DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E NO._____ DMEA NO. 4926

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- [ ] Withdrawn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
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

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

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE

January 21, 1958

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid (Mica-Beryl) Blue Ox Mining Company, Inc. (Blue Ox Claim) Pennington County, South Dakota

Enclosed are the original and two copies of the subject application. The Applicant submitted five copies of the application, one copy is being retained in our file and one copy is being forwarded to Mr. E. N. Harshman.

The Applicant requests a 7-stage program consisting of all weather access road construction and "drifting" at a total estimated cost of $798,150.00.

A review of the application shows that the Applicant's proposed drifting is in reality crosscutting and no drifting on the pegmatite dikes he hopes to intersect is indicated. Surface trenching and diamond drilling might be a more desirable means of exploring this property.

The Applicant furnished no breakdown of costs. In lieu thereof he has submitted his bid and one from Patterson Bros. for the proposed work. Both bids appear to be high.

W H King

W. H. King

WJK
HMC

APPLICATION FOR AID IN AN EXPLORATION PROJECT

FROM

BLUE OX MINING COMPANY, INC.,
BOX 1925
RAPID CITY, SOUTH DAKOTA

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE

App. #1

Blue Ox Mining Company, Inc.

Box 1925
Rapid City, South Dakota

January 20, 1958

U. S. Department of Interior
Defense Minerals Exploration Administration
Region III
DMEA, 224 New Custom House Bldg.,
Denver 2, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
JAN 21 1958
REGION III
DENVER, COLORADO
OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958
DATE | INITIALS | CODE

Gentlemen:

Please find attached our application for aid in our proposed exploration project on our mining property located at Keystone, South Dakota.

We would like to call your attention to the fact that we can supply only one other contract bidder besides ourselves who we feel is qualified and able to handle this project.

We feel that this exploration should be made inseven stages in order to explore the full potential of the property in the shortest time, and at a minimum of cost.

Our property shows great possibilities of strategic minerals, and we hope you will give early consideration to this application for aid in our exploration.

Respectfully yours,

BLUE OX MINING COMPANY, INC.,

John M. Stolley

John M. Stolley, President

JMS/in

Form MF-103
Revised Oct. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR

Budget Bureau No. 42-R1035.3
Approval expires June 30, 1958

DEFENSE MINERALS EXPLORATION ADMINISTRATION

APPLICATION FOR AID IN AN EXPLORATION PROJECT

PURSUANT TO DMEA ORDER I, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

NAME OF APPLICANT (Full legal name and mailing address as it should appear on contract if one is executed)

BLUE OX MINING COMPANY, INC.,
BOX 1925
RAPID CITY, SOUTH DAKOTA

DMEA
DEPARTMENT OF THE INTERIOR
JAN 24 1958
REGION III
DENVER, COLORADO

RECEIVED
JAN 24 1958

APPLICANT NOT TO USE THIS BLOCK

Docket Number: DMEA-4926
Date Received: 1/24/58
Government Participation %:
Region: III
Division Code: 600

BUSINESS ORGANIZATION (Check one)

- Individual [ ]
- Corporation [X]
- Partnership [ ]
- Other (Specify) [ ]

State in which firm is organized: S. Dakota

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

Name	Address	Title
John M. Stolley	105 Signal Drive, Rapid City, S. D.	Pres.,
Ernest C. Ellison	318 North 40th St., " " " "	V-Pres.,
Ivin L. Nielsen	1925 Hillview Dr., " " " "	Sec'y-Treas.,

Mineral(s) for which you wish to explore: Mica and Beryl

Estimated Cost of Project: $ 798,150.00

LOCATION OF PROPERTY

Name	County	State
Keystone,	Pennington	S. Dakota

GENERAL INSTRUCTIONS

Before filling out this application, please read DMEA Order-I, Revised, "Government Aid in Defense Exploration Projects." To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 1, existing mine workings and geology in item 2, and the proposed exploration project in item 4. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 2(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest DMEA Field Office.*

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.

January 20, 1958
Dated

BLUE OX MINING COMPANY, INC.,
John M. Stolley
BY (Signature)

President
Title

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. *Applicant's Property Rights:*

(a) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all land adjacent to the proposed project area which you own or control. Describe any part of the project land or workings which should not be subject to Government lien for royalty payments. If the land consists of unpatented claims, state the book and page number for each recorded location notice, including amended locations, and the place where recorded (courthouse, recorder's office, county, and state).

(b) State all the names by which you know the property.

(c) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise. If you are not the owner, submit with this application one exact copy of the lease, contract, or other document (with address of owner) under which you control the property.

(d) Describe all liens, mortgages, or other encumbrances on the property.

2. *Physical Description:*

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the lands, including existing mine workings. Describe all production facilities.

(b) State your interest, if any, in operations stated in 2*(a)*.

(c) State, as far as you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves on the property giving quantities and grades and sampling methods used, supporting your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you may have, indicating on each whether you require its return to you.

3. *Accessibility of Project:*

(a) To aid DMEA representatives who may be required to examine the property, state the name and address of the person who will meet the DMEA representative; give directions for reaching the property; and describe accessibility of the property including the mine workings.

(b) Name the shipping and supply points and places where employees reside and state the distances between them and the property.

4. *The Exploration Project:*

(a) Describe fully the proposed exploration project giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and longitudinal and cross sections as necessary. Show the location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *property boundaries* or to the closest identifiable corner.

(b) If an access road to the project must be built, show the location on the property map and state the length, type, and construction methods proposed.

(c) In the event that an exploration contract with DMEA is executed, how soon will the work start and how many months will be required to complete it? State your anticipated average daily or monthly rate of progress for each type of work.

5. *Experience:*

State your operating experience and background with relation to your ability to carry out this exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of Costs:*

Furnish detailed estimates of the costs *for each item of the work proposed in 4(a)* under the headings listed below with a total for each heading and the estimated total cost of the project. Costs for any work to be performed by an independent contractor should be shown separately under category *(a)* below. Costs for any work that is not to be performed by an independent contractor should be given in detail under categories *(b)* through *(g)*.

(a) Independent contracts. State the cost of any proposed independent contract for the performance of all or any part of the work, expressed in units of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. *(Note* – If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. For necessary supervision, engineering and geological services, and labor, include an itemized schedule of numbers, classes, rates of wages, salaries or fees, and periods of employment. State whether these technicians and employees are available.

(c) Operating materials and supplies. List items of material and supplies with their cost. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of operating equipment to be used giving specifications and indicating how each item is to be acquired – i.e., rented, purchased, or provided by the applicant. If it is rented or purchased, state the estimated rental or purchase price. If it is to be furnished by the applicant, give its present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of necessary *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant, which will be used on the exploration project.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration project stating specifications and cost including labor, materials and supervision.

(g) Miscellaneous. For the operating equipment listed in 6*(d)*, describe the type and estimate the cost of repairs and maintenance expected during project operations. Do not repeat initial repairs listed in 6*(e)*. Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories.

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)* State whether you are prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation stated in Sec. 7 of DMEA Order–I, Revised.

(b) Explain to what extent you propose to furnish your share of the costs by providing money, by use of equipment owned by you, or otherwise.

* * * * *

INT.-DUP. SEC., WASH., D.C. 25960

BLUE OX MINING COMPANY, INC.,
RAPID CITY, SOUTH DAKOTA
DMEA APP. #1

1. Applicants property rights;

(a) Legal description:
Section 13 T2S R6E Pennington County, South Dakota unpatented claims, Book 48, Page 333 miscellaneous records.
Book 51 Page 42 Location book, Book 50, Page 302 miscellaneous records, Instrument number 19693, 18313 and 3301, Register of Deeds, Pennington County Courhouse, Rapid City, ~~South Dakota.~~

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE

(b) Names by which property is known:
(1) Blue Ox Claim (See Sketch No. 1)
(2) Bernard Original Claim " "
(3) Blue Ox No. 1 Claim " "

(c) Interest in the land:
(1) Lessee

(d) Liens, mortgages or encumbrances:
(1) None.

2. Physical description:

(a) Small test operations only - no existing mine workings or production facilities - See sketch No. 2.

(b) Exploratory cuts made by applicant as lessee.

(c) No past commercial production or mine records.

(d) No known or reserves or previous assay maps.

(e) Property dips at steep angle towards the south - southwest, heavy layer of sandstone covers crest of hill in flat formation; visual inspection of slope, and test holes indicates good possibility of six pegmatite or vertical ledge formations containing high quality mica of a plate variety as well as beryl and other allied pegmatite minerals. We believe ledges are nearly vertical or possibly dipping 7 to 10 degrees toward the south - southwest. (See sketch No. 2 and sketch No. 7). Sandstone formation seems to lay at level position over or near the contact rock of each ledge. Visual inspection leads us to believe that these sandstone caps are held in this level position by solid underpinning formation of hard rock. Sandstone cap carried down slope by previous erosion lays parallel to the slope and is partially imbedded in the decomposed soil and slate between the pegmatites or ledges. Below and south - south west of the southern most exploratory location (See sketch No. 3) the formation drops very abruptly to the Iron Creek stream bed some 100 to 150 feet below. Most all fallen timber observed on the claims exposes mica schists and formations of float upon being uprooted.

(f) We believe there are possibly six pegmatite formations due to the structure of the terrain, and observation of outcroppings and float. Samples from the exploratory cuts (See sketch No. 3) were taken by Mr. R. A. Gira, Custer, South Dakota. At present no assay reports or certificates have been obtained.

(g) See enclosure from Mr. Gira.

(3) Accessibility of the project:

John M. Stolley, 105 Signal Drive, telephone Fillmore 2-2057, Rapid City, South Dakota will meet the DMEA Representatives at any time scheduled at the property which is located 4 miles SE of Keystone, South Dakota on the Keystone, Hayward, Hermosa, South Dakota county road or at any other selected location such as the Rapid City Municipal Airport, the Sheraton Johnson Hotel, or the Custer Mica Depot. Accessibility to the actual property from the all weather county road is good via the access trail (See sketch No. 2) unless closed in by snow or blizzard conditions. Upon notice we will furnish the DMEA Representatives motor transportation and drivers while in the area.

(b) Most all of the equipment and supplies would come out of Rapid City, South Dakota. Rail shipments can be made from Keystone, South Dakota, via the Burlington Route. Any or all employees could find residence at Rapid City, Custer, Keystone or other surrounding towns any of which would be within 20 to 30 miles of the project. Any truck shipments can be made directly to or from the project. Present employees reside at Keystone and Rapid City, South Dakota, 4 miles and 20 miles respectively, from property.

(4) The Exploration Project:

(a) We propose to explore the property by a combination of access roads and 5' x 7' drifting. It is our intention to carry out this project in seven stages of construction. Stage 1 would provide us necessary access to the property. Stage 2 will give us the initial opening to the lower levels, Stage 3 will enable us to gain access to the upper level opening, Stage 4 will provide us the initial opening into the upper level. Stages 5, 6 and 7 are merely the continuation of Stages 2 and 4 and would be completed in their respective order.
It is our belief that this operation will work out especially well in this case due to the possibilities of cross cutting six pegmatite formations. The steepness of the terrain also makes a drifting project appeal to us in this instance. Sketches 1, 4, 5, 6 and 7 will give a good resume of the proposed work and its relationship to boundary lines or any present workings.

(b) Sketches 1 and 4 will show the proposed access roads which we would construct by use of a dozer, shovel, compressor and other necessary heavy equipment. The lower road will be some 2200' in length and the upper road about 1500'. Both roads will be built suitable for truck traffic with the lower road being more of the all-weather road to and from the area.

(c) When a DMEA contract is executed we will start work immediately and continue work until project completion. We believe we can complete the entire project in 24 months or less by completing the stages in their respective orders.

(5) Experience:

(a) John M. Stolley has been engaged in work of this type for many years. He would supervise all operations and has a good number of well qualified, skilled and honest people to carry out the project. John M. Stolley has been engaged in heavy construction, mining, sand and gravel operations, earth and rock work for over twenty years with the exception of nearly four years of service in the Armed Forces as an Army Officer in charge of men and equipment for first the 3rd Army, The 8th Army Corps, the First Army Group and the 12th Army Group during World War II in the European Theater of Operations.

(6) Estimate of Costs:

(a) Independent Contracts. See Enclosures.

(b) Personel service - Included in contract price.
(c) Operating equipment - " " " "
(d) Operating materials " " " "
(e) Initial Rehabilitation & repairs - Included in contract price.
(f) New buildings - Included in contract price.
(g) Miscellaneous - Included in contract price.

(7) Share to cost:

(a) We are prepared to furnish our share of the cost of the proposed project.

(b) We will furnish our share of the cost of the project by providing money.

GENERAL SERVICES ADMINISTRATION

Materials Purchase Depot
Custer, S. Dak.

Region 8
Denver 2, Colorado

January 20, 1958

IN REPLY REFER TO:

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958
DATE | INITIALS | COPY

United States Department of the Interior
Defense Minerals Exploration Administration
Region 3 DMEA
New Custom House Building
Denver 2, Colorado

Gentlemen:

On several different occassions the writer has been over the Blue Ox Lode claims, now owned by John M. Stolley, et al. To date there has been no systematic development on the property and on two dikes that have been exposed just the surface of the deposit has been exposed.

A considerable amount of mica and beryl appears on the surface of these claims as float in the proximity of the dikes. The mica gives promise of being of good quality and the writer has been told that the beryl returns an analysis of better that 10% BeO.

The Vickers Feldspar Corporation is sinking a shaft on the Nickels Dike, This property adjoins the Blue Ox claims on the north. A considerable amount of scrap mica, beryl, amblygonite, spodumene and columbium tantalum has been produced from the Nickels Dike. A quantity of strategic mica could have been produced from this scrap had same been cobbed as it was mined.

The Ferguson Lode claims to the southwest are adjacent to the Blue Ox claims, between forty and fifty tons of beryl has been produced from this property from one or two crystals, to the writer's knowledge. Feldspar has also been produced from this property.

It would be my considered opinion that the Blue Ox claims have potential possibilities that make them worth the time and capital necessary to expose the dikes that cross the property. Any work required should be in a two stage development, first to determine the enrichment of the deposits, and secondly to determine the quality of the minerals to be produced.

