DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE — Idm-E NO. 1078 — DMEA NO. 4366

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] 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
- [ ] Certification of Discovery
- [x] Closing Letter
- [x] Cost Audits
- [x] Termination Notice or Agreement
- [ ] Recision Notice
- [x] Assignment of Contract
- [x] Contract Amendments
- [x] Contract with all exhibits and annexes
- [x] 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:

- [ ] 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)
- [ ] 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. 1 : Maps (Use pocket folder or envelope)

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty material

Reported Inactive 12/28/59

17963

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/22/68		110
		220

Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana 59801

Re: DMRA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Gentlemen:

By the terms of the subject Exploration Project Contract, as amended, and the Termination Agreement, dated November 20, 1958, all minerals mined or produced from April 12, 1957, to April 12, 1968, 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.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Dir. Reading File
Economic Geology File
OME Docket
OME Reading File
OME Region I
Br. of Budget & Finance
130

GLAult/a 5-22-68

Copies to: Squaw Creek Mining Company
c/o William J. Walker, President
Office of the Sheriff
County of Missoula
State of Montana
Missoula, Montana 59801

Idaton, Incorporated
c/o Richard J. O'Brien, Secretary
Donnelly and O'Brien
322 Shelden Avenue
Houghton, Michigan 49931

Mr. A. P. Smothers and Mrs. Florence V. Smothers, P. O. Box 770, Casa Grande, Arizona 85222

Mr. Ernest C. Ecklesdafer, 532 No. Ave. W., Missoula, Montana 59801

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-E1078, Docket DMEA-4366 (fluorspar), dated April 12, 1957, with

Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana
and its assignee
Idaton, Inc.
322 Sheldon Avenue
Houghton, Michigan

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 Smothers Property, Nousson Mine, and Big Squaw Creek Fluorspar Deposits located in Idaho County, Idaho, during the period September 9, 1959, through June 2, 1962.

In accordance with a Termination Agreement dated November 20, 1958, and Amendment No. 1 of the contract, royalty is payable on all minerals produced from the land described in Article 2 of the contract and the termination agreement for a period of 11 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 December 9, 1958, indicated accepted costs under the exploration contract amounting to $7,264.00 with the Government's contribution on a 50 percent basis being $3,632.00.

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 September 8, 1959. Accordingly, as of June 2, 1962, the royalty account of this project was found to be:

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

E. D. Talbert, OMS Auditor

July 3, 1962

Idm-E1078 Idaton, Inc., Assignee DMEA-4366

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

The Termination Agreement executed on November 20, 1958, provides that the Operator, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on all minerals produced for a maximum period of 11 years from the date of the contract from: (1) the eighteen unpatented lode mining claims described in Annex I of the exploration project contract; (2) all other lode mining claims owned by Austin P. and Florence V. Smothers adjacent to or within the general area of the claims under the contract; and (3) "any contiguous lode mining claims located, either as original or amended locations, by Idaton, Inc., during the life of the Contract, or within 10 years from the date of the Contract".

At the time the contract was executed Squaw Creek Mining Company was in possession of the 18 claims (Brown Cab Nos. 1 through 3, Broken Halter Nos. 10 through 14, The Giant Spar Nos. 1 through 3, Big Cliff Nos. 1 through 6, and The Gem) in sec. 27, T. 25 N., R. 12 E., Boise Meridian, Dixie (unorganized) Mining District, by virtue of November 21, 1955, assignment by Ernest C. Ecklesdafer of a May 13, 1955, agreement to purchase the claims from the Smothers. In consideration of the contract, a Consent to Lien and Subordination Agreement was executed by the Smothers on April 27, 1957. A similar document was executed by Mr. Ecklesdafer on March 5, 1957, although at that time apparently he held no interest in the property, having assigned a retained royalty interest to other parties on January 12, 1957.

On April 30, 1957, Squaw Creek Mining Company entered into an agreement to sell the 18 claims to Idaton, Inc., and thereafter assigned the exploration project contract to the purchaser. On June 13, 1957, the Government consented to the assignment "without releasing the Assignor from any of the terms, provisions, and conditions of the Contract, and any amendment (including a termination agreement) * * * ".

In its final report on the exploration work, the Operator-Assignee stated that during July and August of 1957 the original 18 claims were relocated and 12 additional ones located and recorded. The total of 30 claims were recorded as Zekeorino Nos. 1 through 5, Dickorino Nos. 1 through 5, Jackorino Nos. 1 through 5, Chuckorino Nos. 1 through 5, Puddorino Nos. 1 through 5, and Timorino Nos. 1 through 5. However, the Operator-Assignee advised in a November 14, 1958, letter that it never intended to claim title to the Smothers' original 18 claims and had relinquished any right or title to those claims.

A MME Form 63 inquiry addressed on May 21, 1962, to the Operator-Assignor was returned over the signature of the landowner (A. P. Smothers, 312 Snake Run Avenue, Lewiston, Idaho) indicating that the property "Passed from Idaton" and that there had been no production from the land since September 8, 1959. Prior correspondence and examinations of the property disclosed no evidence of production since the date of the contract, work under which was started in June 1957 and terminated August 30, 1958.

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 contain no evidence of any production from the property under the contract; 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.

~~Rec. Cert~~

225

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D. C., pertaining to Contract No. Idm-E1078, Docket No. DMEA-4366 (Fluorspar), dated April 12, 1957, with

Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan
(Assignee of Squaw Creek Mining Company)

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Smothers Property located in Idaho County, Idaho, during the period April 12, 1957, through September 8, 1959.

In accordance with Termination Agreement dated November 20, 1958, royalty is payable on all minerals mined or produced from the land described in Article 2 of the contract for a period of 11 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 in lieu of final cost audit dated December 9, 1958, indicated accepted costs under the exploration contract amounting to $7,264.00 with the Government's contribution, on a 50 percent basis, being $3,632.00.

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

(1) The contract was terminated August 30, 1958, prior to completion of the exploration work, "pseudo" certification being included in the termination agreement;
(2) Semi-annual reports by representatives of the Field Team, Region I, and other documents in the files do not disclose any production or sales of minerals from this property subject to Government royalty during the exploration period or subsequent thereto; and
(3) 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.

The review indicated that there has not been any production or sales of minerals from the land described in Article 2 of the contract since April 12, 1957, and no royalty is due the Government.

C. E. Fisher
C. E. Fisher, OME Auditor

October 21, 1959

MME Form 22
April 59

DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

CHECK SHEET OF EXAMINING ENGINEER

Operator's Name Idaton, Inc. (assignee of Squaw Creek Mining Co.)

Address 322 Shelden Avenue

Houghton, Michigan

Exploration Contract No. Idm-E1078 Docket No. DMEA-4366

		Check One Yes	Check One No.
1.	(a) Does the Operator stockpile ore subject to royalty repayment?		X
	(b) If so, is segregation and identification procedure adequate?		
2.	(a) Does Operator commingle production subject to DMEA or OME royalties with exempt production?		X
	(b) If so, do you consider the allocation of the commingled production equitable?		
3.	(a) Does the Operator stockpile mine or mill rejects (low grade ore, tailing, middlings, etc.) that may have potential value within the royalty payment period?		X
	(b) If so, are adequate records maintained on such material to protect the Government's interest?		
4.	Do you consider the assay controls in effect are adequate?	X	
5.	Do you consider that the manner of disposing of production gives the Government its fair royalty returns?	X	
6.	Do your periodic examinations of operations indicate the Operator is properly reporting his production of ores subject to DMEA or OME royalties?	X	
7.	Does the Operator buy from or sell to other Operators?		X
8.	Comment on any item 2 (b) to 6 if answer is No.		

Property inactive.

September 8, 1959
Date

S. W. Zoldok
Mining Engineer
S. W. Zoldok

53362

OFFICE OF MINERAL [illegible] OPERATIONS
CONTRACT [illegible] AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Idaton, Inc., Assignee
322 Sheldon Avenue
Houghton, Michigan

pertaining to Exploration Project Contract No. Idm-X1078, Docket No. [illegible]-4366, dated April 12, 1957, including Amendment No. 1, and a Termination Agreement dated November 20, 1958, for the months of June 1957 to August 1958, inclusive, covering a project for the exploration of Fluorspar, on property known as the Southern Property, located in Idaho County, Idaho.

My review included an examination of the Monthly Reports (Forms MV-184) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performed by reference to Field Team Reports and correspondence, 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 fixed unit costs of work actually performed.

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

Total cost as billed by the Contractor		$29,519.00
Exceptions (schedule attached)		
Prior to this review	$ -0-	
Herewith	22,255.00	22,255.00
Total accepted cost		$ 7,264.00

The contract calls for 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the Contractor by the Government in the amount of Three Thousand Six Hundred Thirty Two and 0/100 Dollars is valid and proper, provided that the Regional Executive Officer, The Director, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator	$3,632.00
Amount paid to date	-0-
Balance due Operator	$3,632.00

December 9, 1958

George Mayor
George Mayor, OMR Auditor

SCHEDULE OF EXCEPTIONS

IDATON, INC., ASSIGNEE

Contract Terms Fixed Unit Costs		Claimed Units	Claimed Rate	Claimed Amount	Allowed Units	Allowed Rate	Allowed Amount	Disallowed Amount
Diamond drilling with AX bit 1,000 ft. at $8.00 ft. Includes supervision and technical services, reaming, setting and pulling casing, wooden core boxes and all other costs whatsoever connected with the drilling	$8,000.00	1.061.5 ft.	$12,5191	$13,289.00	(a)700 ft.	$8.00	$5,600.00	$7,689.00
50 drill hole samples to be assayed for CaF_2 and SiO_2 at $6.00/sample	300.00				(b) 2 ea.	6.00	12.00	(12.00)
Transportation of 50 drill hole samples at $1.00/each sample	50.00				2 ea.	1.00	2.00	(2.00)
Transportation of men and materials 2 boat trips per month, 2 months at $50.00/trip	200.00						200.00	(200.00)
Transportation in and out of 3,000 lbs. drill equipment 1/	350.00						350.00	(350.00)
Geological mapping, sampling transportation, assaying, and technical services 1/	1,100.00			4,825.00			1,100.00	3,725.00
Technical Services	-0-			5,491.00				5,491.00
Sampling and Analysis	-0-	106 ea.	24,0943	2,554.00				2,554.00
Transportation	-0-	56 ea.	60.0000	3,360.00				3,360.00
Totals	$10,000.00			$29,519.00			$7,264.00	$22,255.00

1/ The completed work constitutes the unit

"Allowable Maximum" 350 ft. each hole

	Hole No. 1	350 ft.
	Hole No. 2A	350 ft.
(a)	Total	700 ft.

(b) 2 drill hole samples from Hole No. 1
There were also 7 drill hole samples taken from Hole No. 2A, however these samples were taken from drilling depths in excess of 350 ft., and are not allowable costs.

Government's copy

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 8 1958

DATE	INITIALS	CODE
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TERMINATION AGREEMENT

It is agreed this 20th day of November, 1958, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and Idaton, Inc., Assignee, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-E1078, Docket No. DMEA-4366, dated April 12, 1957, hereinafter called the "Contract," that:

1. Effective AUG 30 1958 the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the fixed unit costs of work performed prior to said effective date.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

4. All rights of the Government respecting certification of discovery or development, percentage royalty and liens to secure the payment thereof, reports (including preservation of the Operator's records), accounts, audits, and the right to recover any overpayment, are hereby preserved.

5. The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government the royalty on production provided for in the Contract, in the same manner and amount, and for the same period, and subject to the same conditions provided in the Contract, as if certification of discovery or development had been made, such certification being hereby waived by the Operator.

6. All lode mining claims described and referred to in the Agreement dated May 13, 1955, between Austin P. Smothers and Florence V. Smothers, husband and wife, and E. C. Ecklesdafer; and all lode mining claims described and referred to in the Assignment dated November 21, 1955,

Long
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App'd. Col. Off.

Hook
Chambers
Selfridge

between E. C. Ecklesdafer and the Squaw Creek Mining Company; and all lode mining claims described and referred to in the Agreement dated April 30, 1957, between Squaw Creek Mining Company and Idaton, Inc.; and any contiguous lode mining claims located, either as original or amended locations, by Idaton, Inc., during the life of the Contract, or within 10 years from the date of the Contract, shall be considered as part of the Contract area and shall be subject to the Government's lien for repayment.

7. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this Termination Agreement.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
ACTING Director, Office of Minerals Exploration

IDATON, INCORPORATED

By Richard J. O'Brien

Title Secretary

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

May 12, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 15 1958

DATE		
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Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

Enclosed are the Government and Audit copies of Amendment No. 1 to the contract. Other copies of the amendment have already been distributed.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: USBM (2)
USBM (AD)
Alovrd

Government's copy

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 15 1958
DATE

EXPLORATION PROJECT CONTRACT
IDATON, INC., ASSIGNEE
DOCKET NO. DMEA-4366

AMENDMENT NO. 1

It is agreed this 26th day of March, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Idaton, Inc. (Assignee), hereinafter called the "Operator," that Exploration Project Contract Idm-E1078 (Docket No. DMEA-4366), dated April 12, 1957, hereinafter called the "Contract," is amended as follows:

1. (a) Work under the Contract shall be suspended during the period beginning December 12, 1957, and ending not later than May 12, 1958.

(b) The Government shall not contribute to any costs incurred by the Operator during the period of suspension nor to any costs of rehabilitation or repair which in the Government's opinion would not have occurred had there been no suspension of work.

(c) The Operator, at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

2. The date fixed in Article 1 of the Contract for completion of the work is extended from December 12, 1957, to December 12, 1958.

3. The maximum period for royalty payments and liens to secure the payment thereof provided for in Article 6(b)(2) of the Contract is increased from ten (10) to eleven (11) years from the date of the Contract.

4. It is of the essence of this Contract that the work be resumed on or before the termination of the period here fixed for suspension, and be completed before the the termination of the period fixed for completion; and if it is not so resumed and completed in the manner required by the Contract, the following provisions shall thereupon become effective:

(a) The Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated as follows:

(i) Effective December 12, 1957, if the work has not been resumed on or before May 12, 1958.

(ii) Effective December 12, 1958, if the work is resumed on or before May 12, 1958, but is not completed on or before December 12, 1958.

(b) The Government shall contribute only to the fixed unit costs of work performed prior to said effective date.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

(d) All rights of the Government respecting percentage royalty and liens to secure the payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayment are hereby preserved. The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government the royalty on production provided for in the Contract, in the same manner and amount and for the full time and subject to the same conditions provided in the Contract, as if certification of discovery or development had been made, such certification being hereby waived by the Operator.

(e) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the Contract, except as otherwise provided in this Amendment No. 1.

This amendment shall not be construed to increase the estimated cost of the project, the aggregate total

Long
Langer
Anderson
Hoch
Chambers
Geoffrey
Johnson

amount which the Government may be required to contribute, or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C C Mitterdorf
Administrator, Defense Minerals
Exploration Administration

IDATON, INC., Assignee

By Richard J. O'Brien

Title Secretary

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

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DMEA
RECEIVED JUL 29 1957

DATE	INITIALS	CODE
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		600

July 23, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc. (formerly Squaw Creek Mining Co.)
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

Enclosed are the Government, Audit, and Division copies of the Assignment of Contract, Assignee's Acceptance, and Government's Consent executed by Squaw Creek Mining Company and Idaton, Inc.

Other copies of the enclosures have already been distributed.

Sincerely yours,

A E Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: USBM (2)
USBM (AD)
Alvord

P. S. Also attached are three copies of a letter dated July 19, 1957, from Richard J. O'Brien, secretary of Idaton, Inc.

OFFICIAL FILE COPY
Government's copy
DMEA
RECEIVED JUL 29 1957

DATE	INITIALS	CODE

ASSIGNMENT OF CONTRACT

WHEREAS, Squaw Creek Mining Company, hereinafter called the "Assignor," and the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," entered into Exploration Project Contract Idm-E1078 (Docket No. DMEA-4366), dated April 12, 1957, hereinafter called the "Contract"; and

WHEREAS, Idaton, Inc., a State of Idaho corporation, whose address is Houghton, Michigan, hereinafter called the "Assignee," has acquired the right to possession of the land which is the subject of the contract for the purpose of performing exploration work and other purposes pursuant to an agreement dated April 30, 1957, and the Assignee desires to complete the work under the Contract;

NOW THEREFORE, effective June 1, 1957, the Assignor, subject to acceptance by the Assignee and consent of the Government, in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration received from the Assignee does hereby assign, transfer, and convey to the Assignee all of its right, title, and interest in the Contract: Provided, That the Government shall make payment to the Assignor for the costs of work under the Contract performed prior to said effective date, and upon payment thereof the Government shall be and is hereby released by the Assignor from all claims under the Contract.

The Assignor consents to all future amendments (including a termination agreement) and assignments of the Contract and waives notice thereof.

Dated this 12 day of July, 1957.

SQUAW CREEK MINING COMPANY
Assignor

By William J. Walker

Title President

I, Glenda B. Freeman, certify that I am the Treasurer secretary of the corporation named herein; that William J. Walker who signed this instrument on behalf of the corporation, was then President

of said corporation; that said instrument was duly signed for and in behalf of the corporation by authority of its governing body, and is within the scope of its corporate powers.

[Corporate Seal]

ASSIGNEE'S ACCEPTANCE

The Assignee hereby accepts the above Assignment and agrees to be bound by the terms, provisions, and conditions of the Contract. The Assignee expressly assumes and agrees to pay to the Government any royalty that may have accrued and remain unpaid on the effective date of the assignment and that may accrue thereafter under the provisions of the Contract.

Dated this 19th day of July, 1957.

IDATON, INC.
Assignee

By Joseph M. Donnelly

Title Treasurer

I, Richard J. O'Brien, certify that I am the _____ secretary of the corporation named herein; that Joseph M. Donnelly who signed this instrument on behalf of the corporation, was then Treasurer of said corporation; that said instrument was duly signed for and in behalf of the corporation by authority of its governing body, and is within the scope of its corporate powers.

Richard J. O'Brien [Corporate Seal]

Bartin
Langer
Anderson
Chambers
Hawk
Selfridge
Johnson

GOVERNMENT'S CONSENT

The Government, this 13th day of June, 1957, hereby consents to the above Assignment without releasing the Assignor from any of the terms, provisions, and conditions of the Contract, and any amendment (including a termination agreement) and assignment thereof.

THE UNITED STATES OF AMERICA

By C O Mittendorf
Administrator, Defense Minerals
Exploration Administration

IDATON, INC.

(IDAHO - HOUGHTON)

322 SHELDEN AVENUE

HOUGHTON, MICHIGAN

DIRECTORS

JOHN W. RICE

HARRY CONODAS

[illegible] CONODAS

M. EARL VOLIN

[illegible] MCCONNELLY

JOHN J. ECKLESDAFER

[illegible]

J[illegible] 29, 19[illegible]

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 29 1957
DATE [illegible] CODE

[illegible] F. Weissenborn
[illegible] Officer, DMEA
[illegible] Geological Survey
[illegible] Square Street
[illegible], Washington

DMEA

[illegible] Squaw Creek [illegible] (Phoenix)
[illegible]
[illegible]
[illegible]

[illegible] Mr. Weissenborn:

[illegible] reference your letter of June [illegible] William J. Walker, [illegible]ent of the Squaw Creek [illegible]

[illegible] enclose original [illegible] Agreement of Con-[illegible] executed by Squaw Creek Mining Company and Idaton, [illegible].

[illegible] also enclose original [illegible] of Form M[illegible] [illegible] the month of May executed [illegible] of Squaw Creek [illegible] of John G. Eckles[illegible] [illegible] latter signature [illegible] secretary. This is [illegible] of June 19, [illegible]

[illegible]

Sincerely [illegible]
[illegible]

Government's copy

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 27 1957

DATE	INITIALS	CODE

MF-200A
(Rev. April 1956)

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

DMEA No.	*Commodity*	*Contract No. Idm–E*	*County*	*State*
4366	Fluorspar	1078	Idaho	Idaho

It is agreed APR 12 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Squaw Creek Mining Company, a Montana Corporation

whose mailing address is 605 Wilma Building
Missoula, Montana
hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority and project.*—(a) This contract is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF–200A), the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed therein. The project work is a search for indicated or undeveloped deposits of the commodity designated above. The Operator shall begin the work on or before MAY 1 1957, and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 8 months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the project work is $10,000.00. The Government will contribute 50 percent of the fixed unit cost of the work performed, not exceeding $5,000.00, in accordance with the provisions of Articles 4 and 5.

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

ARTICLE 2. *Operator's property rights.*—(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's rights of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances: Payments to the owners according to purchase agreement.

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

(c) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing

Encl. 1

in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. Two copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. *Performance of the work.*—(a) Operator's responsibility.—The work shall be performed diligently, efficiently, expertly, in a workmanlike manner, and in accordance with good mining standards and State regulations governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work, as specified in Article 1 (a).

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

ARTICLE 4. *Contribution by the Government.*—The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5 (b); but all payments by the Government are provisional only, subject to audit, and until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been rendered, the Government may withhold such sums as it sees fit but not in excess of 10 percent of the estimated total cost of the work. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government will not contribute to the cost of any work performed prior to the date of this contract. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(a) Operator's records.—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

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

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

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

ARTICLE 6. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered a sufficient final report (see Article 5), may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 7. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

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

(c) The giving of any notice by the Government under the provisions of this Article 7 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and liens to secure the payment thereof, and such rights shall be fully preserved.

ARTICLE 8. *Notices to be given by the Government* may be delivered to the Operator or may be sent by registered mail addressed to the Operator at the mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 10. *Changes and added provisions.*—

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Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mittendorf
Administrator, Defense Minerals
Exploration Administration

SQUAW CREEK MINING COMPANY
(Operator)

By William J. Walker ~~John D. Eckleudafer, President~~

Title President

I, Richard J. O'Brien ~~Claude E. Freeman~~ certify that I am the secretary of the corporation named as Operator herein; that William J. Walker, who signed this contract on behalf of the Operator, was then President 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.

Claude E. Freeman

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE: 1956—O-383069

Indirect 2/18/57
Dwyer
Appd. Sol. Off.
Anderson
Chambers
Selfridge
Johnson

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 27 1957

DATE	INITIALS	CODE

EXPLORATION PROJECT CONTRACT
SQUAW CREEK MINING COMPANY
DOCKET NO. DMEA-4366

EXHIBIT "A"

Description of the Work

Attached hereto and made a part hereof ~~are the following~~ maps:

a. Plate No. 1 entitled "Smothers Fluorspar Deposit, Squaw Creek Mining Co., Idaho County, Idaho."

b. Plate No. 2 entitled "Claim Map, Smothers Fluorspar Deposit, Idaho County, Idaho."

c. Figure No. 1 entitled "Smothers Fluorspar Deposit, Squaw Creek Mining Co., Idaho County, Idaho."

d. Figure No. 2 entitled "Smothers Fluorspar Deposit, Squaw Creek Mining Co., Idaho County, Idaho."

Explore for fluorspar by AX standard diamond drilling. The holes shall be drilled to cut the downward extension of the mine vein at an approximate depth of 250 feet from the outcrop as indicated on Plates Nos. 1 and 2, and Figures Nos. 1 and 2.

The work shall consist of drilling 3 diamond core holes, as indicated, for a distance not to exceed 350 feet each, and the total drilling shall not exceed 1000 feet.

The Government shall not contribute to the cost of an incompleted hole, or to the cost of any hole that does not produce 80% core in the mineralized zone. Wooden core boxes shall be used for core storage.

Records of each hole drilled, together with assay certificates of samples taken shall be submitted with the Operator's monthly progress report, which shall also include a map showing the location of all holes drilled during the reporting period. All samples shall be properly identified as to drill hole number and the depths represented.

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

The geologist shall map, and wherever feasible shall sample, all known occurrences on the property, and shall submit a reproducible map and a report of his findings. The map should show the following features: (1) altitude of all survey points, (2) sample

locations and assays, (3) width of samples, and (4) any data pertinent to future exploration of any likely economic deposit. Rock types and faults shall be mapped but emphasis shall be on the preparation of an economic geological map acceptable to the Government. This work shall be confined to the contract area as defined by the land description under Annex I of the contract.

Fixed Unit Costs

Diamond drilling with AX bit 1,000 feet @ $8.00/ft. Includes supervision and technical services, reaming, setting and pulling casing, wooden core boxes, and all other costs whatsoever connected with the drilling	$ 8,000.00	
50 drill hole samples to be assayed for CaF_2 and SiO_2 @ $6.00/sample	300.00	
Transportation of 50 drill hole samples @ $1.00/each sample	50.00	
Transportation of men and materials 2 boat trips per month, 2 months @ $50.00/trip	200.00	
Transportation in and out of 3,000 lbs. drill equipment 1/	350.00	
Geological mapping, sampling, transportation, assaying, and technical services 1/	1,100.00	
Estimated Total Cost of Project		$10,000.00
Government Participation @ 50%		$ 5,000.00

1/ The completed work constitutes the unit.

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D M E A
RECEIVED MAY 27 1957
DATE | INITIALS | CODE

EXPLORATION PROJECT CONTRACT
SQUAW CREEK MINING COMPANY
DOCKET NO. DMEA-4366

ANNEX I

The land referred to in Article 2 of the Contract is known as the Smothers Property or Nousson Mine, situated in unsurveyed sec. 27, T. 25 N., R. 12 E. B.M., Idaho, on both sides of the Salmon River between Big Squaw Creek and Smith Creek in Idaho County, Idaho. The property consists of 18 unpatented lode mining claims, about 6 miles outside of the Chamberlin Mining District, approximately 31 miles by pack trail from the end of the Salmon River Forest Highway below Shoup, or about 25 miles by boat down the Salmon River. The Operator has possession of the land by an assignment to it dated November 21, 1955, from Ernest C. Ecklesdafer, of an agreement, dated May 13, 1955, wherein the latter agreed to purchase the 18 claims from Austin P. and Florence V. Smothers. The claims are shown on the attached Plate No. 2 and are described as follows:

NAME	RECORDS OF IDAHO COUNTY, IDAHO
Brown Cub #1 quartz lode	Book 78 of Mining claims at page 664
Brown Cub #2 quartz lode	Book 78 of Mining claims at page 665
Brown Cub #3 quartz lode	Book 78 of Mining claims at page 666
Broken Halter #10 quartz lode	Book 78 of Mining claims at page 667
Broken Halter #11 quartz lode	Book 78 of Mining claims at page 668
Broken Halter #12 quartz lode	Book 78 of Mining claims at page 669
Broken Halter #13 quartz lode	Book 78 of Mining claims at page 670
Broken Halter #14 quartz lode	Book 78 of Mining claims at page 671
The Giant Spar #1 quartz lode	Book 78 of Mining claims at page 672
The Giant Spar #2 quartz lode	Book 78 of Mining claims at page 673
The Giant Spar #3 quartz lode	Book 78 of Mining claims at page 674
The Gem quartz lode	Book 78 of Mining claims at page 675
Big Cliff #1 quartz lode	Book 78 of Mining claims at page 676
Big Cliff #2 quartz lode	Book 78 of Mining claims at page 677
Big Cliff #6 quartz lode	Book 78 of Mining claims at page 678
Big Cliff #5 quartz lode	Book 78 of Mining claims at page 679
Big Cliff #4 quartz lode	Book 78 of Mining cliams at page 680
Big Cliff #3 quartz lode	Book 78 of Mining claims at page 681

Attached hereto are the Consents to Lien signed by A. P. Smothers, Florence V. Smothers, and Ernest C. Ecklesdafer.

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E 1078
Contract Date 12 APR 1957

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

RECEIVED MAY 27 1957 D.M.E.A.

To the United States of America:

Referring to that certain land in the County of Idaho, State of Idaho, described as follows: 2/

In an agreement dated May 13th, 1956, and recorded in book 4, of M.B.L. and A. at page 481, records of Idaho County, Idaho.; And in an assignment dated November 21st, 1955, covering claims recorded in book 78, of mining claims, pages 664 - thru 681 incl. records of Idaho County, Idaho

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

Interests of landowners, and Squaw Creek Mining Company

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: _____ (State "None" or "See Annex No.____")

Dated this 5th day of March, 1957.

Ernest C. Ecklesdafer [Seal] 532 No Ave W [Address]
Ernest C. Ecklesdafer
_____ [Seal] Missoula, Mont [Address]

_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

_____ [Seal] _____ [Address]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

MAR 27 1957 U.S. ENG. OFFICE

1080

MF-205
(Combines and supercedes MF-2[illegible] and MF-203)
June 1956

Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E 1078
Contract Date 12 APR 1957

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Idaho, State of Idaho, described as follows: 2/

In an agreement dated May 13, 1956, and recorded in book 4, of M. B. L. and A. at page 481, records of Idaho County, Idaho; And in an assignment dated November 21st, 1955, covering claims recorbd in book 78, of mining claims, pages 664 - thru 681 incl. records of Idaho County, Idaho.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

~~Leasehold interest and purchase rights of Squaw Creek Mining Company, and rights reserved to Ernest C. Ecklesdafer in assignment of lease-purchase agreement to Squaw Creek Mining Company~~

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: none (State "None" or "See Annex No.____")

Dated this 27th day of April, 1957.

A. P. Smothers	[Seal]	North Fork, Idaho	[Address]
	[Seal]		[Address]
Florence V. Smothers	[Seal]	North Fork, Idaho	[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

Claim map, Smothers Fluorspar deposit, Scale: 3" = 1 mile	8½" x 9½"	60
Smothers Fluorspar Deposit Plate No. 1, Maps 1, 2, 3	11½" X 13-3/4"	2.70
Geology map of Smother's Fluorite deposit Scale: 1" = 50'	36" x 43½"	120
Map No. 1 - Claims, Idaton, Inc. Scale: 1" = 300'	24" x 36"	120
Geological map of Smother's Fluorite deposit Scale: 1" = 30'	22" x 34"	120
Plan View Vein "A", Sheet 1, Scale: 1" = 30'	22" x 34"	120
" " " " , Sheet 2, Scale: 1" = 30'	30" x 40"	120

If we can be of further service to you, please call or visit this office.

17.25
1.00
18.25

Sincerely yours,

postage

Harold Kirkemo

Harold Kirkemo, Chief
Office of Minerals Exploration

Copy to: Cooper-Trent Division
Keuffel & Esser Co.
Wilson Boulevard at Danville Street
Arlington, Virginia 22201
Attention: Mr. Marvin Mundy

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

January 21, 1976

Mr. Robert Naismith, Manager
Applied Physics Department
Atlantic Research Corporation
5390 Cherokee Avenue
Alexandria, Virginia 22314

Re: DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Dear Mr. Naismith:

This is in response to your request of January 20, 1976, for copies of material in the subject docket.

We are furnishing Cooper-Trent Division, Keuffel & Esser Co., with our copy of the material listed below. Cooper-Trent will contact you regarding the cost of reproductions; the minimum change is $15.00 plus $1.00 for postage and handling. Upon deciding how many copies you want, send the enclosed copy of this letter to Cooper-Trent with your letter of instructions. All future correspondence relating to procurement of copies should be with Cooper-Trent rather than this office.

The material includes the following items:

Operator's final report	23 pages, 8½" x 11"	3.45
Appendix	21 pages, 8½" x 11"	3.15
Vertical sections thru proposed DDH No.'s 1 and 2, Smothers Fluorspar deposit, Scale: 1" = 100'	8½" x 11"	.60
Vertical section through proposed DDH No. 3, Scale: 1" = 100'	8½" x 11"	.60
Annex I to Exploration contract	1 page, 8" x 10½"	.15
		7.45

over

AMERICAN REVOLUTION BICENTENNIAL 1776-1976

EXPLORATION PROJECT CONTRACT
SQUAW CREEK MINING COMPANY
DOCKET NO. DMEA-4366

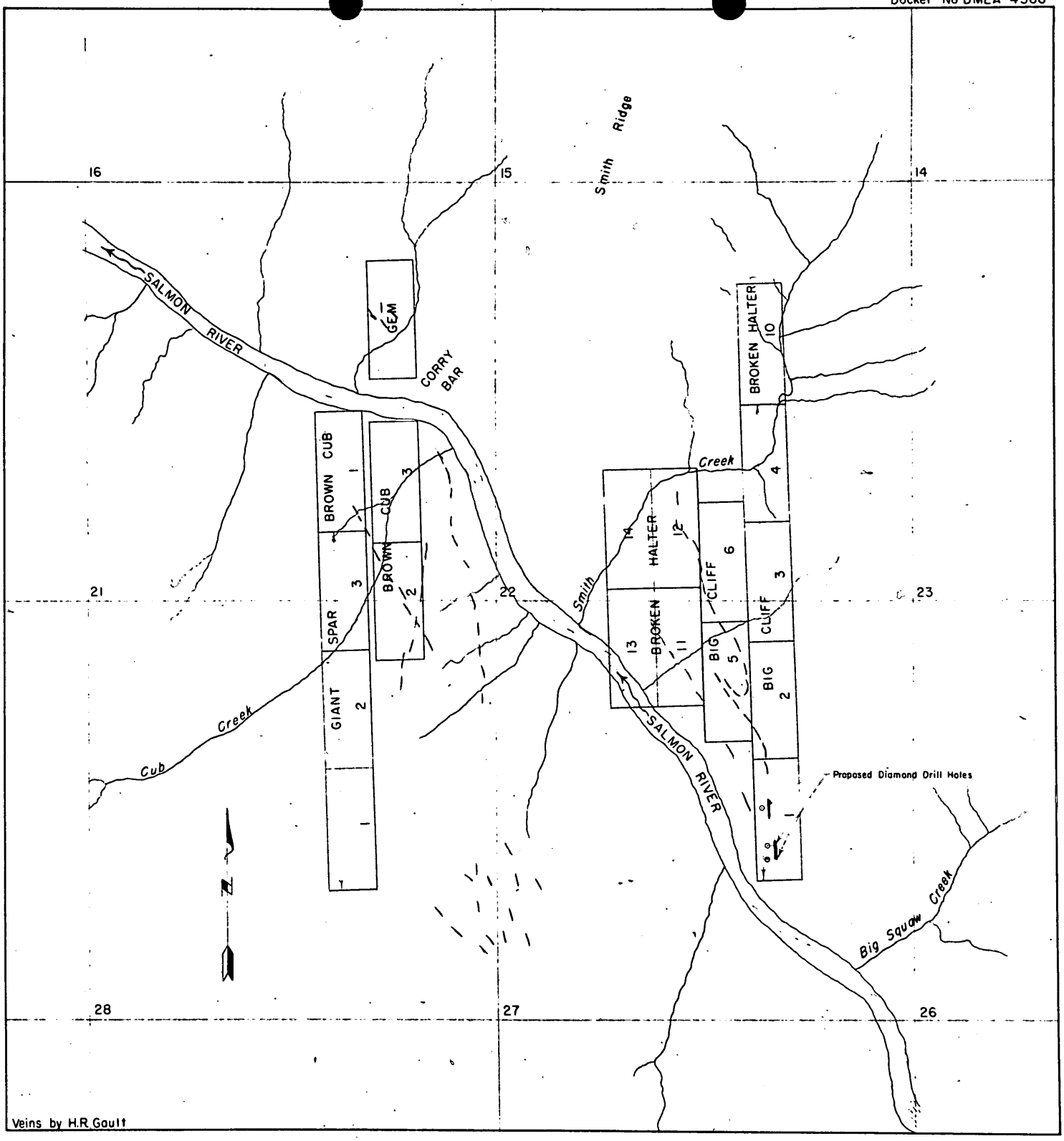
ANNEX I

The land referred to in Article 2 of the Contract is known as the Smothers Property or Nousson Mine, situated in unsurveyed sec. 27, T. 25 N., R. 12 E. B.M., Idaho, on both sides of the Salmon River between Big Squaw Creek and Smith Creek in Idaho County, Idaho. The property consists of 18 unpatented lode mining claims, about 6 miles outside of the Chamberlin Mining District, approximately 31 miles by pack trail from the end of the Salmon River Forest Highway below Shoup, or about 25 miles by boat down the Salmon River. The Operator has possession of the land by an assignment to it dated November 21, 1955, from Ernest C. Ecklesdafer, of an agreement, dated May 13, 1955, wherein the latter agreed to purchase the 18 claims from Austin P. and Florence V. Smothers. The claims are shown on the attached Plate No. 2 and are described as follows:

NAME	RECORDS OF IDAHO COUNTY, IDAHO
Brown Cub #1 quartz lode	Book 78 of Mining claims at page 664
Brown Cub #2 quartz lode	Book 78 of Mining claims at page 665
Brown Cub #3 quartz lode	Book 78 of Mining claims at page 666
Broken Halter #10 quartz lode	Book 78 of Mining claims at page 667
Broken Halter #11 quartz lode	Book 78 of Mining claims at page 668
Broken Halter #12 quartz lode	Book 78 of Mining claims at page 669
Broken Halter #13 quartz lode	Book 78 of Mining claims at page 670
Broken Halter #14 quartz lode	Book 78 of Mining claims at page 671
The Giant Spar #1 quartz lode	Book 78 of Mining claims at page 672
The Giant Spar #2 quartz lode	Book 78 of Mining claims at page 673
The Giant Spar #3 quartz lode	Book 78 of Mining claims at page 674
The Gem quartz lode	Book 78 of Mining claims at page 675
Big Cliff #1 quartz lode	Book 78 of Mining claims at page 676
Big Cliff #2 quartz lode	Book 78 of Mining claims at page 677
Big Cliff #6 quartz lode	Book 78 of Mining claims at page 678
Big Cliff #5 quartz lode	Book 78 of Mining claims at page 679
Big Cliff #4 quartz lode	Book 78 of Mining claims at page 680
Big Cliff #3 quartz lode	Book 78 of Mining claims at page 681

Attached hereto are the Consents to Lien signed by A. P. Smothers, Florence V. Smothers, and Ernest C. Ecklesdafer.

Docket No DMEA 4366



CLAIM MAP

SMOTHERS FLUORSPAR DEPOSIT

IDAHO COUNTY, IDAHO

T. 25 N., R. 12 E.

0 — 1 MILE

Plate No. 2

LOG OF DRILL HOLE NO. 1

LAT: 1337 BEARING: N53E ALL DRILLING AX
DEP: 1336 INCLINATION: -23° SIZE

FEET DRILLED FROM	TO	CORE RECOV.	ROCK CLASS.	OTHER CLASS.	DESCRIPTION
0.	10.		BIOTITE GNEISS	FRACTURED	QTZ., FELDSPAR, BIOTITE
10.	20.		do	do	DO
20.	30.		do	do	DO
30.	40.		do	do	DO, SOME QTZ. STRINGERS
40.	50.		do	do	DO, QTZ. STRINGERS
50.	60.		do	do	DO, RUSTY, SOME QTZ. STRGRS
60.	70.		do	do	DO, QTZ. STRINGERS
70.	80.		do	do	DO, MUCH QTZ.
80.	90.		do	do	DO, BIOT. ALTERED TO CHLORITE.
90.	100.		do	do	DO; BIOT. ALTERED TO CHLOR. FELDSPAR ALTERED TO KAOLIN
100.	110.		do	do	BIOT. → CHLOR.; FELDS. → KAOL. QTZ. VEINLETS
110.	120.		do	do	MIXED QTZ., FELDSPAR, BIOTITE CHLORITE, KAOLIN; QTZ. STRS
120.	130.		do	do	DO
130.	140.		do	do	DO; STREAK GRAPHITE, RUSTY MORE QTZ.
140.	150.		QTZ VEIN	do	QTZ. WITH SOME FELDSPAR; PYRITE DISSEM. & IN THIN STS
150.	160.		do	do	QTZ, SOME FELDSPAR → KAOLIN PYRITE DISSEM. & STRS.
160.	170.		do	do	QTZ. & KAOLIN; DISSEM. PYRITE
170	180.		BIOTITE GNEISS	do	GREENSTONE, MUCH CHLORITE WITH QTZ. STRS.; DIS. PYRITE
180.	190.		QTZ. VEIN	do	QTZ., SOME KAOLIN; DIS. PYRITE
190.	200.		do	do	QTZ., KAOLIN, CHLORITE; DIS. PYR.
200.	210.		do	do	QTZ., INCLUSIONS ALTERED GNEISS; DIS. PYR.
210.	220.		do	do	QTZ. & FELDSPAR → KAOLIN
220.	230.		do	do	WHITE QTZ., FELDSPAR → KAOL. MINOR CHLOR., DIS. PYR., VUGS
230.	240.		do	do	MOSTLY QTZ. & KAOLIN
240.	250.		do	do	DO; RUSTY PYR. DIS. & STRINGS
250.	260.		do	do	DO.
260	270.		do	do	DO; MINOR CHLORITE.

LOG OF DRILL HOLE No. 1

LAT: 1337 BEARING: N53E ALL DRILLING AT
DEP: 1336 INCLINATION: -23° SIZE

FEET DRILLED FROM	TO	CORE RECOV.	ROCK CLASS.	OTHER CLASS.	DESCRIPTION
270.	280.		QTZ. VEYN.	FRACTURED	WHITE QTZ. & KAOLIN; PYRITE DISSEM. & IN STRINGERS.
280.	290.		do	do	DO
290.	300.		do	do	QTZ., SOME KAOLIN; DIS. PYR
300.	305.		do	do	DO
305.	310.	4.3	do	do	QTZ. FRACTURED; KAOLIN & PY IN FRACTURES.
310.	315.	5.0	do	do	DO.
315.	318.	2.7	do	do	QTZ. HIGHLY FRACTURED AN CRUMBLY; PYRITIC
318.	320.	1.0	do	HIGHLY do	MOSTLY DARK QTZ., HIGHLY FRACTURED.
320.	323.5	2.0	do	do	MIXED WHITE & DARK QTZ., PYRITE IN FRACTURES
323.5	324.5	1.0	do	do	DO
324.5	327.	2.0	do	do	DARK QTZ. WITH WHITE QT STRINGERS; PYRITIZED
327.	329.5	2.0	do	do	MOSTLY WHITE QTZ. WITH CLUSIONS ANGULAR DARK QTZ DIS. PYRITE; ONE STRINGER FL ITE 1/2"
329.5	330.5	1.0	do	do	QTZ. DO, PYRITIC; SPARSE FLUORITE
330.5	333.0	2.0	do	do	MIXED DARK & WHITE QTZ. TER HIGHLY FRACTURED & EA ED TO SUGARY TEXTURE; DIS. PYRITE.
333.0	334.0	1.0	do	FRACTURED	MOSTLY DARK QTZ. WITH VEIN LETS LEACHED & ALTERED WH QTZ; PYRITE IN FRACTURE
334.0	338.0	3.6	do	do	DO; FEW STRINGERS FLUORI
338.0	340.5	2.0	MIN. VEIN QTZ	do	LEACHED WHITE QTZ., PYRITIC MASSIVE WHITE FLUORITE
340.5	345.0	4.5	QTZ & GNEISS	MASSIVE	DARK QTZ. WITH WHITE QTZ VEINS; FELDSPAR → KAOL BIOTITE GIVES GNEISS-LIKE APPEARANCE; SOFT TAN MIN AL (GYPSUM?); PYRITE DIS. STRINGERS
345.0	360.	5.	BIOTITE GNEISS	do	DARK QTZ. WITH BIOTITE IN GNEISSIC TEXTURE; FELDSPA → KAOLIN; MASSIVE WHITE Q VEINLETS; PYRITE DIS. & IN STRINGERS

BOTTOM HOLE No. 1

LOG OF DRILL HOLE No. 5A

LAT: 1427
DEP: 1427

BEARING: N41°E
INCLINATION: -10°

ALL DRILLING AX SIZE.

FEET DRILLED FROM	TO	CORE RECOV.	ROCK CLASSIFICATION	DESCRIPTION
0	10	8.	BIOTITE GNEISS	MED. COARSE GRAINED; FRACTURED 8'-10'
10	15	4.5	do	FINE TO MED. COARSE GR ED; ZONES BIOTITE CON CENTRATION; QTZ. STRING 14'-15'
15	20	4.5	do	MED. COARSE GRAINED; O CASIONAL AUGEN-LIKE & IRREG. BIOTITE CONCENTR TIONS.
20	30	8.	do	MED. COARSE GRAINED NEARLY ALL FELDSPAR AT 24' & BIOTITE RICH AT 25'; OCCASIONAL QT. STRINGERS; SOME ALT ATION BIOTITE TO CHLOR
30	38	7	do	MED. COARSE GRAINED; ALTERNATING FELDSPAR AND BIOTITE-RICH ZONE.
38	70	30.	do	MED. COARSE GRAINED; OCC. QTZ. STRINGERS, ALTERATION BIOTITE TO CHLORITE & FELDSPAR TO KAOLIN NEAR FRACTURES QTZ.
70	80	7.	do	MED. COARSE GRAINED; MASSIVE, SOME ALTERA BIOTITE TO CHLORITE
80	89	8.	do	MED. COARSE GRAINED; MASSIVE; SOME ALTERA BIOTITE TO CHLORITE
89	90	1.	do	HIGHLY ALTERED, MOS CHLORITE & KAOLIN.
90	94	4.	do	MED. COARSE GRAINED; MASSIVE; ALTERATION BIOTITE TO CHLORITE
94	114	17.	do	MED. COARSE GRAINED ALTERATION BIOTITE TO CHLORITE ALONG FRACTURES; OCC. QTZ. STRING ERS; CONCENTRATION BIO TITE AT 95'
111	113	1.5	do	MED. COARSE GRAINED FRACTURED; MUCH A TO CHLORITE & KAOLIN
113	127	13.	do	MED. COARSE GRAINED BIOTITE ALTERED TO CHL ITE ALONG FRACTURES QTZ. STRINGER AT 117'
127	130	2.5	do	MED. COARSE GRAINED SOME ALTERATION

LOG OF DRILL HOLE NO. 2A

LAT: 1427 BEARING: N41°E ALL DRILLING
DEP: 1427 INCLINATION: -10° AX SIZE.

FEET DRILLED FROM	TO	CORE RECOV.	ROCK	GRAIN CLASS.	DESCRIPTION
130	131	1.	BIOTITE GNEISS	MED. COARSE	MUCH CHLORITE & KAOLIN; QTZ. STRINGER AT 130.5' WITH PYRITE
131	136	4.	do	do	MASSIVE; SLIGHTLY ALTERED.
136	146	10.	do	do	MASSIVE; MUCH BIOTITE 137'-13. CHLORITE AT 142' & 146'
146	155	9.	do	do	MASSIVE; SLIGHTLY ALTD. MASSES BIOTITE APPEAR AS PSEUDO-MORPHS OF HORNBLENDE AT 15.
155	159	4.	do	do	ALTERED AND FRACTURED; 1" T. 2" QTZ. STRINGES 156', 157½', 159
159	166	5.	do	do	MASSIVE, SOME ALTERATION; QTZ. STRINGER AT 160'
166	176	10.	do	do	MASSIVE
176	186	9.	do	do	MASSIVE; OCC. QTZ. STRINGERS; SLIGHT ALTERATION ALONG FRA
186	189.5	3.5	do	do	SLIGHTLY ALTERED.
189.5	196	6.5	GRANITE INTRUSIVE	COARSE	MOSTLY FELDSPARS, SOME QTZ., M. MAFICS OR BIOTITE; FRACTURED.
196	206	8.	GRANITE PEG. INTR.	COARSE	MASSIVE; SPARSE BIOTITE; PHENO CRYSTS FELDSPAR; QTZ. STRINGER 2
206	216	10.	BIOTITE GNEISS	COARSE	MASSIVE; 4" GRANITIC DIKE AT 211.5' CHLORITE & KAOLIN ALONG FRACTURE
216	226	10.	do	MEDIUM COARSE	AUGEN-LIKE BIOTITE AT 218'
226	236	10.	do	do	MASSIVE; QTZ. STRINGER AT 225'; CHLORITE & KAOLIN 235'-236'; DECOMPOSED AT 236'.
236	246.4	10.	do	do	ALTERED & FRACTURED; MUCH KAOLIN 244'-246'; QTZ. STRINGER 245'
246.4	251.5	5.	do	do	BIOTITE RICH, 90% 246.4-247.4 50% 247.4'-251.5; QTZ. STRINGER AT 248.5'
251.5	263.	11.5	do	do	MASSIVE; ALTERATION 262'-263
263.	269.	6.	do	do	ALTERED; MUCH BIOTITE 263.7'-264.8'
269.	279.3	9.	do	do	ALTERED; MUCH CHLORITE & KAOLIN.
279.3	287.	7.	do	do	ALTERED 286'-287'
287.	289.	2.	do	do	BIOTITE CONCENTRATIONS
289.	298.	7.	do	do	SOME ALTERATION TO CHLORITE KAOLIN; HIGHLY ALTERED 291'-
298.	299.6	1.	VEIN QTZ.		FRACTURED, KAOLIN FILLING FRACTURES; FLUORITE IN SMA VUG AT 298'
299.6	307.	2.	do		HIGHLY FRACTURED; KAOLIN FRACTURES

LOG OF DRILL HOLE NO. 2A

[illegible] 427 BEARING: N41E ALL DRILLING AX SIZE

[illegible] 427 INCLINATION: -10°

[illegible]	[illegible]	CORE RECOV.	ROCK	GRAIN CLASS	DESCRIPTION
[illegible]7	309	1.	GRANITE PORPHYRY	COARSE	LARGE PHENOCRYSTS FELDSPAR IN QTZ.
309	319	10.	do	do	MASSIVE, MOSTLY QTZ. & FELDSP. LITTLE BIOTITE.
[illegible]	329	10.	BIOTITE GNEISS	MEDIUM COARSE	MASSIVE; BIOTITE ALTERED TO CHLORITE; QTZ. STRINGER AT 323
[illegible]	339	8.	do	do	MOSTLY CHLORITE & KAOLIN
[illegible]39	[illegible]	4.	VEIN QTZ.		MIXED BLACK AND WHITE QTZ. WITH KAOLIN IN FRACTURES; PYRITE AT 339'; FLUORITE STRINGER AT 340'
349	359	5.	do		ALTERNATING & MIXED BLACK & WHITE QTZ, KAOLIN, CHLORITE, PARTLY ALTERED BIOTITE GNE. DISSEM. PYRITE BLEBS.
359	364	4.	do		MOSTLY WHITE QTZ., GYPSUM COATINGS IN FRACTURES; CHLORITE 361'-362'; PYRITE BLEBS.
364	374	8	do		WHITE & CLEAR QTZ. 364'-365', FEW STRINGERS & XTALS GREEN FLUORITE; CHLORITE & KAOLIN WITH QTZ. VEINLETS 365'-371' WHITE TO CLEAR QTZ., HIGHLY FRACTURED, MUCH GYPSUM 371-[illegible]
374	378	4.	do		HIGHLY ALTERED AND FRACTURED CRUMBLY; INTIMATE MIXTURE GYPSIFEROUS QTZ., KAOLIN, CHLORITE; DISSEM. PYRITE BLEBS
378	382	3.	do		DO, WITH SMALL XTALS PLATY METALLIC MINERAL LIKE GRAPHITE
382	386	3.3	do		DO 382'-384'; MOSTLY CHLORITIC GNEISS 384'-386'. DISSEM. PYRITE
386	389	2.	do		WHITE QTZ WITH DARK SILICEOUS INCLUSIONS LIKE BRECCIA.
389	397	6.	do		WHITE QTZ. WITH ANGULAR DARK QTZ. INCLUSIONS; GYPSUM IN FRACTURES; DISSEM. PYRITE
397	405	5.8	do		HIGHLY FRACTURED WHITE QTZ. 397'-399', 1"-2" VEINLET WHITE FLUORITE; PALE GREEN GYPSUM 399'-400'; PYRITIC; MOTTLED QTZ. AND CHLORITIC GNEISS; TWO VEINLETS PALE GREEN CaF_2
405	407.4	2.0	MIN. VEIN QTZ.		HIGHLY ALTERED, CRUMBLY, MOSTLY GYPSUM, WITH VEINLETS QTZ. AND CHLORITE; DISSEM. PYRITE; SPARSE CaF_2.
407.4	412.4	4.0	do		DO
412.4	415.0	2.1	do		DO, HIGHLY BROKEN
415.0	418.5	3.5	do		DO, MUCH DISSEM. SHINY BLACK XTALS (GRAPHITE?)

LOG OF DRILL HOLE No. 2A

LAT: 1427' BEARING: N41E ALL DRILLING AX SIZE
DEP: 1427' INCLINATION: -10°

FEET DRILLED FROM	TO	CORE RECOV.	ROCK	GRAIN CLASS.	DESCRIPTION
418.5	423.5	3.0	MIN. VEIN QTZ.		HIGHLY ALTERED, CRUMBLY MOSTLY SUGAR QTZ. CEMENTED WITH GYPSUM; WITH VEINLETS & DISSEM. CHLORITE; MINOR PYRITE; SPARSE WHITE CAF.
423.5	427.0	3.5	do		DO; 3" FLUORITE VEINLET AT 4.5
427.0	431.0	3.0	do		DO; PROGRESSIVELY DARKER. WITH MORE CHLORITE; ONE VEINLET FLUORSPAR
431.0	432.0	1.0	QTZ. TO GNEISS		MOTTLED QTZ. & ALTERED GNEISS. MUCH DISSEM. BIOTITE
432.0	437.0	2.	BIOTITE GNEISS		ALTERED GNEISS, CHLORITIC. KAOLINIZED, PYRITIC.
437.	444.5	6.	do		DO; HANGING WALL

BOTTOM HOLE No. 2A.

LOG OF DRILL HOLE No. 3

LAT: 1295 BEARING: N65E COLLAR ELEV 149
DEP: 1428 INCLINATION: -14-30 DRILLING AX SI

FEET DRILLED FROM	TO	CORE RECOV	ROCK CLASS	OTHER CLASS	DESCRIPTION
0	8.	4.1	VEIN QTZ.	FRAC. & VUGS	QTZ: SHOWING SURFACE ALTERATION, RUSTY STREAKS; WITH ALTERED BIOTITE GNEISS; FELDSPAR → KAOLIN BIOT → RUSTY CHLORITE
8.	10.	2.	do	do	Do
10.	13.	1.5	do	do	DO, BUT MORE BIOT. GNEISS
13.	15.	1.	do	do	DO; 1/2" FLUORITE STRINGER AT 15'
15.	21.	4.5	do	do	Do; SOME ALT. BIOTITE GNE.
21.	58.	12.1	do	do	QTZ.
58.	63.	4.3	do	FRAC.	MUCH LIGHT GREEN CRUMBLY KAOLIN WITH QTZ. STRINGERS, DIS. PYRITE; TRACES FLUORITE AT 61'
63.	68.	3.0	do	do	QTZ. & KAOLIN WITH DIS. PYRITE; TRACE GREEN FLUORITE AT 64.5'
68.	71.	1.3	do	do	QTZ., HIGHLY FRACTURED, RUSTY
71.	77.	3.3	do	do	Do
77.	81.	2.5	do	do	Do, MUCH PYRITE
81.	85.	1.5	do	do	QTZ. & KAOLIN
85.	91.	2.1	do	do	QTZ; SOME KAOLIN
91.	95.	4.0	do	do	Do, WITH PYRITE STRINGERS
95.	106.	NOT RECORD	do	do	QTZ.
106.	119.	3.8 (CORE SHOWS EXTENSIVE GRINDING)	do	do	QTZ. HIGHLY BROKEN, MANY VUGS, IRON STAIN, KAOLIN & GYPSUM; VEINLETS FLUORITE, GRAY & PALE GREEN (CORE ASSAY - 70.8 % CaF_2)
119.	121.	1.1	do		MOSTLY GOUGE & KAOLIN, PYRITIC.
121	138.	5.4	do	FRAC.	QTZ. & KAOLIN, PYRITIC TO ALTERED BIOTITE GNEISS.

BOTTOM HOLE No. 3

LOG OF DRILL HOLE NO. 4A

LAT: 1244 BEARING: N48E COLLAR ELEV. 138'

DEP: 1319 INCLINATION: -20°

FEET DRILLED FROM	TO	CORE RECOV.	ROCK CLASS.		DESCRIPTION
0	5.	BX 2.1	BIOTITE GNEISS	ALTERED	WITH QTZ. STRINGERS
5.	8.5	AX 2.5	VEIN QTZ	FRACTURED	SPECKLED WITH RUSTY KAOLIN
8.5	16.	AX 4.5	BIOTITE GNEISS	ALTERED	MANY POROUS QTZ. STRINGERS, RUSTY KAOLIN
16.	22.	AX 6.0	do	do	DO; MORE QTZ.
22.	32.	AX 7.8	VEIN QTZ.	FRACTURED	SCATTERED RUSTY KAOLIN
32.	38.	AX 4.0	do	do	SOME KAOLIN, PALE GREEN; ONE STREAK PYRITE 34'
38.	41.	AX 2.9	do	do	VUGS LINED WITH RUSTY QTZ XTALS; SCATTERED KAOLIN.
41.	61.	AX 4.0	do	do & VUGS	MORE KAOLIN & RUST; SOME GNEISS
61.	64.	AX 0.8	do	FRACTURED	GREY QTZ. & WHITE KAOLIN DIS. PYRITE 64'
64.	72.	AX 3.1	do	do POROUS	GREY QTZ. & ALT. BIOT. GNEISS STREAKS PYRITE.
72.	76.	AX 3.8	do	do VUGS	QTZ. & KAOLIN
76.	81.	NOT RECORDED	do	do VUGS	WHITE & RUSTY QTZ; STREAK PYRITE 76'-77'.
81.	85.	AX 3.3	do	MAS.	WHITE QTZ; SOME RUSTY
85.	88.	AX 2.9	do	FRACT. VUGS	DO; CLAY 85'
88.	90.	AX 2.0	do	do	DO; DARK CLAY 89' (GOUGE?)
90.	94.	AX 2.7	do	do	DO; RUSTY; 1/2" FLUORITE & PYRITE 90.5'
94.	116.	EX NOT RECORD	do	do	QTZ.
116.	122.	EX 2.7	do	do	MIXED QTZ, WHITE KAOLIN & GYPSUM; SOME STRINGERS GREEN FLUORITE. (ASSAY ~ 48.0% CaF_2).
122.	129.	EX NOT RECORD	do	do	QTZ. & KAOLIN.

BOTTOM HOLE NO. 4A.

ASSAYS – HOLE No. 1

INTERVAL FT	CORE RECOV.	CaF_2 %
338.0-340.5 CORE	2.5'	19.9
340.5-345.0 CORE	4.5'	TRACE

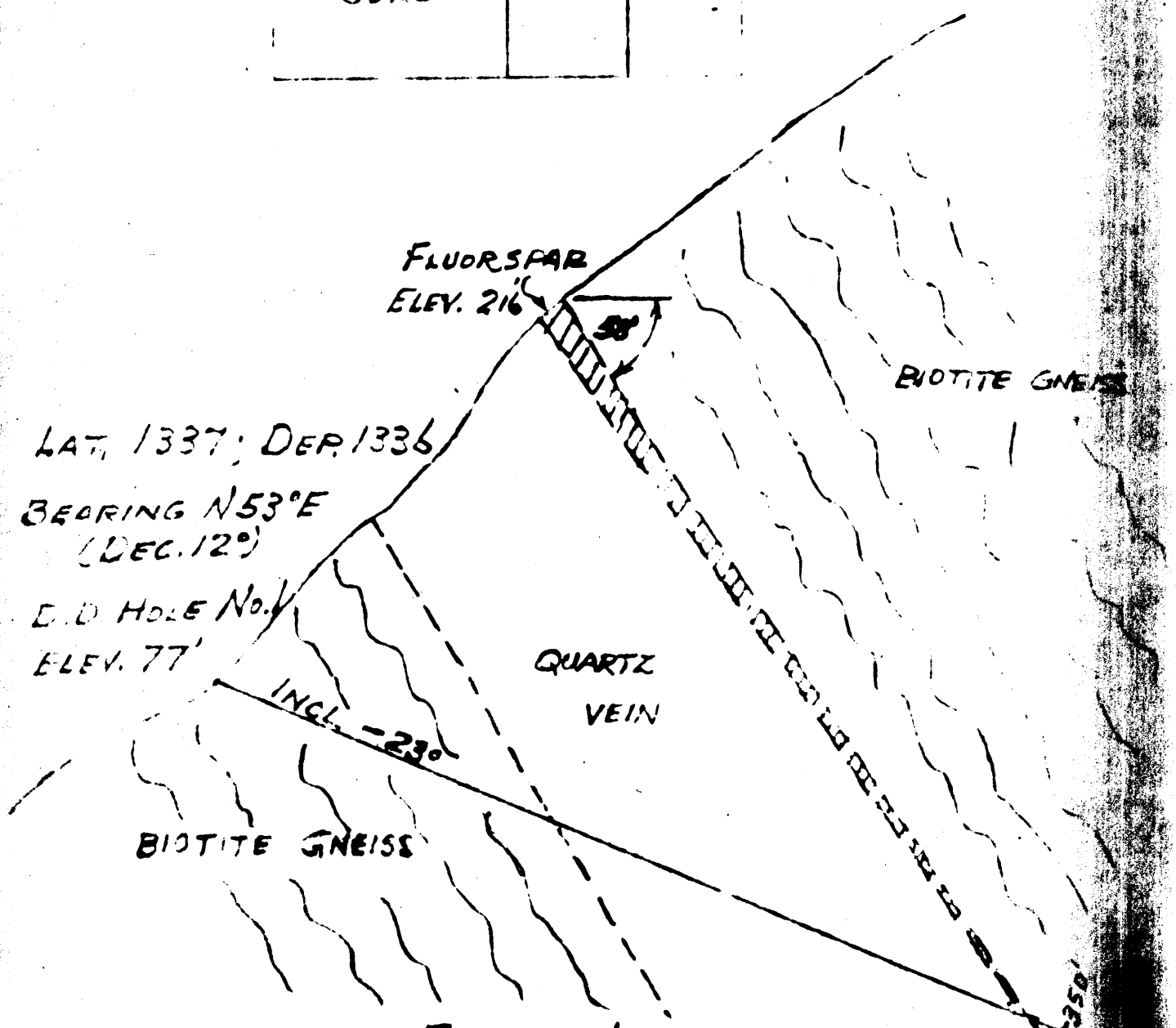


FIGURE 1

VERTICAL SECTION

THRU

D.D. HOLE No. 1

SCALE: 1IN = 60 FT.

ELEV. DATUM – MEAN HIGH WATER

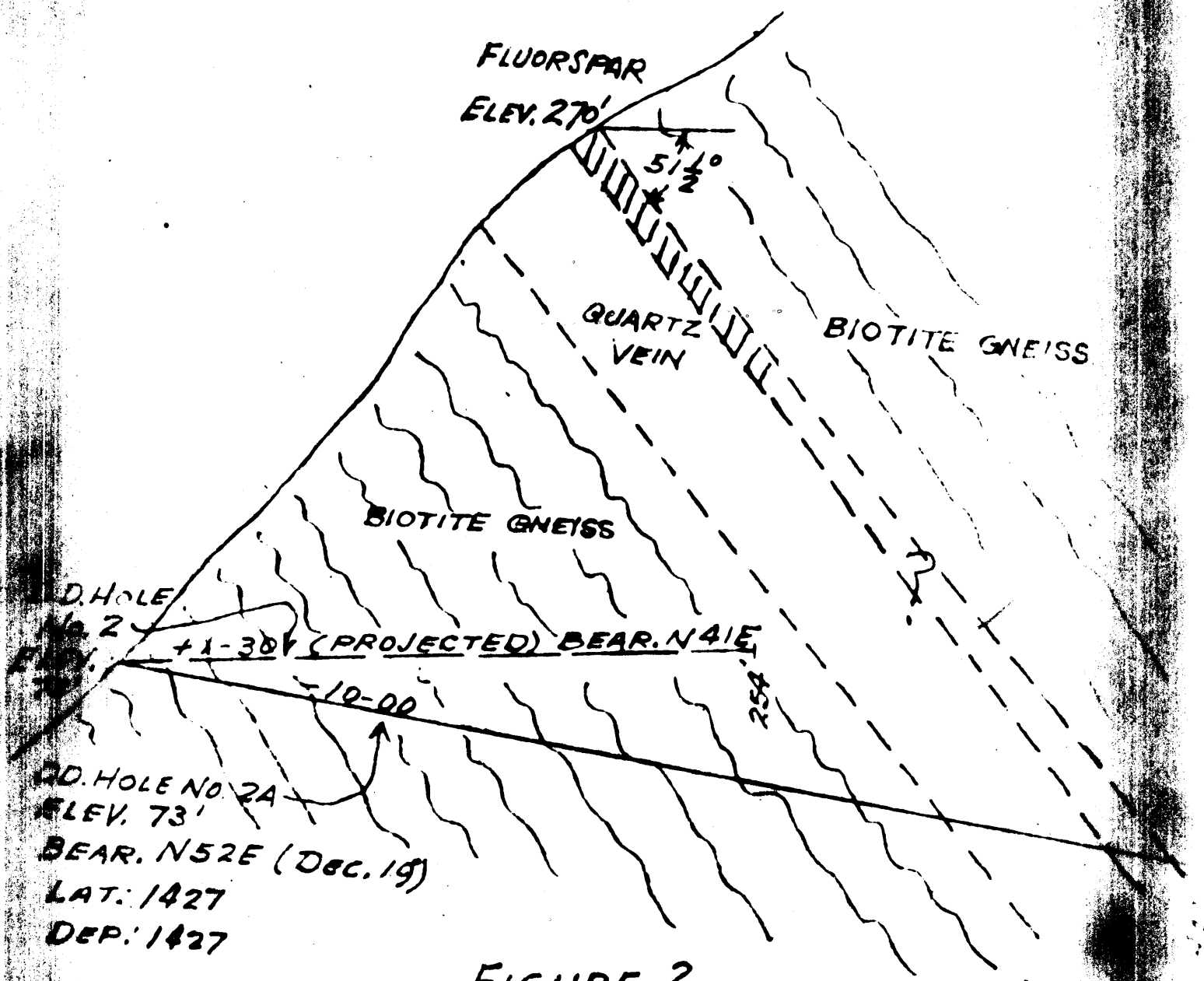


FIGURE 2

VERTICAL SECTION

THRU

D.D. HOLE No. 2A (No. 2 PROJ.)

