DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E NO._____ DMEA NO. 4433

Application
- [x] 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- [ ] Withdrawn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
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [ ] Project summary (final)
- [ ] 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
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] 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

17963

MF-205
(Co[illegible]nes and supercedes MF[illegible]1 and MF-203)
Jun[illegible]956

[illegible]or Government's Use Only
EXPL[illegible]ATION PROJECT CONTRACT
Operator_____
Docket No. DMEA-_____
Contract No. Idm-E_____
Contract Date_____

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Mitchell, State of North Carolina, described as follows: 2/ Beginning on an iron stake at the center of what is known as the Buckeye Prospect which is located 643 feet South 21 degrees West to a Black Oak tree, which is the property line between James Buchanan and Anna McKinney, as shown on deed recorded in Book #66, Page #242, Register of Deeds Office in Bakersville, N.C., and running 250' North; thence 250' West; thence 500' South; thence 500' East; thence 500' North; thence 250' West to a point of closing. This property located approximately four miles North of Bakersville, N.C.

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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;

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RECEIVED
AUG 22 1956

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 17th. day of August, 1956.

W B Parsons	[Seal]	Bakersville Rt. 3	[Address]
Lillian Parsons	[Seal]	Bakersville Rt. 3	[Address]
Beatrice M. Butt	[Seal]	Nebo, N. C.	[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.

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[Corporate Seal]

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
Contract Date

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

Dated this [illegible] day of [illegible], 195[illegible].

X W B Parsons	[Seal]	Baskerville Rt 3	[Address]
Lillian Parsons	[Seal]	Baskerville, Rt 3	[Address]
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	[Seal]		[Address]
	[Seal]		[Address]
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MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

For Government's Use Only
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Operator _____
Docket No. DMEA- _____
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O.B. Parsons	[Seal]	Bakersville Rt 3	[Address]
Lillian Parsons	[Seal]	Bakersville, Rt. 3	[Address]
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(Combines and supercedes MF-201 and MF-203)
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G H B Parsons	[Seal]	Robersville Rt 3	[Address]
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MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

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Operator_____
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Dated this 17th. day of August, 1956.

J. B. Parsons	[Seal]	Bakersville Rt. 3	[Address]
Lillian Parsons	[Seal]	Bakersville Rt. 3	[Address]
Beatrice M. Butt	[Seal]	Nebo, N. C.	[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

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_____

[Corporate Seal]

C O P Y
mg 8/20/56

August 20, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: New Applications received here

Enclosed are three copies of each of the following applications, received here today:

Operator	Prospect	County		State
J. R. Beam	Back Prospect	Cleveland	(Mica)	N.C.
Larkin Buchanan and Joe Snyder	Ivy Knob Prospect	Mitchell	(Mica)	N.C.
C. W. Ellis	Buckeye Prospect	Mitchell	(Mica)	N.C.

We are keeping the fourth copy of each application for our use.

Robert A. Laurence
Executive Officer

Wm. A. Beckfor V. J. Lynch
Member, Bureau of Mines

RAL/mg

Enclosures 3
cc - Operating Committee (8)

Lynch (3) Files (3)

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. 4433
Metal or Mineral Mica
Date Received 8-22-56
Estimated Cost $6200
Participation (Government %)

RECEIVED
AUG 20 1956
U. S. Geological Survey
Denver, Colorado

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:

C.W. Ellis
Route #3
Bakersville, N.C.

(*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 Legal description given on attached lease.

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

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

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

(*e*) If you own the land, describe any liens or encumbrances on it Do not own land.

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

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 See. Sheet

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

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

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

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

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AUG 23 1956

16—66551-1

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

(*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. See sheet.

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

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

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. See sheet.

(*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)? Yes.

(*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 8-17-56, 195..

C.E. Ellis
(Applicant)

By C. E. Ellis

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

MF-103 (Continuation Sheet)

4. (a) Some work has been done at this prospect. A shaft about 60 feet deep exists. Applicant had no interest in previous work.

(b) There has been a substantial amount of strategic mica sold.

(c) We belive that by deepen the shaft an additional 40 feet we will find lots of good quality mica.

(d) Project is accessible to road except for a short distance.

(e) Manpower, supplies and equipment are available. Power is about 300 yards away.

5. (b) We propose to bulldoze access to road, then deepen shaft an additional 40 feet, then drift a distance of 100' with vein.

6. Estimate of costs:

25 hours Bulldozing @ $10.00 . . .	$ 250.00
40' Shaft @ $50.00 per. Ft. . . .	2000.00
100' Drift @ $35.00 per. ft. . . .	3500.00
Total estimated cost of project:	$ 6200.00

MINING LEASE

State of North Carolina Mitchell County:

This indenture made this 17th. day of August, 1956 ~~XXXX~~,

between W.B. Parsons and wife Lillian Parsons, and Beatrice M. Butt

of Mitchell County and State of North Carolina as party of the first part, and known as lessor, and C.W. Ellis

of Mitchell County and State of North Carolina, party of the second part and known as lessee.

WITNESSETH, That the part of the first part in consideration of One Dollar in hand received and hereby acknowledged by the lessor, and in consideration of the agreements hereinafter contained, on the part of the party of the second part to be performed, hereby bargains, leases and grants to the party of the second part, and his heirs and assigns, for the period of five years from the date of this agreement, the following described real property, for mining purposes, in the County and State first above written to wit:

Beginning on an iron stake at the center of what is known as the Buckeye Prospect which is located 643 feet South 21 degrees West to a Black Oak tree, which is the property line between James Buchanan and Anna McKinney, as shown on deed recorded in Book #66, Page #242, Register of Deeds Office in Bakersville, N.C, and running 250' North; thence 250' West; thence 500' South; thence 500' East; thence 500' North ; thence 250' West to a point of closing. This property located approximately four miles North of Bakersville,N.C.

TO HAVE AND TO HOLD the said lands to him, for mining purposes, the said lessee and his heirs and assigns for the aforesaid period of five years in compliance with the condition of this instrument, for the purpose and with the right to dig, quarry, search, explore for, obtain, and remove any kind of minerals, metals or fossils, and particularly mica, and to conduct the same to any extent the said party of the second part, the lessee, may desire. And it is hereby agreed between the parties to this agreement that the party of the second part is to have the use of any unoccupied buildings on said lands for mining purposes, and that he shall have the right to erect such buildings as he needs to carry on such mining operatins during the period of this lease, and that the party of the second part shall keep the same in as good condition as when received, unavoidable accidents excepted. And it is also agreed by the party of the second part that no unnecessary damage is to be done to the lands herein leased during the period of this lease and the continuance of said lease, but the said party of the second part shall have the right to take from said lands leased to the party of the second part any wood or timber the party of the second part may need to carry on said mining operations or which may be needed to carry on the addition to existing buildings or to erect new buildings or sheds on said lands. (Timber of high or special market value is excepted and shall not be used by the lessee.) And it is hereby agreed that the party of the second part, the lessee, is to have right-of-way of ingress and egress to said mines or land upon which exploration is being conducted.

AND IT IS FURTHER AGREED That the party of the second part, the lessee hereby agrees to pay to the said part of the first part, or his or their heirs or assigns, a rental royalty of 1/8 (one-eighth)

on the minerals taken and sold from said mines which shall be for the use of the said lands for the aforesaid period of five years. The said amounts shall be payable on the computation of selling bills on the tenth day of each month covering sales made during the previous month. Any minerals other than those set forth above which may be taken and sold shall be paid for and at the usual royalty rate of the minerals taken.

AND IT IS FURTHER AGREED That the lessee, the party of the second part, his heirs or assigns, shall have the option to renew this lease and to extend the period of its running for an additional five years from the date of its present termination. The option shall be exercised by giving formal written notice to the party of the first part or by the continuation of any mining operations then being conducted. The lessor reserve the right to use the land, or convey the same not conflicting with this lease, but under any conveyance the terms of this lease must be recognized by the grantee, purchaser, or assigns thereof. And it is agreed that the lessee may assign this mining lease or any part thereof and that he may sublease.

~~AND IT IS FURTHER AGREED That the lessee, the party of the second part, his heirs or assigns, is hereby given an option to purchase all the right, title and interest, legal and equitable to and in the real estate described and set forth in this lease for a total purchase price of _____, said purchase price to be paid in full within three years from the date of this instrument and it is agreed that all rental royalties paid to the party of the first part shall apply toward and be a part of the total purchase price above set forth, and that at such time that the total purchase price is paid in the form of royalties or a lump sum payment or a combination of both, the party of the first part will execute a special warranty deed to the party of the second part and that a tender of the remaining purchase price at any time within the next three years shall entitle the party of the second part to specific performance of this option contract.~~

BUT IT IS EXPRESSLY AGREED That unless mineral or fossil material of practical value for mining purposes shall be found within a period of two years from the date of this instrument, the lease may be terminated by the lessee at any time thereafter on thirty days notice to the lessor. The lessee agrees that during the period of this lease or the continuance of this lease work in said mines or exploration for new mines within the area leased shall not cease longer than ninety days at any one time, unavoidable accidents excepted.

WITNESS our hands and seals the day and year first above written.

Witness:

W B Parsons (Seal)

Lillian Parsons (Seal)

Beatrice M. Butt (Seal)

Kenneth R. McKinney
Notary Public
My Comm Expires 8/17/57

8/22

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. 4433
Metal or Mineral Mica
Date Received 8-22-56
Estimated Cost $ 6200
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:

C.W. Ellis
Route #3
Bakersville, N.C.

RECEIVED
AUG 20 1956

(*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 Legal description given on attached lease.

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

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

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

(*e*) If you own the land, describe any liens or encumbrances on it Do not own land.

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

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 See. Sheet

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

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

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

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

16—66551-1

RECEIVED
AUG 22 1956

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

(*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. See sheet.

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

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

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. See sheet.

(*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)? Yes.

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

☒ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated 8-17-56, 195__

C.E. Ellis
(Applicant)

By C. E. Ellis

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

MF-103 (Continuation Sheet)

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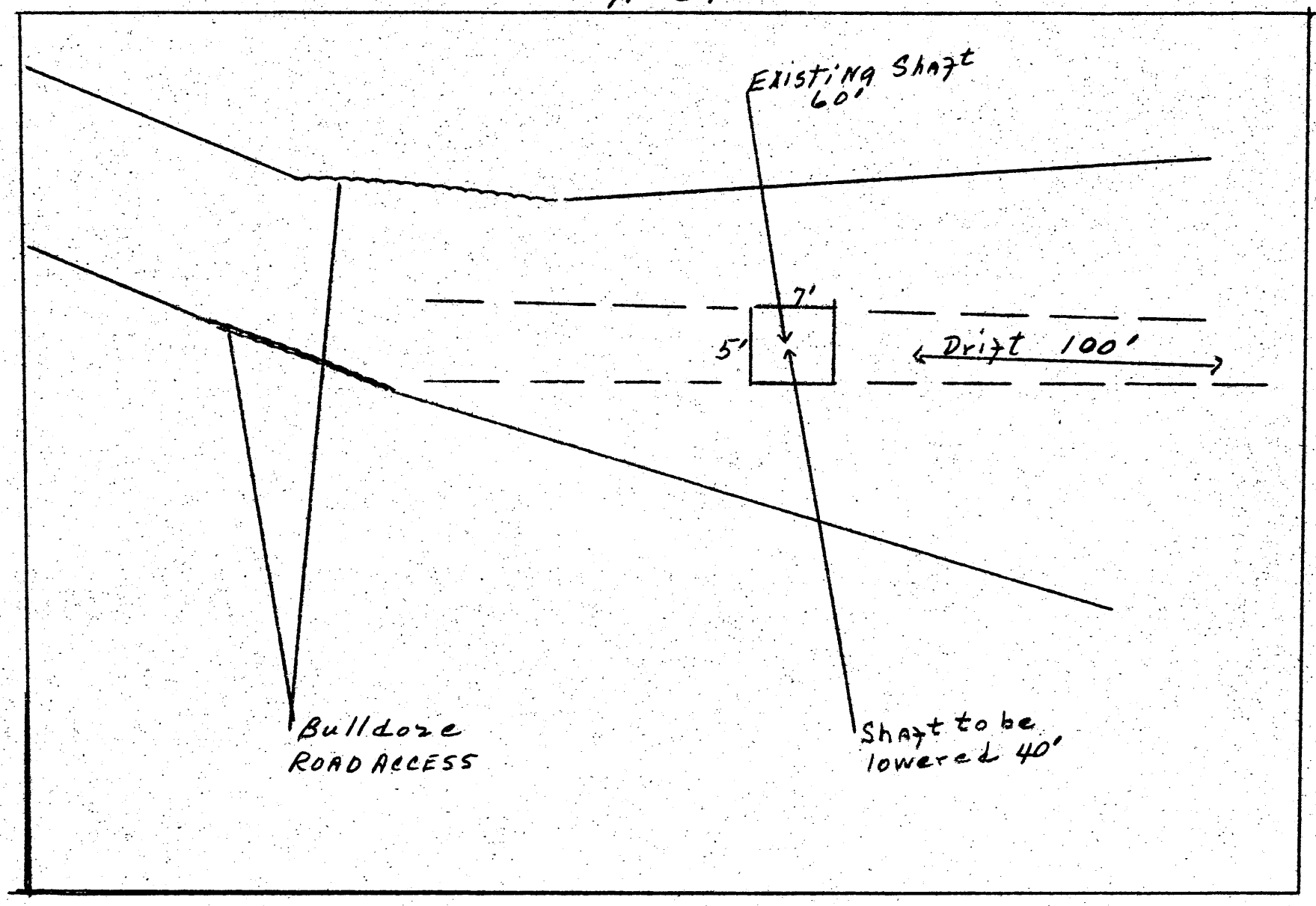
100' Drift @ $35.00 per. ft. . . .	3500.00
Total estimated cost of project:	$ 6200.00

Buckeye Prospect
Mitchell County
N.C.



MINING LEASE

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between W.B. Parsons and wife Lillian Parsons, and Beatrice M. Butt

of Mitchell County and State of North Carolina as party of the first part, and known as lessor__, and C.W. Ellis

of Mitchell County and State of North Carolina, party of the second part and known as lessee.

WITNESSETH, That the part__ of the first part in consideration of One Dollar in hand received and hereby acknowledged by the lessor__, and in consideration of the agreements hereinafter contained, on the part of the party of the second part to be performed, hereby bargains, leases and grants to the party of the second part, and his heirs and assigns, for the period of five years from the date of this agreement, the following described real property, for mining purposes, in the County and State first above written to wit:

Beginning on an iron stake at the center of what is known as the Buckeye Prospect which is located 643 feet South 21 degrees West to a Black Oak tree, which is the property line between James Buchanan and Anna McKinney, as shown on deed recorded in Book #66, Page #242, Register of Deeds Office in Bakersville, N.C, and running 250' North; thence 250' West; thence 500' South; thence 500' East; thence 500' North ; thence 250' West to a point of closing. This property located approximately four miles North of Bakersville,N.C.

TO HAVE AND TO HOLD the said lands to him, for mining purposes, the said lessee and his heirs and assigns for the aforesaid period of five years in compliance with the condition of this instrument, for the purpose and with the right to dig, quarry, search, explore for, obtain, and remove any kind of minerals, metals or fossils, and particularly mica, and to conduct the same to any extent the said party of the second part, the lessee, may desire. And it is hereby agreed between the parties to this agreement that the party of the second part is to have the use of any unoccupied buildings on said lands for mining purposes, and that he shall have the right to erect such buildings as he needs to carry on such mining operatins during the period of this lease, and that the party of the second part shall keep the same in as good condition as when received, unavoidable accidents excepted. And it is also agreed by the party of the second part that no unnecessary damage is to be done to the lands herein leased during the period of this lease and the continuance of said lease, but the said party of the second part shall have the right to take from said lands leased to the party of the second part any wood or timber the party of the second part may need to carry on said mining operations or which may be needed to carry on the addition to existing buildings or to erect new buildings or sheds on said lands. (Timber of high or special market value is excepted and shall not be used by the lessee.) And it is hereby agreed that the party of the second part, the lessee, is to have right-of-way of ingress and egress to said mines or land upon which exploration is being conducted.