Sincerely yours,

Bernard A. Gira

Bernard A. Gira
Buyer

[illegible]

[illegible]

[illegible]
[illegible]
[illegible]

We hereby submit the following quotation on your proposed [illegible] [illegible] by product

Stage 1	Power Steere Steel	200 Co. @ 3.50	700.00
Stage 2	Power Steere	200 Co. @ 57.50	2300.00
Stage 3	Power Steere Steel	1500 Co. @ 3.50	5245.00
Stage 4	Power Steere	1500 Co. @ 57.50	1800.00
Stage 5	Extended Power Steere	1500 Co. @ 57.50	1800.00
Stage 6	Extended Power Steere	1500 Co. @ 57.50	1800.00
Stage 7	Extended Power Steere	1500 Co. @ 57.50	1800.00
	Additional costs for 50 or 60 Steere	@ 14.75	110.00

All steere quotations include color, extended, [illegible], [illegible], [illegible] [illegible].

Signed to the date [illegible] and [illegible] [illegible].

Patterson Bros

By C. O. Patterson

[illegible]
DIBA
RECEIVED JAN [illegible]
DATE | [illegible]

BID PROPOSAL

10

BLUE OX MINING COMPANY, INC.,
BOX 1025
RAPID CITY, SOUTH DAKOTA

We hereby submit the following quotations on your proposed exploratory project:

Stage 1	Lower Access Road	2200 ft.	$ 3.50	per lin. ft.
Stage 2	Lower Drift	2900 ft.	$ 52.00	per lin. ft.
Stage 3	Upper Access Road	1500 ft.	$ 3.50	per lin. ft.
Stage 4	Upper Drift	4400 ft.	$ 52.00	per lin. ft.
Stage 5	Extension Lower Drift	2400 ft.	$ 52.00	per lin. ft.
Stage 6	Extension Upper Drift	1700 ft.	$ 52.00	per lin. ft.
Stage 7	Extension Lower Drift	1700 ft.	$ 52.00	per lin. ft.
Timbering work in 5' x 7' Drift			$ 16.00	per lin. ft.

All above quotations include labor, materials, equipment, supplies, insurance, etc.,

Payment to be made monthly per engineers estimate.

BLUE OX MINING COMPANY, INC.,

By John M. Stalley
President

DMEA
RECEIVED JAN 24 1958
DATE

CHRONOLOGICAL COPY
DMEA
RECEIVED JAN 24 1958
STATE | REMARKS | CODE

LEASE AGREEMENT

This agreement made and entered into this 5th day of November, 1957, by and between Vincent L. Cordes and Amelia E. Cordes, jointly, of Keystone, Pennington County, South Dakota, parties of the first part (hereinafter called the "Owner") and the Blue Ox Mining Company of Rapid City, Pennington County, South Dakota, party of the second part (hereinafter called the "Operator"), witnesseth:

Para. 1. That whereas the Owner owns, claims leases and has control and possession of a tract or tracts of land that may contain earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits and they are described as follows, to-wit:

(a) Blue Ox Lode Mining Claim located in Section 13, T2S, R6E, Pennington County, South Dakota, location filed with Register of Deeds as Unpatented Claim on Page 33, Book 48 Miscellaneous Records, Pennington County Court House, Rapid City, South Dakota. Instrument No. 19693, copy attached hereto.

(b) Bernard Original Lode Mining Claim located in Section 13, T2S, R6E, Pennington County, South Dakota, location filed with Register of Deeds as Unpatented Claim on Page 42, Book 51 Location Records, Pennington County Court House, Rapid City, South Dakota. Instrument No. 18313, copy attached hereto.

(c) Such additional land as now lies between the north boundary line of the Blue Ox Lode Mining Claim described in (a) above, and the center line of the Keystone, Hayward and Hermosa, South Dakota county road and whose east and west boundary lines shall coincide with the east and west boundary lines of the aforesaid Blue Ox Lode Mining Claim.

(d) All other claimed, leased, patented, deeded or otherwise secured land which lies within Section 13, T2S, R6E, Pennington County, South Dakota, that may now be or shall come into possession or control of the Owner, his heirs, partners or assigns.

Para. 2. Whereas the Operator is engaged in the business of exploring for, extracting and removing aforesaid earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits and is prepared to engage in his operation of said business on the premises hereinbefore described, and;

Para. 3. Whereas the Owner and the Operator are desirous of entering into a written agreement providing for the Operator to enter upon the premises of the Owner and conduct his business and to provide for payment of royalties to the Owner for all earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits extracted and removed from said premises,

NOW THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

Para. 4. The Owner agrees:

(a) That the Operator shall have the right of ingress or egress to the aforedescribed premises at all times.

(b) That the Operator shall have the exclusive right to enter upon said premises and explore for, extract and remove therefrom any and all earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits in or on the premises hereinbefore described.

(c) That the Operator shall have the exclusive right to sell, haul from, deliver or remove any and all earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits, processed or otherwise, now existing or accumulated by him on said premises.

(d) That the Operator shall have the exclusive right to enter upon and use the water supplies that now exist on the above described premises.

(e) That the Operator shall have the exclusive right to dispose of any and all overburden, waste water, waste materials or tailings upon the premises hereinbefore described.

(f) That the Operator shall have the right to enter upon and construct any buildings, plants, water lines, power lines, fuel lines, flumes, roads, shafts, tunnels, railway lines and/or other equipment necessary to operate and conduct the business of the Operator upon the aforedescribed premises; and that the Operator shall retain title to same and it or they shall not become a part of the real property or lands in possession or control of the Owner.

(g) To render free and clear the described premises, of any judicial actions, notes, liens, mortgages or other obligations at the conception of and during the lease periods of this agreement.

(h) To give the Operator a properly executed "Consent to Lien and Subordination Agreement", using U.S. Government, DMEA Form MF-205, which will enable the Operator to conduct his operations with the aid of U. S. Government funds.

(i) To allow the Operator to use any part or parts of constructed facilities, including but not limited to tunnels, upon and within the described premises for the extracting, removing, processing or refining of materials derived from deposits on areas adjacent to and other than in or on the hereinbefore described premises.

Para. 5. The Operator agrees:

(a) To pay the Owner ten per cent (10%) of all monies received, F.O.B. Mine, Keystone, South Dakota for all earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits, unprocessed, processed or otherwise that he actually extracts and removes from the particular premises described.

(b) To pay the Owner between the fifteenth day and the thirtieth day of each month the monies due the Owner for all earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits removed from the premises during the operations conducted within the thirty day period ending on the fifteenth day of the preceding month as determined by the prices set out above.

(c) To furnish the Owner with monthly statements showing mine production and computation of royalty payments due the Owner for earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits removed from the premises during the operation periods as set out above.

(d) That the Owner shall have the right to inspect the records of the Operator, pertaining to the Operator's agreement with the Owner, at any time to determine the computation of royalties and payments due the Owner for earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits removed from the aforedescribed premises by the Operator.

(e) Not to remove any bins, bunkers, sheds or shops constructed upon the premises with lumber or timber derived or secured from the standing timber now on the premises unless otherwise agreed to by both the Owner and the Operator.

(f) To perform all operations in such a manner as to eliminate unnecessary waste of material deposits and in compliance with existing State and Federal Mining and Forest Regulations regarding said premises.

(g) To perform and keep current all necessary assessment work on such described land in said Section 13 that is now or will be held as Mining Claims by the Owner.

(h) To pay the Owner and Owner hereby acknowledges receipt of Three Thousand Dollars ($3,000.00) upon the signing of this agreement and to set up such amount as an advanced royalty account for any earth, sand, gravel, rock, ores, minerals, petroleums, gases and other material deposits removed or to be removed from the premises and sold by the Operator. It is further agreed that the Operator shall deduct fifty per cent (50%) of each monthly royalty payment due the Owner and credit said fifty per cent (50%) of the monthly royalty payment toward the advanced royalty payment account until such advanced royalty payment account is fully repaid by the Owner.

(i) To declare null and void this lease and to forfeit all advance payments in the event that he does not engage in his exploratory operations within ninety (90) days after signing this agreement or at any time during the period of this agreement discontinues said operations and royalty payment for a period in excess of five (5) years unless otherwise agreed to by both parties hereto.

Par. 6. Duration of this agreement:

(a) This agreement and lease shall continue for a period of fifteen (15) years commencing on the 5th day of November, 1957, and ending with the 4th day of November, 1972.

(b) It is also agreed that at the end and for the duration of this agreement the Operator shall retain the right of option for renewal of this agreement for the period of lease starting on the 5th day of November, 1972 and ending with the 4th day of November, 1997. Notice of which renewal shall be given the Owner by the Operator via registered mail not less than sixty (60) days prior to the expiration of this lease and agreement. Such notice to be addressed and forwarded to the last known address of the Owner.

Para. 7. It is further agreed that this agreement to lease shall be binding upon the present Owners, their heirs or any party or parties who may come into possession of all or any part of the hereinbefore described premises. It is also agreed that in the event the party of the second part, known as the Operator, shall incorporate himself or form, sell to or join any party, parties, company, partnerships, or corporations, his rights and obligations under this agreement may be transferred to the said party, parties, company, partnership, or corporation, and that the rights, obligations and privileges herein granted to the party of the second part, known as the Operator, shall pass to his heirs, personal representative, transferrees or assigns.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this the day first above written.

Amelia E. Cordes
Amelia E. Cordes

Vincent L. Cordes
Vincent L. Cordes

BLUE OX MINING COMPANY

By John M Stoelly

STATE OF SOUTH DAKOTA)
) ss.
COUNTY OF PENNINGTON)

On this 5th day of November, 1957, before me, Marianne Coats, a Notary Public within and for said County, personally came Vincent L. Cordes, Amelia E. Cordes and John M. Stolley to me known to be the persons named in and who executed the above instrument and acknowledged the execution of the same to be their voluntary act and deed.

Marianne Coats
Notary Public in and for County of
Pennington and State of South Dakota.

(SEAL)

NATIONAL TITLE CO.
DMEA
RECEIVED JAN 24 19
DATE | INITIALS | CO.

STATE OF SOUTH DAKOTA)
) SS.
COUNTY OF PENNINGTON)

On this 5th day of November, 1957, before me, _____, a Notary Public within and for said County, personally came Vincent L. Cordes, Amelia E. Cordes and John M. Stolley to me known to be the persons named in and who executed the above instrument and acknowledged the execution of the same to be their voluntary act and deed.

_____
Notary Public in and for County of Pennington and State of South Dakota.

(SEAL)

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 195
DATE | INITIALS | COL

ASSIGNMENT OF LEASE AGREEMENT

I, John M. Stolley, party of the second part to the above and foregoing Lease Agreement and who executed the same as Blue Ox Mining Company of Rapid City, Pennington County, South Dakota, referred to as Operator in said Lease Agreement, for the consideration of six hundred shares of capital stock of Blue Ox Mining Company, Inc., receipt of which is hereby acknowledged, do hereby assign, transfer and convey to Blue Ox Mining Company, Inc. all my right, title, interest and obligations in and under the above and foregoing Lease Agreement entered into November 5, 1957, by and between Vincent L. Cordes and Amelia E. Cordes of Keystone, South Dakota, as parties of the first part and John M. Stolley as Blue Ox Mining Company as party of the second part.

Dated this 30th day of December, 1957.

John M Stolley

STATE OF SOUTH DAKOTA)
) SS.
COUNTY OF PENNINGTON)

On this the 30th day of December, 1957, before me, the undersigned officer, personally appeared John M. Stolley, known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Charles E. Carroll
Notary Public

(SEAL)

Men by these Presents:

THAT We the undersigned and Citizens of the United States of America and of the County of Pennington and State of South Dakota claim by right of discovery and location, fifteen hundred feet linear and horizontal measurement on the Blue Ox Lode along the vein thereof, with all the dips, variations and angles, together with three hundred feet in width on each side of the middle of said vein at the surface, and all veins, lodes, ledges and surface ground within the lines of said Claim

Eleven hundred feet on said Lode running in a Westerly direction from the center of the discovery shaft, and

four hundred feet running in a Easterly direction

300 ft Northerly and 300 ft Southerly in width from said center of discovery shaft, said discovery shaft being situated upon the said Lode within the lines of said claim, in No Organized Mining district, County of Pennington State of South Dakota, being more particularly described as follows, to-wit:

The Blue Ox Lead is about 1/2 Mile North West of Hayward on Hayward Hill.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 195
DATE | INITIALS | CODE

#19693

STATE OF SOUTH DAKOTA } ss.
COUNTY OF PENNINGTON }

Filed for record this 13 day of June A.D. 1952 at 1 o'clock and 5 minutes P.M., and recorded in Book 48 page 222

Recorder of Deeds

By [illegible] Deputy

RECORDED INDEXED

Said Blue Ox

26 day of Oct A.D. 1952

A.D., 19

Seal

J. B. [illegible]

Men by these Presents

Vincent Cobb

THAT The Bernard Original

of the County of Pennington

and State of South Dakota claims by right of discovery and location, fifteen hundred feet linear and horizontal measurement on the Bernard Original running [illegible] Blue Ox mine in a south and

Lode along the vein thereof with all the dips, variations and angles, together with three hundred feet in width on each side of the middle of said vein at the surface, and all veins, lodes, ledges and surface ground within the lines of said Claim [illegible] on a westerly direction

750 feet on said Lode running and in a westerly direction running

751 from the center of the discovery shaft, and 761 feet in southerly direction from Blue Ox south side center stake and 401 feet running in a southerly direction

from said center of discovery shaft, said discovery shaft being situated upon the said Lode within the lines of said claim, in Hayward

Mining district, County of Pennington, S.D. State of South Dakota being more particularly described as follows, to-wit:

said claim joins the Blue Ox mine on south side and also crosses iron creek and approximately 1½ miles upstream from Hayward on iron creek.