SCALE: 1 IN = 60'

DATUM: MEAN HIGH WATER

ASSAYS - HOLE No. 3

INTERVAL, FT	CORE RECOV.	CaF_2 %
106. - 119.	AX 3.8	70.8

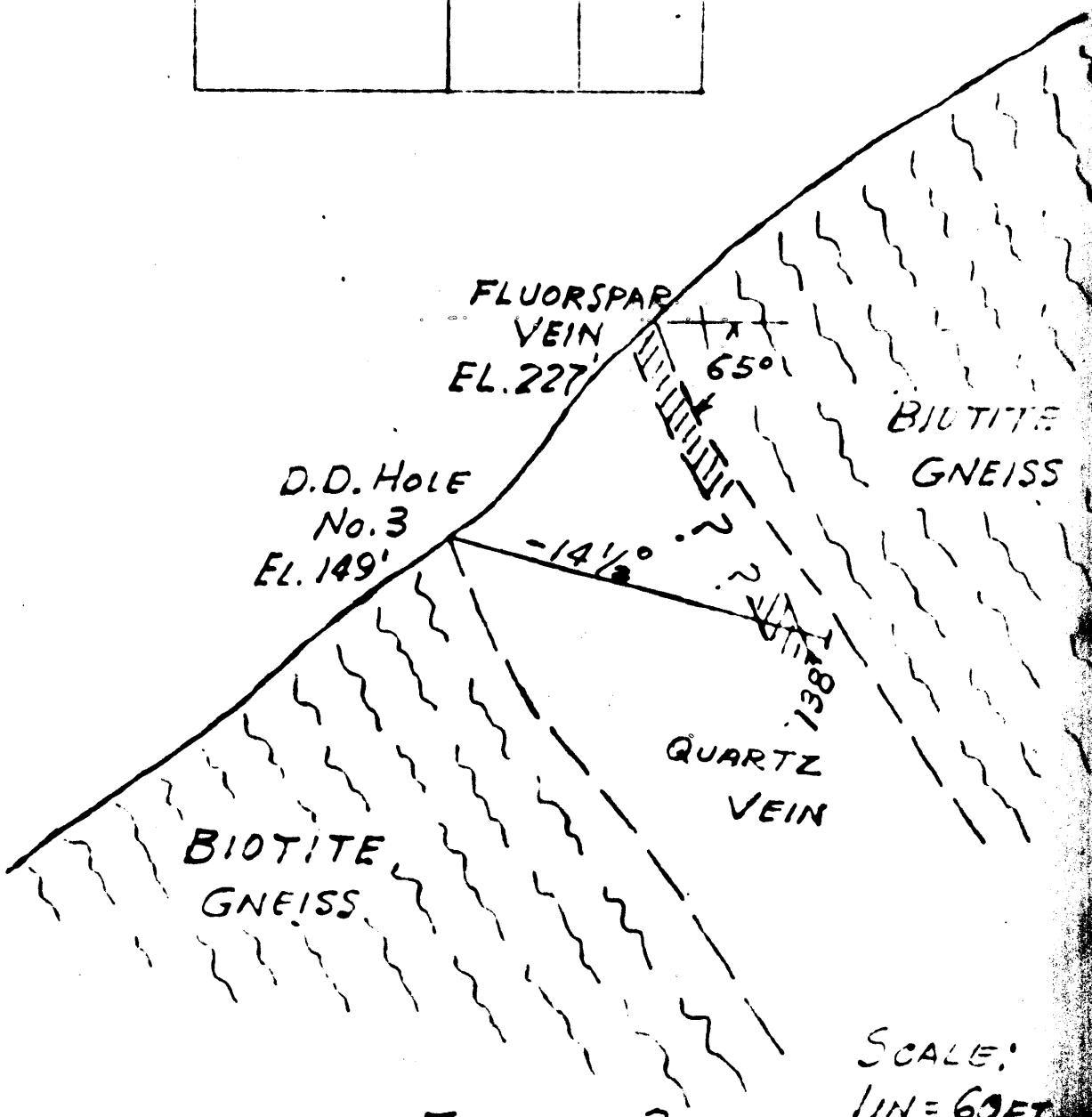


FIGURE 3
VERTICAL SECTION
THROUGH
D.D. HOLE No. 3

LAT. 1295' DEP. 1428
BEARING: N 65E
EL. DATUM - MEAN HIGH WATER

ASSAYS - HOLE NO. 4A

INTERVAL, FT.	CORE RECOV.	CaF_2 %
116. - 122.	EX 2.7	48.0

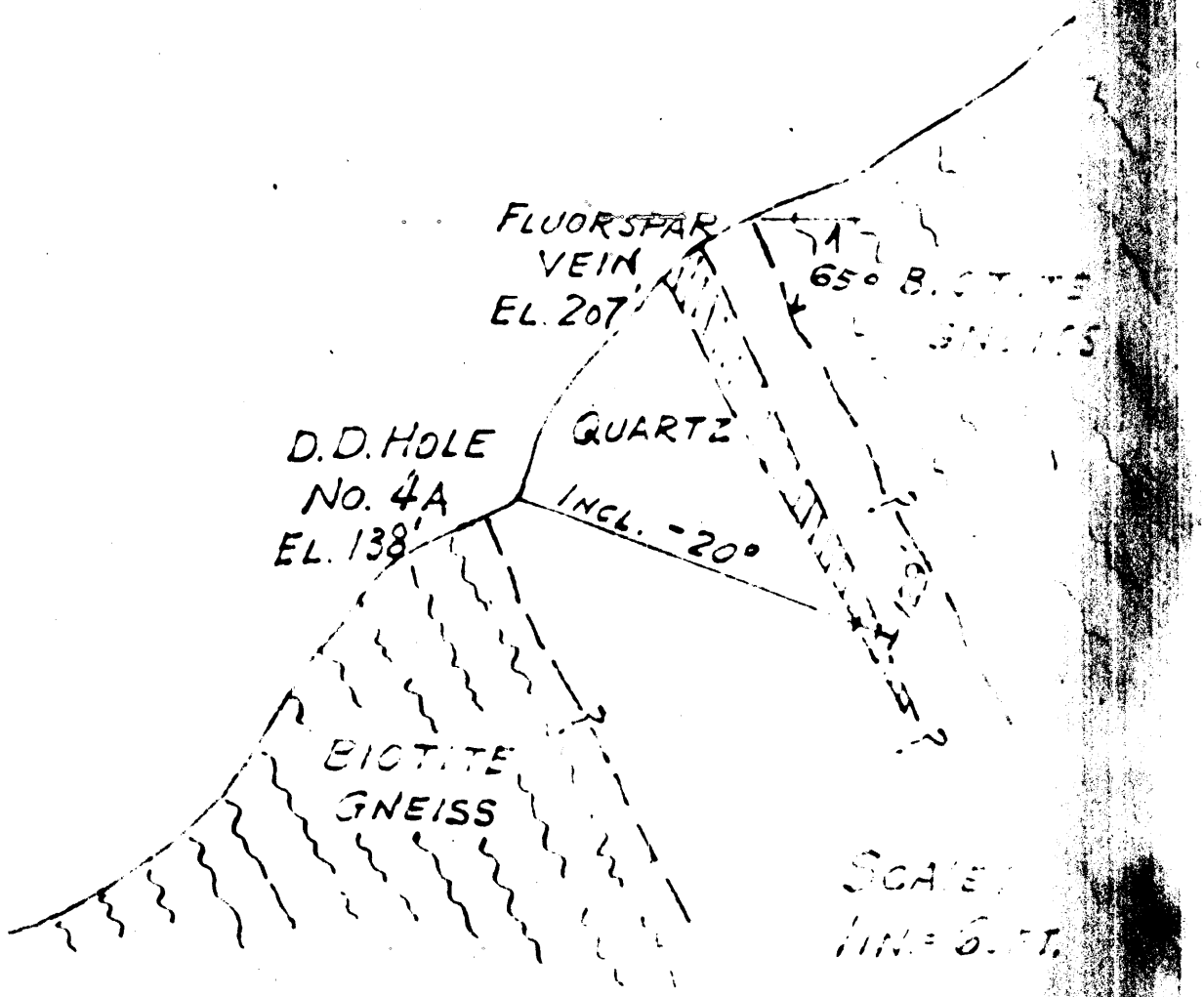


FIGURE 4

VERTICAL SECTION

THROUGH

D. D. HOLE NO. 4A

LAT. 1244 DEP. 1319

BEARING N48E

EL. DATUM - MEAN HIGH WATER

TABLE 1 - SURFACE SAMPLES

TRENCH	SAMPLE NO.	WEIGHT LBS.	LENGTH, FT.	CaF_2 %	SiO_2 %	LENGTH ASSAY	AVER. CaF_2 %
A1	1	10.9	2.0	74.5	18.4	149.0	
	2	5.2	1.6	78.5	14.1	125.6	
	3	12.1	3.1	93.4	1.8	289.5	
	4	9.4	1.7	86.6	7.7	147.2	
			8.4			711.3	84.7
B1	1	11.7	2.4	26.7	60.1	64.1	
	2	10.7	1.6	43.4	46.6	69.4	
	3	10.8	3.4	91.8	3.1	312.1	
	4	8.5	2.6	75.5	17.5	196.3	
			10.0			641.9	64.2
C1	1	8.4	3.3	a/	66.6	—	
	2	10.1	2.9	76.3	16.8	254.0	
	3	9.5	3.3	74.1	18.8	244.5	
	4	9.8	3.0	80.3	13.3	240.9	
	5	7.8	2.6	32.0	56.5	83.2	
			11.8			822.6	69.7
D1	1	10.2	3.5	a/	73.7		
	2	10.4	2.4	89.7	4.8	224.3	
	3	8.6	2.4	91.2	3.6	218.9	
			4.9			443.2	90.5
E1	1	8.5	3.5	58.4	32.8	204.4	
	2	9.7	2.5	73.8	19.0	184.5	
	3	11.2	1.3	70.8	21.5	92.0	
	4	10.6	2.0	84.4	9.6	168.8	
	5	14.0	3.7	65.3	26.7	241.6	
			13.0			891.3	68.6
E1A	1	5.1	1.5	86.1	8.1		86.1
E1B	No SAMPLE						
E1C	1	7.7	2.6	54.2	36.4	140.9	
	2	8.5	2.9	35.0	53.5	101.5	
			5.5			242.4	44.1
E1D	No SAMPLE						
E1E	1	2.9	0.8	91.3	3.9		0.8
F1	1	5.9	1.5	65.1	26.9	162.8	
	2	3.7	2.5	68.8	23.5	103.2	
			4.0			266.0	66.5
G1	1	3.2	1.0	72.7	19.9		72.7
H1	1	4.6	1.2	83.8	10.1		83.8
I1	1	7.5	3.0	a/	64.3		a/

a/ LESS THAN 25% CaF_2

TABLE 1 - SURFACE SAMPLES

TRENCH	SAMPLE NO.	WEIGHT LBS.	LENGTH FT.	CaF_2 %	SiO_2 %	LENGTH ASSAY	AVER. CaF_2
J1	1	6.8	1.9 ✓	86.5	7.7		86.5 ✓
K1	1	6.4	2.8	a/	82.2	—	
	2	8.5	2.5	29.5	58.6	73.8	
	3	7.5	2.1	47.8	42.2	100.4	
	4	6.3	2.3	79.6	13.9	182.4	
			6.9 ✓			356.6	51.3 ✓
L1	1	7.5	3.0	68.3	24.0	—	
	2	6.4	3.3	a/	72.5	—	
	3	7.6	3.1	a/	76.2	—	
	4	7.0	2.1	32.0	56.2	67.2	
	5	7.1	3.3	38.9	50.1	128.4	
	6	7.0	3.0	68.8	23.5	206.4	
	7	4.8	2.3	33.6	54.9	77.3	
			10.7 ✓			479.3	44.8 ✓
M1	1	10.9	2.8	89.1	5.4	249.5	
	2	10.2	3.8	91.8	2.9	348.8	
	3	9.5	2.9	79.7	13.9	231.1	
	4	2.8	1.0	62.0	26.9	62.0	
			10.5 ✓			891.4	84.9 ✓
N1	1	9.1	3.6	71.7	20.9	258.1	
	2	8.3	2.0	35.8	52.8	71.6	
			5.6 ✓			329.7	58.9 ✓
N1A	1	9.0	2.8	93.3	1.7	261.2	
	2	7.3	2.8	67.7	24.4	189.6	
	3	8.3	2.9	93.6	1.4	271.4	
	4	8.9	3.0	46.7	43.3	140.1	
			11.5 ✓			862.3	75.0 ✓
O1	1	11.0	1.8	80.8	12.8	145.4	
	2	12.4	1.4	94.3	0.8	132.0	
	3	12.8	2.8	84.0	10.0	235.2	
	4	9.9	2.8	38.0	51.0	106.4	
	5	9.6	4.2	a/	73.3	—	
			8.8 ✓			619.0	70.3 ✓
P1	1	8.4	2.3	59.8	31.5	137.5	
	2	9.9	3.2	80.1	13.4	256.3	
	3	8.3	2.6	68.1	24.2	177.1	
	4	7.5	2.0	72.8	19.9	145.6	
			10.1 ✓			716.5	70.9 ✓
G1	1	11.0	3.0	72.8	19.8	218.4	
	2	11.5	2.4	81.3	12.3	195.1	
	3	11.3	2.0	66.8	15.6	133.0	
	4	11.9	3.2	73.8	19.0	236.2	
	5	5.9	1.6	79.2	14.3	126.7	
			12.2 ✓			909.4	74.5 ✓

LESS THAN 25% CaF_2

TABLE 1 - SURFACE SAMPLES

TRENCH	SAMPLE NO.	WEIGHT LBS.	LENGTH FT.	CaF_2 %	SiO_2 %	LENGTH % ASSAY	AVER. CaF_2 %
R1	1	10.7	2.0	78.4	15.0	156.8	
	2	6.5	1.6	89.3	5.2	142.9	
			3.6 ✓			299.7	83.3 ✓
R1A	No SAMPLE						
R1B	"	"					
R1C	"	"					
R1D	"	"					
S1	1	4.8	1.9 ✓	70.3	22.1		70.3 ✓
T1	No SAMPLE						
U1	"	"					
V1	"	"					
A2D	1	8.5	1.7	91.2	3.5	155.0	
	2	9.1	3.0	86.7	7.6	260.1	
			4.7 ✓			415.1	88.3 ✓
A2C	1	13.2	2.8	83.2	10.7	233.0	
	2	11.0	2.8	62.5	29.2	175.0	
	3	10.7	1.7	76.7	16.4	130.4	
	4	11.0	1.7	71.2	21.3	121.0	
			9.0 ✓			659.4	73.3 ✓
A2B	1	4.4	1.7 ✓	93.7	1.4		93.7 ✓
A2A	1	10.2	2.0	85.6	8.5	171.2	
	2	8.7	3.0	68.8	23.5	206.4	
	3	9.2	3.8	50.8	39.5	193.0	
	4	9.0	2.7	48.7	41.3	131.5	
	5	10.6	2.0	58.2	33.0	116.4	
	6	3.4	0.7	55.0	35.7	38.5	
			14.2 ✓			857.0	60.4 ✓
A2	1	5.5	2.3	60.6	30.9	139.4	
	2	8.0	3.0	77.3	15.9	231.9	
	3	8.9	1.3	40.6	48.6	52.8	
	4	9.1	2.3	82.2	11.6	189.1	
			8.9 ✓			613.2	68.9 ✓
STRINGER A		4.3	1.0	90.3	4.3		90.3
B2B	1	8.6	2.4	94.4	0.6	226.6	
	2	10.8	2.5	91.4	3.3	228.3	
	3	5.9	2.6	[illegible]	28.2	165.4	
			7.5 ✓			620.3	82.7 ✓

TABLE 1 - SURFACE SAMPLES

TRENCH	SAMPLE NO.	WEIGHT LBS.	LENGTH FT.	CaF_2 %	SiO_2 %	LENGTH X ASSAY	AVER. CaF_2 %
B2A	NO SAMPLE						
B2	1	8.1	1.6	93.8	1.2	150.1	
	2	5.9	1.7	64.8	27.1	110.2	
			3.3			260.3	78.9
C2	1	9.2	2.2	88.7	5.8	195.1	
	2	7.8	2.3	80.5	13.0	185.2	
			4.5			380.3	84.5
D2B	NO SAMPLE						
D2A	"	"					
D2	1	5.9	2.2	68.5	23.9		68.5

TABLE 2 - DRILL CORE SAMPLES

HOLE NO.	INTERVAL FROM	TO	CORE FT.	RECOV. %	Al_2 %	SiO_2 %	$CaCO_3$ %	AVER. CaF_2 %
1	338.0	340.5	AX 2.5	100	19.9			.09
	340.5	345.0	AX 4.5	100	TRACE			
2A	405.0	407.4	AX 2.0	83	18.6	64.3	8.80	
	407.4	412.4	AX 4.0	80	13.9	75.6	4.81	
	412.4	415.0	AX 2.1	81	13.75	69.7	8.01	
	415.0	418.5	AX 3.5	100	13.2	72.75	8.76	
	418.5	423.5	AX 3.0	60	15.7	62.1	15.85	
	423.5	427.0	AX 3.5	100	16.1	69.5	7.58	
	427.0	431.0	AX 3.0	75	18.9	72.0	3.76	
								15.0
3	106.	119.	AX 3.8	29	70.8			70.8
								48.0
4A	116.	122	EX 2.7	45	48.0			

TABLE 3 - ORE RESERVES, SHOOT #1

TRENCH NO.	TOTAL W, FT.	AVER. CAF₂%	AVER. W, FT.	DIST. L, FT.	AVER. G, %	W×L×G	W×L
J1	1.9	86.5					
			4.4	34	59.3	140.9	237.6
K1	6.9	51.8					
			8.8	34	47.5	142.1	299.2
L1	10.7	44.8					
			10.6	72	64.2	490.0	763.2
M1	10.5	84.9					
			8.05	42	75.9	256.6	338.1
N1	5.6	58.9					
			8.55	55	69.7	327.8	470.25
N1A	11.5	75.0					
			10.15	25	73.0	185.2	253.75
O1	8.8	70.3					
			9.45	53	70.6	380.6	500.85
P1	10.1	70.9					
			11.15	35	72.9	284.5	390.25
Q1	12.2	74.5					
			7.9	47	76.5	284.0	371.3
R1	3.6	83.3					
				417		2491.7	3624.50

AVERAGE GRADE - 68.7% CaF_2

AVERAGE WIDTH - 8.7 FT.

ASSUMED TONNAGE FACTOR - 11 C.F./T.

TONS PER FOOT DEPTH = $\frac{417 \times 8.7}{11}$ = 302.5

TABLE 4 - ORE RESERVES, SHOOT #2

TRENCH No.	WIDTH, FT.	CaF_2 %	AVER. DIST. W, FT.	AVER. DIST. L, FT.	AVER. G, %	W×L×G	W×L
A2C	9.0	79.3					
			6.85	50	78.4	268.5	342.5
A2D	4.7	88.3					
			6.55	32	86.0	180.3	209.6
A1	8.4	84.7					
			9.2	49	73.5	331.3	450.8
B1	10.0	64.2					
			10.9	33	67.2	241.7	359.7
C1	11.8	69.7					
			8.35	39	74.9	243.9	325.65
D1	4.9	90.5					
			8.95	33	74.6	220.3	295.35
E1	13.0	68.6					
			7.25	24	70.4	128.8	174.0
E1A	1.5	86.1					
			58.05	260		1614.8	2157.6

AVERAGE GRADE - 74.8 % CaF_2

AVERAGE WIDTH - 7.3 FT.

ASSUMED TONNAGE FACTOR - 11 C.F./T.

TONS PER FOOT DEPTH $\frac{260 \times 7.3}{11} = 172.5$

TABLE 5 - ORE RESERVES, SHOOT #3

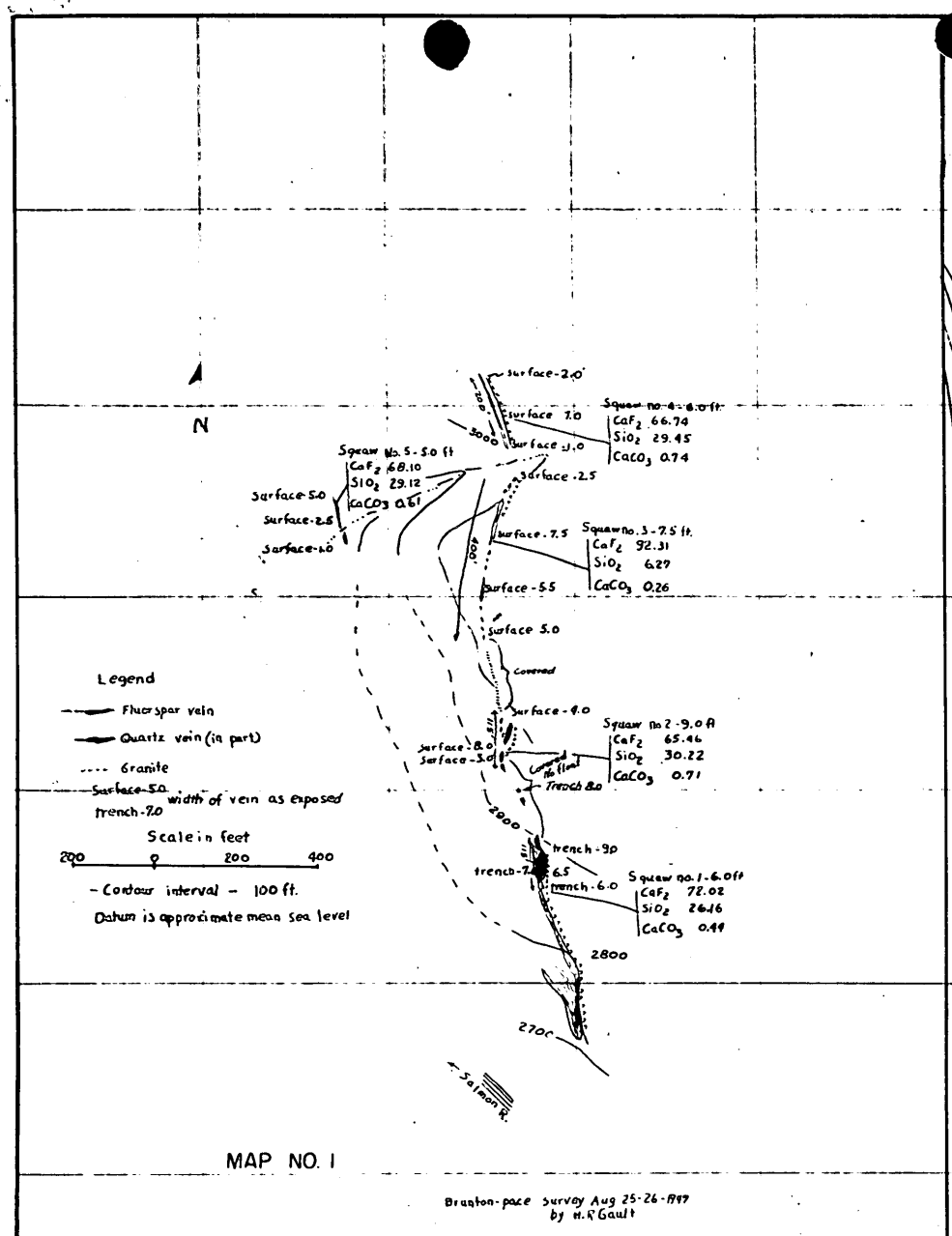
[illegible]	WIDTH FT.	CaF_2 %	AVER. DIST. W, FT.	L, FT.	AVER G, %	W x L x G	W x L
C2	4.5	84.5	3.9	40	82.1	128.1	156.0
B2	3.3	78.9	5.4	48	81.8	212.0	259.2
B2B	7.5	82.7	8.2	25	75.2	154.2	205.0
A2	8.9	68.9	11.55	20	63.6	146.9	231.0
A2A	14.2	60.4	7.95	25	63.9	127.0	198.7
[illegible]B	1.7	93.7					
			37.00	158	73.2	768.2	1049.9

AVERAGE GRADE - 73.2 % CaF_2

AVERAGE WIDTH - 6.2 FT.

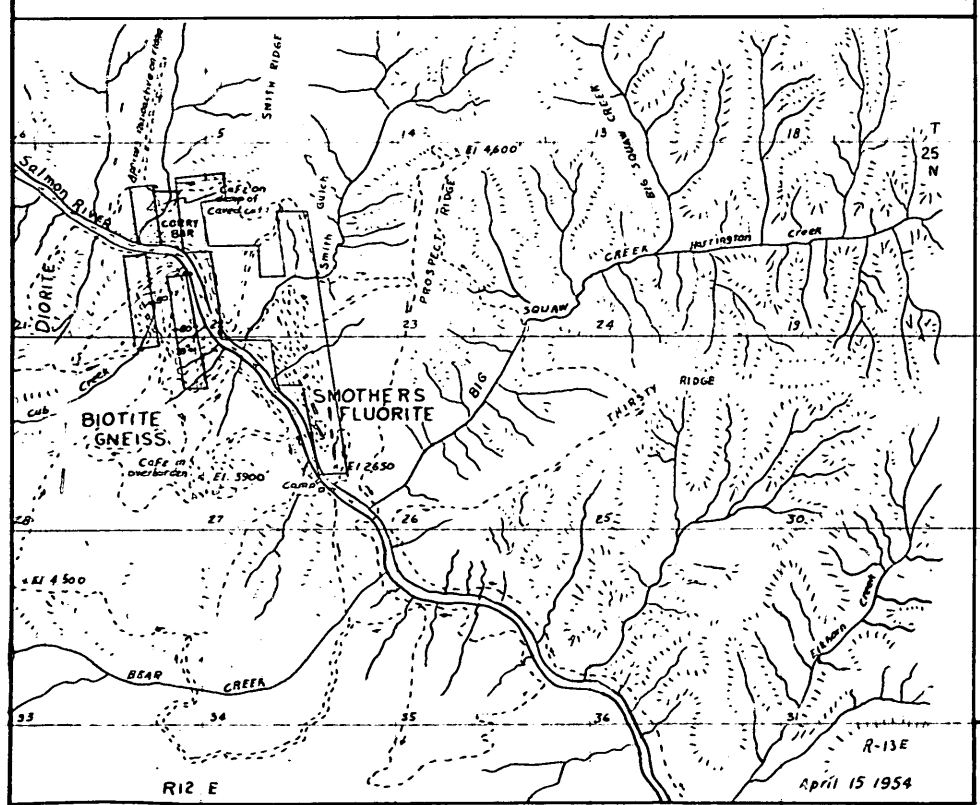
ASSUMED TONNAGE FACTOR - 11 C.F./T.

TONS PER FOOT DEPTH = $\frac{158 \times 6.2}{11}$ = 89.1



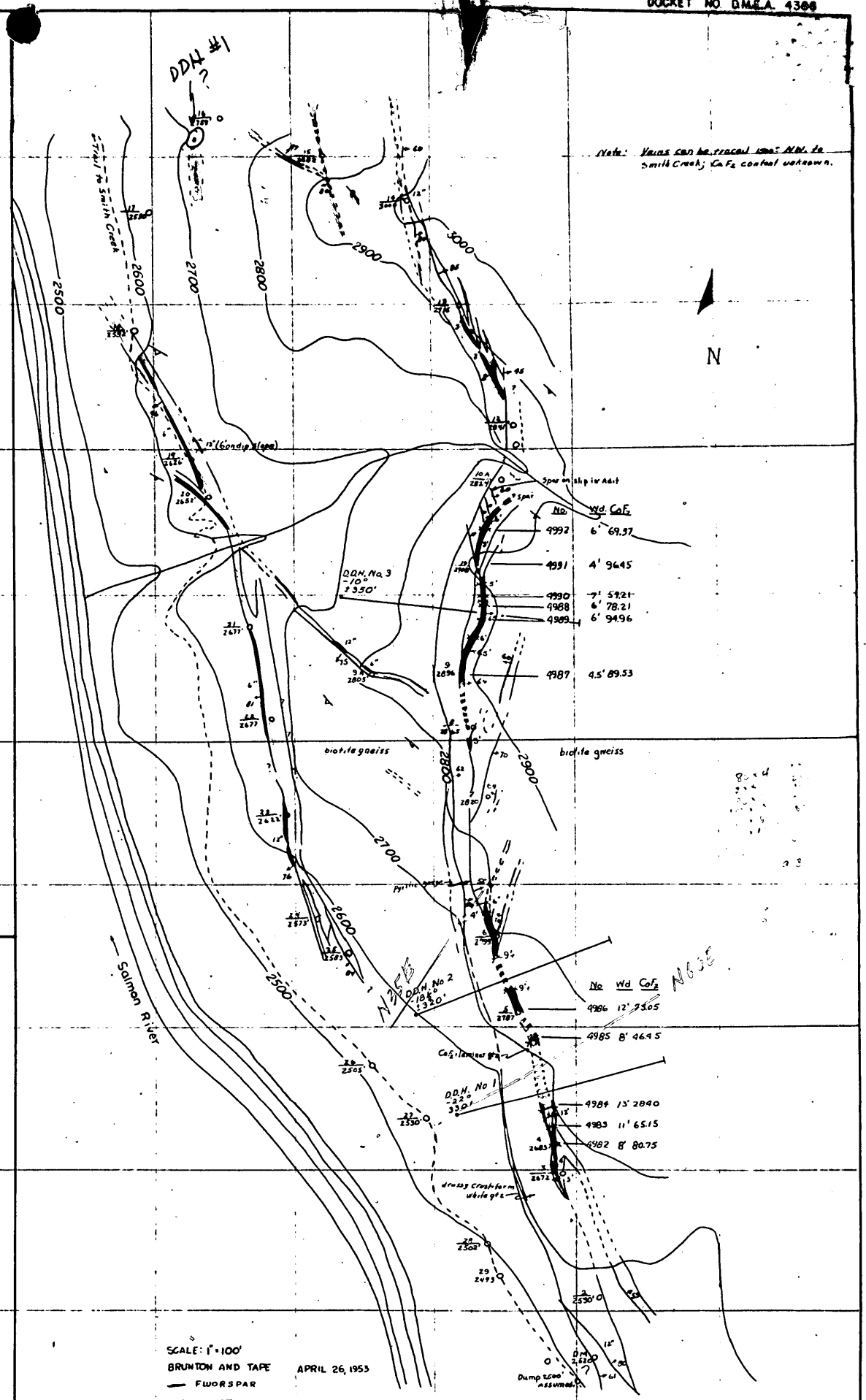
MAP NO. 1

Brunton-pace survey Aug 25-26-1947
by H.R Gault



Fluorite mineralization Scale 1" = 1/2 mile. Route of survey.

MAP NO. 3



MAP NO. 2

MAP NO. 1	Brunton Pace Survey by H.R. Gault. Map accompanies Robert M. Gammell's U.S.B.M. examination report 1953.
MAP NO. 2	Brunton Survey by a A.S. and R. company geologist.
MAP NO. 3	Reconnaissance Survey Map showing fluorspar outcrops and float. The claims boundaries are shown in the original application.

SMOTHERS FLUORSPAR DEPOSIT

Squaw Creek Mining Co.

IDAHO COUNTY, IDAHO

Plate No. 1

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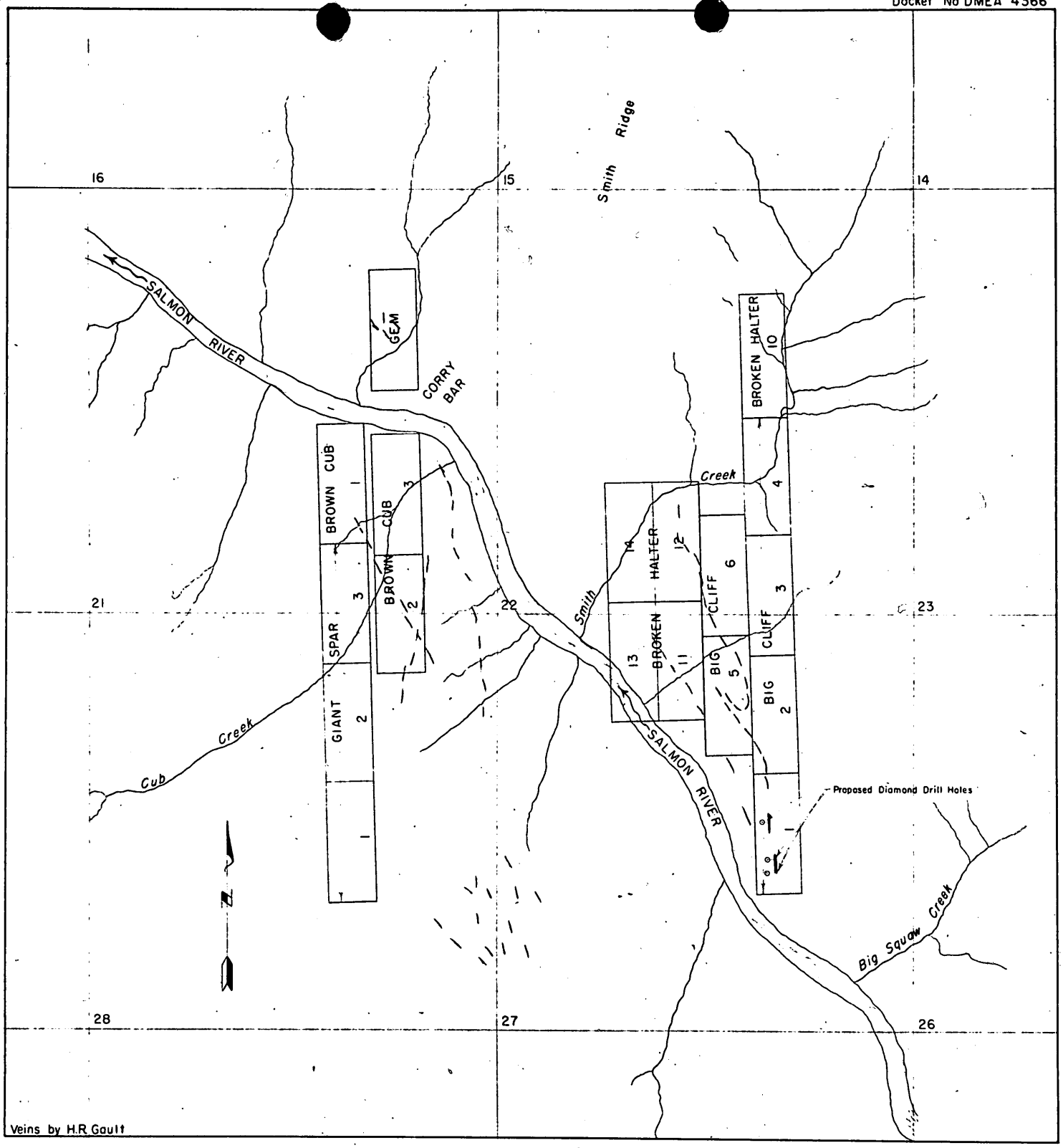
DATE	INITIALS	CODE

Docket No DMEA 4366



CLAIM MAP

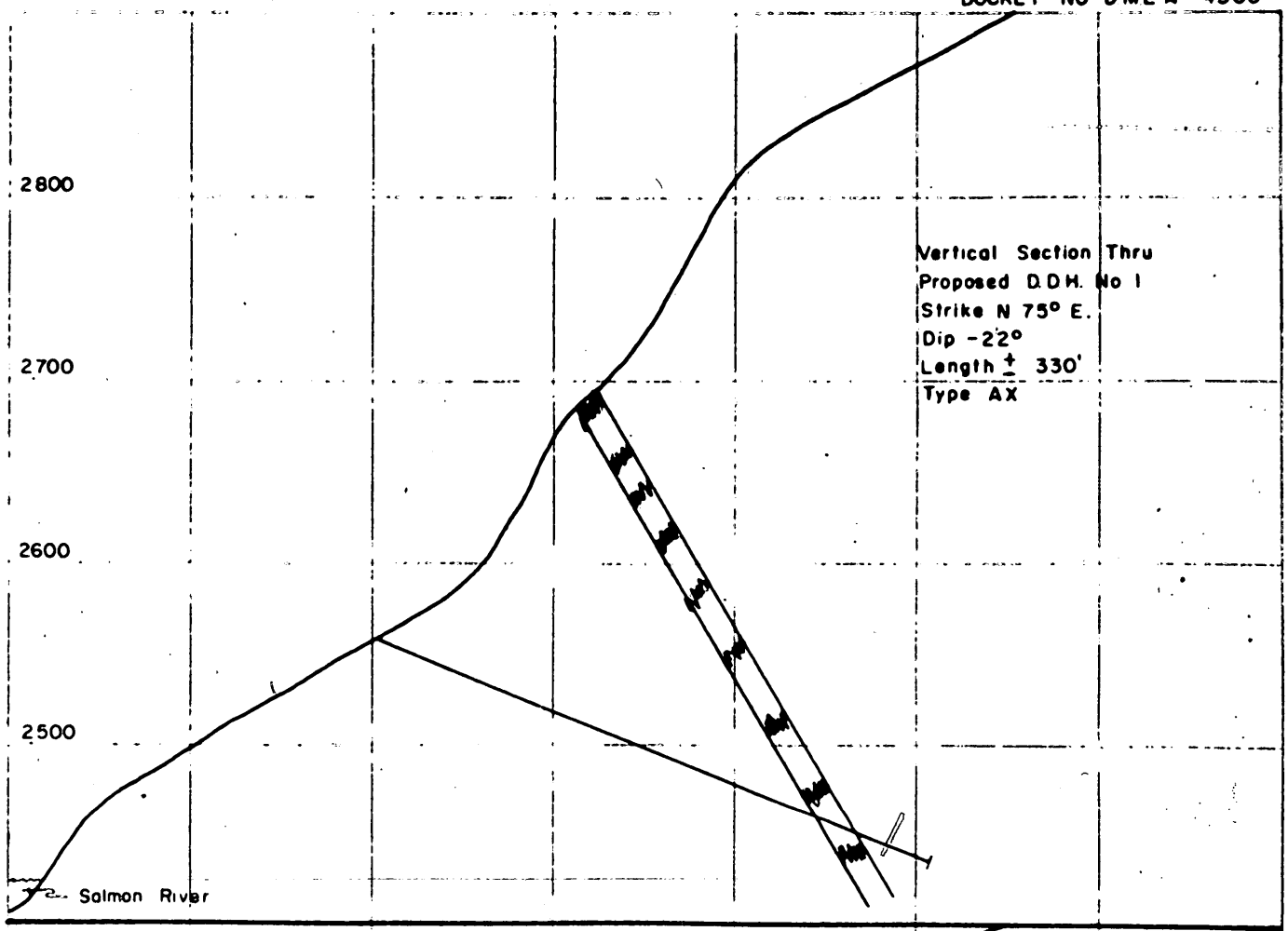
SMOTHERS FLUORSPAR DEPOSIT

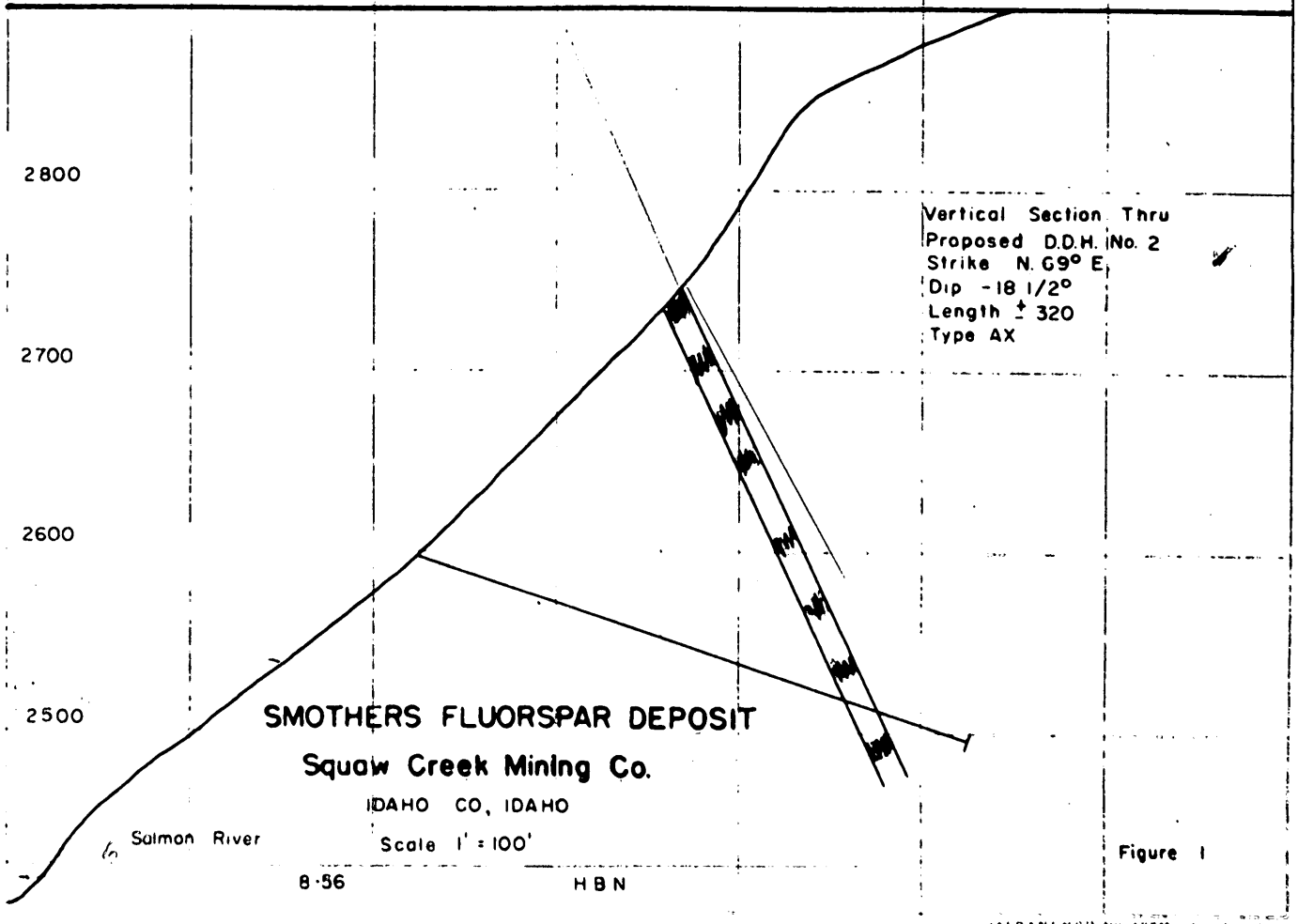
IDAHO COUNTY, IDAHO

T. 25 N., R. 12 E.

0 — 1 MILE

Plate No. 2





SMOTHERS FLUORSPAR DEPOSIT

Squaw Creek Mining Co.

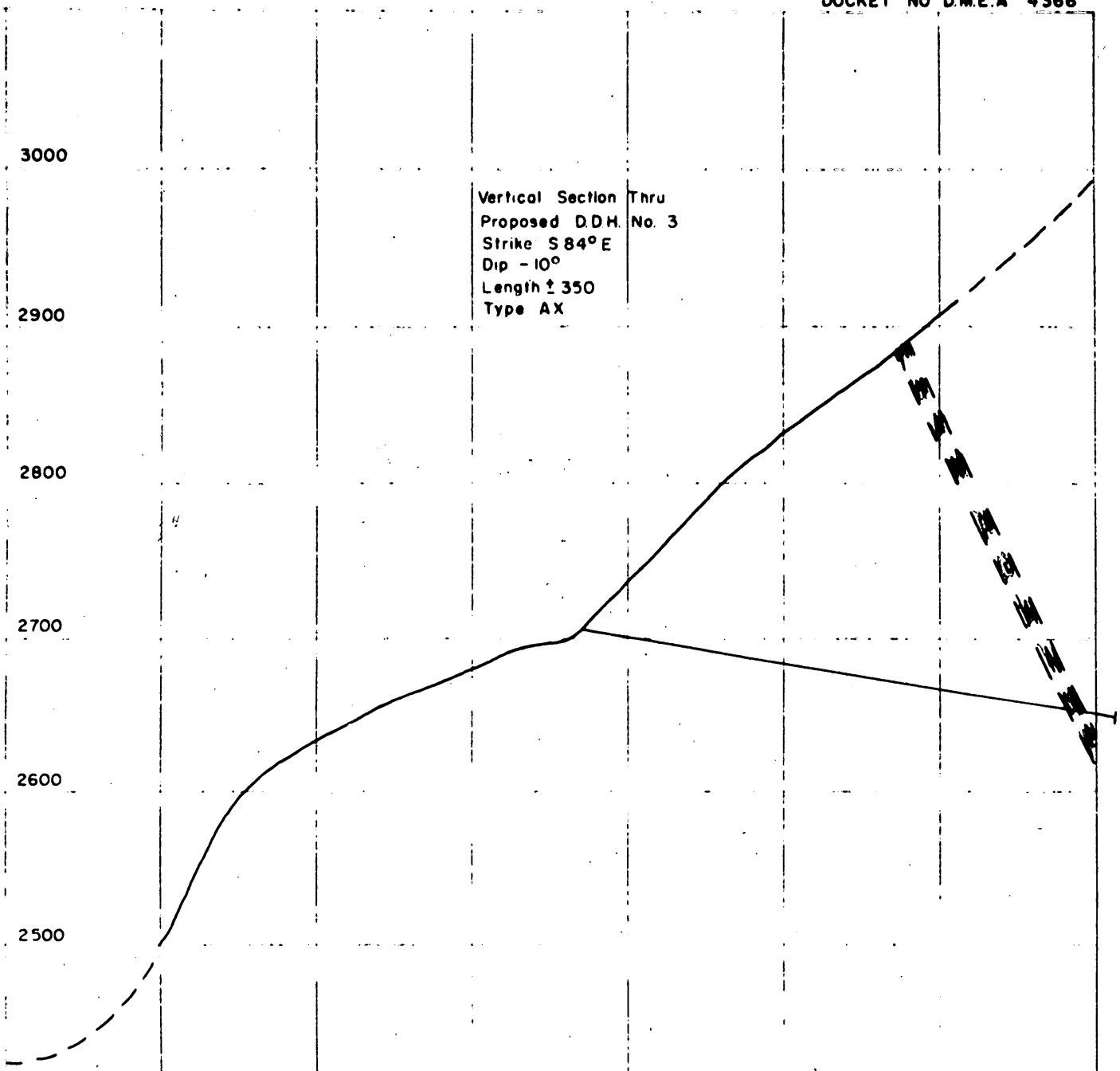
IDAHO CO, IDAHO

Scale 1" = 100'

8-56 HBN

Figure 1

ALDAN ENG. NO. 100M K&E CO., N.Y.
REG. U.S. PAT. OFF.



SMOTHERS FLUORSPAR DEPOSIT

Squaw Creek Mining Co.

IDAHO CO, IDAHO

Scale 1" = 100'

Figure 2

8-56 HBN

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DATE
CODE

mr. frank
May 22

LAW OFFICES
DONNELLY AND O'BRIEN
322 SHELDEN AVENUE
HOUGHTON, MICH.
TELEPHONE 145

JOSEPH M. DONNELLY
RICHARD J. O'BRIEN

EXTRA COPY
D M E A
RECEIVED MAY 22 1957

DATE	INITIALS	CODE

May 20, 1957

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I
NW District
South 157 Howard Street
Spokane 4, Washington

RE: DOCKET NO. DMEA - 4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Sale to Idaton, Inc.

Dear Mr. Weissenborn:

I enclose original and four copies of DMEA Contract No. IDM - E - 1078 which were received in our office this morning from the Squaw Creek Mining Company, executed by the latter company on page three thereof.

I also enclose original and four copies of an Assignment of this Contract from the Squaw Creek Mining Company to Idaton, Inc., subject to the approval of your office.

Excuse the delay in this matter but the respective mailing back and forth between Michigan and Idaho has held same up. Is there any other information your office desires before this Contract can be officially placed in Idaton, Inc.'s name?

Very truly yours,

DONNELLY & O'BRIEN

/s/ by Richard J. O'Brien

O:m

Enc.

Copy to: Mr. Wing G. Agnew, Member
U. S. Bureau of Mines
Division Street
Spokane, Washington

and Mr. John G. Ecklesdafer
Box 101
Northfork, Idaho

A S S I G N M E N T

KNOW ALL MEN BY THESE PRESENTS, that the Squaw Creek Mining Company, a Montana Corporation, Assignor, for and in consideration of the sum of Ten Dollars ($10.00), and other good and valuable considerations, to it in hand paid by Idation, Inc., a Corporation, Assignee, the receipt of which is hereby acknowledged, does by these presents, sell, set over, transfer and assign unto the Assignee all its right, title and interest in and to that certain D.M.E.A. exploration contract, which bears the date of April 12, 1957, and which is D.M.E.A. #4366 and contract No. Idm - E1078 and which exploration contract is for the following described properties:

Smothers Fluorspar Deposit,
Squaw Creek Mining Company,
Idaho County, Idaho.

The Assignee, by acceptance of this Assignment agrees to perform all acts required of the Assignor under the terms of said D.M.E.A. contract and to save and hold the Assignor harmless from any obligation or liability thereunder.

Dated this 15 day of May, 1957.

SQUAW CREEK MINING COMPANY

By William J. Wells
President

ATTEST:
Claude E. Freeman
Secretary

OFFICIAL FILE COPY
D.M.E.A.
RECEIVED MAY 27 1957

DATE	INITIALS	CODE

Idation, Inc. hereby accepts the foregoing Assignment.

IDATION, INC.

By Thomas Rice
Vice President

ATTEST:
Richard J. O'Brien
Secretary

STATE OF MONTANA)
) ss
County of Missoula)

On this 15th day of May, 1957, before me, the undersigned, a Notary Public for the State of Montana, personally appeared WILLIAM J. WALKER and CLAUDE C. FREEMAN known to me respectively to be the President and Secretary of the Corporation that executed the within instrument, and acknowledged to me that such Corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written

Jack R. Green
NOTARY PUBLIC for the State of Montana
Residing at Missoula, Montana
My Commission expires Jan 23, 1958

(NOTARIAL SEAL)

STATE OF Michigan)
) ss
County of Houghton)

On this 20th day of May, 1957, before me, the undersigned, a Notary Public for the State of Michigan, personally appeared John W. Rice and Richard J. O'Brien known to me respectively to be the Vice President and Secretary of the Corporation that executed the within instrument, and acknowledged to me that such Corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Calvin Bossum
NOTARY PUBLIC for the State of Michigan
Residing at Houghton, Michigan
My Commission expires _____
Notary Public, Houghton Co., Mich.
My Commission Expires October 27, 1959

(NOTARIAL SEAL)

JACK L. GREEN
ATTORNEY AT LAW
MISSOULA, MONTANA

A S S I G N M E N T

KNOW ALL MEN BY THESE PRESENTS, that the Squaw Creek Mining Company, a Montana Corporation, Assignor, for and in consideration of the sum of Ten Dollars ($10.00), and other good and valuable considerations, to it in hand paid by Idation, Inc., a Corporation, Assignee, the receipt of which is hereby acknowledged, does by these presents, sell, set over, transfer and assign unto the Assignee all its right, title and interest in and to that certain D.M.E.A. exploration contract, which bears the date of April 12, 1957, and which is D.M.E.A. #4366 and contract No. Idm - E1078 and which exploration contract is for the following described properties:

Smothers Fluorspar Deposit,
Squaw Creek Mining Company,
Idaho County, Idaho.

The Assignee, by acceptance of this Assignment agrees to perform all acts required of the Assignor under the terms of said D.M.E.A. contract and to save and hold the Assignor harmless from any obligation or liability thereunder.

Dated this 15 day of May, 1957.

SQUAW CREEK MINING COMPANY

By William J. Arch
President

ATTEST:
Claude B. Freeman
Secretary

RECEIVED MAY 22 1957
DATE | INITIALS | CODE

Idation, Inc. hereby accepts the foregoing Assignment.

IDATION, INC.

By [illegible]
Vice President

ATTEST:
Richard J. O'Brien
Secretary

STATE OF MONTANA)
) ss
County of Missoula)

On this 15th day of May, 1957, before me, the undersigned, a Notary Public for the State of Montana, personally appeared WILLIAM J. WALKER and CLAUDE C. FREEMAN known to me respectively to be the President and Secretary of the Corporation that executed the within instrument, and acknowledged to me that such Corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written

NOTARY PUBLIC for the State of Montana
Residing at Missoula, Montana
My Commission expires Jan 13, 1958

(NOTARIAL SEAL)

STATE OF Michigan)
) ss
County of Houghton)

On this 20th day of May, 1957, before me, the undersigned, a Notary Public for the State of Michigan, personally appeared John W. Rice and Richard J. O'Brien known to me respectively to be the Vice President and Secretary of the Corporation that executed the within instrument, and acknowledged to me that such Corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

NOTARY PUBLIC for the State of Michigan
Residing at Houghton, Michigan
My Commission expires _____

(NOTARIAL SEAL)

Notary Public, Houghton Co., Mich.
My Commission Expires October 27, 1959

JACK L. GREEN
ATTORNEY AT LAW
MISSOULA, MONTANA

A S S I G N M E N T

KNOW ALL MEN BY THESE PRESENTS, that the Squaw Creek Mining Company, a Montana Corporation, Assignor, for and in consideration of the sum of Ten Dollars ($10.00), and other good and valuable considerations, to it in hand paid by Idation, Inc., a Corporation, Assignee, the receipt of which is hereby acknowledged, does by these presents, sell, set over, transfer and assign unto the Assignee all its right, title and interest in and to that certain D.M.E.A. exploration contract, which bears the date of April 12, 1957, and which is D.M.E.A. #4366 and contract No. Idm - E1078 and which exploration contract is for the following described properties:

Smothers Fluorspar Deposit,
Squaw Creek Mining Company,
Idaho County, Idaho.

The Assignee, by acceptance of this Assignment agrees to perform all acts required of the Assignor under the terms of said D.M.E.A. contract and to save and hold the Assignor harmless from any obligation or liability thereunder.

Dated this 15 day of May, 1957.

SQUAW CREEK MINING COMPANY

By William J. Nash
President

ATTEST:
Claude E. Freeman
Secretary

EXTRA COPY
D M E A
RECEIVED MAY 27 1957
DATE | INITIALS | CODE

Idation, Inc. hereby accepts the foregoing Assignment.

IDATION, INC.

By Thomas Rice
Vice President

ATTEST:
Richard J. O'Brien
Secretary

STATE OF MONTANA)
) ss
County of Missoula)

On this 13-th day of May, 1957, before me, the undersigned, a Notary Public for the State of Montana, personally appeared WILLIAM J. WALKER and CLAUDE C. FREEMAN known to me respectively to be the President and Secretary of the Corporation that executed the within instrument, and acknowledged to me that such Corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written

Jack L. Green
NOTARY PUBLIC for the State of Montana
Residing at Missoula, Montana
My Commission expires Jan 13, 1958

(NOTARIAL SEAL)

STATE OF Michigan)
) ss
County of Houghton)

On this 20th day of May, 1957, before me, the undersigned, a Notary Public for the State of Michigan, personally appeared John W. Rice and Richard J. O'Brien known to me respectively to be the Vice President and Secretary of the Corporation that executed the within instrument, and acknowledged to me that such Corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Dalores Borsum
NOTARY PUBLIC for the State of Michigan
Residing at Houghton, Michigan
My Commission expires _____

(NOTARIAL SEAL)

Notary Public, Houghton Co., Mich.
My Commission Expires October 27, 1959

JACK L. GREEN
ATTORNEY AT LAW
MISSOULA, MONTANA

A G R E E M E N T

THIS AGREEMENT, Made and entered into this 30th day of April, 1957, by and between LOMAN CREEK MINING COMPANY, a Montana Corporation of Missoula, Montana, party of the first part, hereinafter called the "Seller" and EMTEN, Inc., a corporation presently being incorporated in the State of Idaho, party of the second part, hereinafter called the "Buyer".

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 27 1957

DATE	INITIALS	CODE

W I T N E S S E T H

ARTICLE I

That if the Buyer shall first make the payments and perform the covenants hereinafter mentioned on its part to be made and performed, the said Seller hereby covenants and agrees to sell, transfer, convey, assign and assure to the said Buyer the following described mining claims, located in the Dixie Unorganized Mining District in Township 25 North, Range 13 East, Boise Meridian, in unsurveyed territory, Idaho County, Idaho, all as more fully described in the location certificates which are recorded in the Idaho County Courthouse at Grangeville, Idaho, and at the office of the Deputy Mining Recorder, Dixie, Idaho, and also in re-location certificates by Ernest C. Ticklesdafer of August 12, 13, 14 and 15, 1955, and recorded on August 18, 1955, as follows:

NAME	RECORDS OF IDAHO COUNTY, IDAHO
Brown Cub #1 quartz lode	Book 78 of Mining Claims at page 664
Brown Cub #2 quartz lode	Book 78 of Mining Claims at page 665
Brown Cub #3 quartz lode	Book 78 of Mining Claims at page 666
Broken Halter #10 quartz lode	Book 78 of Mining Claims at page 667
Broken Halter #11 quartz lode	Book 78 of Mining Claims at page 668
Broken Halter #12 quartz lode	Book 78 of Mining Claims at page 669
Broken Halter #13 quartz lode	Book 78 of Mining Claims at page 670
Broken Halter #14 quartz lode	Book 78 of Mining Claims at page 671

The Giant Spar #1 quartz lode	Book 78 of Mining Claims at page 672
The Giant Spar #2 quartz lode	Book 78 of Mining Claims at page 673
The Giant Spar #3 quartz lode	Book 78 of Mining Claims at page 674
The Gem quartz lode	Book 78 of Mining Claims at page 675
Big Cliff #1 quartz lode	Book 78 of Mining Claims at page 676
Big Cliff #2 quartz lode	Book 78 of Mining Claims at page 677
Big Cliff #6 quartz lode	Book 78 of Mining Claims at page 678
Big Cliff #5 quartz lode	Book 78 of Mining Claims at page 679
Big Cliff #4 quartz lode	Book 78 of Mining Claims at page 680
Big Cliff #3 quartz lode	Book 78 of Mining Claims at page 681

together with all right, title and interest of the Seller in and to all veins, lodes, mineral deposits, precious substances, rights of way, easements, water, water rights, tenements, hereditaments, privileges and appurtenances of every kind and nature pertaining thereto.

ARTICLE II

Upon payment of the purchase price and compliance with all provisions of this contract as hereinafter set out, said above described mining claims shall be conveyed to the Buyer by the Seller by a good and sufficient deed, which deed shall convey to the Buyer good, merchantable title to said above described unpatented mining claims.

ARTICLE III

The Buyer agrees to pay to the Seller, for the purchase of said mining claims and property, the sum of Eight Hundred Fifty Thousand Dollars ($850,000.00), to be paid in installments at the rate of One and 50/100 Dollars ($1.50) per ton on all fluorspar mined and sold from any or all of the above described mining claims and also at the rate of ten per cent (10%) of the net smelter returns of all ore mined and removed therefrom, other than fluorspar, said payments to be made to the Seller on the 20th day of each month for the ore mined and sold and for which payment has been received the preceding month. The Buyer shall have the privilege of

paying any additional amount of said unpaid balance, or all thereof, any time in advance of the due date.

ARTICLE IV

The above mentioned payments, being royalty payments, shall be calculated as follows:

a) Royalties based on metalurgical grade fluorspar shall be calculated at the point of rail shipping thereof and verified by freight receipts and based upon quantities shipped and sold.

b) Royalties based on acid grade fluorspar or any other grade ore will be calculated at the point where the metalurgical grade fluorspar has been converted into acid grade ore and shall be based upon quantities shipped and sold, OR, upon quantities leaving the mill as acid grade fluorspar for further upgrading.

ARTICLE V

The Buyer agrees to pay all taxes and special improvements assessed against said property for the year 1957 and thereafter. Further, Buyer covenants and agrees to do and perform at no cost to the Seller, but in its behalf, all assessment work required to be done annually on each and all of the above described claims in order to lawfully hold said claims as the property of the Seller under all applicable laws and to file with the proper officer or office the proper evidence of the doing of such assessment work.

ARTICLE VI

The Seller represents that on May 13, 1955, Austin P. Smothers and Florence V. Smothers, hereinafter called the Owners, and Ernest C. Ecklesdafer entered into a contract for the purchase of the herein described mining claims. That said contract is recorded in Book 4 of M.B.L. & A. at Page 481, Records of Idaho County, Idaho. On November 21, 1955, the said Ernest C. Ecklesdafer conditionally assigned his contract to the Seller herein and it is by these means that the Seller holds its interest in the said mining properties. The Smothers-Ecklesdafer contract requires a royalty of $2.50 per

ton on all ore mined and sold to be applied on the purchase price, until full payment of $50,000.00, with remaining balance due to be paid by minimum annual payments of $3,500.00 on each June 14th of 1957, 1958, 1959, and $6,500.00 on each June 14th of 1960, 1961, 1962, 1963, 1964. Buyer agrees that it will conform to, abide by and perform the terms, conditions and covenants of the Agreement of May 13, 1955, and make all future payments due thereunder to Owners through the Seller, said checks to be made payable to both Seller and Owners; it being expressly understood and agreed however, that Buyer is not unconditionally committing itself to purchase said mining claims from Owners for $50,000.00 or from Seller for $850,000.00, but that payments on said purchase prices are to be based upon royalties from ore mined and sold, except that Buyer will pay Owner the minimum annual royalty payments set forth above as long as Buyer retains its interest in this Agreement; it is further expressly understood and agreed that the sole remedy against Buyer for default in any of its covenants or payments under this Agreement to Owners or Seller shall be by forfeiture of this Agreement as provided for in Article XV hereof.

ARTICLE VII

It is mutually understood and agreed that in the said assignment of November 21, 1955, Ernest C. Pickleadafer reserved to himself, his heirs and assigns, a royalty of $1.50 per ton on all ore mined and sold from any of said mining claims; that on January 12, 1957, the said Ernest C. Pickleadafer assigned his $1.50 royalty as follows, to-wit:

NAME	AMOUNT
William J. Walker & Geraldine Walker	50¢ per ton
John P. Lanham & Edith M. Lanham	50¢ per ton
Claude C. Freeman & Frances C. Freeman	25¢ per ton
William Cocanougher & Mary Cocanougher	25¢ per ton

The Buyer agrees to assume and make said royalty payments of $1.50 per ton as per the above described assignment, in addition to all other payments herein set forth.

ARTICLE VIII

The Seller covenants and agrees that promptly upon the execution of this Agreement, Buyer shall have the right to go upon, take

possession of and mine and extract ore, metals, minerals and other precious substances from each and all of the above described mining claims, subject to the terms of this Agreement and so long as Buyer shall not be in default in its performance of the terms of this Agreement.

ARTICLE IX

The Buyer agrees to perform the following work and expend the following sums of money in the following years, subject and conditioned upon permission and approval of the U. S. Forest Service:

Year Ending	Expenditure	Work to be performed
1957	$10,000.00	Reconnaissance survey of access road.
1958	20,000.00	Complete one track bulldozer trail half-way to mine site.
1959	30,000.00	Complete one track bulldozer trail to within 1½ miles of mine site.
1960	40,000.00	Commence "finished road".
1961 and thereafter	Nil	Complete "finished road" and be shipping ore OR pay royalties on 10,000 tons, subject to Article XVI herein.

Buyer agrees to commence exploration work in the spring of 1957 and to have 1,000 feet of diamond drilling completed by July 1, 1958; further, Buyer agrees to mine and sell a minimum of 10,000 tons of ore per year, commencing with the year 1961, or, for failure to do so because of reasons not mentioned in Article XVI hereof, pay the $2.50 Smothers' royalty, $1.50 Seller's royalty and the $1.50 royalty mentioned in Article VII hereof, the same as if 10,000 tons had actually been mined and sold.

ARTICLE X

Buyer shall have the exclusive right to carry on the entire operation on the herein described claims in such manner and form as in its discretion it shall see fitting and proper, provided however, that such work shall be done in a good and miner-like manner, having due regard to maintaining an economic mining operation. Buyer

shall have the right to erect and install such buildings, structures, machinery, equipment and fixtures as it may deem necessary or desirable, at its own expense. Two of Seller's authorized agents shall have the right, at reasonable times, to go upon said above described property by use of Buyer's access road for the purpose of inspecting mining operations on the aforesaid 18 claims only, at their own risk, and shall have the right to inspect all of the books, records, maps and exhibits pertaining to the mining operations on said 18 claims only. As soon after each month as is reasonably convenient, Buyer shall mail to the Seller a duplicate copy of its freight receipts showing ore shipped and also mill records showing quantities handled so that Seller may verify its royalty payments due.

ARTICLE XI

Buyer agrees to post on the premises, and to maintain a suitable place visible to workmen thereon, written notice to all employees and other persons informing them of the fact that said premises are being worked and operated by the Buyer, and the Seller is not in any manner responsible for the wages of any persons employed by Buyer upon the premises, or for any work, supplies or materials furnished to or for the Buyer, its agents, contractors or servants.

ARTICLE XII

Should Buyer's operations hereunder be delayed or suspended by hindrance or prevention of performance by Act of God, accident, strike, lockout, operation of law, war or national emergency, governmental regulation, weather conditions, abnormally low metal prices, or other conditions whether similar or dissimilar, beyond Buyer's reasonable control, which would prevent or render performance abnormally expensive, difficult or impossible, then Buyer may be excused from performance and shall not be in default during the time of such hindrance or prevention, PROVIDED THAT: During the term of such sus-

pension, Buyer shall do and perform such assessment work as may be necessary to keep valid the unpatented mining claims subject to this lease, and to make the payment to the Owners as called for in that certain Agreement dated May 13, 1955, and as hereinabove set forth, so that said Agreement shall remain in full force and effect.

ARTICLE XIII

Buyer agrees to maintain liability insurance, Workmen's Compensation, Federal Old Age Insurance, Unemployment Compensation and other insurance required by laws of like nature, either State or Federal.

ARTICLE XIV

The parties hereto further agree that in case of the failure of the Buyer to make any of the payments, whether of royalty or otherwise, or any part thereof, or to perform any of the covenants on its part hereby made and entered into, then this contract shall, at the option of the Seller, be forfeited and determined by giving to the Buyer sixty (60) days notice, in writing, of the intention of the Seller to cancel and determine this Agreement, and the time and place, when and where, payment can be made by said Buyer; it being understood that the Buyer may restore and renew said Agreement by making good the portion thereof in which he is in default within said sixty (60) days period; PROVIDED, that the sixty (60) day notice provided by this clause shall not apply to any payments to the Owners on behalf of the Seller.

ARTICLE XV

It is agreed by the parties hereto that sixty (60) days is a reasonable and sufficient notice to be given to said Buyer in case of its failure to perform any of the covenants on its part hereby

made and entered into, and shall be sufficient to cancel all obligations hereunto on the part of the Seller and to fully reinvest the Seller with all right, title and interest hereby agreed to be conveyed and the Buyer shall forfeit all payments made by it on this contract and all its right, title and interest in and to all improvements placed by it on said mining premises, and such payments and improvements shall be retained by the Seller in full satisfaction and in liquidation of all damages by it sustained and it shall have the right to re-enter and take possession of the mining premises above described.

ARTICLE XVI

The parties hereto further agree that in case such notice of default shall be given, it shall be deemed to have been legally served upon the Buyer if made in writing and directed to it by Registered United States Mail, addressed to the Secretary, EDATON, Inc., 322 Shelden Avenue, Houghton, Michigan, or personally served upon him, and that in case such notice is mailed, the date of mailing thereof shall be deemed to be the date of the service thereof upon said Buyer.

ARTICLE XVII

That the time of payment shall be and is an essential part of this Agreement. Further, conditions of this Agreement shall be deemed to be continuing ones, so that any waiver of the Seller of its rights to enforce compliance of any of its terms, conditions, covenants, payments or forfeiture in case of non-compliance for the breach hereof shall not be construed as a waiver of its right to enforce compliance or forfeiture on the occasion of any subsequent breach.

ARTICLE XVIII

This Agreement may be assigned by the Buyer without first having obtained the consent of the Seller or Owners.

ARTICLE XIX

Seller represents that it has heretofore made application for a DITA contract in the amount of Ten Thousand Dollars ($10,000.00) and that if same is accepted and approved by the government, it will immediately assign this DITA contract to Buyer in consideration of the covenants herein agreed to be done by Buyer, so that Buyer must accept all responsibilities of Seller thereunder and will receive all benefits thereunder to which Seller would have become entitled.

ARTICLE XX

It is agreed between the parties hereto that Buyer, if it so desires, may deduct and pay all outstanding obligations of Seller as of May 1, 1957 from the first royalty payments due Seller under the terms of this Agreement, and which outstanding obligations of Seller are due and unpaid as of the date said first royalty payments fall due; said deducted payments to be made for and on behalf of Seller.

ARTICLE XXI

The Buyer agrees, in the event it should become necessary for the Seller to bring an action at law to cancel this Agreement, or to enforce any right hereunder, to pay all costs of said action including a reasonable attorney's fee. The parties hereto further agree that the terms and conditions of this Agreement and Exhibits A and B attached hereto shall be binding upon their heirs, executors, successors, and assigns.

IN WITNESS WHEREOF, The parties have hereunto set their hands and seals the day and year first above written.

Signed, Sealed and Delivered
In Presence Of:

John G. Eckhardt

Richard A. Dick

SQUAW CREEK MINING COMPANY

by William J. Walker
William J. Walker, President

Claude E. Freeman
Secretary

Signed, Sealed and Delivered
In Presence Of:

Margaret Anderson
Margaret Anderson

Irene S. Greenleaf
Irene S. Greenleaf

EDATOX, Inc.

by John L. Rice
John L. Rice, Vice-President

Richard J. O'Brien
Richard J. O'Brien, Secretary

STATE OF MONTANA)
)ss.
COUNTY OF Missoula)

On this 30th day of April in the year of our Lord one thousand nine hundred and fifty seven before me, a Notary Public in and for said County, appeared William J. Walker and Claude C Freeman to me personally known, who, being by me duly sworn, did each for himself say that they are respectively the President and Secretary of Squaw Creek Mining Company, the corporation named in and which executed the within instrument, and that the seal affixed to said instrument is the corporate seal of said corporation; and that said instrument was signed and sealed in behalf of said

corporation by authority of its board of directors; and said William J. Walker and Claude C Freeman acknowledged said instrument to be the free act and deed of said corporation.

Jack L. Green

Notary Public, _____ County, Montana

My commission expires: _____

My residence: _____

NOTARY PUBLIC for the State of Montana,
Residing at Missoula, Montana.
My commission expires January 13th, 1958

STATE OF MICHIGAN)
)SS.
COUNTY OF HOUGHTON)

On this 7th day of May in the year of our Lord one thousand nine hundred and fifty seven before me, a Notary Public in and for said County, appeared John L. Rice and Richard J. O'Brien, to me personally known, who, being by me duly sworn, did each for himself say that they are respectively the Vice-President and Secretary of Idaton, Inc., the corporation named in and which executed the within instrument, and that the seal affixed to said instrument is the corporate seal of said corporation; and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors; and said John L. Rice and Richard J. O'Brien acknowledged said instrument to be the free act and deed of said corporation.

Irene S. Greenleaf

Irene S. Greenleaf
Notary Public, Houghton County, Michigan

My commission expires: Jan. 19, 1958

Residing at Houghton, Michigan

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DMEA
RECEIVED MAY 27 1957
DATE | INITIALS | CODE

EXHIBIT A

I hereby consent to this Agreement between Squaw Creek Mining Company and Watson, Inc. whereby the latter company is purchasing the contract for land that I had previously assigned to Squaw Creek Mining Company on November 21, 1955.

Witness:

Richard A. Dreh

Ernest G. Eckleschafer

John G. Eckleschafer

Dated: 4/24/57

EXHIBIT A

I hereby consent to this agreement between Squaw Creek Mining Company and Idaton, Inc. whereby the latter company is purchasing the contract for Deed that I had previously assigned to Squaw Creek Mining Company on November 21, 1955.