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WITNESS our hands and seals the day and year first above written.

Witness:

(Seal) Kenneth R. McKinney Notary Public

(Signed) W.B. Parsons (Seal)

(Signed) Lillian Parsons (Seal)

(Signed) Beatrice M. Butt (Seal)

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/4	Houk	600
11/6	Selfridge	1304
11/6	Lamb	130
11/4	Kielsgaard	130
11/6	Johnson	110
		~~100~~ 56
11/7	gb	220
		225

NOV 6 1957

Noted

Mr. C. W. Ellis
Route #3
Bakersville, North Carolina

Re: Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Ellis:

Your application for aid for an exploration project and other reports available to us in Washington relating to the subject property have been reviewed.

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

Careful study of all our information indicates to us that the probability of disclosing significant reserves of mica by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Program and for bringing your property to our attention.

Sincerely yours,

Frank E. Johnson (for)

ACTING Administrator

LGHouk:gad 10/29/57
Copy to: Admr. R. File
Operating Committee
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

November 4, 1957

Memorandum

To: Mr. C. O. Mittendorf, Administrator

From: Lawrence G. Houk, Director, Division of Nonmetallic Minerals

Subject: Evaluation of application and field examination report
Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Denial of application is recommended.

Mica: Clear light yellow green color, and fairly good quality. Despite this good quality the 1954-1956 Operators had trouble in maintaining a high enough recovery to be economic.

Pegmatite: The examination report states: "The complicated pegmatitic structure, converges to the northeast becoming feldspathic, discontinuous and unpromising. The pegmatite to the southwest appears to be developing a favorable mica-rich structure 100 feet southwest of the shaft. There appears to be an excellent target potential in the plunge and dip direction of the mica-rich structures.....to intercept the plunge and dip projection or duplication of the mica-rich structures mapped in the existing stopes." The Division does not believe the proposed work will intersect the plunging structure. Geology exposed surface for 145 feet, concordant structure well-banded fine-grained hornblende and gneiss.

Workings: A study of Docket No. DMEA-3351 shows Colonial records to be 5,641 pounds; "5,076 pounds was punch for $2,890.00." That application was denied August 26, 1954. Pertinent to the case is after denial of DMEA-3351 the mine was unwatered and worked for a short period without production of a significant amount of mica. The location of the mine in respect to the topography indicates the water problem will be present.

Applicant's proposal: The Applicant applied for 25 hours of bulldozing at $250.00, 40 feet of shaft at $2,000.00, and 100 feet of drift at $35.00 for a total of $6,200.00.

Comments: On September 19, 1956, the Field Team recommended:

1. Rehabilitation		$461.00
2. 30 feet of shaft	$45.80	1,374.00
3. 75 feet of drift		2,807.00
Total cost of project		$4,682.00

On October 22, 1956, the Division wrote that they were inclined to deny the application. The Field Team's reply stated that they had no strong feelings about the project but thought it provided a suitable target based largely on inference. The mine was unwatered and an examination was made. This time the estimated cost of rehabilitation was $1,342.00, as the shaft was found to be 87 feet deep and the Field Team recommended 50 feet of additional shaft at $49.98 or about $2,500.00; a headframe for $500.00; and 150 feet of drift at $37.60 for $5,640.00; 100 feet of percussion drill holes $75.00. Total estimated cost of project $10,330.00.

The Applicant agreed verbally to a winzing program but his partner, on October 16, 1957, stated: "The most satisfactory way according to the best mining practice...would be to deepen the existing shaft which is in a very strong pegmatite. Then drift back under the old workings to intersect the isolated rolls and plunges as indicated by the old workings."

Recommendations:

The Division of Nonmetallic Minerals does not believe that the proposed work would intercept the plunging dip projection of the mica-rich structure and that no geologic evidence exists to support the duplication, nor that the total past production justifies an expenditure of $10,000.00. Therefore, the Division of Nonmetallic Minerals recommends that this application be denied.

The Commodity Members of both the Geological Survey and the Bureau of Mines concur in the Field Team's recommendation.

LGHouk:gad 11/4/57
Copy to: Admr. R. File
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

WASHINGTON 25, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 24 1957

DATE	INITIALS	CODE
10/24	C	220
10/24	Hark	600

October 22, 1957

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V. Knoxville, Tennessee

Subject: DMEA-4433-Mica. Buckeye Mine, Mitchell County, N.C.
C. W. Ellis, Bakersville, N. C., applicant

Please refer to our memorandum of October 2.

Enclosed are two copies of a letter from Sam L. Phillips, representing the Applicant. He apparently is now a partner in the venture with Mr. Ellis.

Mr. Ellis told the Field Examiners, orally, that he was agreeable to a winzing program, but it was apparent from later discussion that he did not really understand the proposal. Mr. Phillips' letter indicates that they are not agreeable to the winzing proposal, and would not be willing to bear the cost of rehabilitation.

Robert A. Laurence
Robert A. Laurence
Executive Officer, DMEA-Reg.V

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

Spruce Pine, North Carolina
October 16, 1957

Mr. Robert A. Laurence, Executive Officer
D.M.E.A., Region V
Room 13, Post Office Building
Knoxville, Tennessee

Re: DMEA #4433 (Mica)
Buckeye Prospect
Mitchell County, N.C.

Dear Mr. Laurence:

The above application was filed on 8-17-57, and so far we have not received either an approval or denial on this application. This letter is not intended as a complaint by any means, but merely to point out that the landlord is getting impatient.

The most astisfactory way according to the best mining practice that we know to throughly explore this pegmatite would be to deepen the existing shaft which is in a very strong pegmatite. Then drift back under the old workings to intersect the isolated rolls and plunges as indicated by the old workings. To go back into the old workings and sink a winze would be too expensive an operation, because this would mean that air tuggers would have to be put in the mine to bring the muck out of the winze, then the muck would have to be transfered to somekind of a tramway. The cost of building a satisfactory tramway in this mine would be tremendous, because of the twisting and turning of the plungings in the old works. If a satisfactory tramway could be installed then the muck would have to be transfered from the tramway to the main shaft of the mine to be brought to the top of the ground. As I have pointed out this would mean that the muck would have to be handled three times, and therefore, we beleive that the most economically and the most practical way of satisfactorily exploring this prospect would be as outlined in the begining of this paragraph.

Hope to hear from you as soon as possible.

Sincerely yours,

Sam L. Phillips

Sam L. Phillips

RECEIVED
OCT 18 1957
U. S. Geological Survey
Geologic Division

P/bj

October 7, 1957

Note to File: Substance of

Long distance telephone conversation between Mr. Houk and Mr. Victor Lynch, Region V, on DMEA 4433, Buckeye Prospect.

Mr. Beck will ask Mr. Ellis if he will rehabilitate the mine prior to receiving DMEA aid for winzing down the plunge of the mica-bearing structure.

October 7, 1957

~~Mr. C. W. Ellis~~ Lawrence
Route #3
Bakersville, North Carolina

Re: Docket No. DMEA-4433-Mica
C. W. Ellis -
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Ellis:

Reference is made to your application for exploration assistance at the Buckeye Prospect in Mitchell County, North Carolina.

This office has been advised by the Field Team that you desire to proceed with a program of winzing down the plunge of the mica shoot from the stope face. We are prepared to give favorable consideration to such a program provided you first rehabilitate the workings so that the exploration program may be carried out.

The program would be:

Access Road (0.9 mile)	$160.00
Building (Toolhouse, Powder & Expl.	115.00
75 feet of winzing at $42/ft.	3,050.00
	$3,325.00

Please advise this office if you wish to proceed on this basis.

Sincerely yours,

Administrator

Hold for

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 _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

WASHINGTON 25, D. C.

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October 2, 1957

Memorandum

To: Operating Committee, DMEA - Washington, D. C.

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4433-Mica. C. W. Ellis, Bakersville, N.C.
Buckeye Mine, Mitchell County, North Carolina

Reference is made to your letter of September 15, and our reply of September 19.

The Field Examiners talked with Mr. Ellis about your suggestion of winzing down the plunge of the mica shoot from the stope face. He indicated that he would go along with such a program.

However, we have no basis for making an estimate of costs. An extensive amount of rehabilitation, muck removal, etc., would be required in the stope. This was not considered when the examination was made, as the cost estimates were based on the more logical approach of sinking and drifting, as proposed in the examination report, so no data are available. We do not think the Applicant should be asked to unwater the mine again to permit another inspection to obtain data for this new proposal.

Exclusive of rehabilitation costs, the winze could probably be sunk for around $40 to $42 per foot. The shoots are so discontinuous that it is difficult to estimate how many feet of winze would be required, but 75 feet should be a reasonable amount.

However, we do not consider the winzing proposal to be the proper way to explore this deposit. Therefore, it is our recommendation that the application be denied, if the proposal of the field examination report cannot be approved.

Robert A. Laurence
Robert A. Laurence
Executive Officer, DMEA
Region V

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

WASHINGTON 25, D.C.

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September 19, 1957

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4433 (mica) C. W. Ellis, Bakersville, N.C.
Buckeye Mine, Mitchell County, N.C.

Reference is made to your letter of September 15.

The Field Examiners are in North Carolina this week, and we have asked them to contact the Applicant and get his opinion on your proposal. This will be reported to you next week, when the men return from the field.

However, we cannot go along with the reasoning that sinking an inclined winze down the plunge of the known mica-bearing shoot is the most economical means of exploring the target. It completely fails to explore the principal target, which was set up as possible parallel plunging shoots. Further, it completely ignores the apparent discontinuous nature of the shoots and the supposed controlling structures. We still prefer the original plan as the most economical method of exploring the entire target.

The discrepancy between the plan and stope is apparently due to a drafting error. Part of the geology in the plan was mapped at water level, and part was mapped at the stope back. In the section, the footwall margin of the oligoclase-muscovite zone should have been shown converging with the footwall of the pegmatite so that, at the stope back, the microcline-oligoclase zone is not present.

Robert A. Laurence
Robert A. Laurence
Executive Officer, DMEA-Reg.V

W. A. Beck
Wm. A. Beck, for V. J. Lynch
Member, Bureau of Mines

DMEA Form 7
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SEP 11 1957

Mr. Robert A. Laurence
Executive Officer, DMEA
Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to your memorandum of September 4, 1957, to the Operating Committee on the Buckeye Prospect.

We are prepared to give favorable consideration to a work program of winzing down the plunge of the structure from the present stope face. We do not consider this to be in the realm of mining anymore than sinking or drifting on an ore bearing structure. In our opinion, work in the mica-bearing structure is the most economical means of exploring this target. The Examiner's proposed program would permit easier mining if the structure goes to depth, but we do not feel that the work should be so located in exploring this target. Should the winzing prove that the structure continues favorably to depth, then consideration can be given to do additional work by amendment. Please obtain the Operator's reaction, and if he is agreeable, prepare the necessary cost estimates.

The plan and vertical section through the southwest portion of the stope appear to be in disagreement. Please amplify or revise for clarity.

Sincerely yours,

Approved:

Frank D. Lamb (DVB)
Member, Bureau of Mines

Thor H. Kiilsgaard (DVB)
Member, Geological Survey

George C. Selfridge
Chairman, Operating Committee (DVB)

LGHouk:gad 9/10/57
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROWAN BLDG.
KNOXVILLE 2, TENN.

September 4, 1957

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4433(mica) C. W. Ellis, Bakersville, N. C.
Buckeye Prospect, Mitchell County, N. C.

Reference is made to your letter of August 30. Your questions are answered below, in the same order:

1. The available evidence indicates that the oligoclase-muscovite zone probably continues down the plunge, but we cannot give a positive answer because the lower part of the southwest stope is flooded.

2. Based on observations of the Field Examiners, we think the structures may be projected to the lower level. The work as proposed is directed toward finding duplicate structures and possible extensions of the known structures.

3. The matter of evaluating former production of mica mines is one of the most frustrating items in our work. We have been unable to get a complete breakdown of the grade and quality of the mica sold under the present program. Nor can we estimate even approximately the volume of rock and mica taken from the stope, because much of it is filled with muck and water. This week we discussed this mine with Mr. K. H. Teague and he expressed an opinion that this recent work produced a high recovery of block muscovite which did not yield a high recovery of the better grades. But he had seen no actual records either.

4. We would not favor an inclined winze projecting the southwestward slope over deepening the shaft and drifting, as proposed. Winzing on the plunging zone would explore only one structure and would be more in the realm of mining, whereas sinking and drifting would explore for duplicate structures as well as extensions of the known ones.

We still think this pegmatite affords a good exploration target, and continue to recommend approval.

Robert A. Laurence

Robert A. Laurence, Executive Officer
DMEA Field Team, Region V

Wm. A. Beck

Wm. A. Beck, for V. J. Lynch
Member, (DMEA) Bureau of Mines

DMEA Form 7
(12-56)

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AUG 30 1957

Mr. Robert A. Laurence
Executive Officer, DMEA
Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to the June, 1957, field examination report recommending a program at the Buckeye Prospect in Mitchell County, North Carolina.

The unwatering of the mine and the recent excellent detailed geological report adds a great deal to our knowledge of this deposit, but it also presents a number of questions:

1. Does the oligoclase-muscovite zone pinch out down the plunge as it does down the dip as shown by the vertical section through the southwest portion of the stope?

2. From the stope outline and traces of the drag folding there is a question in our minds that the proposed work (drift) "...would reach the excellent target potential in plunge and dip direction of the mica-rich structure." Do you believe the results of the recent work in the southwest stope justify projecting it to the proposed lower level? It appears that the program is chiefly directed toward finding a duplicate structure at depth.

3. While the reported pre-Colonial value of production of $35,000.00 is impressive, the Colonial Mica production of only 565 pounds of sheet and 5,076 of punch valued at $2,890.00 is not. The thesis that most of the pre-Colonial Mica produced might be considered strategic in arriving at a total value of production ($350,000.00 at present prices) may be questioned in the

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light of punch-sheet ratio of sales under the Colonial Mica Program. It would be appreciated if we could receive the breakdown of grade and quality distribution for the $4,919.00 worth of mica sold under the present program. The approximate volume of rock moved in the southwest stope and the mica produced in this area would be desirable if available.

4. Would it not be feasible to continue the lower stope as an inclined winze in and along the synclinal fold of the oligoclase-muscovite zone shown on the southwestern cross section? Occasional exploration raises could then be driven at intervals to explore for higher mica-bearing plications.

Before we proceed with further processing of this application, please give us your comments on the above.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Approved:

O. M. Bishop (GCS)

Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)

Member, Geological Survey

LGHouk:gad 8/30/57

Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

DMEA Form 7
(12-56)

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Mr. Robert A. Laurence
Executive Officer, DMEA
Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to the Field Examination Report on the subject contract which was denied in 1954, (Docket No. DMEA-3351).

That denial was based upon the geologic improbability of making a significant discovery by the proposed program. The new proposal to cost $10,330.00 is simply an enlargement of the previous proposal ($5,125.00). The Field Team's report gives a great deal of additional detail and geology. This, coupled with a study of the sales in the Colonial Mica period and the 1954-1956 period, in our opinion, fails to justify an expenditure of the magnitude recommended by the Field Team.

Before we proceed with formal denial of this application please give us your comments.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

P. F. Yopes
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

LGHouk:gad 8/27/57
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

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IN REPLY REFER TO:

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

Memorandum

August 26, 1957

To: L. G. Houk, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of field examination report, DMEA 4433 (mica), C. W. Ellis, Buckeye mine, Mitchell County, North Carolina.

The examining team report that the Buckeye mine has been a good mica producer in the past. The mica-bearing pegmatite is, in part, mineralogically and geologically favorable for the presence of additional reserves of strategic grade mica.

The examiners believe that an exploration project would have a good chance for success. They accordingly recommend approval of a project consisting of shaft rehabilitation, shaft sinking, and drifting. I agree with the findings of the examining team and their recommendation for approval of the application.

W. P. Williams

W. P. Williams

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

August 23, 1957

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Donald R. Irving, Acting Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA-4433 (mica)

Applicant: C. W. Ellis

Name and Location of Property: Buckeye Mine, Mitchell County, N. C.