12343

STATE OF SOUTH DAKOTA } ss.
COUNTY OF PENNINGTON

Filed for record this 13 day of Sept. A.D. 19 57 at 2 o'clock P.M. and recorded in Book [illegible] of Mining Locations

Recorded
Indexed

Said The Bernard Original

was located on the 20th day of August A.D. 19 1957

Date of Certificate , A.D. 19

LOCATOR

Cobb

Know all Men by These Presents:

THAT [illegible] the undersigned, citizens of the U. S. [illegible] of [illegible] 18[illegible] of the County of [illegible] and State of South Dakota claim [illegible] by right of discovery and location, fifteen hundred feet linear and horizontal measurement on the [illegible] of [illegible] hundred feet and [illegible] feet along the vein thereof, with all the dips, variations and angles, together with three hundred feet in width on each side of the middle of said vein at the surface, and all veins, lodes, ledges and deposits within the lines of said Claim [illegible] the [illegible] Lode on the East side, [illegible] from [illegible] and 4 miles East of [illegible] 300 ft [illegible] 1500 ft [illegible]

[illegible]

[illegible] 18[illegible]

[illegible] A.D. 1887

[illegible]

S. E. Gordon

[illegible]

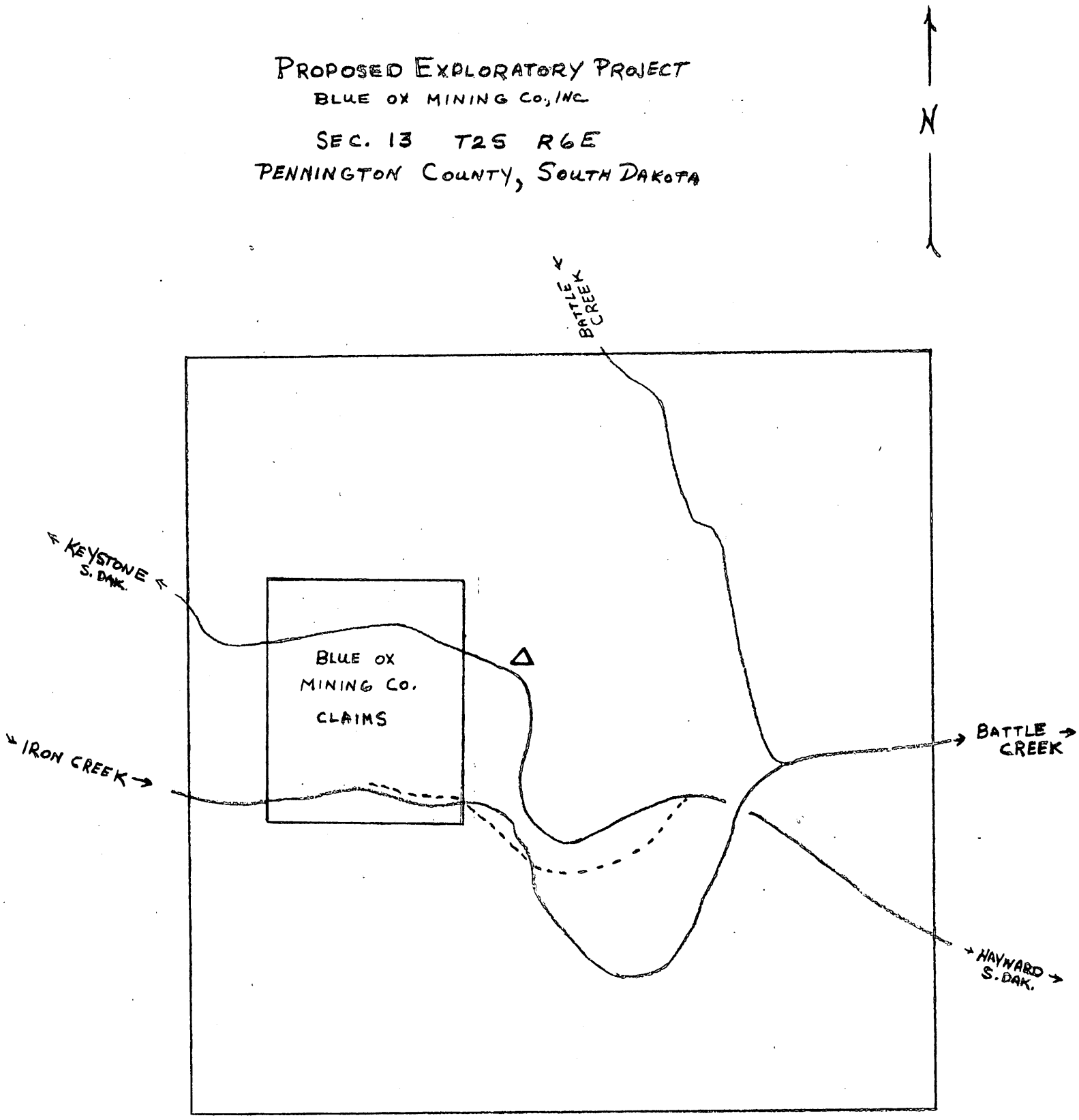
[illegible]

[illegible]

[illegible]

PROPOSED EXPLORATORY PROJECT
BLUE OX MINING CO., INC.

SEC. 13 T2S R6E
PENNINGTON COUNTY, SOUTH DAKOTA



△ NICKELS MICA MINE
PROPOSED ALL WEATHER ROAD ----- STAGE 1

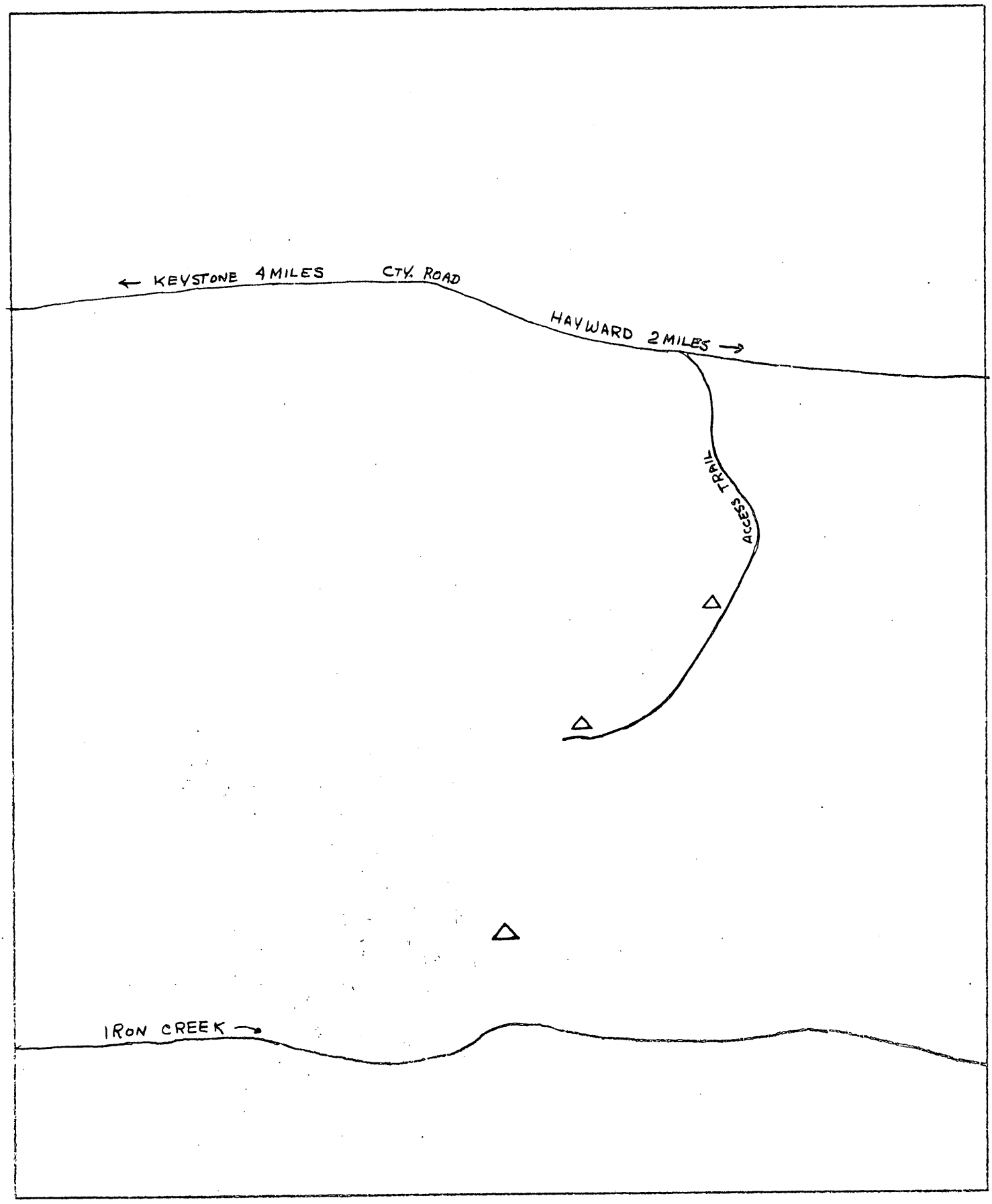
SKETCH No. 1

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	COPY

BLUE OX CLAIMS

EXISTING ROADS - TRAILS - STREAMS



△ - EXPLORATORY LOCATIONS

N

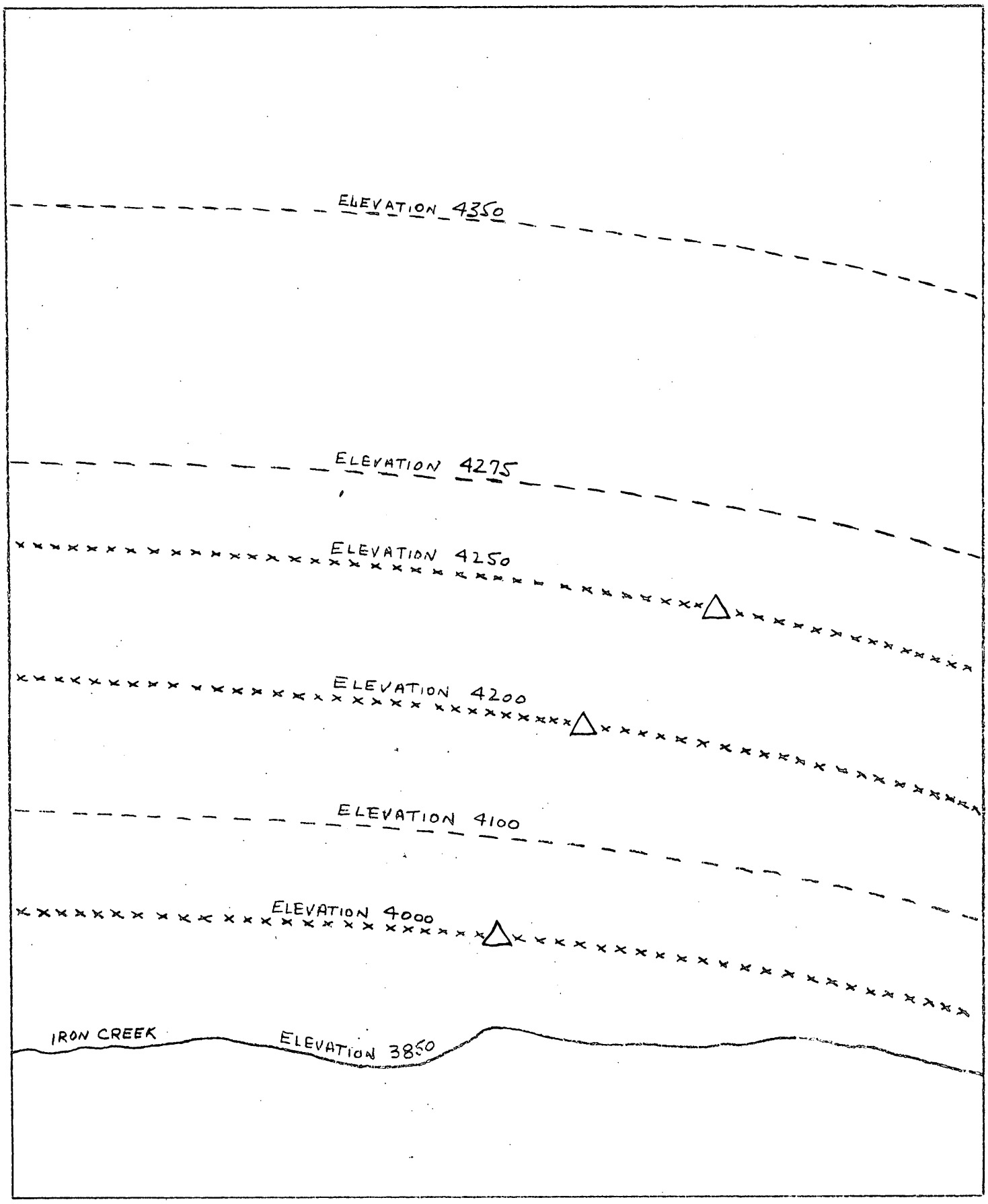
SCALE 1/2" = 100'

SKETCH No 2

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE

BLUE OX CLAIMS PEGMATITE FORMATIONS



ESTABLISHED FORMATION xxxx

UNPROVEN FORMATION – – – –

EXPLORATORY LOCATIONS △

N

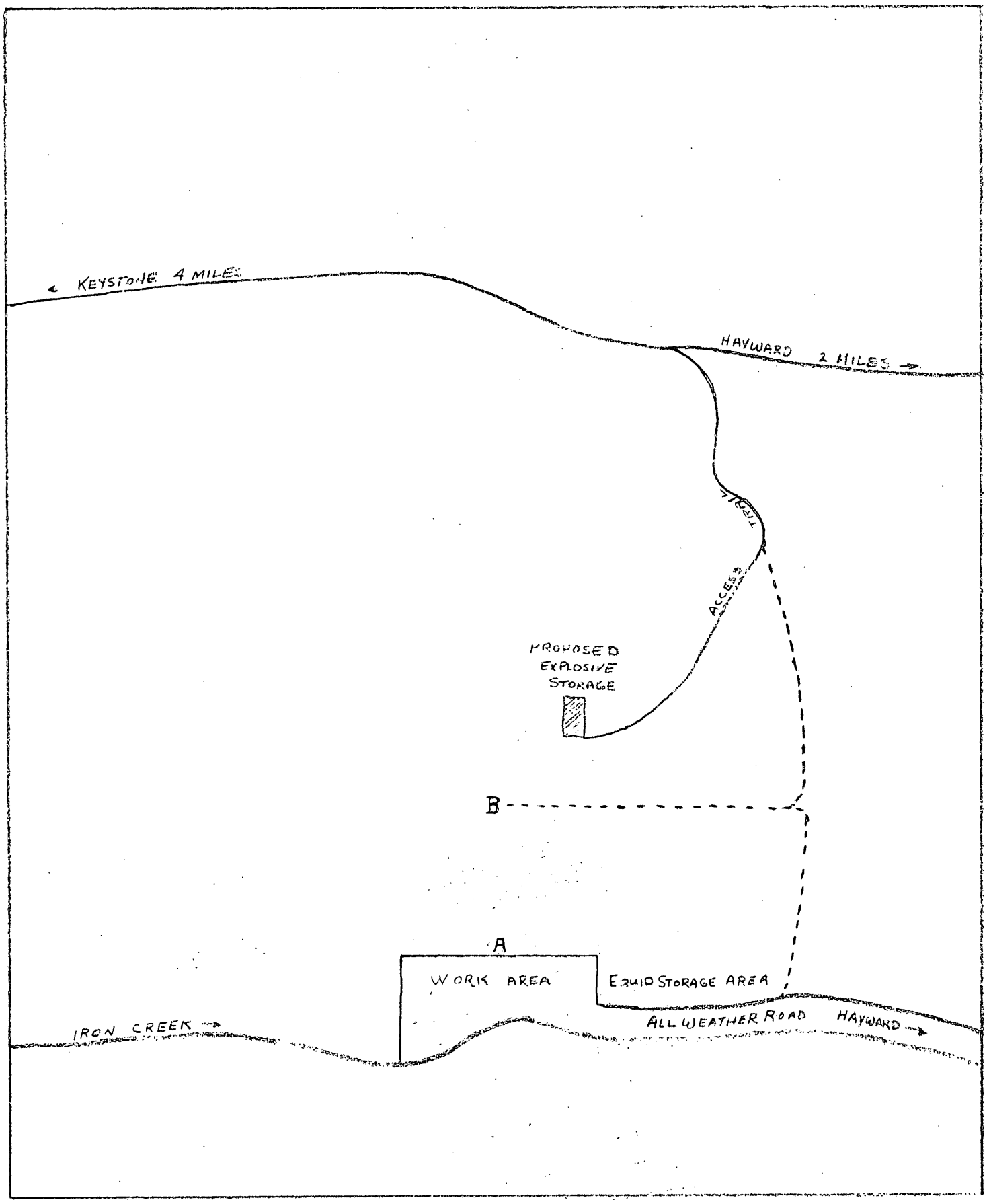
SCALE 1/2" = 100'