Witness:

Ernest C. Ecklesdafer

Dated: 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 27 1957
DATE | STAMP | CODE

EXHIBIT B

We hereby consent to this Agreement between Squaw Creek Mining Company and Idaton, Inc. and acknowledge the receipt of $ 6,687.50 due us under our Agreement with Mr. E. C. Ecklesdafer dated May 13, 1955, and admit that we now have a balance coming under said agreement in the amount of $ 43,312.50

Witness: John G. Ecklesdafer
Richmond Savage Jr.
Atty at Law

Florence V. Smothers
Florence V. Smothers

Austin P. Smothers
Austin P. Smothers

Dated: April 27 1957

[illegible]
[illegible]
Houghton, Michigan.

June 9th, 1956

RECEIVED JUN 10 1956

[illegible] Howard.
[illegible] Engineer
[illegible] of Mines.
[illegible] Washington.

[illegible] Howard.
Enclosed is the D.M.E.A. application with claim [illegible], [illegible] section of probable drill holes, geology report [illegible] (report written on property last summer).

Yesterday, Friday, we started into the property, but due [illegible] high water and general conditions surrounding the area [illegible] unable to get there. We will go down in the near future, [illegible] three weeks hence. At that time we will attempt [illegible] your A.S.& R. map to the now completed trenches.

We would certainly appreciate any priority that [illegible] this D.M.E.A. application. We are very anxious to [illegible] and what with a short season and all, every [illegible] to our mutual advantage.
In order that we may facilitate matters we would [illegible] much if you would mail direct to [illegible] all correspondence pertaining to this D.M.E.A. application [illegible] a copy to the Squaw Creek Mining Co. 805 Wilt[illegible] Building, Missoula, Montana.

We certainly want to thank you and all the other men for your cooperation, help and advice.

Respectfully submitted,

Jack Ecklesdafer

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
JUN 29 1956

RECEIVED
JUN 13 1956
U. S. G. S.
SPOKANE, WASH.

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. 4366
Metal or Mineral Manganese
Date Received 6/29/56
Estimated Cost $ 10,381.00
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: Squaw Creek Mining Company
605 Wilma Bldg.
Missoula, Montana

(*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 On accompanying sheet.

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

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

(*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 Not applicable.

(*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 ints.

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

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

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

(*c*) The work will start within **30** days and be completed within **6** months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

[x] Money [ ] 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 June 12, 1956

Sgraw Creek Mining Co, Inc
(Applicant)

By William J. Walter Vice Pres

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

SQUAW CREEK MINING COMPANY

605 Wilma Building
MISSOULA, MONTANA

RECEIVED
JUN 29 1956

1. (b) Squaw Creek Mining Company, incorporated in the State of Montana.

1. (c) Officers of Squaw Creek Mining Company:

Dr. John Minckler - - - - - President
William J. Walker - - - - - Vice President
Jack L. Green - - - - - - - Secretary-Treasurer

3. (a) The exploration program is to cover the following claims recorded at the Idaho County Court House, Grangeville, Idaho.

NAME	
Brown Cub #1 quartz lode	Book 78 of Mining claims at page 664
Brown Cub #2 quartz lode	Book 78 of Mining claims at page 665
Brown Cub #3 quartz lode	Book 78 of Mining claims at page 666
Broken Halter #10 quartz lode	Book 78 of Mining claims at page 667
Broken Halter #11 quartz lode	Book 78 of Mining claims at page 668
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Broken Halter #13 quartz lode	Book 78 of Mining claims at page 670
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The Giant Spar #1 quartz lode	Book 78 of Mining claims at page 672
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The Giant Spar #3 quartz lode	Book 78 of Mining claims at page 674
The Gen quartz lode	Book 78 of Mining claims at page 675
Big Cliff #1 quartz lode	Book 78 of Mining claims at page 676
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Big Cliff #6 quartz lode	Book 78 of Mining claims at page 678
Big Cliff #5 quartz lode	Book 78 of Mining claims at page 679
Big Cliff #4 quartz lode	Book 78 of Mining claims at page 680
Big Cliff #3 quartz lode	Book 78 of Mining claims at page 681

(Total 18 mining claims)

The above mining claims are located in Township 25 North, Range 12, East, Boise Meridian.

3. (c) Squaw Creek Mining Company has acquired a contract for the purchase of eighteen mining claims located in Idaho County, Idaho. All of these claims were acquired from Ernest C. Ecklesdafer by assignment of a contract for pruchase.

SQUAW CREEK MINING COMPANY

605 Wilma Building
MISSOULA, MONTANA

RECEIVED
JUN 2 9 1956

ADDITIONAL SHEETS FOR FORM MF-103

4. (a) John G. Ecklesdafer (Mining Engineer) spent two months working on the property for Squaw Creek Mining Company during the summer months of 1955. His examination disclosed numerous high grade fluorspar veins. The principal vein examined outcropped for two thousand feet.

There are no existing mine workings or facilities. The property is fairly difficult to reach as it is necessary to go by horseback from Salmon Mountain in Idaho County (12 miles) or by boat from the end of the Shoup Road (23 miles). The property has been examined by the Bureau of Mines. When the Bureau examined it, it is believed that the property was known as the "Newsom Property". The Squaw Creek Mining Company started diamond (core) drilling late in the Fall of 1955 and pierced the vein with one hole at which point the winter freeze-up stopped the work.

4. (b) There is no current production from the property. Probable ore reserves are better than 300,000 tons. This tonnage is considered to be metallurgical grade and is based on the geologic structure. It is to be proven by the proposed drilling program.

4. (c) The Squaw Creek deposits are of fissure vein type. The main vein has been surveyed by Brunton and tape for a distance of two thousand feet. Its average width is seven feet, determined by trenching at approximately 50 foot intervals. This vein traverses a ridge of 450 foot relief. The foot and hanging wall are composed of low temperature quartz. The strike is approximately North 10 degrees East and the dip is practically vertical. This vein assays on the average 86% CaF_2.

There are five other veins approximately parallel to the main vein on the north side of the Salmon River and a cluster on the south side of the river. It is planned to drill the main vein to prove out "measured ore" and to systematically channel sample the remaining veins. This work is for the purpose of determining whether the property warrants development.

4. (d) The property is accessible by a 23 mile boat trip down the Salmon River from the end of the North Fork-Shoupe road.

The property, if it goes into production, will be accessible by a road which will be built from Salmon Mountain Idaho (approximately 15 miles long) to the property. Suitable roads are available from Salmon Mountain to the railway at Darby, Montana (approximately 51 miles).

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ADDITIONAL SHEETS FOR FORM MF-103

(4.(d) cont.)
Ores will probably be shipped to the aluminum industries in the Northwest or to the Steel industry. Supplies will be obtained from Darby, Montana. Residence points will be at the property.

4. (e) Manpower can be obtained from Salmon, Idaho. Materials, equipment and supplies will be shipped from Darby, Montana. The power for the project will be from gas. Water will be obtained from the Salmon River.

5. (b) The proposed work includes diamond drilling the main vein which has previously been surveyed. It is proposed that the drilling be directed to intersect the vein at depth with a minimum of drilling. This will be accomplished by holes drilled at the base of the cliff or ridge which the vein traverses. A sketch on the following page shows the details of this work

The proposed work also includes trenching, channel sampling, and assaying of all the other veins on the property and geologic mapping of the area. A mine estimation and valuation report will also be made on the property.

5. (d) The exploration project will be under the direction of Thomas J. Herron, a geophysicist from Marquette, Michigan. Mr. Herron is at present doing research for the U. S. Bureau of Mines and has been an engineer for the U. S. Dept. of the Army. He will be assisted by John G. Ecklesdafer, a mining and mineral dressing engineer. Mr. Ecklesdafer was in charge of an exploration program during the summer of 1955. Also assisting, will be Robert D. R. McChesney, a geologist and mining engineer who has had exploration experience with Cleveland Cliffs Iron Company and the Iron Ore Company of Canada.

6. Estimate of Costs for Examination Program.

A unit cost contract is desired based on the following cost estimate:

(a) Diamond Drilling.

Not enough work

Rental on Machine (1,000 feet @ 20 feet/day = 50 days)	$ 750.00
Drillers' wages at $21.60 per day for 50 days	1,080.00
Drillers' helpers wages at $17.30 per day for 50 days	865.00
Gas $1.50 per foot for 1,000 feet	1,500.00
Bits $2.00 per foot for 1,000 feet	2,000.00

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ADDITIONAL SHEETS FOR FORM MF-103

Repairs $0.50 per foot for 1,000 feet	500.00
Miscellaneous $1.00 per foot for 1,000 feet	1,000.00
Workers' compensation and insurance 7% of labor costs	136.00
TOTAL cost for 1,000 feet of drilling	$7,831.00

Cost per foot of drilling = $7.83

6. (b) Supervision:

One Geologist - engineer at $600.00 per month $1,200.00

(g) Miscellaneous:

Analysis of 100 samples at $6.00 per sample	600.00
Transportation of samples by boat & freight	200.00
Transportation of men and materials by boat 2 trips per month at $50.00 per trip for 2 months	200.00
Demobilizing drill, pump, rods and miscellaneous total weight 3,000 pounds by river from property to Riggins, Idaho, 110 miles by boat from Riggins to Missoula, Montana by truck a distance of approximately 450 miles	350.00
TOTAL COST - - - -	$10,381.00

[illegible], duly made and entered into, in triplicate, [illegible] [illegible] and [illegible] P. [illegible]THERS and [illegible], residing and [illegible] of Salmon, Idaho, the Parties of the First Part (hereinafter designated as the "First Parties") and [illegible] of Missoula, Montana, the Party of the Second Part (hereinafter designated as the "Second Party");

WITNESSETH:

1. That the said Second Party shall first make the payments and perform the [illegible] hereinafter mentioned on his part to be paid and performed, the said First Parties hereby covenant and agree to sell, transfer, convey, assign and assure to the said Second Party the following described mining claims, to-wit:

> The Big Cliff Lode Mining Claims; Numbers One, Two, Three, Four, Five and Six (being six lode mining claims in all);
>
> The Gem #1 Lode Mining Claim;
>
> The Brown Cub Lode Mining Claims; Number One, Two, and Three (being three lode mining claims in all);
>
> The Giant Spar Lode Mining Claims; Numbers One, Two and Three (being three lode mining claims);
>
> The Broken Halter Lode Mining Claims; Numbers Ten, Eleven, Twelve, Thirteen and Fourteen (being five lode mining claims);
>
> All of the above mentioned claims being represented by Certificates of Location thereof, duly recorded in the office of the County Recorder of Idaho County, Idaho, at Grangeville, Idaho, and all of said claims being located in Idaho County, Idaho; there is also included in this Agreement and to be conveyed by the terms hereof, all other lode mining claims owned by First Parties adjacent to or within the general area of the above mentioned lode mining claims, it being the intention of the First Parties to sell all of their interests in all of their lode mining claims located in the general area of the above described lode mining claims to the Second Party herein.

2. Upon payment of the purchase price as hereinafter set out said above described mining claims shall be conveyed to the Second Party by the First Parties by a good and sufficient deed, which deed shall convey to the Second Party good, merchantable title to said above described and described mining claims.

3. The Second Party hereby covenants and agrees to pay the said First Parties, for said mining claims, the sum of Fifty Thousand and no/100 Dollars ($50,000.00), payable to the said First Parties at Salmon, Idaho, at the following times and in the following manner, to-wit:

> The sum of Five Hundred and no/100 Dollars ($500.00) on or before the execution of this Agreement, the receipt of which sum is hereby acknowledged by the First Parties;
>
> The sum of Three Thousand and no/100 Dollars ($3,000.00) on or before the 14th day of June, 1955;
>
> The sum of Three Thousand Five Hundred and no/100 Dollars ($3,500.00) on or before the 14th day of June, 1956;
>
> The sum of Three Thousand Five Hundred and no/100 Dollars ($3,500.00) on or before the 14th day of June, 1957;
>
> The sum of Three Thousand Five Hundred and no/100 Dollars ($3,500.00) on or before the 14th day of June, 1958; and
>
> The sum of Three Thousand Five Hundred and no/100 Dollars ($3,500.00) on or before the 14th day of June, 1959; and
>
> The sum of Six Thousand Five Hundred and no/100 Dollars ($6,500.00) on or before the 14th day of June of each year thereafter up to and including the 14th day of June, 1964.

4. Second Party covenants and agrees to pay directly to First Parties a royalty of Two and 50/100 Dollars ($2.50) per ton on all ore mined and sold from any or all of the above described mining claims and the First Parties agree that all royalties so paid to them shall be applied upon the purchase price of the above described property.

5. It is specifically understood and agreed that the royalty

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shall be based upon the weight of the ore as determined by the purchaser thereof and that the Second Party shall pay First Parties such royalty on every ton of ore purchased from him by anyone within fifteen (15) days after he has been paid for said ore by such purchaser and that such payments of royalty shall be paid to the First Parties directly at Salmon, Idaho.

6. It is further specifically understood and agreed that all royalties paid to the First Parties by the Second Party after June 14th of each year of this contract, shall be credited upon the payment due upon this contract on the next succeeding June 14th.

7. Second Party covenants and agrees to do and perform, at no cost to First Parties, but in their behalf, all assessment work required to be done annually on each and all of the above described claims in order to lawfully hold said claims as the property of First Parties under all applicable laws and to file with the proper officer or office the proper evidence of the doing of such assessment work.

8. Second Party further covenants and agrees that he will start the assessment work on said above described mining claims for the current year on or before June 20th, 1955, and will thereafter diligently prosecute such assessment work in the proper manner so as to lawfully hold said claims for First Parties.

9. The First Parties covenant and agree that promptly upon the execution of this Agreement, Second Party shall have the right to go upon, take possession of and mine and extract ore from each and all of the above described mining claims, subject to the terms of this Agreement and so long as Second Party shall not be in default in his performance of the terms of this Agreement.

10. It is further understood and agreed by the parties hereto that the above described mining claims are not now accesible by road and that, for the time being, men, material and supplies for operations on said claims, will, in the most part, have to be transported to and from said claims by means of boat transportation on the Salmon

[illegible] and it is further mutually agreed by the parties hereto that [illegible] party shall deem it necessary and advisable and [illegible] the extent that Second Party shall deem it necessary and advisable, First Parties shall be given the work of transportation of such men, materials and supplies to and from said mining claims on their boats on the Salmon River, providing that the charges made by First Parties for such transportation shall be no greater than the going competitive rate for such transportation on said Salmon River.

11. The parties hereto further agree that in case of the failure of Second Party to make any of the payments, whether of royalty or otherwise, or any part thereof, or to perform any of the covenants on his part hereby made and entered into, then the whole of said payments shall, at the election of the First Parties, become immediately due and payable, and this contract shall, at the option of First Parties, be forfeited and determined by giving to the Second Party sixty (60) days notice, in writing, of the intention of the First Parties to cancel and determine this Agreement, setting forth in said notice the amount due upon said Agreement, and the time and place, when and where, payment can be made by said Second Party; it being understood that Second Party may restore and renew said Agreement by making good the portion thereof in which he is in default within said sixty (60) day period.

12. It is agreed by the parties hereto that sixty (60) days is a reasonable and sufficient notice to be given to said Second Party in case of his failure to perform any of the covenants on his part hereby made and entered into, and shall be sufficient to cancel all obligations hereunto on the part of the First Parties and to fully reinvest the First Parties with all right, title and interest hereby agreed to be conveyed and Second Party shall forfeit all payments made by him on this contract and all his right, title and interest in and to all improvements placed by him on said mining premises, and such payments and improvements shall be retained by the First Parties

[illegible] in liquidation of all damages by them sus-
[illegible] the right to re-enter and take possession
[illegible] premises.

[illegible] that in case such notice
[illegible] shall be given, it shall be deemed to have been legally
[illegible] in writing and directed to him
[illegible] at 532 North Ave-
[illegible] served upon him in the
[illegible] mailed, the date of
[illegible] date of the service
[illegible] party.

14. That time of payment shall be and is an essential
[illegible] of this Agreement.

15. That this Agreement shall be fully and completely assignable by either of the parties hereto without the consent of any of the other parties hereto.

16. That all of the covenants, conditions and agreements herein contained shall extend to and be obligatory upon the assigns and the heirs, executors and administrators of each and all of the parties hereto.

IN TESTIMONY WHEREOF, the parties hereto have hereunto subscribed their respective names the day and year first above written.

[illegible]

[illegible]
Parties of the First Part.

[illegible]
Party of the Second Part.

13th

Jack Cook

Idaho.

July 1-1956

[illegible], [illegible], [illegible]:

[illegible]

[illegible] No. 1 quartz lode Book 78 of Mining claims [illegible]
[illegible] No. 2 quartz lode Book 78 [illegible] 664
[illegible] No. 3 quartz lode Book 78 [illegible]

Broker [illegible] quartz lode Book 78 of Mining claims [illegible] 667
Broker [illegible] #1 quartz lode Book 78 of Mining claims [illegible] 668
Broker [illegible] #2 quartz lode Book 78 of Mining claims [illegible] 669
Broker [illegible] #3 quartz lode Book 78 of Mining claims [illegible] 670
Broker [illegible] #4 quartz lode Book 78 of Mining claims [illegible] 671

The Giant Spur #1 quartz lode Book 78 of Mining claims at page 672
The Giant Spur #2 quartz lode Book 78 of Mining claims at page 673
The Giant Spur #3 quartz lode Book 78 of Mining claims at page 674

The Tom quartz lode Book 78 of Mining claims at page 675
Big Cliff #1 quartz lode Book 78 of Mining claims at page 676
Big Cliff #2 quartz lode Book 78 of Mining claims at page 677
Big Cliff #6 quartz lode Book 78 of Mining claims at page 678

Big Cliff #5 quartz lode Book 78 of Mining claims at page 679
Big Cliff #4 quartz lode Book 78 of Mining claims at page 680
Big Cliff #3 quartz lode Book 78 of Mining claims at page 681

(Total 18 mining claims)

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[illegible], before me, the undersigned, a Notary Public [illegible], personally appeared ERNEST C. [illegible], proved to me to be the person whose signature is subscribed to the foregoing instrument, and acknowledged to me that he executed

[illegible], I have hereu to set my hand and affixed my [illegible] the day and year in this certificate first above written.

NOTARY PUBLIC for the State of Montana
Residing at Missoula, Montana
My commission expires January 13, 1958

The above assignment approved and accepted this 1st day of November, 1955.

SQUAW CREEK MINING COMPANY

By _____
President

ATTEST:

_____
Secretary

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RAY BECLSON
Consulting Geologist

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PRELIMINARY GEOLOGICAL REPORT ON THE SQUAW CREEK FLUORSPAR DEPOSIT, IDAHO CO. IDAHO

By Ray B. Beclson - Consulting Geologist
Missoula, Montana

The Squaw Creek Mining Claims are a group of mining claims held under option by the Squaw Creek Mining Company of Missoula, Montana.

The Squaw Creek Fluorspar Deposit is located in sections 21, 22, 27, and 28, Township 25 N, Range 12 E., Boise Meridian, Idaho County, Idaho, in the Dixie (Unorg.) Mining District.

The claims are not at present accessible by automobile. The area is reached by boat from the end of the Shoup road, or by foot from the Elk City road.

A Geological reconnaissance was made by the author to verify the maps and report of Mr. John Beklesdafer, Mining Eng. who spent several months mapping the vein and sampling. The brief reconnaissance allowed time only to investigate that portion of the large vein covered by the Big Cliff claim No. 1, and a portion of No. 2. It is on this vein that the company proposes to begin development. Several other veins of nearly equal or greater size are indicated nearby on Mr. Beklesdafers' map, and have been claimed by the Squaw Creek Mining Co. for further exploration.

[redacted]

24, 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E
Contract Date

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CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the County of Idaho, State of Idaho, described as ~~follows:~~ xxxxxxxx 1/ In an agreement dated May 13th, 1956, and recorded in book 4, of M.B.L. and A. at page 481, records of Idaho County, Idaho.; And in an assignment dated November 21st, 1955, covering claims recorded in book 78, of mining claims, pages 664-Thru 681 incl. records of Idaho County, Idaho,

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract; 2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following: 3/

none

none

3. Undertakes and agrees neither to commit any act nor assert any claim in conflict with the provisions of this Consent to Lien; and to give advance notice of the Government's rights under this Consent to Lien to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, or interest in the land; and

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

3/ Write "none" if that is the case. Do not leave lines blank.

4. Consents to all amendments and assignments of the contract without notice thereof, and agrees that this Consent to Lien shall extend and apply thereto.

5. Added provision: none

Dated this 8th day of June, 1956.

A. P. Smothers [Seal]

Florence P. Smothers [Seal]

Ernest B. Eckleschafer [Seal]

I, _____ certify that I am the _____ (Secretary, etc.) of the corporation named herein; that _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____

[Corporate Seal]

(1)

INVESTIGATION OF SQUAW CREEK FLUORSPAR DEPOSIT

IDAHO COUNTY, IDAHO

By JOHN G. ECKLESDAFER

AUGUST 24, 1955

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INTRODUCTION AND SUMMARY

This report is written on the Squaw Creek Fluorspar deposit located in the Dixie (Unorg.) Mining District, Idaho County, Idaho. The report covers in detail the following: geology, proposed mining methods, metallurgy of concentrating the ore, and the uses of fluorspar in industry. A survey was made of two veins on the North side of the Salmon River showing an indicated ore reserve of three hundred thousand tons.

The fluorspar is deposited in silicified fracture zones in a fissure vein structure. The proposed mining operation for the fluorspar veins will be carried on by the shrinkage stope method. The proposed mill which will produce an acid grade fluorspar will operate on a flotation concentrating system. It is proposed that the main reserve of the ore will be sold to produce hydrofluoric acid. This market will give the largest net return.

LOCAL FEATURES

Location and Accessibility

The Squaw Creek Fluorspar deposit is located in Sections 21, 22, 27 and 28, Township 25 North, Range 12 East, Boise Meridian, Idaho County, Idaho. The claims on the north side of the Salmon River are located within the Wilderness Area and those on the south side of the Salmon River are within the Primitive Area of Idaho.

The road from Elk City, Idaho to Connor, Montana will be traversed for a distance of approximately forty-seven miles and is a dirt-surfaced road with a moderate grade. A distance of five miles from Connor, Montana to Darby, Montana by U. S. Highway 93 places the ore at railroad facilities. The Elk City road is maintained during the summer months by the United States Forest Service.

Physical Features

The altitude of the deposit is between two thousand seven hundred feet and five thousand feet. The main vein lies nearly parallel to the Salmon River and two hundred-fifty feet from the north shore. The vein lies in a reef or ridge approximately four hundred-fifty feet high. The veins on the south side of the Salmon River outcrop at an approximate elevation of five thousand three hundred feet. The proposed road will follow along high ridges from Salmon Mountain to the deposit. Very little rock work will be necessary for the road. The overburden area permits easy cutting by bulldozers.

Light stands of different varieties of pine make up the vegetation on the higher ridges.

Climate

The climate of the Salmon River area is typical of western Montana. Summers are warm and dry, and winters are cold with an accumulating snowfall averaging a depth of six feet. The snow season, on the average, begins around the first of October and clears away during April and May. With the help of snow removal equipment, shipping can be carried on for nine months of the year.

Facilities

Darby, Montana is the nearest town, having a population of four hundred-eighty persons. The town is a way point on U. S. Highway 93 and the terminus of the nearest railroad. The principal city of the Bitterroot Valley is Missoula, sixty-nine miles north of Darby on U. S. Highway 93 and has population of thirty-three thousand five hundred. Industrial supplies and equipment can be obtained in Missoula. Domestic needs can be filled in Darby or nineteen miles north on U. S. Highway 93 at Hamilton.

Labor and Living Conditions

Ranching and lumbering are the principal industries in the area. No producing mines, with the exception of the Crystal Mountain Fluorite deposit, are in the area. Miners can be brought in from the Butte area to the East and from the Salmon, Idaho area to the South. No difficulty should be encountered in obtaining the relatively small labor force required to operate the concentrating mill and the mining of the ore.

Prevailing labor rates in 1952 were $1.65 per hour for common labor and $1.80 to $2.00 per hour for semi-skilled labor.

Living quarters will be built to house the men operating the mill and the mine. Timber can be cut off the property to furnish the lumber for the construction of the mill and cabins. The truckers can regulate their trips so as to maintain living quarters at Darby or elsewhere.

GENERAL GEOLOGY OF FLUORSPAR DEPOSITS

Fluorspar deposits occur predominately as a filled fissure vein. Fluorine gas and hydrofluoric acid attack the calcium silicate as they work their way through fractures which are the paths of least resistance. The silicates are replaced by the fluoride producing the products fluorspar (CaF_2) and silica (SiO_2). Fluorspar has inert susceptability to other elements and compounds which leads to the fact that fluorspar shows no tendency to replace or unite with the wall rock or to erode chemically. Fluorspar has been found to be associated with and carrying barite, quartz, calcite, pyrite, magnatite, sphalerite and galena. A fissure vein of fluorite can be a very high grade being diluted only by the wall rock. In general a three foot vein of fluorspar running 60% pure is considered economic. The depth of a vein is limited only by the fact that as the fissure continues forcing its way to the surface and reducing the primary surging pressure, the wall rock pinches off the fissure vein. The length of the vein is determined as the fissure chooses the path of least resistance. The width has a regular pinching and swelling pattern reaching a maximum width of fifteen feet. A fissure vein may contain a slight trace of calcium carbonate ($CaCO_3$) and sulphide minerals or in most cases, none at all. The fluorspar may have a high silica (SiO_2) content.

Fluorspar deposits may also occur from deep seated ascending vapors or hot solutions carrying the fluorine gas and hydrofluoric acid attacking calcium carbonate sediments thus forming a solution of CaF_2 which will deposit on the limestone walls as fluorspar. The predominate impurity in this type of deposit would be calcium carbonate ($CaCO_3$). Since two or three large mines on the Roisclare deposit in southern Illinois furnish a very large percent of the domestic production, it represents a typical limestone enrichment

of great economic value. Since the demand for fluorspar has been so great, this deposit is nearly depleted.

The third type of deposit of a different geological formation is the recent discovery of the Crystal Mountain deposit near Darby, Montana. This fluorspar deposit is in the form of a magmatic segregation in granite, probably having a reserve of five hundred thousand tons or more, holding a grade of 97% or better. As this section of the great Idaho batholith cooled, the minerals having a slow cooling rate coalesced, causing large pockets of fluorspar. Magnatite has practically the same cooling rate, causing it to be associated with the fluorspar pockets. This makes it possible to prospect by the use of a dip needle running a grid type survey over heavily overburdened area. A magnetic storm is the only thing that interrupts the use of a dip needle survey.

Geology of Squaw Creek Fluorspar

Up to the present time very little information regarding the geology of this area has been written. This deposit lies entirely within the Idaho batholith. Adjoining the most northern limits of the deposit, one can note a much younger batholith by the smooth, rounded appearance of the ridges and peaks. A granite of the younger batholith has a much finer texture with a lower silica content causing a mechanical and chemical erosion to be much greater than on the Idaho batholith. The falls in the Salmon River are more prominent at the granite contact and into the younger granite area which is more easily cut by the river action than in the Idaho granite.

After studying the area, the geology of the fluorspar deposit can best be described as follows. During the intrusion of the younger batholith into the Idaho batholith, tremendous internal stresses were set up in the surrounding area which caused the fracturing of the exterior area within the Idaho batholith. These fracture zones later became silicified. These

fracture zones, even though they have been filled by a cementing material, still maintain to be a path of least resistance to underground liquids under high pressure. In this case a fluorine gas and hydrofluoric acid forced its way through the silicified fracture zones uniting with the calcium silicates. The fluoride replaced the silicate radical, producing fluorspar (CaF_2) and quartz.

Equations: $HF + CaX_nSiO_2 \longrightarrow CaF_2 + SiO_2 + CaHX_n$

$F_2 + CaX_nSiO_2 \longrightarrow CaF_2 + CaX_nSiO_2$

The non-resistant quartz reefs can easily be seen marking out fluorspar deposition. The geological association of the reefs with a fluorspar deposition permits a feasable and rapid method of prospecting by the use of aerial photos or a direct survey by air.

The geology of six separate parallel veins has been studied on the north side of the Salmon River and two intersecting veins plus a spider-web cluster has been recognized on the south side.

Mineralogy of Fluorspar

Fluorspar occurs in the isometric system in the most common form, cubic, and less frequently as octahedral or dodecahedral forms. Cubic crystals sometimes grouped in parallel position to form a pseudo-octahedron. A dusty appearance is caused from this tendency to form crystals by the parallel grouping of minute cubes. The atomic structure of fluorspar has the calcium atom arranged on a face centered cubic lattice with the fluorine atoms lying at the centers of the eight small cubes of which the unit cell is composed.

Fluorspar is deposited more predominately as a compact, rarely columnar, coarse or fine, granular and massive. Fluorspar fractures flat-conchoidally and splintery. Other characteristics are brittle, hardness 4, specific

gravity 3 to 3.25, luster vitreous, streak white, transparent to subtransluscent, and color white, yellow, rose, violet blue, sky blue, green and brown.

Mine Development and Equipment

No development work has been done up to the present towards actual mining of the ore. The mining of the main vein on the north side of the Salmon River, which averages a width of 7.08 feet, has been traced for a distance of approximately two thousand feet and will be the primary operation. By the outcropping of the vein on the extreme ends of the ridge or reef, a depth of three hundred feet has been estimated. By the use of intermittent trenches along the vein, three hundred thousand tons would be a probable estimation of indicated ore reserves for this single vein. Only by the use of diamond drilling can an estimation of measured ore be determined.

A main haulageway will be cut into the face of the reef at an elevation of approximately two thousand seven hundred feet above sea level and shrinkage stoping will be carried along the vein to the surface three hundred feet above. The ore will be mined at an approximate cost of $2.85 per ton. Ore chutes placed at twenty-five foot centers along the main haulageway will be used to draw off ore from the shrinkage stoping above. The height of the broken ore will be controlled so as all drilling can be done while standing on broken ore. The chutes will be equipped with hydraulic controlled doors so the drawing of ore can be regulated. The ore will be scooped from the floor of the haulageway by a Hi-loader which will transfer it to two five ton capacity trucks outside and carried directly to the concentrating mill. The broken ore, ten cubic feet to the ton, will be placed in storage bins that will supply a concentrating mill on Smith Creek approximately one thousand-five hundred feet away along the bank of the Salmon River.

After concentrating the fluorspar to an acid grade it will be hoisted to the top of the ridge or trucked over a series of switchbacks, depending on further study after the road is completed, and loaded into ten-ton capacity trucks. If hoisted, the hoisting equipment must be able to lift one hundred twenty-five tons of concentrates per day up a grade of 30 or 40 percent to a height of one thousand feet. Five trucks carrying ten tons will make two trips per day to Darby, approximately sixty-five miles away. A road must be constructed from Salmon Mountain to the fluorspar deposit, approximately eighteen miles distant. The road from Elk City to Darby will supply the remaining forty-seven miles to be traversed. Construction estimates for the eighteen-mile road have ranged from $22,000 to $33,000. The road will traverse on the top of three predominant ridges and crossing two gulches, one at Dennis Creek and one at Hamilton Creek. In constructing the eighteen miles of road, the possibilities of uncovering other ore deposits are very good. The area has not been prospected for mineral wealth with the exception of gold.

Further mapping and drilling must be done to determine the tonnage on the south side of Salmon River and also joining the main vein on the north side. As the ore deposits are developed and mined on the south side, ore will be transported to the mill by an overhead tram line.

Concentrating Mill for Acid Grade Spar

The mill will be located on Smith Creek for its clean water supply and convenient railings disposal. The capacity of the mill will be to produce one hundred tons of acid grade fluorspar concentrates per twenty-four hours. Approximately one hundred thirty-five tons or ore will be run through the mill at a cost of approximately $.41 per ton for flotation reagents. The mill equipment will cost $100,000 plus $5,000 for quanitative laboratory equipment to control concentrate grade.

The main vein on the north side of the Salmon River was channel sampled in four equally-spaced trenches. The partial chemical analysis were as follows:

Sample #1	SiO_2 %	9.9	CaF_2 %	67.45
" #2	" "	24.2	" "	67.93
" #3	" "	4.2	" "	74.33
" #4	" "	17.1	" "	75.89

The results employed are standard to fluorspar practice. Soda ash will be used as an alkalinity regulator. Sodium silicate and quebracho will be used as depressants and dispersion reagents. Oleic acid was used as a collector for the fluorspar. No frother is necessary as a satisfactory froth is produced by oleic acid. Two cleanings of the rougher flotation concentrate is sufficient to produce acid grade fluorspar concentrate. An 80% recovery is possible with little trouble producing 98% acid grade fluorspar. It is recommended the quebracho should be controlled closely for an excessive amount would retard the flotation of the fluorspar. If $CaCO_3$ is not present in the ore, quebracho is not needed. The addition of sodium silicate other than to the conditioner and first cleaner can probably be eliminated. The liberation for non-metallics in concentration by flotation is at a minus 65 mesh. Heating the pulp in the conditioner by means of a steam coil is recommended. The water for milling should be relatively soft otherwise a water softening unit should be installed.

The concentrate settles rapidly. The concentrate thickener should be based on an area of approximately five square feet per ton per twenty-four hours. The thickener concentrate has a filter rate of two thousand pounds per square foot per twenty-four hours.

Sales Practice

Fluorspar is mainly sold through brokers who can guarantee delivery

to the consumer. Direct sales are otherwise difficult as the buyer feels he cannot be assured of delivery.

General Information Regarding Uses

Steel and Foundry Work

Fluorspar is added to the blast furnace charge to give greater fluidity to the slag, thus assisting in carrying off the impurities. Present practice calls for the use of 6.5 pounds of fluorspar per ton of basic open hearth steel produced. Steel making requires gravel-size fluorspar with not over 15% fines, as the fine material blows out of the furnace and does not readily sink into the molten mass.

Ferro-Alloys

Fluorspar is used in the manufacture of ferro-alloys to form a fluid slag to carry off impurities.

Miscellaneous Metallurgical Work

Fluorspar is used metallurgically in smelting refractory ores of gold, silver, and copper; in the production of nickel and monel metal; in refining copper, antimony, lead, and silver; in brass foundry work; and in extracting various rare metals from their ores. Its use is in forming a fluid slag.

Welding Rod Coatings

Welding rod coatings carry fluorspar which becoming fluid, carries off oxide scale and impurities from the joints being welded.

Aluminum

Fluorspar is used in slagging off impurities.

Cement

In cement mills, the addition of 0.25 to 1% fluorspar permits lowering the fusion point 400°, resulting in fuel economy. Further experimentation has shown that 3 to 5% fluorspar is preferable, giving a fragile clinker which is more easily ground. This quantity also eliminates formation of

rings in the kilns, eliminating stoppages for cleaning and increasing refractory life.

Fluorspar is also used in the manufacture of a flux to de-slag high temperature steam generators.

Calcium Carbide and Cyanimid

Fluorspar is used to facilitate fusion and the contract of products in the manufacture of calcium carbide and cyanimide, and promotes easy flowing of the fused mass.

Glass and Enamel

Fluorspar is used for the manufacture of opalescent glass. It is the fluidity of fluorspar during fusion which imparts the smooth surface to enamel and sanitary ware. It is similarly used to produce smooth, fused facings on bricks and tiles and for vitriolite building material.

It is to be noted that the above uses of fluorspar depend upon its qualities of fluidity during fusion; physical rather than chemical qualities. The following usages depend upon its chemical properties and the chemical properties of its derivitives.

Acid

The production of hydrofluoric acid is the first step in the chemical usage of fluorspar. Sulfuric acid is added to the fluorspar to produce hydrofluoric acid. Specifications of the fluorspar call for less than 1% $CaCO_3$ and less than 1% SiO_2. Calcium carbonate neutralizes the acid and too much causes foaming. Silica forms hydrofluosilicic acid in such proportion that for every part of silica, 4 parts of fluorspar and 5 parts of 66° Baume sulfuric acid are wasted. For each additional 1% silica, 10% must be deducted from the value of the fluorspar.

Hydrofluoric acid is used in electrolytic refining of metals, stripping anodizing racks, chromium plating, pickling of metals, etching glassware, and frosting light bulbs.

Acid Derivatives

From hydrofluoric acid, artificial cryolite and aluminum fluoride are made for use as electrolytes in the production of aluminum. Other fluorides are used in making the bond for constituents of emery wheels, the bond for carbon electrodes, in making roofing cements, in making welding rod coatings and various fluxing compounds, in making boiler cleaning compounds, insecticides, and wood preservative.

Fluorine Chemicals

With the exception of the violently active hydrofluoric acid and uranium hexafluoride, fluorine chemicals are extremely stable and inert to chemical reaction. The substitution of two fluorine atoms for two chlorine atoms in carbon tetrachloride produces freon, an extremely inert refrigerant medium. In the production of uranium for atomic energy, uranium hexafluoride is produced. To separate this uranium compound from other compounds, it must be placed in a heavy, inert liquid, and this liquid is another fluorine compound. Other fluorine compounds are used as a carrying agent for insecticides, and in the production of high-octane gasoline.

Fluorocarbons

Fluorine atoms can be substituted for hydrogen atoms in hydrocarbons to make compounds roughly similar to the original hydrocarbon but being extremely inert and resistant to oxidation and chemical reaction. Thus, fireproof rubber and insulation can be made, and these materials will not deteriorate through age or oxidation. Greases, completely resistant to oxidation, ordinary heat, and chemical reation are now being made. Chemical-resistant gasket material is now on the market. Fluorocarbon chemistry is a new field which promises rapid and spectacular advances in the future.

BIBLIOGRAPHY

Ford, William E. Dana's Textbook of Mineralogy. New York: John Wiley and Sons, Inc., 1951.

Ladoo, Raymond B., and W. M. Myers. Nonmetallic Minerals. New York: McGraw-Hill Book Company, Inc., 1951.

Parks, Roland D. Examination and Valuation of Mineral Property. Cambridge: Addison-Wesley Press, Inc., 1949.

ACKNOWLEDGEMENTS

The cooperation and opinions of the following were greatly appreciated: Peter H. Toepfer, Geologist; Richard Miller, Geologist; Montana State University, Geology Department; and Denver Equipment Company, Ore Testing Division, Ore Test No. EQ-26613.

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

January 21, 1976

Mr. Robert Naismith, Manager
Applied Physics Department
Atlantic Research Corporation
5390 Cherokee Avenue
Alexandria, Virginia 22314

Re: DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Dear Mr. Naismith:

This is in response to your request of January 20, 1976, for copies of material in the subject docket.

We are furnishing Cooper-Trent Division, Keuffel & Esser Co., with our copy of the material listed below. Cooper-Trent will contact you regarding the cost of reproductions; the minimum change is $15.00 plus $1.00 for postage and handling. Upon deciding how many copies you want, send the enclosed copy of this letter to Cooper-Trent with your letter of instructions. All future correspondence relating to procurement of copies should be with Cooper-Trent rather than this office.

The material includes the following items:

Operator's final report	23 pages,	8½" x 11"
Appendix	21 pages,	8½" x 11"
Vertical sections thru proposed DDH No.'s 1 and 2, Smothers Fluorspar deposit, Scale: 1" = 100'		8½" x 11"
Vertical section through proposed DDH No. 3, Scale: 1" = 100'		8½" x 11"
Annex I to Exploration contract	1 page,	8" x 10½"

AMERICAN REVOLUTION BICENTENNIAL 1776-1976

Claim map, Smothers Fluorspar deposit, Scale: 3" = 1 mile	8½" x 9½"
Smothers Fluorspar Deposit Plate No. 1, Maps 1, 2, 3	11½" X 13-3/4"
Geology map of Smother's Fluorite deposit Scale: 1" = 50'	36" x 43½"
Map No. 1 - Claims, Idaton, Inc. Scale: 1" = 300'	24" x 36"
Geological map of Smother's Fluorite deposit Scale: 1" = 30'	22" x 34"
Plan View Vein "A", Sheet 1, Scale: 1" = 30'	22" x 34"
" " " " , Sheet 2, Scale: 1" = 30'	30" x 40"

If we can be of further service to you, please call or visit this office.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo, Chief
Office of Minerals Exploration

Copy to: Cooper-Trent Division
Keuffel & Esser Co.
Wilson Boulevard at Danville Street
Arlington, Virginia 22201
Attention: Mr. Marvin Mundy

cc:
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Mr. Kirkemo

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UNITED STATES POSTAL SERVICE U.S.MAIL

BOB MAISMITH
3721 RANDOLPH
FAIRFAX VA 22030

TO WHOM IT MAY CONCERN;

I FULLY AUTHORIZE MR MAISMITH TO CHECK ALL RECORDS ON BIG SPAR MINING COMPANY SALMON IDAHO

D H BROWN, OWNER
BOX 889
SALMON ID 83467

1252 EST

MGMFCHA FSCH

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 20 1976

INITIALS	CODE
HK	HK

3721 Randolph Street
Fairfax, Virginia 22030

19 January 1976

Mr. Harold Kirkemo
Office of Mineral Exploration
U.S.G.S. National Center
Reston, Virginia

Subject: Squaw Creek Fluorite Deposit

Gentlemen:

The subject land, known as the Smothers Property or Noussen Mine, consists of 18 unpatented lode claims. The claims were originally owned by Austin P. and Florence V. Smothers of Salmon, Idaho. On May 13, 1955, Ernest C. Eckesdafer of Missoula, Montana entered into an agreement to purchase the 18 claims from the Smothers. Agreements were then entered into with Squaw Creek Mining Company and IDATON, Inc. These claims expired.

In 1970, Mr. D. H. Brown and his associates, J. Leveaux and B. W. Porter filed 18 claims with the Office of the Recorder of Idaho County, Grangeville, Idaho. These claims have been maintained since that time and are believed to be valid. I represent Mr. Brown and am authorized by him to review all documents associated with this property.

I appreciate any assistance you can give me in this regard.

Yours very truly,

Robert Naismith

Robert Naismith

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O. M. E.
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JAN 20 1976

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HK	HK

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

September 19, 1975

Memorandum

To: The Record

From: Chief, Office of Minerals Exploration Harold Kirkemo

Subject: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

The following material was furnished to Mr. John Ecklesdafer, Route #1, Box 2384, Severna Park, Maryland 21146. Phone (301) 647-7693. A request for the material and identification had been submitted earlier by Mr. Ecklesdafer.

Claims Map

✓	Map No. 1.	Claims	
	Map No. 2.	Composite of Maps 1, 2, and 3.	
✓	Map No. 2.	Smothers Fluorspar Deposit; Scale:	1" = 50'.
✓	Map No. 3.	Geological Map "	1" = 30'.
✓	Map No. 4.	Plan View of Vein "A" "	1" = 30', Sheet 1.
✓	Map No. 5.	" " " " " "	1" = 30', Sheet 2.

✓ Geology Map of Smother's Fluorite Deposit; Scale: 1" = 50'.

Vertical Sections thru Proposed Diamond Drill Holes Nos. 1, 2, and 3.

✓ Operator's Final Report and Appendix, 45 pages

✓ Annex I of Contract, 1 page.

AMERICAN REVOLUTION BICENTENNIAL 1776-1976

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington

April 24, 1959

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DATE	INITIALS	CODE
4/27		220
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5-1		130
5/4		220
5/4		800
5/4		600

Memorandum

To: Chairman, Operating Committee, OME

From: OME Field Team, Region I

Subject: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Enclosed are three copies of a Field Team final report on this project prepared by D. R. MacLaren, Geologist, Geological Survey, and William M. Romischer, Mining Engineer, Bureau of Mines.

The completed work comprised 2 diamond drill holes aggregating 700 feet of AX size core drilling, the geologic mapping of the area containing fluorspar deposits on 18 claims, and assaying of 2 drill-hole samples and 77 surface samples for CaF_2 and SiO_2. The total cost of the work was $7,264, of which the Government's participation was 50 percent or $3,632.

The project resulted in the discovery of 105,148 tons of inferred ore having an average grade of 70.03 percent CaF_2. A pseudo-certification is incorporated in the Termination Agreement. ?

Wing G. Agnew
Wing G. Agnew, Acting Exec. Officer
Bureau of Mines

Donald R. MacLaren
Donald R. MacLaren, Acting Member
Geological Survey

Enclosures
cc: USBM(2)
USGS(SRO)
MacLaren

Reviewed by
OME OPERATING COMMITTEE
5-1-59
(date)

DEPARTMENT OF THE INTERIOR

OFFICE OF MINERALS EXPLORATION

FIELD TEAM, REGION I

FINAL REPORT

Contract Idm-E1078

by

William M. Romischer
Mining Engineer
U. S. Bureau of Mines

D. R. MacLaren
Geologist
U. S. Geological Survey

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		220

IDATON, INC.
Assignee
Squaw Creek Mining Company
322 Shelden Avenue
Houghton, Michigan

Docket No.:	DMEA-4366
Commodity:	Fluorspar
Contract date:	April 12, 1957
Termination date:	August 30, 1958

Reviewed by
OME OPERATING COMMITTEE
5-1-59
(date)

SMOTHERS PROPERTY
Unorganized Dixie Mining District
Idaho County, Idaho

Spokane, Washington

April 1959

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ILLUSTRATIONS

Plate 1.	Claim map	In pocket
2.	Map showing property boundaries, geology, and location of diamond drill holes	In pocket
3.	Vertical sections in the planes of DDH's No. 1, 2A, 3, and 4A	In pocket
4.	Plan and section map showing sample locations and inferred ore blocks	In pocket
Figure 1.	Index map	In pocket

FINAL REPORT

IDATON, INC.
Assignee
Squaw Creek Mining Company
Smothers Property
Unorganized Dixie Mining District
Idaho County, Idaho

Contract Idm-E1078

* * * *

INTRODUCTION

This report describes an exploration project to explore a fluorite deposit in Idaho County, Idaho, conducted jointly by the Government, acting through the Defense Minerals Exploration Administration and Idaton, Inc.

Summary

The project work completed consisted of 2 diamond drill holes aggregating 700 feet of AX size core drilling and the geologic mapping of the area containing the fluorspar deposits on 18 claims covered by the contract. Two drill-hole samples and 77 samples taken during the surface trenching for the geologic mapping were assayed for CaF_2 and SiO_2.

The total cost of the work was $7,264, of which the Government's participation was 50 percent or $3,632.

Disappointing results were obtained from the two contract bore holes drilled. The third hole authorized under the contract was never drilled. Results obtained from the surface sampling were much more encouraging. Because of the very limited amount of drilling done at depth and the favorable results obtained at the surface over a larger area, it appears more drilling is needed to make an accurate evaluation of the fluorite deposits at the property. The contract was terminated by mutual agreement effective as of August 30, 1958.

East of the Salmon River there are at least 3 zones of fluorite ranging in length from 150 to 600 feet and in width from 1.7 to 20.0 feet. They occur along and a short way in from the east wall of a quartz vein in gneiss. The geology of the area in which the fluorite is found was mapped and fractional samples were taken from channels cut across the fluorite zones throughout a length of approximately 1,800 feet. The southernmost and largest fluorite zone was probed by four diamond drill holes. Two holes and part of a third were drilled at the Operator's expense. Two additional holes were drilled by the Operator, at his expense, but they did not reach the fluorite zone. The drilling showed that, at depth, the vein flattened in dip and the fluorite zone became narrower and much lower in grade.

Although the limited amount of drilling completed did not test the southernmost zone sufficiently to calculate an indicated reserve, an inferred reserve, comprising all 3 zones, is estimated to contain 105,150 tons, having an average content of 70 percent CaF_2. A pseudo-certification is incorporated in the Termination Agreement.

Recommendations

Although at the present time the only access to the property is by pack trail, or by small boat on the Salmon River, and construction of a suitable access road would be costly, the property is a potential source of fluorite ore. Therefore, should a properly financed and competently supervised project for additional exploration be received, it is recommended that it be given thoughtful consideration.

LOCATION AND ACCESSIBILITY

The Smothers property, also known as the Nousson mine, is in the unorganized Dixie Mining District situated in unsurveyed sec. 27, T. 23 N., R. 12 E. Boise meridian, Idaho County, Idaho, and comprises claims on both sides of the Salmon River between Big Squaw Creek and Smith Creek (fig. 1 and pl. 1). It is about 31 miles by pack trail from the end of the Salmon River Forest Highway below Shoup, Idaho, or about 25 miles by boat down the Salmon River. It may also be reached by another pack trail that leaves the road between Darby, Montana, and Grangeville, Idaho, near Salmon Mountain. This pack trail is 15 miles long and passes through rugged terrain. Access is difficult at any time and between November and June is impracticable. Special boats make the trip downstream in about 2 hours and boats with high-powered motors are able to return upstream. Freight boats must continue downstream to Riggins, Idaho.

From the river bank, at an altitude of about 2,500 feet, the surface slopes upward at 45° or steeper. The canyon terrain is rough and in places the canyon walls are almost sheer and have bold rock outcrops. The north slopes have only sparse vegetation, and the slopes on the south side at higher altitudes are covered with grass, pine trees, and other vegetation.

The summers are warm and dry, while winters are cold. Snow is on the ground from November to April or May in the surrounding country, depending on the altitude. Near the bottom of the Salmon River Canyon the winter is somewhat milder because of the lower altitude.

PROPERTY

The land which is known as the Smothers Property or Nousson mine consists of 18 unpatented lode claims (fig. 1 and pl. 1). The claims are owned by Austin P. and Florence V. Smothers of Salmon, Idaho, and are recorded in the Office of the Recorder of Idaho County, Grangeville, Idaho.

On May 13, 1955, Ernest C. Ecklesdafer of Missoula, Montana, entered into an agreement to purchase the 18 claims from the Smothers. On November 21, 1955, Ernest C. Ecklesdafer assigned the purchase agreement to the Squaw Creek Mining Company, 605 Wilma Building, Missoula, Montana. A contract was signed by Squaw Creek Mining Company April 12, 1957, and on July 12, 1957, was assigned to Idaton, Inc., a State of Idaho corporation, whose address is Houghton, Michigan.

Consent to Lien forms were signed by Austin P. Smothers, Florence V. Smothers, and Ernest C. Ecklesdafer.

A list of the claims and the book and page on which each is recorded is:

Name	Book	Page
Brown Cub No. 1	78	664
2	78	665
3	78	666
Broken Halter No. 10	78	667
11	78	668
12	78	669
13	78	670
14	78	671
Giant Spar No. 1	78	672
2	78	673
3	78	674
Gem	78	675
Big Cliff No. 1	78	676
2	78	677
6	78	678
5	78	679
4	78	680
3	78	681

History and Production

The property has been described in three Government reports:

Ross, Clyde P., 1943, Fluorite Prospect Near Big Squaw Creek, Bitterroot National Forest, Idaho: U. S. Geological Survey (Commodity Report).

Herdlick, J. A., 1943, Nousson Mine, U. S. Bureau of Mines War Minerals Report.

Gammell, Robert M., 1953, Fluorite Deposits on the Salmon River Near Big Squaw Creek, U. S. Bureau of Mines (Examination Report).

The large quartz veins associated with the fluorspar were discovered in 1860 by prospectors enroute to Leesburg, Idaho. The veins were first prospected for gold with negative results.

In 1937 Jaffet and Hugo Nousson staked six claims for gold, but the claims were allowed to lapse. Fluorspar was recognized at this time.

Later, 18 claims covering the principal deposits were located by Austin P. Smothers and Florence V. Smothers. There is no record of any production from the property, and there are no mining facilities at the claims.

The only exploration work done prior to the DMEA contract consists of a diamond drill hole drilled late in the fall of 1955 by the Squaw Creek Mining Company. No record of drill log or assays was reported by the company who stated only that a vein had been cut. A number of hand trenches and pits were reported.

GEOLOGY

There are no known published reports on the geology of the area in the vicinity of the property. However, there are three unpublished reports made by engineers of the Bureau of Mines and a geologist of the Survey. There is also in the DMEA files a geologic map that has been prepared by a geologist of the American Smelting and Refining Company.

Much of the following discussion is based on information contained in these reports.

The property is in the central part of the Idaho batholith in an area where the batholithic roof apparently was exceptionally low. The rocks are mostly granodiorite and gneiss which have been somewhat sheeted in a northerly to northeasterly direction. In places banding in the gneiss suggests that it is a metamorphosed roof pendant of sedimentary beds, the banding representing traces of the bedding in the original rock. According to Ross (1943), the banding or bedding strikes N. 55°-75° W. and dips 80° NE.-75° SW. Small irregular bodies of pegmatite and aplite are reported by Ross.

There are many quartz veins in the area, some of them quite large with conspicuous outcrops. On the east side of the Salmon River one of these veins with an average strike of about N. 10° W. and a dip of about 60° E. has been traced on the surface for more than 2,000 feet. Diamond drilling indicates that the vein tends to flatten at depth. It ranges in width from narrow anastamosing stringers to massive quartz bodies up to 25 feet across. Fluorspar occurs at intervals mostly along the east side of the vein and in places within it. On the Squaw Creek claims there are three known fluorite zones in this vein (pl. 2). The largest and southernmost zone is about 600 feet long and up to 12 feet wide on the surface. Thirty-five samples were taken from 12

channels ranging in width from 1.2 to 12.2 feet across the fluorite-bearing zone. The average width of the zone throughout this distance is 7.2 feet and the average grade is 67.50 percent CaF_2. A central zone of fluorite is about 260 feet long and up to 13.0 feet wide on the surface. In this zone 26 samples were taken from 8 channels, ranging in width from 1.5 to 13.0 feet across the zone. The average width throughout the zone is 7.9 feet and the average grade is 73.93 percent CaF_2. The third fluorite zone, the northernmost one, is about 220 feet long and up to 14 feet wide. Sixteen samples were taken from 5 channels ranging in width from 1.7 to 14.2 feet. The average width throughout the zone is 7.1 feet and the average grade is 70.50 percent CaF_2.

Parallel to the quartz vein just described and between it and the Salmon River is another quartz vein up to about 30 feet wide which has been traced for more than 1,100 feet. This vein contains only a few very small pods of fluorite.

Herdlick (1943) and Gammell (1953) report similar quartz veins on the west side of the Salmon River as well as some fluorite float. Herdlick mentions only 3 short fluorite stringers, 2 of them about 2 inches wide, and 1 about half an inch wide.

THE PROJECT

The occurrence of fluorspar associated with large quartz veins on the Salmon River near Big Squaw Creek has been known for years. On the northeast side of the Salmon River one of these veins striking about N. 10° W. and dipping about 60° E. has been traced on the surface for more than 2,000 feet. The grade of the fluorspar was known to be exceptionally good with the gangue being quartz and wall rock. Bureau of Mines engineers have estimated the ore reserves as 43,000 to 113,000 tons of indicated and inferred ore with a ratio of metallurgical to acid grade ore about two to one.

The possible downward extensions at depth of two known fluorite zones exposed at the surface containing a good grade of fluorspar and of sufficient size were the targets for exploration along with any new discoveries found by geologic mapping.

Squaw Creek Mining Company applied on June 13, 1956, for Government aid to drill an aggregate of 1,000 feet of diamond drilling, distributed in 3 or 4 holes, to test the downward continuity of 2 fluorite bodies along a vein system. They also applied for hand trenching, geologic mapping and sampling of other veins in the area. The applicant's estimated cost of this work was $10,381.

Examinations of the property were made by DMEA representatives and from their recommendations, together with those of the Washington office, a similar exploration project as that submitted by the applicant was recommended.

The exploration project was essentially as follows:

1. One thousand feet of diamond drilling with AX bit.

2. Fifty drill hole samples to be assayed for CaF_2 and SiO_2.

3. Transportation of 50 drill hole samples.

4. Transportation of men and materials; limited to 2 boat trips per month for 2 months.

5. Transportation in and out of 3,000 pounds of drill equipment.

6. Make geologic map of area.

The estimated total cost of the project was $10,000. The contract, dated April 12, 1957, was signed by Squaw Creek Mining Company who then assigned it to Idaton, Inc., on July 12, 1957. The contract work was to be completed within 8 months from the date of the contract.

The project work was started on April 15, 1957, when a control survey was run with transit and tape on the north side of the river to establish points for the geologic mapping. A base line was also established on the north side of the river from which a number of control points south of the river were located by triangulation. This work was completed by the end of May.

Examination of the area for the geologic mapping was started about June 15. The mapping of pertinent data was done with Brunton compass and tape measurements from the survey control points.

Trenching to expose the fluorite veins for sampling and geologic information was done concurrently with other work. The main vein was trenched first. Ninety-five channel samples taken from 33 trenches were shipped to the Institute of Mineral Research at the Michigan College of Mining and Technology for assaying. The sample channels averaged 4 inches wide and 1 inch deep in cross section. The locations of the trenches are shown on Map No. 2 accompanying the Operator's final report and the widths and assays of the samples are given in table 1 in that report.

A number of other trenches were dug to investigate the smaller veins and areas in which pieces of float were found. Some of these were reported at the northwest end of the property and others on the south side of the river, but as no accurate account was kept of these trenches, they were not plotted on the map.

The trenching and sampling part of the field work was started June 20 and completed by the end of July.

Diamond drilling commenced April 10 and continued through the summer. Numerous delays were caused by poor drill performance and supervision. Drilling was suspended on October 14 without having completed any of the three holes authorized under the contract. Drill hole locations are shown on plate 2, and the drill hole logs are in the appendix accompanying the Operator's final report.

Drilling by another contractor was resumed early in May 1958 and two of the three contract holes were completed by penetrating the fluorite-bearing zone and entering the hanging-wall rock on the other side. Drilling operations were suspended on June 1, 1958, because of the disappointing results obtained from the two contract bore holes drilled. The third contract hole was not drilled because the Operator considered that even if fluorite of about the same width and grade as occurs at the surface were encountered in this hole, the tonnage probably would not be large enough to support a mining operation.

DDH 1 at coordinates 1337N, 1337W, was drilled N. 53° E. at an angle of -23° and the hole was bottomed at a depth of 350 feet (pls. 2 and 3). The hole was collared at altitude 77 feet on the assumed datum used by the Operator for the control survey. Drilling of the hole commenced April 10, 1957. The hole was drilled to a depth of 306 feet after many delays when the Operator temporarily stopped the hole on June 18, 1951. Drilling of this hole was resumed on May 25, 1958, and completed by June 1, 1958, at a depth of 350 feet.

A few fluorite stringers were cut from 338 to 340.5 feet. Core recovery for this interval was 80 percent and the core assayed 19.9 percent fluorite. The core from 340.5 to 345.0 feet assayed only a trace fluorite. The hole entered the biotite gneiss hanging wall at 345.0 feet.

DDH 2 at coordinates 1427N, 1427W, was drilled N. 43° E. at an angle of +1°, and collared at an altitude of 75 feet (pls. 2 and 3). Drilling of the hole commenced June 22, 1957, and was drilled to a depth of 254 feet where the core barrel sheared off in the hole. Attempts made to recover the core barrel failed and no wedges were available to deflect the hole. Later attempts to

deflect this hole failed and the hole was abandoned. The following summer in early May 1958 attempts were made to re-enter this hole, but the tools encountered an obstruction at 236 feet and the hole was again abandoned.

The Operator ordered the drilling of another hole, No. 2A, at the same site as DDH 2, but on a bearing of N. 41° E. and an inclination of -10°. Drilling of this hole commenced about October 1, 1957. It was drilled to a little over 80 feet when mechanical breakdowns of the drill equipment occurred. The hole was abandoned on October 14 when drilling and other operations were suspended. This hole was re-entered the following year and drilling commenced in biotite gneiss at 80 feet about May 9, 1958, and was completed about May 24, when the hole was bottomed at 444.5 feet in altered gneiss. The main quartz vein was intersected at 340 feet. Low-grade fluorspar mineralization was cut in a highly altered, broken, and leached zone at the hanging wall of the quartz vein. Fluorite in the interval from about 406 to 431 feet assayed 15.71 percent. The core recovery for this interval was 81 percent. The hole penetrated the biotite gneiss hanging wall at 432 feet.

At the Operator's own expense drilling was started on DDH 3 on August 1, 1957, at a non-DMEA drill site. DDH 3 at coordinates 1428N, 1295W, was drilled N. 65° E., inclination -14½° (pls. 2 and 3). The hole was collared at altitude 149 feet and drilled to a depth of 138 feet. The hole was started just in the footwall of the quartz vein. Fluorite mineralization was cut from 106 to 119 feet, but only 3.8 feet of core was recovered from this interval. The core, as reported, was badly broken and showed extensive grinding. Veinlets of massive fluorite, white, purple gray, and pale green were in the core along with vuggy quartz, kaolin, and gypsum. Sludge samples were not taken. The core assayed 70.8 percent CaF_2.

DDH 4, a non-DMEA hole, was started August 24, 1957, and was completed September 15, 1957, at coordinates 1319N, 1244W. Its bearing was N. 48° E., and its inclination was -20° (pls. 2 and 3). The hole was collared at altitude 138 feet in the quartz vein and at 94 feet the hole caved and froze the core barrel. In attempting to loosen the core barrel, the driller disconnected the rods and the hole had to be abandoned. Hole 4A was started with the same altitude, inclination, bearing, and latitude, but the departure was changed a little bit. This hole was drilled for 129 feet and intersected fluorspar mineralization from 116 to 122 feet, but only 2.7 feet of broken and ground core was recovered for this interval. The core assayed 48.0 percent CaF_2. Sludge samples were not taken.

The Operator considered that the narrow width and low grade of the fluorite zone in DDH 1 indicated that the vein was pinching out with depth and that the mineralization encountered in DDH 2A was too low in grade to be classed as ore.

The drilling of DDH's 1 and 2A to depths of 350 feet each completed the contract work as DMEA DDH 3 was never drilled.

Amendment No. 1, dated March 26, 1958, provided for a recess from December 12, 1957, to May 12, 1958, and extended the time for completion from December 12, 1957, to December 12, 1958. The period for the payment of the Government's royalty was extended from 10 to 11 years.

Ore Reserves

Because of the questionable value of the drill hole samples, any estimate of a reserve must be based on the results of the surface sampling. However, the drill hole sampling and assaying indicate that ore may be inferred to a depth somewhere between the altitudes of DDH's 4A and 1. If it be assumed that the grade decreases at a constant rate from 48.0 percent CaF_2 at DDH 4A to 19.9 percent CaF_2 at DDH 1, the cut-off grade of 25 percent CaF_2, established by sink-float and flotation tests made at the Operator's expense, would fall about 40 feet above DDH 1. Applying the same assumption to DDH's 3 and 2A, the 25 percent cut-off would fall about 42 feet above DDH 2A. However, as a more conservative approach, we have based our estimate on the assumption that the ore will continue to a depth equal to half the length of the ore shoot on the surface and have considered only the surface assays in estimating the grade.

Assays of surface samples indicate three ore shoots: the southernmost shoot, Shoot A, extending from Sample R_1 to half way between Sample I_1 and J_1, the middle shoot, Shoot B, extending from Sample E_1A to Sample A_2C, and the northernmost shoot, Shoot C, extending from Sample A_2B to Sample R_2 (pl. 4). Assays of all surface samples are given in table 1 in the appendix accompanying the Operator's final report. No assays less than 25 percent CaF_2 have been considered in calculating the grade of the inferred reserve blocks. The distance between samples varies only slightly and therefore is not considered in determining the average grade. Block A has a length of 455 feet on the surface, an average width of 8.2 feet, and an assumed average depth of 227.5 feet. Assuming a tonnage factor of 11 cubic feet per ton, the inferred ore in this block is $\frac{455 \times 227.5 \times 8.2}{11} = 77,160$ tons. The inferred grade is 68.81 percent CaF_2 computed as follows:

Sample No.	Width	X	Grade			Total width	(Width X average grade)
J_1-1	1.9		86.5	=	164.35	1.9	164.35
K_1-1	2.5		29.5	=	73.75		
-2	2.1		47.8	=	100.38		
-3	2.3		79.6	=	183.08		
	6.9				357.21	6.9	357.21
L_1-4	2.1		32.0	=	67.20		
-5	3.3		38.9	=	128.37		
-6	3.0		68.8	=	206.40		
-7	2.3		33.6	=	77.28		
	10.7				479.25	10.7	479.25
M_1-1	2.8		89.1	=	249.48		
-2	3.8		91.8	=	348.84		
-3	2.9		79.7	=	231.13		
-4	1.0		62.0	=	62.00		
	10.5				891.45	10.5	891.45
N_1-1	3.6		71.7	=	258.12		
-2	2.0		35.8	=	71.60		
	5.6				329.72	5.6	329.72
N_1A-1	2.8		93.3	=	261.24		
-2	2.8		67.7	=	189.56		
-3	2.9		93.6	=	271.44		
-4	3.0		46.7	=	140.10		
	11.5				862.34	11.5	862.34

Sample No.	Width X Grade			Total width	(Width X average grade)
O_1-1	1.8	80.8	= 145.44		
-2	1.4	94.3	= 132.02		
-3	2.8	84.0	= 235.20		
-4	2.8	38.0	= 106.40		
	8.8		619.06	8.8	619.06
P_1-1	2.3	59.8	= 137.54		
-2	3.2	80.1	= 256.32		
-3	2.6	68.1	= 177.06		
-4	2.0	72.8	= 145.60		
	10.1		716.52	10.1	716.52
Q_1-1	3.0	72.8	= 218.40		
-2	2.4	81.3	= 195.12		
-3	2.0	66.5	= 133.00		
-4	3.2	73.8	= 236.16		
-5	1.6	79.2	= 126.72		
	12.2		909.40	12.2	909.40
R_1-1	2.0	78.4	= 156.80		
-2	1.6	89.3	= 142.88		
	3.6		299.68	3.6	299.68
Total				81.8	5,628.98

Average width of Block A 8.18 feet

Average grade of Block A 68.81 percent CaF_2

Block B has a length of 257 feet on the surface, an average width of 7.9 feet, and an assumed average depth of 128.5 feet. Assuming a tonnage factor of 11 cubic feet per ton, the inferred ore in this block is: $\frac{257 \times 128.5 \times 7.9}{11}$ = 23,720 tons. The inferred grade is 73.93 percent CaF_2 computed as follows:

Sample No.	Width X Grade			Total width	(Width X average grade)
A_2C-1	2.8	83.2	= 232.96		
-2	2.8	62.5	= 175.00		
-3	1.7	76.7	= 130.39		
-4	1.7	71.2	= 121.04		
	9.0		659.39	9.0	659.39
A_2D-1	1.7	91.2	= 155.04		
-2	3.0	86.7	= 260.10		
	4.7		415.14	4.7	415.14
A_1-1	2.0	74.5	= 149.00		
-2	1.6	78.5	= 125.60		
-3	3.1	93.4	= 289.54		
-4	1.7	86.6	= 147.22		
	8.4		711.36	8.4	711.36
B_1-1	2.4	26.7	= 64.08		
-2	1.6	43.4	= 69.44		
-3	3.4	91.8	= 312.12		
-4	2.6	75.5	= 196.30		
	10.0		641.94	10.0	641.94

Sample No.	Width X Grade			Total width	(Width X average grade)
C_1-2	2.9	76.3	= 221.27		
-3	3.3	74.1	= 244.53		
-4	3.0	80.3	= 240.90		
-5	2.6	32.0	= 83.20		
	11.8		789.90	11.8	789.90
D_1-2	2.4	89.7	= 215.28		
-3	2.4	91.2	= 218.88		
	4.8		434.16	4.8	434.16
E_1-1	3.5	58.4	= 204.40		
-2	2.5	73.8	= 184.50		
-3	1.3	70.8	= 92.04		
-4	2.0	84.4	= 168.80		
-5	3.7	65.3	= 241.61		
	13.0		891.35	13.0	891.35
E_1A-1	1.5	86.1	= 129.15	1.5	129.15
Total				63.2	4,672.39

Average width of Block B 7.9 feet

Average grade of Block B 73.93 percent CaF_2

Block C has a length of 115 feet on the surface, an average width of 7.1 feet, and an assumed average depth of 57.5 feet. Assuming a tonnage factor of 11 cubic feet per ton, the inferred ore in this block is: $\frac{115 \times 57.5 \times 7.1}{11}$ = 4,268 tons. The inferred grade is 70.5 percent CaF_2, computed as follows:

Sample No.	Width X Grade			Total width	(Width X average grade)
B_2-1	1.6	93.8	= 150.08		
-2	1.7	64.8	= 110.16		
	3.3		260.24	3.3	260.24
B_2B-1	2.4	94.4	= 226.56		
-2	2.5	91.3	= 228.25		
-3	2.6	63.6	= 165.36		
	7.5		620.17	7.5	620.17
A_2-1	2.3	60.6	= 139.38		
-2	3.0	77.3	= 231.90		
-3	1.3	40.6	= 52.78		
-4	2.3	82.2	= 189.06		
	8.9		613.12	8.9	613.12
A_2A-1	2.0	85.6	= 171.20		
-2	3.0	68.8	= 206.40		
-3	3.8	50.8	= 193.04		
-4	2.7	48.7	= 131.49		
-5	2.0	58.2	= 116.40		
-6	0.7	55.0	= 38.50		
	14.2		857.03	14.2	857.03
A_2B	1.7	93.7	= 159.29	1.7	159.29
Total				35.6	2,509.85

Average width of Block C 7.1 feet

Average grade of Block C 70.5 percent CaF_2

In summary, the inferred reserves resulting from this project are (pl. 4):

Block	Tons	% CaF_2
A	77,160	68.81
B	23,720	73.93
C	4,268	70.50
Total	105,148	70.03

Exploration Possibilities

The inferred reserve estimate is believed to be conservative; however, with the exception of four drill holes in the south half of the southern block, they are based entirely on the assumption that the ore will continue to a depth equal to half the length of the shoot exposed at the surface. From 5 to 10 additional diamond drill holes should be drilled to explore further the areas below and between the inferred blocks. If the inferred reserve is confirmed, crosscutting and drifting should be done to firm up the grade estimate.