Date of Field Team Report: 8/14/57

Date Rec'd. by Br. of Ceramic & Fertilizer Materials: 8/21/57

Field Team Recommendation: Recommend exploration assistance be granted.

Comments:

1. This is an old mine with a good record of production of strategic mica.

2. Water problems have caused mining difficulties and were the reasons for past denials of DMEA assistance because field examiners were unable to properly examine the mine.

3. Strategic muscovite in thick books up to 8x10 inches across (consisting of 5 to 25 percent by volume of enriched zones) were seen in place.

4. This deposit appears to have possibilities for the development of strategic mica.

Recommendation:

I concur with the recommendation of the field team for approval of DMEA assistance.

Donald R. Irving

Donald R. Irving

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1-POST OFFICE BLDG.
KNOXVILLE 2, TENN.

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August 14, 1957

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: Field Examination Report - DMEA-4433, BUCKEYE MINE, (mica). C. W. Ellis, Bakersville, N.C., applicant

Transmitted are three copies of the subject report, with eight extra copies of the map. The Field Team concurs with the Examiners in recommending exploration as outlined in the report.

V. J. Lynch

V. J. Lynch, Acting
Executive Officer, DMEA

S. C. Bergman

S. C. Bergman, Geologist
Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE
8-21-57
(date)

On-Site Exam Rpt

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UNITED STATES

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD EXAMINATION REPORT

DMEA-4433, BUCKEYE MINE (mica)
Mitchell County, N. C.

S. C. Bergman, Geologist
E. L. Boudette, Geologist
U. S. Geological Survey

L. E. Shirley, Mining Engineer
U. S. Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE

8-21-57
(date)

June 1957

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FIELD EXAMINATION REPORT

DMEA-4433 (mica) BUCKEYE MINE, Mitchell County North Carolina

Applicant: C. W. Ellis, Route # 3, Bakersville, North Carolina

SUMMARY

The Buckeye Mine has an intermittent productive history dating back to 1911. From that time to the present, it has produced at least $42,000 worth of muscovite. Two applications for DMEA assistance have been submitted under Docket Nos. 3351 and 4433. Exploration work was recommended on both applications, but they were denied without prejudice, because of a lack of information available on the condition and extent of underground workings, as well as the definition of a geologic target.

Upon request and after many difficulties due to extremely wet weather, the applicants finally unwatered the mine and an examination was made of the openings. A rather complicated pegmatite structure was mapped which converges to the northeast and becomes feldspathic and discontinuous in that direction. The structure has excellent continuity to the southwest and favorable mica-rich structures appear to be still developing at a distance of 100 ft southwest of the shaft. There appears to be an excellent target potential in the plunge and dip direction of the mica-rich structures so that the Examiners recommend an exploration program consisting of rehabilitation of the existing 87 ft of shaft, deepening the shaft another 50 ft along the structure and drifting 150 ft to the southwest to intercept the plunge and dip projection or duplication of mica-rich structures mapped in the existing stopes.

INTRODUCTION

Location

The mine lies in a northwest trending valley at the junction of Pisgah Mountain and Road Ridge, 3.1 airline miles S 60° W of Bakersville, Mitchell County, North Carolina. The site is located in the northwest 1/9th of the Spruce Pine, N.C. Quadrangle (209-NE), USGS-TVA Ed. 1934(1/24.000). A good paved road runs southwest out of the Bakersville off U S Highway 26, turning into gravel to the last farmhouse about 0.9of a mile from the mine. The last 0.9 of a mile is a bulldozer trail mostly in need of repair, and in wet weather almost impassable even with a jeep.

Mine History

The only known report of previous operations is a summary given in the still unpublished USGS professional paper (Blue Ridge Manuscript).

According to this paper, the mine was first worked about 1911, by a J. E. Burleson, and subsequently by Arthur Buchanan, M. S. Wilson, and Ed Young. The mine was being operated in 1940 by George and Stokes Young. The value of the mica mined through this period and prior to World War II is reported to be at least $35,000. If most of this mica is what is considered strategic, the value translated into present day GSA prices would be conservatively $350,000. The average GSA price for strategic muscovite is somewhat over $14.00 per pound compared to less than a dollar average for the period up to World War II. Depreciating at least 25% for pre-World War II sheet muscovite, bought, but not of present strategic grade, an average price comparison of 10 to 1 is considered to be reasonable and conservative. A production of $2,890.00 is reported during the Colonial Period, while $4,919.00 is reported from the present GSA Depot records. This aggregates a total of at least $42,809.00 worth of muscovite produced and sold to date.

Examination

The mine has been formally examined twice, as a result of applications under Dockets 3351 and 4433. Very little could be seen on either examination as the water level stood nearly to the collar of the shaft and only a very limited amount of outcrop was exposed for examination. DMEA-3351 was denied because of a lack of available information on which to base an exploration program. DMEA-4433 was subsequently submitted by the same party without any additional information, The only recourse was to ask the Applicant to unwater

the the mine for inspection so that the condition and extent of the workings could be determined as well as the definition of a geological target. Shortly after the denial of DMEA-3351, the mine was unwatered and worked for a short while, during which an informal inspection of the works made by the former field examiners. No report or map was made of this inspection. After considerable difficulties due to unusually heavy spring rains, the Applicants succeeded in unwatering the mine and another examination made of the underground workings on June 1, 1957.

Situated as it is in the bottom of a valley at the confluence of two mountain slopes, the mine is subject to continuous and rather heavy ground and surface drainage. This is a problem which would be satisfactorily solved by the installation of a power line and continuous electric pumping facilities. A power line is reportedly within 300 yards of the mine. The earliest mining was conducted in an open cut along the strike of the pegmatite. From the shaft, the cut trends S 7°W a distance of about 45 ft and has a maximum depth of about 20 ft. An incline has been driven S 7 to 27° W -35° from the SW end of the cut along the plunge of the structure for a distance of about 65 ft. The cut has been excavated at least 60 ft N 30 E of the shaft to depths of from 0 to 10 ft. A 25-ft deep shaft has reportedly been sunk on the structure at a point about 50 ft northeast of the main shaft. This shaft is now backfilled and covered. The main shaft was measured a total of 87 ft in depth. The first 30 ft is vertical, and partially cribbed. This section would have to be retimbered, but otherwise

unchanged. The remaining 57 feet of shaft is inclined to the southeast in hard relatively unfractured material and is from 6 x 8 ft in cross-section to much larger dimensions. Some minor stoping has been done ~~to~~ the northeast of the shaft in what appears to be mineralogically unfavorable ground. A level has been driven from the 56-ft level of the shaft along widely diverging southwest structures a distance of about 100 ft in a S 23-57° W direction. This stope varies in width from 8 ft near the shaft to 18 feet at various intermediate portions southwest of the shaft. A raise has been driven along the structure, at a point about 75 ft southwest of the shaft, connecting the lower workings with the ~~plunging~~ incline driven from the opencut. Shallow stopes have been driven about 10 feet downdip from the level from 40 to about 115 ft southwest of the shaft generally offset towards the northwest from the level workings. The workings partly parallel and partly cut the indicated plunge of the favorable mica-rich structures.

Competence of Applicant

Mr. Cling Ellis has participated in some of the more successful mica-mining operations in the Spruce Pine area, and has access to competent personnel and adequate mining machinery and equipment.

GEOLOGY

Structure

The Buckeye is a contorted concordant structure which has been exposed in underground workings for a distance of at least 145 ft along strike. It is enclosed in a well-banded fine-grained hornblende gneiss which has been altered to a coarse biotite schist in thin discontinuous zones along the pegmatite contact. The structure

appears to have developed due to differential movement along the steeply inclined foliate planes. The movement which is probably contemporaneous with stresses accompanying the introduction of pegmatite material, has displaced the northwest contact of the pegmatite upwards relative to the southeast contact producing irregular and assymmetrically developed dragfolds mostly along the hangingwall contact of the pegmatite. The pegmatite in the shaft section and to the northeast strikes N 25 to 30°E and dips from vertical in the upper portion of the shaft to about 65° southeast in the lower shaft. Pegmatite in this section is in the form of lenses 2 to 7 ft in maximum thickness and discontinuous in both the norizontal and vertical planes. There is a more or less en echelon arrangement of the lenses in the vertical section. Immediately southwest of the shaft on the 56 ft level the pegmatite pinches and then swells into a continuous more or less tabular structure 2 1/2 to at least 7 ft thick extending continuously southwest at least 115 ft to the limits of the workings. About 15 ft southwest of the shaft, there is an axis of rotation of the dip from southeast to northwest. The dip flattens to the southwest from vertical to 45° northwest. This flattening of dip produces a divergence of strike on the tabular structure from N 42° E in the lower part of the stope to N 23° E in the upper part. Well developed dragfold emplacements along the hangingwall of the structure southwest of the shaft, have an even greater divergence of strike and have an overturned fold axis inclination to the southeast, converging down dip with the tabular structure. From the remnants of the marginal folding, it could not

be determined whether pegmatite emplaced in these marginal structures was continuous to its junction with the main structure or whether it was squeezed out along the limbs producing a discontinuous lenticular shaped body occupying the crestal portions of the folds. The axial trace of the marginal folding as well as the orientation of minor convolutions along the contacts indicates a persistent, but variable plunge on the structures of from 0 to 60° to the SW with the steeper plunges indicated near the shaft station and in the upper incline. The pegmatite tapers to a maximum thickness at the southwest extremities of the workings, that coupled with the increasing flatness of dip in that direction suggests a continued and increasing development of the structure in the plunge and dip directions.

Mineralogy

All of the pegmatite in the shaft section and in the northeast, as well as a considerable portion of the pegmatite to the southwest is composed of a medium to medium-fine essentially unzoned mixture of microcline perthite, and minor oligoclase, interstitial quartz, and rare finely crystalline muscovite. A massive quartz core is reported, but not seen because of water, in the lower southwest extremities of the workings, and is indicated by material on the dump. Zones 1 to 3 ft thick consisting of medium-grained oligoclase, interstitial quartz and from 5 to 25% strategic muscovite with minor granular garnet are found usually along the hangingwall contact but occasionally extending across the entire thickness of the pegmatite in its thinner portions. These zones appear to intimately related to

the development of the marginal folding and the flattening of the dip. They have good continuity along the plunge axis of the contact contortions and appear to be discontinuous in the dip direction. From what can be seen of pegmatite remnants in the shaft, and to the northeast, there is indicated a complete absence of mineralogically favorable pegmatite, while pegmatite left in the roof of the stope to the southwest along both major and minor structures is exceedingly rich in good quality muscovite. Whether the rotation of dip just southwest of the shaft controls this mineralogic difference is problematical.

Muscovite

The muscovite seen in place in the stope areas is in thick books up to 8 x 10 inches across, averaging roughly 3 x 4 inches, and in concentrations in the mineralogically favorable zones from 5 to 25% by volume. The muscovite is a clear light yellow green color, the major imperfections being ruling and cracking, with minor isolated reeves and A-structure and minor specks or intergrowths of what appears to be iron oxide. The wartime report states that the quality of the mica is very good and what could be seen of the muscovite by the present examiners indicated a fairly good quality, but verbal reports of the last mining in the extremities of the stope areas (1954-1956) indicates that the Operators were having some trouble in maintaining a high enough recovery of strategic grade material to be economic.

CONCLUSIONS AND RECOMMENDATIONS

A contorted essentially tabular pegmatite with good indicated southwest continuity has been outlined in a series of old underground stope areas. Discontinuous zones within the pegmatite are rich in strategic quality muscovite, and are controlled apparently by the plunge of marginal dragfolding and a general flattening of the dip to the southwest of the shaft. Pegmatite to the northeast of the shaft becomes discontinuous and mineralogically unfavorable. The southwest extremities of pegmatite exposed in the stope areas show ~~and~~ increasing thickness and development of favorable structural features in both the plunge and dip directions. The examiners recommend an exploration program to explore the downdip extensions and plunge projections of contained pegmatite structures. The program recommended consists of rehabilitating the existing 87 feet of shaft, sinking an additional 50 ft downdip along the structure and driving 150 feet of drift and/or crosscut to the southwest along the pegmatite. A 100 ft of percussion testhole drilling is recommended as needed to probe the walls of the pegmatite for marginal pegmatite structures locally isolated from the main pegmatite body. The marginal fold emplacements, although small, appear to be uniformly mica-rich and would add greatly to the minable volume of pegmatite.

<u>Estimated Costs:</u>

<u>Access Road:</u> Construct 0.9 mile of access road.
Excavate 530 cu. yds. of material
@ 30¢ per cu. yd..... $159.00

Rehabilitate existing 87 ft shaft. Retimber with solid 2" x 6" oak, cribbing the vertical portion of the 6' x 8' shaft from the present collar to a depth of 25 ft. Install a separate manway with ladders and landings at reasonable intervals from the collar of the shaft to the shaft bottom, a distance of 87 feet (20 shifts)

Labor:

1 - Foreman-Miner @ $1.75/hr.	$280.00
1 - Hoistman @ $1.50/hr.	240.00
2 - Laborers @ $1.00/hr.	320.00

Equipment (rental)

1 - Gasoline Hoist @ $50/Mo.	50.00
1 - Electric pump @ $60/Mo.	60.00
1 - Electric Generator @ $75/Mo.	75.00

Supplies:

Gasoline and Oil	30.00	
Timber, 2000 b.f. @ $65/M	130.00	
Miscellaneous	50.00	
Liability Ins. & Social Security	101.00	
Sales Tax	6.00	
($16.17/ft) Estimated Cost of Rehabilitation		$1,342.00

Construct:

Toolhouse	75.00	
Powder Magazine	25.00	
Exploder "	15.00	
		115.00

Construct rigid "A" type headframe to conform with North Caroline state mining laws governing shafts deeper than 100 ft. (Ref. to DMEA-2379,3157 and 3356) for details on similar type structures provided for these contracts). Posts and sills should have minimum dimensions of 6" x 8".

Estimated unit cost..... 500.00

Shaft sinking. From the bottom of the existing 87 ft shaft, sink a maximum of 50 ft of inclined and/or vertical shaft, 5' x 7' in cross section, cribbed where necessary, and install separated manway to the shaft bottom. (33 shifts)

Labor:

1 - Foreman - Miner @ $1.75/hr.	$462.00
1 - Hoistman @ $1.50/hr.	396.00
1 - Laborer @ $1.00/hr.	264.00

Equipment (rental)

Gasoline and oil	150.00
Explosives	150.00
Drill steel	90.00
Timber - 1000 b.f. @ $65/M	65.00
Small tools, pipe, etc.	150.00
Liability Ins. & Social Security	135.00
Sales Tax	18.00

($49.98/ft) Estimated cost of shaft sinking $2,499.00

Drift - from the 137 ft shaft bottom drive a maximum of 150 ft of drifts and/or cross-cuts, 5' x 7' in cross section and timber where necessary (75 shifts)

Labor:

1 - Foreman-Miner @ $1.75/hr.	1050.00
1 - Hoistman @ $1.50/hr	900.00
1 - Laborer @ $1.00/hr	600.00

Equipment (rental)

105 c.f.m. air Compressor @ $150/Mo.	563.00
Gasoline hoist @ $50/mo.	187.00
Air rock drill @ $40/Mo.	150.00
Electric pump @ $60/mo.	225.00
Gasoline powered electric generator @ $75/Mo.	281.00
Air blower w/electric motor @ $30/Mo.	112.00
Air jackleg @ $25/Mo.	94.00

Supplies;

Gasoline and oil	263.00
Explosives	412.00
Drill steel	225.00
Timber - 1000 b.f. @ $65/M	65.00
Small tools, pipe, etc.	173.00
Liability Ins, & Soc. Sec.	306.00
Sales Tax	34.00

($37.60/ft) Estimated cost of drifting $5,640.00

In conjunction with above drift work, drill a maximum of 100 feet of percussion test holes, if necessary. 100 ft @ .75¢/ft.	75.00
Total Estimated Cost of Project.....	$10,330.00

S. C. Bergman and E. L. Boudette,
Geologists, Geological Survey

L. E. Shirley, Mining Engineer
Bureau of Mines

z

August 15, 1957

Memorandum to the files

From: Lawrence G. Houk, Director, Division of Nonmetallic Minerals

Subject: Substance of telephone conversation with Mr. Sam Phillips August 15, 1957 Docket No. DMEA-4433-Mica, C. E. Ellis, Buckeye Prospect, Mitchell County, N. C.