SKETCH No. 3

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE

BLUE OX CLAIMS - PROPOSED EXPLORATION (ROADS)



A - PORTAL LOWER DRIFT - EL. 3900

B - PORTAL UPPER DRIFT - EL. 4150

ACCESS ROAD TO UPPER LEVELS (PROPOSED) - - - - STAGE 3

N

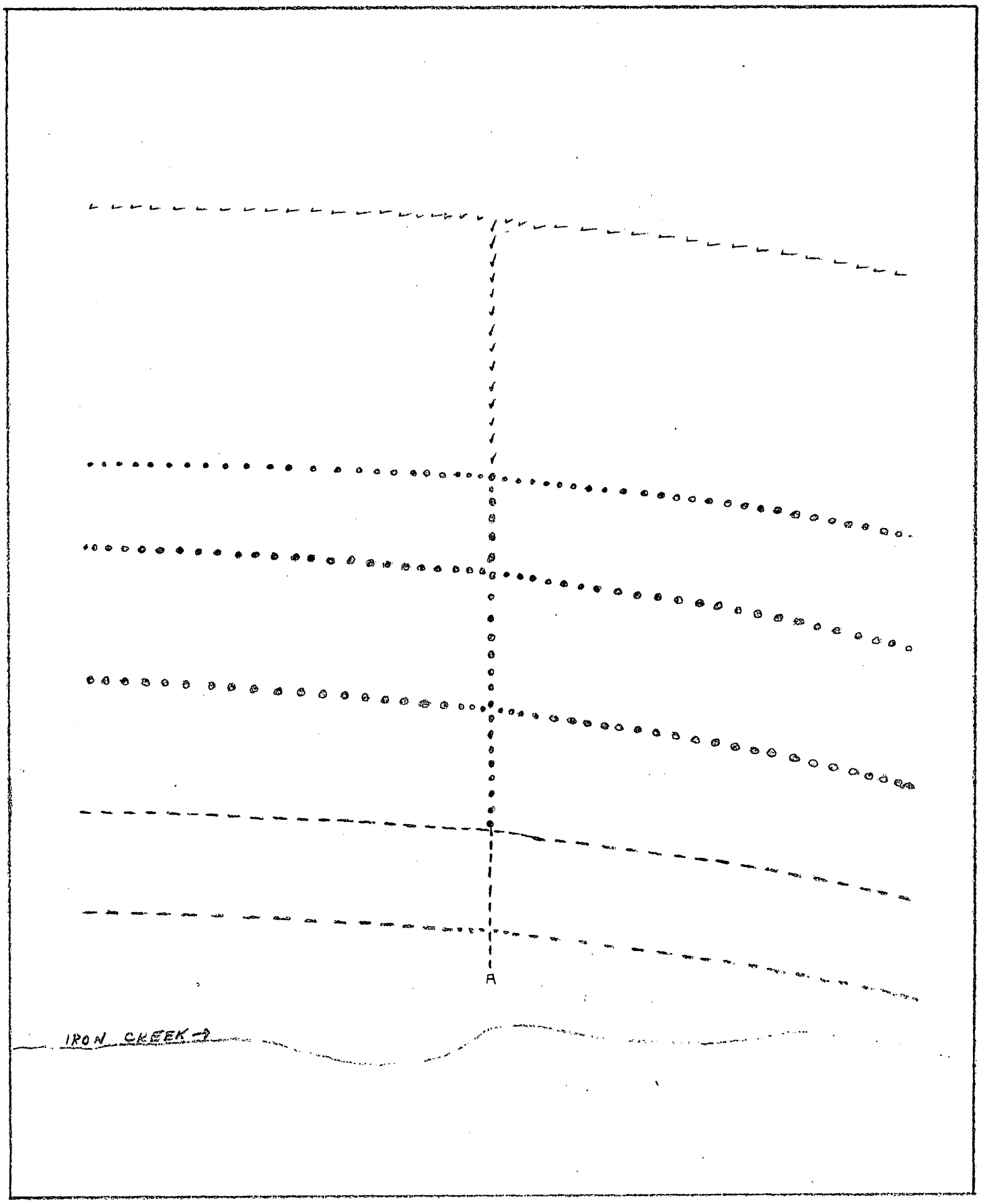
SCALE 1/2" = 100'

SKETCH No. 4

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE

BLUE OX CLAIMS PROPOSED DRIFTING (LOWER LEVELS)



STAGE 2 - DRIFTING - - - -

STAGE 5 - DRIFTING • • • • •

STAGE 7 - DRIFTING - - - -

N

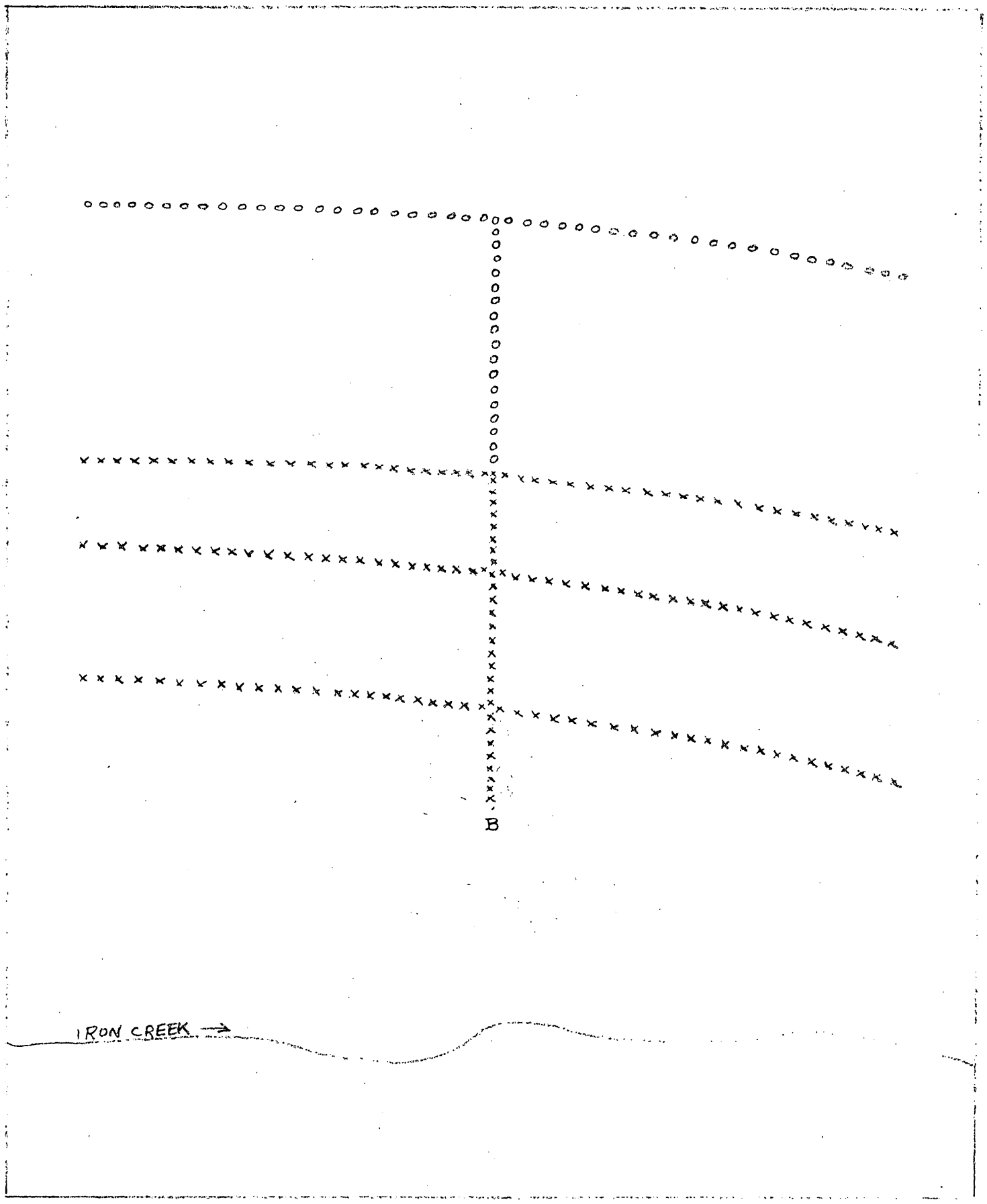
SCALE ½" = 100'

SKETCH No. 5

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE

BLUE OX CLAIMS - PROPOSED DRIFTING (UPPER LEVELS)



STAGE 4 - DRIFTING xxxxx

STAGE 6 - DRIFTING oooooo

N

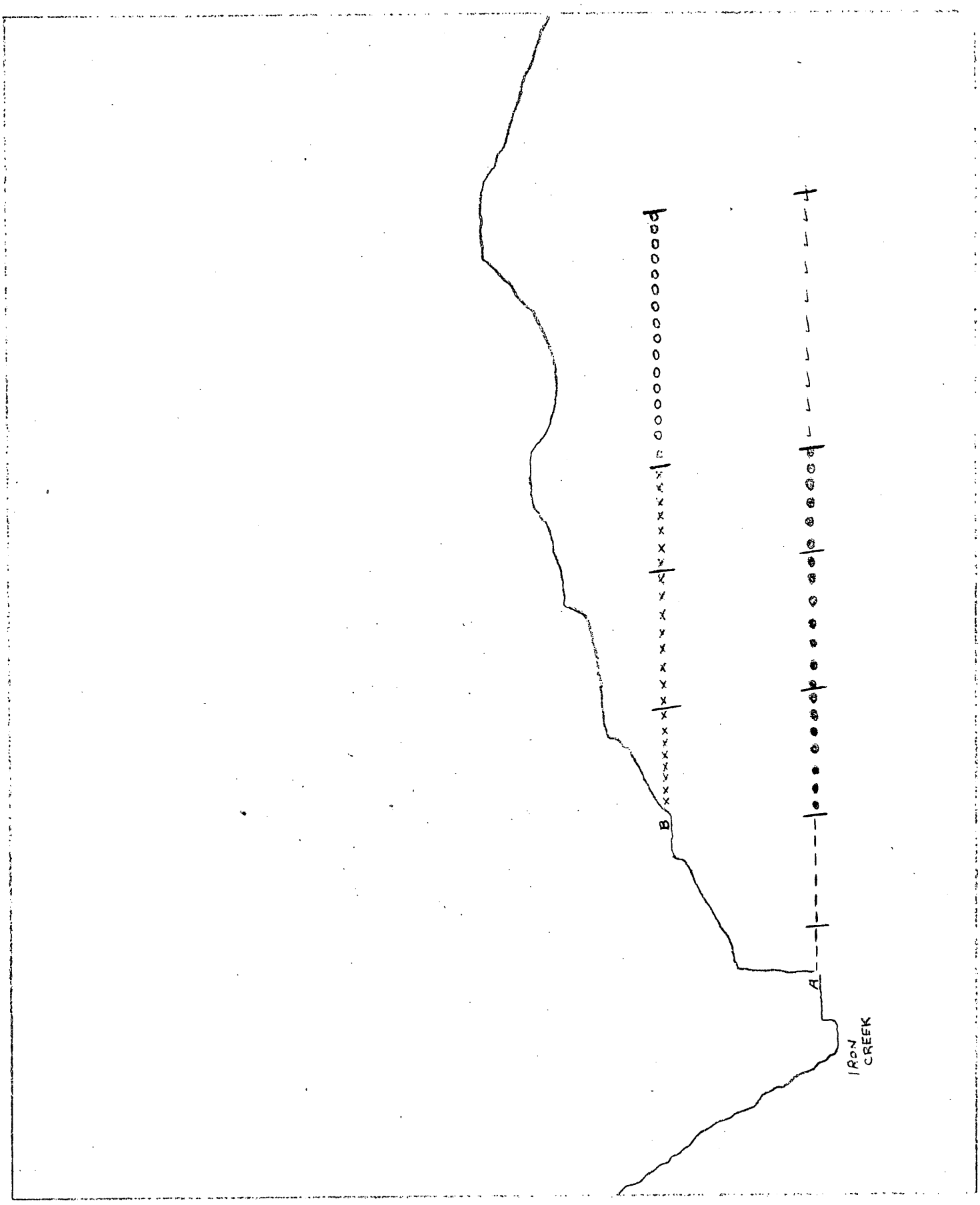
SCALE 1/2" = 100'

SKETCH No 6

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 195

DATE	INITIALS	CODE

BLUE OX CLAIMS - PROPOSED DRIFTING (CROSS SECTION)



STAGE 2 - DRIFTING - - - -

STAGE 4 - DRIFTING x x x x

STAGE 5 - DRIFING • • • •

STAGE 6 - DRIFTING o o o o

STAGE 7 - DRIFTING ⌐ ⌐ ⌐ ⌐

PEGMATITE FORMATIONS /

N

SCALE 1/2" = 100'

SKETCH No. 7

OFFICIAL FILE COPY
D M E A
RECEIVED JAN 24 19[illegible]

DATE	INITIALS	CODE

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/12	Moore	600
5/13	Hook	

600

May 12, 1958

Summary of Proposed Project

Object: Denial of application for exploration aid.