The reported occurrences of fluorite on the southwest side of the Salmon River should be trenched. If the results of the trenching disclose fluorite zones of encouraging length, width, and grade, further exploration by diamond drilling, crosscutting, and drifting should be carried out.

Because of the difficult access to the property, the accompanying logistical problems, and the short season available, only a well-financed and most competently managed operation should be considered for Government aid.

Summary of Factual Data

Work under the contract was on a fixed unit cost basis.

The allowable costs of the project were:

Item	Authorized	Completed	Unit cost	Total cost
Diamond drilling AX holes	1,000 ft.	700 ft.	$ 8.00	$5,600.00
Drill hole samples assayed for CaF_2 and SiO_2	50 ea.	2 ea.	6.00	12.00
Transportation for drill hole samples	50 ea.	2 ea.	1.00	2.00
Transportation for men and materials	$200.00	4 trips	50.00	200.00
Transportation in and out for drill equipment	$350.00			350.00
Geological mapping, sampling, transportation, assaying and technical services	$1,100.00			1,100.00
Total cost				$7,264.00

Total amount of contract	$10,000.00
Government's participation at 50 percent	5,000.00
Total amount expended	$ 7,264.00
Government's participation at 50 percent	3,632.00
Total amount unexpended	$ 2,736.00
Government's share unexpended	1,368.00

There was no production at the property during the contract period.

The Government had no equity in operating materials, supplies, or equipment used on the project.

Discussion of Conclusions

Because of the limited finances available to the original applicant, the exploration program was necessarily a minimum one, which was not considered adequate to explore fully the fluorspar deposits.

It was recognized that progress on the project work would be hindered by the isolated location of the property and by having to use river transportation to and from the property; even traveling by boat was restricted during periods of high water on the river.

Poor work performance and supervision, especially in regard to the diamond drilling, contributed to the slow progress made on the project. The supervisor for the Operator during the year 1937 was inexperienced and failed to follow some of the terms of the contract for drilling. The result was that only two of three approved holes were drilled and these only partly so that neither hole had penetrated the fluorite zone when work was stopped in 1937.

Contract drilling was resumed in May 1938 under the supervision of an experienced consulting geologist. After two of the contract holes had been completed, the geologist left the property June 1 with all the critical core. This made it necessary to have this core examined by a DMEA representative at the Michigan College of Mining and Technology, Institute of Mineral Research, Houghton, Michigan, where the Operator had the core stored.

Disappointing results were obtained from the two contract holes drilled. The third hole authorized under the contract was never drilled. Results obtained from surface sampling over a larger area were much more favorable. Because of the very limited amount of drilling done at depth and the much more favorable results obtained from the surface sampling, more drilling is needed to make an accurate evaluation of the deposits at the property.

Enclosures
Distribution:
OME(3)
USBM(5)
USGS(SRO)
Docket
Maclaren

official

DATE		CODE
9-26	C	220
9/26	[illegible]	800
9-26	[illegible]	600

No. 157 Howard Street
Spokane 4, Washington
September 25, 1958

Mr. M. F. Volin
Idaton, Inc.
322 Sheldon Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Ida-21078

Dear Earl:

On my return from the field your letters of September 8 and 11, 1958, came to my attention, the latter of which included four copies of the geologic map (Map 2) revised to show the altitudes of the survey points.

We have sent the maps and your final report to DMEA in Washington, D. C. As soon as we are notified that these are acceptable, we will proceed to make a final settlement of the Idaton account.

Sincerely yours,

A. E. Weissenberg
Executive Officer, OME
Field Team, Region I

cc: DMEA(2) w/cys incoming
DTM(2)
AD
Prinz

September 11, 1958

Mr. A. E. Kaissenberg
Mining Engineer, DMEA
Ore Dressing Branch
Bureau of Mines
Department of the Interior
Washington 25, D.C.

Re: Docket No. DMEA-4866 (Fluorspar)
Idaho, Inc., Assignee
Smathers property
Idaho County, Idaho
Contract No. Idm-X1078

Dear Al:

Enclosed are four copies of the Geologic map revised to show the altitudes of the survey points. Please let me know whether you think it advisable to add the information on sample locations and assay results. I believe that this information sent on the other maps would be in a form more easily understood.

Sincerely yours,

M. E. Volin, Director
Institute of Mineral Research

MEV:bes

Enc. (4)

RECEIVED

AVENUE
HOUGHTON, MICHIGAN

DIRECTORS
JOHN H. RICE
HARRY GENEBAS
SAM CONDOAS
M. EARL VOLIN
JOSEPH M. DONNELLY
JOHN S. ECKLESDAFER
RICHARD J. O'BRIEN

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 26

DATE	INITIALS	C

September 8, 1958

Mr. Donald R. MacLaren
Alternate Acting Exec. Officer
DMEA Field Team, Region I
U. S. Department of the Interior
So. 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

DMEA

Dear Mr. MacLaren:

I have been away for some time and your letter of August 22 has just come to my attention.

Since writing your letter, you have received a final report on the captioned project. This includes all of the data on sample locations, assays and widths sampled. I presumed that it was not necessary to include this information on the geologic map, in that it could best be shown on sample maps and lists of assays.

As to the altitudes of the survey points shown on the geologic map, I wonder if a list of this data will be satisfactory rather than sending another five copies of the map with this data added. The altitudes can be identified by the numbers of the survey points.

I hope that you will find the report already submitted essentially the information required under the contract.

Sincerely yours,

M. E. Volin, Director
Institute of Mineral Research

MEV:bec

RECEIVED
SEP 10 1958
U. S. D. I.
SPOKANE, WASH.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

So. 157 Howard Street
Spokane 4, Washington

September 18, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 25 1958

DATE	INITIALS	CODE
9-25	C	220
9/25	wza	600
9/30	[illegible]	

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

Enclosed are the original and one copy of the Operator's final report together with five maps. The contract requires the submission of only one map showing the geology, the altitude of survey points, sample locations and assays, width of samples, and data pertinent to future exploration of any likely deposit. The geology and the altitudes of survey stations are shown on Maps 2 and 3, while the sample locations and assay data are shown on Maps 4 and 5 drawn at a larger scale. This fact appears to us to meet the contract requirements, as does the report.

In reference to your letter of July 15, 1958, we have previously sent you two copies each of an interim inspection report, dated August 1, 1958, by William C. Prinz, Geologist, U. S. Geological Survey, and a memorandum, dated August 13, 1958, by Charles J. Stehlik, Mining Engineer, U. S. Bureau of Mines. Prinz' report describes his inspection of the property made on July 25, 1958 and contains logs of the core he found on the property. Stehlik's memorandum contains logs of those portions of the core which were sent to Houghton, Michigan. Our letter of July 29, 1958, stated the Operator's reasons for not wishing to drill DDH-3. DMEA hole 3, if drilled, might firm up the presently inferred tonnage but would not materially increase it. Therefore, we recommend that the contract be terminated by mutual consent.

Our letter of July 3, 1958, recommended approval of the Operator's request to amend the contract to allow hole 2A to be drilled to a depth of 445 feet, taking 95 feet from the footage authorized for hole 3. Our letter of August 26, 1958, forwarding Stehlik's memorandum recommends that "if the Operator presents a satisfactory map and report, Mr. Volin's figure of 79 percent recovery from hole 2A be accepted as meeting the requirements of the contract."

Will you please advise us whether or not the Operator's final report is acceptable, whether or not the amendment will be prepared, whether or not the core recovery from hole 2A may be accepted as meeting the requirements of the contract, and whether or not payment can be made for holes 1 and 2A, and the mapping, sampling, and assaying.

In your letter of July 15, 1958 you ask if certification should be made at this stage. Hole 1 indicates 2.5 feet assaying only 19.9 percent CaF_2 and hole 2A indicates 26 feet assaying only 15.7 percent CaF_2. Holes 1 and 2A both cut the vein about 300 feet below the outcrop. Non-DMEA hole 3 intersected the vein about 110 feet below the outcrop. Incomplete data indicate a 13-foot zone in which core recovery was only 29 percent. Assay of this core showed 70.8 percent CaF_2. Non-DMEA hole 4A cut the vein about 130 feet below the outcrop. Incomplete data indicate a 6-foot zone in which core recovery was only 45 percent. Assay of this core showed 48 percent CaF_2.

On the basis of surface samples the Operator estimates an indicated reserve of 28,000 tons of ore having an average grade of 71.2 percent CaF_2. This estimate is based on the assumption that the average vein width and grade will hold to a depth of only 50 feet. On the basis of the incomplete data from non-DMEA holes 3 and 4A we believe that at least 56,000 tons of ore having an average grade of 70 percent CaF_2 may be inferred.

Before any ore could be mined, 25 miles of access road would have to be constructed. The minimum charge for hauling by local boatmen is $50 per trip and the maximum load is 1,000 pounds per trip. Therefore, we believe that it is extremely unlikely that there will be any production from this property in the foreseeable future unless considerably larger reserves can be blocked out. Additional reserves might be found across the Salmon River, but how much is problematical.

Under the circumstances the Field Team is of the opinion that a Certification of Discovery is not warranted; however, we have no objection if a pseudo-certification is incorporated in the Termination Agreement.

By Field Team, Region I

Wing D. Agnew

Wing D. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

D R MacLaren

D. R. MacLaren, Acting Member
U. S. Geological Survey

cc: USBM (2)
USBM (AD)

SEP 8 1958

DATE	INITIALS	CODE
9/8	C	220
9/8	[illegible]	800
		600

So. 157 Howard Street
Spokane 4, Washington

September 4, 1958

Mr. Richard J. O'Brien, Secretary
Idaton, Incorporated
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. O'Brien:

This will acknowledge receipt of your letter of August 26, 1958, enclosing four copies of an Exploration Report together with maps.

Apparently your letter and ours of August 22 addressed to Mr. Volin crossed in the mail as the altitudes of all survey points are not shown on the maps. The sample locations and assay results are shown on a separate map, which is in effect an overlay. Whether or not DMEA will consider this as acceptable under the terms of Exhibit A of the contract we do not know, but they have already advised us that the altitude of all survey points must be shown on the map. Therefore, if you will have the altitudes of each survey point added to the tracings and will send us four copies of each, we will send your report to Washington.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I

cc: DMEA (2)
USBM (2)
USBM(AD)
Prinz

LAW OFFICES
DONNELLY AND O'BRIEN
822 SHELDEN AVENUE
HOUGHTON, MICH.
TELEPHONE 146

JOSEPH M. DONNELLY
RICHARD J. O'BRIEN

EXTRA COPY
DMEA
RECEIVED SEP 8 1958

DATE	INITIALS	CODE

August 26, 1958

Mr. A. E. Weissenborn,
Supervising Geologist
U. S. Geological Survey
South 157 Howard Street
Spokane 4, Washington

RE: IDATON, INC.

Dear Mr. Weissenborn:

I enclose four copies of our Exploration Report together with maps in compliance with our DMEA contract.

If these reports and coucher applications for payment are not in order please advise.

Very truly yours,

Richard J. O'Brien,
Secretary,
IDATON, INC.

O'B:G
Enc.

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BIG SQUAW CREEK FLUORSPAR DEPOSITS

IDAHO COUNTY, IDAHO

INTRODUCTION

This report covers exploration work performed at the Big Squaw Creek fluorspar deposits by IDATON, INC., during the 1957 and 1958 field seasons. Mr. John G. Ecklesdafer was in charge of the work done in 1957, and Mr. Ted Engel, Jr. was in charge in 1958. The fluorspar property is located on the Salmon River in Township 25 N, Range 12 E, Boise Meridian.

PROPERTY OWNERSHIP AND HISTORY

The first claims were located by Neusson, and the property was known by that name for many years. Engineers of the U. S. Bureau of Mines examined the property as a part of the strategic minerals exploration program of World War II. Later, 18 claims covering the principal deposits were located in the names of Austin P. Smothers and Florence V. Smothers. They entered into a contract to sell the property to E. C. Ecklesdafer on May 13, 1955. Mr. Ecklesdafer conditionally assigned his contract to the Squaw Creek Mining Company on November 21, 1955. The contract subsequently was assigned to IDATON, INC., on April 30, 1957. During the summer of 1957, the original 18 claims were relocated and 12 additional ones located, all in the name of IDATON, INC., and duly recorded at the Idaho County Court House at Grangeville. These claims are shown on map no. 1.

The property was examined by a geologist of the American Smelting and Refining Company in recent years and a number of other mining companies have inquired about it.

PHYSICAL FEATURES AND COMMUNICATIONS

The property is in the canyon of the main Salmon River where it cuts through the Bitter Root Range of mountains. The claims north of the river lie in the Selway-Bitter Root Wilderness Area and in the Salmon River Game Preserve; these areas are part of the Nezperse National Forest. The claims on the south side of the river are in a designated primitive area in the Bayette National Forest.

The nearest town is North Fork, Idaho, on State Highway 93 about 100 miles south of Missoula, Montana, and 30 miles south of the Montana-Idaho border. From North Fork a rough automobile road follows the North Fork of the Salmon River to its confluence with the Middle Fork and then follows the main Salmon River; the road ends about 50 miles from North Fork. Along the river road are scattered farms, the Indianola Ranger Station about 20 miles from North Fork, and the old mining camp of Shoup about 26 miles from town. The property is 23 miles down the river from the end of the road and can be reached only by river boat or a pack trail.

The canyon terrain is rough and is characterized by a series of sharp ridges rising to elevations of 2500 feet above the river. The walls of the canyon are steep and in many places have bold rock outcrops. The higher slopes on the south side support grass, pine trees, and other vegetation. The north slopes have only sparse vegetation.

The main vein approximately parallels the river and lies 200

to 400 feet north of it; the outcrops are 50 to 150 feet above high water level. The vein is not far from the mouth of Big Squaw Creek which joins with Harrington Creek to drain an area to the north and east. Other tributaries run into the Salmon River at frequent intervals; all these streams have steep gradients. During high water in late June and early July, the Salmon River is about 300 feet wide at the property and all the tributary streams become small rivers. When the water recedes, the river is about 200 feet wide at the property and the tributaries are greatly reduced in size or altogether dry. The Salmon River has an average fall of 13 feet per mile. It may be impractical to generate hydroelectric power because of the great fluctuation in flow of the river and side streams.

Austin Smothers and Don Smith both operate river boats from a landing at the end of the road. The boats are powered by twin 35-horsepower outboard motors and will carry 1000 to 2000 pounds down stream and about half as much weight in returning upstream.

In the late spring and early summer of 1957 when the river was high, the cost was $50 per trip. Later, as the water receded and rocks became exposed, the cost was raised to $60 and in October it was $120. Mr. Smothers lives during the summer across the river from the end of the road. Don Smith lives in North Fork.

A sandbar at the property makes a good landing for boats at normal water levels. Don Smith has a camp on the bar for fishermen and hunters. An old barge serves as a kitchen, and there are tents and other equipment. Water is piped from a nearby spring. Mr. Smothers owns a log cabin not far from Smith's camp.

In 1957, pack horses cost $4 per horse per day for a minimum of 3 horses; this included the packer.

The nearest habitation to the property is a small farm about 10 miles up the river occupied by a retired forest ranger. The Forest Service maintains a short wave radio there, and the ranger communicates on a regular schedule with the Missoula office.

North Fork has a post office, general store, gas station, restaurant, and motel. Salmon is 22 miles south on Highway 93; most general supplies are available there. Missoula, with a population of about 30,000 is the main trading center; it is on east-west highways and railroads.

About the only industries in the region are small sawmills which cut the timber from the mountain areas, and the ranches and farms which are confined mostly to the valleys. Labor is available in a number of small communities along Highway 93 and in Salmon. Some experienced miners can be found around Salmon, but the nearest mining center is Butte, Montana. The prevailing wage rates in 1957 were $1.75 an hour for

unskilled labor and $2.00-$2.10 an hour for semi-skilled.

The climate is typical of that of western Montana. Summers are warm and dry, while winters are cold with snow accumulating to depths of six feet in the mountains. Snow is on the ground from November to April or May, depending on the altitude.

The nearest railroad is Darby, Montana, located on Highway 93. A Forest Service road leaving the highway at Connor, five miles from Darby, and running to Elk City, Idaho, passes about 19 miles north of the fluorspar property. A connecting road on a moderate grade would be about 25 miles in length; the haulage distance to Darby would be about 70 miles.

GEOLOGY AND DESCRIPTION OF THE DEPOSITS

The deposits are near the eastern rim of the Idaho batholith, a granite mass which covers much of the center of Idaho. The batholith is chiefly a quartz monzonite with marginal bodies of quartz diorite, granodiorite, biotite-diorite gneiss and rocks of similar composition. It is late Triassic or Tertiary in age. The marginal bodies and adjacent formations are intruded by many dikes of varying texture ranging in composition from granites to lamprophyres.

Mineralogic and geologic information in this report is based on examination with the hand lens and mapping with Brunton compass and tape. The distribution of the rocks in the immediate area of the deposits and their relationship to the main vein are shown on Geologic Maps nos. 2 and 3. The country rock is a medium to coarse-grained diorite-biotite gneiss which is fairly well foliated; it is made up of feldspar, quartz, and biotite mica. Some of the biotite has been chloritized and the feldspar kaolinized. Adjacent to dikes and mineralized veins about a mile to the northwest, the gneiss is cut by the central monzonite of the Idaho batholith. Neither gneiss nor monzonite has weathered very deeply. The rocks of the steeper slopes show practically no weathering at all, while the less steep slopes show weathering from 1 to 4 feet deep.

Intruding the biotite-diorite gneiss are a large number of dikes of granitic to andesitic composition ranging from medium to coarse in texture; there are some porphyries also. A few narrow lamprophyric dikes were noted in the gneiss; one

was porphyritic with scattered feldspar phenocrysts. The dikes have general north-south directions.

Aligned with the dikes in a north-south direction are several steeply dipping quartz veins. Most of these veins contain fluorite and possibly varying amounts of pyrite, although weathering has removed surface evidence of this mineral. The fluorite is considered to be later than the quartz because in many vugs the cubic fluorite crystals invariably were superimposed on the quartz crystals. The larger deposits of fluorite are massive and occur as cavity fillings in the quartz veins; however, one small vein of fluorite not associated with quartz was found in the monzonite. The fluorite varies from purple to light green and blue-green in color. The pyrite occurs in veinlets cutting the quartz; at the surface it was evident only as rust in the quartz and the fluorite. Some kaolinized feldspar which probably originated from the country rock also was noted in the vein quartz.

The geologic mapping did not reveal any major pattern of faulting. The quartz veins occupy fissures which are the larger faults of the area, but they have small displacements. The fissure veins are cut by a few small cross-faults.

Fluorite is the only economic mineral found in the area explored. The largest deposit is that designated Vein A on Geologic Map no. 3. This vein occurs along or near the hanging wall of a large quartz ledge; it includes three lenses approximately 400, 260, and 160 feet in length and up to 17 feet wide as exposed in trenching. Other veins of fluorite

were discovered north of Vein A, but none was greater than a foot in width. The one vein found in the monzonite unassociated with quartz was very pure but it was only one foot in width; it is exposed at Corey Bar on the south bank of the river. The vein was hard to trace by trenching because of the deep weathering of the monzonite in that area. Several indications of fluorite float were discovered on the south side of the river, but dense vegetation and lack of time made it impossible to explore them satisfactorily. Mr. Smothers and other people who are familiar with this area claim to have seen several fluorite outcrops on both sides of the river. Smothers showed Engel one occurence on the northwest side of the draw formed by Cub Creek, almost directly across the river from Corey Bar and up the side of the canyon about 400-500 feet. He had done enough trenching there to expose a vein of purple fluorspar 2 feet wide. The vein is covered by overburden both to the north and south. Smothers took Engel to a fluorspar outcrop on the south side of the river nearly opposite Smith Gulch and about 800-1000 feet above the river. Only 2 to 3 feet of the fluorspar vein is exposed and the full width is not apparent because of the overburden. The fluorspar occurs in a north-south striking quartz ledge estimated to be 150-200 feet wide, largely covered by overburden.

EXPLORATION BY IDATON, INC.

THE PROGRAM

The program set up for the summer of 1957 included a control survey, staking of claims, geologic mapping, trenching and outcrop sampling, diamond drilling, and a reconnaisance survey for an access road. This work was scheduled to be completed in three months.

The Squaw Creek Mining Co. had applied for and received from the Defense Minerals Exploration Administration a contract for a field project. This contract, Docket No. DMEA-4366 (Fluorspar), Smothers Property, Idaho County, Idaho, Contract No. Idm-E1078, dated April 12, 1957, was subsequently assigned to IDATON, INC.. The contract specified 1,000 feet of diamond drilling in three holes; Geologic mapping and sampling of mineralized outcrops; assaying of samples; transportation of man, drilling equipment, and samples; and technical services. This work was set up in six items of fixed unit costs, totalling $10,000. The Government would contribute 50% of the costs of satisfactorily completed items computed on the basis of the unit costs, but not exceeding a total of $5,000. The drill holes were specified by the government as to location, inclination, and direction; drilling was to be done so as to produce standard AX cores. The drilling in any hole was not to exceed 350 feet. The contract specified that the government would not contribute to the cost of an incompleted hole or the cost of any hole that did not produce 80% core in the mineralized zone.

Preparations for the field work were started by Mr. Ecklesdafer in March. He and Richard Dick went out to Montana early in April. Bids were advertised for the diamond drilling, but few bidders were interested in undertaking only 1,000 feet of drilling in such an isolated location. A contract was finally negotiated with the R. V. Campbell Drilling Co. of Salmon, Idaho, for a minimum of 2,000 feet of diamond drilling at $7.50 per foot. The contract was signed May 1, 1957, with the first 1,000 feet to be completed by June 15 and the remainder by August 1, 1957.

A contract was made with Don Smith to rent his hunting camp for five months at a cost of $100 plus $60 for installing a wooden floor. Camp equipment, tools, and food, were purchased by Ecklesdafer and rented to IDATON, INC. Other engineering equipment and supplies were purchased.

A camp cook could not be found nor could a boarding contract be arranged. There was no other choice but for the workers to do their own cooking.

Jerry Knaebel, Richard Mosher, and Tim Volin arrived from Michigan about the middle of June to help in the field work. Elmer Warren arrived soon thereafter to start the geologic mapping and drill core logging.

CONTROL SURVEY and CLAIM STAKING

A traverse was run with transit and 300-foot tape on the north side of the river to establish control points for locating the claims and for the geologic mapping. The survey was started on April 15 by Ecklesdafer and Dick and completed by

the end of May. Differences in elevation were computed by measuring the vertical angles between stations. The traverse is plotted on Map no. 1. The coordinates shown on all maps are referred to the control survey.

A base line was measured on the north side of the river, and a number of control points on the south side were located by triangulation; these are shown on the claim map.

The work of relocating the old claims and locating new ones was started by Jerry Knaeble and Richard Dick on July 28 and finished on August 15. Two blocks of claims 1500 feet long by 600 feet wide were located to take in the main vein, minor veins, areas of fluorite float, possible mill sites, power sites, and lands considered to have future value to a production enterprise. One block of thirteen claims closely follows the river on the northeast side and the other block of 17 claims lies on the southwest side. The claims are shown on Map No. 1.

Claim corners were established by Brunton compass and tape survey from the control points. Corners were marked with wooden stakes and witnessed by blazing three or four nearby trees. Meander corners were set on the claim lines intersecting the river; the shoreline claims extend into the river short distances to cover all the ground above water line. The claims were filed under their proper descriptions at the County Court House, Grangeville, Idaho.

GEOLOGIC MAPPING

Elmer Warren, a graduate geological engineer, started examination of the area about June 15 and was occupied with the

mapping and the logging of drill cores until he left the property on September 10; he was assisted by Mosher and Volin. The mapping was done with Brunton compass and tape measurements from the control survey points. Rocks and minerals were identified by hand lens. The geology of the area is shown on Maps Nos. 2 and 3.

TRENCHING and SURFACE SAMPLING

Trenching to expose the fluorite veins for sampling was carried on concurrently with other operations. The main vein was trenched first; 47 trenches were dug to expose it but not all of them reached the vein, as it proved impracticable to trench deeper than three feet in the rocky overburden. The trenches were spaced 40 to 60 feet apart, but the locations were dictated by depth of overburden and other factors that precluded a regular pattern. They varied from 2 to 18 feet in length and averaged about 8 feet. Some blasting had to be done to expose good faces for sampling. The trenches are shown on Geologic Map No. 2 and on Sample Maps Nos 4 and 5.

A number of other trenches were dug to investigate the smaller veins and areas in which pieces of float were found. Some of these were located at the northwest end of the property and others on the south side of the river. An accurate account was not kept of these trenches, nor were the excavations measured. They are not shown on the maps.

Channel sampling of the main vein was done with hammer and moil by Warren, Dick, Ecklesdafer, and Mosher. This

work was started June 20 and finished by the end of July. Continuous channels were cut across the vein normal to the dip and strike; the average cross section was one inch deep by four inches wide.

The channels extended from one wall of the fluorite mineralization to the other and the lengths were representative of the changes of mineralization across the vein. The longest sample was 4.2 feet, but most of the samples were less than 3 feet long. Each sample was put in one or more canvass bags identified by a pair of tags, one inside the bag and the other fastened outside. The tags gave the following information: channel number, sample number, length of sample, weight of sample, sampler's name and date taken. Samples were shipped to the Institute of Mineral Research at the Michigan College of Mining and Technology for assaying; 785 pounds of samples were shipped, representing 229 feet of channeling. The samples, their lengths, and assays are listed in Table 1; the locations are shown on Maps Nos. 4 and 5.

DIAMOND DRILLING

The diamond drilling was a very important part of the exploratory program, but this work was not completed in the summer of 1957 and had to be taken up again in 1958. A number of reasons contributed to failure. The drilling contractor, R. V. Campbell, of Salmon, Idaho, did not enter into the contract in good faith; he did not furnish an experienced crew, his equipment was worn out, and there were insufficient drill

rods, bits, and repair parts. Poor workmanship and poor equipment resulted in frequent breakdowns which, because of the isolated location, meant expensive boat trips out and the loss of many working days. John D. Ecklesdafer's inexperience and lack of judgment also were factors in the failure of 1957 drilling program.

Drilling started April 10 at Hole No. 1 (latitude 1337, departure 1336, elavation 77 feet, bearing north 53 east, inclination minus 23°). After only 52 feet had been drilled, the water pump broke down; many days were lost while a new pump was being procured. Other delays followed, including a complete breakdown of the pump engine. The contractor did not have enough A rods and had to use E rods, resulting in excessive whipping and chattering. Finally, on May 28, with the hole at a depth of 300 feet, the contractor ran out of rods altogether. Inasmuch as high water was due on the Salmon River, the job was closed down temporarily.

The contractor resumed drilling on June 18, but Ecklesdafer ordered Hole No. 1 to be stopped at 306 feet because he considered that it was too steep and probably was following the quartz vein. The hole penetrated biotite gneiss to 140 feet, then was in quartz to the depth at which drilling stopped.

The drill then was moved to Hole No. 2 (latitude 1427, departure 1427, elevation 75, bearing north 41 east) and drilling was started on June 22. Ecklesdafer changed the inclination to plus 1 - 30, an error which later brought trouble because the hole could not be cemented without grouting equipment which

the contractor did not have. After drilling 4 days, the pump broke down and had to be repaired. Then the carburetor on the gasoline engine of the drill broke. This necessitated a trip to Missoula for repair. Drilling then progressed to 254 feet where the core barrel sheared off in the hole. The contractor attempted to recover it but did not have adequate fishing tools, nor did he have wedges with which to deflect the hole.

Instead of going back to Hole No. 1, Ecklesdafer decided to drill Hole No. 3 (latitude 1428, departure 1295, elevation 149, bearing north 65 east, inclination minus $14\frac{1}{2}^{o}$); It was started on August 1. This hole did not follow the DMEA specifications but was started in the quartz vein to intersect the fluorite mineralization at about 125 feet down dip on the vein. After drilling 31 feet, a rod bearing on the drill engine burned out. It took 10 days to take the engine block to Missoula, have a new bearing installed, and get it back to the property.

Fluorite mineralization was cut from 106 to 119 feet, but only 3.8 feet of core was recovered from this interval. The core was badly broken, the largest piece being about 3 inches long. The core showed extensive grinding as might be expected with lack of care in the mineralized zone and the use of a 10-foot single tube core barrel. Veinlets of massive fluorite, white, purple, grey, and pale green, were noted in the core along with

vuggy quartz, kaolin, and gypsum. Sludge samples were not taken. The information from this hole does not permit an accurate evaluation of the grade. A log of Hole No. 3 is given in the Appendix, and a vertical section through the hole is shown in Figure 3.

At that time, the contractor was in default for a number of reasons. He admitted default and signed an auxiliary contract giving control of the drilling operations to Ecklesdafer. After cutting a site and a path, the drill was moved to Hole No. 4 (latitude 1319, departure 1244, elevation 138, bearing north 48 east, dipping minus 20°). This hole was not located according to DMEA specifications. It started in the quartz vein to cut the fluorite mineralization at about 100 feet down dip. Two-shift drilling was started on August 24. At 94 feet the hole caved and froze the core barrel. In trying to loosen the core barrel, the driller disconnected the rods and the hole had to be abandoned. Hole No. 4A was started at the same site and latitude. This hole intersected fluorspar mineralization from 116 to 122 feet, but only 2.7 feet of highly broken and extensively ground core was recovered. Sludge samples were not taken. Here again the information cannot be evaluated. The hole was stopped at a depth of 129 feet in quartzite on September 15. A log of Hole No. 4A is given in the Appendix, and a vertical section through the hole is shown in Figure 4.

The drill then was moved back to Hole No. 2. Additional rods, bits, core barrels, and some wedges were purchased, but it was not possible to cement a wedge into place in this hole because of the inclination upwards, and after many days of unsuccessful attempts to deflect the hole, it had to be abandoned. Ecklesdafer then ordered that another hole, No. 2A, be started at the same site but inclined at minus 10°. Drilling started about October 1, but at a depth of 80 feet the screw mechanism broke. This was repaired and almost immediately thereafter a rod bearing burned out. Drilling and other operations were suspended on October 14.

Diamond drilling was started up again in 1958. Ted Engel, a geologist of the Cleveland Cliffs Iron Co. was employed on a temporary basis to direct the work. He arrived at Salmon, Idaho, on May 8 and met Don Alvord, DMEA geologist. A contract on force account basis was made with R. S. McClintock Drilling Company of Spokane, Washington. A Joy 12D drill fitted with AX equipment was transported to the property. The drill crew arrived on May 8 and began setting up at Hole No. 2. On reentering this hole the tools encountered the end of the wedge or other obstruction at 236 feet. Attempts to get around this wedge were unsuccessful. The amount of water returned after the pressure was shut off indicated that the hole inclined upwards throughout. Because of the time and expense involved in wedging, no further attempt was made to continue this hole. Hole No. 2A then was reentered and cleaned out to 80 feet. Drilling started at that depth in biotite

gneiss. The main quartz vein was expected to be encountered at about 300 feet, but it was not intersected until 340 feet because the vein was flatter than anticipated. Low grade fluorspar mineralization was cut in a highly altered, broken and leached zone at the hanging wall of the quartz vein. A 5-foot swivel type core barrel was used in this zone. The drilling was done slowly and with extreme care. Core recovery was as high as could be achieved in this type of fractured and crumbly rock. Core recovery in the interval from 405 to 431 feet was 81%. The fluorite in this interval assayed 15.0%. The hole entered the biotite gneiss hanging wall at 432 feet and was stopped in altered gneiss at 444.5 feet. A log of Hole No. 2A appears in the Appendix, and a vertical section through the hole is shown in Figure 2.

During the period Hole No. 2A was in progress, a trail was built to Hole No. 5, planned according to specifications for DMEA Hole No. 3. Approximately 1,000 feet of trail 4 feet wide was cut to permit transport of the drill to this site.

On May 25, the drill was moved to Drill Hole No. 1 and drilling was resumed at AX size at 306 feet. In anticipation of the mineralized zone at any time, a 5-foot swivel type core barrel was used to assure maximum core recovery. A few fluorite stringers were cut from 338 to 340.5 feet. Core recovery in this interval was 80%, and the core assayed 19.9% fluorite. The core from 340.5 to 345.0 feet assay-

ed only a trace fluorite. The hole entered the biotite gneiss hanging wall and was stopped at 350 feet. A log of Hole No. 1 appears in the Appendix, and a vertical section through this hole is shown in Figure 1.

Drilling operations were suspended on June 1 because of the disappointing results in Holes Nos. 1 and 2A. The narrow width of fluorite mineralization in Hole No. 1 indicates a pinching out with depth of the southern portion of Vein A, and the grade is low. The mineralization in Hole No. 2A is too low grade to be classed as ore. Hole No. 5 was not drilled because even if it should find fluorite of about the same width and grade as occurs at the surface, the tonnage probably would not be great enough to support an enterprise. It is considered likely that the mineralization would be impoverished in depth or narrow in width in this part of the vein the same as in holes Nos. 1 and 2A.

OTHER WORK IN 1957.

In the latter part of August a reconnaisance trip was made with pack outfit to locate an access route from the Connors-Elk City Road to the deposits. First a plane was hired to fly over the area and pick out a general route. Then Ecklesdafer and Dick spent ten days on a pack trip through the area between the Forest Service base camp at Salmon Mountain and the deposit. Two possible routes were selected, each about 25 miles in length.

Two possible mill sites were selected and topographic maps made of each.

Considerable work was done in preparing the camp, maintaining it, and bringing in supplies. During the course of the 1957 field work, 56 trips were made, 44 by motor boat and 12 by foot.

Flotation and sink-float tests were run at the Institute of Mineral Research of the Michigan College of Mining and Technology.

ORE RESERVES

The assays and the length of the surface samples are entered in Table 1; the table also shows the total width of ore in each trench sampled amd the average percent fluorite for that width. The widths and computed average grades are based on a cut-off assay of 25%; this lower limit for ore was arrived at from the mineral dressing tests.

The assay data from the drill cores are presented in Table 2. The intervals assayed from Holes 1 and 2A were determined by visual inspection of the cores; small amounts of fluorite were noted in other intervals but not in amounts comparable to that in the intervals assayed. Obviously, the mineralization is not of ore grade and an impoverishment of fluorite in depth is apparent. The marked change in degree of mineralization in the drill cores as compared to that in the surface samples cannot be explained on the basis of the geologic and other information reported from the field.

The assay data for holes 3 and 4A was obtained by measuring and analyzing all of the pieces of core representing the intervals shown in Table 2. The cores were highly fractured and showed extensive grinding. Sludge samples were not taken. Core rocoveries are too low to support an estimate of ore reserves. Ecklesdafer considered that the fluorite had been ground preferentially to the quartz, but the experience in drilling Holes 1 and 2A, strongly indi-

cates that kaolin and sugary quartz were washed away, enriching the fluorite. On the basis of percent core recovery, the average fluorite content is 20.4% for Hole No. 3, and 21.6% for Hole No. 4A; these grades are in a range similar to those more accurately determined for Holes 1 and 2A. This seems to be the only acceptable evaluation of the incomplete information. On this basis, Holes 3 and 4A did not find ore.

Any ore reserves must be based on the surface sampling only and placed in the classification of indicated reserves. The data for and computations of average grade and tonnages per foot of depth are shown in Tables 3, 4, and 5, for the three shoots defined by surface sampling. Assuming that the shoots are continuous down the dip of the veins for 50 feet and that they maintain the average width and grade as evidenced at the surface, the indicated reserves are:

SHOOT	TONS*	GRADE, Ca F_2%
1	15,000	68.7
2	8,500	74.8
3	4,500	73.2

Total Tons - - - 28,000

* To nearest 500 tons

APPENDIX

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

So. 157 Howard Street
Spokane 4, Washington

August 26, 1958

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DATE	INITIALS	CODE
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9/4	Hook	600

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

Enclosed are two copies of a memorandum from Charles J. Stehlik, Mining Engineer, U. S. Bureau of Mines, describing the problem with which he was faced in logging those portions of drill core from this property that had been sent to Houghton, Michigan.

Stehlik found it difficult to determine from the core fragments just which portion was mineralized. On the basis of the portions the Operator had analyzed he reports 92.8 percent recovery from Hole 1 and 75.2 percent recovery from hole 2A. In the case of Hole 2A the statement of chemical analysis accompanying Stehlik's report shows the assayed portion to be from 405.0 to 431.0 feet rather than to 432.0 feet as Stehlik shows. For the 26-foot interval from 405.0 to 431.0 feet the recovery was 19.3 feet or 74.2 percent. However, the amount of core recovered from the 5-foot interval 418.5 to 423.5 feet is admittedly questionable. If that segment is omitted, the recovery from the remaining 21 feet in the assayed zone would be 17.8 feet or 84.8 percent.

The Field Team therefore recommends that if the Operator presents a satisfactory map and report, Mr. Volin's figure of 79 percent core recovery from Hole 2A be accepted as meeting the requirements of the contract.

We have written Mr. Volin to advise him of the inadequacies of the geologic map submitted by Ecklesdafer last fall. Two copies of our letter to Volin are enclosed.

By Field Team, Region I

D. R. MacLaren, Acting Member
U. S. Geological Survey

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

cc: USBM (2)
USBM (AD)

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RECEIVED SEP 2 1958

DATE	INITIALS	CODE

No. 157 Howard Street
Spokane 4, Washington
August 22, 1958

Mr. M. E. Volin
Idaton, Inc.
322 Sheldon Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Volin:

This is in further reference to our letter of July 29, 1958, in which we advised you that Washington has asked us for certain information, including "the Operator's reports and maps."

We sent the DMEA copies of the geologic map we received from Ecklesdafer last fall. They have advised us that the map is not in itself acceptable as it does not show the altitude of all survey points and, while it shows sample locations, it does not show the assays and widths of the sample. In this connection we call your attention to the paragraph at the bottom of the first page and top of the second page of Exhibit A of the contract.

We have received Mr. Charles J. Stahlik's report on those portions of drill core that are in Houghton and thank you for your cooperation with him. Will you please save this core a while longer.

Sincerely yours,

Donald R. MacLaren
Alternate Acting Exec. Officer
DMEA Field Team, Region I

cc: DMEA(2)
JTEA(2)
A.
Prim

RECEIVED
BUREAU OF MINES
AUG 18 1958
SPOKANE, WASH.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REGION V
c/o Michigan College of Mining and Technology
Institute of Mineral Research, Houghton, Michigan

D 2

August 13, 1958

To: Wing G. Agnew, Member, DMEA Field Team, Region I

From: Charles J. Stehlik, Mining Engineer, U. S. Bureau of Mines, Houghton, Michigan

Subject: Drill core recovery, DMEA Contract Idm-M1078, Docket 4366 (fluospar), Idaton Inc., Smothers Property, Idaho County, Idaho

Mr. M. E. Volin has given me access to the subject Contract drill core which you have requested measurement of. The measurements were made (Data attached) and are presented here for what value they may be.

Conditions beond my control have made precise measurement difficult. Foremost is the fact that the original unsplit core is not available. The core I examined had been split, and had been transferred from the original wood core boxes to card-board core boxes. It is virtually impossible to fit the core end to end properly because few pieces are longer than an inch; most are smaller. Some of the core which is largely kaolin has been reduced to fines and the footage blocks have been moved to contain the powdered half core as a total filling of the section. In the 418.5 to 423.5 section of hole 2A this has happened, and I had to rely on weight-specific gravity calculation to ascertain it's probable original length.

As to the question of recovery within the "Mineralized zone" I have made no attempt to show it. I'm not a poor mineralogist, nor a hot one either, but I believe this core will tax the best as to the question of whether it is mineralized or not. I have instead shown the apparent core recovery per pull, the average apparent recovery of the total length represented by the boxes of core available, and the average apparent recovery of the core assayed. (The Operators intent was to assay all the core that is here. But it was later decided to limit assays to that shown. This explains the fact that all core is split.)

Mr. Volin advised me that the core in question will remain in his custody and that it will be available to the DMEA for examination at any reasonable time.

Charles J. Stehlik

cc RA. Lawrence, Knox
2 copies to Spokane 8/19/58

Hole No. 1

DMEA Contract Idm-E1078, Docket 4366 (fluorspar), Idaton Inc., Smothers Property, Idaho County, Idaho

From	To	feet Drilled	feet Recovered	Percent Recovery	
305	310	5.0	4.6	92.0	
310	315	5.0	5.0	100.0	
315	318	3.0	2.5	83.3	
318	320	2.0	0.9	45.0	
320	323.5	3.5	1.9	54.3	
323.5	-324.5	1.0	1.0	100.0	
324.5	-327	2.5	1.9	76.0	
327	329.5	2.5	1.9	76.0	
329.5	-330.5	1.0	1.0	100.0	
330.5	-333	2.5	1.9	76.0	
333	334	1.0	0.9	90.0	
334	338	4.0	2.5	62.5	
338	340.5	2.5	2.0	80.0	ore zone -
340.5	-345	4.5	4.5	100.0	
305	345	40.0	32.5	81.2	(Total sample)
338	345	7.0	6.5	92.8	(Assayed portion)

The above recovery was measured on the split core stored at Houghton, Michigan on 8/12/58.

Charles J. Stehlik
Mining Engineer
U. S. Bureau of Mines

Hole No. 22

BMB Contract Ida-21078, Docket 4366 (fluorspar), Idaten Inc., Smothers Property, Idaho County, Idaho

From	To	feet Drilled	feet Recovered	Percent Recovery
338	339	1.0	1.0	100.0
339	349	10.0	3.0	39.0
349	359	10.0	4.9	49.0
359	364	5.0	3.9	78.0
364	374	10.0	8.0	80.0
374	378	4.0	4.0	100.0
378	382	4.0	3.0	75.0
382	386	4.0	3.3	82.5
386	389	3.0	2.0	66.7
389	397	8.0	5.9	73.8
397	405	8.0	5.6	70.0
405	407.4	2.4	2.0	83.3
407.4	-412.4	5.0	4.0	80.0
412.4	-415	2.6	2.0	76.9
415	418.5	3.5	3.5	100.0
418.5	-423.5	5.0	1.5*	30.0
423.5	-427	3.5	3.4	97.1
427	430	3.0	2.0	66.7
430	431	1.0	0.9	90.0
431	432	1.0	1.0	100.0
432	437	5.0	2.0	40.0
437	444.5	7.5	6.0	80.0
338	444.5	106.5	73.8	69.3 (Total sample)
405	432	27.0	20.3	75.2 (Assayed portion)

* Calculated by weight-specific gravity method of fines

The above recovery was measured on the split core stored at Houghton, Michigan on 8/12/58.

Charles J. Stehlik
Mining Engineer
U. S. Bureau of Mines

July 30, 1958

STATEMENT OF CHEMICAL ANALYSIS
TO IDATON, INC.

	Ppm.
Samples from Drill Hole #1 Box 3 338' - 340.5'	19.9
Sample from Drill Hole # 1 Box 4 140.5 - 145'	Trace

The above samples were analyzed in Triplicate by the Bureau of Standards Method.

Donald E. Rose

June 10, 1958

STATEMENT OF CHEMICAL ANALYSES
TO IDAHON, INC.

Samples from Drill Hole 2A:

	CaF_2 %	SiO_2 %	$CaCO_3$ %
405.0'-407.0'	18.0	64.3	8.60
407.0'-412.0'	12.0	75.0	4.81
412.0'-415.0'	13.75	69.7	8.01
415.0'-416.5'	13.2	72.75	8.76
416.5'-420.5'	15.7	62.1	15.85
420.5'-427.0'	16.1	60.5	7.58
427.0'-431.0'	16.8	72.0	3.76

The above samples were analysed in duplicate by the Bureau of Standards method. A standard was run concurrently as a check.

J. L. Moss, Research Chemist

Thomas H. Lentz, Research Engineer

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/12	Houk	600
8/12	[illegible]	130
"	Johnson	110
"	[illegible]	100
8/13	[illegible]	220
		600

600

AUG 12 1958

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn:

Reference is made to your letter of July 29, 1958, on justification for amendment of the subject contract.

The copy of the geologic map sent with your letter of October 1, 1957, is not in itself acceptable. The map does not show the altitude of all survey points, and while it shows sample location it does not show the assays and width of the sample.

We hope it will be possible to make a field examination to verify the work that has been done. We will await with interest both the Field Team's and the Operator's reports.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

P. F. Yopes

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

LGHouk:gad 8/12/58
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

1201 N. Division St.
Spokane 2, Washington

August 4, 1958

8/7 8/7 H.G. 225 800 600

Mr. Charles J. Stehlik
U. S. Bureau of Mines
Mineral Research Building
Michigan College of Mining and Technology
Houghton, Michigan

Re: Docket No. DMEA-4366 (fluorspar)
Idaton, Inc.
Smathers Property
Idaho County, Idaho
Contract No. Ida-K1078

Dear Mr. Stehlik:

At our request, Robert A. Laurence, DMEA Executive Officer, Region V, has requested Mr. Lynch to ask you to assist us with the measurements of some core from a DMEA contract in Idaho. This core is now stored at Houghton, Michigan, and is in the custody of M. K. Volin, whom you undoubtedly know. Mr. Volin probably has the complete logs of all of the holes.

The problem we have is to check the requirements of the contract which specifies that there must be 80 percent core recovery in the "mineralized zone." We would appreciate it greatly if you would log the cores that are at Houghton, indicate which part of them might be called "mineralized zone," and estimate the core recovery that has been obtained.

If there is any more information you need, please write or telephone me.

Your help in logging the part of the core that is at Houghton is very much appreciated.

Sincerely,

Wing G. Agnew, Member
DMEA Field Team, Region I

cc: DMEA (2)
USGS (2)
USBM (AD)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

August 1, 1958

RECEIVED AUG 14 1958

DATE	INITIALS	CODE
8/14	H.G.	225
14	[illegible]	100
15	FEJ	110
8/18	[illegible]	800
8/19	[illegible]	600

MEMORANDUM

To: DMEA Field Team, Region I

From: William C. Prinz, Geologist, U. S. Geological Survey

Subject: Interim inspection report, Docket No. DMEA-4366 (Fluorspar), Idaton, Inc., Smothers property, Idaho County, Idaho, Contract No. Idm-E1078.

The Smothers fluorspar property was examined on July 25, 1958, accompanied by Austin P. Smothers, property owner. No work was being done at the property at that time, all drilling equipment had been removed, and no Idaton representatives were present. Five drill sites, three DMEA and two non-DMEA, and numerous surface trenches and exposures were examined.

Hole No. 1 at coordinates 1337N, 1337W, was drilled N. 53° E. at an angle of -23°. A short distance southeast of the hole, some AX drill core is laid out on an old boat transom along which parallel saplings have been attached to keep the core separated. The core is uncovered and appears to have been there for some time, probably since last summer. This core consists of: 9.3 feet of AX gneiss core with legible markers bearing the figures "70", "80", and "120"; 5.8 feet of AX quartz core with no legible markers; and 10.8 feet of AX gneiss core with legible markers bearing the figures "180" and "250". About 15 feet northwest of the hole, 4.8 feet of mixed gneiss, quartz, and fluorite core, AX size, is laid out in an unmarked wooden core box.

Contrary to requirements wooden boxes.

Two holes were drilled at site No. 2 at coordinates 1427N, 1427W; one hole bears N. 43° E., plus 1°, the other, N. 53° E., -10°. The latter hole is making water, and according to the operator (see Volin's letter dated June 25, 1958), it was, in part, drilled this spring. About 25 feet southeast of the drill site, some core is stored in cardboard and wooden core boxes. That in the cardboard boxes is poorly marked and appears to be mixed up. Individual boxes contained core as follows: (Intercepts are taken from numbers on the ends of the boxes, some of which are illegible. All core is gneiss and AX size except as noted.)

From (ft.)	To (ft.)	Core (ft.)	Remarks
10	20	9.5	
20	30	8.7	
30	40	6.4	1.4' is BX core
40	50	9.8	
?	60	9.1	
?	?	9.0	
?	?	8.1	
?	?	9.2	
	Total core	69.8	

The core in the wooden boxes is better arranged; the intercepts are marked on wooden spacers and each box is labeled as having come from Hole No. 2A, which is probably the one inclined at -10°. This core is as follows: (All is gneiss and AX size except as noted.)

From (ft.)	To (ft.)	Core (ft.)	Remarks
80	90	8.2	
90	94	3.6	
94	103	8.8	
103	105	1.8	
105	117	11.3	
117	123	4.3	
123	127	3.4	
127	130	2.6	
130	136	4.3	
136	146	10.2	
146	156	9.5	0.15' quartz at 156'
156	166	8.0	0.10' quartz at 161'
166	176	10.0	
176	179	2.4	
179	186	6.2	
186	196	10.2	
196	204	6.7	
204	206	1.0	
206	216	7.4	
216	226	13.0	

226	228	1.6
228	236	8.4
236	246	9.7
246	250	4.5
?	259	8.1
259	269	9.8
269	275	5.6
275	279	3.8
279	289	11.0
289	299	6.1
299	309	3.0
309	319	10.4
319	329	10.1
329	338	6.2
	Total core	231.2

Recovery from the 80-foot to 338-foot interval in this hole was 89.6 percent. The gneiss consists mainly of medium-grained quartz and gray feldspar with as much as 15 percent biotite. Locally it is bleached white and in other places may grade into a pale green amphibolite.

Contract mapping is 350'

From evidence at the property, it is apparent that diamond drill hole No. 2A was drilled to a depth of at least 338 feet; according to Volin's letter of June 25, 1958, this hole was actually drilled to 445 feet. Evidence around the site of Hole No. 1 is inclusive. About 30.7 feet of core was found here but it was poorly marked. According to Volin, this hole was drilled to a depth of 350 feet. A drill station has been cut at the site of proposed DMEA DDH No. 3, but no hole has been started.

Three non-DMEA holes were drilled east of the DMEA holes. Hole No. 3 (not at the site of proposed DMEA hole No. 3) was reported on by D. C. Alvord in his interim inspection report dated October 22, 1958, and I can add nothing to his information as the only core at the site of this hole are a few pieces lying loose on the ground. Two holes were drilled at a site about 120 feet south-southeast of this hole at about coordinates 1315N, 1270E. Both were drilled northeasterly, one horizontal, the other inclined -25°. Core representing 5- to 13-foot intervals is in cloth sacks lying near the drill site. Some of the sacks are intact; others are broken and the core is lying loose on the ground. Some sacks are labeled; on others, the labels are missing. The following partial logs could be worked out: (It is not known which hole is horizontal and which is inclined.)

From (ft.)	To (ft.)	Lithology
Core labeled Hole No. 4		
0	8.5	Quartz and gneiss.
8.5	16	Gneiss.
16	22	Quartz and gneiss.
22	32	do.
32	41	do.
61	72	Gneiss.
81	94	Quartz.
Core labeled Hole No. 5		
20	31	Quartz.
31	40	do.
40	52	Quartz, gneiss, some fluorite.
52	61	do.
61	71	Gneiss with some quartz and fluorite.
71	76	Quartz.

A recommendation regarding certification of this project cannot be made at this time because all of the critical core has been removed from the property. Arrangements are being made to have the missing core logged by Bureau of Mines personnel in Houghton, Michigan, and the results sent to us here in Spokane. After these logs have been received, we will be in a better position to evaluate the work completed and the merits of the property.

Distribution:
DMEA (4)
USBM (2)
USBM(AD)
Docket
Prinz

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

July 29, 1958

8/5 H. g. 225-600

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 - Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

This is in reference to your letter of July 15, 1958, in which you request certain information on the Smothers project in order to process the amendment requested in our letter of July 3.

Our field men left for the Salmon, Idaho area July 24 and will try to get to the property on this trip.

As all of the mineralized section of core has been taken to Houghton, Michigan, the Executive Officer has written to the Executive Officer of Region V requesting him, if possible, to arrange for one of his field men to log this core with particular attention to the percent of core recovery. It is our understanding that a Bureau of Mines engineer assigned to DMEA work is stationed at Houghton. As soon as we receive the logs we will forward them to you.

Late in September of last year we received three copies of the geologic map and sent you one copy with our letter of October 1, 1957. We sent one copy to the Bureau of Mines and kept the third copy for our files. If you wish we can have an autopositive made and send you additional copies.

That hole No. 3, which was to be collared about 700 to 800 feet west of hole No. 2, may not be drilled is implied in M. E. Volin's letter dated June 25, 1958. In a phone conversation, Volin reported that the results of holes 1 and 2, which tested the best surface showings, were very discouraging. Volin has not yet reported the assay results from hole No. 1, but hole No. 2-A assayed only 15 percent CaF_2 over a width of 22 feet. Until we receive assays from hole 1 we cannot recommend either for or against certification.

In his letter of June 25, 1958, Mr. Volin states, "I shall submit a report and statement for reimbursement as soon as I can do so." The next to the last paragraph of his letter of April 17 explains in large part his delay. However, we shall write him again requesting his report.

By Field Team Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: USBM (2)
USBM(AD)
Prinz

So. 157 Howard Street
Spokane 4, Washington

July 29, 1958

8/5
8/5
M. J.
225
800
600

Mr. M. E. Volin
Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1076

Dear Mr. Volin:

In your letter of June 25, 1958 you state that you will submit a report on the Smothers project as soon as you can do so. While we appreciate the difficulties which you may be having with the records of last summers work, we again urge you to send us a report.

Washington has asked us for certain information, including "the Operator's reports and maps" so that they can determine if the amendment requested in your letter of June 26 is justified.

We are attempting to make arrangements with the Executive Officer of Region V so that the core can be logged by an engineer assigned to that region.

By Field Team Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (2)
USBM (2)
USBM(AD)
Prinz

D4E4

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 25 1958

DATE	INITIAL	VOL.
7/25	C	220
7/25	[illegible]	800
7/25	[illegible]	600

So. 157 Howard Street
Spokane 4, Washington
July 22, 1958

Mr. Robert A. Lawrence
Executive Officer, Region V, DMEA
Room 13, Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Bob:

Perhaps you will recall our discussion in Washington regarding the logging of some diamond drill core from a fluorspar property in Idaho. When the contract work ceased in late June, we were unable to send one of our men there immediately because of the inaccessibility of the property and because we were tied up with application examination work before the deadline. The Operator, Idaton, Inc., shipped the core from the mineralized zone from Idaho to Houghton, Michigan, where he split the core and assayed half of it. The contract requires that 80 percent core recovery be obtained in the ore zone and it is precisely this part of the hole that the Operator shipped to Houghton.

Somehow or other, before we can make final settlement with the Operator, we will have to determine the percent core recovery in the ore zone and this involves either sending the core to Spokane or sending someone to Houghton to measure it. When we discussed this matter, you told me that there was a Bureau engineer stationed in Houghton assigned to DMEA and that you thought it might be possible for him to measure the core. You suggested that I ask Wing Agnew to write Lynch and request that this be done. Wing, however, feels that it would be more appropriate for me, as Executive Officer, to write to you as Executive Officer and request you to ask Lynch to have his man do this job for us. This seems a very practicable solution to the problem and I can assure you that we would appreciate it very much if you would help us out of this situation.

With very best regards,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

cc: DMEA(2) USBM(2)
USBM(AD)
Prinz

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 21 1958

DATE	INITIALS	CODE
7/21	C	220
7/21	[illegible]	600

July 16, 1958

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 4366 - Fluorspar
Idaton, Inc.
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

We have discovered that identical reports have been submitted to you describing an interim inspection of the Smothers property on June 5, 1958 (Prinz' dated June 9, Romischer's, June 5). These should, of course, have been submitted as a joint report but were mistakenly typed separately. We did not notice this until after they had been transmitted to you.

Sincerely yours,

Wing G. Agnew
Acting Executive Officer
Field Team Region I

USBM (2)
Prinz

Mr. Mittendorf:

Kiilsgaard and Lamb objected to original letter because it was not specific as to the inadequacy and inaccurate points of field reports, evidently, having in mind the Field Team Reports.

As written Kiilsgaard has withdrawn his objections but Lamb still believes we should spell out what is lacking and now also objects to our comment on duplicate reports.

Just what has been done at project and status is not clear.

FEJohnson

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/14	Houk	600
7/14	Martin	130
"	Johnson	110
15	[illegible]	100
7/15	C O	220
		600

~~7-14-58~~

600

JUL 15 1958

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1076

Dear Mr. Weissenborn:

Your letter of July 3, 1958, to the Operating Committee recommending an amendment to permit an additional 95 feet of drill hole in #2A beyond the 350 feet depth limitation cannot be acted upon until the reporting on the project is brought up to date.

Please arrange for a field examination of the property and verify the work done, if possible.

It will be necessary that the Field Team verify the 79% core recovery reported by Volin. The Operator's reporting on this project has been most inadequate and inaccurate. Separate memoranda of field trips reporting second hand information when only the paragraphing and author are changed, are unnecessary. (See memos. of June 5 and 9, by Prinz and Romisher).

Please supply us with the geological map so that we may determine if it meets our requirements. Why will hole #3 not be drilled? Can we certify at this stage?

Please have the Operator submit his reports and maps and when we have the information, we will determine if an amendment is justified. We will also appreciate receiving your report with comments and recommendations as to termination of the contract.

Sincerely yours,

Approved:

Noted: Frank D. Lamb
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

W. S. Martin
ACTING Chairman, Operating Committee

LGHouk:rsi 7/10/58
Rewritten
FEJohnson/LGHouk:rsi 7/11/58
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/11	Houk	600
		130
		110
		100
		220

600

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-M1078

Dear Mr. Weissenborn:

Your letter of July 3, 1958, to the Operating Committee recommending an amendment to permit an additional 95 feet of drill hole in #2A beyond the 350 feet depth limitation cannot be acted upon until the reporting on the project is brought up to date.

Please arrange for a field examination of the property and verify the work done, if possible.

It will be necessary that the Field Team verify the 79% core recovery reported by Volin. The field reporting on this project has been most inadequate and inaccurate. Separate memoranda of field trips reporting second hand information when only the paragraphing and author are changed, are unnecessary. (See memos. of June 5 and 9, by Prinz & Romisher).

operator

Please supply us with the geological map so that we may determine if it meets our requirements. Why will hole #3 not be drilled? Can we certify at this stage?

Please have the Operator submit his reports and maps and when we have the information, we will determine if an amendment is justified. We will also appreciate receiving your report with comments and recommendations as to termination of the contract.

Sincerely yours,

Approved:

"Noted" by Frank D. Lamb
Member, Bureau of Mines

"Noted" by Thor H. Kiilsgaard
Member, Geological Survey

Chairman, Operating Committee

LGHouk:rsi 7/10/58
Rewritten
FEJohnson/LGHouk:rsi 7/11/58
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/10	Houk	600
		130
7/14	Jones	110
		100
		220

600

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn:

Your letter of July 3, 1958, to the Operating Committee recommending an amendment to permit an additional 95 feet of drill hole in #2A beyond the 350 feet depth limitation cannot be acted upon until the reporting on the project is brought up to date.

Please arrange for a field examination of the property and verify the work done. [illegible]

It will be necessary that the Field Team verify the 79% core recovery reported by Volin. The field reporting on this project has been most inadequate and inaccurate. Separate memoranda of field trips reporting second hand information when only the paragraphing and author are changed, are unnecessary. (See memos. of June 5 and 9, by Frins & Romisher).

Please supply us with the geological map so that we may determine if it meets our requirements. Why will hole #3 not be drilled? Can we certify at this stage?

Please have the Operator submit his reports and maps and when we have the information, we will determine if an amendment is justified. We will also appreciate receiving your proposed [illegible] comments and recommendations as to [illegible] the contract.

Sincerely yours,

Approved:

Chairman, Operating Committee

Member, Bureau of Mines

Member, Geological Survey

LGHouk:rsi 7/10/58
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington
July 3, 1958

ORIGINAL FILE COPY
DMEA
RECEIVED JUL 7 1958

DATE	INITIALS	CODE
7/7	C	220
		130
7/8	Hook	600

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4566 (Fluorspar)
Idaton, Inc., Assignee
Smother Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

Enclosed are two copies of a letter, dated June 26, 1958, from M. E. Volin, Member of the Board, Idaton, Inc., requesting an amendment to this contract to permit drilling hole 2A at coordinates 1427 N. and 1427 E., bearing N. 41° E. at an inclination of minus 10° to a depth of 445 feet.

Last summer hole 2 was drilled to a reported depth of about 260 feet. Apparently during the drilling it was necessary to attempt to wedge the hole. In a letter, dated April 17, 1958, Mr. Volin said that he considered hole 2 to be in such a condition from the wedging that it would be best to drill a new hole of the same attitude and bearing adjacent to hole 2. Copies of this letter were sent to you.

Ted Engle, geologist on the staff of Cleveland Cliffs Iron Co., went to the property early in May to supervise completion of drilling holes 1 and 2. In a letter, dated June 25, 1958, copies of which were sent to you, Mr. Volin describes the conditions Engle found, and the results of drilling hole 2A and hole 1.

As this hole was drilled in good faith and required more than the 350 feet authorized in the contract in order to crosscut the vein completely, we recommend that the requested amendment be prepared. The required footage should be taken from hole 3 which will probably not be drilled.

By Field Team, Region I

Wing G. Agnew

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Donald R. MacLaren

Donald R. MacLaren, Acting Member
U. S. Geological Survey

Enclosures
cc: USBM(2) Prinz
USBM(AD)

Danaab)

Official

EXTRA COPY
DMEA
RECEIVED JUL 2 1958

DATE	INITIALS	CODE
7/2	C	220
7/2	[illegible]	800
7/3	[illegible]	600

So. 157 Howard Street
Spokane 4, Washington
June 30, 1958

Air Mail

Mr. M. E. Volin
Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Earl:

I returned last night from a joint Columbia Basin-Missouri Basin Interagency Committee meeting at Glacier Park and found your letter waiting for me. I am leaving for Washington in a few minutes and will scrawl a brief acknowledgment.

The matter of the drill cores is a troublesome one, for us as well as for you. Ordinarily, our engineer could certify with a clear conscience that the drilling was done competently and with all due care, that the recovery was as good as could be expected under the circumstances, that it gave the information that we were trying to get, and that would be all there was to it. However, because of their lack of confidence in Ecklesdafter's ability to do the job, the contract was written by the DMEA commodity people in a very tight manner with a specified core recovery in the mineralized zone. Although we are now dealing with people in whom we have complete confidence, we are stuck with this provision. For this reason we probably will have to do a little checking. If a Field Team representative from the eastern area will be in the vicinity, we will try to arrange to have him do this; if not, I shall ask Wing to find out if a Bureau representative stationed in the vicinity can do this for us.

As I recall the contract, it calls for 80 percent recovery in the "mineralized zone." Engle's log should show what can justifiably be called the "mineralized zone." There is, of course some room for interpretation here. We will await your report with interest. Meanwhile, please hang on to the core until we can decide what should be done.

Sincerely yours,

cc: DMEA(2) w/2 cys incoming
USBM(2)
USBM(AD)
Prinz w/cy incoming

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

(Draft by AEW 6/29/58)

IDATON, INC.
(IDAHO - HOUGHTON)
322 SHELDEN AVENUE
HOUGHTON, MICHIGAN

DIRECTORS
JOHN W. RICE
HARRY COHODAS
SAM COHODAS
M. EARL VOLIN
JOSEPH M. DONNELLY
JOHN S. ECKLESDAFER
RICHARD J. O'BRIEN

June 26, 1958

DMEA

refer to our letters of April 25 + June 19, 1958

Field Team,
U.S. Geological Survey,
Defense Minerals Exploration
Administration,
South 157 Howard St.,
Spokane 4, Washington.

An amendment to Contract No. Idm-E1078 is requested to permit drilling in Hole No. 2A (bearing N41E, inclination -10°, lat. 1427, dep. 1427) to a depth of 445 feet so as to cut the full width of the quartz vein and enter the biotite gneiss hangingwall.

M. E. Volin,
Member of the Board, Idaton,
Inc.

MEV:pm
Via Air Mail

IDATON, INC.
(IDAHO - HOUGHTON)
323 SHELDEN AVENUE
HOUGHTON, MICHIGAN

DIRECTORS
JOHN W. RICE
HARRY COHODAS
SAM COHODAS
M. EARL VOLIN
JOSEPH M. DONNELLY
JOHN S. ECKLESDAFER
RICHARD J. O'BRIEN

DMEAL

June 25, 1958

Mr. A. E. Weissenborn,
Executive Officer,
U.S. Geological Survey,
Defense Minerals Exploration
Administration,
South 157 Howard St.,
Spokane 4, Washington.

Dear Al:

The Field Team, on the basis of your letter of June 19, 1958, has accepted some misinformation and apparently has chosen to ignore the difficult circumstances under which we have had to work at the Smothers fluorspar property. Under our last drilling contract on a force account basis, it was prohibitive to delay operations pending consultations with the Field Team; because of the communication problem of which you must be aware it was impossible to keep you fully informed all the time. I assumed the Field Team would know that full information would be coming to you as soon as we can assemble it. Right now I am preparing the final report for fulfillment of our contract. Maybe this letter will clear some of the smoke, but I am going to be brief because the full information will appear in my report.

I notified you by telephone early in May that Ted Engle would arrive in North Fork on May 7 or 8 to resume work under Contract Idn-E1098. Alvard met Ted in Salmon on May 8 and discussed the work, but apparently was too busy to go to the property at that time.

We took some chances on getting men and equipment into the property before the Salmon River reached a peak, and were lucky in this respect. The drillers were set up on Hole No. 2 when Ted arrived, but after careful probing he decided that going around the wedge left in the hole from the previous unsuccessful attempt to deflect it might bring a lot of troubles. He found another hole alongside in the same direction but at -10° inclination to facilitate cementing, which Ecklesdafer started but did not report. This hole, No. 2A, was reentered. Drilling started in biotite gneiss at 80 feet. The quartz vein was cut at 340 feet, and the hanging wall was found at 427 feet. The hole was bottomed in biotite gneiss at 445 feet. From 404 to 427 feet, a highly fractured and altered zone of quartz with gypsum was cut; this was judged by Ted to be the mineralized portion of the vein. Smothers thought this zone would show appreciable fluorspar in the assays, but Ted could positively identify fluorspar

in only the interval 404 to 405 feet. A 5-foot swivel core barrel was used throughout the zone and the drilling was done under Ted's constant supervision. With the greatest care, core recovery in the highly altered vein material was 79%; in the rest of the hole it was 86%.

The drill was moved to Hole No. 1 on May 25 and drilling was started in vein quartz at 306 feet. The hanging wall was found at 342 feet and the hole was stopped in biotite gneiss at 350 feet. A few stringers of fluorspar were cut from 326.5 to 340.5 feet. A 5-foot swivel core barrel was used throughout; core recovery was 87%.

In spite of the river being at floodstage, Mr. Smothers brought out Ted and the vein cores on June 1. Ted called me long distance at once. Inasmuch as we could not evaluate the fluorspar mineralization and Ted's term of employment was about up, I told him to return to Houghton with the cores. I called Phil Irwin to recess the drilling for one week. Had there been a core splitter available at the property or vicinity, I would have had Ted split the cores. It was not possible to contact the Field Team on Sunday, June 1.

Ted arrived in Houghton Tuesday night, June 3, and the two of us went over the cores together. Wednesday I started splitting the cores, first sending the runs from Hole No. 2A (405 to 427 feet) for assays. Two small samples from this interval were also sent to the microscopic lab. The assays were reported Friday morning, showing the interval to average only 15% CaF_2; the Bureau of Standards analytical procedure was used. The brief microscopic examination confirmed the assay results.

A meeting of available board members was called to discuss this development, and we decided to terminate the drilling program pending further review of all the results to date.

Ted Eagle kept complete records and logs of the holes. He sent these along with a narrative report to me last Monday. I have the splits of the cores brought here; all the other cores were left on the property for inspection by your representative. I can send you the boxes of split cores, but because of their weight and the crumbling nature of the material from the altered zone, I suggest that you authorize the Bureau of Mines representative headquartered here to examine the cores and give you a statement about recoveries and hole completions.

I shall submit a report and statement for reimbursement as soon as I can do so. I only hope that you will understand the difficult circumstances under which the work was done. Idaton, Inc., spent about $45,000 on this project.

A request for amendment authorizing additional drilling in Hole No. 2A is being mailed separately.

Very truly yours,

MEV:pm

M. E. Velin

1958

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 23 1958

DATE	INITIAL	CODE
6/23	C	220
6/23	[illegible]	800
6/23	[illegible]	600

So. 157 Howard Street
Spokane 4, Washington

June 19, 1958

Mr. Earl Volin
Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Volin:

During our telephone conversation the last week in May you advised the Executive Officer that drill holes 1 and 2 were about completed and that Mr. Engel would call us the following week. We promised to have an inspection made as soon as possible and that we would try to meet Mr. Engel before he left.