Mr. Phillips wanted to know the status of the application.

May 22, 1957

Telephone conversation.

Robert A. Laurence, Knoxville, Tennessee

Washington office: Mr. L. G. Houk
Mr. W. C. Anderson

Docket No. DMEA-4433-Mica
C. E. Ellis
Buckeye Prospect
Mitchell County, N. C.

The property was examined by Bergman. His report is not completed. A recommendation will be made for a contract.

A contract will be recommended.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED 1957

		CODE
4/22	C	220
4/22	[illegible]	600

April 19, 1957

Memorandum

To: Operating Committee, DMEA - Washington, D. C.

From: Executive Officer, DMEA, Region V, Knoxville, Tennessee

Subject: DMEA-4433 (Mica), C. W. Ellis, Bakersville, N. C.
Buckeye Prospect, Mitchell County, N. C.

Reference is made to your letter of March 22, 1957, to the Applicant.

Enclosed is a letter from the Applicant requesting additional time in which to complete the unwatering of the mine.

Robert A. Laurence
Robert A. Laurence

RALV
SCB
ELB
file

OFFICIAL FILE COPY
DMEA
RECEIVED APR 22 1957
CODE

Spruce Pine, North Carolina
April 17, 1957

Mr. Robert A. Laurence, Executive Officer
D.M.E.A., Region V, Room 13, P.O. Bldg.
Knoxville, Tennessee

Dear Mr. Laurence:

We would like to request that the application on the Buckeye Prospect be held in abeyance for at least another thirty days. We have pumped the mine out two or three times, but due to the unusually wet weather we have had in the past weeks the mine fills with water about as fast as we can pump it out. We will notify the Field Team when it will be alright for them to see the mine, within the next thirty days.

Thanking you, I am

Very truly yours,

C. W. Ellis

C.W. Ellis

RECEIVED
APR 19 1957
Geology Division
Knoxville, Tenn.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/22	Anderson	600
3/22	Houk	600
3/22	Johnson	110
22	Mittendorf	100
3/23	C	220
		600

600

MAR 22 1957

Mr. C. W. Ellis
Route #3
Bakersville, North Carolina

Re: Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Ellis:

Reference is made to our letter of February 18, 1957, requesting that you make the underground workings at the subject property accessible for examination by the Government examining engineers.

We wish to cooperate with you fully in allowing ample time to comply with our request; however, we cannot indefinitely postpone action on an application. Therefore, if our request is not complied with within 30 days from the date of this letter, we will assume that you are no longer interested in proceeding with your application, and we will consider it as having been withdrawn.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

WCAnderson:gad 3/22/57
Copy to: Admr. R. File
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Field Team, Region V

8623

DMEA Form 7
(12-56)

Denied
3351

600

OFFICIAL FILE COPY

Date	Surname	Code
2/18	Anderson	600
2/18	Houk	600
"	Whitenday	100
2-19	C	220
		600

FEB 18 1957

Mr. C. W. Ellis
Route #3
Bakersville, North Carolina

Re: Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Ellis:

On November 16, 1956, you were advised that a re-examination of the Buckeye Prospect would be scheduled when the underground workings were made accessible.

Your application is being held in abeyance pending your compliance with our request. Please contact Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Room 13, Post Office Building, Knoxville 2, Tennessee, when the mine has been made accessible for examination.

Sincerely yours,

SIGNED

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

LGHouk:WCAnderson:gad 2/18/57
Copy to: Admr. R. File
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~ ROOM 10 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

H

November 16, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region V

Subject: DMEA-4433 (Mica)
C. W. Ellis, Route 3, Bakersville, N. C.
Buckeye Prospect, Mitchell County, North Carolina

Reference is made to your letter of November 14.

I am mailing the letter to Mr. Ellis today. Please send me the carbon copies for our files.

Robert A. Laurence
Robert A. Laurence

acknowledgment sent 11-12-56

RECEIVED NOV 19 1956 D.M.E.A.

November 16, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region V

Subject: DMEA-4433 (Mica)
C. W. Ellis, Route 3, Bakersville, N. C.
Buckeye Prospect, Mitchell County, North Carolina

Reference is made to your letter of November 14.

I am mailing the letter to Mr. Ellis today. Please send me the carbon copies for our files.

Robert A. Laurence

RAL/mg
cc
Operating Committee (2)
Lynch
file

Docket Copy
Surname:

Hopkins
Hoyle
Selfridge
Hefner

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

16 NOV 1956

Thru Laurence

Mr. C. W. Ellis
Route #3
Bakersville, North Carolina

Re: Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Ellis:

Reference is made to your application for exploration assistance dated August 17, 1956, on the subject property.

The DMEA Field Team visited this property September 19, 1956, and found the underground workings flooded and inaccessible for an examination.

If you will unwater the mine and advise Mr. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Room 13, Post Office Building, Knoxville 2, Tennessee, when the underground workings are accessible, another examination will be scheduled.

Sincerely yours,

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

JHopkins:gad 11/13/56
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

Docket Copy
Surname:

Hopkins
Hoyt
Selfridge
Johnson
Matthews

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

Mr. Robert A. Laurence
Executive Officer, DMEA
Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to your memorandum dated October 8, 1956, on the subject property suggesting that we request the applicant to unwater the mine so that it could be examined underground.

Enclosed is a letter to Mr. C. W. Ellis telling him that another examination would be scheduled when and if he unwaters the underground workings.

If you approve of this letter please forward it to the applicant.

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

Enclosure

JHopkins:gad 11/13/56
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM POST OFFICE BLDG.
WASHINGTON 25, D.C.
KNOXVILLE 2, TENN.

RECEIVED
OCT 29 1956

October 25, 1956

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tenn.

Subject: DMEA-4433 (mica) C. W. Ellis, Bakersville, N.C.
Buckeye Prospect, Mitchell County, N.C.

Reference is made to your letter of October 22.

We have no additional comments. We have no strong feelings about this project, and, as pointed out in our memo of October 8, no new information. The Field Examiners thought it provided a suitable target, based largely on inference but all the information they were able to get is in the September 19 report.

Robert A. Laurence
Robert A. Laurence
Executive Officer, DMEA
Region V

L. E. Shirley
L. E. Shirley for V. J. Lynch
Member, Bureau of Mines

s

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

RECEIVED
OCT 23 1956

October 22, 1956

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Donald R. Irving, Acting Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA-4433 (mica)

Applicant: C. W. Ellis

Name and Location of Property: Buckeye Prospect, Mitchell County, N. C.

Date of Field Team Report: 9/19/56

Date Rec'd. by Br. of Ceramic & Fertilizer Materials: 10/11/56

Field Team Recommendation: Recommend a unit-cost exploration program be undertaken.

Comments:

1. The Field Examiners believe that a potential continues to exist for the production of strategic mica from this pegmatite.

2. The proposed program of exploration will determine value of ground in mine that previously has been a producer of mica.

Recommendation:

I concur with the Field Team's recommendation.

Donald R Irving

Donald R. Irving

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

600

DOCKET COPY
Surname:
Hopkins
Houk
Selfridge
Mitterdorf

OCT 22 1956

Mr. Robert A. Laurence
Executive Officer, DMEA
Field Team, Region V
Room 13, Post Office Building
Knoxville, 2, Tennessee

Re: Docket No. DMEA-4433-mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Reference is made to the Field Team report dated September 19, 1956, in which it is recommended that an exploration program be undertaken on the subject prospect.

It is noted that the proposed work is essentially the same as that proposed for the property under Docket No. DMEA-3351, and that no work has been done on the property since that application was denied.

Because no new approach to explore what appears to be a worked-out pegmatite is offered, we are inclined to again deny the present application for the same reasons as given in our letter of July 27, 1954. However, before doing so, we will be pleased to have further comments from you.

Sincerely yours,

Approved:

Frank D. Lamb
Member, Bureau of Mines (2/B)

N. E. Nelson
Member, Geological Survey (2/B)

George C. Selfridge
Chairman, Operating Committee (2/B)

JHopkins:ms 10/16/56

Copy to: Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Admr. R. File

R.C.S.

IN REPLY REFER TO:

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

RECEIVED
OCT 16 1956

October 12, 1956

Re: DMEA 4433
C. W. Ellis
Buckeye Prosp.
Mitchell Co., N.C.
Appl. Est. $6,200
Rec'd. Est. 4,682
Mica

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 deepening a shaft and drifting a pegmatite from which considerable mica is reported to have been recovered.

The property was the subject of application 3351 (1954). The examiners and Field Team recommended approval of the application but it was denied Aug. 26, 1954.

The present examiners and the Field Team recommend that a work program, essentially that recommended in 1954, consisting of shaft rehabilitation, shaft sinking and drifting, be approved.

No work appears to have been done since 1954 and the conditions and potential are taken to be as then portrayed and estimated.

If the estimated $38,000 worth of mica was recovered from the triangular shaped opening shown in section in the Field Team report, 3351, it is not unreasonable to expect a pitching extension of the mica shoot and search for it is warranted. Assuming the sketch map and section are somewhere near correct and the pegmatite is 6 feet thick, the opening shown would have contained about 1,250 tons and a value of about $30.00 per ton is suggested.

The shaft rehabilitation probably will show more mining has been done than indicated, but at least the cleanup work is justified.

I concur with the recommendation of approval 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.
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

RECEIVED
OCT 1 0 1956

October 8, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: Field Examination Report, DMEA-4433 (Mica)
C. W. Ellis, Bakersville, North Carolina
Buckeye Prospect, Mitchell County, North Carolina

Enclosed are the original and three copies of the subject examination report.

It will be noted that no work has been done since denial of a previous application (DMEA-3351) from the same Applicant.

The present field examiners report that, after examination of material on the dump and other surface evidence, and review of available old reports, they consider this deposit to be worth exploration by drifting to the northeast after extending the existing shaft for another 30 feet.

On the basis of this report and that of the previous examing team, we recommend approval of a contract as outlined in the report. An alternative would be to ask the Applicant to pump out the mine so it could be examined underground.

Robert A. Laurence
Robert A. Laurence
Executive Officer

Wm. A. Beck
Wm. A. Beck for V. J. Lynch
Member, Bureau of Mines

Enclosures 4

Reviewed by
DMEA OPERATING COMMITTEE
10-12-56
(date)

RECEIVED
OCT 1 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXAMINATION REPORT, REGION V

On

DMEA-4433 (mica) BUCKEYE PROSPECT
Mitchell County, N. C.

A. R. Taylor and S. C. Bergman
Geologists, Geological Survey

and

L. E. Shirley, Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
10-12-56
(date)

September 19, 1956

On-Site Exam Rpt

FIELD EXAMINATION REPORT
On

DMEA-4433 (mica) BUCKEYE PROSPECT
Mitchell County, N. C.

Applicant: C. W. Ellis, Route #3, Bakersville, North Carolina

Summary

An estimated $38,000 worth of green mica has been recovered from this mine from 1911 to 1944. Dump material indicates an excellent mineralogic environment and exhibits much sheet muscovite remaining in the muck. It is recommended that a unit-cost exploration program be undertaken.

Introduction

The Buckeye Mine is 3.1 airline miles S 60°E of Bakersville, Mitchell County, N.C., on the NW side of Pisgah Mountain north of its junction with Road Ridge.

The mine was examined September 19, 1956 in the company of S. L. Phillips. One hour was spent on the examination.

An examination report (DMEA-3351, 1954) adequately describes the workings. No change was noted from those conditions that existed in 1954. An unpublished USGS manuscript also describes the workings.

A one-mile jeep access road is in need of repair. A tool house is on the property, but in need of repair.

Geology

Workings: A vertical shaft 60 feet deep exists at the NE end of an open cut that is 60 feet long, 10 feet wide, and 10 to 25 feet deep. According to the USGS report (see ref.), stoping was carried out S 25° W from the bottom of the shaft for about 100 feet, and

an unknown height. The floor is reported nearly level while the back slopes to the SW. Fifty feet northeast of the 60 ft shaft is an old caved shaft reportedly 25 ft deep on the same pegmatite.

Pegmatite and Muscovite (from USGS report[2])

"The deposit consists of concordant pegmatite lenses that pinch and swell markedly. In general they are vertical and strike N 25° E. They range in thickness from a knife edge to 6 feet, and are sharply bounded from the wall rock. Other lenses that are exposed in the southwest wall of the main shaft plunge 20° SW. The pegmatite consists of plagioclase, microcline, and quartz, with muscovite, granular masses of garnet, and fracture-filling sericite. The book mica is very light green in color and of good quality."[2]

The pegmatite is enclosed in a biotite-hornblende gneiss country rock, whose foliation strikes N 25° E and dips very steeply. Local undulations occur in the wall rock making what appears to be pipe-like plunging "rolls."

Production from 1911 to 1944 has been conservatively estimated to be worth about $38,000 . The USGS report indicates at least $35,000 worth and later reports add $2,890 for 5,641 lbs of mica (Colonial records).

The Field Examiners believe that the potential continues to exist for the production of strategic mica from this pegmatite. Since no level work has been conducted on the northeast-end of the pegmatite, it is recommended that an exploration program similar to that already recommended in a previous report (DMEA-3351) be con-

ducted. This program should consist of 60 feet of shaft rehabilitation, deepening the shaft an additional 30 feet and driving 75 feet of drift from the shaft bottom.

Shaft Rehabilitation:

Dewater shaft (5 shifts)

1 - 105 cfm air compressor @ $200/Mo.	$50.00	
1 - Air sump pump @ $85/Mo.	21.00	
1 - Compressor and pump Operator @ $1.25/hr.	50.00	
Gasoline and oil	20.00	$141.00

Retimber Shaft (crib top 15 ft existing shaft and install separated partition and manway from collar to the shaft bottom)(5 shifts)

Timber-2000 b.f. @ $65/M	130.00	
1 - Miner @ $1.75/hr.	70.00	
1 - Laborer @ $1.00/hr.	40.00	
Small tools, nails, etc.	20.00	$260.00

Removal of Muck (2 shifts)

1 - Gasoline powered Hoist (rental) @ $50/Mo.	5.00	
1 - Air sump pump @ $85/Mo.	8.50	
Gasoline and oil	6.50	
1 Hoistman @ $1.50/hr.	24.00	
1 Laborer @ $1.00/hr.	16.00	60.00

Total rehabilitation cost.... $461.00

Sink 30 feet of shaft 5 1/2' x 6' in cross-section with separated partition (18 shifts)

Construct:

Powder Magazine	25.00	
Exploder Magazine	15.00	40.00

Labor:

1 - Foreman-miner @ $1.75/hr.	$252.00
1 - Hoistman @ $1.50/hr.	216.00
1 - Laborer @ $1.00/hr.	144.00

Equipment: (rental)

105 c.f.m. air compressor @ $200/Mo.	200.00
Gasoline Powered Hoist @ $50/Mo.	50.00
Air sump pump @ $85/Mo.	85.00
Rock drill with hose @ $50/Mo.	50.00

Supplies:

Timber-500 b.f. @ $65/M	30.00
Gasoline and oil	60.00
Explosives	105.00
Drill steel	50.00
Small tools, pipe, etc. (misc)	55.00
Liability Insurance	56.00
Social Security	12.00
Sales Tax	9.00

Total cost of shaft sinking.....$1,374.00
($45.80 per ft).