Docket No.: DMEA-4926

Commodity: Mica-Beryl

Applicant: Blue Ox Mining Company, Inc., South Dakota Corporation.
Box 1925
Rapid City, South Dakota

Property: Consists of three contiguous unpatented lode mining claims in Section 13, T. 2 S. R. 6 E., BHM&B, Pennington County, South Dakota. The claims are Blue Ox, Blue OX No. 1, and Bernard original.

Property Rights: By a mining lease dated November 5, 1957, from Vincent L. and Amelia E. Cordes, Applicant controls the land for 15 years. There is a discrepancy between the land described in the lease and the claim map.

Application dated: January 20, 1958
Application amount: $798,150.00 - later reduced to $461,350.00
Received in Division: January 24, 1958
Referred to Region III: February 14, 1958
Property examined: March 25, 1958
Field Team Report received in Division: April 30, 1958

Work proposed: Consists of seven stages. Stages I and III consist of constructing 3,700 feet of access road (two roads at different elevations). Stage II consists of 220 feet of adit crosscut, and approximately 2,680 feet of drifting along two inferred pegmatites. Stage IV consists of a 500 foot adit at a higher elevation than Stage II work and three drifts aggregating about 3,900 feet east and west along inferred pegmatites. Stage V consists of extending the lower crosscut adit 540 feet and drifting approximately 3,860 feet east and west along three inferred pegmatites. Stage VI consists of extending the upper crosscut adit (Stage IV) 380 feet and drifting 660 feet both east and west along an inferred pegmatite. Stage VII consists of extending the adit crosscut (Stage V) 380 feet and drifting 660 feet both east and west along an inferred pegmatite. Applicant, after the examination, reduced the program by deleting Stages VI and VII to a total cost of $461,350.00.

Estimated cost:

Stage I - 2,200 ft. lower access road		
@ $3.50/ft.		$7,700.00
Stage II - lower crosscut adit 220 ft.		
2 drifts	2,680 ft.	
	2,900 ft.	
@ $52/ft.		150,800.00
Stage III - upper access road 1,500 ft.		
@ $3.50/ft.		5,250.00
Stage IV - upper crosscut adit 500 ft.		
3 drifts	3,900 ft.	
	4,400 ft.	
@ $52/ft.		228,800.00
Stage V - lower adit extension 540 ft.		
3 drifts	3,860 ft.	
	4,400 ft.	
@ $52/ft.		228,800.00
Stage VI - upper adit extension 380 ft.		
1 drift	1,320 ft.	
	1,700 ft.	
@ $52/ft.		88,400.00
Stage VII - lower adit extension 380 ft.		
1 drift	1,320 ft.	
	1,700 ft.	
@ $52/ft.		88,400.00
Total estimated cost of the project		$798,150.00
Government participation @ 75%		$598,612.50

Field Team Report dated April 24, 1958, by William N. Sharp, USGS, and E. O. Binyon, USBM.

The property lies at the eastern edge of the exposed Pre-Cambrian crystalline and metamorphic rock core of the Black Hills uplift. The core is predominantly composed of mica-schist, quartzitic-schist and quartzite and contains large granite and pegmatite intrusives.

Two pegmatites "A" and "B" dikes are exposed by open cuts on the Blue Ox Claim and two pegmatites "C" and "D" are conspicuous by natural outcrop on the Bernard Original Claim. All the dikes strike about N. 70° W. parallel to the foliation of the mica-schist. Dike "A" is exposed at three places to a maximum depth of 15 feet. It is 4 to 20 feet wide and has been traced along the strike about 100 feet. The dike is composed of pink feldspar, and quartz generally mixed, in crystals and masses up to 3 inches across. Muscovite books up to 3 inches across were noted throughout the dike but it is not of strategic grade. No beryl was seen. The dike does not appear to be zoned.

Dike "B" is exposed in a cut across the pegmatite to a depth of about 50 feet. It is about 6 feet wide and dips about 76° northward. The texture of the quartz and feldspar is coarser in the upper part of the cut and contains muscovite in books up to 4 inches across. None of the mica is strategic grade. Also no beryl was noted in the dike.

Dike "C" strikes almost due east and dips about vertical, is 5 to 10 feet wide except on the east end where it swells abruptly to 30 feet and pinches out. It is medium to coarse textured, contains abundant scrap quality muscovite (books 2 to 3 inches across) at the wide end, and small beryl crystals up to 1 inch across were found in small clusters at two places. However, the beryl content appears to be insignificant.

Dike "D" - Only a part of the strike length is on the property. The dike is unzoned granite pegmatite and consists chiefly of large feldspar and quartz crystals. Muscovite and black tourmaline are minor components. No beryl was found in the dike. Other pegmatites seen on the property were not considered important in evaluating the merits of the property.

None of the exposures on the pegmatitescontained strategic quality mica, or significant amounts of beryl, nor do they have features that suggest they will contain significant amounts of either commodity.

USGS Members who have spent long periods studying the resources of the Black Hill pegmatites are of the opinion that none of the dikes have features common to good mica and/or beryl producing pegmatites.

It is the examining team's opinion that no significant quantities of either strategic grade mica or beryl would be discovered by exploring the dikes, and the application should be denied.

Commodity Members comments:

USGS, Mr. T. H. Kiilsgaard, dated May 6, 1958:

"Despite the poor showing of the property, the examiners spent considerable time trying to persuade the applicant to abandon his grandiose and overly expensive program. The applicant, however, was adamant and insisted the only way to explore the property was in the manner he had proposed. In view of this situation and in view of the poor showings of mica or beryl in the pegmatites, the Field Examiners recommend denial of the application.

"I concur with the Field Examiners and recommend that this application be denied."

USBM, Mr. W. F. Dietrich, dated May 12, 1958:

Comments:

"1. Field examiners report that none of the dikes on the property exhibit the features common to good mica-beryl production in the Black Hills pegmatites.

"2. Very few books of mica are visible and these are not of strategic quality.

"3. The applicant apparently refuses to consider modification of the extensive and illogical $798,150 exploration program proposed.

"4. The mica mined in the Keystone district has been predominantly scrap; only minor quantities of sheet mica have been produced.

Recommendation:

"I concur with the recommendation of the field team that the application be denied."

Conclusions:

A review of all our information relating to the proposed project indicates that the chances a significant discovery of either strategic grade mica or beryl will be made on the property are poor. Therefore, the application should be denied. The property is a potential source of scrap mica.

F. L. Knouse

FLKnouse:gad 5/12/58
Copy to: Admr. R. File
Mr. Houk
Mr. Knouse

DMEA Form 7
(12-56)

OFFICIAL FILE

Date	Surname	
7/1	Hark	300
7/1	Selfridge	120
7/1	Johnson	110
7/2	Mittendorf	100
7/5	C O	220
		600

(620)

JUL 2 1958

Mr. John M. Stolley, President
Blue Ox Mining Company, Inc.
Box 1945
Rapid City, South Dakota

Re: Docket No. DMEA-4926-Mica-Beryl
Blue Ox Mining Company, Inc.
Blue Ox Claim, et al.
Pennington County, South Dakota

Dear Mr. Stolley:

Under date of May 28, 1958, you were advised as to how to reopen your application. On June 6, 1958, however, the enclosed press release announcing the termination of the DMEA program, effective June 6, 1958, was issued. Under the circumstances, we are not to inform you that we are unable to reopen your case.

Legislation is pending in Congress for a modified type of the DMEA exploration program. If this legislation is enacted into law, we shall be glad to consider your application upon written request, under the rules and regulations established for the new program.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure

LGHouk:gad 6/30/58
Rewritten
FEJohnson:LGHouk:gad 7/1/58
Copy to: Senator Karl E. Mundt
Admr. R. File
Field Team, Region III
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE

Date	Surname	
7/1	Houk	600
7/1	Selbridge	120
7/1	Johnson	110
	Mittendorf	200
		220

600

Hon. Karl E. Mundt
United States Senate
Washington 25, D. C.

JUL 2 1958

Dear Senator Mundt:

Reference is made to the third paragraph of our letter to you of June 2, 1958, on the discussions between Mr. John M. Stolley, president of the Blue Ox Mining Company, Inc., and Mr. Eugene O. Binyon of the Bureau of Mines.

We have received the comments of Mr. Binyon who states that several times during the talks he suggested, "that some additional preliminary work might possibly be warranted" but he never advised Mr. Stolley that doing this work would adversely effect his rights to receive exploration assistance. He feels Mr. Stolley misinterpreted his remarks.

Under date of May 23 we wrote to Mr. Stolley as to how he might reopen this application, however, he has not replied to that letter. The DMEA authority to grant financial assistance terminated June 30, 1958; therefore, we are unable to reopen this application under the present program. We are informing Mr. Stolley of the program termination. A copy of our letter is enclosed.

We sincerely regret that there was any misunderstanding between Mr. Binyon and Mr. Stolley.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure

LGHouk:gad 6/30/58
Rewritten
FEJohnson:LGHouk:gad 7/1/58
Copy to: Admr. R. File
Field Team, Region III
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
June 23, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 26 1958

DATE	INIT.	CODE
6/26	C	220
6/27	Hach	600

Memorandum

To: C. O. Mittendorf, Administrator

From: Alternate Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4926 (Mica-Beryl) Blue Ox Mining Company, Inc. (Blue Ox Claims, et al.) Pennington County, South Dakota

This responds to your letter of June 4, 1958, on the subject docket.

Enclosed are the original and one copy of a joint memorandum by W. N. Sharp, USGS, and E. O. Binyon, USBM, giving their comments on each of the Stolley statements. Also enclosed are the original and one copy of a memorandum from E. O. Binyon regarding his discussion with the Applicant concerning the subject application.

J. W. Townsend

J. W. Townsend

IN REPLY REFER TO:

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

DMEA
DEPARTMENT OF THE INTERIOR
JUN 20 1958
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 26 1958

DATE	INITIALS	CODE

June 18, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III
Through: E. N. Harshman

From: W. N. Sharp
E. O. Binyon

Subject: Docket DMEA 4926 (Mica-beryl) Blue Ox Mining Company, Inc. (Blue Ox claims, et al.), Pennington County, South Dakota

This memorandum is in response to a letter ~~dated June 4,~~ 1958, from C. O. Mittendorf to the Alternate Acting Executive Officer, Region III, in which the Administrator requests the examiners to comment on a number of statements made by Mr. Stolley following denial of his application for exploration assistance (DMEA Docket 4926).

An examination was made of the property (Blue Ox claims, et al.) March 25, 1958, and the examination report was submitted May 24, 1958. The report covers, to some degree, all of the topics outlined by Stolley in a transmittal to Senator Mundt, and labeled 1a, b, c, and d; and 2a. Aside from the report, these specific items were discussed with Stolley at length, in a friendly manner, in the Denver office of DMEA on May 20, 1958, the date of Stolley's transmittal to Washington. This discussion which took up each item of his list and pointed out among other things the general engineering and geologic techniques in appraising a property, and the obvious inconsistencies and poor reasoning on Stolley's part

concerning the evaluation of a pegmatite property. Apparently this discussion served little or no purpose to enlighten Stolley.

Comments on Stolley's statements follow:

1(a). In Stolley's first statement he says that "plate" /sheet/ mica was picked up from float on his claims by Mr. Bernard Gira of the GSA mica buying depot in Custer, and that this sample of mica was thought to be of strategic grade. This data is given apparently as proof that the Blue Ox claims have a great potential in strategic grade /sheet/ mica.

Mr. Gira of the GSA depot reportedly picked up about two pounds of mica float on the Blue Ox claims, and he stated in a letter that the mica was of good quality. Mr. Gira was called June 9, 1958, about this mica sample. He again referred to the sample as good quality mica, but would not qualify it further as to size and grade. The examining team noted and inspected mica float and mica in place in the field. All mica on the property was considered to be of scrap mica quality.

Although any pegmatite might contain some sheet mica, a hand specimen of such is not considered representative of the pegmatite deposit. The same logic holds for beryl or any other pegmatite mineral.

b) Mr. Stolley's second statement is almost meaningless. Existing mines referred to must mean the Nickels mine, for this is the only operating property in the vicinity of the Blue Ox claims; however, such mines as the abandoned Ferguson mine, the Giltedge, the Rattlesnake, the Wood Tin (all within 2 miles of the Blue Ox claims) might be included.

That a "careful study" was made by Stolley of these deposits is doubtful, but regardless it is still not "reasonable to believe [from such a study] that the quality and the quantity of mineralization increases with depth." Such generalizations about pegmatites are not valid. Each dike in outcrop has certain features of composition, shape, and zoning that may be used to assess the potential of that dike only. Other dikes even though close by must be appraised on their own sets of features.

In general it is not valid to reason that the minerals of pegmatite deposits will improve in quality or quantity with depth, unless specific favorable geologic features of the body that meet certain requirements can be measured. Such favorable characteristics have not been observed in the pegmatites on the Blue Ox claims nor in pegmatites in the vicinity.

The following list is a compilation of the existing mines reasonably close by the Blue Ox claims (operating and abandoned):

Production records of mines near the Blue Ox claims, Pennington County, S. Dak.

	Mica (sheet) (tons)	Beryl (tons)	Total beryl (tons)
Giltedge 1/	none	none (feldspar produced)	
Rattlesnake 1/	none	none (feldspar produced)	
Ferguson 1/	none	4.105 (pre 1955) 31.522 (1955)	35.627
Wood Tin 1/	none 2/	36.5 (pre 1943) 17.53 (1943) 40.2 (1943-44) 7.42 (1944-45)	101.65
Nickels	none 3/	2.204 4/	2.204

1/ Not operating.

2/ 544.79 tons scrap mica produced prior to 1943.

3/ Ore shipment (tonnage not available) of scrap mica made in 1941.