Although we received no call from Mr. Engel, our field men attempted to make the inspection on June 5, 1958. Mr. Wayne England, one of the boatmen, would not attempt the trip because of high water; Mr. Smothers could not make it because his boats were being repaired. Mr. Smothers had recently transported men and equipment in to and out from the property and claimed to be familiar with the work.

Mr. Smothers reported that the first 80 feet of hole No. 2 was saved, that the hole was drilled to a depth of 450 feet, and that 20 feet of fluorite was cut at about 420 feet; that hole No. 1 was stopped in vein material at a depth of 350 feet; that Mr. Engel left the property June 1, 1958, taking with him all of the critical core; and that the drillers left the property June 3, 1958.

If these reports are correct, they raise several interesting points. As you know Exhibit "A" of the contract specifically states that the Government shall not contribute to the cost of an incomplete hole, or to the cost of any hole that does not produce 80 percent core recovery in the mineralized zone. We did not understand that the core would be removed and we assumed that it would be available for inspection. Inasmuch as our field men have not seen the core from the critical zones, we are wondering how they can certify that the specified 80 percent recovery has been made. We presume that Mr. Engel has made complete and

detailed logs and perhaps this will be regarded as adequate. We hope that you have retained splits of the core. If so, you should keep them; if necessary, they could be shipped to Spokane for examination or perhaps some arrangement could be made for the core to be inspected by some representative of the DMEA Field Team in your region.

Presumably the question would not arise in connection with the upper part of drill hole No. 2. It was drilled to the required depth without cutting the ore zone and obviously it was impossible to recover any core from the zone. However, if the contract is amended to permit deepening the hole, our field men would have to certify that 80 percent recovery was made in the ore zone. Regarding the deepening of this hole, as we advised you in our letter of April 25, 1958, you should request an amendment authorizing drilling the hole to the depth required to cut the vein.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (2)
USBM (2)
USBM (AD)
Alvord

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

June 9, 1958

CENTRAL FILE
DMEA
RECEIVED JUN 26 1958

DATE	INITIALS	
6/26		225
26		100
"		110
6/27		800
6/30		600

MEMORANDUM

To: DMEA Field Team, Region I

From: William C. Prinz, Geologist, U. S. Geological Survey

Subject: Interim Inspection Report, Docket No. DMEA-4366 (Fluorspar) Idaton, Inc., Smothers Property, Idaho County, Idaho, Contract No. Idm-E1078

An attempt was made to examine the property with William M. Romischer, Mining Engineer, U. S. Bureau of Mines, on June 5, 1958. Mr. Wayne England, one of the river boatmen, would not take us to the property because of high water. Mr. Austin P. Smothers, the other boatman and also property owner, could not take us because his boats were up for repair. Mr. Smothers had recently transported operating personnel and equipment in and out of the property and he gave us the following information.

Equipment and men were moved into the property starting May 8, 1958 and drilling was started on May 11. Hole No. 2 was re-entered, the first 80 feet of it being saved. Mr. Smothers reported that this hole intersected 20 feet of fluorite at a depth of about 420 feet and that the hole was bottomed at about 450 feet in wall rock; however, he wasn't sure of the exact footage. Hole No. 1 was also re-entered and is now about 350 feet deep. Its bottom is in vein material after having penetrated a horse of wall rock. A few thin stringers of fluorspar were cut. A drill site has been prepared for proposed hole No. 3 (to be numbered 5) but it has not been started. Mr. Ted Engel, Jr., Idaton consultant geologist, left the property June 1 taking with him all of the critical core. The drillers left on Tuesday, June 3. The drilling equipment is still at the property.

Mr. Engel has taken the core to Ishpeming, Michigan for further study and analysis. After this study, Idaton will decide whether to continue the drilling program or abandon the property. This decision is expected by the middle of June because Idaton owes Mr. Smothers a payment at that time. Furthermore, Mr. Smothers stated that he has a tentative date on June 10 to either take the drillers back to the property or haul out the drilling equipment.

Distribution:
DMEA (Orig. & 3)
USBM (2)
USBM (AD)
Docket
Prinz

This is almost identical to the B of M report

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

1201 N. Division St.
Spokane 2, Washington

June 5, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 26 1958

DATE	INITIALS	CODE
6/26	H. G.	225
26	Corr	100
"		110
6/27		800
6/30		600

MEMORANDUM

To: DMEA Field Team, Region I

From: Wm. Romischer, Mining Engineer, Bureau of Mines

Subject: Routine inspection report, Docket No. DMEA-4366 (fluorspar) Idaton, Inc., Smothers Property, Idaho County, Idaho, Contract No. Idm-E1078

An attempt was made to examine the property with W. C. Prinz, geologist, U. S. Geological Survey, on June 5, 1958. Mr. Wayne England, one of the river boatmen, would not take us to the property because of high water. Mr. Austin P. Smothers, another boatman and also the above property owner, could not take us because his boats were up for repair. Mr. Smothers had recently transported operating personnel and equipment in and out of the property and he gave us the following information:

Equipment and men were moved into the property starting May 8, 1958 and drilling was started on May 11. Hole No. 2 (DMEA) was reentered, the first 80 feet being saved. Mr. Smothers reported that this hole intersected 20 feet of fluorite at a depth of about 420 feet and that the hole was bottomed at about 450 feet in wall rock (he was not sure of the exact footage).

Hole No. 1 (DMEA) was also reentered and is now about 350 feet deep. Its bottom is in vein material after having penetrated a horse of wall rock. A few thin stringers of fluorite were cut. The drill site has been prepared for proposed DMEA hole No. 3 (to be numbered 5) but it has not been started.

Mr. Ted Engel, Jr., Idaton consultant geologist, left the property June 1 taking with him all of the critical core. The drillers left on Tuesday, June 3. The drilling equipment is still at the property.

Mr. Engel has taken the core to Ishpeming, Michigan, for further study and analysis. After this study Idaton will decide whether to continue the drilling program or abandon the property. This decision is expected by the middle of June because Idaton owes Mr. Smothers a payment at that time. Furthermore, Mr. Smothers stated that he has a tentative date on June 10 to either take the drillers back to the property or haul out the drilling equipment.

Distribution:
DMEA (4)
USGS (2)
USBM (AD)

Docket
Romischer

Wm. M. Romischer

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 9 1958

DATE		CODE
5/9	C	220
5/9	[illegible]	800
5/9	Hank	600

So. 157 Howard Street
Spokane 4, Washington

May 6, 1958

Mr. Richard J. O'Brien, Secretary
Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. O'Brien:

With a letter dated April 2, 1958, we sent you the original and four copies of a proposed Amendment No. 1 to DMEA Contract No. Idm-E1078. This amendment authorizes a period of recess beginning December 12, 1957 and ending not later than May 12, 1958 and extends the contract period from December 12, 1957 to December 12, 1958. We have heard nothing further from you regarding the intentions of Idaton, Inc. with respect to accepting or rejecting the amendment. We called this to the attention of Mr. Volin in an air mail letter dated April 25, 1958.

In a telephone conversation with Mr. Volin on May 5, 1958, it became clear that work will be resumed before the end of the recess period but until the amendment is signed and all copies, except the one marked "Operator's Copy," have been returned the contract will be in default since December 12, 1957, and DMEA cannot participate in further work on this project.

Your prompt attention to this matter will be appreciated.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

cc: DMEA (2)
USBM (2)
USBM (AD)
Alvord

DMEA
RECEIVED APR 28 195
DATE | INITIAL | CODE
4/28 | C | 220
4/28 | [illegible] | 200
4/28 | [illegible] | 600

So. 157 Howard Street
Spokane 4, Washington

Air Mail

April 25, 1958

Mr. M. E. Volin
Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Earl:

I was glad to receive your letter of April 17, 1958, in which you outline your plans for continuing the DMEA work.

We sent Mr. O'Brien on April 2, 1958, the original and four copies of a proposed amendment authorizing a recess from December 12, 1957, to May 12, 1958. If the company decides to sign this amendment, work may be started any time on or before May 12, 1958, and you will have until December 12, 1958 to complete it.

Enclosed is a Thermofax copy of the only data on DDH 3 that Mr. Ecklesdafer sent us. You will note his memo to himself at the top of the sheet is: "Send Don Alvord description of DD 4 and DD 3," but that no data is given for DD 4. This DDH 3 cut the vein and could therefore be considered as completed, but it cannot be accepted for payment under the DMEA contract, even if 80 percent core was recovered from the vein because it is located between DDH 1 and DDH 2. The map accompanying the contract shows that DDH 3 should be several hundred feet north of DDH 2.

Also enclosed are sections through DDH 1, DDH 2, and DDH 3 prepared from data supplied by Ecklesdafer. DDH 3 cut the vein considerably higher than DDH 1 or DDH 2, but it indicates a fairly constant dip at least to that point and suggests that the sections through DDH 1 and DDH 2 are probably fairly accurate. It appears from the section that DDH 1 is very close to the vein at 306 feet and that the vein should be cut before a depth of 350 feet. Of course, it is possible that the dip of the vein may flatten or that the vein may pinch out before reaching the depth of DDH 1. It might be a good idea to survey the hole to be sure it

has not deviated too much from the bearing and inclination at which it was started, but we realize that it may not be practicable to do this. In any event we do not think anything would be accomplished by drilling the hole deeper than about 450 feet as a maximum.

You bring up an interesting point concerning what would happen if the vein is not intersected by 350 feet, the maximum depth permitted by the contract for any hole. The terms of the contract were made rather rigid as there was some question of Ecklesdafer's ability to supervise the project because of his limited operating experience. We believe that under the terms of the contract any hole that is drilled to a depth of 350 feet without encountering the downward extension of the mineralized zone would have to be considered as completed, provided that the hole was satisfactorily located. The Field Team would have to certify that the location, dip, and bearing of the hole was such that there was a reasonable expectation that the vein would be cut. This, we believe, is true in the case of DDH 1. By this reasoning the requirement of 80 percent core recovery in the ore zone would not be effective if no vein were found. The Field Team could not authorize deepening the hole beyond 350 feet, but it would appear that under the particular circumstances there would be good grounds for requesting DMEA to amend the contract to permit this.

We suggest that you continue DDH 1 until it passes through the fluorite vein or reaches a depth of 350 feet. We think it probable that the hole will cut the vein before this depth. If it has not cut the vein, you should request an amendment to permit exceeding 350 feet.

Regarding DDH 2, we are inclined to agree with you that it might be best to drill another hole on the same bearing and inclination adjacent to the present hole. However, it is too bad the present hole cannot be utilized since it appears to lack only 25 or 30 feet to reach the projected position of the vein.

We air mailed you the application forms you requested, but frankly there may be some difficulty in getting a proposal for additional work processed in time to have a contract signed by July 1 as the drill data should certainly be available first. Whether or not DMEA will be able to enter into any contracts after July 1, 1958, we do not know at this writing. However, get your application in and we will do the best we can.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosure

cc: DMEA (2)
USBM (2)
USBM (AD) Alvord

EVERY ROOM AIR CONDITIONED

HOTEL FLORENCE

"AMERICA'S FINEST SMALL HOTEL"

H. C. JENSEN
MANAGER

MISSOULA, MONTANA

Send Don Alvord description
of DD 4 & DD3

DD#3

Lat. = +1428
Dep. = -1295
Elev at Collar = 149.0'
Dip. = -14½°
Bearing = N65°
Depth of intersection
Total length = 138'
Fluorite - 106'-119'

IDATON, INC.
(IDAHO - HOUGHTON)
322 SHELDEN AVENUE
HOUSHTON, MICHIGAN

DIRECTORS
JOHN W. RICE
HARRY COHODAS
SAM COHODAS
M. EARL VOLIN
JOSEPH M. DONNELLY
JOHN S. ECKLESDAFER
RICHARD J. O'BRIEN

OFFICIAL FILE COPY
DMEA
RECEIVED APR 28 1958
DATE | INITIALS

April 17, 1958

Via Air Mail

Mr. A. E. Weissenborn,
Executive Officer, DMEA,
Field Team Region I,
Defense Minerals Exploration Administration,
South 157 Howard Street,
Spokane 4, Washington.

Dear Al:

At a meeting of the Board of Directors of Idaton, Inc., last Tuesday it was decided to try to complete the drilling at the Smothers fluorspar deposit as set forth in the DMEA contract. Accordingly we would like to have your authorization to resume work under the contract starting about May 1.

In planning the work, we would like to have your interpretation on Diamond Drill Hole 1. This hole was abandoned at 306 feet because of lack of rods to drill it further. Presumably it is in good condition and can be resumed. The contract specifies that no drill hole shall exceed 350 feet in length, but that the government shall not contribute to the cost of an incompleted hole or to the cost of any hole that does not produce 80% core in the mineralized zone. I would like to have your interpretation of whether we can drill Hole No. 1 beyond 350 feet and be paid for it. Of course the purpose of the hole is to determine whether the fluorspar vein is present, and we would want to extend the hole a reasonable distance to get this information. On the other hand, we would not want to extend the hole too far because the small angle of intersection suggests the possibility that the hole in depth may be more or less paralleling the vein.

I consider that Hole No. 2 is in such a condition from the unsuccessful wedging work that it would be best to drill a new hole of same attitude and bearing immediately adjacent to it. I do not seem to have the information on DMEA Hole No. 3. You have copies of our maps. Will you please send me the data on this hole referred to our coordinates including latitude, departure, bearing, and inclination? In view of the drilling experience we have had, it may be advisable to alter the location and attitude of this hole, but its purpose would be the same, that is to cut the north segment of the vein which I call Ore Shoot No. 1.

I am contacting McClintock Drilling Company and Boyles Drilling Company for quotations for performing the drilling on a force account or per shift basis. It would be our hope to complete the work before high water starts about June 1.

We would like to enter an application for a drifting project. I understand that this will have to be approved by DMEA before June 30. Will you please air mail me the necessary forms? I have all the information, I believe, for preparing the application.

Mr. Ecklesdafer did such a poor job last summer that I am having considerable difficulty in interpreting his results. We found so many discrepancies in his statements and accounts that we don't know what to believe. He is no longer a member of the Board or an officer of the company, but he is still a stockholder. If he requests any information about the property as developed by Idaton, Inc., please refer him to the president of the corporation. We will furnish such information as he is entitled to have. The other young men who worked on the project last summer all were sincere and tried to do as good a job as they could under Ecklesdafer's direction.

I hope we can finish the drilling so as to come to a decision on what we should do next. Best regards to you and the other Survey people.

Sincerely,

Earl

M. E. Volin

MEV:pm

RECEIVED
air mail
APR 18 1958

OFFICIAL FILE COPY
DMEA
RECEIVED APR 4 1958
DATE | INITIAL | CODE
4/4 | C | 226
4/4 | | 800
4/8 | | 660

So. 157 Howard Street
Spokane 4, Washington

April 2, 1958

Mr. Richard J. O'Brien, Secretary
Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. O'Brien:

In your letter of March 4, 1958, you outlined certain tentative plans for Idaton to complete the DMEA contract and requested a recess from November 1, 1957, to April 15, 1958.

We believed that weather and possibly other unforeseen difficulties might make it impossible for you to resume work by April 15, 1958, and complete it by June 1. We therefore asked that a recess from November 1, 1957, to May 15, 1958, and an extension of the completion date to December 12, 1958, be authorized. Work may be resumed any time prior to May 15, 1958.

We would appreciate knowing whether or not you intend to seek reimbursement for the surface sampling completed last summer.

Enclosed are the original and four copies of Amendment No. 1, which has been signed by the Administrator for the Government. If this amendment meets with your approval, would you please sign all copies and return all but the copy marked for the Operator. If the amendment does not meet with your approval, please return all copies, unsigned, with your comments.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: DMEA(2)
USBM(2)
USBM(AD)
Alvord

OFFICIAL FILE COPY

Date	Surname	Code
3/24	Anderson	600
3/24	Houk	600
3/26	[illegible]	130
"	Johnson	110
"	Rettedorf	100
3/27	C	220
3-24	Chambers	800
		600

600

MAR 27 1958

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn:

Pursuant to your recommendation in letter of March 11, 1958, we have prepared and enclose the original and four copies of Amendment Number 1, which have been signed by the Administrator for the Government. Two extra copies are enclosed for the use of the Field Team. If the amendment meets with your approval present it to the Operator for approval and signature. If any part of this amendment does not have either your approval or that of the Operator and cannot be amended within your delegated authority, then the original and all copies are to be returned to this office, together with the proposed changes for consideration.

After execution of the amendment, the copies are to be distributed in the usual manner.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

P. F. Yopes

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

Enclosures 5

WCAnderson:rsi 3/24/58
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 14 1958

DATE	INITIALS	CODE
3/14	C	220
		630
3/17	Hoch	600

March 11, 1958

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

This is in further reference to your letter of February 11, 1958, regarding the status of the referenced contract and our reply of February 20.

Enclosed are two copies of a letter from Richard J. O'Brien, Secretary of Idaton, Inc., in which he explains the delay in submitting a report on last year's work and outlines tentative plans for the future. He has not answered the question in the letter we wrote to him February 20, 1958, copies of which we sent you, regarding Idaton's intentions with respect to claiming reimbursement for the surface sampling. Presumably this decision will depend upon what the directors finally decide to do when they will meet "around the end of this month."

It appears that Mr. Ecklesdafer has not been too cooperative with Idaton, Inc., especially since his resignation as president, but with Mr. Volin as consultant we have every reason to believe the supervision of the project will be improved. In view of the change in supervision and the favorable results of the project to date, we feel that the Operator should be given every chance to complete the project.

In line with the tentative schedule for completing the work, Mr. O'Brien requests a recess from November 1, 1957 to April 15, 1958 and an extension of the time for completion of the work from December 12, 1957 to June 1, 1958. We doubt that work can be resumed by April 15 and completed by June 1. Therefore, we recommend that the

contract be amended to authorize a recess from November 1, 1957 to May 15, 1958 and to extend the date for completion from December 12, 1957 to December 12, 1958.

By Field Team, Region I

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
USBM (AD)
Alvord

LAW OFFICES
DONNELLY AND O'BRIEN
[illegible] CHERRY AVENUE
HOUGHTON, MICH.
TELEPHONE 140

JOSEPH M. DONNELLY
RICHARD J. O'BRIEN

RECEIVED
BUREAU OF MINES
MAR 6 - 1958
SPOKANE, WASH.

March 4, 1958

ORIGINAL FILE COPY
DMEA
RECEIVED
DATE

Mr. Wing G. Agnew, Acting Executive Officer
U. S. Bureau of Mines
Mr. Donald R. MacLaren, Acting Member
U. S. Geological Survey
Spokane, Washington

DMEA

RE: DOCKET NO. DMEA-4366 (Fluorspar)
IDATON, INC., Assignee
SMOTHERS PROPERTY
IDAHO COUNTY, IDAHO
CONTRACT NO. Idm-E1078

Gentlemen:

Replying to your letter of February 20, 1958.

We have been delayed in submitting our report to your office on the activities of last year because Mr. Ecklesdafer tied same up with an attorney here in Houghton and we have not been able to get to the records until this time. Mr. Volin and I have an appointment at this attorneys office tomorrow afternoon and at that time expect to be able to secure the records so that Mr. Volin can shortly get out his report and will submit same to you.

The present planning of the Board of Directors is to complete the diamond drilling in April and May of this year so as to finish the three holes authorized by the Government. We would therefor like an extension of time on our DMEA contract. Three of our directors are out of town at the present time and will not be back until around the end of this month at which time a final decision will be made and your office will be advised of same. We would request a recess from last November 1, 1957 to April 15, 1958 and will then commence our operations with the expectation of completing same by June 1st under the present DMEA contract. We may then wish to apply for a DMEA contract allowing some drifting

Mr. Wing G. Agnew
Mr. Donald R. MacLaren

March 4, 1958

and further diamond drill exploration.

Hoping this is the information you desire and will be happy to answer any further questions you may have, I remain,

Very truly yours,

Richard J. O'Brien

Richard J. O'Brien,
Secretary
IDATON, INC.

O'B&G

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

February 20, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 24 1958

DATE	INITIALS	CODE
2/24	C	220
2/24	Hawk	600

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

To answer the questions in your letter of February 11, 1958, we have written to Mr. R. J. O'Brien, Secretary of Idaton, Inc., asking what the company's intentions are concerning a recess, time extension and reimbursement for surface sampling. Copies of our letter of February 20 are enclosed. We shall answer your letter just as soon as we hear from Mr. O'Brien.

Sincerely yours,

D R MacLaren
D. R. MacLaren
for: Wing G. Agnew
Acting Executive Officer
DMEA Field Team, Region I

Enclosure (in dupl.)

cc: USBM (2)
USBM (AD)
Alvord

FILE COPY
DMEA
RECEIVED FEB 24 1958

DATE	INITIALS	CODE

No. 157 Howard Street
Spokane 4, Washington

February 20, 1958

Mr. Richard J. O'Brien, Secretary
Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. O'Brien:

The date for completion of work under the terms of DMEA Contract Idm-E1078 expired December 12, 1957.

On October 15, 1957, the Executive Officer wrote to Mr. Volin stating that we would appreciate receiving a brief narrative report of activities since the start of the contract work, and at least the coordinates, bearing, inclination and depth of any holes drilled subsequent to holes 1, 2, and 3, the only holes on which we have any information. Mr. Volin replied on November 7, 1957, stating that he had delayed preparing the requested narrative until Mr. Ecklesdafer returned from the field, and that he had requested the company directors to give him a decision as to whether they want to seek reimbursement in the amount of $550 (the Government's share of $1,100 total allowable cost for surface mapping, sampling, transportation, assaying, and technical services), or request that the DMEA contract be cancelled. On November 9, 1957, you advised us of the resignation of John G. Ecklesdafer as President, and stated that Mr. Volin is working on a report.

Will you please inform us whether or not you wish an amendment extending the date of termination and whether or not you will seek reimbursement for the surface sampling. In the event you wish a time extension amendment, it will be necessary to include a recess; therefore, you should tell us the date the

recess should start, on or before what date it will terminate, and how much of a time extension you will require.

An early reply will be appreciated.

By Field Team, Region I

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Donald R. MacLaren, Acting Member
U. S. Geological Survey

cc: DMEA (2)
USBM (2)
USLM (AD)
Alvord

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
27	Houk	600
2/12	[illegible]	130
"	[illegible]	110
"	[illegible]	100
2/11	[illegible]	220
		600

600

FEB 11 1958

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn:

The date for completion of the contract work expired December 12, 1957. Please advise us if a time extension amendment is necessary. Will the company seek reimbursement for the surface sampling?

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Approved:

Frank D. Lamb (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

LGHouk:gad 2/7/58
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

IDATON, INC.
(IDAHO - HOUGHTON)
322 SHELDEN AVENUE
HOUGHTON, MICHIGAN

DIRECTORS
JOHN W. RICE
HARRY COHODAS
SAM COHODAS
M. EARL VOLIN
JOSEPH M. DONNELLY
JOHN B. ECKLESDAFER
RICHARD J. O'BRIEN

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 2 1957

DATE	INITIAL	CODE
12/2	C	220
12/3	[illegible]	800
12/3	[illegible]	600

November
Seventh
1 9 5 7

Mr. A. E. Weissenborn,
Executive Officer, DMEA,
Field Team Region I,
Defense Minerals Exploration Administration,
South 157 Howard Street,
Spokane 4, Washington.

Re: Docket No. DMEA-4366
(Fluorspar)
Idaton, Inc. (Assignee)
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Al:

I have delayed answering your letter of [illegible] requesting a narrative report on the captioned DMEA fluorspar project until Mr. Ecklesdafer returned from the field.

Ecklesdafer has been working on a final report which would serve the DMEA purposes and also be suitable for the stockholders. His records are not very good, but I think we will end up with a presentable report.

After reviewing the drilling results, it is apparent that the two short holes that were completed will not qualify for DMEA approval because the recovery of fluorspar was too low. This means that the only reimbursement Idaton can claim under the DMEA contract is that to cover surface sampling and other operations in the item for which the total allowable cost is $1100. I have requested the company directors to give me a decision as to whether they want to seek reimbursement in the amount of only $550 or request that the DMEA contract be cancelled. This decision will be made as soon as a board meeting can be held.

In the meantime I will get the report into final form so that it can be submitted immediately should we want to seek reimbursement under the DMEA contract.

Sincerely yours,

M. E. Volin

RECEIVED
NOV 12 1957
U.S.
SPOKANE

DMEA

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 29 1957

DATE	INITIALS	CODE
11/29	gb	220
12/2	[illegible]	800
12/2	[illegible]	600

So. 157 Howard Street
Spokane 4, Washington

November 27, 1957

X

Mr. Richard J. O'Brien, Secretary
Idaton, Incorporated
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. O'Brien:

Thank you for your air mail letter of November 19, 1957 in which you advise us of a change in officers.

All future correspondence will be addressed to your Houghton office.

Sincerely,

A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I

cc: DMEA (3) w/3 cys incoming
USBM (2)
USBM(AD)
Alvord

IDATON, INC.
(IDAHO - HOUGHTON)
333 SHELDEN AVENUE
HOUGHTON, MICHIGAN

DIRECTORS
JOHN W. RICE
HARRY CONOSAS
SAM CONOSAS
M. EARL VOLIN
JOSEPH M. CONNELLY
JOHN G. ECKLESDAFER
RICHARD J. O'BRIEN

November 19, 1957

Mr. A. E. Weissenborn, Executive Officer
United States Geological Survey Office
S. 157 Howard St.,
Spokane, 4, Washington

RE: IDATON, INC.
DMEA-4366 (Fluorspar)

Dear Mr. Weissenborn:

This is to inform you that John G. Ecklesdafer resigned as President of Idaton, Inc. on November 14, 1957 because of his entry into the Army.

All future correspondence and other matters pertaining to Idaton, Inc. and our DMEA Contract should be forwarded through this office.

Mr. Volin is working on a report at the present time to forward on to you.

Very truly yours,

IDATON, INC.

by _____
Secretary

O'BrG

RECEIVED
Air Mail
NOV 21 1957
U.S.G.S.
SPOKANE, WASH.

IDATON, INC.
(IDAHO - HOUGHTON)
322 SHELDEN AVENUE
HOUGHTON, MICHIGAN

DIRECTORS
JOHN W. RICE
HARRY CONDOS
SAM CHODAS
M. EARL VOLIN
JOSEPH M. CONNELLY
JOHN G. ECKLESDAFER
RICHARD J. O'BRIEN

November 19, 1957

Mr. A. E. Weissenborn, Executive Officer
United States Geological Survey Office
S. 157 Howard St.,
Spokane, 4, Washington

RE: IDATON, INC.
DMEA-4306 (Fluorspar)

Dear Mr. Weissenborn:

This is to inform you that John G. Ecklesdafer resigned as President of Idaton, Inc. on November 14, 1957 because of his entry into the Army.

All future correspondence and other matters pertaining to Idaton, Inc. and our DMEA Contract should be forwarded through this office.

Mr. Volin is working on a report at the present time to forward on to you.

Very truly yours,

IDATON, INC.

by_____
Secretary

O'B:G

RECEIVED
Air Mail
NOV 21 1957
U.S.G.S.
SPOKANE, WASH.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

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RECEIVED NOV 14 1957

DATE	INITIALS	CODE
11/14	gb	220
14	Cm	100

October 22, 1957

MEMORANDUM

To: DMEA Field Team, Region I

From: D. C. Alvord, Geologist, U. S. Geological Survey

Subject: Interim Inspection Report, Docket No. DMEA-4366 (fluorspar), Idaton, Inc., Smothers Property, Idaho County, Idaho, Contract No. Idm-E1078

The property was inspected on September 11, 1957 in company with Mr. M. E. Volin, Engineering consultant to Idaton, Inc., and Mr. J. G. Ecklesdafer, exploration manager. On September 10, none of the regular charter power boats were available. The property was reached by floating down river in a rubber life raft, a cold wet trip entailing 5 hours. Only the morning of the 11th was available for the inspection as the only power boat available for the return trip had to leave by 1:00 p. m. at the latest. It appears that the operation has been plagued the entire season by the erratic availability of river transportation. To prevent similar difficulties in the future, Mr. Volin stated that Idaton, Inc. will have its own power boat during the 1958 exploration season.

Since the writer's last inspection on July 24, 1957 (Memorandum dated September 6, 1957), no further diamond drilling had been done under the contract. DDH-1 had been temporarily abandoned, due to insufficient pumping capacity, prior to the July 24th inspection and on July 24, apparently after I left the property, work on DDH-2 was stopped because the bit was sheared off at 260 feet.

It is the intention of the company to complete both of these holes when adequate equipment can be obtained but in the interim two new holes were started on the company's own account. DDH-3 was collared about 50 feet to the north of DDH-1 and about 80 feet higher. DDH-4 was collared at a similar altitude on the south side of DDH-1. After minor troubles, including an engine breakdown that necessitated repair in town, DDH-3 was completed to a depth of 138.0 feet. The fluorite zone was penetrated between 106 and 119 feet. DDH-4 was drilled to 97 feet at which depth the core barrel, bit, reaming shell and 50 feet of rods were lost.

DDH-4A was offset 3 to 4 feet from DDH-4 and had been drilled to a depth of 116 feet by the time of the inspection. Sections of DDH-1, 2 and 3, prepared from the geologic map made by the operator and from the data obtained from DDH-3, have been prepared and are included with this report. From these it can be seen that DDH-1 was abandoned just as it might have penetrated the fluorite and that DDH-2 should have reached the fluorite in about 20 more feet. As stated earlier, the company intends to complete these holes and has assembled sufficient equipment to do so when it was discovered that one of the drillers, fired the day before the inspection, apparently had taken all five AX bits and the two EX core springs with him when he left the property.

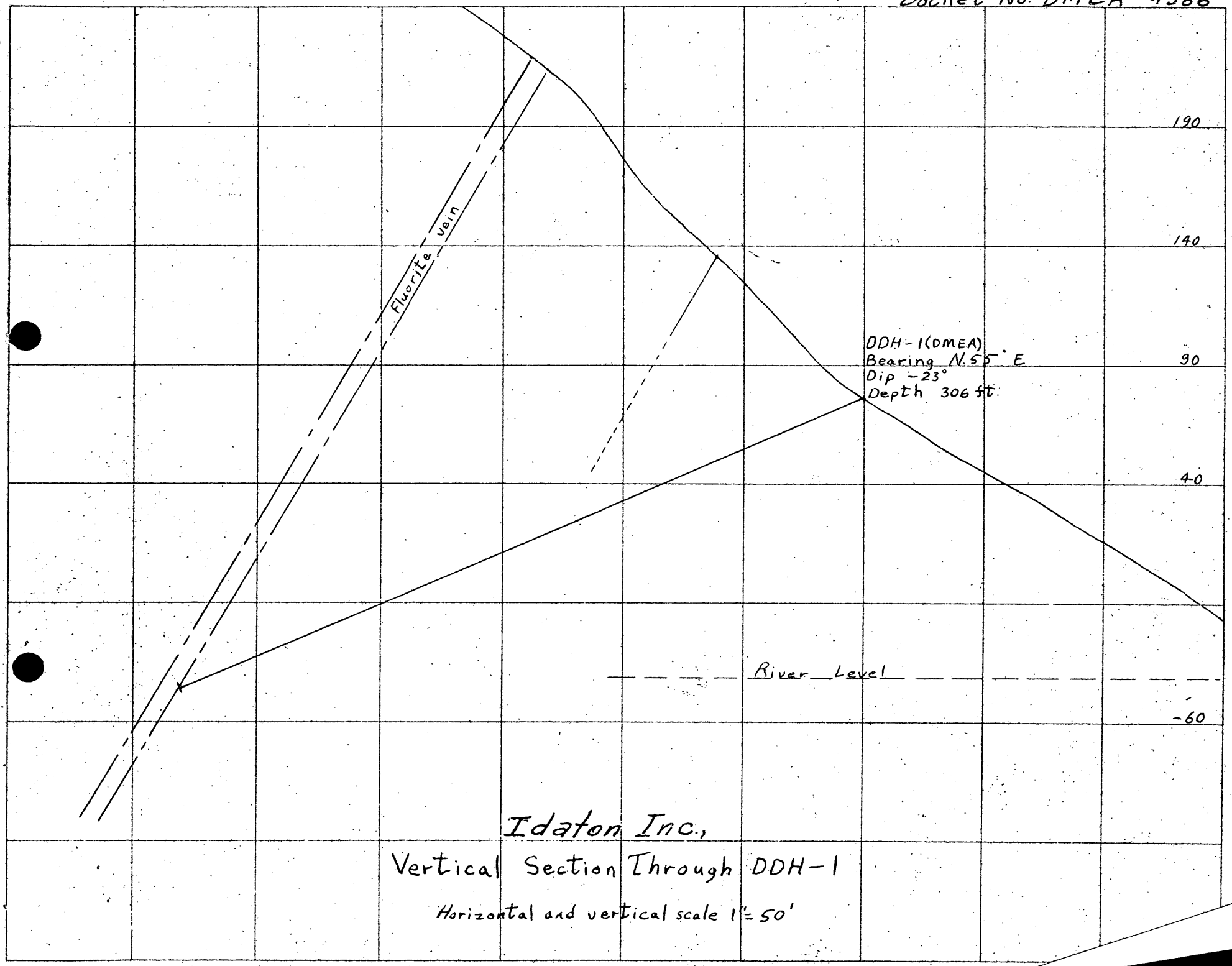
According to Mr. Ecklesdafer, the core from DDH-3 and 4 was being skeletonized and the remainder stored in sacks. He said that he would send me the complete data from these holes as soon as possible. Up to this time only the location, directions, depth, and ore intersections for DDH-3 have been received. On October 5, while passing through Missoula, Montana, I looked up Mr. Ecklesdafer but was only able to contact his assistant, Mr. Richard Dick. Mr. Dick told me that DDH-4 was completed but that no further work had been done on DDH-1 and DDH-2. He added that bad weather and a deficiency of funds were forcing them to abandon further work this season, as of October 3 and that he and Mr. Ecklesdafer were about to prepare a report summarizing the results of the summers work. Up to the writing of this report, no further information regarding this property has been received.

D. C. Alvord

Enclosures

cc: DMEA (Orig. & 3)
USBM (2)
USBM (AD)
Docket
Alvord

Docket No. DMEA-4366



Idaton Inc.,

Vertical Section Through DDH-1

Horizontal and vertical scale 1" = 50'

J. A. Gendron Co., Spokane

"ALBANENE" NO. 188M KAECO., N.Y. REG. U.S. PAT. OFF.

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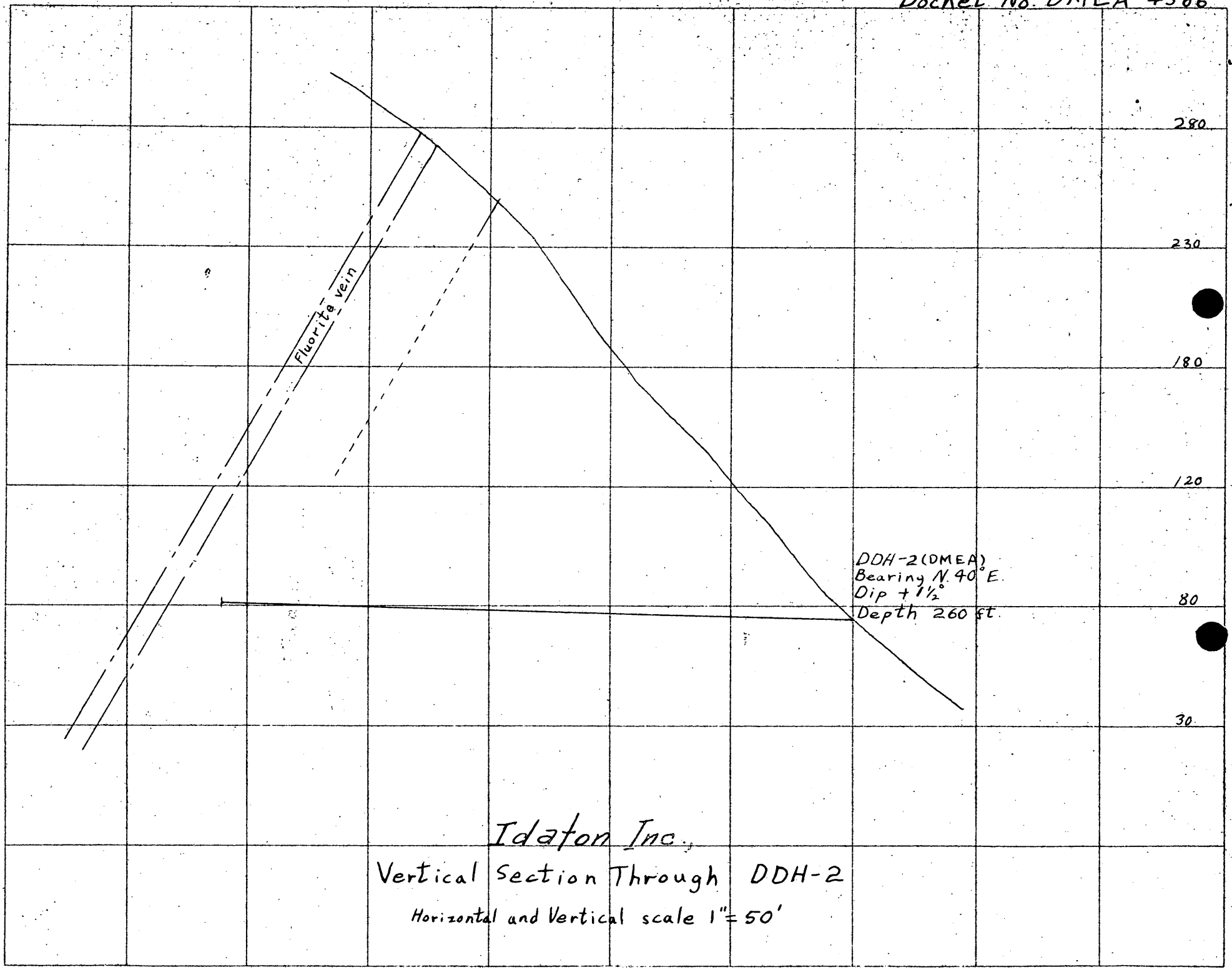
DMEA
RECEIVED NOV 14 1957

DATE	INITIALS	CODE

Docket No. DMEA-4366



Idaton Inc.

Vertical Section Through DDH-2

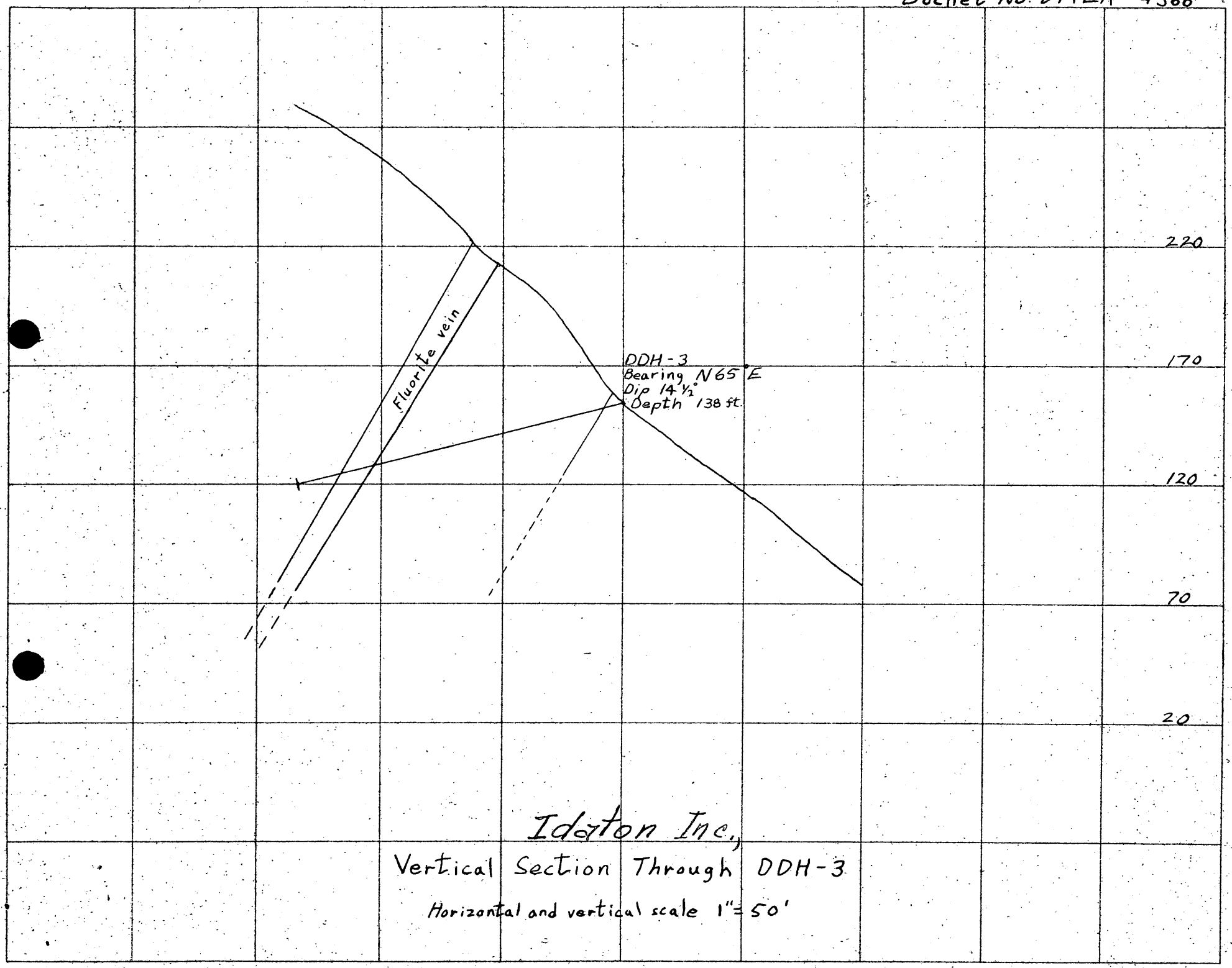
Horizontal and Vertical scale 1" = 50'

"ALBANENE" NO. 1088M K&E CO., N.Y. REG. U.S. PAT. OFF.
J. A. Gendron Co., Spokane

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 14 1957

DATE	INITIALS	CODE

Docket No. DMEA - 4366



Idaton Inc.,

Vertical Section Through DDH-3

Horizontal and vertical scale 1" = 50'

J. A. Gandron Co., Spokane

"ALBANENE" NO. 168M KAECO, N.Y. REG. U.S. PAT. OFF.

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RECEIVED NOV 14 1957

DATE	INITIALS	CODE

OFFICE COPY
DMEA
RECEIVED OCT 21 1957
10/21 gb 220
10/21 800
600

So. 157 Howard Street
Spokane 4, Washington

October 15, 1957

Air Mail

Mr. M. E. Velin
c/o Michigan Bureau of Mineral Research
Michigan College of Mining and Technology
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc. (Assignee)
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Earl:

Reference is made to your letter of September 18, 1957, in which you advise us that only a final voucher will be submitted.

Washington has called our attention to Article 5(b) of the contract, "Progress reports and vouchers," and has advised us that "where the Operator completes work for which he is entitled to reimbursement, it is not necessary for him to send in a voucher; however, he is required to submit a monthly narrative of his activities."

To date we have received narrative progress reports for May and June only. Both of these were returned as unacceptable because they did not describe the work accomplished in sufficient detail. We have subsequently received copies of an incomplete surface map and a list of surface assays.

We would appreciate receiving a brief narrative report of activities since the start of the contract work, and at least the coordinates, bearing, inclination and depth of any holes drilled subsequent to holes 1, 2, and 3, the only holes on which we have any information. We would also like monthly progress reports as long as DMEA work is in progress.

We will, of course, have to know the location and bearing of hole 4 before we can determine whether it meets the terms of the contract.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I

cc: DMEA (2)
USBM (2)
USBM(AD)
Alvord

(Note: Per Op. Com. ltr of 10/10/57)

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/7	Houk	600
10/9	GCS	130
"	Johnson	110
"	Stottenberg	100
		220
10-8	Chamber	800
10/10	B	220
		600

OCT 10 1957

600

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1073

Dear Mr. Weissenborn:

Reference is made to Mr. Volin's letter to you dated September 18, 1957, in which he states he will submit only a final voucher.

Please note Article 5 (b) of the contract, "Progress reports and vouchers.--The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground."

Where the Operator completes no work for which he is entitled to reimbursement, it is not necessary for him to send in a voucher, however, he is required to submit a monthly narrative of his activities.

Approved:

Frank D. Lamb
Member, Bureau of Mines

W. P. Williams
Member, Geological Survey

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

LGHouk:gad 10/7/57
Copy to: Admr. R. File
Mr. Dietrich, 3061
Mr. Houk
Operating Committee
Mr. Kiilsgaard, 5222

8623

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 4 1957

DATE	INITIALS	CODE
10/4	C	220
10/4	Hank	600

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

October 1, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

This is in reply to your letter of September 23, 1957, regarding the lack of a map showing the locations of the drill holes.

Enclosed is a copy of the only map we have received to date. It shows the location of drill hole No. 3, but as yet we have not received the coordinates of drill hole No. 4.

In a letter dated September 18, 1957, which crossed yours of the 23d, Mr. M. E. Volin says that he has decided not to prepare any interim reports for partial payments under the contract but to wait and prepare one final report which would serve as the Operator's final report and a narrative for a single voucher. As soon as we receive the necessary data on the location and attitude of drill hole No. 4, and the results of holes Nos. 1, 2, 3, and 4, we will submit our recommendations.

The location of drill hole No. 2 is somewhat lower on the slope than was anticipated, due to topographic features. The present location is more feasible and, as the change of direction and inclination does not increase the original estimate of the depth of hole, it has the Field Team's approval. Due to a flattening of the dip of the vein, drill hole No. 1 may require more than the maximum footage allowed, but until we receive Volin's report, we will not make any recommendation for change.

By Field Team, Region I

D R Mackaven
for A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Thomas E. Howard
Thomas E. Howard, Acting Member
U. S. Bureau of Mines

Enclosure

cc: USBM (2)
USBM (AD)
Alvord

MICHIGAN COLLEGE OF MINING AND TECHNOLOGY

HOUGHTON, MICHIGAN

BOARD OF CONTROL

PATRICK W. THORNTON, HOUGHTON, CHAIRMAN
CYRIL M. CLARK, ONTONAGON
JOSEPH W. O'CONNELLY, HOUGHTON
C. HARRY BENEDICT, LAKE LINDEN
WALDEMAR A. KNOLL, IRONWOOD
DONALD W. PROHASKA, JACKSON

J. R. VAN PELT, PRESIDENT
ERNEST J. TOWNSEND
CONTROLLER AND TREASURER
FRANK KERKES, DEAN OF FACULTY
LEO F. DUGGAN, DEAN OF STUDENTS
THOMAS C. SERMON, REGISTRAR
THEODORE PEARCE
DIRECTOR OF COLLEGE RELATIONS

OFFICE OF THE
VICE PRESIDENT
RECEIVED SEP 20 1957

DATE	INITIALS	CODE

September
Eighteenth
1 9 5 7

Mr. A. K. Weissenborn,
Supervising Geologist,
U. S. Geological Survey,
South 151 Howard St.,
Spokane 4, Washington.

Dear Ake

The enclosed letter from Tom Lents explains the direct procedure used for analysis of calcium fluoride as authorized by you sometime ago. He explains the attached graph, the linear portion of which was used to arrive at corrections for the assays previously reported. The corrected assays are shown in the enclosed assay certificate, dated September 18, except for 7 falling below 25% and thus outside of the linear portion of the correction curve. The comparison of the composite assay with the computed assay for the composite is quite close, and in our estimation is a satisfactory check of the corrections. As Tom mentions in his letter, future assays will be performed by the Bureau of Standards method. We consider that the silica assays as previously reported are accurate enough.

I hope that the bill for this work is satisfactory. It is not too high when you consider that 24 determinations were made, 10 samples in duplicate and one in quadruplicate. If you have any exceptions to the bill, we will absorb the cost here because this work had to be done anyway.

I am sorry that I didn't get to see you when I was in Spokane, but Mr. MacLaren gave me a lot of his time, and as a result of it I understand the whole project much better. I was very disappointed in the quality of performance on this project, and the fault lies almost entirely with Ecklesdafer. We made a great mistake in letting him supervise the work.

The company has taken over the drilling entirely in an effort to complete Hole No. 2 and Holes 1 and 3 if possible. I gave Ecklesdafer explicit instructions for completing the work, handling the drill cores, and recording the data. I am not sure that he will follow orders, however. We hope that the drilling will be completed in less than

a month, and then Kohlenstofer is to come back here to help me prepare the final report. I decided not to prepare any interim reports for partial payments under the contract but to wait and prepare one final report which would serve for completion of the contract and payment, too.

With best personal regards,

Sincerely yours,

M. E. Volin, Director,
Michigan Bureau of Mineral Research.

MEV:pm
Encs.

RECEIVED
SEP 23 1957

OFFICE FILE COPY
DMEA
RECEIVED SEP 30 1957
DATE | INITIALS | CODE

1010 Jasper Ave.
Houghton, Mich.
September 18, 1957

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team
Region I
South 157 Howard Street
Spokane, Washington

DMEA

Gentlemen:

At the request of the U.S. Government geologist representing the DMEA, selected channel samples of Code 100, Vein A were analyzed for calcium fluoride according to a more comprehensive method. Mr. Don Rose and I selected ten channel samples that would represent the complete spread of assays for all of Vein A. These ten were assayed in duplicate.

We also ran a composite sample of Vein A in quadruplicate. This composite sample is a weighted sample, obtained by taking measured amounts of ore from each of 73 channel samples from Vein A. Therefore, this composite is representative of all of Vein A channel samples.

The table below presents the results of this work.

Vein A Sample	% Calcium Fluoride: Previously Reported	% Calcium Fluoride: By U.S. Bureau of Standards Method*	
O_1 -2	99.23	92.33	
A_1 -4	92.34	89.27	
A_1 -2	85.24	80.13	
E_1 -3	78.46	70.73	
A_2a-6	64.30	56.57	
B_1 -2	53.44	41.53	
C_1 -5	43.50	31.88	
B_1 -1	38.86	26.22	
L_1 -3	23.76	15.72	
K_1 -1	17.82	11.88	
Comp.	74.73	66.00)	66.72
Comp.	74.73	67.43)	

* Average of duplicate assays.

These assays were plotted on a graph (copy enclosed) in order to determine the corrected assay of the remaining 63 samples that made up the 73 sample composite. We then computed a mathematical assay for the composite, which was 67.02 %, a very close check with the chemical assay of 66.72 % CaF_2.

Future assays will be performed by the longer, more accurate

U.S. Bureau of Standards method. Flotation concentrates will be assayed by the Bidtel method for greater accuracy on high calcium fluoride samples.

Sincerely yours,

Thomas H. Lents

Encl.

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DMEA
RECEIVED SEP 30 1957

DATE		CODE
9/30	C	220
9/30		800
10/1		600

So. 157 Howard Street
Spokane 4, Washington

September 25, 1957

Mr. M. E. Volin, Director
Michigan Bureau of Mineral Research
Michigan College of Mining and Technology
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Earl:

I am glad that you were able to visit the Squaw Creek property but I was extremely sorry to have missed you when you came through Spokane. It was unfortunate that I had to go to Salt Lake City at this particular time.

Regarding the bill for the assaying, all the assaying costs are included in the $1,100 lump sum that is authorized for mapping, surveying, sampling and assaying as the last item in Exhibit A of the contract. Mr. Rose's bill is being returned herewith. Since this item is a fixed unit cost, no supplier's invoice will be necessary. I'm sorry if there was a misunderstanding about this. I think that when the contract was set up it was not contemplated that so many samples would be necessary. Your crew seems to have done a good job on the mapping and sampling and the fact that so much of the length of the vein was good enough to require sampling should be very gratifying to you.

I certainly hope that you will be able to complete the three holes and that the results will be such as to justify further work.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosure

cc: DMEA (2) w/2 copies of incoming
USBM (2)
USBM (AD)
Alvord

* assaying of drill holes samples is a separate item.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/23	Houk	600
9/23	GCS	130
"	Johnson	110
"	Whitenberg	100
9/24	B	220
		600

SEP 23 1957 600

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Smothers Property
Idaton, Inc., Assignee
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn

Reference is made to the Interim Inspection Reports dated August 15 and September 6, 1957, by Mr. William M. Romischer and Mr. Donald C. Alvord, respectively, and a copy of a letter to you from Mr. M. E. Volin dated August 13, 1957.

We are unable to follow the progress of this project as we have no accurate map showing the location of the drill holes and, therefore, would hesitate to comment on Mr. Volin's query on payment for Diamond Drill Holes 3 and 4.

We might point out that Diamond Drill Hole 2 was drilled 35 to 40 degrees off the bearing suggested in the contract. Please comment on whether the direction and inclination of this hole has the approval of the Field Team.

When we have a map showing drill hole locations, we will comment on payment for the drill holes.

Sincerely yours,

George C. Selfridge
(esf)
Chairman, Operating Committee

Approved:

Frank D. Lamb
(esf)
Member, Bureau of Mines

N. E. Nelson
(esf)
Member, Geological Survey

LGHouk:gad 9/23/57
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

9-17 C 220
9/18 Hawk 600

September 6, 1957

MEMORANDUM

To: DMEA Field Team, Region I

From: Donald C. Alvord, Geologist, U. S. Geological Survey

Subject: Interim Inspection Report, Docket No. DMEA-4366 (Fluorspar), Idaton, Inc., Smothers Property, Idaho County, Idaho, Contract No. Idm-E1078

The property was examined on July 24, 1957, in company with Mr. Sui Ju Kung, Mining Engineer, Taiwan, Nationalist China. Mr. Elmer J. Warren, company geologist; two drillers; and two laborers were on the property. Mr. Ecklesdafer, Mine Manager, and his assistant were off in the hills trying to select a route for a road and aerial tram to the property.

By the time of the inspection 32 trenches had been hand dug across the fluorite vein along a strike length of 1,200 feet; of the 32 trenches, 28 had been sampled with 1 inch by 4 inch channels. The sample cuttings had already been sent for analysis to the Ores Research Building at the Michigan College of Mining and Technology, Houghton, Michigan. A transit net had been completed with plenty of Brunton and tape offsets to points of geologic interest. Additional geologic and sampling data are being gathered and a geologic map on a topographic base was being compiled. Mr. Warren expected to continue the sampling, mapping and compilation work in the field through August and into early September.

Contract diamond drill holes Nos. 1 and 2, both partially completed, were collared approximately as located on plate 1 of the contract. Their bearings and dip are not quite in conformity with those shown on plate 1, but will give the desired information.

DDH-1 had been drilled to 306 feet on a bearing of N. 55° E. and a dip of -23° without encountering the fluorite vein. Pumping difficulties forced the temporary abandonment of that hole and DDH-2 was started with a bearing of N. 40° E. and a dip of plus $1\frac{1}{2}$°. It had been drilled to a depth of 260 feet where the bit was sheared off. This hole was also to be temporarily abandoned until wedges could be obtained with which the sheared bit could be bypassed.

According to Figure 1 of Nickelson's and Parsons' examination report (dated August 20, 1956), DDH-1 should have penetrated the fluorite vein at about 260 feet and DDH-2 at about 250 feet. Dip measurements made on the fresh exposures of the vein in the trenches, however, indicate a dip somewhere between 50° and 60°, whereas at the time of the application examination, the dip was thought to be more nearly 60°. It appears that DDH-1, now at 306 feet, will have to be drilled to about 360 to 400 feet in order to penetrate the vein. DDH-2, now at 260 feet, even though drilled flat, will probably have to be drilled 300 to 350 feet deep to penetrate the vein.

Up to the time of the examination, the core was being saved in 20 foot intervals in cloth sacks. Mr. Warren saw that I was upset by this fact and took me to the site of DDH-1 where representative pieces of core had been selected and laid out in order on a rack. I asked him about the core from DDH-2 and he appeared confused. He stated that Mr. Eckelsdafer had selected the core for DDH-1 but that he didn't believe that the core from DDH-2 was being treated in a similar manner.

When questioned later in the Spokane office, Mr. Eckelsdafer told the Executive Officer that core from both holes had been skeletonized. Mr. Warren and also Mr. Eckelsdafer when seen in Spokane were told that in the future all the core should be stored in boxes until it could be inspected by DMEA field men. Not followed

Donald C. Alvord

Distribution:
DMEA (Orig. & 3)
USBM (2)
USBM (AD)
Docket
Alvord

MICHIGAN COLLEGE OF MINING AND TECHNOLOGY

HOUGHTON, MICHIGAN

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RECEIVED SEP 20 1957

DATE	INITIALS	CODE
9/20	C	220
		600

August
Thirtieth
1 9 5 7

Mr. A. E. Weissenborn,
Supervising Geologist,
U. S. Geological Survey,
South 157 Howard St.,
Spokane 4, Washington.

Dear Al:

As a result of a meeting of the Idaton group Wednesday noon, it was decided that I should go out to the fluorspar property as soon as possible, and I am making plans to come out by plane to arrive at Missoula the evening of September 7 or 8. I would like to have your geologist meet me there, if possible, and then we can proceed into the property. I will not have any transportation but suppose that your man will have the government car. However, if you want me to arrange the transportation from Missoula to North Fork, I can do so.

The group feels that we must get at least one drill hole intersection at considerable depth on what I call Ore Shoot No. 2 as indicated by the surface sampling. This will mean completion of Drill Hole No. 1 or No. 2, and preferably both. Ecklesdafer has written that Drill Hole No. 3, latitude 1425, departure 1295, striking N65E, inclination -14 1/2°, cut 8 3/4 ft. (true width) of fluorspar. His information on the intersection follows:

0-106' uneconomical country rock (Qtz footwall)
(1) 106'-110 1/2' contaminated fluorite 80%
(2) 110 1/2-113 1/2' very good spar
(3) 113 1/2 - 116 3/4' Qtz with traces of fluorite
(4) 116 3/4' - 119' Very good spar
119' - 127' Mud material (black)
127' - 138' Qtz-pyritized

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DMEA
RECEIVED SEP 20 1957

DATE	INITIALS	CODE

...eissenborn,
..., 1957,

...ing bac... shallow ..., clearing, and ... taken over supervis... ... working two shifts a day. ... hole No. 4 was ... intersect the ... inasmuch as the ... to tell ... ...es and get ... as possible.

...also thinks th... Ore Shoot No. 1 ... French D... ... section of this ... because the overburden is ... drill a hole from a ... ...ature 2260, to cut the vein approx... ... uncertain interval. I do not ... any topographic map ... and thus cannot locate the ... ...ately.

...of DMEA will approve D... ... and ... for payment ... with Holes 1 and 2, if completed, will bring the ... to the thousand feet allowed under the contract. I believe ... you fully understand the difficulties we have experienced in ... operations, and while the information from Hole 3, and ...ably what will come from Hole 4, does not indicate much more, ...nevertheless the data about the dip of the vein has considerable ... on how much farther we have to go in Holes 1 and 2 to get intersections.

If you are reluctant to approve Holes ... for payment, will ... permit payment of proposed Hole No. ... have never received data on the location of DMEA Hole No. 3 and perhaps it is sufficiently close to our proposed No. ... not to require any change in plans. ... me all of this can best be worked out with your geologist on the ground, but I thought I would give you my thinking as of this time so that you could have some prior discussions with him.

If Hecklesdafer does not report any significant drilling progress when he next comes out, I have proposed to the group, and they have approved the suggestion, that we try to get in another driller on force account.

Campbell has already defaulted on his contract, and there will be no difficulty in getting rid of him except that we will have to sue him for return of the portion of the advance payment not used up by the drilling as of date of termination. With this possibility in mind, I have decided to write Phil Erwin of McClintock Drilling Co. and ask him if he wants to go into the property when I do and size up the situation for completion of the presently planned drilling by force account and a contract on the next stage of drilling we might undertake next summer. Inasmuch as I do not have Phil's address and I want to make sure that the letter reaches him in time, I am enclosing it and would like to have you mail it to him as well as give him a telephone call about it because he will not have much time to get ready for the trip.

In regard to the check analysis you asked for, we have written to the Bureau of Standards for their approved direct method for fluorspar and have just received it. We are running five or six of the samples with a considerable spread in fluorspar content now and will report the results to you next week. You'll be interested in our preliminary results. We composited the surface samples by length which gave a head assaying 75% CaF_2. Preliminary flotation tests on this gave a concentrate analysing 99+% CaF_2 with very good recovery. We are not going any farther with these tests until we have some drill core samples to average with the surface samples.

To firm up the plans for the trip, I will call you long distance on Friday, September 6. I've asked Phil to leave word with you as to his decision to come in to the property with me.

With best personal regards.

Sincerely yours,

TE 8-3588

M. E. Volin, Director,
Michigan Bureau of Mineral Research.

MEV:pm
Enc.

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DMEA
RECEIVED SEP 20 1957

DATE	INITIALS	COL.

cc: Mr. Weissenborn

Official

~~EXTRA~~ COPY DMEA RECEIVED SEP 20 1957		
DATE	INITIALS	CODE

August
Thirtieth
1 9 5 7

Mr. Phil Erwin,
McClintock Drilling Co.

Dear Phil:

I am getting in touch with you presuming that you are still in the diamond drilling business. A local group of people here has financed an exploration program on a Salmon River Canyon fluorspar deposit which has been in progress since last May. A drilling contract was let to Campbell Drilling Co. of Salmon, Idaho, but the accomplishment to date has been far from satisfactory. At this time we still lack the information about the character of the deposit at depth, and we feel that we must get the information in this field season to decide whether to go ahead with the exploration work next year. Other than the diamond drilling, the exploration results have been quite encouraging as you can check with Al Weissenborn. I am going into the property on September 8 or 9, and I am trying to make arrangements with Al to have one of his geologists accompany me. I am wondering if you would like to go along with the possibility that, if it is apparent that Campbell cannot finish the work planned for this year, we will want to negotiate with you to take the rest of this year's work by force account and perform whatever drilling we set up for next summer. Al will give you the details about the property in getting in there. It is a tough trip and will take the better part of a week to go in, look over the property, and come back out again.

I plan on calling Al long distance on September 6 and you can leave word with him as to whether you will accompany me on the trip. In any event, it is good to have an excuse to get in touch with you again, and I hope to get to see you personally.

Sincerely yours,

M. E. Velin, Director,
Michigan Bureau of Mineral Research.

MEVspm

MICHIGAN COLLEGE OF MINING AND TECHNOLOGY

HOUGHTON, MICHIGAN

BOARD OF CONTROL

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DONALD W. PROMASKA, SAULT STE. MARIE

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RECEIVED SEP 20 1957

DATE	INITIALS	CODE

J. R. VAN FOLT, PRESIDENT
[redacted]
ERNEST J. TONNING
TREASURER AND BUSINESS MANAGER
FRANK HERRING, DEAN OF FACULTY
LEO F. BUGBAN, DEAN OF STUDENTS
THOMAS C. GERSHEL, REGISTRAR
THEODORE PEARCE
DIRECTOR OF COLLEGE RELATIONS

August
Thirtieth
1 9 5 7

Mr. A. E. Weissenborn,
Supervising Geologist,
U. S. Geological Survey,
South 157 Howard St.,
Spokane 4, Washington.

Dear Al:

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The group feels that we must get at least one drill hole intersection at considerable depth on what I call Ore Shoot No. 2 as indicated by the surface sampling. This will mean completion of Drill Hole No. 1 or No. 2, and preferably both. Ecklesdafer has written that Drill Hole No. 3, latitude 1428, departure 1295, striking N65E, inclination -14 1/2°, cut 8 3/4 ft. (true width) of fluorspar. His information on the intersection follows:

0-106' uneconomical country rock (qtz footwall)
(1) 106'-110 1/2' contaminated fluorite 30%
(2) 110 1/2-113 1/2' very good spar
(3) 113 1/2 - 116 3/4' Qtz with traces of fluorite
(4) 116 3/4' - 119' Very good spar
119' - 127' Mud material (black)
127' - 138' Qtz-pyritized

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Instead of going back into Drill Hole 1 or 2 as I had instructed, he started shallow Hole 4 for which I have no information on location, bearing, and inclination. By an agreement with Campbell, he has taken over supervision of the drilling and is paying the drillers for working two shifts a day. The only information he gave about Hole No. 4 was that it was in the vicinity of Hole No. 1 and would intersect the vein at a depth (along vein) of about 120. feet. Inasmuch as the hole was already started, I had no other choice than to tell him to continue it, but I advised him to get some wedges and get back into Holes 1 or 2 and complete either one as soon as possible.

The group also thinks that it is essential to drill one hole on what I call Ore Shoot No. 1 indicated by the surface sampling to extend from Trench D_{2b} south to the fault at Trench E_{1a}. A considerable section of this shoot between Trench A_{2b} and A_{2c} is in doubt because the overburden is too deep for trenching. I proposed that we drill a hole from a location approximate latitude 1560, departure 2280, to cut the vein approximately 200 feet downdip in this uncertain interval. I do not have any topographic map as yet and thus cannot locate the hole accurately.

I am wondering if DMEA will approve Drill Holes 3 and 4 for payment; these, along with Holes 1 and 2, if completed, will bring the footage to the thousand feet allowed under the contract. I believe that you fully understand the difficulties we have experienced in our drilling operations, and while the information from Hole 3, and presumably what will come from Hole 4, does not indicate much more, nevertheless the data about the dip of the vein has considerable bearing on how much farther we have to go in Holes 1 and 2 to get intersections.

If you are reluctant to approve Holes 3 and 4 for payment, will you permit payment of proposed Hole No. 5? I have never received data on the location of DMEA Hole No. 3 and perhaps it is sufficiently close to our proposed No. 5 not to require any change in plans. I presume all of this can best be worked out with your geologist on the ground, but I thought I would give you my thinking as of this time so that you could have some prior discussions with him.

If Ecklesdafer does not report any significant drilling progress when he next comes out, I have proposed to the group, and they have approved the suggestion, that we try to get in another driller on force account.

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DMEA
RECEIVED SEP 20 1957

NAME	INITIALS	CODE

Campbell has already defaulted on his contract, and there will be no difficulty in getting rid of him except that we will have to sue him for return of the portion of the advance payment not used up by the drilling as of date of termination. With this possibility in mind, I have decided to write Phil Erwin of McClintock Drilling Co. and ask him if he wants to go into the property when I do and size up the situation for completion of the presently planned drilling by force account and a contract on the next stage of drilling we might undertake next summer. Inasmuch as I do not have Phil's address and I want to make sure that the letter reaches him in time, I am enclosing it and would like to have you mail it to him as well as give him a telephone call about it because he will not have much time to get ready for the trip.

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To firm up the plans for the trip, I will call you long distance on Friday, September 6. I've asked Phil to leave word with you as to his decision to come in to the property with me.

With best personal regards.

Sincerely yours,

M. E. Volin, Director,
Michigan Bureau of Mineral Research.

MEV:pm
Enc.

EXTRA COPY
DMEA
RECEIVED SEP 30 1957

DATE	INITIALS	CODE

cc: [illegible] Weissenborn

EXTRA COPY
DMEA
RECEIVED SEP 20 1957

DATE	INITIALS	CODE

August
Thirtieth
1 9 5 7

Mr. Phil Erwin,
McClintock Drilling Co.

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Sincerely yours,

M. E. Volin, Director,
Michigan Bureau of Mineral Research.

MEVjpm

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/24	alt	600

600

Project Summary Report

By: J. W. Alt June 23, 1959

1. Docket No. DMEA-4366-Fluorspar
Contract No. Idm-E1078
Smothers Property
Idaho County, Idaho

Application: Form MF-103 (April 1952) received June 29, 1956
Work proposed by Applicant:
Diamond drill a total of 1,000 feet, distributed in three or four holes, hand trenching, geologic mapping, and sampling.
Total estimated cost of proposed work $10,381.00

Operator: Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana

Operator's property rights: Purchase Agreement, dated May 13, 1955. Assignment of 18 mining claims to Squaw Creek Mining Company.
Consent to Lien dated June 8, 1956.

2. Contract: Form MF-200A (April 1956) dated April 12, 1957
Work authorized (Fixed Unit Costs)

Diamond drilling with AX bit 1,000 feet @ $8.00/ft.	$8,000.00
50 drill hole samples to be assayed for CaF_2 and SiO_2 @ $6.00/sample	300.00
Transportation of 50 drill hole samples @ $1.00/each sample	50.00
Transportation of men and materials 2 boat trips per month, 2 months @ $50.00/trip	200.00
Transportation in and out of 3,000 lbs. drill equipment	350.00
Geological mapping, sampling, transportation, assaying, and technical services	1,100.00
Estimated total cost of project	$10,000.00
Government participation @ 50%	$ 5,000.00

43683

Assignment of contract to Idaton, Inc., dated July 12, 1957.
Purchase Agreement dated April 30, 1957.
Consent to Lien and Subordination Agreements, dated March 5, 1957, and April 27, 1957.

Amendments:

No. 1 — March 26, 1958. Suspends work from December 12, 1957, and ending not later than May 12, 1958. Completion time extended from December 12, 1957, to December 12, 1958. Royalty payment period increased from 10 to 11 years. Contains a pseudo certification. Contract to be terminated, effective December 12, 1957, if work has not been resumed on or before May 12, 1958, and if work is resumed but is not completed on or before December 12, 1958, contract shall be terminated effective December 12, 1958.