Drive 75 feet of drift 5' x 7' in cross-section (37 shifts)

Labor:

1 - foreman-miner @ $1.75/hr.	518.00
1 - Hoistman @ $1.50/hr.	444.00
1 - Laborer @ $1.00/hr.	296.00

Equipment (rental)

1 - Compressor @ $200/Mo.	400.00
Gasoline,-Hoist @ $50/Mo	100.00
Pump, sump- @ $85/Mo.	170.00
Drill and air leg @ $60/Mo.	120.00

Supplies:

Timber - 1000 b.f. @ $65/M	$65.00
Gasoline and Oil	125.00
Explosives	225.00
Drill steel	135.00
Small tools, pipe, etc.	50.00
Liability Insurance	116.00
Social Security	25.00
Sales Tax	18.00
Estimated total cost of driftingd.....	$2,807.00
Estimated Total Cost of Project.....	$4,682.00

Ref: 1. Teague,K. and Amos, D. H., 1954, Examination report on Buckeye Mine; DMEA-3351

2. Umpublished USGS manuscript.

A. R. Taylor and S. C. Bergman, Geologist
Geological Survey

and

L. E. Shirley, Mining Engineer
U. S. Bureau of Mines

ZM
10-1-56

Docket Copy
Surname:

Hopt
Houk
Kelsom
Lamb
Selfridge

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

SEP - 7 1956

Mr. C. W. Ellis
Route #3
Bakersville, North Carolina

Re: Docket No. DMEA-4433 - Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Ellis:

Your 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. Robert A. Laurence, Executive Officer, DMEA Field Team, Region V, Room 13, Post Office Building, Knoxville 2, Tennessee, for further consideration and possibly a field examination.

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

ACTING Administrator

JHopkins:gad 9/5/56
Copy to: Admr. R. File
Docket
Operating Committee
Field Team, Region V
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

P.C.S.

Docket Copy
Surname:

Hon
Hunt
Selfridge
Hefner

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

SEP - 7 1956

Mr. Robert A. Laurence
Executive Officer, DMEA
Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Subject: Docket No. DMEA-4433-Mica
C. W. Ellis
Buckeye Prospect
Mitchell County, North Carolina

Dear Mr. Laurence:

Please review the subject application and arrange for a field examination if you deem it necessary.

Copies of memoranda dated August 24 and 29, 1956, by Mr. N. E. Nelson, USGS, and Mr. W. F. Dietrich, USBM, respectively, relating to the project are enclosed.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

Frank D. Lamb

Member, Bureau of Mines

N. E. Nelson

Member, Geological Survey

Enclosures 4

JHopkins:gad 9/5/56
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

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

August 29, 1956

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: W. F. Dietrich, Chief
Branch of Ceramic and Fertilizer Materials

Subject: DMEA-4433 (mica)

Applicant: C. W. Ellis

Name and Location of Property: Buckeye Prospect, Mitchell County, N. C.

Date Application Rec'd. by Br. of Ceramic & Fertilizer Materials: 8/22/56

Comments:

1. The applicant states that some previous work was done at this prospect but no data available in this office on this property.

2. It appears a field examination is necessary to determine the feasibility of a project.

Recommendation:

It is recommended that the field team visit this mine when in that vicinity to ascertain if an exploration project is justified. If so, the field team and applicant should agree on a definite plan of exploration on a unit-cost basis.

W. F. Dietrich

W. F. Dietrich

Attachment

IN REPLY REFER TO:

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

August 24, 1956

Re: DMEA 4433
C. W. Ellis
Buckeye Prospect
Mitchell Co., N. C.
$6,200 - Mica

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 a pegmatite in which a 60-foot shaft has been sunk and a substantial amount of strategic mica recovered. The applicant is of the opinion he will find lots of good quality mica if he sinks another 40 feet and drifts 100 feet.

A check on that opinion is needed, so referral to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

August 22, 1956

Mr. C. W. Ellis
Route # 3
Bakersville, N. C.

Subject: DMEA-4433
Re: Exploration Assistance
Buckeye Prospect

Dear Mr. Ellis

The receipt of your application dated August 17, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4433 and referred to the Nonmetallic Minerals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Allen S. Dakan
~~Robert E. Adams~~, Chief
Operations Control and
Statistics Division

August 22, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region V

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 V.

DMEA - 4433 C. W. Ellis

Allen S. Dokan
Robert E. Adams
Chief, Operation's Control
and Statistics Division

C O P Y
mg 8/20/56

August 20, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: New Applications received here

Enclosed are three copies of each of the following applications, received here today:

Operator	Prospect	County		State
J. R. Beam	Back Prospect	Cleveland	(Mica)	N.C.
Larkin Buchanan and Joe Snyder	Ivy Knob Prospect	Mitchell	(Mica)	N.C.
C. W. Ellis	Buckeye Prospect	Mitchell	(Mica)	N.C.

We are keeping the fourth copy of each application for our use.

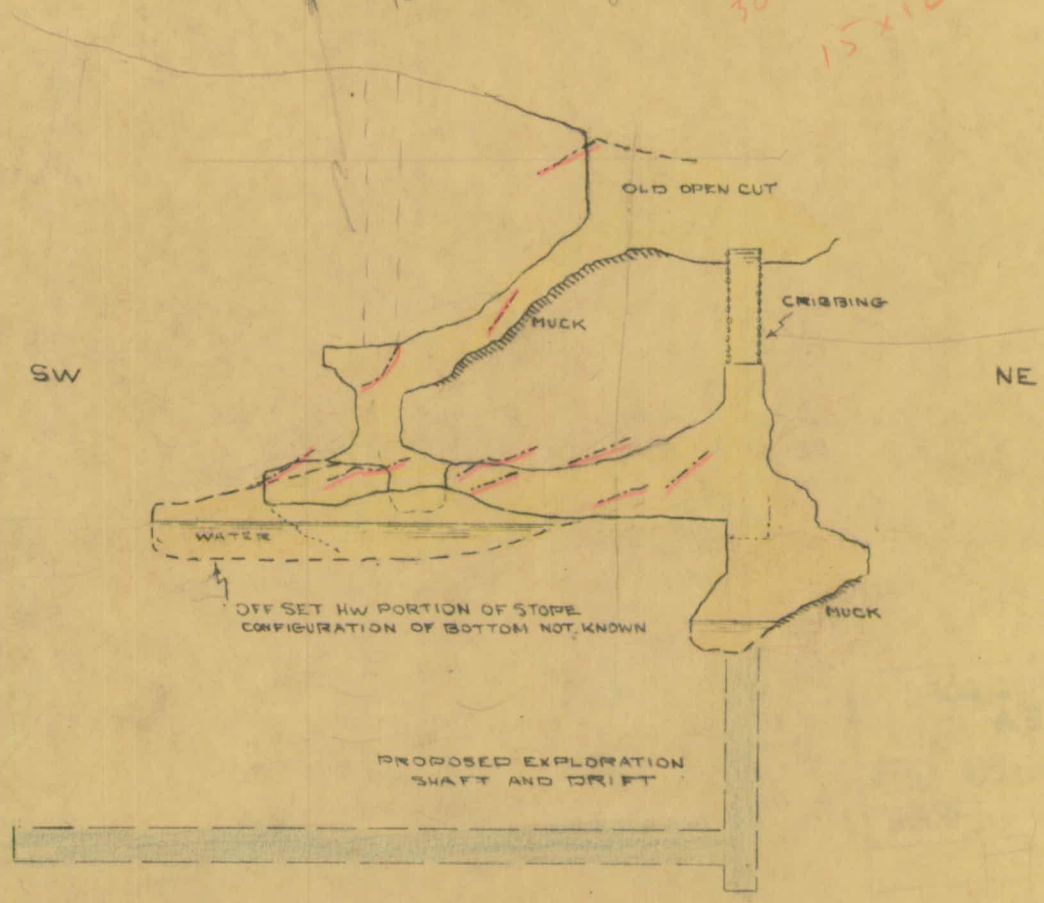
Robert A. Laurence
Executive Officer

Wm. A. Beckfor V. J. Lynch
Member, Bureau of Mines

RAL/mg

Enclosures 3
cc - Operating Committee (2)

Lynch (3) Files (3)



LONGITUDINAL SECTION PROJECTION

BUCKEYE MINE

MITCHELL COUNTY, N.C.

SCALE: 1" = 40'

LEGEND

- AXIAL TRACE OF PEG. MARGIN DRAGFOLDING AND MINOR CONVOLUTIONS
- OUTLINE OF PROPOSED EXPLORATION
- ESTIMATED LIMITS OF WORK THROUGH 1944
- ESTIMATED LIMITS OF WORK - 1944 - 1957

LEGEND

- OLIGOCLASE, QTZ, MUSCOVITE PEGMATITE
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- AXIAL TRACE OF MICA-RICH MARGINAL DRAGFOLD IMPLACEMENTS
- FINE GR. HORNBLENDE GNEISS
- DOWN — INCLINATION OF RAISE OR STOPE FLOOR

BUCKEYE MINE

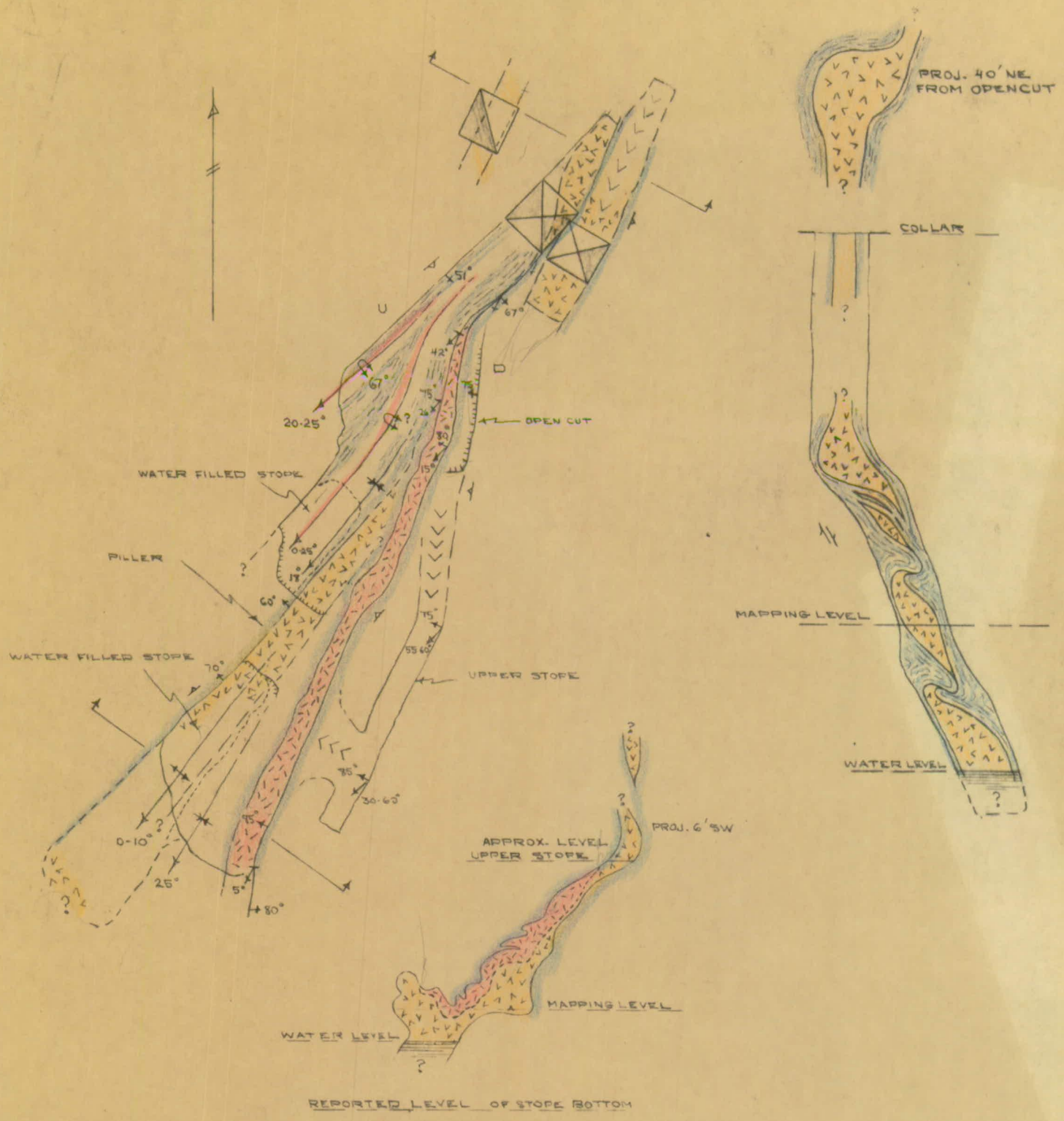
MITCHELL COUNTY, NORTH CAROLINA

DMEA - 4433 (MICA)

SCALE: 1" = 20'

0 10 20 30

SCB 5/57



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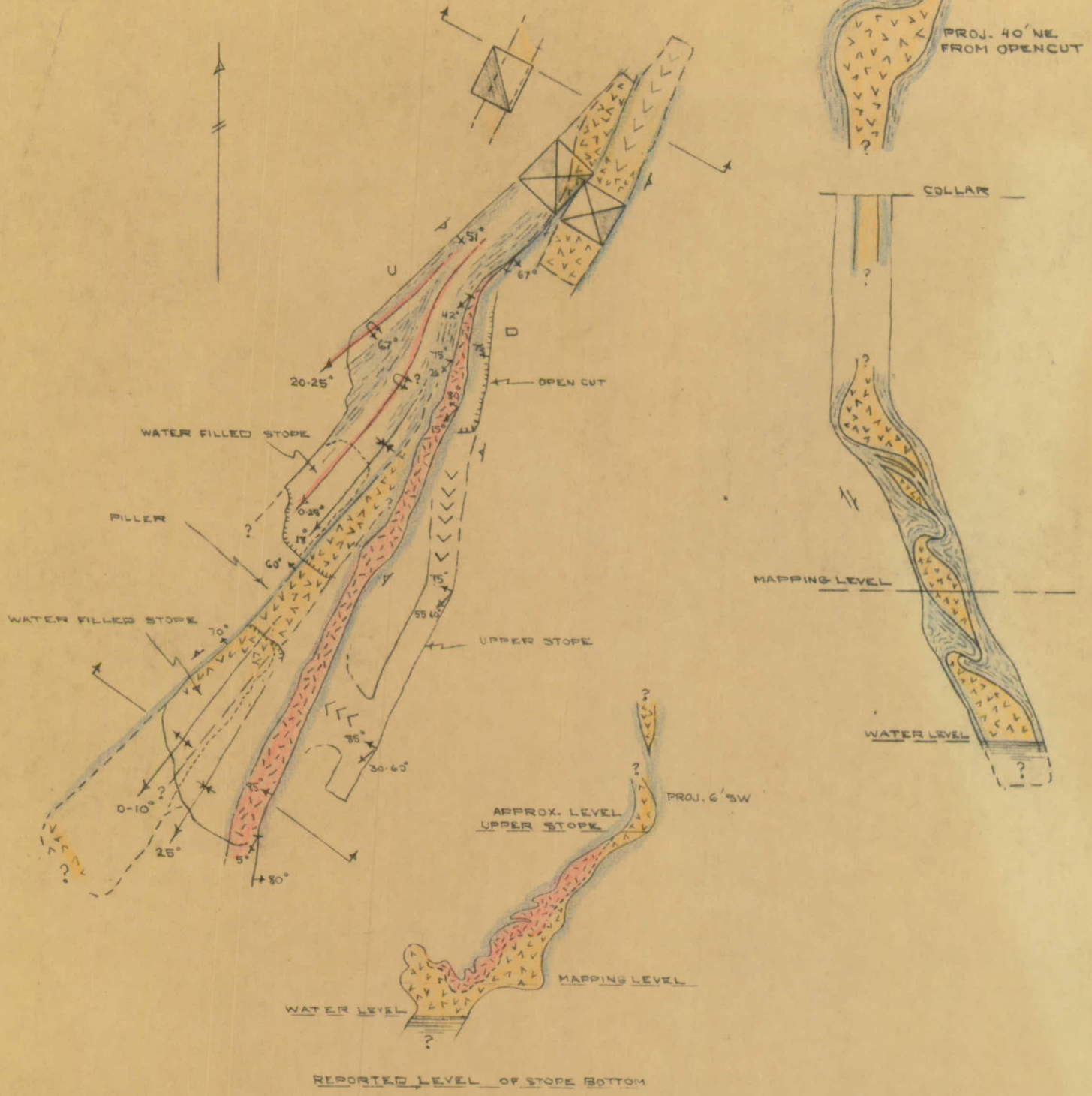