4/ Weights, grades, and values as follows:

	1,572 lbs. @ 10.32% BeO,	$ 407.93
	1,108 lbs. @ 9.86% BeO,	245.81
	1,728 lbs. @ 11.35% BeO,	490.32
Totals	4,408 lbs.	$1,144.06

None of these mines have produced strategic grade mica, and there is no record at the Custer buying depot of any strategic grade mica having been produced in the area. A small amount of beryl has been produced. The total beryl production for the area since mining began is about 140 tons.

(c) The Nickels dike (for which production data is presented above) does not cross on the surface into the Blue Ox property; the mine shaft, about 400 feet from the property boundary, may have been sunk 150 feet in depth, and may have reached a level comparable to the altitude of Stolley's proposed lower adit. However, the depth of development on the Nickels dike in no way indicates that it might extend under the Blue Ox property. But, again regardless of the existence of such a dike, at the rate of production of the Nickels mine (2.2 tons of beryl and no strategic mica in five years) a comparable dike would not constitute a favorable geologic target for exploration for mica or beryl.

The statement by Stolley that "all the formations [dikes] in the combined areas ... extend to great depths, and show extremely high promise of strategic mineralization" is unfounded. A substantial amount of field data obtainable from the dike outcrops such as shape, internal zoning, composition, and texture, strongly suggest the contrary. The three conspiduous dikes exposed on the property are small and appear to bottom within a relatively short depth or (in the case of the one relatively large dike) the composition and internal structures are such that little hope exists for the occurrence of significant amounts of mica or beryl.

(d) Mr. Stolley refers to a recent shipment of beryl made to the Custer depot from "Blue Ox property." This shipment, subsequent to the field examination of the Blue Ox claims, amounted to only 706 pounds of beryl, valued at $187.00. Inasmuch as Mr. Stolley had in his possession

samples of beryl at the time of the examination, from the Battle Creek and other Blue Ox-owned properties, serious doubt is cast on the statement that the 706 pounds of beryl was produced from the Blue Ox claims. However, even if by some means, Stolley did produce 700 pounds of beryl from the Blue Ox claims the geologic facts of his property and of the exposed dikes are not modified.

2a. Stolley's statement indicates concern about the conclusion that "sufficient progress had not been made in the development of the area" [to warrant the program of exploration requested by Stolley]. The limited amount of prospecting done by the company, and the extensive program of exploration proposed are incompatible.

The "three geologic probabilities" of discovery (cuts that expose dikes) referred to by Stolley are not considered as such by the examining team. Each of these localities are discussed in the examination report.

In review it would appear that Mr. Stolley has taken his block of three claims [bounded by a set of man-made limits] and attributed to this block of ground all the features devoutly to be wished by a pegmatite miner regardless of what is in outcrop. Features of the property such as the number of pegmatites, the size of pegmatites, and the beryl and mica content strongly suggest that significant deposits of a mica and beryl are not likely to occur on this property. It would appear that if Stolley really wanted to mine mica and beryl, by this time he could see that this property is not the best of what is available in the Black

Hills. The real problems in exploring for and mining mica and beryl are oblivious to him. In respect to the total values of all mica and beryl produced in the Black Hills (about $840,000 in beryl and $2,600,000 in sheet mica) his request for aid in the amount of $800,000 to explore for mica and beryl from one property is unreasonable.

The suggestion was made by the examining team that the Blue Ox Mining Company consider a modest program more in line with the size and character of the pegmatite in outcrop; a program of a few thousand dollars at most which should enable proper evaluation of the potential of the property. Stolley's reply, which typifies his attitude to his application, was that the request for assistance (money) is a gamble, and that it cost him no more to gamble for $800,000 than to gamble for a few thousand. His aspirations appear to include not only exploration of his property but the development of revolutionary milling methods for pegmatites based on a sand-gravel production technique, and the revival of the Black Hills mining in general.

F. B. Moore for
W. N. Sharp, Geologist

E. O. Binyon
E. O. Binyon, Mining Engineer

DMEA
DEPARTMENT OF THE INTERIOR
JUN 11 1958
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REGION III

Building 20
Denver Federal Center
Denver 2, Colorado
June 11, 1958

Memorandum

To: Acting Executive Officer, DMEA Field Team, Region III

From: E. O. Binyon

Subject: Docket No. DMEA 4926 (Mica-Beryl) Blue Ox Mining Co., Inc. (Blue Ox Claims, et al) Pennington County, S. Dak.

This is in reply to your request for comments on remarks made during the discussion of the subject application with the applicant, as requested by the Administrator in a letter dated June 4, 1958.

No advice whatever was given Mr. Stolley concerning the effects of any preliminary work on either his rights or any adverse position that such work might place his company in respect to a DMEA application. However, it was suggested several times during the discussion that some additional preliminary work on the pegmatite dikes on the property might possibly be warranted.

It is apparent that Mr. Stolley has misinterpreted this suggestion. Also, he has made a misstatement of fact in saying that he was advised "That if we would do more preliminary work and expose more beryl or mica we would not be in a position to request DMEA aid." (Quote is from paragraph 2 -- Sufficient progress has not been made in development of the area.)

E. O. Binyon
E. O. Binyon
Mining Engineer

EOB/mw
cc: 9
DMEA 4926

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 26 1958
DATE | CODE

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/2	Houk	600
6/2	Selfridge	120
6/3	Johnson	110
"	Mittendorf	100
		220

600

JUN 4 1958

Mr. J. W. Townsend
Alternate Acting
Executive Officer, DMEA
Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-4926-Mica-Beryl
Blue Ox Mining Company, Inc.
Blue Ox Claims, et al.
Pennington County, South Dakota

Dear Mr. Townsend:

You will find enclosed three copies of a letter from Senator Karl E. Mundt, transmitting some comments and opinions of Mr. John M. Stolley, President of the Blue Ox Mining Company, Inc., and three copies of our reply to the Senator. Two copies of a letter dated May 20, 1958, from the applicant are enclosed for your information.

Please have the examining team comment on each of the Stolley statements. Mr. E. O. Pinyon should comment on Paragraph 2, Page 1, regarding his discussion with Mr. Stolley about the project.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosures 8

LGHouk:rsi 6/2/58
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/29	Houk	600
5/29	Selfridge	120
"	Johnson	110
5/30	Mittendorf	100
		220

600

JUN 2 1958

Hon. Karl E. Mundt
United States Senate
Washington 25, D. C.

Dear Senator Mundt:

Thank you for your letter of May 24, 1958, enclosing comments from Mr. John M. Stolley.

Mr. Stolley expresses a number of opinions relating to the proposed project but does not give any new factual information. On May 28, 1958, we wrote him for the information needed to reopen the case. A copy of our letter is enclosed. As soon as we receive this information, we will be in a position to review his application.

In the meantime, we are writing the Field Team for their comments on the discussions between Mr. Stolley and Mr. Eugene Binyon of the Bureau of Mines.

Your interest in this case is appreciated.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

LGHouk:rsi 5/29/58
Copy to: Admr. R. File
DCCO
MR
DL
MBM
Secretary's Reading File
Mr. Houk
Senator Francis Case
Congressman E. Y. Berry

PRS 0579

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/27	Houk	600
"	Johnson	110
"	Mittendorf	100
		220

600

MAY 28 1958

Blue Ox Mining Company, Inc.
Mr. John M. Stolley, President
Box 1925
Rapid City, South Dakota

Re: Docket No. DMEA-4926-Mica-Beryl
Blue Ox Mining Company, Inc.
Blue Ox Claim, et al.
Pennington County, South Dakota

Gentlemen:

A review of your denied application requested by your letter of May 20, 1958, will be made after you have completed the additional work and submitted the results to this office. When submitting this information refer to the original DMEA docket number and send a copy of the settlement sheet on the sale of the sample shipment of beryl to the Custer, South Dakota, GSA Depot, (Lot No. 455) and the written comments from Mr. Otto Klein on the quality of the mica.

If the additional work on the property is of sufficient scope and the results in our opinion are favorable, we will be pleased to reopen the application.

Sincerely yours,

C. O. Mittendorf

Administrator

LGHouk:gad 5/27/58
Copy to: Admr. R. File
Field Team, Region III
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

Copy to: Senator Karl E. Mundt
Senator Francis Case
Representative E. Y. Berry

8623

DMEA Form 20
March 1958

~~600~~ Hook
225

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

MEMORANDUM OF CONGRESSIONAL CALL

TO: Director, Division of Legislation (DL)

FROM: Administrator, DMEA C O Mittendorf (Signature) 5/26/58 (Date)

Call from Robert Berry, office of Senator Karl E. Mundt (SD) Date of call May 23, 1958 Time

State below subject of call and conclusions or action taken.

Bob Berry, of Senator Mundt's office, phoned in connection with the Blue Ox case, DMEA-4926. He said he had received a letter from the applicant which transmitted additional information.

He said when they informed the applicant that his application was denied they pointed out that he had two recourses. One was to ask for reconsideration based on new information, and the other to appeal for review through the Secretary. The purpose of Berry's call was to tell me he had the supplemental information and ask if he could run it by us for evaluation.

I told him we had not received a scratch of the pen from the applicant since receiving his application. I wondered why he always chose to operate through people on the Hill, and why he didn't submit the information directly to DMEA. I told him further that it would be difficult for me to transmit our evaluation of the supplemental data to him by phone, because if he was mailing it to me it would go through our formal Congressional mail procedures and a reply would have to be drafted and sent through the Congressional mail control room.

I asked if the applicant was reluctant to make the supplemental information a part of the official docket. If not, why didn't he send it in here in the first place? Berry could well understand that the applicant is transacting his business with DMEA in a round-about and cumbersome manner, and he said he would call the applicant's attention to the fact that he should correspond directly with us.

It is my understanding that Berry will transmit the supplemental information by formal letter.

C. O. Mittendorf (Call received by) 5/23/58 (Date)

Prepare in duplicate when call is received. Send both copies to Administrator who will send original to DL and copy to DMEA Central Files. If call pertains to application or contract, copy will be recorded and filed in official docket.

34038

KARL E. MUNDT
MADISON, SOUTH DAKOTA

R. L. McCAUGHEY
ADMINISTRATIVE ASSISTANT
ABERDEEN, SOUTH DAKOTA

ROBERTA VAN BEEK
EXECUTIVE SECRETARY
ABERDEEN, SOUTH DAKOTA

JAMES E. SMITH
LEGISLATIVE ASSISTANT
PIERRE, SOUTH DAKOTA

United States Senate

WASHINGTON, D. C.

MEMBER:
APPROPRIATIONS COMMITTEE
AGRICULTURE COMMITTEE
GOVERNMENT OPERATIONS COMMITTEE
SENATE INVESTIGATIONS SUBCOMMITTEE
SELECT COMMITTEE ON IMPROPER ACTIVITIES IN THE LABOR OR MANAGEMENT FIELD
SPECIAL COMMITTEE ON SPACE AND ASTRONAUTICS

May 24, 1958

PRS
MAY 27 1958 0579

TO: MDM	
REPLY TO BE PREPARED BY:	MDM
FOR SIGNATURE OF:	MDM
COPY OF LETTER FURNISHED	
MR / MBM / DL	
SEND REPLY COPY TO ABOVE	

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Department of Interior
Washington 25, D. C.

Dear Mr. Mittendorf:

Relative to our conversation of yesterday, I am enclosing the material which John M. Stolley, President of Blue Ox Mining Company, Inc., of Rapid City, South Dakota, has sent me as further information for the purpose of reconsidering the application of the firm for aid by the Defense Minerals Exploration Administration.

I should further point out that Mr. Stolley indicated his surprise that one of the reasons for the disapproval of his application was that sufficient progress had not been made in developing the area. Mr. Stolley indicated that Mr. Gene Binyon of the Bureau of Mines had advised him during the field inspection that for him to engage in further preliminary exploration and expose the beryl or mica would place the firm in a position in which they would not be able to request aid from your Administration. I would appreciate very much your checking into this aspect of the matter.

Assuring you I appreciate your giving this application your further and most conscientious consideration, and with best wishes, I am

Cordially yours,

Karl E. Mundt
U. S. Senator

KEM:bss
Enc.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 27 1958

DATE	INITIALS	CODE
5/27	J.S.	600
27	[illegible]	100
27	[illegible]	600

1. Minerals not of sufficient standard to be considered strategic.

(a) Plate Mica was taken from the property during the initial exploration by Mr. Bernard A. Gira, the government representative of the Custer, South DakotaGSA depot. It is our belief that these samples are now in the offices of Mr. Otto Klien and Mr. Verne Winters at the Denver Colorado egional Office of the GSA. We think that mica samples taken from the Blue Ox were of strategic quality even though they were taken from the float and deterioration of the upper part of the pegmatitie formation. We feel certain that a call to Mr. Bernard Gira at Custer would definitely qualify as to whether this mica is of strategic standard.

(b) Judging from the operation of existing mines and after careful study of these deposits is is reasonable to believe that the quality and the quantity of mineralization increases with depth. It is our conclusion, and we understand, the conclusion of the people in Custer that our own deposits will follow this pattern.

(c) The Nickels dike adjoining our property has been and can continue to be a producer of strategic minerals. A shaft has been sunk on this property to a depth equivalent to the level of our proposed lower elevation of drifting, and continues in pegmatite formation and good mineralization to the floor. Mr. Robert Dennison the geologist and geo-physicist now working the Nickels dike is of the opinion that the pegmatite formation continues to an even greater depth, and probably connects with the formation we are desirous of exploring. It is our mutual thinking that all of the formations in the combined area of the Blue Ox properties, and the Vickers (Nickels) properties extend to great depths, and show extremely high promise of strategic mineralization.

(d) It is very hard for us to understand the reasoning in not considering the ores taken from the Blue Ox properties as being strategic in view of the above and also for the reason that beryl has been taken from the Blue Ox properties by us, and shipped to the Custer Depot under Certificate of Authorization No. 8-266 (Beryl). We feel certain that Beryl is a very strategic mineral and will continue to be so for some time. We would also like to call your attention to the fact that the Beryl taken from this area carries a content of 11% plus BeO which is well above the strategic requirment of 8%. The copy of Mr. Gira's letter dated January 20, 1958 and attached to the application for aid will verify the above.