Work Completed:

Diamond drilling AX size, 700 feet @ $8.00/ft.	$5,600.00
Drill hole samples assayed for CaF_2 and SiO_2, 2 @ $6.00/each	12.00
Transportation for samples, 2 @ $1.00/each	2.00
Transportation for men and materials 4 trips @ $50.00/trip	200.00
Transportation in and out for drill equipment	350.00
Geological mapping, sampling, transportation, assaying and technical services	1,100.00
Total cost	$7,264.00

Work started on April 15, 1957. Effective August 30, 1958, the contract by mutual agreement was terminated. Field Team final report received May 4, 1959. Operator's final report received September 29, 1958. No equipment was purchased under the contract.

3. Audit: Report of Review issued December 9, 1958.

Total cost as billed by contractor	$29,519.00
Exceptions	22,255.00
Total accepted cost	$7,264.00
Government participation @ 50%	$3,632.00

4. Certification of discovery: A pseudo certification is contained in the Termination Agreement.

5. Comments:

How conducted: Numerous delays were caused by poor drill performance and supervision.
Operation: Poor work performance and supervision, especially in regard to diamond drilling, contributed to the slow progress made on the project. The Supervisor for the Operator during the year 1957 was inexperienced and failed to follow some of the terms of the contract for drilling. Contract drilling was resumed in May, 1958, under the supervision of an experienced consulting geologist.
Engineering: The Operator's reporting on the project has been most inadequate and inaccurate. However, the final report is verycomprehensive.
Geological premise: Outcrops of two fluorspar bodies that occur on the hanging wall of a large quartz vein are of sufficient size and grade to warrant exploration.
Geological criteria upon which work was based:

1. Two fluorspar bodies, one about 400 feet long and 10 wide, the other about 300 feet long and 5.8 feet wide, are exposed on the surface along the hanging wall of a large quartz vein. The average grade of five samples from the 400-foot body is 58 percent CaF_2, while the average grade of six samples from the 300-foot body is 80 per cent CaF_2. There are other veins on the property that are known to contain fluorite.
2. The Field Team states that the chance of finding an ore body containing as much as 100,000 tons, with an average grade somewhere between 58 and 80 per cent CaF_2, is very good and that the chance of finding other ore bodies within the Applicant's claims is good.

Criteria developed during project:

1. East of the Salmon River there are at least 3 zones of fluorite ranging in length from 150 to 600 feet and in width from 1.7 to 20.0 feet. They occur along, and a short way in from the east wall of a quartz vein in gneiss. The southernmost and largest fluorite zone was probed by four diamond drill holes. The drilling showed that at depth, the vein flattened in dip and the fluorite zone became narrower and much lower in grade. Disappointing results were obtained from the two contract drill holes. The third hole authorized under the contract was never drilled. Results obtained from the surface sampling were much more encouraging. The Field Team estimate that the inferred reserves are 105,148 tons with a grade of 70.03 per cent CaF_2. Because of the questionable value of the drill hole samples, the

estimate of a reserve is based on the results of surface sampling. More drilling is needed to make an accurate evaluation of the fluorite deposits at the property.

Future possibilities: Although at the present time the only access to the property is by pack trail, or by small boat on the Salmon River, and the construction of a suitable access road would be costly, the property is a potential source of fluorite ore.

Recommendations: A pseudo certification is incorporated in the Termination Agreement. Should a properly financed and competently supervised project for additional exploration be received, it should be given thoughtful consideration.

J. W. Alt
Division of Nonmetallic Minerals

JWAlt:gad 6/23/59
Copy to: Dir. R. File
Mr. Johnson

☑ Audited 12/9/58 WORK ANALYSIS SHEET - DMEA PROJECT ☐ Actual Cost

☑ Certified — Pseudo 11/30/54 Analysis as of 4/6/59 ☑ Agreed Unit Costs

Incl. Voucher for

Name Idaton, Inc.

Docket No. DMEA-4366

State Idaho

Commodity Fluorspar

Idm-E No. 1078

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
~~Drifting & Crosscutting~~ Samples to be assayed	50	300.00	2	$12.00	12.00
~~Raising~~ Transportation of 50 samples	50	50.00	2	2.00	2.00
~~Shafts~~ Transportation man & supplies	4 trips	200.00		200.00	200.00
Winzes Transportation in tout		350.00		350.00	350.00
Geological mapping, etc		1,100.00		1,100.00	1,100.00
Drilling (Specify) Diamond AX Bit	1000 ft	8000.00	700	5,600.00	5,600.00
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		$10,000.00		$7,244	7,264

Prepared by Walter C. Anderson

71626

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Weeks	

OCT 20 1972

Mr. Jack E. Scott
P. O. Box 1088
Wallace, Idaho 83873

Re: DMEA 4366 (Fluorspar)
Smothers Property
Idaho County, Idaho
Contract Idm E-1076

Dear Mr. Scott:

We acknowledge receipt of your request of October 16, 1972, together with documents supporting your current possession of the mineral rights to the subject property, and permission of the widow of the secretary of the defunct corporation, Idaton, Inc., with whom the Government had an exploration contract. The following material is available:

1. Final report, Idaton, Inc. on the Big Squaw Creek fluorspar deposits. 23pp.

2. Appendix to final report giving drilling logs. 19pp.

3. Map No. 1, Claims, Idaton, Inc. 24 x 35 inches.

4. Map No. 2, Geology map of Smother's Fluorite Deposit. 36 x 42 inches, scale 1" = 50'.

5. Map No. 3, Geological map of Smothers Fluorite Deposit. 18 x 24 inches, scale 1" = 30'.

6. Map No. 4, Plan of vein. 30 x 40 inches.

7. Map No. 5, Plan view of vein A, Sheet 2. 22 x 30 inches.

Copies of this material may be obtained by contacting:

Cooper-Trent, Inc.
1521 North Danville Street
Arlington, Virginia 22201
Attention: Mr. Marvin Mundy

Material returned 11/10/72 by Mr. Mundy

Please send the enclosed copy of this letter to Cooper-Trent with your letter of instructions when ordering copies of the above material. Cooper-Trent will contact you regarding cost of reproductions. All further correspondence relating to procurement of copies of the material should be with the above company and not with this office.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

Enclosure

For the attention of Mr. Mundy:

Please return the enclosed material to:

Mr. Harold Kirkemo
Chief, Office of Minerals Exploration
U. S. Geological Survey
Room 865, Matomic Building
1717 H Street N. W.
Washington, D. C. 20006

cc: Director's reading file
Mineral Resources
OME reading file
Region I
R. Weeks
H. Kirkemo

RWeeks:cac 10/20/72

P. O. Box 1088
Wallace, Idaho 83873
Oct. 16, 1972

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 19 1972
ACTIONS CODE
HK + 10
RAW

Mr. Harold Kirkemo, Chief
Office of Minerals Exploration
U. S. Geological Survey
Washington D. C. 20242

Dear Mr. Kirkemo,

We have a mining claim on the Salmon River about 1500 feet downstream from the mouth of Big Squaw Creek, with a good showing of Fluorspar. The claim was originaly located in 1903 by a Mr. Wade and was purchased by my Dad in 1953. The claim is currently in good standing. (Proof of Labor enclosed)

We recently learned of a drilling program through the Geological Survey Bulletin 1353 C, Salmon River Breaks Idaho. This drilling was cinducted byIdaton, Inc., the company expired Nov. 1, 1959. (letter from Idaho Secretary of State enclosed)

Bulletin 1353 C Page C32 paragraph 1 states Don Smith later acquired the claims. He has now abandoned all but one claim which is about 4000 feet northerly of our claim, this is the Broken Halter # 12. (proof of labor enclosed)

We have tried to locate people from Idaton, Inc. to secure permission to acquire a copy of the D.M.E.A. report on the drilling, the only one we could find is the wife of the Secretary of the company now deceased, she has given permission. (letter from Barbara C. O'Brien)

Could you please supply us with a copy of this report, drill logs and maps that might be available? Advise me of the charges and our check will follow.

Thank you very much.

Sincerely
Jack E. Scott
Jack E. Scott

cc: Willard Puffett

4366

245917

INDEXED (✓)
TRACTED ( )
FILMED (✓)

PROOF OF LABOR

STATE OF IDAHO, }
County of Shoshone, } ss.

Before me, the subscribed, personally appeared Jack E. Scott

who, being first duly sworn, says that at least One Hundred ($100.00) Dollars' worth of work or improvements were performed or made upon Big Cliff

claim.., situated in Warren Mining district, County of ~~Shoshone~~ Idaho State of Idaho, during the year ending Aug. 31, 1972., that such expenditure was made by, for or at the expense of Dr. F. E. Scott

owner.. of said claim.. for the purpose of holding such claim.., and all stakes, monuments or trees marking boundaries of said claim.. are in proper place and position.

Jack E. Scott

Subscribed and sworn to before me this 28th day of July A. D. 1972

Notary Public residing at
Wallace Idaho

STATE OF IDAHO
SECRETARY OF STATE
BOISE

PETE T. CENARRUSA
SECRETARY OF STATE

August 30, 1972

Mr. Jack E. Scott
Silver Buckle Mining Company
Box 1088
Wallace, Idaho

Dear Mr. Scott:

With reference to your letter of August 29th, the records of this office indicate thatthe corporation charter for IDATON, INC. was forfeited as of December 1, 1959.

Most sincerely,

PETE T. CENARRUSA
Secretary of State

Margaret Lawrence

Corporation Clerk

242332

INDEXED (✓)
TRACED ( )
FILMED ( )
DELIVERED ( )
MAILED ( )

AFFIDAVIT OF ANNUAL REPRESENTATION

STATE OF IDAHO,)
) SS
COUNTY OF LEMHI)

Before me the subscribed, personally appeared C. WALKER LYON

who being first duly sworn, says that during

the year ending September 1st, 1971 at least THREE HUNDRED and NO/100's-----

DOLLARS worth of work of improvements were performed or made upon the

LUCKY B-2 Lode, BROEKN HALTER NO. 12 Lode, LUCKY B Placer

mining claims situate in Dixie Mining District, County of Idaho ~~XXXXXXX~~ State of Idaho, that such expenditure was made by, for or at the expense of

Don L. Smith, Claude V. Marcus and C. Walker Lyon

owners of said claims for the purpose of holding said claims, and all stakes, monuments or trees marking the boundaries of such claims are in proper place and position

Signature C. Walker Lyon

Subscribed and sworn to before me this 31 day of August 1971

Margaret Elliott XXXXXXXXXXXXX
Notary Public for Idaho
~~XX~~Residing at Salmon ~~XXXXX~~ Idaho

State of Idaho) SS
County of ~~Lemhi~~ Idaho

Recorded at the request of C. Walker Lyon

SEP 1 1971 19 at 07 minutes past 11 o'clock a.m. in Filed of Proof of Labor, Records of ~~Lemhi~~ IDAHO County, Idaho.

CARL T. REUTER County Recorder

by Bob J. Waite Deputy

Fees $ .75

Salmon, Id. 83467

P. OBox 1088
Wallace, Idaho
Sept. 22, 1972

Mr. Richard O'Brien
322 Shelton
Houghton, Mich. 49931

Dear Mr. O'Brien,

Back in 1953 and 1954 my Dad owned a mining claim on the Salmon River a short distance down stream from the mouth of Big Squaw Creek. The claim had a little showing of fluorspar. We reacquired the property recently and have just learned of the drilling done by Idaton, Inc. during 1957 and 1958, and of the report by the U.S.G.S. printed in 1972.

The property has sevenal very large drawbacks which may make it impossible to do anything with,

1. The remote location and lack of transportation.
2. The new ecology regulations requireing restoration of lands.
3. The area now is a wildreness area and the requlations are not going to allow power equipment in the area.
4. The area is now included in the Wild and Scenic Rivers Act with their regulations.

We have found out that the D.M.E.A. has a report of the drilling by Idaton, Inc., which expired Nov. 1, 1959, but cannot let us have access to the report with out permission of the company. They supplied me with your name and address to request this permission. Could you write me a letter giving this permission. Thank you very much.

Sincerely

Jack E. Scott

Jack E. Scott

Oct. 3, 1972

Dear Mr. Cook,

To my best knowledge Idaton Inc. was dissolved in 1959 or thereafter when the stockholders decided not to exercise the option on the fluorspar property which apparently is the one referred to in your letter of September 22, 1972. My husband who was secretary of the company and a principal stock holder is deceased and I have no records of Idaton Inc.

As far as I am concerned you have my permission to see the DMEA report. The other principal stockholders are either deceased or retired to addresses not known to me.

Good luck

Barbara C. O'Brian

United States Department of the Interior

GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

OFFICIAL COPY
M. E.
RECEIVED
DEC 16 1971

INITIALS	CODE
	130
	120
	220

AIRMAIL

DEC 9 1971

Mr. B. W. Porter
President and Treasurer
Goldstone Mining Company
511 Securities Building
Seattle, Washington 98501

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee of
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Porter:

Your recent, undated letter to Mr. Willard P. Puffett, Field Officer, OME Region I, was referred to us for reply.

Before we can release any material furnished by the Operator and subsequent assignee on this project, we would appreciate receiving a written consent from Idaton, Inc., Assignee, for the Government to release information to Goldstone Mining Company. If you own the property, a copy of a bill of sale or deed from the assignee to Goldstone Mining Company should be submitted. We cannot release information furnished by the Operator and assignee without the written consent of same or proof of present ownership.

The claims listed in your letter, Crystal Cluster Nos. 1 and 2 and the Broken Halter Nos. 1 through 7, were not among the claims included subject to the DMEA contract. We have no file information on the claims you listed. Please identify the property you have acquired.

We will be glad to make available to you any information furnished by the Operator or assignee upon receipt of the above information.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D. C. 20242

OFFICIAL BUSINESS

(90)

Moved, not forwardable
Addressee unknown

Mr. B. W. Porter
President and Treasurer
Goldstone Mining Company
511 Securities Building
Seattle, Washington 98501

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF THE INTERIOR

44

OME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
12/9/71		120
		220

AIRMAIL

Mr. B. W. Porter
President and Treasurer
Goldstone Mining Company
511 Securities Building
Seattle, Washington 98501

DEC 9 1971

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee of
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

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Your recent, undated letter to Mr. Willard P. Puffett, Field Officer, OME Region I, was referred to us for reply.

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We will be glad to make available to you any information furnished by the Operator or assignee upon receipt of the above information.

Sincerely yours,

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading File
OME Region I
Mr. Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

HKirkemo/gla 12-8-71

DMEA 4366 Certified

Idaton, Inc.
Idaho City, Idaho

GOLDSTONE
MINING COMPANY

MINE AT
GOLDSTONE MOUNTAIN
P. O. SALMON, IDAHO

511 SECURITIES BUILDING
SEATTLE 1, WASHINGTON 98501

B. W. PORTER
PRESIDENT AND TREASURER
LYNN GUNNING
VICE PRESIDENT
EMIL MOTTMAN
SECRETARY

RECEIVED
NOV 15 1971
O. M. E.
SPOKANE, WASH.

Mr. Willard Puffet.
U.S.G.S.
Spokane Wash.

Dear Mr Puffet.

In the early 1940's. the Bureau of Mines, as a D.M.E.A. project. examined and drilled. the Austin P. Smothers property.

This property is located 82 miles down the Salmon river, from Salmon Idaho and is in Idaho. County. (The file*, maybe? 25.1)

The claims, were known as. Crystal Cluster No's 1 and 2 and the Broken Halter No's. 1 through 7.

Could we, as present owners, of this property, get the D.M.E.A. report.

We are making plans, to mine this fluorspar property, and would like to have. the report.

Very truly yours.
B. W. Porter

ROUTING AND TRANSMITTAL SLIP

	INITIALS	ACTION
1 TO (Name, office symbol or location) Chief, Office of Minerals Exploration	DATE	CIRCULATE / COORDINATION
2 Re: DMEA 4366 (Fluorspar) Idaton, Inc. assignee of Squaw Creek Mining Company ~~Idaho~~ Smothers Property	INITIALS / DATE	FILE / INFORMATION
3 Idaho County, Idaho Contract Idm-E1078	INITIALS / DATE	NOTE AND RETURN / PER CONVERSATION
4	INITIALS / DATE	SEE ME / SIGNATURE

REMARKS Attached is a request by Mr. B. W. Porter, President and treasurer of Goldstone Mining Company, for information concerning the ~~subject~~ Smothers fluorspar property.

I will not answer this letter but will refer it your office for answering.

OFFICIAL COPY
O. M. E.
RECEIVED
NOV 17 1971
INITIALS | CODE
1130
HK 1 20 M

Do NOT use this form as a ~~RECORD~~ of approvals, concurrences, disapprovals, clearances, and similar actions.

FROM (Name, office symbol or location)
Willard P. Puffett
Field Officer, Region I
Office of Minerals Exploration

DATE 11/15/71
PHONE

GPO : 1967 O—300-455 (8-H) 5041-101

OPTIONAL FORM 41
AUGUST 1967
GSA FPMR (41CFR) 100-11.206

220

file

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

MAY 22 1968

Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana 59801

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Gentlemen:

By the terms of the subject Exploration Project Contract, as amended, and the Termination Agreement, dated November 20, 1958, all minerals mined or produced from April 12, 1957, to April 12, 1968, 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.

Sincerely yours,

Frank E. Johnson

Frank E. Johnson
Chief, Office of
Minerals Exploration

Copies to: Squaw Creek Mining Company
c/o William J. Walker, President
Office of the Sheriff
County of Missoula
State of Montana
Missoula, Montana 59801

Idaton, Incorporated
c/o Richard J. O'Brien, Secretary
Donnelly and O'Brien
322 Shelden Avenue
Houghton, Michigan 49931

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D. C. 20242

OFFICIAL BUSINESS

MISSOULA, MT
PM
MAY 25
1968

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF THE INTERIOR

RETURNED TO WRITER

Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana 59801

Not at

☒ Moved, left no address
☐ No such number
☐ Moved, not forwardable
☒ Addressee unknown

C-13 PA

Opened by mistake
J. Evans
605 Wilma Bldg

45

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/22/68		110
		220

Mr. A. P. Smothers and
Mrs. Florence V. Smothers
P. O. Box 770
Casa Grande, Arizona 85222

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Dear Mr. and Mrs. Smothers:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the subject contract.

This correspondence relates to the Lien and Subordination Agreement signed by you on April 27, 1957.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File
OME Region I
130

GLAult/a 5-22-68

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/22/68		110
		220

Mr. Ernest C. Ecklesdafer
532 No. Ave. W.
Missoula, Montana 59801

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Dear Mr. Ecklesdafer:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the subject contract.

This correspondence relates to the Lien and Subordination Agreement signed by you on March 5, 1957.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosure

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File
OME Region I
130

GLAult/a 5-22-68

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
656 U. S. Court House
W. 920 Riverside Avenue
Spokane, Washington 99201

OFFICIAL
COPY
O. M. E.
RECEIVED
MAY 16 1968
INITIALS | CODE
glo | 130
| 110

May 14, 1968

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

The U. S. Bureau of Mines, Albany, Oregon, reported by telephone May 13, 1968, that they have no record of any production from the subject property.

D. R. MacLaren

D. R. MacLaren

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/25/68		110
		220

APR 25 1968

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Please check with the U. S. Bureau of Mines on possible production from the subject property, from July 3, 1962, to April 12, 1968, the expiration date of the royalty repayment period, and advise.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File
130 (2)

GLAult/a 4-25-68

P-I

IN REPLY REFER TO:
Office of Minerals Exploration

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

July 5, 1967

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Mr. A. P. Smothers
~~1216 N Street~~
~~Lewiston, Idaho 83501~~ P.O. Box 770
Casa Grande,
Ariz.

Dear Mr. Smothers:

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,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since May 1966, 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 May 1966, 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 through workings (see of contract)?, has any production been transported Yes ☐ No ☑

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

Disposition of Material	Quantity	Value

Submitted by:

Name A P Smithers Title Owner

Address Box 770 Casa Grande Ariz Date 7/20/67

DMEA-4366
Idm-E1078
IDATON, INC., Assignee

INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Show to whom and date delivered ☐ Show to whom, date, and address where delivered ☐ Deliver ONLY to addressee

(Additional charges required for these services)

RECEIPT

Received the numbered article described below.

REGISTERED NO.

CERTIFIED NO. 133268 X

INSURED NO.

SIGNATURE OR NAME OF ADDRESSEE (*Must always be filled in*)

1 Mrs A. P. Loretters

2 SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

DATE DELIVERED JUL 18 1967

SHOW WHERE DELIVERED (*only if requested*)

DIVISION 1968 JUL 10 AM 1967

055—16—71548-9 GPO

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
WASHINGTON, D. C. ~~20240~~ 20242

OFFICIAL BUSINESS

GEOLOGICAL SURVEY

Name Clerk
1st Notice 6-15-67
2nd Notice 6-18-67
Return 6-28

133145

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

C-54

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF THE INTERIOR

Mr. A. P. Smothers
5230 North Scottsdale Road
Scottsdale, Arizona 85251

RETURNED TO WRITER
REASON CHECKED
Unclaimed
Unknown
Refused
Insufficient address
Moved, Left no address
No such post office in state
Do not remail in this envelope

40

INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Show to whom and date delivered ☐ Show to whom, date, and address where delivered ☐ Deliver ONLY to addressee

(Additional charges required for these services)

RECEIPT

Received the numbered article described below.

REGISTERED NO.

CERTIFIED NO. 133[illegible]

INSURED NO.

1 SIGNATURE OR NAME OF ADDRESSEE (*Must always be filled in*)

2 SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

DATE DELIVERED

SHOW WHERE DELIVERED (*only if requested*)

~~1967~~ 28 JUN

A55—16—71548-9 GPO

File

IN REPLY REFER TO:
Office of Minerals Exploration

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

June 8, 1967

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Mr. A. P. Smothers
5230 North Scottsdale Road
Scottsdale, Arizona 85251

Dear Mr. Smothers:

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,

Frank E. Johnson

Frank E. Johnson
Chief, Office of
Minerals Exploration

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since May 1966, 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 ☐

   Has the assessment work been kept current on all of the claims? If not, please give details. Yes / / No / /

2. Since May 1966, 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 through workings (see of contract)? Yes ☐ No ☐

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

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

IN REPLY REFER TO:

ORIGINAL COPY
O. M. E.
RECEIVED
MAY 13 1966
IN REFERENCE TO

5/16/ 120 M

April 14, 1966

Mr. A. P. Smothers

1216 N. Street

Lewiston, Idaho

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Ida-E1078

Dear Mr. Smothers:

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,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT
AND PROJECT UNDER ROYALTY AGREEMENT

1. Since **April 1965**, 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 ☑

Since July 1962, have any lode claims been located, either as original or amended locations, contiguous with the land described in the contract? If so, please give details. Yes ☐ No ☑

2. Since **April 1965**, 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 ☑

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

Disposition of Material	Quantity	Value
—	—	—

Submitted by:

Name A P Smothers Title Owner

Address 5230 N Setsdale Rd Date 5/9/66

Scottsdale Ariz

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

May 18, 1965

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Mr. A. P. Smothers
1216 N. Street
Lewiston, Idaho

Dear Mr. Smothers:

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,

George C. Selfridge

George C. Selfridge, Chief
Division of Exploration Operations

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 1 1965

INITIALS	CODE
	100
	110
6/2	120
	120
	220

MME Form 63
Revised 3-62

DMEA-4366
Idm-E1078

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since April 1964, 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 ☑

Has the assessment work been kept current on all of the claims? If not, please give details. Yes ☑ No ☐

2. Since April 1964, 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
	None	

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		None
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
	None	

Submitted by:

Name A P Smothers Title Owner

Address 1216 N 2d Lewiston Idaho Date 5/20/68

4511

~~Grained~~
220

#1-INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Deliver *ONLY* to addressee ☐ Show address where delivered

(Additional charges required for these services)

RETURN RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

C. D. Izralev

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

Mrs Julia Bounds

DATE DELIVERED MAY 8 - 1964

ADDRESS WHERE DELIVERED *(only if requested in item #1)*

C55—16—71548-4 GPO

4366

DMEA 4366

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

February 27, 1964

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Mr. A. P. Smothers
1216 N Street ~~312 Snake River Avenue~~
Lewiston, Idaho

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,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

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

DATE	INITIALS	CODE
4/3		800
		120
4/3		100
4/3		110
4/3	Murphy	500
		220

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since June 2, 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 ☐

Was leased to Larsen Industries Murray Utah in 1961 They did not produce any ore and lease expired on Mar 1 1964

2. Since June 2, 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
None		

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

Type	Quantity		Estimated Grade	Location
Ore	None	Tons		
Concentrates		Tons		
Other		Tons		

3. Since through workings (see of contract)? Yes ☐ No ☑

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

Disposition of Material	Quantity	Value
None		

Submitted by:

Name A P Smothers Title Owner

Address 216 N. St Lewiston Idaho Date 3/30 1964

4511

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

February 27, 1964

Re: DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idn-E1078

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Mr. A. P. Smothers
312 Snake River Avenue
Lewiston, Idaho

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,

W. R. Griswold

W. 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 June 2, 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 ☐

Was Leased on option to Larson Industries in 1961 They did not Produce any ore, Lease option expired on Mar 1 1964 A.P.S.

2. Since June 2, 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
None	None	

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

Type	Quantity		Estimated Grade	Location
Ore	None	Tons	—	—
Concentrates	None	Tons	—	—
Other	None	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
None	None	

Submitted by:

Name A P Smothers Title Owner

Address 1216 N St Lewiston Idaho Date 3/30/64

4511

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

JUL 5 1962

Memorandum

To: Acting Field Officer, Region I

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

Subject: DNSA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract Idm-81078

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 7-3-62

cc:
Docket
Director's Reading File
CA & A Division
Fiscal Section

43683

4266

RECEIVED JUL 3 1962		
DATE	INITIALS	CODE
		120
		220

So. 157 Howard Street
Spokane 4, Washington
July 3, 1962

Mr. Ken McGriffin
438 S. Main Street
Box 1856
Salt Lake City 10, Utah

Dear Mr. McGriffin:

An exploration contract between DMEA and Squaw Creek Mining Company was assigned to Idaton, Inc., and was in effect during 1957 and 1958.

Reports and maps prepared by Government geologists and engineers for DMEA are of a confidential nature and cannot be released to the public. However, all the factual data relative to this contract were furnished us by the Operator, and therefore I suggest that you write to

Mr. Richard J. O'Brien, Secretary
Idaton, Inc.
322 Sheldon Avenue
Houghton, Michigan.

I regret I cannot be more helpful to you.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

DRMacLaren:my
cc: OME w/cy incoming
Reading copies to:
Nolan
Hobbs
Guild

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

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 6 1962

DATE	INITIALS	CODE
6/6		800
6-6		100
6-18		110
	Granted	500
	Murphy	500
		220

MAY 21 1962

Re: DMEA-4366 (Fluorspar)
Idaton, Inc. (Assignee)
Smothers Property
Idaho County, Idaho
Contract Idm-E1078

Mr. William J. Walker
Office of the Sheriff
Missoula, Montana

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,

W. 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 October 26, 1959, 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 ☐

Re Passed from Idaton

2. Since September 8, 1959, 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 A P Swotkey Title Owner

Address 312 Snake River Ave Lewiston Idaho Date June 2 1962

4511

OFFICIAL FILE COPY O. M. E. RECEIVED FEB 29 1960		
DATE	INITIALS	CODE
2-29	gad	2V0
4/29	[illegible]	800
8/7	[illegible]	500
		225

So. 157 Howard Street
Spokane 4, Washington
February 23, 1960

Mr. Charles R. Sewell
Geology Department (E-1408)
The Dow Chemical Company
Texas Division
Freeport, Texas

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Incorporated (Assignee)
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Sewell:

This is in reply to your letter of February 16 addressed to W. C. Prinz (Prinz) in which you request that we lend you any report or other information regarding the Big Cliff claims and DMEA work thereon.

Reports written by Government geologists and engineers for DMEA are of a confidential nature and cannot be released to the public. However, all the factual data relative to the DMEA work was furnished us by the Operator and we therefore suggest that you write to

Mr. Richard J. O'Brien, Secretary
Idaton, Inc.
322 Sheldon Avenue
Houghton, Michigan

Although we cannot open our files to you, we would be glad to discuss the geology of the area with you should you be in Spokane.

Sincerely yours,

D. R. MacLaren
Alternate Acting Executive Officer
OME Field Team Region I

cc: OME(2) w/2 cys incoming
USBM(2) " " "
Prinz w/cy incoming
Director's Reading File

THE BOU

RECEIVED		
DATE	INITIALS	
2-29	gad	

February 16, 1960

Mr. W. C. Printz
U. S. Geological Survey
2157 Howard St.
Spokane 4, Washington

Dear Mr. Printz:

In the course of a geological reconnaissance program in Idaho and Montana, I contacted Mr. A. P. Smothers of Shoup, Idaho, regarding a fluorspar property known as the Big Cliff claims located in Idaho County near the junction of Sabe Creek with the Salmon River (T. 25 N., R. 12 E.). Mr. Smothers informed me that a D.M.E.A. financed exploration program under the direction of yourself and Mr. W. M. Romischer was completed on the property in 1957(?) but he did not have any information on the results or the D.M.E.A. contract number. I would appreciate any report or other information regarding this property which you could lend me.

Thank you for your attention.

Very truly yours,

Charles R. Sewell
Geology Department
B-1408

md

OFFICIAL FILE COPY
O. M. E.
RECEIVED FEB 13 1959

DATE	INITIALS	CODE
2/16	C	220
2/17	Hirsh	600

So. 157 Howard Street
Spokane 4, Washington
February 10, 1959

Mr. M. E. Volin
Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Earl:

In reply to your letter of January 15, 1959, the matter of the payment of the assaying and transportation charges was discussed at some length with the DMEA (now OME) office in Washington. As a result of this discussion it was decided that according to the contract the assaying and transportation charges for the seven samples you claim could not be allowed because they were from below the depth that the contract authorized the hole to be drilled.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

cc: WF(2) w/cys incoming
[illegible](2)
[illegible]
[illegible]rine

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 2 1959

DATE	INITIALS	CODE
11-2	gad	220
11/2	[illegible]	800
11/3	[illegible]	500
		225

1201 N. Division St.
Spokane 2, Washington

October 28, 1959

Mr. W. J. Walker
Office of the Sheriff
Missoula, Montana

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Incorporated (Assignee)
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Walker:

This is in reply to your letter of October 26, 1959, requesting proof of drilling at the referenced property, and the results of such drilling.

Squaw Creek Mining Company did some diamond drilling at the property prior to assignment of the contract to Idaton, Inc. Mr. John Ecklesdafer was manager for Squaw Creek at the time and no doubt your files contain the results of such drilling. Idaton, Inc., Assignee of the contract, continued this drilling and the bulk of the data in our files was furnished by them.

Data and reports on DMEA projects that are in our files are of a confidential nature and we are prohibited by law from releasing this material to the public.

Inasmuch as all the data on the results of the project was furnished us by Idaton, Inc., and since they have no further interest in the property, they may have no objection to releasing this material to you.

We suggest that you write to:

Mr. Richard J. O'Brien, Sec.
322 Sheldon Avenue
Houghton, Michigan

requesting that they furnish you with the data you wish.

Sincerely yours,

Wing G. Agnew
Acting Executive Officer, OME
Field Team, Region I

cc: OME (2) Docket
USGS (2) Df
USBM (AD)

COPY COPY

OME-12)

W. J. Walker
Sheriff

Joe Young
Under Sheriff

COUNTY OF MISSOULA
STATE OF MONTANA
OFFICE OF THE SHERIFF

MISSOULA, MONTANA

Monday, Oct. 26, 1959

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I, NW Dist.

Re: Docket #DMEA-4366 (Fluorspar)
Smothers Property
Idaho County, Idaho
Contract #IDM-E1078

Dear Sir,

I am the president of Squaw Creek Mining Company which assigned a DMEA arrangement to Idaton, Inc. of Houghton, Mich.

Since Idaton has forfeited their contract with us and are out of the picture, I would appreciate getting some sort of proof that they did do some drilling and the results thereof.

I am still negotiating on the property and any help you could give me would be greatly appreciated.

Thank you.

Signed: WILLIAM J. WALKER

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 2 1959

DATE	INITIALS	CODE

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 28 1959

DATE	INITIALS	CODE
9-28	gad	VVO
9-28	det	~~FOO~~
		225

OME

No. 157 Howard Street
Spokane 4, Washington

September 22, 1959

Mr. A. P. Smothers
Smothers River Trips
Shoup, Idaho

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Incorporated (Assignee)
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Smothers:

This is in reply to your letter of September 15, 1959, requesting us to release to Mr. John Taber all maps, geologic, and engineering data regarding the DMEA work done on the Big Cliff and other claims in Idaho County, Idaho.

Such data as we have in our files was furnished us by Squaw Creek Mining Company and Idaton, Incorporated, successive operators under the DMEA contract. Reports written by Government engineers and geologists is of a confidential nature and cannot be released to the public.

Since all the factual data was furnished us by the operator, we suggest that you write to

Mr. Richard J. O'Brien, Secretary
Idaton, Inc.
322 Sheldon Avenue
Houghton, Michigan

requesting that they furnish you with the data you wish.

Although we cannot give any of the requested data to Mr. Taber, we discussed the geology of the property with him when he visited the office recently.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team Region I

cc: John W. Taber, Gen. Mgr.
Cummings-Roberts Darby
Fluorspar Operations
Darby, Montana

OME (2)
USBM (2)

OFFICIAL FILE COPY
O. M. E.
RECEIVED FEB 2 1959

DATE	INITIALS	CODE
2 2		220
"		110
"		800
		680

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1958

Date of report: January 2, 1959

Operator: Idaton, Inc., assignee of Squaw Creek Mining Co., 322 Shelden Avenue, Houghton, Michigan

Mine name: Smothers Property

County and State: Idaho County, Idaho

Docket number and commodity: DMEA-4366 (fluorspar)

Contract number: Idm-E1078

Date of contract: April 12, 1957

Date of certification: November 20, 1958 (in Term. Agreement)

Expiration date of royalty payments: April 12, 1968

Total amount of contract: $10,000.00

Total expenditures under contract: 7,264.00

Amount of Government participation @ 50%: 3,632.00

Royalty payments this period: none

Previous royalty payments: none

Total royalty payments to date: none

Percent of Government participation repaid: none

Royalty due on production to date: none

Royalty remarks: none

	Tons	Analysis
Original estimate of DMEA reserves (from Field Team final report) Mines ___ Survey ___ Joint ___	Field Team final report in preparation	
Revised estimate of DMEA reserves (Field Team) Mines ___ Survey ___ Joint ___		
Increase of reserves by work performed subsequent to DMEA project work:	none	
Production of DMEA ore (this period):	none	
(previous):	none	
(to date):	none	
Production of Operator's ore found subsequent to DMEA work (this period):	none	
(previous):	none	
(to date):	none	

Percent of revised reserves mined:

Production remarks: The property is inactive.

Investment data: none

Signed: S. W. Zoldok (Engineer)

Distribution:
OME (4)
USGS (2)
USBM (AD)
USBM (2)

IDATON, INC.
(IDAHO HOUGHTON)
322 SHELDEN AVENUE
HOUGHTON, MICHIGAN

DIRECTORS
JOHN W. RICE
HARRY COMODAS
SAM COMODAS
M. EARL VOLIN
JOSEPH J. DONNELLY
JOHN G. ECKLESDAFER
RICHARD J. GIBSON

cc
Mee
USOM cc
AD cc
OMT

OFFICIAL FILE COPY
O. M. E.
RECEIVED FEB 13 1959
DATE | INITIALS | CODE

January 16, 1959

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I
U. S. Department of the Interior
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Al:

I have been asked by the Idaton group to check the payments made under the captioned contract. Recently, when I was in Washington, I had a chance to discuss with Larry Houk the disapproval of our claim for all of the 444.5 feet drilled in hole 2A. He was adamant about allowing the change order which would permit payment of the additional 94.5 feet drilled in excess of the 350 feet authorized in the contract. We consider that DMEA is taking advantage of a tenuous technicality in not allowing payment for the extra footage necessary to reach the mineralized portion of the vein; however, I realize that nothing will be gained by arguing this point further.

I call your attention to items 2 and 3 under the fixed unit costs authorizing analysis of 50 drill hole samples at $6 and transportation of drill hole samples at $1. The voucher showed that payment was allowed for analysis and transportation of only two drill hole samples whereas the final report clearly gives the analysis of two samples from hole 1 and seven samples from hole 2A. It is the wish of the Idaton group that an additional claim be made for the analysis of seven samples at $6 and transportation of seven samples at $1, a total of $49.

I see that you will have a part in the program of the 1960 AIME annual meeting in New York City. I am trying to get together a program for pyrolysis and agglomeration. Maybe I'll see you there.

With best personal regards.

Sincerely,

M. E. Volin, Director
Institute of Mineral Research

MEV:bec

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

November 12, 1958

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

DATE	INITIALS	CODE
1/26	C	220
"	[illegible]	110
1/27	[illegible]	800
		600

MEMORANDUM

To: OME Field Team, Region I

From: Wm. M. Romischer, Mining Engineer, U. S. Bureau of Mines

Subject: Final inspection report, Docket No. DMEA-4366 (fluorspar) Idaton, Inc., assignee of Squaw Creek Mining Company, Idaho County, Idaho, Contract No. Idm-E1078

My last inspection of this property was made on August 1, 1957.

At the time of the inspection, two of the three approved (DMEA) diamond drill holes (Nos. 1 and 2) had been partly drilled but neither hole had penetrated the fluorite zone. Both the above holes were collared at approved drill sites. Hole No. 1 was drilled for 306 feet and hole No. 2 for 260 feet for a total footage of 566. No further drilling under the contract was done during the year 1957. DMEA hole No. 3 was never drilled.

Hole No. 1 was temporarily abandoned because of pumping difficulties, and the bit was lost in hole No. 2 at 260 feet. The Operator drilled some holes on his own account. DDH-3 (non-DMEA) was drilled between holes No. 1 and 2 about 80 feet higher in altitude. This hole was drilled to completion at a depth of 138 feet on an inclination of $-14\frac{1}{2}$ degrees. The fluorite zone was encountered between 106 and 119 feet. Another hole, DDH-4, was collared at the same altitude as hole No. 3 but east of hole No. 1. Hole 4 was drilled 97 feet on an inclination of -20 degrees and stopped when the core barrel and bit were lost. DDH-4A was collared several feet from hole No. 4 and drilled for a depth of 116 feet on an inclination of -20 degrees.

Contract drilling was resumed May 11, 1958 when hole No, 2A, which is adjacent to hole No. 2 with the same bearing but at a minus 10 degree inclination, was reentered at 80 feet in biotite gneiss. Hole No. 2A was drilled from 80 to 445 feet where it was bottomed in the hanging wall in biotite gneiss. It was reported that a highly fractured and altered zone containing quartz and gypsum was encountered from 404 to 427 feet with fluorite occurrence between 404 and 405 feet.

On May 25, drilling was started in hole No. 1 in vein quartz at 306 feet and drilled to 350 feet where the hole was bottomed in biotite gneiss. The hanging wall was penetrated at 342 feet. A few stringers of fluorspar were cut from 338.5 to 340.5 feet.

Mr. Ted Engel, Jr., Idaton consultant geologist, left the property June 1 with all the critical core. The core was taken to Ishpeming, Michigan, for further study and analysis.

An attempt was made to examine the property with Wm. C. Prinz, geologist, U. S. Geological Survey, on June 5, 1958. The trip could not be made because of high water. An examination of the property was made July 25 by Mr. Prinz.

The status of the contract at the time of this report is:

Date of contract: April 12, 1957
Termination date: December 12, 1958
Amount of contract: $10,000.00
Amount spent: none

	Authorized	Completed	
Diamond drilling (AX)	1,000 ft.	700 ft.	1/
Drill hole assays (CaF_2 and SiO_2)	50	9	2/
Transportation of drill hole samples	50	9	2/
Transportation of men and materials 2 boat trips per month, 2 months	$200.00	$200.00	
Transportation in and out of drill equipment	$350.00	$350.00	
Geological mapping, sampling, transportation, assaying, and technical services	$1100.00	$1100.00	

1/ Hole No. 1 - 350 feet; hole No. 2A - 445 feet. Only 700 feet reimbursable. See Selfridge's letter of November 4, 1958 to the Field Team.

2/ See Weissenborn's letter of November 19, 1958 to Certifying Officer.

An acceptable final report and maps were submitted by the Operator. Two drill hole samples from hole No. 1 and 7 from hole No. 2-A were assayed for CaF_2 and SiO_2. Eighty-five samples were assayed for CaF_2 and SiO_2 for the geological mapping.

The termination agreement contains a pseudo-certification.

There was no DMEA production from the property.

The Government has no equity in operating materials, supplies or equipment used on the project.

Distribution: OME (4) USBM (AD)
USGS (2) Docket
Romischer

Wm. M. Romischer

OFFICE FILE COPY
O. M. E.
RECEIVED JAN 19 1959

DATE	INITIALS	CODE
1/19	C	220
1/19	[illegible]	800
		600

So. 157 Howard Street
Spokane 4, Washington

January 14, 1959

Idaton, Incorporated
322 Shelden Avenue
Houghton, Michigan

R : Docket No. DMEA-4366 (Fluorspar)
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Gentlemen:

Enclosed for your information and files is a copy of a Report of Review dated December 9, 1958, for the period June 1957 to August 1958.

The audit disclosed that there is a balance due you of $3,632.00. This amount was scheduled for payment on January 7 and you should have your check by now.

Very truly yours,

A. E. Weissenborn
Executive Officer, OME
Field Team Region I

cc: OME (2)
USBM (2)
USBM(AD)

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 12 1959

DATE	INITIALS	CODE
1/12	C	220
4	AA	110
1/14	EGA	600

1201 E. Division St.
Spokane 2, Washington
December 22, 1958

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 E. Division Street
Spokane 2, Washington

Re: Docket No. DMEA-4366 (fluorspar)
Idaho, Inc.
Southern Property
Contract No. IAm-41078

Dear Mrs. Long:

The work completed under the contract was done to the satisfaction of the Government. The contract was terminated by mutual agreement on November 20, 1958, effective as of August 30, 1958. A final report evaluating the results of the exploration program has been presented by the Operator and accepted by the Executive Officer.

The Government has no interest in supplies or equipment purchased for use on the project.

A pseudo-certification is incorporated in the Termination Agreement.

A final Report of Review dated December 9, 1958 by OME Auditor George Meyer has been received.

As all contract requirements have been met, it is requested that final settlement of our account with the Operator be made.

Sincerely yours,

A. E. Weissenborn, Exec. Officer
OME Field Team, Region I

cc: OME (2)
USGS (2)
Contract Admin. & Audit Div. (2)
Docket

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

OMME JAN 12 1959

Month of FINAL, 1958 Docket No. DMEA Contract No. E-1078
Operator's Name IDATON, INC. Minerals Fluorspar
Address 322 Sheldon Ave., Houghton, Michigan
Contract Amount, $10,000 Government Participation: 50 % Amount, $ ~~10,000~~ 5,000

ITEMS OF COSTS	FOR OPERATOR'S USE: UNITS ~~Monthly~~	Totals Previously Reported	FINAL Totals To Date COST	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1061.5	NONE	$13,289			5600.00
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services		NONE	5491			—
(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	106	NONE	2554			12.00
Transportation of Samples						2.00
~~Payroll Taxes~~ Trans.-men & supplies						200.00
~~Liability Insurance~~						350.00
Transport - Equip.	56	NONE	3360			1100.00
GEOL. MAPPING, ETC.		NONE	4825			
(8) Contingencies (specify):						
TOTALS			$29,519			7264.00

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 8/26/58 *Payee IDATON, INC.
Per Richard J. O'Brien Title Secretary

*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:

$ 36,32.00

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 1/7/59 Vou. No. 2268
(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. E 1078 in accordance with the terms of the contract.

Signature /s/ William M. Kornicker Title Mining Engr. Date 12/18/58

APPROVAL BY ~~DMEA~~ OME EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date Dec. 23, 1958

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.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

JAN 12 1959
O.M.E.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of FINAL 195 8 Docket No. DMEA 4366 Contract No. E - 1078
Operator's Name IDATON, INC. Minerals Fluorspar
Address 322 Sholden Avenue, Houghton, Michigan

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								
Raising								
Shafts								
Winzes								
Drilling: Core				~~$13,289~~ 5,600.00	~~1061.5~~ 700	~~$12.52~~ 8.00	1000	$8.00
Churn								
Auger								
~~Stripping~~ Drill Hole Assays	Ea.			12.00	2	6.00	50	$6.00/ea.
~~Trenching~~ Trench Samples	Ea.			2.00	2	1.00	50	1.00/ea.
Test Pits								
Roads and Trails								
Other (Geological mapping, transport, assaying, etc)				~~$16,230~~ 1100.00			Job	~~$2,000~~ $1100.00
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Trans. - Men & Materials Trip				200.00				
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Trans. - Drill Equip.				350.00				
TOTAL COSTS				~~$29,519~~ $7,264.00				$10,000

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 8/26/58 Operator IDATON, INC.

Per Richard Jobner Title Secretary

REMARKS:

→ 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)

(For Government use only)

/s/ William M. Romescher, 12/18/58

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 872894

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REGION V
c/o Michigan College of Mining and Technology
Institute of Mineral Research, Houghton, Michigan

August 13, 1958

To: Wing G. Agnew, Member, DMEA Field Team, Region I

From: Charles J. Stehlik, Mining Engineer, U. S. Bureau of Mines, Houghton, Michigan

Subject: Drill core recovery, DMEA Contract Idm-E1078, Docket 4366 (fluospar), Idaton Inc., Smothers Property, Idaho County, Idaho

Mr. M. E. Volin has given me access to the subject Contract drill core which you have requested measurement of. The measurements were made (Data attached) and are presented here for what value they may be.

Conditions beond my control have made precise measurement difficult. Foremost is the fact that the original unsplit core is not available. The core I examined had been split, and had been transferred from the original wood core boxes to card-board core boxes. It is virtually impossible to fit the core end to end properly because few pieces are longer than an inch; most are smaller. Some of the core which is largely kaolin has been reduced to fines and the footage blocks have been moved to contain the powdered half core as a total filling of the section. In the 418.5 to 423.5 section of hole 2A this has happened, and I had to rely on weight-specific gravity calculation to ascertain it's probable original length.

As to the question of recovery within the "Mineralized zone" I have made no attempt to show it. I'm not a poor mineralogist, nor a hot one either, but I believe this core will tax the best as to the question of whether it is mineralized or not. I have instead shown the apparent core recovery per pull, the average apparent recovery of the total length represented by the boxes of core available, and the average apparent recovery of the core assayed. (The Operators intent was to assay all the core that is here. But it was later decided to limit assays to that shown. This explains the fact that [illegible] core is split.)

Mr. Volin advised me that the core in question [illegible] remain in his custody and that it will be available to [illegible] for examination at any reasonable time.

Hole No. 1

DMEA Contract Idm-E1078, Docket 4366 (fluospar), Idaton Inc., Smothers Property, Idaho County, Idaho

From	To	feet Drilled	feet Recovered	Percent Recovery	
305	310	5.0	4.6	92.0	
310	315	5.0	5.0	100.0	
315	318	3.0	2.5	83.3	
318	320	2.0	0.9	45.0	
320	323.5	3.5	1.9	54.3	
323.5	-324.5	1.0	1.0	100.0	
324.5	-327	2.5	1.9	76.0	
327	329.5	2.5	1.9	76.0	
329.5	-330.5	1.0	1.0	100.0	
330.5	-333	2.5	1.9	76.0	
333	334	1.0	0.9	90.0	
334	338	4.0	2.5	62.5	
338	340.5	2.5	2.0	80.0	
340.5	-345	4.5	4.5	100.0	
305	345	40.0	32.5	81.2	(Total sample)
338	345	7.0	6.5	92.8	(Assayed portion)

The above recovery was measured on the split core stored at Houghton, Michigan on 8/12/58.

Charles J. Stehlik
Mining Engineer
U. S. Bureau of Mines

H ole No. 2A

DMEA Contraxt Idm-E1078, Docket 4366 (fluorspar), Idaton Inc., Smothers Property, Idaho County, Idaho

From	To	feet Drilled	feet Recovered	Percent Recovery	
338	339	1.0	1.0	100.0	
339	349	10.0	3.0	39.0	
349	359	10.0	4.9	49.0	
359	364	5.0	3.9	78.0	
364	374	10.0	8.0	80.0	
374	378	4.0	4.0	100.0	
378	382	4.0	3.0	75.0	
382	386	4.0	3.3	82.5	
386	389	3.0	2.0	66.7	
389	397	8.0	5.9	73.8	
397	405	8.0	5.6	70.0	
405	407.4	2.4	2.0	83.3	
407.4	-412.4	5.0	4.0	80.0	
412.4	-415	2.6	2.0	76.9	
415	418.5	3.5	3.5	100.0	
418.5	-423.5	5.0	1.5*	30.0	
423.5	-427	3.5	3.4	97.1	
427	430	3.0	2.0	66.7	
430	431	1.0	0.9	90.0	
431	432	1.0	1.0	100.0	
432	437	5.0	2.0	40.0	
437	444.5	7.5	6.0	80.0	
338	444.5	106.5	73.8	69.3	(Total sample)
405	432	27.0	20.3	75.2	(Assayed portion)

* Calculated by weight-specific gravity method of fines

The above recovery was measured on the split core stored at Houghton, Michigan on 8/12/58.

Charles J. Stehlik
Mining Engineer
U. S. Bureau of Mines

July 10, 1961

STATEMENT OF CHEMICAL ANALYSIS
TO IDATCO, INC.

	Iron
Samples from Drill Hole #1 Box 3 130' - 140.5'	19.9
Sample from Drill Hole #1 Box 4 142.5 - 145'	Trace

The above samples were analyzed in triplicate by the Bureau of Standards Method.

Donald H. Rose

STATEMENT OF CHEMICAL ANALYSES
TO IVANON, INC.

Samples from Drill Hole 8A:

	CaO %	SiO2 %	CaCO3 %
395.0'-407.4'	18.6	64.3	0.00
407.4'-412.4'	13.0	78.0	4.01
412.4'-416.0'	13.75	69.7	0.01
416.0'-418.5'	15.2	72.75	0.76
418.5'-420.5'	16.7	62.1	15.65
425.5'-427.0'	10.1	60.6	7.80
[illegible]'-431.0'	16.0	72.0	3.70

The above samples were analyzed in duplicate by the Bureau of Standard Method. A standard was run consecutively as a check.

J. V. Nuno, Bureau Chemist

Thomas V. Lewis, Bureau Director
Laboratory

RECEIVED
AUG 12 1957
U. S. G. S.
SPOKANE, WASH.

MICHIGAN COLLEGE OF MINING AND TECHNOLOGY

HOUGHTON, MICHIGAN

BOARD OF CONTROL

PATRICK H. THORNTON, HOUGHTON, CHAIRMAN
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THOMAS C. SERMON, REGISTRAR
THEODORE PEARCE
DIRECTOR OF COLLEGE RELATIONS

August 7, 19[illegible]

[illegible], Inc.,
[illegible],
[illegible] Park, Idaho.

Sample Assays

Sample No.	% CaF_2	% SiO_2
[illegible]	69.09	30.92
[illegible]	84.14	15.86
[illegible]	51.42	48.58
[illegible]	88.38	11.62
[illegible]	91.52	8.48
[illegible]	76.48	23.52
[illegible]	60.52	39.48
[illegible]	58.66	41.34
[illegible]	66.98	33.02
[illegible]	64.30	35.70
[illegible]	98.62	1.38
[illegible]	89.34	10.66
[illegible]	70.80	29.20
[illegible]	83.64	16.36
[illegible]	[illegible].66	21.34
[illegible]	95.46	4.54
[illegible]	92.38	7.62
[illegible]	[illegible].76	[illegible]
[illegible]	72.86	27.14
[illegible]-1	76.08	23.92
[illegible]-1	63.60	36.40
[illegible]-2	46.46	53.54
[illegible]-1	73.08	26.92
[illegible]	76.48	23.52
[illegible]-1	80.14	19.86

August 7, 1957

Sample Assays (continued)

Sample No.	% CaF_2	% SiO_2
H_1-1	89.92	10.08
I_1-1	35.74	64.26
J_1-1	92.32	7.68
K_1-1	17.82	82.18
K_1-2	41.52	58.48
K_1-3	57.85	42.14
K_1-4	86.08	13.92
L_1-1	75.98	24.02
L_1-2	27.54	72.46
L_1-3	23.76	76.24
L_1-4	43.76	56.24
L_1-5	49.90	50.10
L_1-6	76.52	23.48
L_1-7	45.10	54.90
M_1-1	94.62	5.38
M_1-2	97.06	2.94
M_1-3	86.08	13.92
M_1-4	70.42	29.58
N_1-1	79.12	20.88
N_1-2	47.24	52.76
S_1-1	77.86	22.14
Adit	86.08	13.92
1-Str.A	95.72	4.28

M E Volin

M. E. Volin, Director,
Michigan Bureau of Mineral Research

RECEIVED
AUG 1 2 1957
U. S. G. S.
SPOKANE, WASH

MICHIGAN COLLEGE OF MINING AND TECHNOLOGY
HOUGHTON, MICHIGAN

BOARD OF CONTROL

[redacted]

July 24, 1957

Idaton, Inc.,
Box 101,
North Fork, Idaho.

Sample Assays

Sample No.	% CaF_2	% SiO_2
A_1-1	81.63	18.37
A_1-2	85.24	14.76
A_1-3	98.15	1.85
A_1-4	92.34	7.66
B_1-1	38.86	61.14
B_1-2	53.44	46.56
B_1-3	96.87	3.13
B_1-4	82.52	17.48
C_1-1	33.36	66.64
C_1-2	83.20	16.80
C_1-3	81.15	18.85
C_1-4	86.66	13.34
C_1-5	43.50	56.50
D_1-1	26.34	73.66
D_1-2	95.15	4.85
D_1-3	96.39	3.61
E_1-1	67.17	32.83
E_1-2	81.04	18.96
E_1-3	78.46	21.54
E_1-4	90.35	9.65
E_1-5	73.28	26.72
O_1-1	87.23	12.77
O_1-2	99.23	0.77
O_1-3	90.04	9.96
O_1-4	48.96	51.04
O_1-5	26.73	73.27

[illegible], 1957

[illegible], Inc.,

Sample Assays (continued)

Sample No.	% CaF_2	% SiO_2
[illegible]-1	68.48	31.52
[illegible]-2	86.61	13.39
[illegible]-3	75.77	24.23
[illegible]-4	80.06	19.94
[illegible]-1	80.22	19.78
[illegible]-2	87.66	12.34
[illegible]-3	74.43	25.57
[illegible]-4	81.00	19.00
[illegible]-5	85.66	14.34
[illegible]-1	85.02	14.98
[illegible]-2	94.81	5.19

M. E. Volin

M. E. Volin, Director,
Michigan Bureau of Mineral Research

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 16 1958

DATE	INITIALS	CODE
12/16	C	220
12/16		600

December 11, 1958

Mr. George C. Selfridge, Chairman
Operating Committee, OME
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

This will acknowledge your letter of December 2, 1958, concerning the authorization for the cost of assaying seven samples from DDH-2A from between 405.0 and 431.0 feet.

The contract is specific in limiting the drilling to a depth not to exceed 350 feet. It is not specific regarding the sampling; it merely states that 50 drill hole samples are to be assayed for CaF_2 at a cost of $6.00 per assay. Since the object of the contract was to obtain information concerning content of CaF_2 in the fluorite vein in depth, it seemed to us that DMEA would be justified in contributing to the cost of assaying samples from the fluorite vein, even though the Government did not contribute to the cost of drilling that portion of the hole from which the samples were taken. The information would be equally as valuable whether the vein was intersected at a depth of 400 feet or 345 feet and the cost of assaying would be no greater, regardless of the depth. Further, it was our opinion that the money spent to drill hole 2A to the 350-foot depth permitted by the contract would be wasted unless the ore zone were assayed and therefore it was to the Government's interest to authorize payment of the assaying. Any other course seemed to us to be technically unsound and uneconomic. Under these circumstances we felt that the payment of the Government's share of the $42 allowed for the assaying of the seven samples in question was amply justified.

Since you have ruled to the contrary, we are instructing the Certifying Officer and the Auditor that this cannot be paid.

By Field Team Region I

A. E. Weissenborn
A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Thomas E Howard
for Wing G. Agnew, Member
U. S. Bureau of Mines

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12/12	G McCarthy	~~800~~
12/12	Talbert	800
12/12	C	220
		600

DEC 11 1958

Via Air Mail

Mr. George Mavor
OME Auditor
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-4360 (Fluorspar)
Idaton, Inc., Assignee
Contract No. Idm-21078

Dear Mr. Mavor:

Your Report of Review covering the referenced project is acceptable and normal distribution is authorized.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers
Contract Administration
and Audit Division

GMcCarthy/GMcC
December 12, 1958

cc: Docket
Director's Reading File
Mr. Chambers

8623

OFFICIAL FILE COPY O. M. E. RECEIVED DEC 11 1958		
DATE	INITIALS	CODE
12/11	C	220
		600

1801 N. Division St.
Spokane 2, Washington

December 4, 1958

CERTIFIED MAIL

Mr. George Mayer, OME Auditor
Room 4AD, Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. IBMA-4366 (Fluorspar)
Linton, Inc.
Southern Property
Contract No. IAm-21078

Dear Mr. Mayer:

Enclosed herewith is a memorandum from the Field Team, Region I, requesting final audit of the subject contract. In addition, we are transmitting the following material needed to complete your audit:

1. Contract and Correspondence File
(Includes original contract, Annex I, Assignment of Contract, Exhibit "K", Amendment No. 1, and Termination Agreement).

2. Voucher File
(MF-240's and 10hA's, with attachments)

There have been no payments made to the Operator.

Sincerely yours,

Dorothy F. Long
Authorized Certifying Officer

Enclosures

cc: Mr. Chambers
OME (2)
USAE (2)
UKEM (AD)

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 9 1958

DATE	INITIALS	CODE
12/9	C	220
12/11	Pouch	600

1201 N. Division St.
Spokane 2, Washington

December 3, 1958

Mr. George Mavor
OMK Auditor
Room 420, Custom House
555 Battery Street
San Francisco 11, Calif.

Re: Docket No. DMEA-4366 (fluorspar)
Idaton, Inc.
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Mavor:

The referenced contract was terminated by mutual agreement on November 20, 1958, effective as of August 30, 1958.

The number of units of work satisfactorily completed by the Operator and accepted by the Field Team are:

	Authorized	Completed	
Diamond drilling (AX)	1,000 ft.	700 ft.	1/
Drill hole assays	50	9	2/
Transportation of drill hole samples	50	9	2/
Transportation of men and materials 2 boat trips per month, 2 months	$200.00	$200.00	
Transportation in and out of drill equipment	$350.00	$350.00	
Geological mapping, sampling, transportation, assaying, and technical services	$1100.00	$1100.00	

1/ Hole No. 1 - 350 feet; hole No. 2A - 445 feet. Only 700 feet is reimbursable. See Selfridge's letter of November 4, 1958 to the Field Team.

2/ See Weissenborn's letter of November 19, 1958 to the Certifying Officer.

The Operator's final engineering and geological report was received on August 29, 1958. This report meets the requirements of Article 5(c) of the contract.

A pseudo-certification is incorporated in the Termination Agreement.

No payments have been made to the Operator.

A Report of Review in lieu of a final audit is in order and requested.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: Mr. Chambers
OME (2)
USGS (2)
USBM (AD)

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/24	Talbert	800
11-25	Chambers	800
11/25	Long	600
11/25	Anderson	600
12/1	Britin	140
12/1	Mayor	140
12/2	Johnson	100
12/3	C	220
		600

12/2 GL 130

DEC 2 1958

Mr. A. G. Weissenborn
Executive Officer
DME Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

INTERIOR DEPT.
NOV 25 1958
SOLICITOR

Re: Docket No. DMEI-4355 (Fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn:

By letter dated November 19, 1958, you advised the Certifying Officer, DME, Region I, that she was authorized to certify for reimbursement the assay costs of seven samples of the core interval of 405.0 to 431.0 feet from DDH-2A of the referenced project.

FROM SOLICITOR

DEC 2 1958

FOR SIGNATURE

The work authorized and described by the contract consists of drilling three diamond core holes "for a distance not to exceed 350 feet each" and related sample assaying. Accordingly, no authority exists for the acceptance by the Government of the costs of any work pertaining to drilling depths in excess of 350 feet. The fact that the Government may have benefited from the assays does not alter the provisions or intent of the contract.

Sincerely yours,

George C. Selfridge
ACTING Chairman, Operating Committee (HB)

cc: Docket
Director's Reading File
Operating Committee
THKiilsgaard
R. B. McDougal
Mr. Chambers
Mrs. Dorothy Long
Mr. George Mavor

APPROVED:

(s) C. J. Barsch (HB)
Member, Bureau of Mines

N. E. Nelson (HB)
Member, Geological Survey

RECEIVED
NOV 25 1958
ASSOC. SOLICITOR
MINERAL RESOURCES

EDTalbert/GMcC
November 25, 1958

8623

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 1 1958

DATE		CODE
12/1	C	220
12/1	4007	800
		600

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

November 28, 1958

Mr. Richard J. O'Brien, Secretary
Idaton, Inc.
322 Sheldon Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc.
Smethers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. O'Brien:

Enclosed are the original and four copies of a proposed termination agreement signed by the Acting Director, Office of Minerals Exploration, for the Government.

If the proposed agreement meets with your approval, please sign all copies, retain the one marked "Operator's Copy," and return the other copies to this office. If it does not meet with your approval, please return all copies with a statement of your objections and we will refer them to Washington for consideration.

As soon as we receive the signed termination agreement we will have an audit of the contract made, after which the funds due you will be released.

Your request for an amendment to drill DDH-2A deeper than 300 feet has been denied.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team Region I

Enclosure (as above)

cc: OME (2)
UHBM(2)
UHBM(AD)
Prinz

EXTRA COPY
O. M. E.
RECEIVED DEC 1 1958

DATE	INITIALS	CODE

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

So. 157 Howard Street
Spokane 4, Washington

November 28, 1958

Mr. Richard J. O'Brien, Secretary
Idaton, Inc.
322 Sheldon Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc.
Smothers property
Idaho County, Idaho
Contract No. Idm-21078

Dear Mr. O'Brien:

Enclosed are the original and four copies of a proposed termination agreement signed by the Acting Director, Office of Minerals Exploration, for the Government.

If the proposed agreement meets with your approval, please sign all copies, retain the one marked "Operator's Copy," and return the other copies to this office. If it does not meet with your approval, please return all copies with a statement of your objections and we will refer them to Washington for consideration.

As soon as we receive the signed termination agreement we will have an audit of the contract made, after which the funds due you will be released.

Your request for an amendment to drill DDH-2A deeper than 300 feet has been denied.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team Region I

Enclosure (as above)

cc: OME (2) ✓
USBM(2)
USBM(AD)
Prinz

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/20	Houk	600
11-20	Chambers	800
11/21	GCS	130
"	Johnson	110
11/24	C	220
		600

600

NOV 21 1958

Mr. A. E. Weissenborn
Executive Officer, OME
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn:

Reference is made to the Field Team's letter of September 18, 1958, recommending termination of the subject contract.

Enclosed are the original and four copies of a proposed termination agreement (with certification by agreement clause), signed by the Acting Director for the Government. Two extra copies are enclosed for the use of the Field Team.

If the proposed termination agreement meets with your approval, present it to the Operator for execution. If any part of this agreement does not have either your approval or that of the Operator, and cannot be amended within your delegated authority, then the original and all copies are to be returned to this office, together with the proposed changes for consideration. Please fill in the effective date of the termination agreement. After execution of the termination agreement, the copies are to be distributed in the usual manner.

Sincerely yours,

Approved:

Richard H. Moe
Member, Bureau of Mines

N. E. Nelson
Member, Geological Survey

George C. Selfridge
ACTING Chairman, Operating Committee

Enclosures 7

LGHouk:gad 11/20/58
Copy to: Dir. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington

November 19, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 24 1958

DATE	INITIALS	CODE
11/24	C	220
11/24	Hand	600

Mr. George C. Selfridge, Chairman
Operating Committee, OME
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Idaton, Inc.
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

In further reference to your letter of October 3, 1958, we are enclosing two copies of a self-explanatory letter dated November 14 from the referenced operator.

Sincerely yours,

Donald R. MacLaren

Donald R. MacLaren
For: A. E. Weissenborn
Executive Officer, OME
Field Team Region I

cc: USBM (2) w/2 cys incoming
USBM(AD) w/1 cy "
Prinz

LAW OFFICES
DONNELLY AND O'BRIEN
322 SHELDEN AVENUE
HOUGHTON, MICH.
TELEPHONE 145

JOSEPH M. DONNELLY
RICHARD J. O'BRIEN

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 24 1958

DATE	INITIALS	CODE

November 1[illegible], 1958

Mr. A. E. Weisenborn, Executive Officer
U. S. Department of The Interior
S. 157 Howard Street
Spokane 4, Washington

RE: DOCKET NO. DMEA-4366 (Fluorspar)
IDATON, INC.

Dear Mr. Weisenborn:

Answering your letter I advise that IDATON, INC. relocated the original 18 claims described in the contract because we wanted to stake out additional claims covering outcrops of fluorspar that were adjacent to the original 18 claims and we also wanted to make doubly sure that all of the claims were properly surveyed, described and recorded since we were investing quite a bit of money. They were recorded in the name of IDATON, INC. because we were claiming our own additional 12 claims (there were 30 claims in all recorded) but it never was the company's intention to claim title to Mr. Smother's original 18 claims. Mr. Smothers had previously recorded those and had superior title to us. Also, we have relinquished any right or title to these claims to Mr. Smothers and are no longer involved in the Smothers-Squaw Creek Mining Company contract. Squaw Creek Mining Company is the present assignee of the option to buy Smother's fluorspar claims.

The 18 claims involved in this DMEA contract are in the name of Smothers but I believe that Squaw Creek Mining Company presently holds an option to buy these and plans to continue in the future in an attempt to develop this property.

I hope this answers all of your questions and that we can expect our DMEA voucher in the near future.

Thanking you, I remain,

Very truly yours,

O'B:G

Richard J. O'Brien

No. 157 Howard Street
Spokane 4, Washington

November 19, 1958

EXTRA COPY		
OMAE		
RECEIVED		1958
DATE		CODE

Mr. George C. Selfridge, Chairman
Operating Committee, OME
Department of the Interior
Washington 25, D. C.

Re: Docket No. IME-4366 (Fluorspar)
Idaton, Inc.
Southern property
Idaho County, Idaho
Contract No. Idm-21078

Dear Mr. Selfridge:

In further reference to your letter of October 3, 195., we are enclosing two copies of a self-explanatory letter dated November 1. from the referenced operator.

Sincerely yours,

Donald E. Maclaren
For: A. S. Weissenborn
Executive Officer, OME
Field Team Region I

cc: USBM (2) w/2 cys incoming
USBM(AD) w/1 cy "
Prime

Cyrent 800

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 24 1958

DATE	INITIALS	CODE
11/24	C	220
11/25	[illegible]	600

South 157 Howard Street
Spokane 4, Washington

November 19, 1958

Mrs. Dorothy Long, Certifying Officer
OME, Region I
1301 N. Division Street
Spokane 2, Washington

Re: Docket No. DMEA-4366 (fluorspar)
Idaton, Inc., Assignee
Southern Property
Idaho County, Idaho
Contract No. Idm-K1078

Dear Mrs. Long:

The Operator under the cited contract transported and had assayed 7 samples from DDH-21. These samples covered the core interval from 405.0 to 431.0 feet. Although the Government did not participate in the drilling beyond the 350-foot point, the information obtained by sampling is invaluable in appraising the results of the exploration.

The Government benefited by this work and you are authorized to certify these samples for reimbursement.

Sincerely yours,

A. R. Weissenborn
Executive Officer
OME Field Team, Region I

cc: OME (3)
USBM (2)

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 14 1958

DATE		CO
11/14	C	220
11/19	[illegible]	800
		600

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Office of Minerals Exploration
So. 157 Howard Street
Spokane 4, Washington

November 10, 1958

Mr. Richard J. O'Brien, Secretary
Idaten, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. IMEA-1360 (fluorspar)
Idaten, Inc.
Smothers property
Idaho County, Idaho
Contract No. Ida-E1078

Dear Mr. O'Brien:

This is in reply to your letter of November 5, 1958.

During the processing of your voucher we have encountered some difficulties which we have had to refer to Washington. We are awaiting a reply to these questions.