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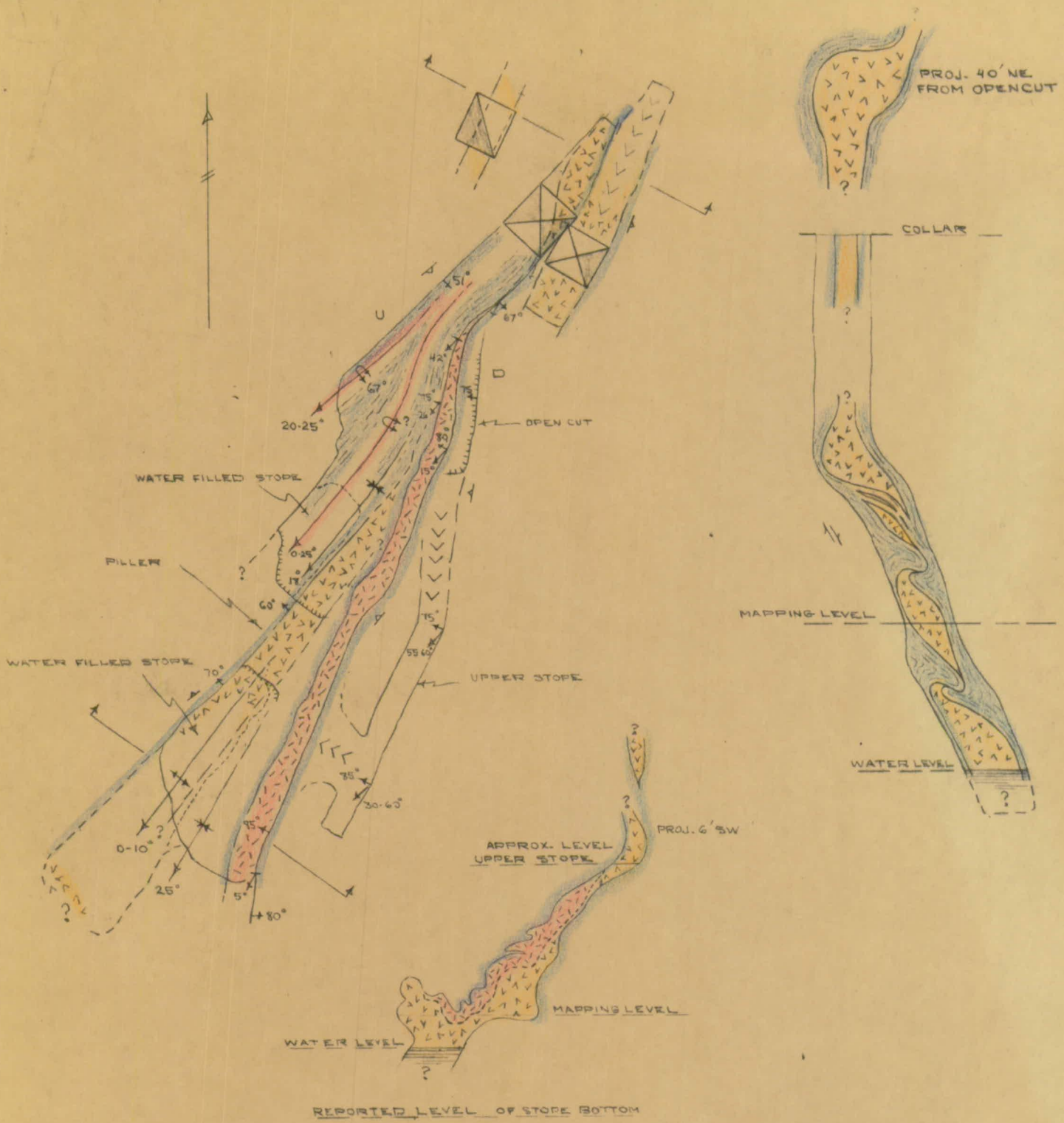

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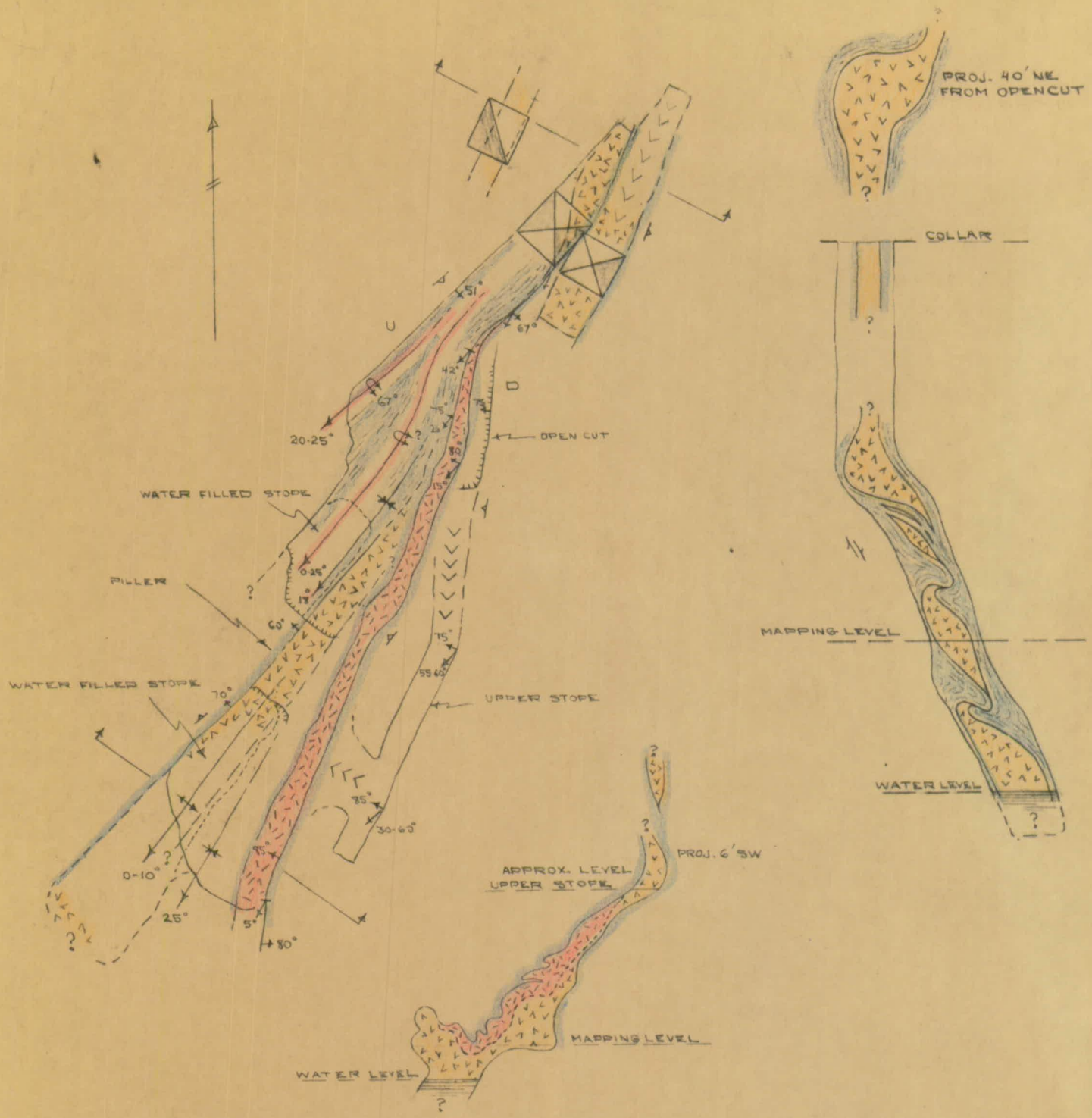

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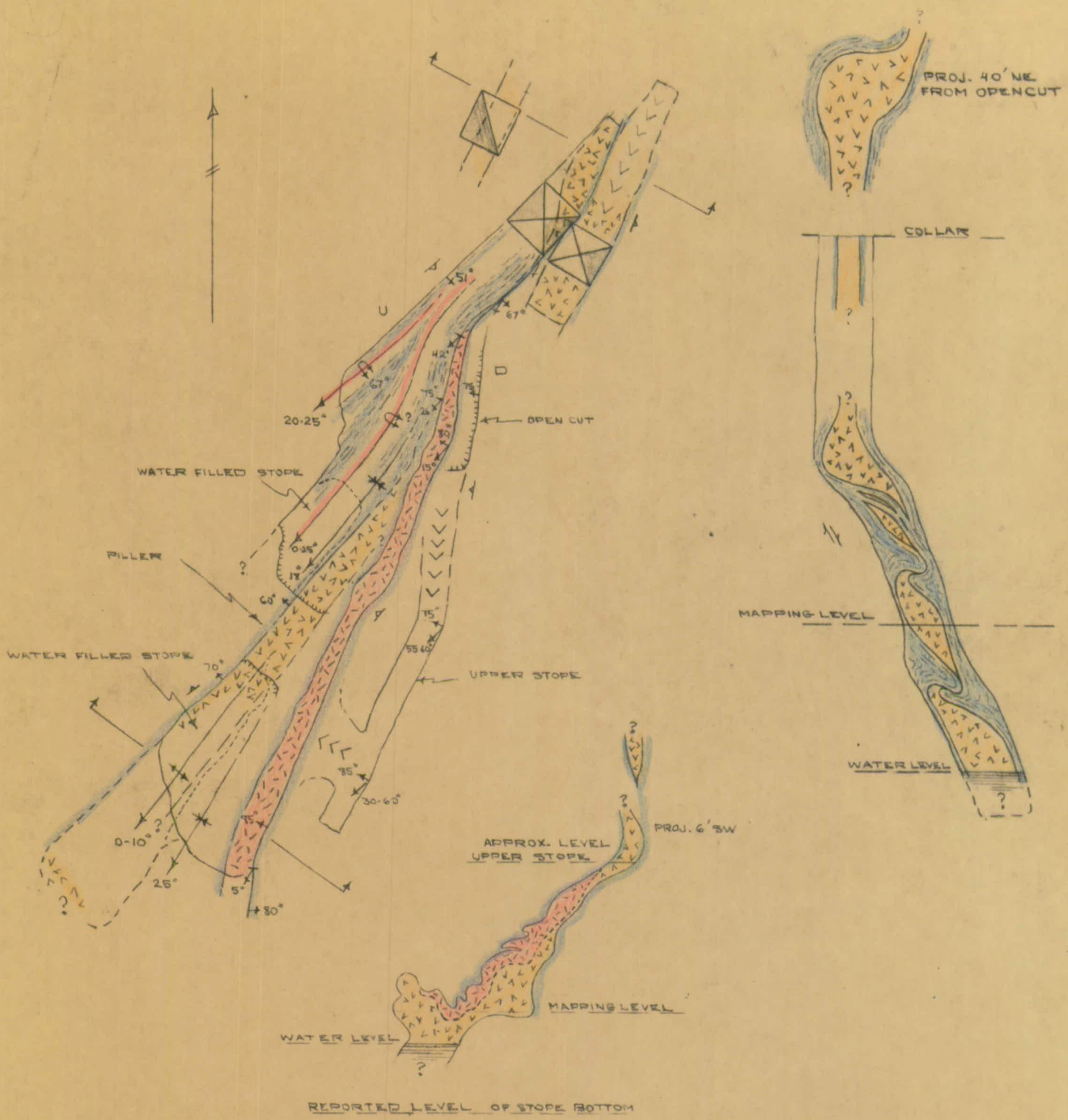

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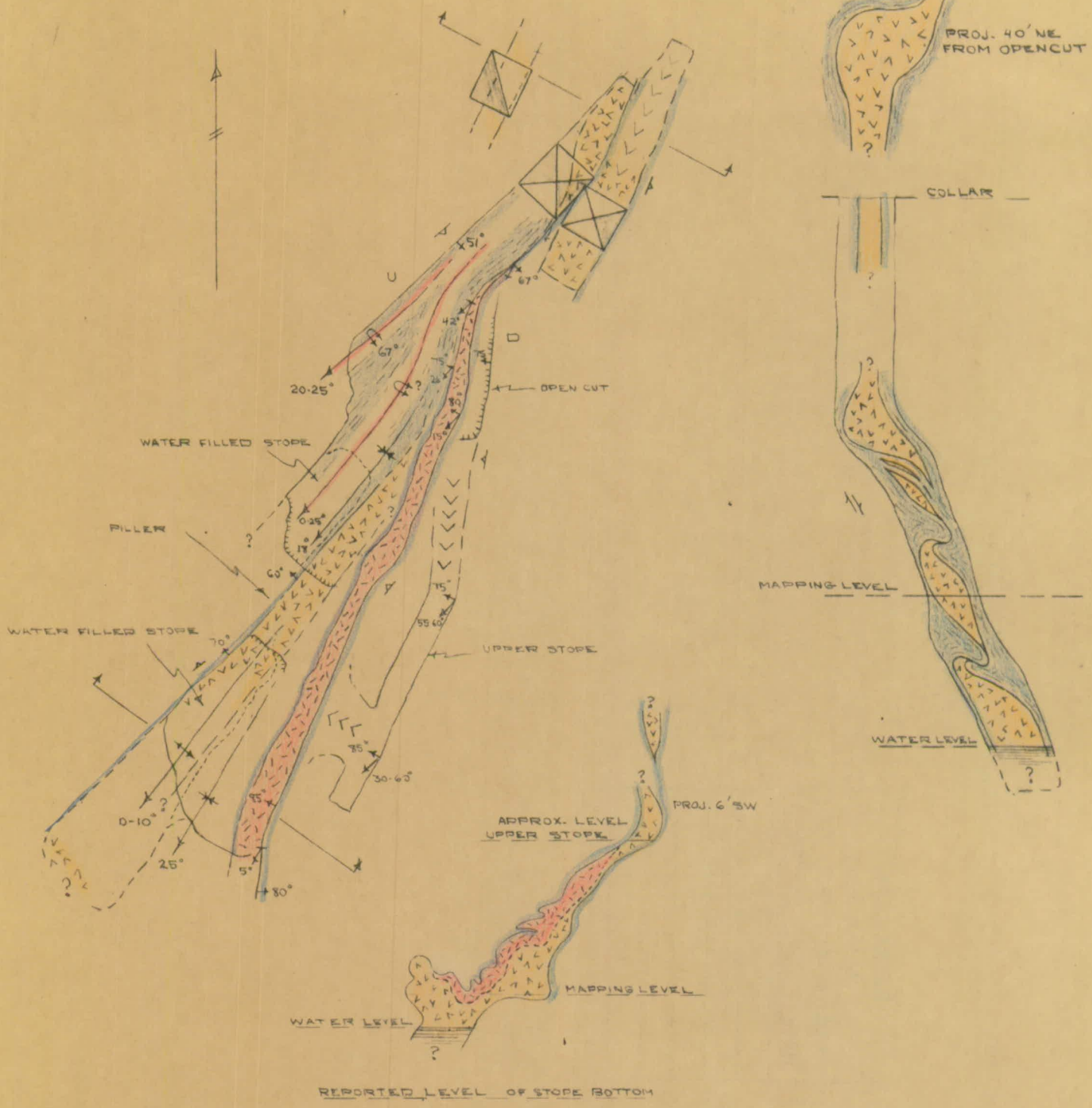