2. Sufficient progress had not been made in the development of the area.

(a) The second reason given for the unfavorable action towards the Blue Ox properties presents quite a puzzle to us as I personally was advised during the field inspection by Mr. Gene Binyon of the Bureau of Mines to the effect that if we would do more preliminary work and expose beryl or mica we would not be in a position to request DMEA aid. We would then be on the ore bodies and ready for mining. We are of the opinion that Mr. Binyon's recommendation was based on DMEA Order 1, Amended, Title 32A--National Defense Appendix, Chapter X11, whereby Section 6, paragraph (b)

asks only for the geologic probability of a discovery. Sketch No. 2 of our application shows the locations of preliminary work done. We have established three geologic probabilities. A lengthy and careful study of the Blue Ox and surraounding properties will also establish these geologic probabilities to a greater extent. We are very confident that we are not trying to explore a series of small outcroppings striking in the same direction due to the formation of the schistosity, but rather three or more extremely large deposits of very valuable and strategic ores.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 26 1958

DATE	INITIALS	CODE
5/26	C	220
		600

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

Date May 23, 1958

DMEA Docket No. 4926
DMEA Contract No.
Commodity Beryl
Name of applicant Blue Ox Mining Co., Inc.
Name of property Blue Ox
Location of property Sec.13, T. 2S, R. 6E., BHBM*
Estimated cost of project

* 4 miles SE of Keystone on the Keystone Hayward and Hermosa road in Pennington, County, S. D.

Memorandum

To: Lawrence G. Houk, Chief
Non-Metallic Minerals Div.

From: Donald E. Eilertsen, Commodity Specialist (Beryllium)

Subject: Review of Summary Report of Minerals Examination by field team
(Application, Field Team Report, etc.)

1. Date of subject document: April 7, 1958 2. Date received by reviewer: May 22, 1958

3. Prior reports on this property known to reviewer: Yes [ ] No [X]

4. Prior reports on nearby properties known to reviewer: Yes [ ] No [X]

5. Information available on past production: Yes [ ] No [X]

6. Other pertinent factors known to reviewer: Yes [ ] No [X]

7. Explain items marked yes above:

8. Factors needing special consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of mineralization [ ]
   d. Geology [ ]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

9. Action advised:
   a. Obtain information from applicant [ ]
   b. Refer to Field Team [ ]
   c. Denial [X]
   d. Agree with Field Team [X]
   e. Disagree with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request another examination [ ]
   h. Approval [ ]
   i. Consult with Mr. _____ at _____ AEC office.

10. Remarks: (Use back of page if necessary)

I agree with the field team that the application for DMEA assistance should be denied.

Donald E. Eilertsen

Donald E. Eilertsen

Blue Ox Mining Company, Inc.

Box 1925
Rapid City, South Dakota

26

5/26 C 220
5/26 Hook 600

May 20, 1958

United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-4926-Mica-Beryl
Att: C. O. Mithendorf, Administrator

Gentlemen:

This will acknowledge your letter of May 16th referring to our above captioned application.

We were very much surprised and disappointed to note that the DMEA had taken unfavorable action. However we are still firmly convinced that our properties warrant the exploration applied for in our application.

Since the project was submitted we have shipped to the Custer, South Dakota GSA depot a sample shipment of beryl under Certificate of Authorization No. 8-266 (Beryl), which has been accepted as strategic mineral and designated Lot No. 455. This beryl was extracted from the Blue Ox properties by our company.

Also during initial work preceding our application several samples of plate mica were removed from our property by Mr. Bernard Gira of the Custer depot. It is our understanding that these samples are now in the offices of Mr. Otto Klein and Mr. Vern Winters, Regional Office GSA, Denver, Colorado.

Judging from letters received from Senator Karl E. Mundt and Congressman E. Y. Berry, it appears that more preliminary work, additional information, and further field inspection by DMEA is necessary for a review of our application.

We would like to hereby make formal application for a review of our project application as soon as information received from the above actions can be made available to you and the DMEA.

Thank you for your kind consideration.

Yours very truly,

BLUE OX MINING COMPANY, INC.,

John M. Stolley

John M. Stolley, President

JMS/in
cc: Senator Karl E. Mundt
cc: Congressman E. Y. Berry

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/12	Knouse	600
5/12	Houk	600
5/14	Selfridge	130
5/14	Lamb	130
5/14	Williams	130
"	Johnson	110
"	Hufferstay	100
		220

600

MAY 16 1958

Blue Ox Mining Company, Inc.
Box 1925
Rapid City, South Dakota

Re: Docket No. DMEA-4926-~~Mica-Beryl~~
Blue Ox Mining Company, Inc.
Blue Ox Claim, et al.
Pennington County, South Dakota

Gentlemen:

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 or beryl 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,

C. O. Mittendorf

Administrator

FLKNOUSE:gad 5/12/58
Copy to: Admr. R. File
Operating Committee
Field Team, Region III
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Mr. Knouse

8623

DMEA Form 20
March 1958

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

MEMORANDUM OF CONGRESSIONAL CALL

TO: Director, Division of Legislation (DL)

FROM: Administrator, DMEA C. O. Mittendorf (Signature) May 16, 1958 (Date)

Call ~~from~~ to Mr. Juhnke, office of Senator Francis Case (SD) Date of call May 15, 1958 Time

~~Congressman E. Y. Berry (SD)~~
Mr. Robert Berry, office of Senator Karl E. Mundt (SD)

State below subject of call and conclusions or action taken.

I called Juhnke, of Senator Case's office, and Congressman Berry and told them we had denied the Blue Ox application (DMEA-1926). Houk called Bob Berry, of Senator Mundt's office.

Each was given some explanation for our action. All accepted our decision without question.

Congressman Berry said he received a three-page telegram from the applicant this morning which went on to glorify the merits of the property from the standpoint of by-products. It said enormous amounts of rose quartz would be recovered, which has a good market throughout the United States. It also elaborated on the value of scrap mica, feldspar, and other building materials. The Congressman said he would advise the applicant, and that he would be glad to let me know of any repercussions. I told him of the appeal procedures, in case the applicant became embittered or belligerent.

C. O. Mittendorf (Call ~~received~~ made by) May 15, 1958 (Date)

Prepare in duplicate when call is received. Send both copies to Administrator who will send original to DL and copy to DMEA Central Files. If call pertains to application or contract, copy will be recorded and filed in official docket.

34038

DMEA Form 20
March 1958

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

MEMORANDUM OF CONGRESSIONAL CALL

TO: Director, Division of Legislation (DL)

FROM: Administrator, DMEA C. O. Mittendorf (Signature) 5/16/58 (Date)

Call ~~xxxxx~~ to Senator Mundt's Office Date of call May 15, 1958 Time 9:00 A.M.
Mr. Bob Berry

State below subject of call and conclusions or action taken.

On Thursday I telephoned Mr. Bob Berry in Senator Mundt's office stating that the Blue Ox Mining Company's application had been formally denied. I told him that 14 people in the Bureau of Mines, the Geological Survey, and the DMEA had reviewed the application and the recommendation for denial, and they were all in agreement that the geologic potential of the Applicant's claims was not promising. Mr. Berry wanted to know if the Applicant had agreed to a much smaller program would consideration have been given for a contract. I stated that every consideration was given and that in my opinion not even a small project was warranted as the mica was non-strategic and there was little evidence the beryl would be found in quantity.

Lawrence G. Houk, Director
Division of Nonmetallic Minerals

s/ LAURENCE G. HOUK 5/16/58
~~Call received by~~ (Date)
Call made by

Prepare in duplicate when call is received. Send both copies to Administrator who will send original to DL and copy to DMEA Central Files. If call pertains to application or contract, copy will be recorded and filed in official docket.

34038

DMEA Form 20
March 1958

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

MEMORANDUM OF CONGRESSIONAL CALL

TO: Director, Division of Legislation (DL)

FROM: Administrator, DMEA C. O. Mittendorf (Signature) May 15, 1958 (Date)

Call from Congressman E. Y. Berry (S.D.) Date of call May 9, 1958 Time

State below subject of call and conclusions or action taken.

Congressman Berry called again about the Blue Ox application, DMEA-1926. He asked when I intended to have the applicant come to Washington to discuss his case. I told him I had no intention of making such a request. He seemed a little surprised, so I explained further.

I told him I noted from the application form that Mr. Stolley, the applicant, had some experience in the sand and gravel business, but other than that he had served in the Army and was engaged in general construction work. With due respect to his ability, I did not believe he was experienced in geology and mining engineering, and it was therefore doubtful to me if he could contribute much back here in Washington. After all, I said, these trips do cost money.

Congressman Berry agreed with me. He said he would inform his constituent that it would not be necessary for him to make the trip to Washington.

He asked when we might take final action on the case. I explained our processing procedures and then informed him that we are awaiting written comments from the mica and beryl commodity specialists from the Bureau of Mines and from the U.S. Geological Survey. I hoped that we would be in position to reach a final decision sometime next week. He seemed satisfied with my explanation.

C. O. Mittendorf (Call received by) May 9, 1958 (Date)

Prepare in duplicate when call is received. Send both copies to Administrator who will send original to DL and copy to DMEA Central Files. If call pertains to application or contract, copy will be recorded and filed in official docket.

34038

DMEA Form 20
March 1958

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

MEMORANDUM OF CONGRESSIONAL CALL

TO: Director, Division of Legislation (DL)

FROM: Administrator, DMEA C. O. Mittendorf (Signature) May 15, 1958 (Date)

Call from Mr. Juhnke, Office of Senator Francis Case (S.D.) Date of call May 13, 1958 Time

State below subject of call and conclusions or action taken.

Mr. Juhnke phoned in connection with the Blue Ox case, DMEA-4926. He wanted to know if the applicant had ever reduced the amount of his request. I said he was willing to reduce it from $798,000 to $461,000.

I told him the case is scheduled to come before the Operating Committee tomorrow. He asked me to advise him of our final action. He made no attempt to find out what that action might be.

C. O. Mittendorf (Call received by) May 13, 1958 (Date)

Prepare in duplicate when call is received. Send both copies to Administrator who will send original to DL and copy to DMEA Central Files. If call pertains to application or contract, copy will be recorded and filed in official docket.

34038

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 12 1958

DATE	INITIALS	CODE
5/12	C	220
5/12	22k	600
✓		

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

May 12, 1958

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA-4926 (mica)

Applicant: Blue Ox Mining Co., Inc.

Name and Location of Property: Blue Ox Claims, Pennington County, South Dakota

Date of Field Team Report: 4/25/58

Date Rec'd. by Br. of Ceramic & Fertilizer Materials: 4/29/58

Field Team Recommendation: Recommend that application be denied.

Comments:

1. Field examiners report that none of the dikes on the property exhibit the features common to good mica-beryl production in the Black Hills pegmatites.

2. Very few books of mica are visible and these are not of strategic quality.

3. The applicant apparently refuses to consider modification of the extensive and illogical $798,150 exploration program proposed.

4. The mica mined in the Keystone district has been predominantly scrap; only minor quantities of sheet mica have been produced.

Recommendation:

I concur with the recommendation of the field team that the application be denied.

W. F. Dietrich

W. F. Dietrich

DMEA Form 20
March 1958

600

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

MEMORANDUM OF CONGRESSIONAL CALL

TO: Director, Division of Legislation (DL)

FROM: Administrator, DMEA C. O. Mittendorf (Signature) May 9, 1958 (Date)

Call from Congressman E. Y. Berry (S.D.) Mr. Juhnke, of Senator Francis Case's office (S.D.) Date of call April 25, 1958 Time 10:30-11:00 A.M.

State below subject of call and conclusions or action taken.

Congressman E. Y. Berry and Mr. Juhnke, of Senator Case's office, phoned me today in connection with DMEA-4926, Blue Ox Mining Company.

This is a mica-beryl deal where the applicant requested the fantastic amount of $798,150. He has done little work on the property and there are no inferred reserves. His estimated costs are excessive.

We know the Field Team examined the property on March 25, and that on April 1 and 2 they discussed an alternate program with the applicant. He was unwilling to accept any modified project. Although we haven't received the field team report, we feel that they will deny the application in its present form.

On both calls I gave the status of the case. I pointed out that the large amount requested was unreasonable and unwarranted, citing that we had entered into 23 contracts for beryl-mica (half of them in South Dakota) and the total Government funds spent was only $98,000 - an average of less than $5000 per project.

Both Congressman Berry and Mr. Juhnke immediately recognized that their constituent must be considerably out of line.

Berry read parts of the applicant's letter. It made no reference to the Field Team's efforts to come to an agreement on a modified program. It implied that the Field Team had prepared its report and sent it in to Washington. Berry said he would suggest to his constituent that he come down to earth because such large projects require painstaking review and cannot always be justified.

Mr. Juhnke said he would merely tell the constituent that we were waiting for the Field Team report.

(Over)

C. O. Mittendorf (Call received by) Apr. 25, 1958 (Date)

Prepare in duplicate when call is received. Send both copies to Administrator who will send original to DL and copy to DMEA Central Files. If call pertains to application or contract, copy will be recorded and filed in official docket.

34038

DMEA Form 20
March 1958

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

MEMORANDUM OF CONGRESSIONAL CALL

TO: Director, Division of Legislation (DL)

FROM: Administrator, DMEA C. O. Mittendorf (Signature) May 9, 1958 (Date)

Call from Office of Congressman E. Y. Berry (S.D.) Date of call April 30, 1958 Time

State below subject of call and conclusions or action taken.

Congressman Berry's office called again today regarding the Blue Ox application. Mr. Stolley, of Blue Ox, had just called Mr. Berry and said he had "made amendments to the application" and it had been forwarded to Washington. Mr. Berry requested that when the revised application is received someone call and tell him what it contains, etc.

May 7, 1958 About 3:45 p.m.

Mrs. Daly, of Congressman Berry's office, called for information on the Blue Ox application. She wanted to know if the Field Team report had been received, and reported that the applicant would be glad to come to Washington to discuss his revised application.

May 8, 1958 About 4:45 p.m.

Mrs. Daly was called back and told that the Field Team report had been received and was being processed. She asked that when final decision is made I call Congressman Berry and discuss it with him.

C. O. Mittendorf (Call received by) April 30, May 7, May 8, 1958 (Date)

Prepare in duplicate when call is received. Send both copies to Administrator who will send original to DL and copy to DMEA Central Files. If call pertains to application or contract, copy will be recorded and filed in official docket.

34038

IN REPLY REFER TO:

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 7 1958
DATE | INIT.
5/7 | C
220
600

Memorandum

May 6, 1958

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

From: T. H. Kiilsgaard, U. S. Geological Survey

Subject: Review of Field Team report, DMEA 4926 (Mica and Beryl), Blue Ox Claims, Pennington County, South Dakota.