Washington has asked us to advise them why Idaten relocated the original 18 claims described in the contract and renamed and re-recorded them in the name of Idaten, Inc. They also wish to know if Idaten, Inc., Squaw Creek Mining Company, or the owners control the property at the present time. Any information you can give us so that we can answer these questions will be greatly appreciated.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team Region I

cc: OME (3)
USBM (2)
USBM(AD)
Prins

Rec
OL
USAM cc
AD cc
OME

LAW OFFICE
DONNELLY AND O'BRIEN
322 SHELDEN AVENUE
HOUGHTON, MICH.
TELEPHONE [illegible]

JOSEPH M. DONNELLY
RICHARD J. O'BRIEN

November 5, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 14 1958

DATE	INITIALS	CODE

Mr. A. E. Weissenborn,
Executive Officer, DMEA
U. S. Department of Interior
[illegible] Street
[illegible] Washington

RE: DOCKET [illegible] DMEA 4300 [illegible]
[illegible]

Dear Mr. Weissenborn:

We [illegible] kindly advise the status of our application for funds under captioned DMEA contract in the amount of approximately $4,200.00.

Kindest wishes to yourself and the members of your staff I met while out in Spokane.

Very truly yours,

IDATON, INC.

Richard J. O'Brien
Secretary

O:m

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 12 1958

DATE	INITIALS	CODE
11/12	C	220
11/12	[illegible]	600

November 10, 1958

Mr. George C. Selfridge, Chairman
Operating Committee, OME
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (fluorspar)
Idaton, Inc., Assignee
Smothers property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

We have received your letter of November 4, 1958, concerning the referenced project and will proceed to certify payment as you outline.

Will you please send us the Termination Agreement mentioned in your letter of October 3, 1958, so we can have a final audit made and close out this project.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, OME
Field Team Region I

cc: USBM (2)
USBM(AD)
Prinz

OFFICIAL FILE COPY

Date	Surname	Code
11/4	Houk	600
11-4	Chamber	800
11/4	[illegible]	130
11/4	Johnson	100
11/5	C	2200
		600

DMEA Form 7
(12-56)

600

NOV 4 1958

. E. Weissenborn
ntive Officer, OME
d Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn:

Reference is made to your letter of October 27, 1958, again recommending payment for the 95 feet of drilling in Hole #2A in excess of the 350 feet maximum. We have, after careful study of the facts presented, decided not to amend the contract.

We do not believe steepening Hole #2A, "To avoid difficulties encountered in Hole #2" was necessary. According to the Operator's final report worn out and insufficient equipment, inexperience of the drill crew, and the inexperience and lack of judgment of the supervisor were the causes of the drilling difficulties. Other acts that contributed to the poor record of the Operator's performance were removal of critical core, core storage in sacks, no monthly narratives, questionable recovery in the ore zone and failure to drill Hole #3.

art 2(a) of contract?

art 5(a)?

If you consider that the work performance meets the specifications of the contract, you may certify payment for the authorized and verified portions of the drilling, subject to audit.

Sincerely yours,

George C. Selfridge
(es)
Chairman, Operating Committee

Approved:
Richard H. Mote
(es)
Member, Bureau of Mines

M. E. Nelson
(es)
Member, Geological Survey

LGHouk:gad 11/4/58
Copy to: Dir. R. File
Operating Committee
Mr. Kiilsgaard
Mr. McDougal, 3522
Mr. Houk

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington

October 27, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 29 1958
DATE | INITIALS | CODE
10/29 | C | 220
10/30 | Hawk | 600

Air Mail

Mr. George C. Selfridge
Chairman, Operating Committee, OME
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (fluorspar)
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Selfridge:

This is in further reference to our letter of September 18, 1958, and to your reply of October 3 regarding winding up the Idaton contract.

You state that had Hole 2-A been drilled according to specifications, no amendment would have been necessary and therefore you can find no justification to amend the contract. As we interpret this statement, we can pay for the 350 feet authorized in the contract but not for the additional 95 feet required to penetrate the vein. We urge you to reconsider this decision. The location specified in the contract for Hole 2 fell on a steep slope; good sense and good engineering practice demanded that it be moved a short distance down hill to a more easily accessible site at the toe of the slope, and the change had the Field Team's approval. By changing the inclination of the hole from minus $10\frac{1}{2}^{\circ}$ to plus $1\frac{1}{2}^{\circ}$ the distance to be drilled remained essentially the same. At 254 feet the core barrel sheared off and could not be recovered. After an unsuccessful attempt was made to bypass the stuck core barrel by wedging, Hole 2 was abandoned and Hole 2-A was drilled from the same site. To avoid similar difficulties, Hole 2-A was drilled at an inclination of minus 10°. It appears to us to be a reasonable field decision. The suggested amendment is justified by (1) the departure from contract specifications was made necessary by field conditions and (2) it was to the Government's advantage to continue the hole until the vein was intersected. Had the hole been stopped short of its objective no useful information would have resulted.

We do not know why Idaton deemed it necessary to relocate all the claims. Although this is getting outside our field of competence, it seems to us questionable that the new locations would supersede the original ones. According to the agreement between Idaton and Squaw Creek Mining Company, Idaton agrees to keep the claims in good order and upon any failure to comply with the terms of the agreement the claims revert back to the seller. This would seem to protect the seller against any conflicting locations made after the date of the agreement.

By Field Team Region I

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: USBM (2)
USBM(AD)
Prinz

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

September 9, 1958

Resume of Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

6/29/56 Received application 6/12/56 in Region I, By letter dated 6/26/56 recommended contract without field investigation. Applicant's inferred reserves 300,000 tons 86% Caf2.
7/2/56 USGS memo "refer to Field Team".
7/16/56 USBM memo "refer to Field Team".
7/23/56 Referred to Field Team, Region I.
7/23/56 Advising Applicant of field referral and requesting three bids for diamond drilling.
8/27/56 Field Examination Report, 8/20/56, from Region I, compiled without field examination, and recommending approval of application in the amount of $10,365.15 with Government's share at 50% or $5,182.57. Three bids for diamond drilling are also enclosed.
9/5/56 USGS concurs in the Field Team's recommendation.
9/6/56 Region I letter recommends any additional ground acquired by Applicant be added to Annex II of the Contract.
9/10/56 USBM concurs in the Field Team's recommendation.
10/3/56 Legal states E. C. Ecklesdafer must submit an Owner's Consent to Lien.
10/9/56 Operating Committee states we are reluctant to write contract because: Difficult access to area. High cost of drilling ($7.83 per ft.). Past results with small company drilling. Requests the following information: Location, direction, inclination, depth of penetration and assay character of vein drilled in 1955. Requests copy of Denver Equipment Co. ore tests if Squaw Creek ore. Information on additional ground, list of claim names, book and page of recording. Indicate owner of diamond drilling outfit, size and make. Will Thomas J. Herron supervise project while still a Bureau of Mines employee. Explain why only 20 ft. of drilling per day. It is only half of average.
10/19/56 Region I requests Applicant to furnish answers to Operating Committee's letter of 10/9/56

12/3/56 Applicant furnishes information requested 10/19/56. No assays were made on drill core. Results of J. G. Ecklesdafer's tests will be available June,1957. No additional ground staked since June 1956. Thos. J. Herron may not be available. If not, Robert D. R. McChesney will supervise. T. D. French of Wallace, Idaho, owns drill, "Christensen SI", capacity 1000 ft. Only 15 ft./ day drilling may be accomplished due to moving drill from hole to hole, roads and trails may not be ready, time losses due to breakdowns.

12/20/56 Field Team considers drilling costs ($7.83) reasonable.

1/23/57 Letter to Mr. and Mrs. A. P. Smothers re good standing of Purchase Agreement.

1/25/57 To Field Team requesting the following information: (1) What is nature of purchase agreement of drill, age, condition, and present market value. (2) Experience and background of supervisor should be furnished as well as drillers and other personnel. Will personnel be available next June? (3) One boat trip for job should be sufficient. (4) How many shifts per day drilling? (5) Please furnish copy of A.S.& R. map correlating 1956 work. (6) Austin P. and Florence V. Smothers Owner's Consent to Lien should be furnished also Owner's Consent to Lien by E. C. Ecklesdafer.

1/31/57 Mr. Weissenborn, Region I, telephoned Mr. Selfridge re answering Operating Committee's letter of 1/25/57.

1/31/57 Region I answers Operating Committee's letter of 1/25/57 as follows: (1) T. D. French owns drill and Region I does not have copy of purchase agreement. (2) McChesney will;supervise work. Cannot start work until river is free of ice, may be June. (3) Two boat trips a month is necessary. (4) One shift is contemplated. (5) Map No. 2 of Plate 1 is a copy of A.S. & R. map. Washington requested Owner's Consent to Lien from Mr. and Mrs. Smothers 1/31/57 and Field Team thinks it wiser for Washington to request OCL on new form.

2/27/57 Letter to Ernest C. Ecklesdafer requesting OCL.

2/27/57 Letter to Mr. and Mrs. Austin P. Smothers requesting OCL on new form. Washington is reluctant to grant assistance until status of purchase agreement is received.

3/1/57 A. P. Smothers verifies purchase agreement of 5/13/55 in good standing, although E. C. Ecklesdafer owes $210.00 labor and services for August 1956.

3/5/57 Rec'd. OCL from E. C. Ecklesdafer.

3/27/57 Idaton, Inc., adequately financed, wants to take over contract if quicker, assign contract and then apply for additional work. Region I suggests contract be processed and assigned to Idaton, Inc.

4/10/57 Telegram from Region I inquiring as to status of contract.

4/12/57 Teletype to Region I, contract mailed today.

4/12/57 Operating Committee's letter to Region I transmitting contract. OCL enclosed for A. P. and Florence V. Smothers signatures before contract is signed. Squaw Creek must request contract be assigned to Idaton, Inc. Idaton, Inc. should request the Government to approve assignment. Advise Applicant that geologic mapping called for in contract is considered a unit of work and if map does not meet contract requirements no payment will be made for the job.

4/17/57 Region I transmits sample copy of contract to Squaw Creek with instructions on assignment.

4/17/57 Region I sends sample copy of contract to Idaton, Inc. with instructions on assignment.

5/3/57 Field Examination Report (visited 4/28 and 29/57)to evaluate for additional work -- drifting on vein.

5/7/57 Idaton, Inc., makes formal request for assignment of contract.

5/14/57 Field Team to Idaton, Inc., stating Squaw Creek has not returned copies of contract.

5/14/57 Field Team requests Squaw Creek to return contract.

5/20/57 Field Team rec'd. copies of contract executed by Squaw Creek and Assignment of contract to Idaton, Inc.

5/23/57 Contract Idm-E1078, (dated 4/12/57) rec'd from Region I together with three copies of Assignment request and one copy of purchase agreement dated 4/30/57 between Idaton, Inc. and Squaw Creek. Region I recommends contract be assigned to Idaton, Inc.

5/22/57 Idaton, Inc.'s Attorney requests forms to make application for additional work. $40,000.00 requested.

5/28/57 Region I forwards Idaton, Inc. five copies of MF-103, Application forms, stating assignment being prepared in Washington. Questions why Wm. J. Walker signed contract as President of Squaw Creek Mining Company.

5/31/57 Idaton, Inc., Attorney, advises Wm. J. Walker is President of Squaw Creek Mining Company and John G. Ecklesdafer is President of Idaton, Inc., and assignment should be forwarded to Wm. J. Walker for execution.

6/13/57 Assignment of Contract, Assignee's Acceptance, and Government's Consent forms sent to Region I for execution.

6/18/57 Assignment forms forwarded by Region I to Wm. J. Walker, President of Squaw Creek Mining Company.

6/25/57 Region I sends letter from John G. Ecklesdafer; letter from Michigan Draft Board; and Region I's reply to Ecklesdafer re deferment and submitting approval from Washington of a DMEA contract.

7/1/57 Memo to Administrator from Mr. George C. Selfridge, Special Assistant, re telephone call from Region I on 6/25/57, and John G. Ecklesdafer's Draft Board.

7/3/57 Administrator certifies DMEA contract to Squaw Creek 4/12/57 and presently being assigned to Idaton, Inc., and returns draft board's letter of 4/26/57 to John C. Ecklesdafer.

7/23/57 Region I forwards executed assignment of contract to Idaton, Inc.

8/15/57 Interim Inspection 8/1/57. Two ddh partly completed - no fluorspar penetrated. Another ddh not on DMEA contract collared, no fluorspar penetrated.

8/30/57 M. E. Volin, Director, Michigan Bureau of Mineral Research, and Engineering Consultant to Idaton, Inc., re inspection of project for Idaton, Inc.; also copy of letter to Phil Erwin of McClintock Drilling Company re taking over drilling work in lieu of Campbell Drilling Company.

9/6/57 Interim Inspection 7/24/57. 32 hand trenches dug 1200' across vein. 28 sampled. Dddh #1 and #2 partially completed. Bearings and dip not quite in conformity with Plate 1. Ddh #1 -- 306' no vein encountered. Hole abandoned. Ddh #2 -- 260' core from Ddh #1 skeletonized but core not saved from Ddh #2 in same manner. Mr. Ecklesdafer was advised that in the future all core should be stored in boxes.

9/23/57 Operating Committee requests map for location of drill holes and asks Field Team to comment on direction and inclination of Ddh #2.

9/25/57 Region I advises M. E. Volin that all assaying other than drill hole samples are included in $1,100.00 lump sum for map.

9/18/57 Idaton, Inc. (M. E. Volin) to Region I enclosing letter from Thos H. Lentz on assays. Mr. Volin advises future assays will be done by Bureau of Standards method and submits a bill. Fault in performance lies with Ecklesdafer's supervision. Mr. Volin will prepare only final report to serve for completion of contract and payments too.

10/1/57 Region I sends only map received to date, showing location of Ddh #3. Will make recommendations when all data on location and attitude of Ddh #4 and results of ddh 1, 2, 3 and 4 are received. Ddh #2 is lower on slope than anticipated and has Field Team approval. Ddh #1 may require more footage.

10/10/57 Operating Committee advises Region I that Idaton, Inc. is required to submit a monthly narrative of activities, citing contract, Article 5 (b).

10/15/57 Region I advises Mr. Volin of requirements of contract and requests location and bearing of ddh #4 to see if it meets terms of contract.

10/22/57 Interim Inspection Report 9/11/57. No further diamond drilling has been done since 7/24/57. Company will complete ddh #1 and #2. Ddh #3 collared. Ddh #4 collared. Ddh #3 completed to 138 ft. fluorite zone penetrated.

11/19/57 Idaton, Inc., advises Region I that John G. Ecklesdafer resigned as President to enter Army.

11/27/57 Region I acknowledges Idaton, Inc., letter of 11/19/57, and agrees to send all future correspondence to Houghton, Michigan.

11/7/57 Idaton, Inc. (M. E. Volin) advises Region I he is working on report, and has requested decision from Idaton, Inc. directors as to cancelling contract.

2/11/58 Operating Committee advises Region I that completion date expired 12/12/57 and asks if a time extension amendment is necessary. Also asks if the company will seek reimbursement for surface sampling.

2/20/58 Region I sends copy of letter to Idaton, Inc., requesting information for Operating Committee concerning recess, time extension, and reimbursement for surface sampling.

3/11/58 Region I sends copy of letter from Idaton, Inc., Attorney, explaining delay in sending report on last year's work and outlining plans for future. Idaton, Inc., requests a recess from 11/1/57 to 4/15/58, and an extension of time for completion of the work from 12/12/57 to 6/1/58. The Field Team recommends a contract amendment to recess from 11/1/57 to 5/15/58 and extension of completion date from 12/12/57 to 12/12/58.

3/27/58 Operating Committee transmits Amendment No. 1, dated 3/26/58, to Region I for execution. It suspends work from 12/12/57 to 5/12/58, and extends completion date from 12/12/57 to 12/12/58. It also extends royalty repayment period from 10 years to 11 years. The amendment also provides for termination if work is not resumed by 5/12/58 and not completed by 12/12/58.

4/2/58 Region I transmits Amendment No. 1 to Idaton, Inc., and asks whether they will seek reimbursement for surface sampling.

4/17/58 Idaton, Inc., asks if Hole #1 can be drilled over 350 ft. and be paid for. Also asks authorization to start work May 1, 1958. Requests application forms for drifting.

4/25/58 Region I to Idaton, Inc., M. E. Volin, advising them to request an amendment if ddh #1 does not cut vein at 350 ft. Also advised them that Amendment No. 1 has not been returned executed.

5/6/58 Region I to Idaton, Inc. citing need for starting work and executing Amendment No. 1 as contract will be in default and DMEA cannot participate in further work.

5/12/58 Amendment No. 1, dated 3/26/58, executed, received from Region I.

6/5/58 Routine Inspection Report (Bureau of Mines) could not examine property because of high water. Owner of property (Smothers) furnished information. Drilling started 5/11/58. Hole #2 re-entered and 1st 80 ft. saved, intersected 20 ft. of fluorite at 420 ft. bottomed at 450 ft. (not sure of footage). Hole #1 now 350 ft. deep -- bottomed in vein, and a few stringers were cut. Drill site prepared for DMEA ddh #3 (numbered 5). Idaton, Inc., Geologist left 6/1/58 taking all critical core. A study and analysis will be made by Idaton, Inc., then will decide whether to continue or abandon. Drillers left 6/3/58.

6/9/58 Interim Inspection Report (USGS) almost exactly like 6/5/58 report of USBM.

6/19/58 Region I to Earl M. Volin, Idaton, Inc., advising of Region I's promise of inspection before Idaton, Inc., Geologist left but received no call from Geologist and Region I attempted an inspection 6/5/58. Property Owner(Smothers) reported 80 ft. of ddh #2 saved, and hole was drilled 450 ft. with 20 ft. of fluorite cut at about 420 ft. Ddh #1 was stopped in vein material at 350 ft. Idaton Geologist left property 6/1/58 taking all critical core. Drillers left 6/3/58. Exhibit A of contract states Government will not contribute to cost of incomplete hole or hole not producing 80% core recovery. Core not available for inspection. Splits of core could be shipped to Spokane or some arrangement made to inspect core in your Region.

6/26/58 Idaton, Inc., requests an amendment to deepen ddh #2A to 445 ft.

6/25/58 Idaton, Inc. preparing final report. Instead of drilling ddh #2 they re-entered ddh #2A which was not reported and quartz vein was cut at 340 ft., hanging wall found at 427 ft. bottomed at 445 ft. Fluorspar identified only in interval 404 ft. to 405 ft. Core recovery in vein material 79%. Hole #1, Drilling started 5/25/58 in vein at 306 ft. Hanging wall found 342 ft. -- hole stopped 350 ft. A few stringers fluorspar cut and core recovery 87%. Idaton explains Geologist's term of employment was about up and he was advised to return to Houghton, Michigan with cores. Drilling recessed for one week. Assays of ddh #2A showed 15% caf2. Idaton Board of Directors decided to terminate drilling program. Suggest Bureau of Mines representative headquartered in Houghton examine cores.

6/30/58 Region I to Idaton, Inc. Region will have to check core recovery and will send a Bureau of Mines representative to examine.

7/3/58 Region I transmits Idaton, Inc. letter of 6/26/58 requesting amendment. Region I recommends an amendment. Footage should be taken from ddh #3 which probably not be drilled.

7/15/58 Operating Committee to Region I stating request for amendment cannot be acted on until reporting brought up to date verifying work done. Field Team must verify 79% core recovery. Request map to determine if it meets our requirements. Why will ddh #3 not be drilled? Can we certify now? Send your report on termination with comments and recommendations.

7/16/58 Region I agrees Interim Reports 6/5/58 and 6/9/58 should have been a joint report.

7/22/58 Region I to Region V requesting that a Region V man measure core recovery in Houghton, Michigan.

7/29/58 Region I to M. E. Volin, Idaton, Inc., requesting Operator's reports and maps to determine if amendment is justified.

7/29/58 Region I to Operating Committee. Field men on their way to make report (7/24). All section core taken to Houghton, Michigan. Bureau of Mines Engineer at Houghton has been requested to log the core, with attention to percent of core recovery. Region I will send copy of map which was sent to Washington with Field Team letter of October 1, 1957. Hole No. 3, 700 to 800 ft. west of Hole No. 2, may not be drilled. M. E. Volin of Idaton stated over telephone results of ddh #1 and #2 were very discouraging. Assay results from ddh #1 not reported. Hole #2A assayed over 15% CaF_2 over a width of 22 ft. Until Region I receives assays from ddh #1 cannot recommend certification.

8/4/58 To Chas. J. Stehlik, USBM, Houghton, Michigan, from Region I requesting him to check requirements of contract which must be 80% core recovery in the mineralized zone; log the cores and estimate core recovery.

8/12/58 Operating Committee to Region I copy of map sent with Region I letter of October 1, 1957, not acceptable. Hope it possible to make field examination to verify work done.

8/1/58 Interim Inspection Report. Examined 7/25/58. No work being done - drilling equipment removed and no Idaton representative present. Hole #1, S.E. of the hole some AX drill core laid out on an old boat transom, uncovered, appears to have been there sometime probably since last summer, consisting of 9.3 ft. AX gneiss core bearing figures 70, 80 and 120. 5.8 ft. AX quartz core, no legible markers. 10.8 ft. Ax gneiss core legible markers 180 and 250. 15 ft. N.W. of the hole 4.8 ft. of mixed gneiss, quartz and fluorite core AX size is laid out in unmarked wooden core box. Two holes drilled at site No. 2. The latter hole making water (see M. E. Volin's letter 6/25/58), was in part drilled this spring. 25 ft. S.E. of drill site some core stored in cardboard and wooden core boxes. In cardboard boxes appears mixed and poorly marked. Intercepts taken from numbers on ends of boxes, some illegible. All core gneiss and AX size except as noted. Core (ft.) total 69.8. Core in wooden boxes better arranged intercepts marked on wooden spacers, each box labeled Hole No. 2A. All gneiss and AX size except as noted. Core (ft.) total 231.2. Recovery 80' to 338' interval this hole 89.6%. Gneiss medium grained quartz and gray feldspar with 15% biotite. Bleached white to and in some places may grade pale green amphibolite. DDH #2A apparently drilled to 338 ft. Volin's letter 6/25/58 stated 445 ft. 30.7 ft. of poorly marked core found around Hole #1 which is inclusive. Volin stated Hole #1 drilled to 350 ft. DMEA ddh #3 has a drill station cut at site but no hole started. Three non-DMEA holes drilled east of DMEA holes. Hole #3 (not at site of proposed DMEA hole #3) only core at site are a few pieces loose on ground. Two holes drilled 120 ft. S-SE of Hole #3. Core representing 5 to 13 ft. intervals in cloth sacks near drill site. Some intact, others broken and core loose on ground. Some sacks labeled, others have labels missing. Not known which is horizontal and which inclined. Recommendation for certification cannot be made because all critical core has been removed. After results of logs have been sent from Houghton, Michigan, will be in better position to evaluate.

8/26/58 Region I to Operating Committee enclosing two copies of memo from Chas. J. Stehlik, Mining Engineer, Bureau of Mines, and two copies of letter to (Volin) Operator. Region I states Stehlik had difficulty determining from core fragments which portion was mineralized. On the basis of portions Operator had analyzed Stehlik reports 92.8% recovery from Hole #1, and from Hole 2A, 75.2%. Hole 2A statement of chemical analysis in Stehlik report shows assayed portion

405.0 to 431.0 ft. rather than 432.0 ft. as Stehlik shows. For 26-ft. interval 405.0 to 431.0 ft. the recovery 19.3 ft. or 72%. Amount of core recovered from 5-ft. interval 418.5 to 423.5 ft. is questionable. If segment is omitted recovery from remaining 21 ft. in assayed zone would be 17.8 ft. or 84.8%.

Region I recommends if Operator presents satisfactory map and report Volin's (Operator's) figure of 79% core recovery from Hole 2A be accepted as meeting contract requirements.

Enclosure of letter to Operator (Volin) dated 8/22/58 from Region I requesting map and calling attention to contract requirements. Also requesting Operator to save core.

Enclosure of memo 8/13/58 from Chas. J. Stehlik, USBM, on drill core recovery, giving measurements. Original unsplit core not available, and splits had been transferred to cardboard core boxes. Impossible to fit core end to end as few pieces are over one inch. Some core (largely kaolin) reduced to fines and footage blocks moved to contain powdered half core as a total filling of the section. In 418.5 to 423.5 section of Hole 2A this has happened and it was necessary to rely on weight - specific gravity calculation for probable original length. Unable to ascertain mineralized zone recovery. Shows apparent core recovery per pull, average apparent recovery of total length by boxes of core available and average recovery assayed.

Hole #1 -- 81.2% total sample, 92.8% assayed portion.

Hole #2A -- 69.3% total sample, 75.2% assayed portion.

Statement of chemical analysis: Drill Hole #1 Box 3 19.9% CaF_2.
Drill Hole #1 Box 4 trace CaF_2.
Drill Hole 2A High SiO_2, CaF_2 from 13.2 - 18.9.

9/4/58 Region I to Idaton, Inc. acknowledging receipt of map and advising Idaton to have altitudes of each survey point added to tracings and forward four copies. Carbon copy of letter to Region I from Idaton transmitting four copies of report together with maps.

9/18/58 Region I Operating Committee enclosing original and one copy of Operator's Final Report together with five maps & recommending contract be terminated by mutual agreement. Region I also wanted to know if Operator's Final Report is acceptable and if an amendment will be prepared, whether core recovery from Hole 2A meets the contract requirements, if payment can be made for Holes 1 and 2A and the mapping, sampling and assaying. Certification of discovery not considered warranted by Reg. I but have no objection if a pseudo-certification is incorporated in termination agreement.

9/23/58 From Region I to Idaton with copies of letters 9/8 and 9/11 from Idaton stating Region I has sent Idaton's final report to Washington and when Washington has notified that the report and maps are acceptable Reg. I will make final settlement.

10/2/58 Memo to Actg. Director on Justification for denial of amendment to permit payment for 95 feet of drilling beyond the 350 foot maximum set forth in contract.

10/3/58 From Operating Committee to Region I advising we will prepare termination with pseudo certification clause; Operator's final report and maps are acceptable; find no justification to amend contract.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/2	Houk	600
10/3	GCS	130
"	Johnson	110
"	Butterworth	100
10/6	C	220
		600

600

OCT 3 1958

Mr. A. E. Weissenborn
Executive Officer, OME
Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn:

Reference is made to your letter of September 18, 1958, recommending termination of the subject contract by mutual agreement and other questions.

The Operator's Final Report and the maps are acceptable. We will not prepare an amendment to permit payment for the 95 feet of excess drilling in Hole No. 2A. Had Hole No. 2A been drilled according to the contract specifications no amendment would have been necessary and we find no justification to amend the contract.

We will prepare a termination by mutual consent with pseudo certification clause but wish to be advised why Idaton, Inc., relocated the original 18 claims, described in the contract and renamed and re-recorded them in the name of Idaton, Inc. We wish to know if the Idaton, Inc., or the Squaw Creek Mining Company, or the Owners control the property at the present time.

Sincerely yours,

Approved:

Richard H. Mote (GHB)
Member, Bureau of Mines

George C. Selfridge
ACTING Chairman, Operating Committee (GHB)

N. E. Nelson (GHB)
Member, Geological Survey

LGHouk:gad 10/3/58
Copy to: Dir. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/2	Houk	

600

October 2, 1958

Memorandum

To: Mr. C. O. Mittendorf, Acting Director

From: Lawrence G. Houk, Chief, Division of Nonmetallic Minerals

Subject: Justification for denial of request for an amendment to permit payment for 95 feet of drilling beyond the 350 foot maximum set forth in the contract.
Docket No. DMEA-4366-Fluorspar
Idaton, Inc., Assignee
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

1. Had the Operator drilled Hole No. 2A as set up in the contract no amendment would have been necessary. The vein penetration would have been made within the 350 foot limitation. The contract reads: "The holes shall be drilled to cut the downward extension of the mine vein at an approximate depth of 250 feet." Diamond Drill Hole No. 1 cut it at 320 feet and Diamond Drill Hole No. 2A cut it at 360 feet. The Division of Nonmetallic Minerals recommends denial of the request. The Field Team recommends an amendment to pay for this work.

2. The contract required an 80% core recovery in the mineralized zone. The Operator reported 79% recovery in Hole No. 2A. On the basis of an examination of split core the Bureau of Mines reported a 75.2% recovery. The Field Team recommended accepting this recovery as meeting the requirements of the contract.

3. The Operator's final report is acceptable, however, the supervision was poor. The contract called for a map showing: Altitude of all survey points; sample location; assays with the samples; any data pertinent to future exploration of any likely economic deposit, rock type and faults should be mapped but emphasis should be placed upon an economic geologic map acceptable to the Government. The Operator instead supplied five maps.

4. The Operator failed to store all the core in wooden boxes as specified in the contract.

5. The Operator removed the critical core from the property before it could be examined by the Field Team.

6. The Operator failed to provide monthly narratives of the work progress.

7. The field examination report gave 43,000-113,000 tons of indicated and inferred ore and after drilling two holes the Operator reported 28,000 tons of indicated and 56,000 tons of inferred. On incomplete assay data the Field Team gives at least 56,000 tons of 70% CaF_2 of inferred reserves.

8. The Idaton, Inc., Assignee, Operator, relocated the 18 original claims described in the contract, renamed them and re-recorded them. I can find nothing in the Purchase Agreement which gives them the right to do this.

At this time the Field Team recommends no certification but does not object to a pseudo certification in the termination agreement.

Payments may be made under the contract for Hole No. 1 and 350 feet of Hole No. 2 plus payment for the map and geologic work. Although I think we should have insisted upon completion of Hole No. 3 the Company does not want to drill it.

LGHouk:gad 10/2/58
Copy to: Dir. R. File
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1201 N. Division St.
Spokane 2, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 26 1957

DATE	INITIALS	CODE
8/26	Conn	100
8/27	Hank	

August 15, 1957

MEMORANDUM

To: DMEA Field Team, Region I

From: William M. Romischer, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA-4366 (fluorspar)
Idaton, Inc., assignee of Squaw Creek Mining Company,
Idaho County, Idaho, Contract No. Idm-E1078

The property was visited August 1. Mr. John Eckelsdafer, engineer, was present.

Two diamond drill holes (Nos. 1 and 2) on the DMEA project were partly completed. Neither hole had penetrated any fluorspar. The access path and drill site for hole No. 3 had yet to be prepared.

A local datum approximating the high water mark of the Salmon River at the property is used as zero altitude for vertical control in surveys at the property.

The following is information on the diamond drill holes:

Hole No.	Collar altitude	Size of core	Bearing	Dip	Length of hole	Remarks
1	+ 75'	AX	N60° E	-23°	302'	No fluorspar penetrated by hole. Needed pump to continue hole; intend to complete hole.
2	+ 77'	AX	N 35° E	0-1°	260'	No fluorspar penetrated by hole. Bit sheared off at 260 feet. Will have to by-pass bit to continue hole. Intend to complete hole.

Hole No. 2 is collared N. 55° W. and a distance of approximately 150 feet from hole No. 1.

At the time of the inspection the company had collared a diamond drill hole not on the DMEA contract. This hole is collared between DDH No. 1 and 2 at a relative altitude of 149 feet. The hole was drilled 34 feet when engine trouble developed. The engine had to be taken to town for repairs. The hole at the collar dips -12° and strikes N. 72° E. No fluorspar had been penetrated by this hole.

William M. Romischer

William M. Romischer

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Romischer

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/2	Selfridge	100
"	Johnson	110
3	Mittendorf	100
7/3	C	225
7/5	Houk	600

JUL - 3 1957

Mr. John G. Ecklesdafer
Box 101
North Fork, Idaho

Dear Mr. Ecklesdafer:

As requested in your letter of June 19, 1957, to our Spokane office, this is to certify that the Defense Minerals Exploration Administration granted an exploration contract to the Squaw Creek Mining Company on April 12, 1957, which contract is presently in the process of being assigned to Idaton, Inc. Correspondence to date in our files shows that you are active with both companies.

Should you require additional information relating to the contract, we will be glad to furnish it.

Enclosed is your draft board's letter of April 26, 1957, which notifies you of your classification.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure

GCSelfridge/esf - 7/2/57
Copy to: Docket - DMEA 4366
Admr. R. File
FT, REG. I
Mr. Houk
Mr. Selfridge

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/1	[illegible]	110
7/2	[illegible]	100
		225
7/1	[illegible]	

July 1, 1957

Memorandum

To: Administrator

From: George C. Selfridge, Special Assistant

Subject: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Mr. MacLaren telephoned the writer on June 25, 1957, seeking advice in regard to some correspondence that the Field Team had received relating to a request by John G. Ecklesdafer for material to satisfy his Draft Board. Mr. MacLaren explained that Mr. Ecklesdafer wished to furnish his Draft Board with an approval of a Defense Minerals Exploration Administration contract. He also stated that on June 18 the Field Team had mailed an assignment of the contract to the Squaw Creek Mining Company for execution. Mr. MacLaren thought that it might be better that the correspondence be forwarded to Washington for reply, with which the writer agreed.

The docket shows that:

(1) Mr. Ernest C. Ecklesdafer secured control of the property on May 13, 1955, through a purchase agreement from Austin P. Smothers and Florence B. Smothers;

(2) He assigned the property to Squaw Creek Mining Company on November 21, 1955;

(3) The Squaw Creek Mining Company submitted an exploration application on June 12, 1956;

(4) An exploration contract was executed on April 12, 1957;

(5) Control of the subject land was transferred to Idaton, Inc., by an agreement dated April 30, 1957;

(6) Squaw Creek Mining Company submitted an executed assignment dated May 15, 1957, transferring the DMEA contract to Idaton, Inc;

(7) Washington mailed its usual assignment form to the Field on June 13, 1957, for execution, as the assignment submitted by the Squaw Creek Mining Company was not satisfactory, and

(8) The Field Team mailed the assignment to the Operator on June 18, 1957.

While reviewing the docket the writer noted that the Consent to Lien and Subordination Agreement of the Smothers is dated subsequent to the date of the contract.

George C. Selfridge

George C. Selfridge

GCSelfridge/esf
7/1/57

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 27 1957

DATE	INITIALS	CODE
6/27	C	220
		120
		600

Air Mail

June 25, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Dear Mr. Selfridge:

Enclosed is a self-explanatory letter from John G. Ecklesdafer, with enclosure, concerning which I called you this morning, and to which you said you would reply.

Mr. Ecklesdafer is referring to Docket No. DMEA-4366, Contract Idm-E1078, which at the moment is with Squaw Creek Mining Company. An Assignment of Contract which was mailed to Squaw Creek Mining Company June 18, 1957, will, when executed by both parties, transfer this contract to Idaton, Incorporated. The Assignment of Contract has not yet been returned to this office.

Mr. Ecklesdafer is a graduate mining and metallurgical engineer. He prepared a report on the Squaw Creek property which accompanied the application. Since the contract with Squaw Creek Mining Company has been active, he has been superintendent of the operation. According to a letter dated May 31, 1957 from Joseph M. Donnelly, a member of the law firm of Donnelly and O'Brien, Mr. Ecklesdafer is president of Idaton, Inc. He is listed as a director of Idaton, Inc. in the letterhead under which he has written.

There is no doubt that Mr. Ecklesdafer is connected with both the Squaw Creek Mining Company and with Idaton, Inc., but there is considerable doubt that he could properly claim that he, as an individual, has a contract with DMEA. Whether or not he is indispensable to the contracting company would appear to be a matter for it to determine.

When you reply to Mr. Ecklesdafer, will you please return to him for his files the letter from his Draft Board.

Sincerely yours,

Donald R. MacLaren

Donald R. MacLaren
Alternate Acting Executive Officer
DMEA Field Team, Region I, NW Dist.

Enclosures (in dupl.)

cc: USBM

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 27 1957

DATE	INITIALS	CODE

So. 157 Howard Street
Spokane 4, Washington

June 25, 1957

Mr. John G. Ecklesdafer
P. O. Box 101
North Fork, Idaho

Dear Mr. Ecklesdafer:

This will acknowledge your letter of June 19, 1957, in which you request us to certify to your draft board that you have a contract with the Defense Minerals Exploration Administration.

We have forwarded your letter and the enclosure to Washington by air mail for reply.

Sincerely yours,

Donald R. MacLaren
Alternate Acting Executive Officer
DMEA Field Team, Region I, NW Dist.

cc: DMEA (2)
USBM

SELECTIVE SERVICE SYSTEM

MICHIGAN LOCAL BOARD NO. 63
MUSKEGON COUNTY
POST OFFICE
MUSKEGON, MICHIGAN
(LOCAL BOARD OFFICE)

26 April 1957

[illegible]

SS No. 20-63-33-273

John G. Kohlscheiter
1405 College Avenue
Roughton, Michigan

Dear Sir:

Please find enclosed a classification card on which local board has classified you IIA until 1 November 1957.

Please submit evidence to this local board that you have received approval from Washington D.C. of a Bachelor Minerals Engineering Administration contract.

A self-addressed envelope is included for your [illegible]

By direction of the Local [illegible]

OFFICE [illegible] RECEIVED [illegible]		
DATE	INITIALS	CODE

IDATON, INC.

(IDAHO - HOUGHTON)

~~833 SHELDEN AVENUE~~

~~HOUGHTON, MICHIGAN~~ North Fork, Idaho

DIRECTORS

JOHN W. RICE
HARRY COMODAS
SAM COMODAS
M. EARL VOLIN
JOSEPH M. DONNELLY
JOHN S. ECKLESDAFER
RICHARD J. O'BRIEN

June 19, 1957

United States Department of the Interior
Defense Minerals Exploration Administration
So. 157 Howard Street
Spokane 4, Washington

Gentlemen:

I am enclosing a letter from the Mineral Development Board requesting that I furnish them with an approval of a Defense Minerals Exploration Administration contract.

I would appreciate it if you could satisfy their request immediately.

Thank you for your assistance in this matter.

Very truly yours,

Jack Eckleshafer

JE:ac

EXTRA COPY
DMEA
RECEIVED JUN 2

DATE	INITIALS	CODE

RECEIVED
Air Mail
JUN 24 1957
U. S. G. S.
SPOKANE, WASH

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 26 1957

DATE	INITIALS	CODE
6/24	C	220
6/25	[illegible]	800
6/25	[illegible]	600

So. 157 Howard Street
Spokane 4, Washington

June 18, 1957

Mr. William J. Walker, President
Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana

Re: Docket No. DMEA-4366 (Fluorspar)
Smothers Property
Idaho County, Idaho
Contract No. Idm-R1078

Dear Mr. Walker:

In accordance with your request, our Washington office has prepared the enclosed original and six copies of the Assignment of Contract, Assignee's Acceptance, and Government's Consent forms. If it meets with your approval, please sign all copies (as the Assignor) and mail all copies to Idaton, Inc. They will sign all copies as the Assignee and return the Assignor's copy to you, returning the rest of the copies to this office.

You will note that the effective date of the assignment is June 1, 1957. Therefore, vouchers for work performed during the month of June should be signed by Idaton, Inc.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I, NW Dist.

cc: Idaton, Inc.
c/o Donnelly and O'Brien
322 Shelden Avenue
Houghton, Michigan

DMEA (2)
USBM (2)
USBM(AD)
Nickelson

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/11	Houk	600
6-11	Chambers	800
6/12	GCS	130
6/12	Johnson	110
13	Mathewson	100
6/13	C	220
		600

600

JUN 13 1957

Mr. A. B. Weissenborn
Executive Officer, DMEA
Field Team, Region I, N. W.
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Contract No. IGm-E1078

Dear Mr. Weissenborn:

Reference is made to the Field Team's letter of May 23, 1957, requesting that the necessary papers be prepared for the transfer of the subject exploration contract to Eaton, Inc.

We have prepared and enclose the original and six copies of the Assignment of Contract, Assignee's Acceptance, and Government's Consent forms, the last having been signed by the Administrator for the Government with effective date as shown. There are also enclosed two extra copies for the use of the Field Team.

After execution of the assignment, the copies are to be distributed in the usual manner.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Approved:

Frank D. Lamb (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

LGHouk:gad 6/10/57
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

Enclosures 9

8623

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, N. W.
South 157 Howard Street
Spokane 4, Washington

June 12, 1957

Re: Docket No. DMEA-4366-Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Contract No. Idm-E1078

Dear Mr. Weissenborn:

Reference is made to the memorandum of May 3, 1957, from Nickelson and Parsons to the Field Team, Region I, on the evaluation of the subject property for additional DMEA work.

It is believed that before consideration of the request for the 1,300 feet of drifting the success or failure of the drilling program now in progress, and the results of the geologic mapping and sampling be evaluated. Concerning the diamond drill contract, Mr. Campbell's request for the deposit of the money in escrow, We might point out that Article 4 of the contract gives the Government the right to pay directly to the contractor 50% of the costs of the drilling. If the request is ~~that~~ for the operator place ~~its~~ his 50% in the bank that is something between the operator and the drilling contractor. Please note Article 10 of the agreement between A. P. Smothers and Florence B. Smothers, ~~husband and wife,~~ and E. C. Ecklesdafer, regarding transportation of men and supplies. It is suggested on the next field examination report that the three or four lenses or shoots exposed on the surface be plotted on the map. Perhaps by the time the next field examination is made the operator's geologic mapping will include this area.

90

DEFENSE MINERALS ADMINISTRATION

97022

PRODUCTION EXPANSION DIVISION

EXPLORATION LOANS

Name of Company and Address: _____

Name of Mine and Location _____

Docket No. D.M.A. _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Amount of Total Project: _____

Government participation, percent and amount _____

Number of subprojects in total application _____

Type of Exploration	Feet	Cost per foot	Total cost
Preparatory & Rehabilitation			
Equipment			
Shaft sinking & winzes			
Drifts and crosscuts			
Raises			
Diamond or churn drilling			
Other			

Comments on Contract _____

_____

_____

_____

Date sent to Applicant for signature _____

Date returned to P.E.D. _____

Date sent to Legal _____

Date signed by Administrator _____

Additional remarks: _____

_____

_____

Interior—Duplicating Section, Washington, D. C.

Signed _____

LAW OFFICES
DONNELLY AND O'BRIEN
322 SHELDEN AVENUE
HOUGHTON, MICH.
TELEPHONE 145

JOSEPH M. DONNELLY
RICHARD J. O'BRIEN

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 10 1957

DATE	INITIALS	CODE
6-10	C	220
6/11		800
		600

May 31, 1957

DMEA

Mr. Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines
Donald R. MacLaren, Acting Member U. S. Geological Survey
Department of the Interior, DMEA
S. 157 Howard Street
Spokane 4, Washington

DOCKET No. DMEA - 4366 (Fluorspar)
SQUAW CREEK MINING COMPANY
SMOTHERS PROPERTY
Idaho County, Idaho

Dear Mr. Agnew & Mr. MacLaren:

I hasten to reply to your letter of May 28th that I received this morning.

Answering your question as to whom the assignment should be forwarded to for execution I advise that William J. Walker is the President of Squaw Creek Mining Company and John A. Eckleadafer is the President of Idaton, Inc.; therefore, the assignment should be forwarded to William J. Walker for execution assigning this DMEA contract from Squaw Creek Mining Company to Idaton, Inc.

Very truly yours,

DONNELLY & O'BRIEN

by _____

O'BrG

RECEIVED
Air Mail
JUN 5 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 31 1957

DATE	INITIALS	
5/31		
6/4		220
		800
		600

So. 157 Howard Street
Spokane 4, Washington

May 28, 1957

Mr. Richard J. O'Brien
322 Sheldon Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Southern property
Idaho County, Idaho

Dear Mr. O'Brien:

As requested in your letter of May 22, 1957, we are enclosing five copies of application form MF-103, revised February 1957.

Your application should be submitted in quadruplicate, the fifth copy being for your files. As this would be for additional work, you may, if you prefer, make your application in the form of a letter accompanied by appropriate maps, assay data, and sketches, also in quadruplicate. The salient points which must be included are: a clear description of what you wish to do, where you wish to do it, how many units of work are involved, and a breakdown of your cost estimates.

There is no objection to your preparing and submitting the application now, but of course no action can be taken toward processing it until the contract has been assigned to you by Squaw Creek and accepted by you. Upon our receipt of the contract signed by Squaw Creek, we forwarded your request for assignment to Idaton, Inc. to Washington. The DMEA form for assignment must be prepared in Washington. As yet we have not received it but, as soon as we do, we will forward it to Squaw Creek for their signature.

We were advised by Mr. John Eckleadafer that he would sign the Squaw Creek contract, which he did as President. When we received the signed contract, his name had been lined out and William J. Walker signed as president. Will you please advise us to whom we should send the assignments of contract when it is received?

By Field Team, Region I, NW District

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Donald R. Maclaren, Acting Member
U. S. Geological Survey

cc: DMEA (2) w/2 copies of incoming
UBBM (2)
Nickelson

DONNELLY AND O'
BROADWAY
HOUGHTON, M
TELEPHONE 14

Mich
Jl
USBM
DMEA

DMEA

Rhodes

Ex Mad

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 27 1957

DATE	INITIALS	CODE
5/27	C	220
5/27	B	215
6/60	[illegible]	600

May 23, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Contract No. IDM-E1078

Dear Mr. Selfridge:

Enclosed are the Government, Audit, and Division copies of the above-referenced contract. We have obtained and attached to each copy of the contract a Consent to Lien and Subordination Agreement signed by A. P. Smothers and Florence V. Smothers.

When we first received the contract in this office, we called Mr. John G. Ecklesdafer in Missoula, Montana, to determine where the contract should be sent for signature. He assured us that he would sign it as president of Squaw Creek Mining Company, which he did. He then sent the contract to Michigan for completion of the certificate. It appears that he was no longer president when the contract reached Michigan.

Also enclosed are three copies of a letter dated May 7, 1957, received from Idaton, Inc., requesting that the contract be assigned to them; three copies of an assignment of the contract by Squaw Creek Mining Company to Idaton, Inc., received from Richard J. O'Brien, attorney, with his letter of May 20, 1957, three copies of which are attached; and one copy of a purchase agreement dated April 30, 1957, between Squaw Creek Mining Company and Idaton, Inc.

The Field Team recommends, if the enclosed papers are in order, that the contract be assigned to Idaton, Inc.

By Field Team, Region I, NW District

Wing G. Agnew
Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Donald R. MacLaren
Donald R. MacLaren, Acting Member
U. S. Geological Survey

Enclosures (1 thru 5)

cc: USBM (2)
USBM (AD) w/copy of contract
Nickelson

RECEIVED
MAY 29 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

air mail
MAY 22 1957

LAW OFFICES
DONNELLY AND O'BRIEN
322 SHELDEN AVENUE
HOUGHTON, MICH.
TELEPHONE 1122

JOSEPH M. DONNELLY
RICHARD J. O'BRIEN

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 27 1957

DATE	INITIALS	CODE

May 20, 1957

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I
NW District
South 157 Howard Street
Spokane 4, Washington

RE: DOCKET NO. DMEA - 4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho
Sale to Idaton, Inc.

Dear Mr. Weissenborn:

I enclose original and four copies of DMEA Contract No. IDM - E - 1078 which were received in our office this morning from the Squaw Creek Mining Company, executed by the latter company on page three thereof.

I also enclose original and four copies of an Assignment of this Contract from the Squaw Creek Mining Company to Idaton, Inc., subject to the approval of your office.

Excuse the delay in this matter but the respective mailing back and forth between Michigan and Idaho has held same up. Is there any other information your office desires before this Contract can be officially placed in Idaton, Inc.'s name?

Very truly yours,

DONNELLY & O'BRIEN

by /s/ Richard J. O'Brien

O:m

Enc.

Copy to: Mr. Wing G. Agnew, Member U. S. Bureau of Mines Division Street Spokane, Washington and Mr. John G. Ecklesdafer Box 101 Northfork, Idaho

Encl 4

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 17 1957

DATE	INITIALS	CODE
5-17	C	220
5/-1	wm	600

So. 157 Howard Street
Spokane 4, Washington

May 14, 1957

Mr. John G. Ecklesdafer
Squaw Creek Mining Company
Box 101
North Fork, Idaho

Re: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Ecklesdafer:

Since Mr. Nickelson left the original and five copies of a proposed DMEA contract with you on April 27, 1957, we have heard nothing further from you.

Today we received a letter from Mr. Richard J. O'Brien, Secretary of Idaton, Inc., a copy of which you have doubtless received, with which he enclosed a purchase contract between Idaton, Inc. and Squaw Creek Mining Company, referring to the assignment of your DMEA contract to Idaton, Inc.

We can take no action until we receive all copies of the contract signed by Squaw Creek, except the one marked "Operator's copy," and a written request from Squaw Creek that the contract be assigned to Idaton.

If you do not wish to sign the contract, please return all six copies unsigned to this office stating your objections and we will try to have the contract changed. If you do sign the contract and request that it be assigned to Idaton, Inc., we will be pleased to take the necessary steps. In either case, we would appreciate knowing of your intentions at your earliest convenience.

By Field Team, Region I, NW Dist.

A. S. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: Richard J. O'Brien
322 Shelden Ave.
Houghton, Mich.

DMEA (2)
USBM (2)

Nickelson

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 17 1957

DATE	INITIALS	CODE
5/17	C	220
5/21	mm	600

So. 157 Howard Street
Spokane 4, Washington

May 14, 1957

Mr. Richard J. O'Brien, Secretary
Idaton, Inc.
322 Shelden Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. O'Brien:

Thank you for your letter of May 7, 1957, enclosing a copy of the purchase contract from Squaw Creek Mining Company and requesting that the DMEA contract be assigned to Idaton, Inc.

We are unable to act on your request at this time because signed copies of the proposed DMEA contract have not been returned to us by Mr. Ecklesdafer. Enclosed is a copy of a letter that we have written to him which is self-explanatory.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW District

Enclosure

cc: DMEA (2)
USBM (2)
Nickelson

LAW OFFICES
DONNELLY AND O'BRIEN
302 SHELDEN AVENUE
HOUGHTON, MICH.
TELEPHONE 101

[illegible] DONNELLY
[illegible] J. O'BRIEN

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 27 1957

DATE	INITIALS	CODE

May [illegible], 1957

Mr. A. F. Weissenborn
Executive Officer DMEA
Staff Team Region [illegible]
[illegible] 157 Howard Street
[illegible], Washington

[illegible] 365 (fluorspar
[illegible] January
[illegible] Property
[illegible] County, Idaho

Dear Mr. Weissenborn:

Excuse the [illegible] in my [illegible] your letter of [illegible], but I [illegible] the purchase contract Green Squaw Creek [illegible] which is [illegible].

You will note by Article XIV that Squaw Creek Mining Company has agreed to assign their DMEA contract to Idaton, Inc., an Idaho corporation.

I am the secretary of Idaton, Inc. and hereby make request that the Article [illegible] the Assignment from Squaw Creek to my corporation. Idaton, Inc. is the assignee of a 10-year Option to Buy the [illegible] mining claims [illegible] Option formerly being held by Squaw Creek Mining Company, a Montana corporation.

I trust Mr. Ecklesdafer has written your organization requesting that the DMEA contract be assigned to Idaton, Inc. as stated in your letter of April [illegible] to him.

Very truly yours,

Richard J. O'Brien
Secretary, Idaton, Inc.

DMEA

RJO:

Enc.

cc: Mr. Jack Ecklesdafer
Box 101
North Fork, Idaho

Encl. 2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 3 1957

DATE	INITIALS	CODE
6/3	C	220
10	Corr	100
12		

May 3, 1957

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: Howard B. Nickelson, Geologist, U. S. Geological Survey, and E. C. Parsons, Mining Engineer, U. S. Bureau of Mines

Subject: Field Examination Report, Docket No. DMEA-4366 (Fluorspar), Squaw Creek Mining Company, Smothers Property, Idaho County, Idaho, Contract No. Idm-E1078

The property was visited on April 28 and 29, 1957, by the writers, accompanied by Charles Hubbard, mining engineer, U. S. Bureau of Mines; A. P. Smothers, property owner and boatman; Jack Ecklesdafer, president of Squaw Creek Mining Company; and his assistant.

The purpose of the examination was to evaluate the property for possible additional DMEA work which Mr. Ecklesdafer and Richard J. O'Brien, secretary of Idaton, Inc., suggested during a recent conference in the Field Team office. This work comprises drifting on the vein now being explored by drilling.

The vein outcrop was examined, three samples were cut from the outcrop (see enclosed map), and the feasibility of drilling from the proposed diamond drill locations was checked.

The geologic mapping by Mr. Cox, geologist for the A. S. and R. Company, was field checked and Mr. Cox can be commended for an excellent map.

The diamond drill sites on the contract map are favorably located except that the Operator may have to move them within a 20-foot radius to establish the best drilling site.

It is the opinion of the examining team that the vein being drilled should be further explored by approximately 1,300 feet of drift. However, several important factors for the success of such a program appear imminent at the present time. The first is that the present Operator, Jack Ecklesdafer, does not appear capable of organizing and operating a drifting project. Mr. Ecklesdafer is a graduate mining engineer but he has had no operating experience. Discussions with him indicate he has very little idea of what equipment is needed or how much, or how to handle personnel to accomplish such a project.

Another factor is the transportation of mining equipment to the property which must be by boat. There is, at the present time, considerable bad feeling between the three competing boatmen which could lead to delays in delivery. It is believed that this possibility can be considerably alleviated by requiring the Operator to request bids from all competing boatmen. There is no doubt in the examiners' minds that the necessary equipment for a drifting project can be transported by boat down to the property.

Mr. Campbell, diamond drill contractor, has been hired to do the drilling on the present contract. He has done the drilling on other DMEA projects in Idaho, and has been found to be capable. He has bid $7.50 per foot and $0.50 per foot for reaming and cementing. No trouble is expected to get the 80 percent core recovery because the fluorspar appears to be massive and unfractured on the outcrops. It is reported that Mr. Campbell has requested the money for the drilling be deposited in escrow by the Operator before he will take the job. Mr. Ecklesdafer reported the driller is to start drilling the second week of May.

It is recommended that as soon as the present contract is assigned to the Idaton Company, the drifting proposal be further discussed with them, especially the necessity of obtaining a competent manager to supervise the proposed work. Until a competent manager is obtained, or until the entire underground project is put into the hands of a competent independent contractor, the examiners hesitate to recommend approving additional work. However, Mr. Ecklesdafer is competent to handle surveying and sampling.

During the examination two or three sites were noted which appeared to be suitable for adit portal locations. Additional trenching on the outcrop would serve to delineate the character and continuity of the vein. Apparently there are three or four lenses or ore shoots exposed on the surface, but the exact length has not been determined.

Enclosure

Distribution:
DMEA (Orig. & 3)
USBM (2)
USBM (AD)
Docket
Nickelson

DMEA

OFFICIAL FILE COPY DMEA RECEIVED APR 22 1957		
DATE	INITIALS	CODE
4/22	C	220
4/24	mm	600

No. 157 Howard Street
Spokane 4, Washington

April 17, 1957

Mr. Richard J. O'Brien
Donnelly & O'Brien
322 Sheldon Avenue
Houghton, Michigan

Re: Docket No. Spokane-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. O'Brien:

We have received the contract for the exploration of the Squaw Creek deposit and are forwarding a sample copy to Mr. John G. Eckelsdafer. It is expected that there may be some difficulty in getting in touch with him as he has already gone down the river to the property. Before the contract can be signed, the Smothers must sign the Consent to Lien and Subordination Agreement forms. A sample copy of the contract has been sent to Mr. Eckelsdafer; our fieldmen will bring the Consent to Lien and Subordination Agreement and the contract to the Salmon River area and both can be signed at that time.

We are enclosing a copy of our letter to Mr. Eckelsdafer in which we point out certain features of the contract of which both he and Idaton, Inc. should be aware. We are enclosing also a sample copy of the contract for your information. If the contract is acceptable to Mr. Eckelsdafer and you wish it assigned to Idaton, Inc., Mr. Eckelsdafer should sign the contract, return it to us, and should write us requesting that it be assigned to Idaton, Inc. You, in turn, should write this office requesting that the Administrator approve the assignment. You should accompany this request with a statement of your company's interest in the land and a copy of the instrument transferring this interest to your company.

By Field Team, Region 1, DMEA District

A. G. Weissenborn, Executive Officer
U. S. Geological Survey

King G. Agnew, Member
U. S. Bureau of Mines

Enclosures
cc: [illegible](2); [illegible](2); Eckelsdafer

OFFICIAL FILE COPY
DMEA
RECEIVED APR 22 1957

DATE	INITIALS	CODE

No. 157 Howard Street
Spokane 4, Washington

April 17, 1957

Mr. John G. Ackelsdorfer
General Delivery
North Fork, Idaho

Re: Docket No. [illegible]A-4345 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Ackelsdorfer:

We have received a proposed contract for Squaw Creek Mining Company today but cannot forward it for signature until we have new Consent to Lien and Subordination Agreement forms signed by R. V. and Florence V. Smothers. However, for your information we are enclosing a sample copy of the contract. You will note that the program is essentially the same as the one you proposed. The Washington office has included certain provisions which we desire to call to your particular attention.

In Exhibit "B" of the contract it is provided that the Government will not contribute to the cost of an incompleted diamond drill hole or to the cost of any hole that does not produce 20 percent core in the mineralized zone. The chance of losing a hole in the granite is probably remote, and in the mineralized zone it is probably not great, but it is a possibility. Core loss in the granite is not serious but a loss of more than 20 percent core from the vein is a possibility of which you should be fully aware. In either case, loss of a hole before completion, or loss of more than 20 percent core from the mineralized zone, the DMEA will not contribute to the cost of that hole.

Also in Exhibit "A" the transportation of 3,000 pounds of drill equipment is on a unit-cost basis and the unit is defined as transportation in and out. In other words, this unit will not be completed until the equipment has been brought out.

The geologic mapping is also on a unit-cost basis and the unit will not be completed until a complete map of the contract areas as defined by the land description under Annex [illegible] of the contract, showing all the features called for in Exhibit "A" has been accepted by the Government. Our fieldmen will be glad to discuss with you just what should be shown on the map.

Mr. Howard B. Nickelson of the Survey has written to you that he and Mr. S. W. Parsons of the Bureau of Mines will be in the Salmon River area on April 22 and will try to contact you on that date at North Fork. If they miss you, you should try to get in touch with them at the Suncrest Hotel in Salmon. Mr. Nickelson will have with him the Consent to Lien and Subordination Agreement forms for the signatures of Mr. and Mrs. Smothers, and the copies of the contract for your signature, if you will get in touch with him as he suggests. At that time he will discuss any questions you may wish to have clarified before you sign the contract. He will also try to visit the property with you and discuss your future plans for exploration. We cannot make any binding commitments for additional work, but our fieldman will look the situation over carefully in the field and will recommend accordingly.

After the contract is signed, you should request in a letter to this office that the contract be assigned to Idaton, Inc. Idaton, Inc., in turn, should write this office requesting that the Government approve the assignment.

By Field Term, Region 1, Ms District

S. W. Weissenborn, Executive Officer
U. S. Geological Survey

King G. Agnew, Member
U. S. Bureau of Mines

Enclosure
cc: Richard J. O'Brien
Houghton, Michigan

[illegible]A(2)
[illegible](2)
Nickelson

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/3	Anderson	600
4/3	Hook	600
4-11	Chambers	800
4/4	Dwyer	140
		140
4/12	Eldridge	130
"	Johnson	110
"	Shutteroy	100
4/15	C	220

600

600

APR 12 1957

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, N. W.
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366-Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Weissenborn:

Reference is made to your letter of March 27, 1957, to the Chairman of the Operating Committee requesting the subject application be processed in its present form and that the impending contract be assigned to Idaton, Inc.

Enclosed are the original and five copies of a proposed short-form contract signed by the Administrator for the Government. It consists of the form, Annex I (1 page), Consent to Lien and Subordination Agreement signed by Ernest C. Ecklesdafer, Exhibit "A" (2 pages), and four maps. Also enclosed are two extra copies of Annex I, Exhibit "A", and the maps for Field Team use.

Please explain to the applicant that the contract is a firm commitment to complete the work outlined at the agreed cost. Copies of the executed contract are to be distributed in the usual manner. If any part of this proposed contract does not have your approval and cannot be amended within your delegated authority, then the original and all copies of the contract and the two extra copies of Annex I, Exhibit "A" and the maps are to be returned to this office, together with the proposed changes for consideration.

Before the contract is executed by the Squaw Creek Mining Company, please have A. P. and Florence V. Smothers complete the enclosed Consent to Lien and Subordination Agreement forms and attach to the contract. After execution of the contract the Squaw Creek Mining Company should request the Administrator that the contract be assigned to the Idaton, Inc. Idaton, Inc., should then request that the Government approve the assignment of the contract accompanying the request with a statement of their interest in the land and a copy of the instrument by which the transfer was effected.

8623

Please note that the Government is not committed in any way for additional work beyond that stated in the proposed contract. The drifting on the vein suggested by Mr. Houk was in lieu of a diamond drilling program and not as a supplement to it. If Idaton, Inc., desires to change the work it could be done by appropriate amendment. In this connection, would it not be better to have a field examination of the property and a revised diamond drilling program or a drifting program? The time factor in either assignment or a new contract would not be very much different. However, in compliance with your request the matter is being handled as stated herein. We will expedite consideration of the Idaton, Inc., request for assignment when it is received.

Copies of memoranda dated September 5 and 10, 1956, by Mr. N. E. Nelson, USGS, and Mr. Robert B. McDougal, USBM, respectively, relating to the project are enclosed.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GHB)

Approved:

Frank D. Lamb (GHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (GHB)
Member, Geological Survey

Enclosures 19

LGHouk:gad 4/2/57
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

P.S. The applicant should be advised that the geologic mapping called for in the contract is considered as a job or unit of work. If the completed map does not measure up to contract specifications, or to the additional requirements that may be set by the Field Team, no payment will be made for the job.

locations and assays, (3) width of samples, and (4) any data pertinent to future exploration of any likely economic deposit. Rock types and faults shall be mapped but emphasis shall be on the preparation of an economic geological map acceptable to the Government. This work shall be confined to the contract area as defined by the land description under Annex I of the contract.

Fixed Unit Costs

Diamond drilling with AX bit, 1000 feet @ $8.00/ft. Includes supervision and technical services, reaming, setting and pulling casing, wooden core boxes, and all other costs whatsoever connected with the drilling.	$8000.00
50 samples to be assayed for CaF_2 and SiO_2 @ $6.00/sample (drill hole)	300.00
Transportation of 50 samples @ $1.00/each sample	50.00
Transportation of men and materials 2 boat trips per month, 2 months @ $50.00/trip	200.00
Transportation in and out of 3000 lbs. drill equipment 1/	350.00
Geological mapping, sampling, assaying, and technical services. 1/	1100.00
Estimated total cost of Project	$10,000.00
Government participation @ 50%	$ 5,000.00

1/ The completed work constitutes the unit.

DMEA Form 3
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/11	Houk	600
4/12	Selfridge	130
"	Gorman	110
"	Whitaker	100
4/15	C	220
		600

APR 12 1957

Lamb
Kilsgaard

LGHouk, DMEA X2971

Interior

Defense Minerals Exploration Admin.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

14X4401(01) Revolving Fund,
Defense Production Act, Interior,
(Transfer to Office of Secretary)

TELETYPE

Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region I,
NW District, South 157 Howard Street, Spokane 4, Washington

Subject: DMEA-4366

Proposed contract mailed today on Squaw Creek.

George C. Selfridge

George C. Selfridge (SHB)
Chairman, Operating Committee

LGHouk:gad 4/12/57
Copy to: Admr. R. File
Operating Committee
Confirmation, Region I, NW
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

C

8623

OFFICIAL FILE COPY
DMEA
RECEIVED APR 10 1957

DATE	INITIALS	CODE
4-10	C	220
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RECEIVED
APR 10 2 21 PM '57
GENERAL SERVICES ADMIN.
PUBLIC BLDG.S. SERVICE
BMD - COMMUNICATIONS

AXXXXXXX-066K

AXXXXXXX-067K

XDXXXXXX-068K

YWA068 WAF SP 4 I-GS-G

SPOKANEWASH 4-10-57 1000U

GEORGE C. SELFRIDGE, CHAIRMAN OPERATING COMMITTEE

DMEA DEPT OF INTERIOR WA

PLEASE TELETYPE STATUS OF DOCKET DMEA-4366, SQUAW CREEK MINING CO., APPLICATION. AREA REPORTED CLEAR AND APPLICANT ANXIOUS TO START WORK.

A. E. WEISSENBORN EXECUTIVE OFFICER REGION 1 NW DISTRICT

DMEA-4366

VA 1001U

APR 10 2 31 PM '57
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 29 1957

DATE	INITIALS	CODE
3/29	C	220
		600

Air Mail

March 27, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Selfridge:

Mr. R. J. O'Brien and Mr. John Eckelsdafer called on the Executive Officer on March 13, 1957, to discuss the Squaw Creek or Smothers application. They later visited the Bureau of Mines for the same purpose. Mr. Eckelsdafer is the original applicant. Mr. O'Brien is an attorney from Houghton, Michigan representing Idaton Inc., a company organized to take over the Smothers property from Squaw Creek Mining Company. According to Mr. O'Brien, Idaton Inc. is backed by substantial business men in Ishpeming and Houghton, Michigan; the company will be adequately financed, and if the exploration is successful, will be prepared to develop the property. The company has in mind a more extensive exploration than that provided for under the present application and wishes to increase the scope of the program, which, because of the limited finances available to the original applicant, was a minimum program.

Discussion developed the fact that Mr. O'Brien will be secretary of the company and will handle the finances. Mr. John Eckelsdafer will be in charge of field activities.

The company is most anxious to begin work as soon as possible and wanted to know how far along the processing of the Squaw Creek application was and whether it would be quicker to negotiate a new contract or to let this one be completed, assign the contract to the new company and then apply for additional work.

The changed situation was explained to Mr. Houk in a phone call. It was Mr. Houk's opinion that even though a contract was nearly ready for release it would be preferable to hold it up and consider a new application involving additional work. Mr. Houk

remarked that the improved financial position of the company would make possible a more effective contract and suggested that the possibility of some drifting on the vein be considered. This was discussed with Mr. O'Brien and Mr. Eckelsdafer. They expressed the very strong opinion that they preferred that the contract be processed in the present form and assigned to Idaton Inc., as they are afraid that putting in a new program would delay things. They had previously considered only additional drilling but were agreed that drifting on the vein probably would be preferable.

It appears to us that this procedure offers some advantages. The program as presently outlined is satisfactory as the first stage of a more complete program and, because of the short season, it is important that Idaton start work as soon as possible. Moreover, we hesitate to recommend additional work at this time; we feel that if our field men were able to visit the property we would be in a better position to recommend what, if any, work should be done in subsequent stages. We could also estimate costs more accurately. We therefore suggest that the contract be processed in its present form and assigned to Idaton Inc.

By Field Team, Region I, NW Dist.

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: USBM (2)
Nickelson

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 7 1957

DATE	INITIALS	CODE
3/7	C	220
		600

FEB 27 1957

Mr. Ernest C. Ecklesdafer

Missoula, Montana

Re: Docket No. DMEA-4366
Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Ecklesdafer:

Reference is made to the purchase agreement, dated May 13, 1955, between you and Austin P. Smothers and Florence V. Smothers, which was assigned to the Squaw Creek Mining Company.

Enclosed are seven copies of the new Consent to Lien and Subordination Agreement. Please execute these forms as indicated, return six copies to this office and retain one for your files.

Prompt attention to this matter will enable us to continue with the processing of the subject application.

Sincerely yours,

Lawrence G. Houk

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

Enclosures 7

Signatures affixed as per request
thank you.
5th March 1957

Ernest C. Ecklesdafer

AUSTIN P. SMOTHERS

PRIMITIVE AREA BOAT TRIPS ON SALMON AND MIDDLE FORK RIVERS

PHONE: SALMON, IDAHO
P. O. BOX 68 NORTHFORK, IDAHO

OFFICIAL FILE COPY
D M E A
RECEIVED MAR 5 1957

DATE	INITIALS	CODE
2/5	C	320
3/5	Mark	640

Mar 1-1956

U S Dept of Interior
Mr Lawrence G. Hoerk
RE: Docket # D.M.E.A.-4366
Fluorspar
Squaw Cr Mining Co
Ida Co Idaho

Dear Sir

In answer to your letter of January 23-57 We write to verify Purchase agreement May 13th 1955. to E C Eckhardt. and altho they were unable to make yearly payment June 14 1956, they made partial payment and are making the Balance in monthly Payments. and up to date have kept up agreement altho they were unable to Pay us for labor & services performed in Aug 1956. in the amount of $210.00

Yours Truly

A. P. Smothers

FISHING - PHOTOGRAPHY - HUNTING

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/27	Anderson	600
2/27	Houk	600
"	Olson	110
"	Mattenley	100
3/1	C	22D
		600

600

FEB 27 1957

Mr. and Mrs. Austin P. Smothers

Salmon, Idaho

Re: Docket No. DMEA-4366
Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. and Mrs. Smothers:

Reference is made to the Consent to Lien and Purchase Agreement on the subject property.

On January 23, 1957, we requested that you please verify that the Purchase Agreement, dated May 13, 1955, from Austin P. and Florence V. Smothers to E. C. Ecklesdafer is in good standing and that all the required payments have been met or waived.

Since the Consent to Lien which you executed on June 8, 1956, is on an old form, we are enclosing seven copies of the new form of Consent to Lien and Subordination Agreement for execution as indicated. Please return six copies to this office and retain one for your files.

We are very desirous of continuing the processing of the application for Government assistance to explore the subject property, but are reluctant to do so until hearing from you concerning the status of the Purchase Agreement. In the interest of expediting the processing of the application we would appreciate very much your compliance with our request.