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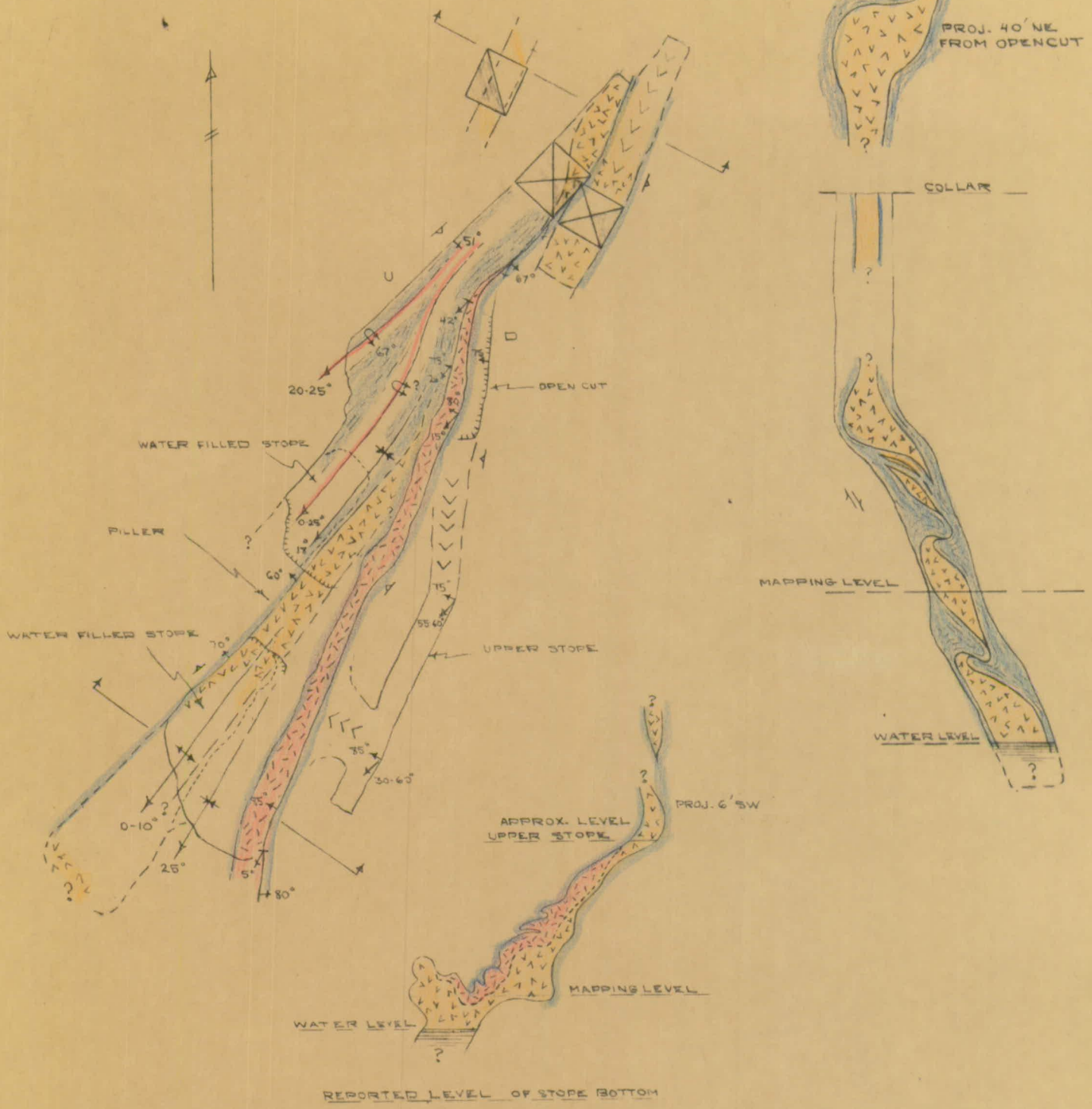

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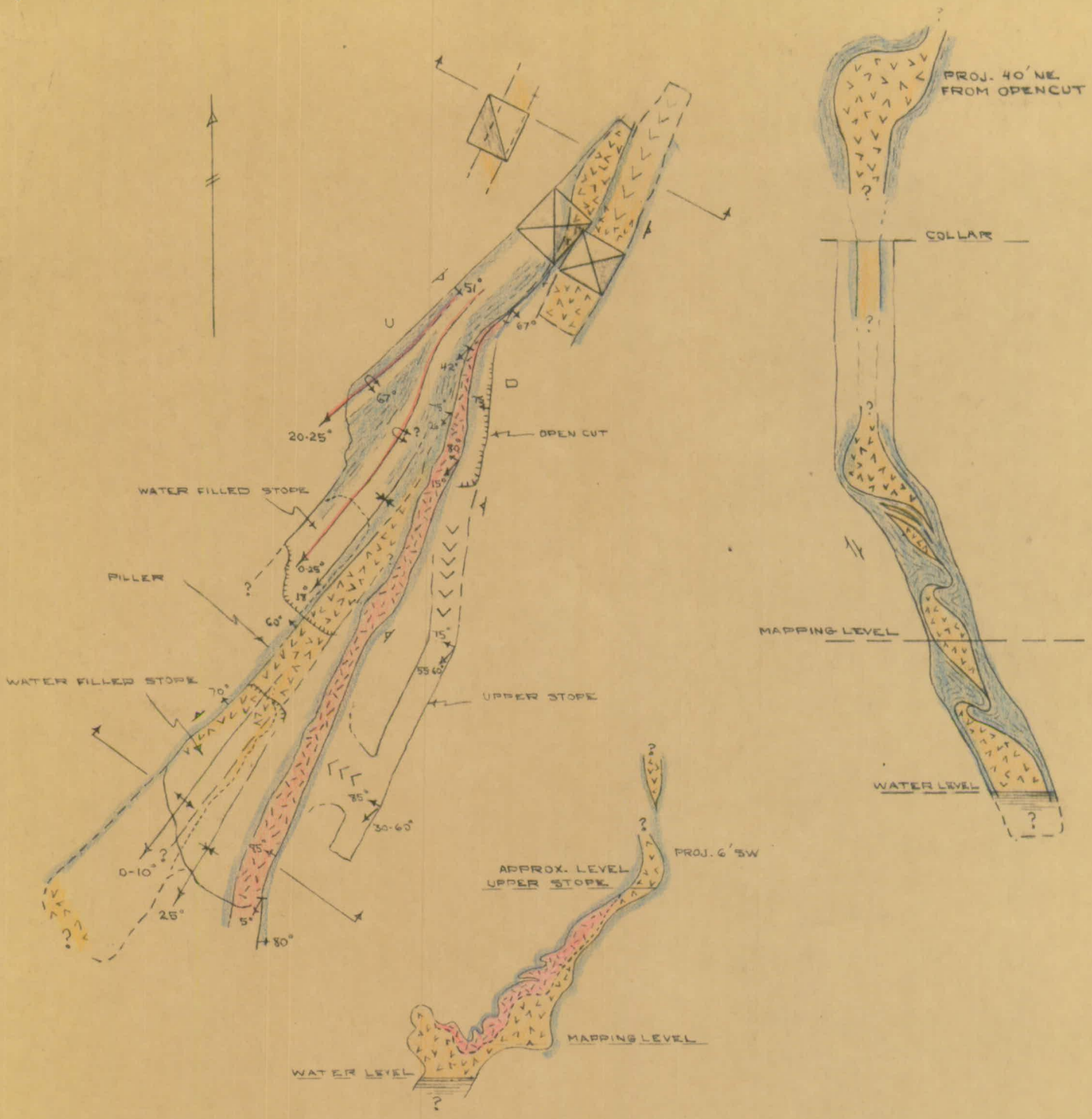

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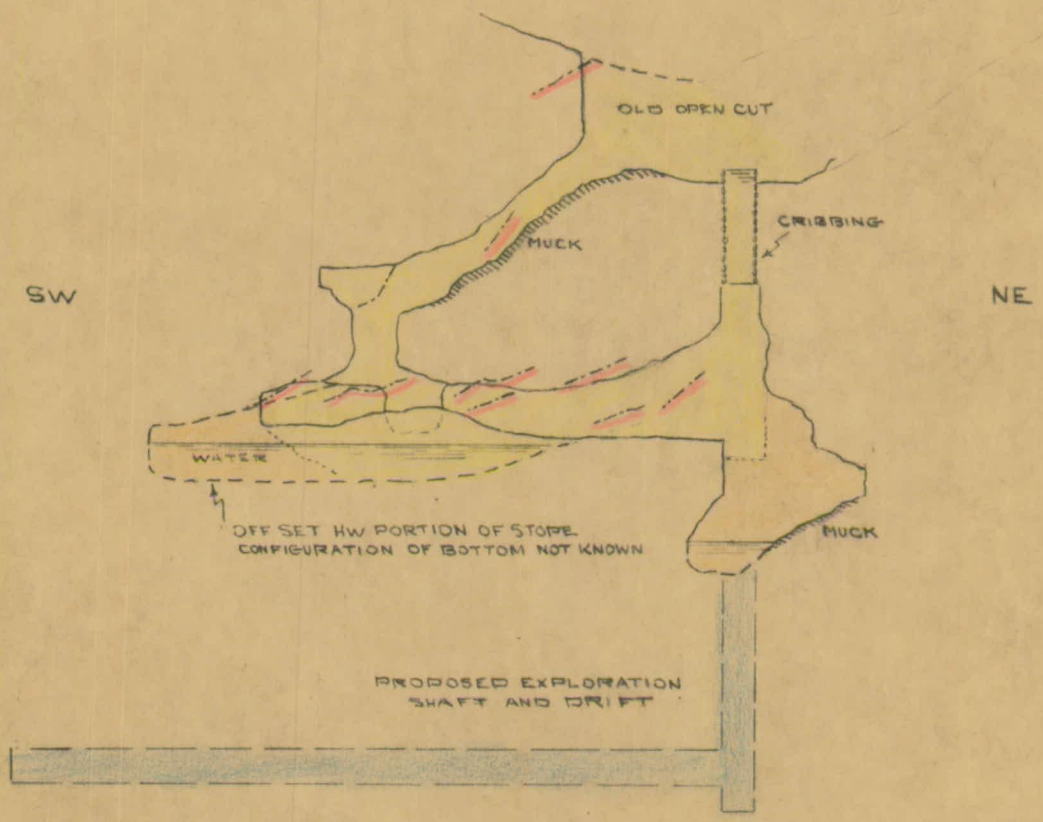

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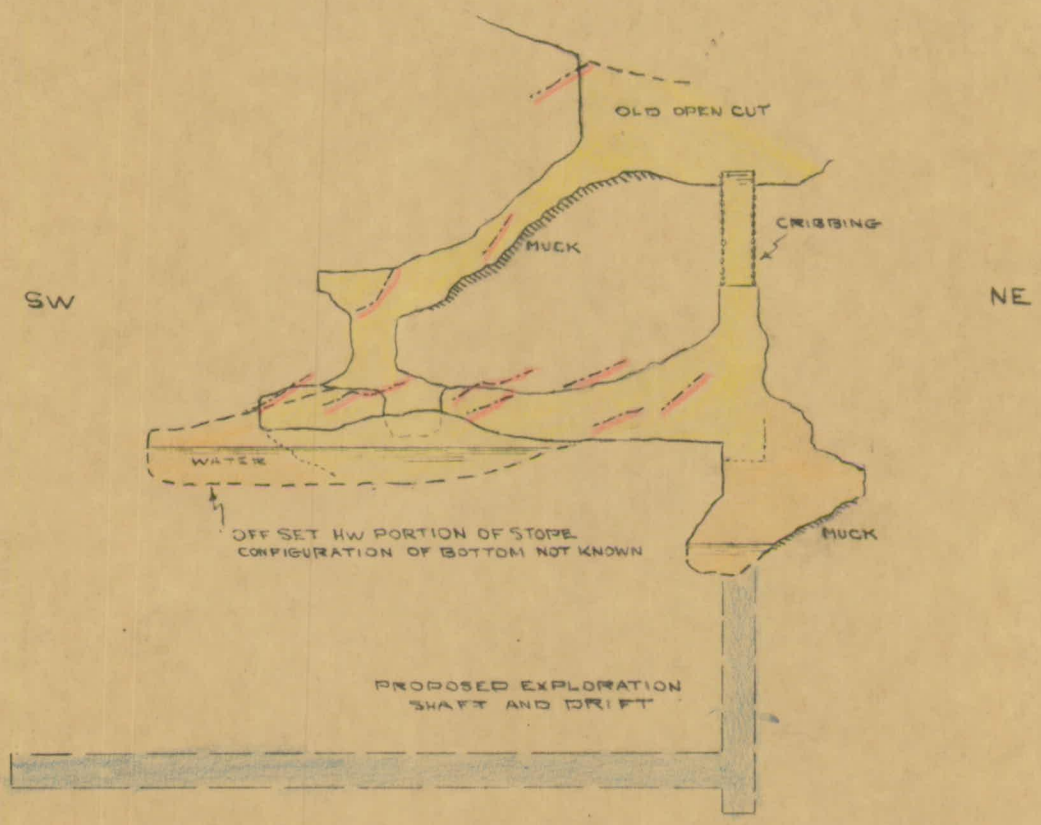

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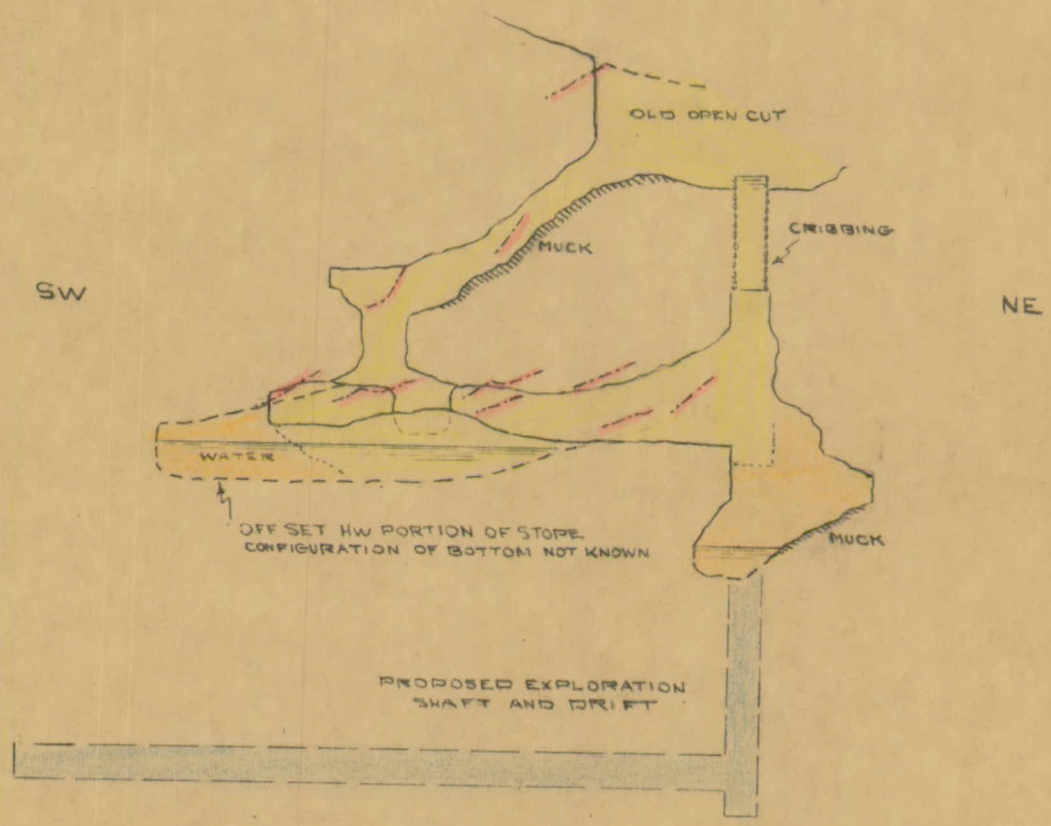