Sincerely yours,

SIGNED

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

Enclosures 7

WCAnderson:gad 2/27/57

Copy to: Admr. R. File
Field Team, Region I, NWDistrict
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

Copy to: Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/27	Anderson	600
	Lawrence G. Houk	600
2/27	[illegible]	110
"	[illegible]	100
		225

600

FEB 27 1957

Mr. Ernest C. Ecklesdafer

Missoula, Montana

Re: Docket No. DMEA-4366
Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Ecklesdafer:

Reference is made to the purchase agreement, dated May 13, 1955, between you and Austin P. Smothers and Florence V. Smothers, which was assigned to the Squaw Creek Mining Company.

Enclosed are seven copies of the new Consent to Lien and Subordination Agreement. Please execute these forms as indicated, return six copies to this office and retain one for your files.

Prompt attention to this matter will enable us to continue with the processing of the subject application.

Sincerely yours,

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

Enclosures 7

WCAnderson:gad 2/27/57
Copy to: Admr. R. File
Field Team, Region I, NW District
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana

8623

DMEA Form 7
(12-56)

120

OFFICIAL FILE COPY

Date	Surname	Code
2/1	Selfridge	120
2/1		110
"	Houk	100
		225

January 31, 1957

Memorandum

To: Administrator

From: George C. Selfridge
Special Assistant

Subject: Docket No. DMEA-4366 - Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Mr. Weissenborn telephoned on January 30 regarding the January 25, 1957, Operating Committee's letter to him. He discussed the various items enumerated in the Committee's letter and mentioned that they would not be able to give answers to all. He thought that with his answer to the letter there should be sufficient information to decide whether the project should be approved or denied.

The writer made sure that Mr. Weissenborn would answer the letter, and informed him that the project would be given special attention in order to arrive at an early decision.

George C. Selfridge

George C. Selfridge

GCSelfridge/esf
cc to: Docket
Admr. Read. File
Mr. Houk
Mr. Selfridge

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 4 1957

DATE	INITIALS	CODE
2-5	C	220
2-5	[illegible]	600

~~January 31, 1957~~

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Selfridge:

Reference is made to your letter of January 25, 1957, in which you request additional information in order to continue processing the above-referenced application.

1. In a letter dated December 13, 1956, replying to a former request for additional information, Robert D. R. McChesney states that Squaw Creek Mining Company had made an agreement with Mr. T. D. French, the owner, to purchase the diamond drill in question. As the recommended contract, if approved, would be set up on a unit cost basis, at a cost per foot considerably less than that in any of the three bids submitted, the requested information regarding the terms of the agreement to purchase the drill appears to be extraneous. In any case, we do not have a copy of the agreement.

No it isn't.

2. When the application was submitted, it was the intent to employ as superintendent, Thomas J. Herron, who has been an engineer for the U. S. Department of the Army, and was temporarily employed by the U. S. Bureau of Mines. Mr. McChesney states in his letter of December 13, 1956, that Herron might not be available, in which case, Mr. McChesney would supervise the work himself. Paragraph 5 (b) of the application states that McChesney is a geologist and mining engineer who has had exploration experience with Cleveland Cliffs Iron Company and Iron Ore Company of Canada. As for the driller and other personnel, it is doubtful that they have been or will be hired prior to the offering of a contract. Paragraph 4 (e) of the application states that man power -- presumably drillers and other personnel -- can be obtained in Salmon, Idaho. Mr. McChesney should be capable of hiring a competent driller and properly supervising the project.

doesn't necessarily follow

Whether or not he plans to hire any graduate students, we do not know, but the application states that work would be started within 30 days. Of course, it cannot start until the Salmon River is free of ice, but that should be before June. How much before

3. Because the project area is so isolated, the Field Team considers two boat trips a month is a minimum commensurate with safety and supply requirements.

4. As far as we know, one shift operation is contemplated. Again because of the isolation of the project area, a larger crew, which would be required for multiple shift operations, would increase the difficulty and expense of bringing in supplies. Logistics will be one of the big problems.

5. Map No. 2 of Plate 1 accompanying the Field Team report of August 20, 1956, is a copy of the American Smelting and Refining map to which you refer and is clearly labeled as such.

As the Nonmetallic Minerals Division wrote to Mr. and Mrs. Smothers as recently as January 23, 1957, regarding the legal status of the Purchase Agreement (and also mentioned the Consent to Lien), we feel that it would be wiser for them to request the Smothers to execute the Consent to Lien and Subordination Agreement on the new form dated June 1956. Two letters regarding legal matters coming so close together, but from different offices, might be misinterpreted as indicating lack of coordination within the DMEA organization.

This contract has been pending since August. We think that all the information that we would be able to obtain has been presented, and we urge an immediate decision one way or the other.

By Field Team, Region I, NW Dist.

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: USBM (2)
Nickelson

January 31, 1957

Memorandum

To: Administrator

From: George C. Selfridge
Special Assistant

Subject: Docket No. DMEA-4366 - Finnerman
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Mr. Weissenborn telephoned on January 30 regarding the January 25, 1957, Operating Committee's letter to him. He discussed the various items enumerated in the Committee's letter and mentioned that they would not be able to give answers to all. He thought that with his answer to the letter there should be sufficient information to decide whether the project should be approved or denied.

The writer made sure that Mr. Weissenborn would answer the letter, and informed him that the project would be given special attention in order to arrive at an early decision.

George C. Selfridge

George C. Selfridge

GCSelfridge/eaf
cc to: Docket
Admr. Read, File
Mr. Hook
Mr. Selfridge

DMEA Form 7.
(12-56)

600

OFFICIAL FILE COPY

Date	Surname	Code
1-24	Pickerson	600
1/24	Hook	600
1/25	Selfridge	130
	Johnson	110
	Whittemore	100
1-28	CW	220
		600

JAN 25 1957

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366
Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Weissenborn:

Reference is made to your memorandum of December 20, 1956, enclosing two copies of a letter dated December 13, 1956, from Mr. Robert D. R. McChesney in response to our request for additional information.

To enable us to properly evaluate the merits of the proposed project, we would be pleased to have clarification on the following matters:

1. The Squaw Creek Mining Company has made an agreement with the owner to purchase the diamond drill. What is the nature of the purchase agreement, age, condition, and present market value of the drill?

2. Please furnish the experience and background of the supervisor, drillers, and other personnel. We understand that the supervision and performance of the work will be done by graduate students and presume they will not be available until next June. Please confirm if our presumption is correct.

3. Cost proposed includes two boat trips per month for men and supplies. For such a short job would not one trip for the duration of the project be sufficient?

8623

4. Please advise concerning the number of shifts per day that will be worked during the drilling operation.

5. The memorandum of August 20, 1956, refers to an American Smelting and Refining map correlating the 1956 work to this map. It would be helpful if you could furnish us with a copy of this map.

We would appreciate having Austin F. and Florence V. Smothers execute the Consent to Lien and Subordination Agreement on the new forms dated June 1956. Mr. Ernest C. Eckleschafter must also subordinate his retained interest in the assignment.

Upon receipt of all of the above requested data we will continue the processing of the application.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (WB)

Approved:

Frank D. Lamb (WB)
Member, Bureau of Mines

N. E. Nelson (WB)
Member, Geological Survey

WCAnderson:gad 1/24/57
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1-22	Anderson	600
1/24	Hook	600
		130
		110
		100
		220

600

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366
Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Weissenborn:

Reference is made to your memorandum of December 20, 1956, enclosing two copies of a letter dated December 13, 1956, from Mr. Robert D. R. McChesney in response to our request for additional information.

To enable us to properly evaluate the merits of the proposed project, we would be pleased to have clarification on the following matters:

1. The Squaw Creek Mining Company has made an agreement with the owner to purchase the diamond drill. What is the nature of the purchase agreement, age, condition, and present market value of the drill?

2. Please furnish the experience and background of the supervisor, drillers, and other personnel. We understand that the supervision and performance of the work will be done by graduate students and presume they will not be available until next June. Please confirm if our presumption is correct.

3. All geologic work must be confined to the contract area as a proposed contract does not permit work outside the contract area.

4. Cost proposed includes two boat trips per month for men and supplies. For such a short job would not one trip for the duration of the project be sufficient?

8623

5 ~~4.~~ Please advise concerning the number of shifts per day that will be worked during the drilling operation.

6 ~~5.~~ The memorandum of August 20, 1956, refers to an American Smelting and Refining map correlating the 1956 work to this map. It would be helpful if you could furnish us with a copy of this map.

We would appreciate having Austin P. and Florence V. Smothers execute the Consent to Lien and Subordination Agreement on the new forms dated June 1956.

Upon receipt of all of the above requested data we will continue the processing of the application.

Sincerely yours,

Chairman, Operating Committee

Approved:

Member, Bureau of Mines

Member, Geological Survey

WCAnderson:gad 1/23/57
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/23	Houk	600
	[illegible]	110
"	[illegible]	100
1-24	[illegible]	220
		600

600

JAN 23 1957

Mr. and Mrs. Austin P. Smothers

Salmon, Idaho

Re: Docket No. DMEA-4366
Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. and Mrs. Smothers:

Reference is made to the Consent to Lien and Purchase Agreement on the subject property.

Please verify that the Purchase Agreement, dated May 13, 1955, from Austin P. and Florence V. Smothers to E. C. Ecklesdafer is in good standing and that all the required payments have been met or waived.

Sincerely yours,

signed

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

LGHouk:gad 1/23/57
Copy to: Admr. R. File
Field Team, Region I, NW District
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk

8623

600

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

RECEIVED DEC 26 1956 D.M.E.A.

December 20, 1956

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Smothers Property
Idaho County, Idaho

Dear Mr. Selfridge:

Enclosed are two copies of a letter dated December 13, 1956, received from Mr. Robert D. R. McChesney which answers some questions posed in your letter of October 9, 1956 and requested of the applicant in our letter to him of October 19, 1956.

Regarding the bit cost, Mr. McChesney did discuss this informally with the Field Team previous to submitting his application. The figure he attributes to Mr. Zoldok was that quoted by a local drilling contractor. As a matter of fact, we discussed drilling costs with several contractors and had informal quotations as high as $16.00 per foot. Therefore, we regard the $7.83 total drilling cost per foot estimated by the applicant as a reasonable cost under the circumstances.

By Field Team, Region I, NW Dist.

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
Nickelson

1405 College Ave.
Houghton, Michigan
December 13, 1956

RECEIVED
DEC 26 1956
D.M.E.A.

Messrs W. G. Agnew & D. R. MacLaren
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4366 (Fluorspar)
Smother Property
Idaho County, Idaho

Gentlemen:

I am hereby enclosing the additional information requested by your Washington office. I regret the delay in submitting this information and trust that it did not duly inconvenience you.

The diamond drill hole is located midway between stations 16 & 17 just above the spur near station 16. The report on the drilling submitted by the driller, a Mr. J. W. Lower, said that the hole was drilled at one degree dip and the vein was intersected at 56 feet. From 56 to 62 feet fluorite mixed with quartz was encountered. Visual examination indicated that this was mill grade ore. From 62 to 64 feet the vein was high grade fluorite. At this point the drilling had to be suspended due to the freezing of the drill water and extreme weather conditions. The opposite wall of the vein was not encountered. No assays were made on the drill core.

Mr. John Gordan Ecklesdafer has found that at minus 65 mesh an 80 percent recovery is possible, producing a 98 percent effective CaF_2 concentrate. Extensive laboratory tests have been and are presently being carried out in the mineral dressing laboratories at Michigan College of Mining & Technology, Houghton, Michigan. The results of this series of tests are not available in full and will not be before June 1957.

No additional ground has been staked since our conversation in Spokane in June of 1956.

Thomas J. Herron has left the employ of the Bureau of Mines and may not be available to supervise the project. In the event that he is not available, the project will be supervised by Robert D. R. McChesney.

With respect to the drilling advance of 20 feet per day indicated in our application, I have inquired from Mr. T. D. French, Wallace Idaho, who owns the drill used for the initial hole and he gave us the following information: It is possible to accomplish 20 feet per day but likely that only 15 would be accomplished. He felt that the time lost moving from hole to hole and the fact that roads or trails to the holes would not be ready would cut the average. Time losses due to breakdowns in such an inaccessible location would also be quite costly. As stated earlier in this paragraph, Mr. T. D. French of Wallace Idaho owns the diamond drill. Squaw Creek Mining Company however has made an agreement with Mr. French to purchase the drill. The drill is a "Christensen 81" capacity approximately 1,000 feet. Mr French replied to my inquiry on the bit costs for the previous hole with the statement that the diamond loss and bit cost in the Smother's property hole was about $1.00. The basis for our bit cost figure was the estimate by Mr. Stephen Zoldak of the Spokane office.

The Denver Equipment Company, Ore Testing Division, Ore Test EW-26613 does not relate to the Squaw Creek Ore, but to ore from elsewhere in Idaho.

The afore mentioned information is designed to answer your questions to the best of my ability. If I can assist you further in any way regarding the Smother's property do not hesitate to contact me.

Respectfully submitted,

Robert D. R. McChesney

P.S. Compliments of the season.

RECEIVED
air mail
DEC 17 1956
U. S. G. S.
SPOKANE, WASH.

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

November 20, 1956

Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana

Re: Docket No. DMEA-4366 (Fluorspar)
Smothers Property
Idaho County, Idaho

Gentlemen:

In a letter dated October 19, 1956, we requested certain additional information regarding your application for Defense Minerals Exploration Administration assistance.

As yet we have received no reply and would appreciate hearing from you at an early date so that processing of your application may be completed.

By Field Team, Region I, NW District

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Donald R. Maclaren, Acting Member
U. S. Geological Survey

cc: DMEA (2)
USBM (2)
~~USBM (nb)~~
Nickelson

xxxxxxxxxxxxxxxxx

RECEIVED
OCT 25 1956

Sc. 157 Howard Street
Spokane 4, Washington

October 19, 1956

Squaw Creek Mining Company
605 Wilma Building
Missoula, Montana

Re: Docket No. DMEA-4366 (Fluorspar)
Smothers Property
Idaho County, Idaho

Gentlemen:

We have received a letter from our Washington office requesting additional information before they can complete the processing of your application for exploration assistance.

Will you please furnish us with the location, direction, and inclination of the diamond drill hole drilled in 1955; also the depth below the outcrop or surface at which the vein was penetrated and the assays of any samples taken from the core.

It is assumed from the John G. Eckleadafer report of August 24, 1955 that grinding to minus 65 mesh an 80 percent recovery is possible producing 98 percent effective CaF_2 concentrate. Is this assumption correct?

Has any additional ground been staked as you intimated would be done when we talked with you in Spokane? If so, list claim names, book and page numbers, and county of recording.

Will Thomas J. Herron continue to be employed by the Bureau of Mines while supervising this project.

The average of 20 feet of drilling per day is about half the average daily advance set up in most of our contracts. Can you give us some data to account for this low average? Also, will you please give us the name of the owner of the diamond drilling outfit and the size and make of the drill.

The bit cost estimates appear high. Can you furnish us the data on which this estimate is based, such as the records of your previous drilling?

Can you tell us whether or not the Denver Equipment Company, Ore Testing Division, Ore Test EQ-61,613 relates to testing the Squaw Creek ore? If so, could you furnish us with a copy of the test data?

By Field Team Region I, NW Dist.

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Donald R. MacLaren, Acting Member
U. S. Geological Survey

cc: DMEA (2)
USBM (2)
Nickelson

Docket Copy
Surname:
Anderson
Hoyt
Selfridge
Mittendorf

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

600

OCT - 9 1956

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District
South 157 Howard Street
Spokane 4, Washington

Subject: Docket No. DMEA-4366-
Fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Weissenborn:

Reference is made to the memorandum, dated August 20, 1956, compiled from the application of the Squaw Creek Mining Company and the reports in the files of the Geological Survey and the Bureau of Mines, recommending a diamond drilling program and geological mapping at the subject property.

This office is reluctant to write a contract on the subject property because of the difficult access to the area, high cost of drilling and past results with small company drilling programs. Before arriving at a firm decision, we would be pleased to have the following information: Location, direction, inclination, depth of penetration, and assay character of the vein drilled in the Fall of 1955. It is our understanding that this hole was drilled under the supervision of John G. Eeklesdafer. We would be pleased to receive a copy of the Denver Equipment Company, Ore Testing Division, Ore Test EQ-61,613 if it relates to testing the Squaw Creek ore. It is assumed from the John G. Eeklesdafer report of August 24, 1955, that grinding to minus 65 mesh and 80% recovery is possible producing a 98% effective CaF_2 concentrate.

Please comment on whether the applicant has staked and recorded additional ground recommended by the memorandum and send a list of the claim names, book and page number and county of recording.

It is noted that Thomas J. Herron, at present doing research for the Bureau of Mines, will supervise the project. Will he do this while still a Bureau employee?

R.C.L.

The average of 20 feet of drilling per day is about one-half the drilling advance set up under most of our contracts. Perhaps there is an explanation. Please indicate the owner of the diamond drilling outfit, and the size and make. The bit cost appears high.

When the above information has been received we will continue the processing of the application.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

/s/ O. M. Bishop

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

LGHouk:gad 10/8/56

Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

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

OCT 3 1956

Memorandum

To: The Administrator, DMEA
Attention: Chief, Nonmetallic Minerals Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers property
Idaho County, Idaho

Mr. Houk's reference slip dated September 27 requested that we review the subject docket to determine whether the Applicant has a sufficient interest in land for purposes of an exploration project contract.

The application states that the Applicant is an assignee of a contract to purchase 18 mining claims. As evidence of this interest in land the Applicant submitted a copy of an agreement dated May 13, 1955, between Austin P. Smothers and wife, Florence V., the landowners, with E. C. Ecklesdafer, which includes mining rights, and a copy of an assignment of said agreement from Ecklesdafer to the Applicant. The assignment reserves to Ecklesdafer an interest in the claims, and therefore a Consent to Lien is required of Ecklesdafer as well as from the landowners, the Smothers.

Robert P. Dwyer

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

RECEIVED
SEP 11 1956

September 10, 1956

Memorandum

To: Lawrence G. Houk, Chief, Non-Metallic Minerals Division, Defense Minerals Exploration Administration

From: Commodity Specialist, Branch of Construction and Chemical Materials

Subject: Review of Field Team Examination Report, DMEA No. 4366, Squaw Creek Mining Co., Smothers Property, Idaho County, Idaho

The Field Team has submitted its report of examination, based upon information from available sources, and has recommended that an exploration program similar to that proposed by the applicant be undertaken on the property.

Two prominent fluorspar outcrops in a quartz vein are exposed. One is 400 feet long and the other is 300 feet long traversing the side of a steep ridge. Average width of the vein at the two outcrops is 10 feet and 5.8 feet respectively.

Proposed diamond drilling of approximately 250 feet per hole is planned to determine the nature of the vein - its grade of ore and width - at this depth. An estimated reserve of about 100,000 tons of ore is inferred to a depth of 240 feet, containing an average grade between 58 and 80 percent CaF_2.

Chances are believed to be good in finding this much ore from these two bodies with the possibility of locating other bodies of ore within the claims.

I concur with the recommendations of the Field Team.

Robert B. McDougal

Robert B. McDougal

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

RECEIVED
SEP 10 1956

September 6, 1956
Air Mail

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Co.
Smothers property
Idaho County, Idaho

Dear Mr. Selfridge:

The last paragraph of the first page of the Field Team letter dated August 27, 1956 might give the impression that the applicant must stake additional claims before a contract can be issued. This was not the intent of the Field Team letter. It is recommended that Annex II of the contract include all the claims listed in the application and provide that any additional ground which the Operator may acquire as a result of the geologic mapping be added to the ground subject to the terms of the contract.

By Field Team, Region I, NW Dist.

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Stephen W. Zolotok

for Wing G. Agnew, Member
U. S. Bureau of Mines

cc: USBM (2)
USGS(SRO)
Nickelson

IN REPLY REFER TO:

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

September 5, 1956

RECEIVED
SEP - 6 1956

Re: DMEA 4366
Squaw Creek Mining Co
Smothers property
Idaho Co., Idaho
App. Est. $10,381.00
Rec'd $10,365.00
Fluorspar

Memorandum

To: L. G. Houk, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

The applicant requested assistance in exploring by diamond drilling, geologic surveying, and sampling fluorspar-bearing veins, one of which is claimed to be 2,000 feet long and about 7 feet wide.

Based on a review of the available information, including that given in the application, the examiners recommend a work program essentially as proposed by the applicant. The examiners estimate the inferred reserves as 100,000 tons to a depth of 240 feet in two ore shoots, one 300 feet long and 6 feet wide, the other 400 feet long and 10 feet wide.

The applicant, probably on the results of work done in 1955, assigns a length of 2,000 feet to the main vein and a width of 7 feet. Using these figures 300,000 tons of 86% CaF_2 material is inferred. The examiners infer the grade is 58 to 80% CaF_2.

The diamond drilling will tend to establish the width and grade of the main vein to a depth of 250 feet.

I concur with the recommendation of the examiners and the Field Team.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

RECEIVED
AUG 30 1956

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

August 27, 1956

Re: Docket No. DMEA-4366 (Fluorspar)
Squaw Creek Mining Company
Smothers property
Idaho County, Idaho

Dear Mr. Selfridge:

Enclosed are four copies of a memorandum report by Howard B. Nickelson, Geological Survey, and E. W. Parsons, Bureau of Mines, on the subject application, and two copies each of three independent bids for diamond drilling.

At the present time access to the property is extremely difficult and has undoubtedly been a deterring factor to its exploration and development. However, two fluorspar bodies, one about 400 feet long and 10 feet wide, the other about 300 feet long and 5.8 feet wide, are exposed on the surface along the hanging wall of a large quartz vein. The average grade of five samples from the 400-foot body is 58 percent CaF_2, while the average grade of six samples from the 300-foot body is 80 percent CaF_2. There are other veins on the property that are known to contain fluorite.

Nickelson and Parsons conclude that the chance of finding an ore body containing as much as 100,000 tons, with an average grade somewhere between 58 and 80 percent CaF_2, is very good and that the chance of finding other ore bodies within the applicant's claims is good. They therefore recommend that a program be approved that will include diamond drilling of the two known bodies and surface geologic mapping to locate other targets for drilling within the applicant's claims.

The Field Team requested the addition of 48 claims, which they believed had been located adjacent to the claims included in the project. At a subsequent interview with the applicants it was learned that this ground had not yet been staked, but it is the applicant's intention to do so. The company was advised that if it wished the Government to participate in the geologic mapping of the unstaked area

Reviewed by
DMEA OPERATING COMMITTEE
9-5-56
(date)

it would first have to locate the claims and add them to the ground included in its proposal.

The Field Team concurs in the recommendation of the examiners.

By Field Team, Region I, NW Dist.

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

D. R. MacLaren, Acting Member
U. S. Geological Survey

Enclosures

cc: USBM (2)
USGS(SRO)
Nickelson

MINE DEVELOPMENT
DIAMOND CORE DRILLING
SURFACE OR UNDERGROUND

T. D. FRENCH
CONTRACTOR
WALLACE, IDAHO

PHONE 14291
P. O. BOX 551

August 4, 1956

Squaw Creek Mining Company
Missoula, Montana

Attention: Mr. Jack Ecklesdafer

Gentlemen:

In compliance with your request for a bid on your diamond drilling program at Squaw Creek property, I am pleased to submit the following:

On the basis of one thousand (1,000) feet minimum drilling a t your property I will furnish transportation in and out of equipment, supplies, labor, bits, equipment, etc. at a price of $15.50 per foot of AX drilling.

This price is considerable above normal drilling costs, however, I think you understand the great transportation costs by boat and also the high cost of providing roads and trails to drill sites, etc.

Yours very truly,

T. D. FRENCH

TDF/b

PHONE
6401

Vivian Bros., Inc.

DIAMOND CORE DRILLING CONTRACTORS

OFFICE AND SHOP
209 WEST CAMERON
KELLOGG, IDAHO

BRANCH OFFICE
MOAB, UTAH

MAILING ADDRESS
P. O. BOX 780
KELLOGG, IDAHO

[illegible], 197[illegible]

[illegible]

N. 5345 Fairmount Place
Spokane 17, Washington

August 5, 1956.

Squaw Creek Mining Company
530 North Avenue West
Missoula, Montana.

Attention; Mr. Jack Eckleesdafer

Dear Sirs:

In reference to your inquiry for diamond core drilling at your Squaw Creek property near Salmon, Idaho, Iam quoting you the following prices.

It is assumed that the minimum linear feet of drilling to be done will be 1200 feet distributed among three drill holes, the maximum of any one hole not to exceed 400 linear feet. As transportation to your Squaw Creek property is in-accessable by road a deposit of $2,000.00 would be necessay for moving the equipment to and out from the drill site. In addition to this charge the drilling cost per linear foot will be $12.50 per foot for EX size hole, $13.50 per foot for AX size, and $14.50 per foot for BX size. If casing is necessary an additional charge of $2.00 per foot shall be made for that portion of the hole cased.

Sincerely,

A. V. Morehead

A. V. Morehead

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

Reviewed by
DMEA OPERATING COMMITTEE
9-5-56
(date)

August 20, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: Howard B Nickelson, Geologist, U S. Geological Survey, and E. W. Parsons, Mining Engineer, U. S. Bureau of Mines

Subject: Application examination report, Docket No. DMEA-4366 (Fluorspar), Squaw Creek Mining Company, 605 Wilma Bldg., Missoula, Montana, Smothers property, Idaho County, Idaho

SUMMARY

The information in this report has been compiled from the application of the Squaw Creek Mining Company and from reports in the files of the Geological Survey and Bureau of Mines at Spokane.

The Squaw Creek Mining Company applied on June 13, 1956 for DMEA assistance to diamond drill a total of 1,000 feet, distributed in 3 or 4 holes, to test the downward continuity of two fluorspar bodies along a vein system (pl. 1, map 2). They also applied for hand trenching, geologic mapping and sampling of other veins in the area.

Outcrops of two fluorspar bodies that occur on the hanging wall of a large quartz vein are of sufficient size and grade to warrant exploration. The largest ore body, at the south end of the vein, crops out for a distance of approximately 400 feet and averages approximately 10 feet in width. The grade of five samples from this vein ranges from 28.4 to 80.75 percent CaF_2, averaging 58 percent CaF_2. The other ore body crops out for a distance of about 300 feet and averages 5.8 feet wide. Assays of six samples from the second outcrop range from 57.21 to 96.45 percent CaF_2 and average 80 percent CaF_2 (pl. 1, map 2). From the information above it is estimated that approximately 100,000 tons of ore can be inferred to a depth of 240 feet below the outcrop.

RECEIVED
AUG 30 1956

The inaccessibility of the property is a deterring factor to its exploration and development at the present time, but the probability of discovering an adequate ore reserve at depth on the two known ore bodies and other ore bodies that may be discovered in the area could well result in a future economic mining venture. Also, if the need for fluorspar should become sufficiently critical, these reserves could be utilized.

RECOMMENDATION

It is recommended that the application be approved to test at depth, by diamond drilling, the two ore bodies described in the summary. It is also recommended that a supervisor-geologist prepare a geologic map of the property, as well as evaluate and sample other occurrences on the property that may prove to be economical.

LOCATION OF THE PROPERTY

The Smothers property or Noussca mine is in sec. 27, T. 25 N., R. 12 E. B.M., (unsurveyed) on both sides of the Salmon River between Big Squaw Creek and Smith Creek in Idaho County, Idaho. The claims are about 6 miles outside of the Chamberlin Mining District. The property is approximately 31 miles by pack trail from the end of the Salmon River Forest Highway below Shoup, or about 25 miles by boat down the Salmon River. Another pack trail through rugged terrain is 15 miles in length and leaves the road between Darby, Montana and Grangeville, Idaho, near Salmon Mountain. Access to the property is difficult at any time, but from November to June travel is impractical, if not impossible. Special boats make the trip downstream in about 2 hours. Boats with high-powered motors are able to return upstream. Freight boats must continue downstream to Riggins, Idaho.

Mr. John Ecklesdafer visited the Bureau of Mines office on August 6 and reported that a preliminary road survey from the property to the Darby-Grangeville road had been made. He stated that the distance was 22 miles, would require very little rock work, and estimated the cost of construction would be approximately $20,000. Previously, in 1943, the Forest Service estimated the cost of a road via the Salmon River at about $300,000.

If the property is adequately stocked with provisions, it can operate throughout the year as the snowfall along the river is much less than that at higher altitudes. The altitude of the property at the river is about 2,500 feet above sea level.

The slopes of the mountains from the river banks are generally steep, 45° or steeper, which makes moving diamond drill equipment and preparing locations extremely difficult.

APPLICANT

The applicant is believed to be financially capable of performing the limited exploration proposed. The project will be under the direction of Thomas J. Herron, geophysicist, who will be

assisted by John G. Ecklesdafer, mining and mineral dressing engineer, and Robert D. R. McChesney, geologist and mining engineer. These young men are recent graduates of the Michigan College of Mines at Houghton, Michigan. It is believed they are capable of supervising and performing the work proposed.

PROPERTY RIGHTS

The property included in the application consists of 18 unpatented lode mining claims owned by Austin P. Smothers and Florence V. Smothers of Salmon, Idaho (pl. 2). On May 13, 1955, Ernest C. Ecklesdafer of Missoula, Montana, entered into an agreement to purchase the 18 claims from the Smotherses, final payment to be made by June 14, 1964. On November 21, 1955, E. C. Ecklesdafer assigned the purchase agreement to the Squaw Creek Mining Company, 605 Wilma Building, Missoula, Montana.

Consent to lien forms were signed by A. P. Smothers, F. V. Smothers, and E. C. Ecklesdafer.

The book and page number of the 18 claims recorded at Idaho County Courthouse, Grangeville, Idaho, are as follows:

Name of claim	How owned	Book No.	Page No.
Brown Cub No. 1	Option to purchase	78	654
" " 2		"	655
" " 3		"	656
Broken Halter No. 10	"	"	657
" " 11	"	"	658
" " 12	"	"	659
" " 13	"	"	670
" " 14	"	"	671
Giant Spar No. 1	"	"	672
" " 2	"	"	673
" " 3	"	"	674
Gem	"	"	675
Big Cliff No. 1	"	"	676
" " 2	"	"	677
" " 6	"	"	678
" " 5	"	"	679
" " 4	"	"	680
" " 3	"	"	681

DESCRIPTION OF THE PROPERTY

The only underground work consists of a diamond drill hole drilled late in the fall of 1955. No record of drill log or assays were reported by the applicant who stated only that a vein had been cut. A number of hand trenches and pits were reported.

No surface facilities are at the property, but it is reported that the diamond drill equipment was left at the property after the completion of last year's work.

HISTORY

The large quartz veins associated with the fluorspar were discovered in 1860 by prospectors enroute to Leesburg, Idaho. The veins were prospected for gold with discouraging results. In 1937 Jaffet and Hugo Nousson staken six claims, the deposit was re-examined for gold, and fluorspar was recognized. The above claims lapsed for lack of assessment work and the Smothersos restaked the deposit for fluorspar.

GEOLOGY

The property has been described in three Government reports: Robert M. Gammell, Fluorite deposits on the Salmon River near Big Squaw Creek, USBM examination report, 1953; J. A. Herdlick, Nousson Mine, War Minerals Report, 1943; Clyde P. Ross, Fluorite Prospect near Big Squaw Creek, Bitterroot National Forest, Idaho, 1943, War Minerals Report; and a geologic map by an AS&R company geologist (reported to be Manning Cox).

Ross briefly describes the general geology of the region as follows:

> ". . . the prospect is in the central part of the Idaho batholith in a region where the original batholithic roof apparently was exceptionally low. Most of the country is granodiorite or an allied rock which has been somewhat sheeted in a northerly or northeasterly direction. Near the northern end of the area that contains prospect holes the granitic rock is indistinctly banded in a manner that suggests it has permeated a mass of sedimentary rock (a xenolith or roof pendant) so thoroughly that original sedimentary textures are obliterated. The banding is thought to represent traces of the bedding of the original rock. Small irregular pegmatite and aplite bodies are locally present."

Ross shows the bedding striking N. 55°-75° W. on his map. Gammell and the company geologist call the country rock a biotite gneiss which is probably logical as Ross mentions the rock as banded. Gammell also reports diorite east of the deposit (pl. 1, map 3).

The fluorspar is closely related to quartz veins. The two most promising ore bodies occur along the hanging wall of a large quartz vein. A reconnaissance survey by Gammell shows the fluorspar as float or in places can be found over an area one mile wide and 1-3/4 miles long (pl. 1, map 3). Except for the two bodies mentioned it is not known if the other occurrences are large enough to become economical.

The veins in the area generally trend northwest and dip steeply. The most promising known vein structure strikes north to N. 10° W. and dips about 60° E.

The grade of the fluorspar is exceptionally good and apparently the only gangue is the quartz and granite wall rock. The average grade of the northern body is 80 percent CaF_2 from six samples across the outcrop. The southern body is somewhat lower (58 percent CaF_2 from five samples across the outcrop) which is apparently due in places to the alternate bands of fluorspar and quartz across the vein. The northern ore body averages about 6 feet wide along a strike length of 300 feet, and the southern body averages about 10 feet wide along a strike length of 400 feet. The company reports that it trenched between the two bodies and claim they comprise a continuous vein. Apparently other trenches to the north have extended the strike length of the northern ore body which of course is possible as no doubt the outcrops were covered in places during the previous examination. If this is true, the increase in ore reserves would make the deposit much more attractive.

Government engineers have estimated the ore reserves as 43,000 to 113,000 tons of indicated and inferred ore with the ratio of metallurgical to acid grade ore about two to one.

From the surface information obtained from the AS&R map the writers infer 100,000 tons of ore to a depth 240 feet below the outcrop. The company estimate of 300,000 tons is based on its belief that there is one continuous vein as indicated by its recent trench exposures. No ore has been produced from the property.

SOURCES OF SUPPLY

Materials, supplies, and equipment are available in Salmon, Idaho or Missoula, Montana. Manpower might be difficult

to secure because of the inaccessibility of the property, but possibly a few local residents would consider employment providing wages were sufficiently high. Water is available on the property. Electric power is not available in the region.

EXPLORATION PROJECT

The applicant proposes to drill four diamond drill holes for a total of 1,000 feet of bore, and to map, and sample systematically other fluorspar-bearing fissure veins on the property.

The examiners propose three diamond drill holes of AX size, located as shown on map 2, plate 1, and figures 1 and 2. These holes will test the vein at an elevation logical for future underground exploration and development. The indicated location of the holes is only approximate because the terrain is steep, but it should be possible to locate drill stations within 50 feet laterally of the indicated locations. The geologist-supervisor should carefully locate each site, giving consideration to elevation, strike and dip of the vein, and bearing of the holes, as the footage allowed does not permit holes longer than those proposed.

The mapping and sampling part of the proposed project will be carried out by the geologist-supervisor. It is estimated that 75 percent of his time will be devoted to mapping and 25 percent to drilling supervision.

The geologist will map all known occurrences on the property, sample these occurrences wherever feasible, and submit a reproducible map and a report of his findings. The map should show the following features: (1) Altitude of all survey points, (2) sample locations and assays, (3) width of samples, and (4) any data pertinent to future exploration of any likely economic deposit. Rock types and faults should be mapped but emphasis on an economic geologic map is the prime consideration.

The applicant's budget does not allow an increase in work units, but the funds appear adequate to accomplish the proposed work. A summary of the applicant's proposed exploration, showing costs, is given below.

APPLICANT'S ESTIMATED COSTS

Diamond drilling

Rental on diamond drill - 2 months at $375/mo.	$ 750.00	
Drillers wages at $21.60/day - 50 days	1,080.00	
Drillers Helper wages at $17.30/day - 50 days	865.00	
Gasoline at $1.50/foot - 1,000 feet	1,500.00	-1000.00
Bit cost at $2.00/foot - 1,000 feet	2,000.00	
Repairs at $0.50/foot - 1,000 feet	500.00	
Miscellaneous (core boxes, etc.) at $1.00/foot - 1,000 ft.	1,000.00	
Workers compensation and insurance - 7% of labor cost	136.00	
Total cost for 1,000 feet of drilling	$7,831.00	

Cost per foot of drilling - $7.83

Supervision

One Geologist-engineer at $600/mo. - 2 mos.	$1,200.00	

Miscellaneous

Analysis of 100 samples @ $6/sample (50, -5.0)	600.00	-300
Transportation of samples by boat and freight	200.00	-150
Transportation of men and materials by boat - 2 trips/mo. @ $50/trip - for 2 months	200.00	
Demobilizing drill, pump, rods, and miscellaneous - total weight 3,000 pounds - by river from property to Riggins, Idaho, 110 miles by boat, then from Riggins to Missoula, Montana, by truck, a distance of approximately 450 miles	350.00	
	$ 2,550.00	
Total cost	$10,381.00	

RECEIVED
AUG 30 1956

Three bids were received from diamond drill contractors, as follows:

Name	Location	1,000 ft. basis AX	EX	Moving equipment
T. D. French	Wallace, Idaho	$15.50		
A. V. Morehead	Spokane, Wash.	13.50	$12.50	$2,000.00
Vivian Bros.	Kellogg, Idaho	16.00		

These bids are high because the footage is small, the location is inaccessible, and the contractors are not interested in this type of work. The applicant's estimate for doing the work is more realistic and is being used as a basis for the cost analysis.

Work on the project shall be started within 30 days of effective date of contract and shall be completed within 6 months providing winter weather does not intervene before the field work is completed.

OPERATING EQUIPMENT

The applicant will rent diamond drilling equipment for the work. Much of the equipment is reported to be on the property at the present time.

PROPERTY RIGHTS

The property to be included in the project consists of the 18 claims previously listed. All of these claims would not be necessary if the project work was confined to diamond drilling, but 6 weeks of geological mapping and sampling of the occurrences in the area will require a greater claim coverage.

ESTIMATED COST OF PROJECT

The project recommended is to consist of 1,000 feet of diamond drilling on the main vein, sampling other veins on the property, assaying 100 samples, and making an engineering report. + geologist

It appears that an agreed unit cost contract would be the most feasible, based on the following estimate:

COST ANALYSIS

(1)	Independent contracts		none
(2)	Labor and Supervision		
	Labor		
	1 Driller 50 days @ $21.60/day	$1,080.00	
	1 Helper 50 days @ 17.30/day	865.00	
	Supervision and Tech. Services		
	@ $600/mo. for 2 months		
	25% of $1200 charged to drilling	300.00	
	75% of $1200 charged to reconnaissance	900.00	$3,145.00
(3)	Operating Materials and Supplies		
	Gasoline - 1,000 ft. @ $0.50/ft.	500.00	
	Bits - 1,000 ft. @ 2.00/ft	2,000.00	
	Core boxes, etc. - 1,000 ft. @ 1.00/ft.	1,000.00	3,500.00
(4)	Operating Equipment		
	To be rented:		
	Diamond drill, 2 mo. @ $375/mo.		750.00
(5)	Initial Rehab. and Repairs		none
(6)	New Bldgs., Improvements, etc.		none
(7)	Miscellaneous		
	Payroll taxes - 7% of Item (2)	220.15	
	Repairs to equipment - 1,000 ft. @ $0.50	500.00	
	Analysis of ~~100~~ samples @ $6/ea.	600.00 1/	
	Transportation:		
	Samples	100.00 1/	
	Men and materials - 2 boat trips per month @ $50/trip, 2 months	200.00	
	3,000 lbs. drill equipment to Riggins, Idaho by boat (110 mi.), then to Missoula, Mont. by truck (450 mi.)	350.00	1,970.15
(8)	Contingencies		
	Unknown transportation difficulties		1,000.00 2/
	Total cost of contract		$10,365.15
	Government's share at 50 percent		$ 5,182.57

1/ 50% to drilling and 50% to reconnaissance
2/ $200 to reconnaissance

SUMMARY OF DRILL COSTS

Labor and Supervision	$2,245.00
Operating Materials & Supplies	3,500.00
Operating Equipment	750.00
Miscellaneous	1,557.15
Contingencies	800.00
Total cost of drilling	$8,852.15
Cost per foot of drilling	$ 8.85

SUMMARY OF RECONNAISSANCE COSTS

Geologist-engineer	$ 900.00
Payroll taxes - 7%	63.00
Analysis of 50 samples	300.00
Transportation of 50 samples	50.00
Contingencies	200.00
Total cost of reconnaissance	$1,513.00
Total cost of contract	$10,365.15
Government's share at 50 percent	$ 5,182.57

RECOMMENDED AGREED UNIT COST FOR DRILLING

1,000 feet of AX size core drilling @ $8.50	$ 8,500.00
50 assays @ $6/ea.	300.00
Transportation of 50 samples @ $1/ea.	50.00
Total cost of drilling	$ 8,850.00

RECONNAISSANCE COSTS
(Actual costs)

Total cost of reconnaissance	1,513.00
Total estimated cost of project	$10,363.00
Government's share at 50 percent	$ 5,181.50

This cost seems reasonable and proper considering the remote location of the property, the difficulty of placing equipment, material, and men on the property, and the ruggedness of the terrain to be drilled. There is no scheduled boat service on Salmon River.

CONCLUSION

The drilling exploration is warranted to determine the continuity of the two ore lenses approximately 250 feet below the outcrop in order to justify a road and future exploration by crosscutting and drifting. The geologic mapping and sampling of the property is also warranted to determine the existence of other veins that may be developed and to provide the Government with information about the area and to determine a reasonable estimate of the fluorspar reserves in the area.

Enclosures 2

Distribution:
DMEA (4)
USBM (5)
USGS(SRO)
Dockst
Nickelsen

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

July 30, 1956

Memorandum

To: Lawrence G. Houk, Chief, Non-Metallic Minerals Division
Defense Minerals Exploration Administration

From: Commodity Specialist, Branch of Construction and
Chemical Materials

Subject: Reports on Fluorite Deposits in Idaho

In connection with the processing of DMEA Application No. 4366, Squaw Creek Mining Company, by your office, as requested there are attached the following publications from the Bureau of Mines Library, Eastern Experiment Station, College Park, Maryland:

80.5763 Interim Report, "Fluorite Deposits on the Salmon River near Big Squaw Creek, Idaho Co., Idaho." By R. M. Gammell (5 maps)

80.7285 WMR, "The Nousson Mine" -2 Review of Exam Rpts. 1 map. Report by J. A. Herdlick

It is requested the above be returned to me as soon as possible.

Robert B. McDougal
Robert B. McDougal

Attachments 2

DOCKET COPY
Surname:
Anderson
Houk
Selfridge
Johnson

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

JUL 1956

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, N. W. District
South 157 Howard Street
Spokane, 4, Washington

Re: Docket No. DMEA-4366-fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Weissenborn:

Please review the subject application and arrange for a field examination if you deem it necessary.

Copies of memoranda dated July 2 and 16, 1956, by Mr. N. E. Nelson, USGS, and Mr. R. B. McDougal, USBM, respectively, relating to the project are enclosed.

It is noted that the applicant proposes to rent diamond drill equipment and hire drill runners and helpers. This is a departure from the usual procedure of contracting the drilling. It is possible the work could be done cheaper this way. However, we note that the drilling cost of $7.83, (which does not include supervision, sample analysis and miscellaneous) is considerably higher than the normal core drilling costs for DMEA contracts in that area. The applicant did not indicate core size.

Sincerely yours,

George C. Selfridge (cf)
Chairman, Operating Committee

Approved:

P. F. Zopes (cf)
Member, Bureau of Mines

N. E. Nelson (cf)
Member, Geological Survey

Enclosures: 4

WCAnderson:ms 7/17/56
Copy to: Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk
Admr. R. File

DOCKET COPY
Surname:
Anderson
Houk
Yong
Wilson
Selfridge

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

JUL 23 1956

Mr. Jack Eckleadafer
1405 College Avenue
Houghton, Michigan

Re: Docket No. DMEA-4366-fluorspar
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho

Dear Mr. Eckleadafer:

The Squaw Creek Mining Company's application for assistance in exploring the subject property has been reviewed by the Nonmetallic Minerals Division of the Defense Minerals Exploration Administration and has been referred to Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region I, South 157 Howard Street, Spokane, 4, Washington, for further consideration and possibly a field examination.

We note that you propose to do your own diamond drilling. Nevertheless, before we can complete the processing of your application, it will be necessary that you submit bids from three contracting companies for the proposed diamond drilling work.

The Regional Office will contact you at an early date if an examination is to be made. Any assistance you may give the members of the Field Team during the examination will be appreciated.

Sincerely yours,

Frank E. Johnson (for)

ACTING Administrator

WCAnderson:ms 7/20/56
Copy to: Docket
Operating Committee
Field Team, Region I
Mr. Kiilsgaard, 5222
Mr. McDougal, 3522
Mr. Houk
Admr. R. File
Squaw Creek Mining Company

R.C.S.

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

RECEIVED
JUL 16 1956

July 16, 1956

Memorandum

To: Lawrence G. Houk, Chief, Non-Metallic Minerals Division, Defense Minerals Exploration Administration

From: Commodity Specialist, Branch of Construction and Chemical Materials

Subject: Review of Application DMEA No. 4366, Fluorspar, Squaw Creek Mining Co., Smothers Property, Idaho Co., Idaho, Estimated cost $10,381.

The attached application has been reviewed and from the information presented appears to justify further investigation by the field team.

The applicant requests assistance in exploring a fissure type vein deposit of fluorspar measuring 2,000 feet long and an average of 7 feet wide.

He proposes to diamond drill 3 holes totaling 1,000 feet of drilling from the base of the cliff with a minimum of drilling to intersect the vein at depth. Five other veins on the property approximately parallel to the main vein are to be trenched, channel sampled and assayed in similar manner to the work that has been done on the main vein.

As it appears that this project will provide useful information on the existence of fluorspar mineralization in this area, it is recommended that the application be referred to the field team.

The estimated unit costs appear to be high but may be justified by the inaccessibility of the deposit. The costs should be given special attention by the field team and evaluated in the light of their knowledge of local conditions.

Robert B. McDougal
Robert B. McDougal

Attachment

3 Bids

Subcontractor agreement

on

O.C.L. [illegible]

OCL is O.K.

Signed by owners,

Smothers + wife

IN REPLY REFER TO:

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

RECEIVED
JUL 3 - 1956

July 2, 1956

Re: DMEA 4366
Squaw Creek Mining Company
Smothers property
Idaho Co., Idaho
$10,381.00 - Fluorspar

Memorandum

To: L. G. Houk, Defense Minerals Exploration Administration

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

Subject: Review of application

The applicant requests assistance in exploring by diamond drilling and sampling fluorspar bearing fissure veins. The main vein has been prospected by trenches (crosscut) at 50-foot intervals for 2,000 feet and according to the application has an average width of 7 feet and averages 86% CaF_2. Inferred reserves are 300,000 tons.

The proposed diamond drilling will explore the main vein at depth and systematically sample the remaining veins, at least five in number.

Referral of the application to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

June 29, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region I,NW

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA

4366 Squaw Creek Mining Co.

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

June 29, 1956

Subject: DMEA 4366
Re: Exploration Assistance
Smothers Property

Squaw Creek Mining Co.
605 Wilma Bldg.
Missoula, Montana

Gentlemen

The receipt of your application dated June 12, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA 4366 and referred to the Nonmetallic Minerals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

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

So. 157 Howard Street
Spokane 4, Washington

RECEIVED
JUN 29 1956

June 26, 1956

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: New application (fluorspar)
Squaw Creek Mining Company
Smothers property
Idaho County, Idaho

Dear Mr. Selfridge:

Enclosed are three copies of an application from the Squaw Creek Mining Company for the exploration of a fluorspar property in Idaho County, Idaho. The Squaw Creek Mining Company is the assignee of the claims from Ernest C. Ecklesdafer and is the applicant. The exploration will be done by Jack Ecklesdafer, nephew of Ernest C. Ecklesdafer, and two associates, all of whom are graduate students at the Michigan College of Mines at Houghton.

The property is in an area difficult of access along the Salmon River. It has been described by Robert M. Gammel (Fluorite deposits on the Salmon River near Big Squaw Creek, U.S.B.M. examination report, 1953) and by J. A. Herdlick (Nousson Mine, War Minerals Report, 1943). There is also in the Spokane office files of the U.S.G.S. a detailed geologic and sample map prepared by a company geologist. The information available is sufficient so that a recommendation could be made without additional field investigation.

The property has a favorable showing of fluorspar which doubtless would have been explored long since if it were not so difficult of access and may be worth some exploration. It is most unlikely that the four holes proposed by the applicant will develop 300,000 tons of ore hoped for by the applicant, but the drilling could indicate enough to interest the applicant or someone else in doing further work.

By Field Team, Region I, NW District

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosure

cc: USBM (2)
Alvord

Mr. and Mrs. Austin P. Smothers,
Salmon, Idaho.

Re: Docket No. DMEA-4366 Thompson
Squaw Creek Mining Company
Smothers Property
Idaho County, Idaho.

Dear Mr. and Mrs. Smothers:

Reference is made to the Consent to Lien and Purchase Agreement on the subject property.

On January 23, 1957, we requested that you please verify that the Purchase Agreement, dated May 13, 1955, from Austin P. and Florence V. Smothers to E. C. Eldeskogen is in good standing and that all the required payments have been met or waived.

We are very desirous of continuing the processing of the application for Government assistance to effect the subject property, but are reluctant to do so until hearing from you concerning the status of the Purchase Agreement. Due the instant of expediting the processing of the application, we would appreciate very much your cooperation with our request.

copy to Jackson

MF-200
(Revised June 1954)

Docket No. DMEA 4366

Commodity Manganese

Contract No. Idm-E

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

EXPLORATION PROJECT CONTRACT[1]

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

whose mailing address is 605 Wilma Building, Missoula, Montana,

hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, and Plate No. 1 and Figures Nos. 1 and 2.

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

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

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] assignee of [5] the mining claims in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] agreement to purchase, [7] recorded in Book 4, page 481, official records of said County; and

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

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title

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

of the land (lessor, seller, optionor, etc.), are attached, ~~as follows~~: .....

.....

.....

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Fluorspar The work to be performed is described in Exhibit "A." The Operator on or before ..... shall commence the work, and on or before ..... (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A."

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

(b) *Independent contracts.*—To the extent that the allowable costs are estimated in Exhibit "A" with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed; but if the reference in Exhibit "A" to any such independent contract requires the Government's approval thereof, payments under such contract will not be allowable costs unless the Government gives its written approval of the contract. Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract and regardless of the Government's approval thereof, the Government will participate in payments to the independent contractor only on account of work performed in accordance with the provisions of this exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $ 9,282.00 The Government shall contribute 50 percent of the allowable costs as they are incurred in a total sum not in excess of $ 4,621.00 : *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work or not in excess of the amount of the Government's contribution to the cost of property which is or may become subject to disposal as provided in Article 9(c), whichever is greater. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 7(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. "Costs incurred" mean costs that have been paid or have become due and payable, or that in the opinion of the Government have become an obligation. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated, total allowable cost of the work.

To the extent specified in this article or in Exhibit "A" the following categories, subcategories, and elements thereof are maximums; but if not so specified either here or in Exhibit "A" they are not maximums, and may be exceeded within the limit of the estimated total allowable cost of the work:

CATEGORY (1)—INDEPENDENT CONTRACTS.—Work to be performed under independent contracts (see Article 4(b)). The estimated total amount of this category and the estimated cost of each unit of work for performance under an independent contract are maximums.

CATEGORY (2)—PERSONAL SERVICES.

Subcategory (a)—Supervision.—All elements of this subcategory (number of supervisors, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)—Technical services.—All elements of this subcategory (number of technicians, periods of employment, rates of pay, and total) are maximums.

Subcategory (c)—Labor.

CATEGORY (3)—OPERATING MATERIALS AND SUPPLIES.—Includes such items as drill bits and steel, explosives, fuel, pipe, power, small tools costing less than $50 each, timber, track.

CATEGORY (4)—OPERATING EQUIPMENT.

Subcategory (a)—Rental.—The number of each object to be rented [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)—Purchases.—The estimated total of this subcategory is a maximum.

Subcategory (c)—Depreciation.—All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)—INITIAL REHABILITATION AND REPAIRS.—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

Subcategory (a)—Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).—The estimated total of this subcategory is a maximum.

Subcategory (b)—Initial rehabilitation and repairs of operating equipment.—The estimated total of this subcategory is a maximum.

CATEGORY (6)—NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

CATEGORY (7)—MISCELLANEOUS.—Repairs and maintenance (other than initial) of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, communications, and any other items of requirement or cost that do not fall within any of the first 6 categories.

THE ESTIMATED TOTAL ALLOWABLE COST of the work is a maximum.

(b) *Nonallowable costs.*—The following costs are not allowable for contribution by the Government:

(1) *Costs of the land,* such as rental, depreciation, depletion, or other cost of acquiring, owning, or holding possession;

(2) *Indirect costs,* such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) *Previous work* performed or costs incurred before the date of this contract; and

(4) *Deferred payments.*—Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods; unless the purchase agreement is approved by the Government in writing.

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 9.

ARTICLE 7. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. If the Government elects to audit said records and accounts relating to the exploration work by certified public accountant, it may do so as a cost of the work to which the Operator shall contribute. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing detailed costs incurred during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

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

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

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

ARTICLE 8. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 7) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

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

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

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

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

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½)

percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

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

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

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

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

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

ARTICLE 9. *Interests in purchased property.*—(a) *Title and ownership.*—All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions, although title thereto shall be taken in the name of the Operator.

(b) *Preservation of property.*—Until the final disposal of any property in which the Government has an interest the Operator shall preserve and protect same for the best interest of the Government, any reasonable and necessary costs thereof to be treated as an allowable cost of the project. After the completion of the work or termination of the Government's obligation to contribute, or when such property is not in use for or needed for the work, the Operator shall neither use it without the written consent of the Government nor without paying a reasonable rental to be fixed by the Government for its interest.

(c) *Disposal of property.*—Upon the completion of the work or termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator or the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government the Operator shall not sell at any price any item of property the cost of which was more than $500, and shall not sell at less than 25 percent of the purchase price any item of property which cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or himself cares to give. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, or explosives, or pipe, or rails), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the project.

(d) *Default of the Operator re disposal.*—If within 90 days after the completion of the work or termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, or after such further time as the Government may in writing allow, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may pursue one of the following two courses: (1) the Government, by written notice to the Operator, may place upon such property what in its opinion is a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the

date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; or (2) the Government may enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 10. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon: (1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon: (1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 10 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 11. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 12. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 13. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By .....

.....
(Operator)

By .....

.....

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

.....

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70617-1

Estimated Costs of the Project

Category (1) Independent Contractors – None

Category (2) Personal Services

(a) Supervision

Geologist-engineer	@ $600/mo.	$ 1,200.00
Driller	@ $21.60/day	1,080.00
Driller's helper	@ $17.30/day	865.00

Category (3) Operating Materials and Supplies

Gasoline	@ $0.50/ft.	500.00
Bits	@ $2.00/ft.	2,000.00
Core boxes, etc	@ $1.00/ft.	1,000.00

Category (4) Operating Equipment

(a) Rental

1 diamond drill	@ $375/month	750.00

Category (5) Initial Rehabilitation and Repairs – None

Category (6) New Buildings, Fixtures and Installations – None

Category (7) Miscellaneous

Repairs	@ $1.50/ft.	500.00
100 samples assayed for CaF_2, Pb, Zn, SiO_2	@ $/sample	600.00
Transportation of 100 samples	@ $1/sample	100.00
Transportation of men and materials	@ $50/trip	200.00
Workers Compensation and insurance	@ 7%	137.00
Demobilization and moving in and out of equipment		350.00

Estimated total cost of project $ 9,282.00

Government participation @ 50% $ 4,621.00

No payment yet recoverable. hole.

MF-200A
(Rev. April 1956)

80% core in mineralized zone

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

RECEIVED
FEB 12 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

EXPLORATION PROJECT CONTRACT
(Short Form)

DMEA No.	Commodity	Contract No.	County	State
4366	Fluorspar	Idm-E	Idaho	Idaho

It is agreed ....., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Squaw Creek Mining Company, a Montana Corporation

whose mailing address is 605 Wilma Building
Missoula, Montana
hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority and project.*—(a) This contract is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200A), the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed therein. The project work is a search for indicated or undeveloped deposits of the commodity designated above. The Operator shall begin the work on or before ....., and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 8 months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the project work is $10,000.00. The Government will contribute 50 percent of the fixed unit cost of the work performed, not exceeding $5000.00, in accordance with the provisions of Articles 4 and 5.

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

ARTICLE 2. *Operator's property rights.*—(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's rights of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances: Payment to the owners according to purchase agreement.

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

(c) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing

in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. Two copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. *Performance of the work.*—(a) Operator's responsibility.—The work shall be performed diligently, efficiently, expertly, in a workmanlike manner, and in accordance with good mining standards and State regulations governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work, as specified in Article 1 (a).

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

ARTICLE 4. *Contribution by the Government.*—The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5 (b); but all payments by the Government are provisional only, subject to audit, and until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been rendered, the Government may withhold such sums as it sees fit but not in excess of 10 percent of the estimated total cost of the work. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government will not contribute to the cost of any work performed prior to the date of this contract. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(a) Operator's records.—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

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

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

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

ARTICLE 6. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered a sufficient final report (see Article 5), may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 7. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

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

(c) The giving of any notice by the Government under the provisions of this Article 7 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and liens to secure the payment thereof, and such rights shall be fully preserved.

ARTICLE 8. *Notices to be given by the Government* may be delivered to the Operator or may be sent by registered mail addressed to the Operator at the mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 10. *Changes and added provisions.*—

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.....

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Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

.....
(Operator)

By .....

By .....

.....

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

.....

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE: 1956—O-383069

Exploration Project Contract
Squaw Creek Mining Company
Docket No. DMEA-4366

Exhibit "A"

Description of the Work

Explore for fluorspar by AX standard diamond drilling. The holes shall be drilled to cut the downward extension of the main vein at an approximate depth of 250 feet from the outcrop as indicated on Plates Nos. 1 and 2 each ~~entitled "Smathers Fluorspar Deposit, Squaw Creek Mining Co., Gasconade County, Mo."~~, and Figures 1 and 2, each with ~~same title~~, attached hereto and made a part hereof are the following maps: a Plate 1 entitled & " 2 " & Fig 1

The work shall consist of drilling 3 diamond core holes, as indicated, for a distance not to exceed 350 feet each, and the total drilling shall not exceed 1,000 feet.

The Government shall not contribute to the cost of an incompleted hole, or to the cost of any hole ~~one~~ that does not produce 80% core in the mineralized zone. Wooden core boxes shall be used for core storage.

Records of each hole drilled, together with many

Certificates of samples taken, shall be submitted with the Operator's monthly progress report, which shall also include a map showing the location of all holes drilled during the reporting period. All samples shall be properly identified as to drill hole number and the depths represented.

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

The geologist shall map, and wherever feasible shall sample, all known occurrences on the property, ~~sample these occurrences wherever feasible~~, and shall submit a reproducible map and a report of his findings. The map should show the following features: (1) All latitude of all survey points, (2) Sample locations and assays, (3) width of samples, and (4) any data pertinent to future exploration of any likely economic deposit. Rock types and faults shall be mapped but emphasis shall be on the preparation of an economic geological map. ~~so the prime consideration.~~ This work shall be confined to the contract area as defined by the land description under Annex I of the contract.

Fixed Unit Costs

Diamond drilling with AX bit, 1000 feet @ $8.00/ft. Includes supervision and technical services, reaming, setting and pulling casing, wooden core boxes, and all other costs unknown connected with the drilling.	$8000.00
50 samples to be assayed for CaF_2 and SiO_2 @ $6.00/sample	$300.00
Transportation of 50 samples @ $1.00 each	50.00
Transportation of men and materials 2 boat trips per month, 2 months, @ $50/trip	200.00
Transportation in and out of 3000 lbs. drill equipment 1/	350.00
Geological mapping, sampling, assaying, and transportation of men 1/	1100.00
Estimated total cost of project	$10,000.00
Government participation @ 50%	5,000.00

1/ The complete events constitute the unit.

Exploration Project Contract
Squaw Creek Mining Company
Docket No. DMEA-4366

Annex I

The land referred to in Article 2 of the contract is known as the Smothers Property or Noonson mine, ~~located~~ situated in unsurveyed Sec. 27, T. 25 N., R. 12 E. B.M., Idaho on both sides of the Salmon River between Big Squaw Creek and Smith Creek in Idaho County, Idaho. The property consists of 18 unpatented lode mining claims, about 6 miles outside of the Chamberlin Mining District, approximately 31 miles by pack trail from the end of the Salmon River Forest Highway below Shoup, or about 25 miles by boat down the Salmon River. The Operator has possession of the land ~~under~~ by an assignment to it dated November 21, 1955, from ~~Ernest~~ ~~Ernest C. Eckladyn, May 13, 1955,~~ Ernest C. Eckladyn ~~entered into an~~ of an agreement, ~~Ernest C.~~ dated May 13, 1955, wherein ~~under which~~ the latter agreed ~~an agreement~~ to purchase the 18 claims from Austin P. and Florence V. Smothers. ~~On November 21, 1955, Ernest C. Eckladyn assigned the purchase agreement to the Squaw Creek Mining Company.~~

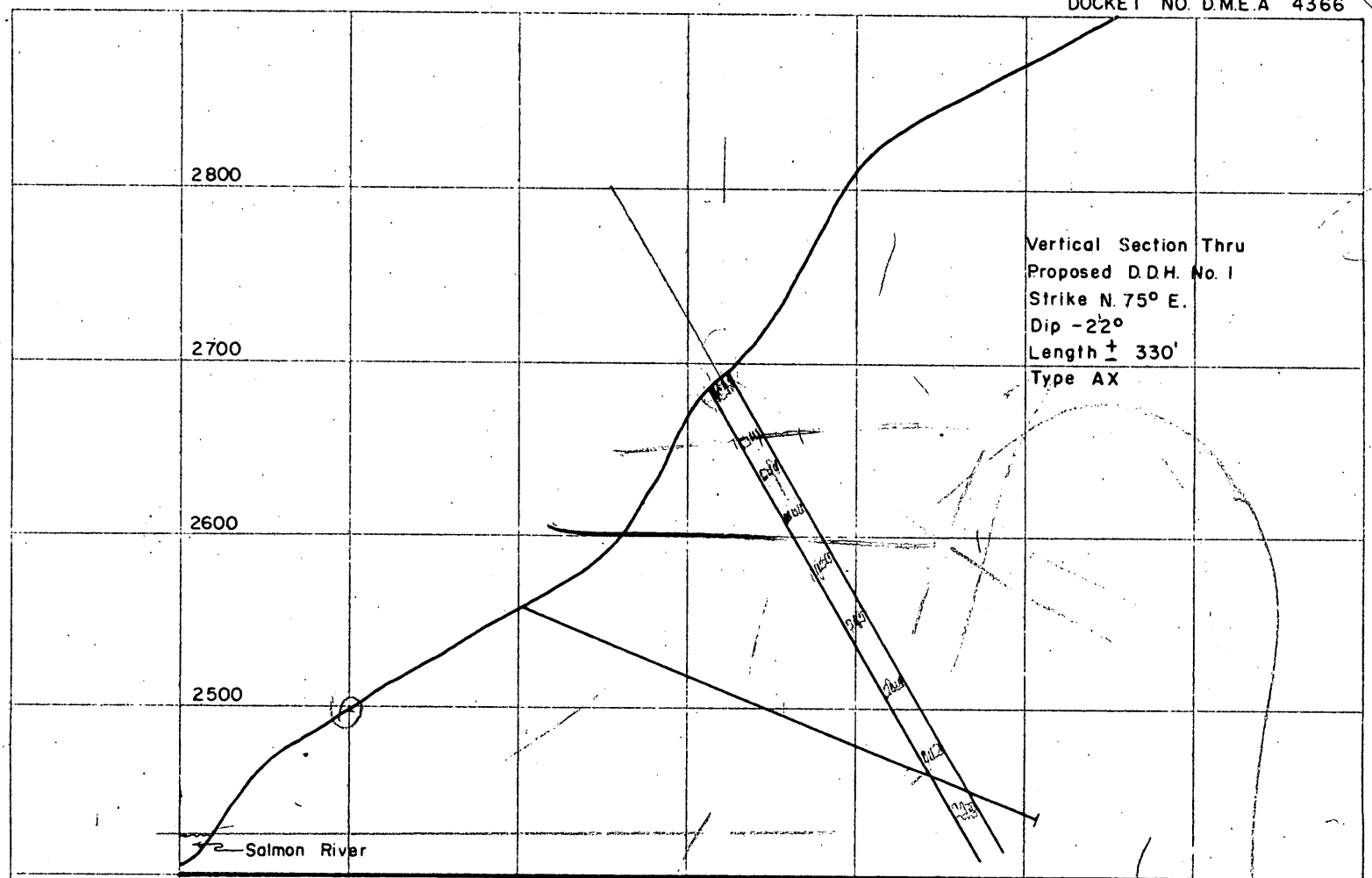
The claims are shown on the attached Plate No.

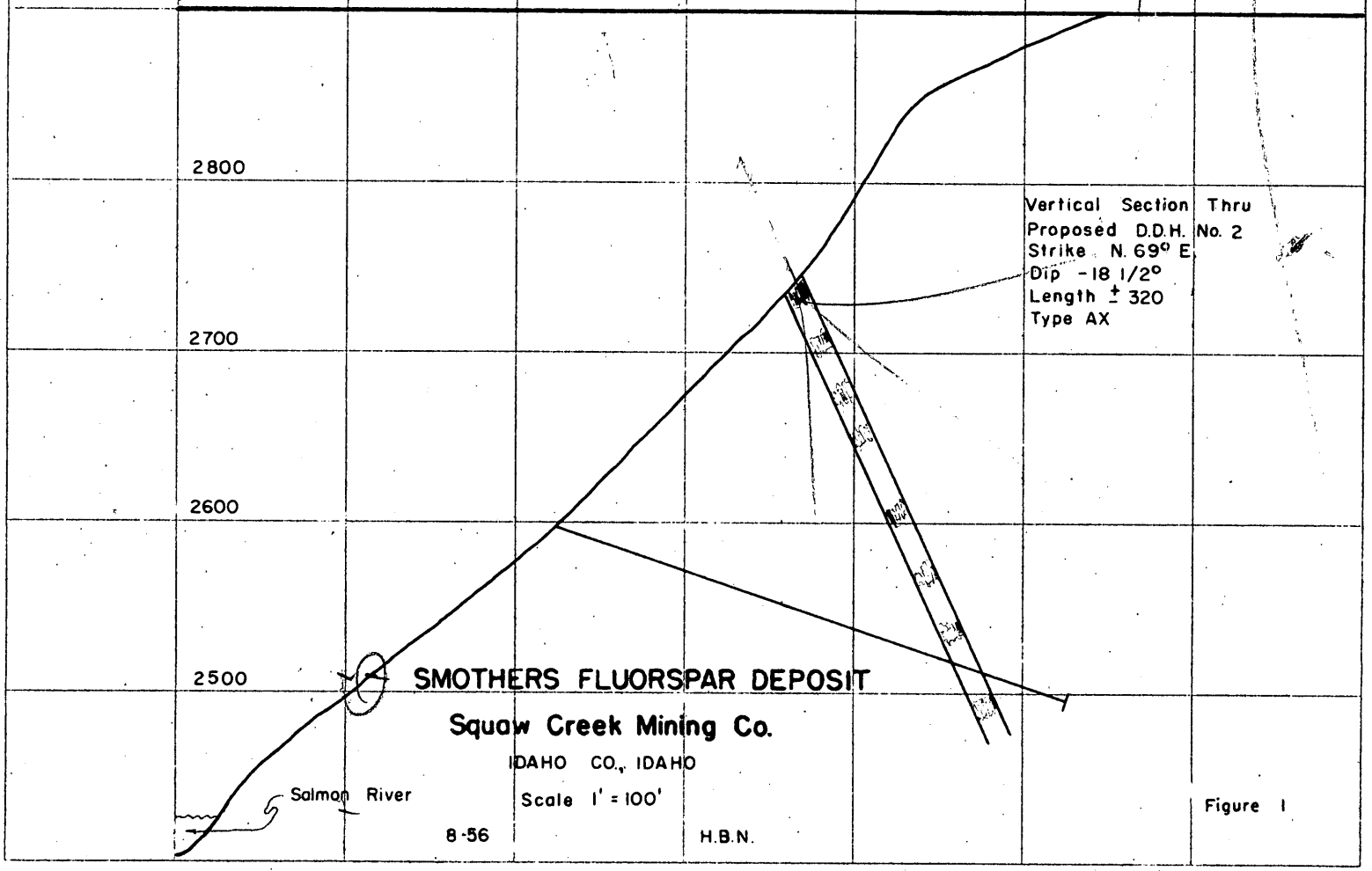
and are described as follows:

(Please copy the list of claims
as given in the assignment by E. C. Ecklesdafer).

COPY

Attached hereto is the Consent
to Lien signed by A. P.
Smothers, Florence V. Smothers,
and Ernest C. Ecklesdafer





SMOTHERS FLUORSPAR DEPOSIT

Squaw Creek Mining Co.

IDAHO CO., IDAHO

Scale 1' = 100'

8-56 H.B.N.

Figure 1

"ALBANENE" NO. 195M K&E CO., N.Y.
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