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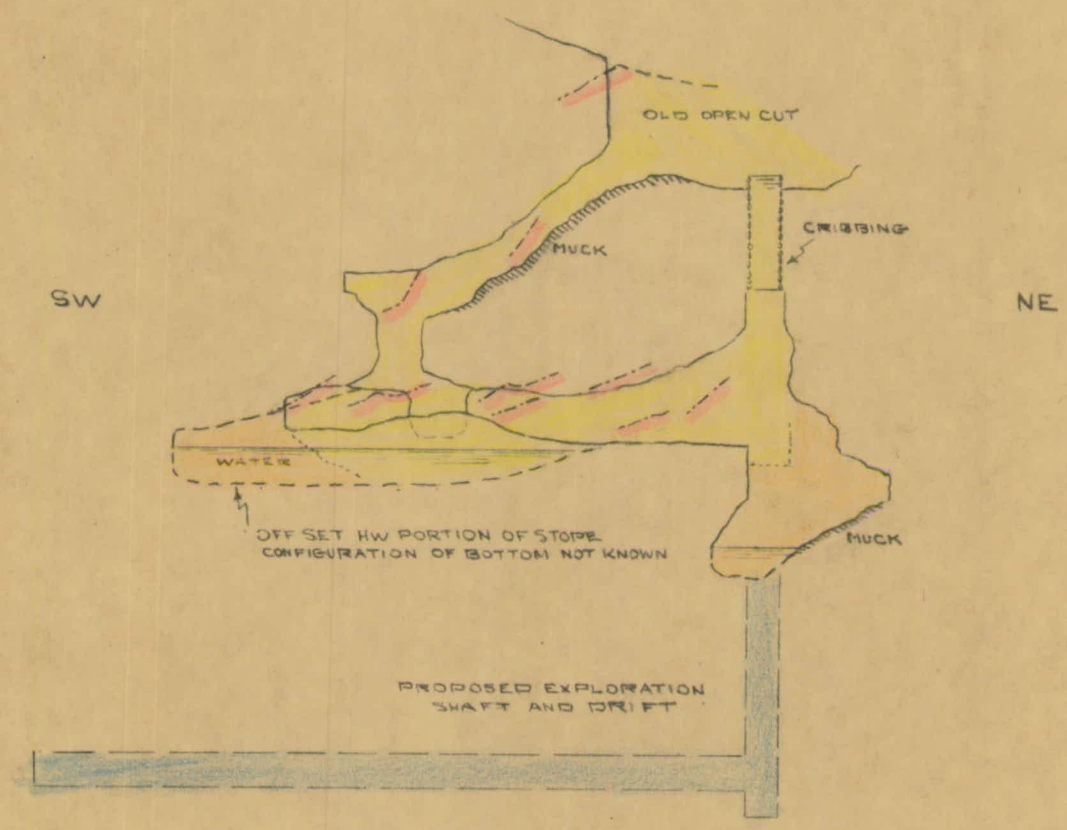

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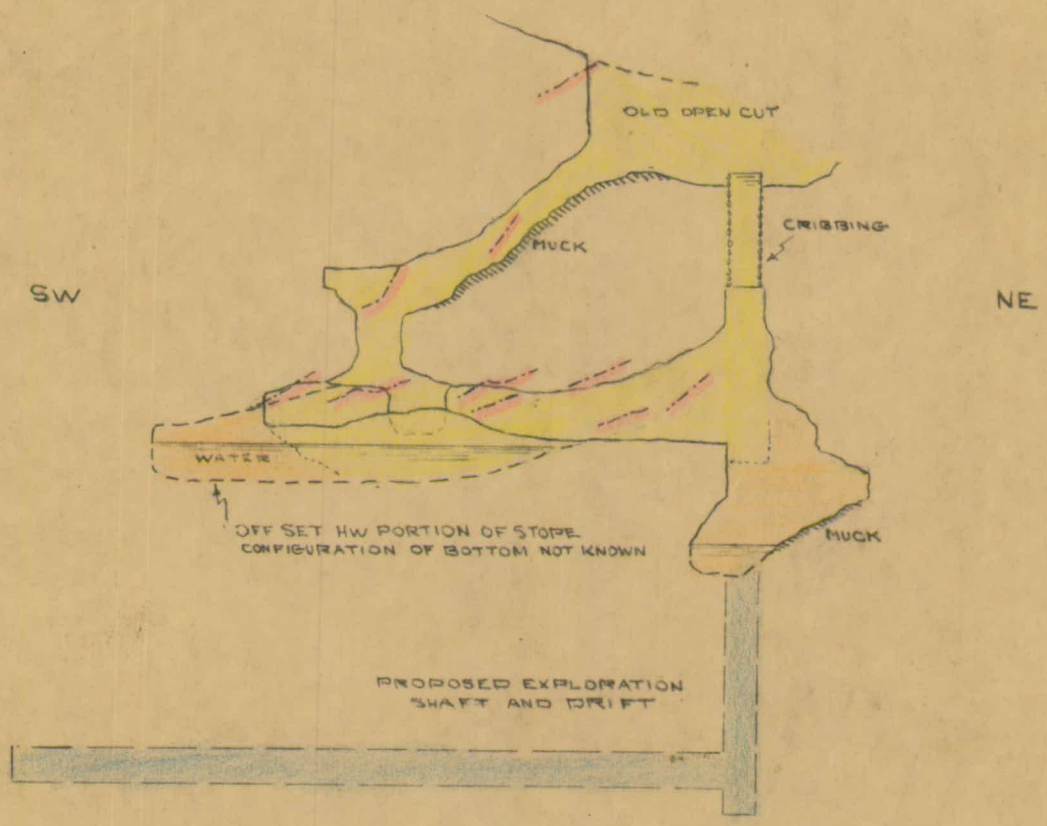

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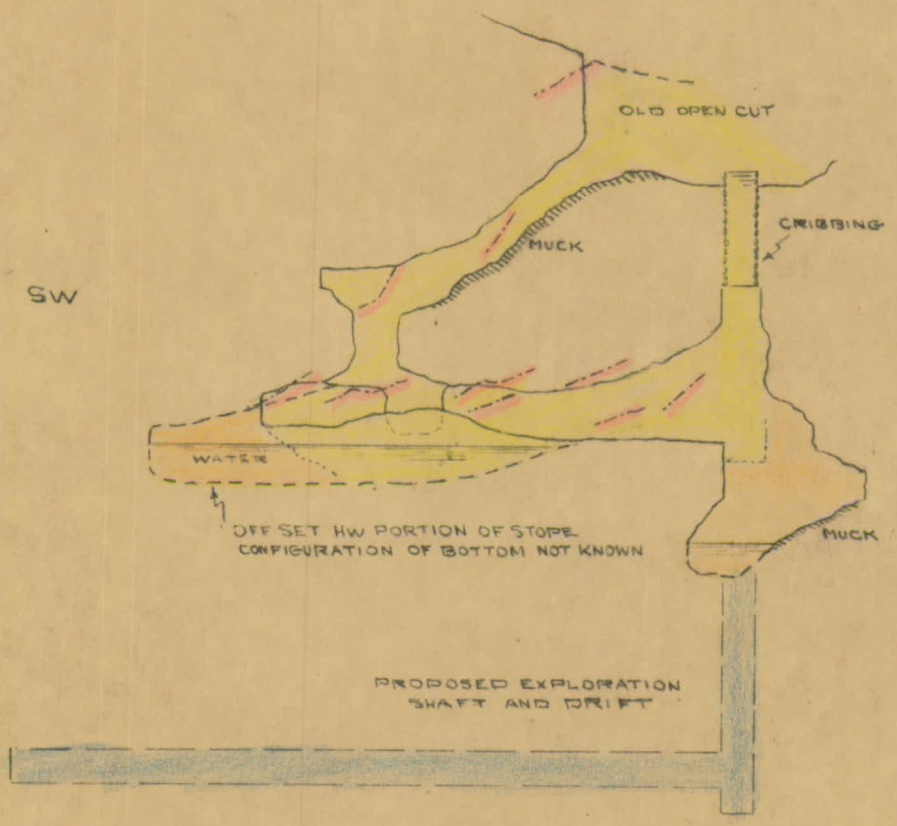

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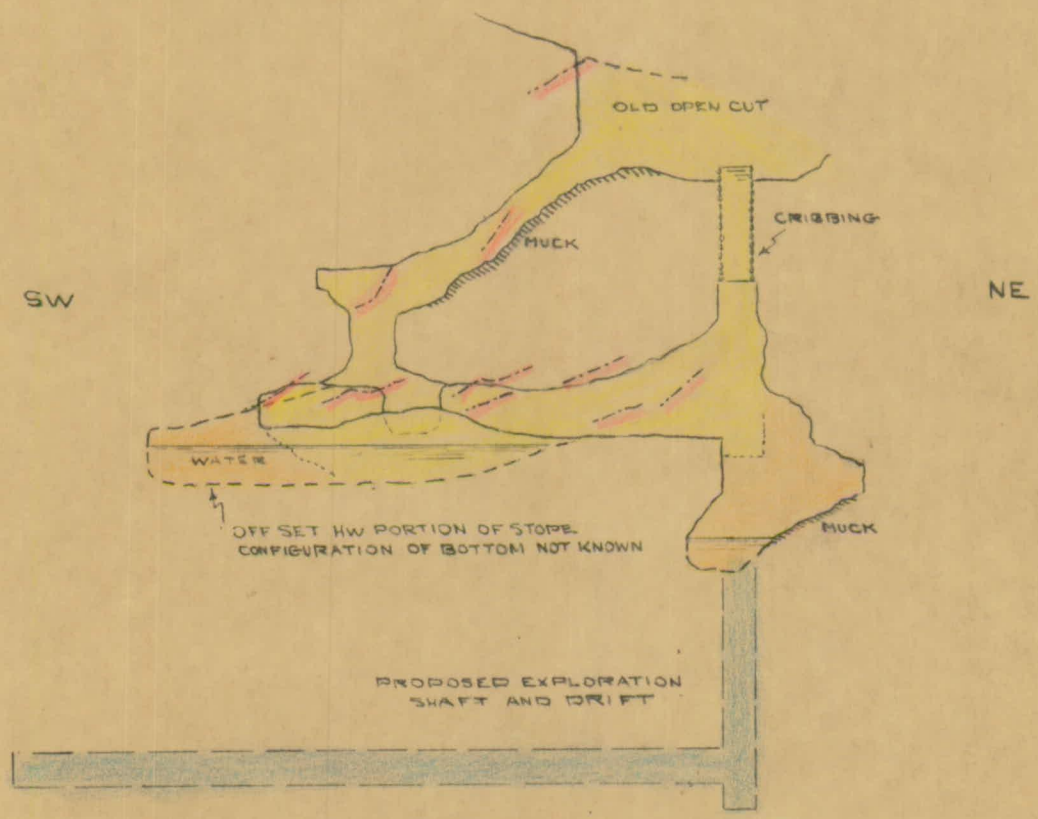

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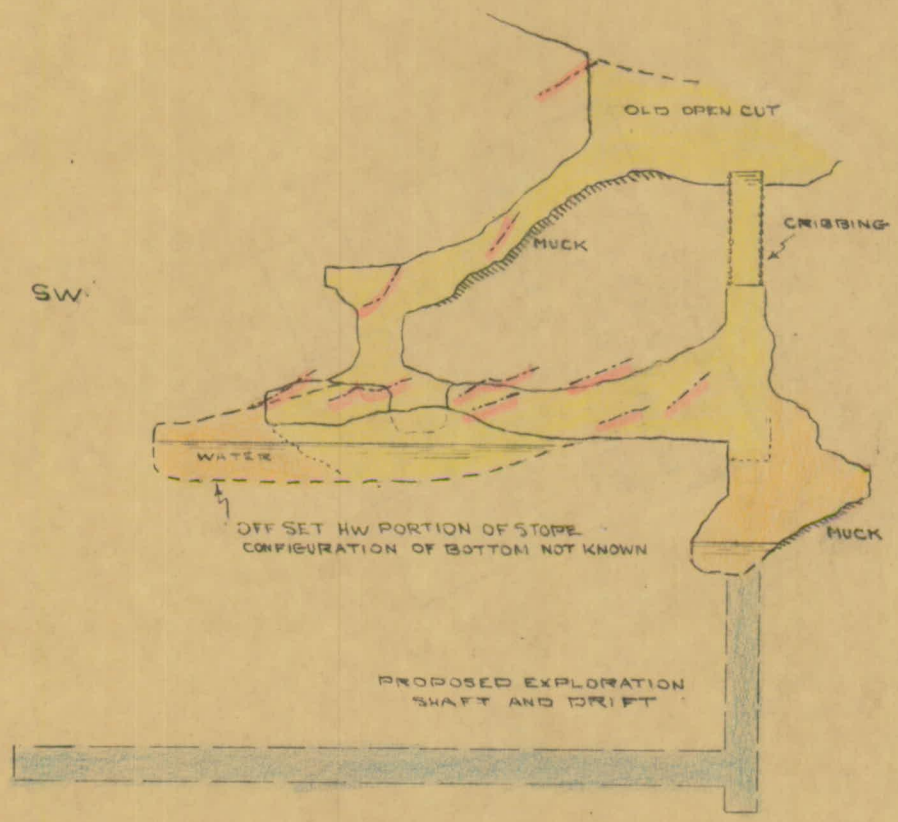

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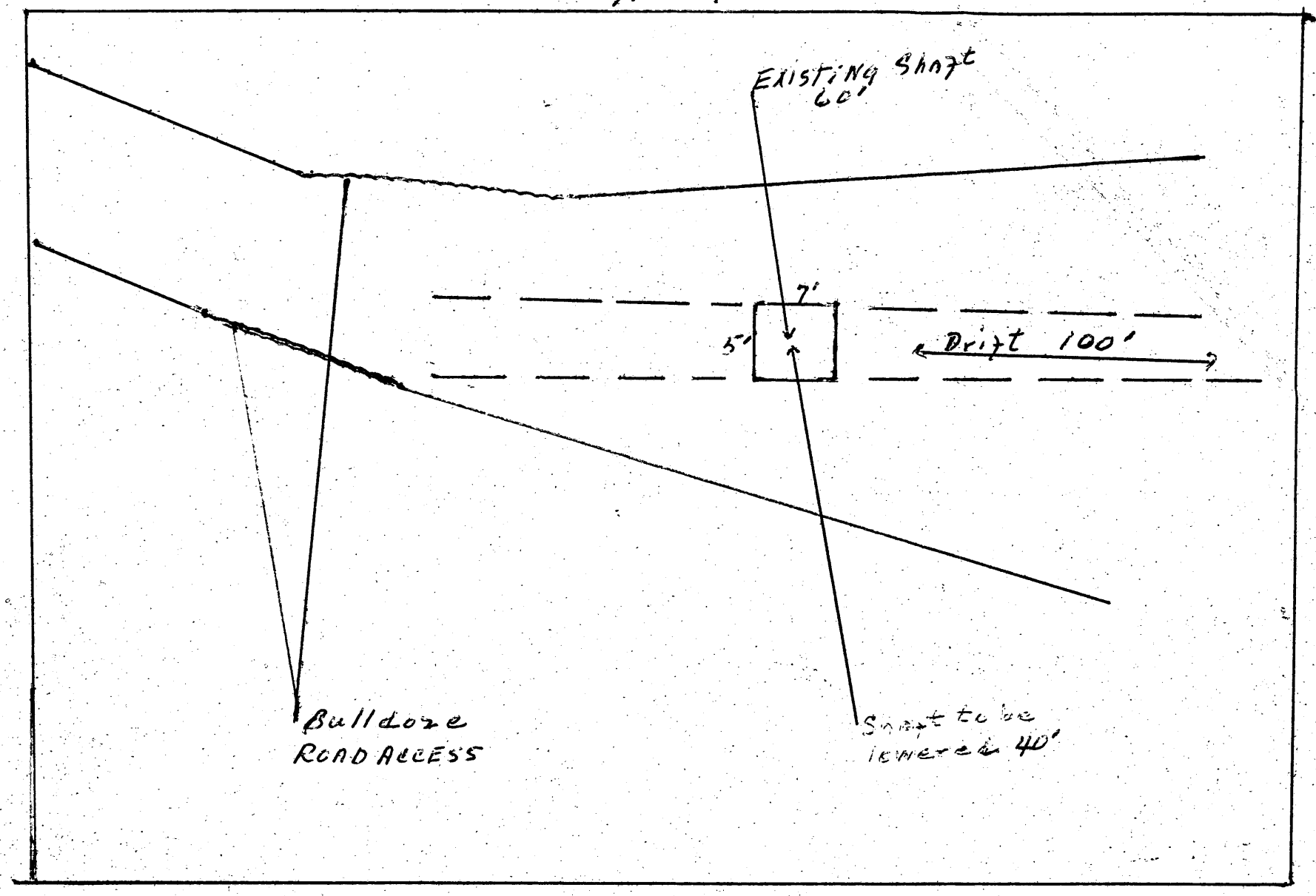
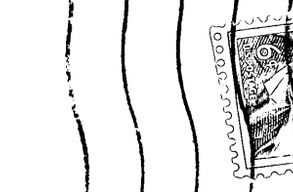
363

Buckeye Prospect
Mitchell County
N. C.



Mr. Jay L. Chambers
Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.