Field Examiners report that four pegmatites outcrop on the applicant's property, but that none of these exhibit features common to good mica-beryl pegmatites in the Black Hills. All mica noted was of scrap quality. The beryl occurred as small, scattered crystals. It is the opinion of the examining team that no significant qualities of either beryl or strategic mica would be discovered by exploration of the dikes.

Despite the poor showing of the property, the examiners spent considerable time trying to persuade the applicant to abandon his grandiose and overly expensive program. The applicant, however, was adamant and insisted the only way to explore the property was in the manner he had proposed. In view of this situation and in view of the poor showings of mica or beryl in the pegmatites, the Field Examiners recommend denial of the application.

I concur with the Field Examiners and recommend that this application be denied.

T. H. Kiilsgaard

T. H. Kiilsgaard

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
May 1, 1958

FILE COPY
DMEA
RECEIVED MAY 5 1958
5/5 C 220 600

Memorandum

To: Secretary to the Operating Committee, DMEA

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

Subject: Docket No. DMEA 4926 (Mica-Beryl) Blue Ox Mining Company, Inc., Pennington County, South Dakota

Enclosed are the original and one copy of a letter from John M. Stolley, President, Blue Ox Mining Company, Inc., dated April 30, 1958. The Applicant's request is for a modification of exploration work as presented in his original application.

Also enclosed are the original and three copies of a joint memorandum from the Field Examiners recommending the denial of the application either in its original or in the revised form.

We concur in this recommendation.

E. N. Harshman

E. N. Harshman

Enclosures

EWH
HMC

IN REPLY REFER TO:

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

DMEA
DEPARTMENT OF THE INTERIOR
MAY 1 - 1958
OFFICIAL FILE COPY
REGION III
DENVER, COLORADO
DMEA
RECEIVED MAY 5 1958

May 1, 1958

Memorandum

To: Executive Officer, DMEA Field Team, Region III
Through: E. N. Harshman EWH

From: W. N. Sharp
E. O. Binyon

Subject: Docket DMEA 4926 (Mica-beryl) Blue Ox Mining Company, Inc. (Blue Ox claims et al.), Pennington County, South Dakota

On April 30, 1958, John M. Stolley of the Blue Ox Mining Company was in the DMEA office to discuss a modification of the proposed program for exploring the Blue Ox property. A request for a revision of the program, which includes a brief outline of the changes, was also extended by letter to the Executive Officer, Region III. The change in the applicant's program was to "lower the cost of the program from $798,150 to $461,350." This lower cost was achieved by dropping the last two stages, 6 and 7, of the original seven-stage program and reducing the size of stages 4 and 5.

The applicant still views DMEA assistance from a rather peculiar aspect. It appears that the program is designed to spend a preconceived sum of money rather than to determine the ore potential of the property at a minimum cost.

The examining team is still of the opinion that the property does not warrant a program of this type (underground with no surface

work) much less the extreme limits and cost of the program. At most the property warrants a modest amount of surface work to better expose the three dikes noted on the property and described in the examination report. The amount of such a program would be no more than a few thousand dollars.

However, it is the opinion of the examining team--as expressed in the examination report--that the dikes exposed on the property, for the most part, are relatively small and do not show any strategic mica or significant amounts of beryl. More important, they do not exhibit features that would indicate that such commodities in significant amounts will ever be found in these bodies. Therefore, the examiners reaffirm their recommendation for denial of the application either in its original or in the revised form.

W. N. Sharp

W. N. Sharp, Geologist

E. O. Binyon

E. O. Binyon, Mining Engineer

DMEA
DEPARTMENT OF THE INTERIOR
APR 30 1958
REGION III
DENVER, COLORADO

Blue Ox Mining Company, Inc.

Box 1925
Rapid City, South Dakota

APR 30 1958
GEOLOGICAL SURVEY
DENVER, COLORADO

April 30, 1958

Re: Docket No. 4986
Mica-Beryl

5 1958

Executive Officer, DMEA Field Team, Region III
224 New Customhouse
Denver, Colorado

Dear Sir:

Since our application was submitted and the examination of our property was made by the DMEA team, we have decided to modify the program proposed to explore the property.

The modification in the program will reduce the scope of the program and lower the total cost from $798,150 to $461,350. We would like to retain the organization of the present program into stages of progressive work through Stage 5. This would mean deleting Stages 6 and 7, and also the last 1,400 feet of work in Stages 4 and 5. Also we would reduce the amount of lateral drifting on the pegmatites from a proposed 650 feet each direction from the crosscut to 550 feet each direction. This would make a total of 7,700 feet of crosscutting and drifting. Timbering is figured to be required for 50 percent of underground work. The unit costs would remain the same as bid in the original program.

An outline of the new program in stages is as follows:

Stage 1 - 2,200 feet road

Stage 2 - 2,500 feet drifting

Stage 3 - 1,500 feet road

Stage 4 - 2,600 feet drifting

Stage 5 - 2,600 feet drifting

Very truly yours,

BLUE OX MINING CO., INC.

John M. Stolley

John M. Stolley, President

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

DMEA
RECEIVED APR 30 1958

4/30	C	220
4/30	Hunt	602
5/5	J.N.L.	600

April 28, 1958

AIR MAIL

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: DMEA Docket 4926 (Mica-Beryl), Blue Ox Mining Company (Blue Ox claims) Pennington County, South Dakota

We were contacted by the applicant April 25, 1958, and it appears that he wishes to revise downward (from $798,150.00 to about $500,000.00) his requested program of exploration on the subject property. A conference has been arranged for Wednesday, April 30, 1958.

Prior to the completion of our Field Team report, forwarded to you by our memorandum of April 25, 1958, the examiners conferred with the applicant for two days regarding a much reduced program of exploration on the Blue Ox claims. The program discussed included surface stripping and trenching in Stage I to be followed by a modest program of sinking and/or crosscutting and drifting, if warranted.

The strategic mica and/or beryl potential of the property appears to be almost nil and a program of the scope proposed by the applicant is absurd.

We will inform you of the outcome of the conference.

E. N. Harshman

E. N. Harshman

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
April 25, 1958

4/26	C	220
4/30	2/B	130
4/30	C	220
5/1	Hourh	600

Memorandum

To: Secretary to the Operating Committee, DMEA

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

Subject: Docket No. DMEA 4926 (Mica and Beryl)
Blue Ox Mining Company, Inc., (Blue Ox claims)
Pennington County, South Dakota - Joint Engineering and Geologic Report

Enclosed are the original and two copies of the joint report of examination on the subject property, by William. N. Sharp, USGS, and E. O. Binyon, USBM.

It is the opinion of the examining team that no significant quantities of either beryl or strategic grade mica would be discovered by exploration of the dikes and they recommend that the application be denied.

We concur in this recommendation.

E. N. Harshman

E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
4-30-58
(date)

Ex. - Site Exam Rpt

FOR UNITED STATES GOVERNMENT USE ONLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

4/30 JAB 130 220

DMEA
DEPARTMENT OF THE INTERIOR
APR 25 1958
REGION III
DENVER, COLORADO

DMEA 4926

Blue Ox Mining Company, Inc.

Blue Ox, Blue Ox No. 1, Bernard Original claims

Pennington County, South Dakota

TRANSMITTED
APR 25 1958

Mica and Beryl

Reviewed by
DMEA OPERATING COMMITTEE
4-30-58
(date)

Joint Engineering and Geologic Report

by

William N. Sharp, Geologist
Geological Survey

E. O. Binyon, Mining Engineer
Bureau of Mines

April 24, 1958

CONTENTS

	Page
Introduction and summary	1
Acknowledgments	2
Location, topography, and physical features	2
Ownership	4
History and production	5
Present status	5
Geology	6
Ore reserves	10
Applicant's proposed exploration program and costs	10
Conclusions and recommendations	13

ILLUSTRATIONS

Figure	Follows page
1. Location map, Blue Ox Mining Company, Inc., Blue Ox, Blue Ox No. 1, and Bernard Original claims, Pennington County, South Dakota. DMEA 4926	2
2. Geologic map of the Blue Ox Mining Co., Inc., property and vicinity sec. 13, T. 2 S., R. 6 E., Pennington Co., S. D. DMEA 4926	13

DMEA 4926

BLUE OX MINING COMPANY, INC.
BLUE OX, BLUE OX NO. 1, BERNARD ORIGINAL CLAIMS
PENNINGTON COUNTY, SOUTH DAKOTA

INTRODUCTION AND SUMMARY

The Blue Ox Mining Company, Inc., a South Dakota Corporation, P. O. Box 1925, Rapid City, South Dakota, applied January 24, 1958, to the Defense Minerals Exploration Administration for aid in exploring pegmatite bodies for strategic mica and beryl on the Blue Ox, Blue Ox No. 1 and Bernard Original mining claims. The claims are approximately 5 miles southeast of Keystone, Pennington County, South Dakota, in sec. 13, T. 2 S., R. 6 E., Black Hills Base Meridian. The applicant proposed to explore six pegmatites that were believed to trend across the property by a seven-stage program consisting of access road building, crosscutting, and drifting at an estimated total cost of $798,150.00.

A field examination was made of the property on March 25, 1958, by William N. Sharp, geologist, U. S. Geological Survey, and E. O. Binyon, mining engineer, U. S. Bureau of Mines. John M. Stolley, president of the company, and George Ihnen, who has an interest in the company, accompanied the examining team on the examination.

It is the opinion of the examining team that the property does not warrant, from any aspect, an exploration program such as that proposed

by the applicant. During lengthy discussions with the applicant's representatives concerning the program, it was tentatively suggested by the examining team that a greatly modified program might be justified to explore the pegmatite dikes actually exposed on the property, and that the cost of exploration could be greatly reduced. The applicant's representatives, however, decided that the property could be explored best only with the program proposed in the application. There is little probability of a significant discovery of either mica or beryl being made on the property, and it is recommended that the application be denied.

ACKNOWLEDGMENTS

Thanks are due John M. Stolley and George Ihnen for conducting the examining team over the property.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Blue Ox, et al. claims are in sec. 13, T. 2 S., R. 6 E., Black Hills Base Meridian, Pennington County, South Dakota, near Keystone, a small community and railpoint on a spur line of the Chicago Burlington and Quincy railroad (fig. 1). To reach the claims from Keystone, take the county road west that leads to Hayward and continue for 2 miles to a fork, bear right, then go 0.1 mile to another fork, take the left hand road and continue for 2.4 miles to the property.

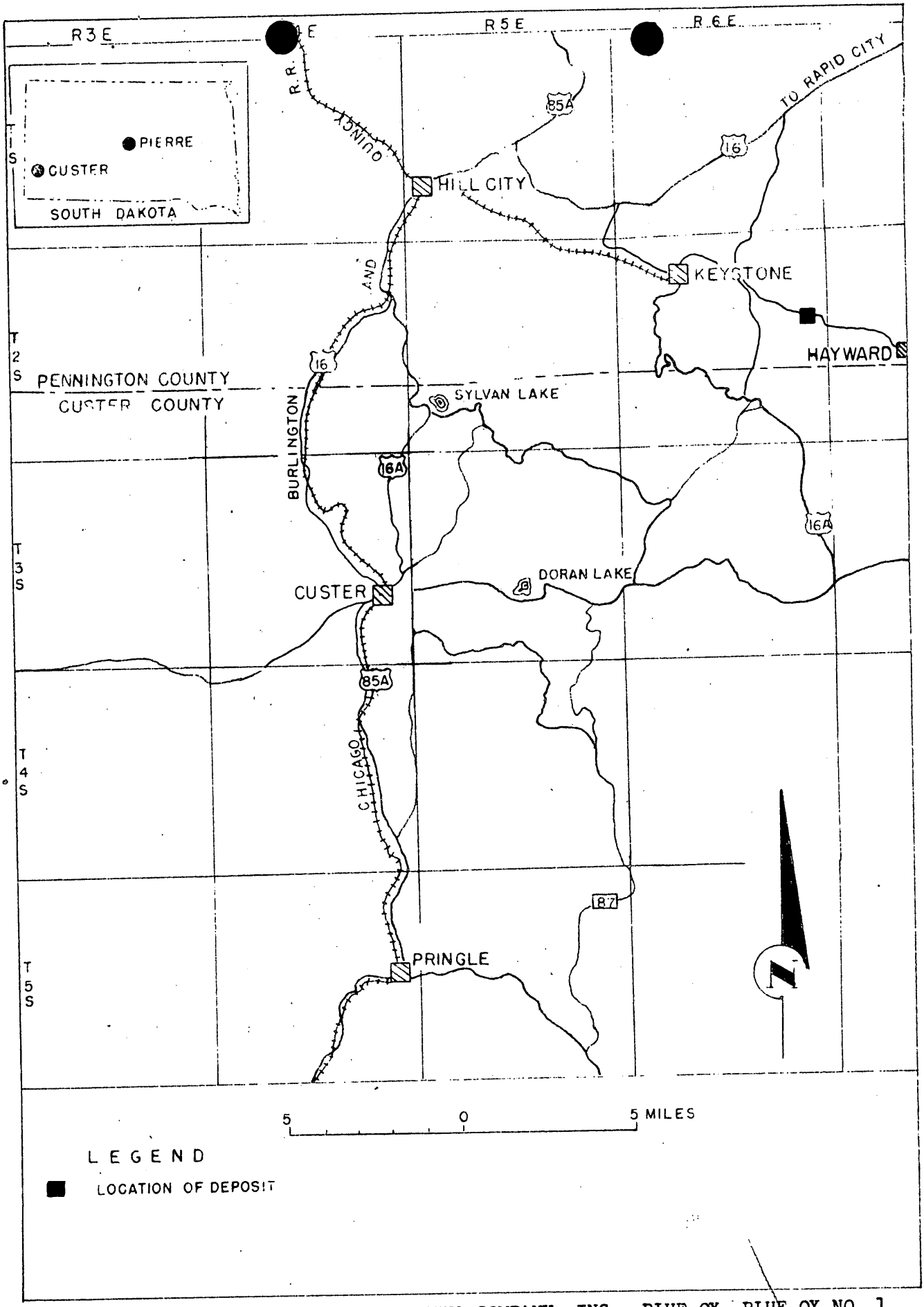


FIGURE 1 - LOCATION MAP, BLUE OX MINING COMPANY, INC., BLUE OX, BLUE OX NO. 1, AND BERNARD ORIGINAL CLAIMS, PENNINGTON COUNTY, SOUTH DAKOTA. DMEA 4926

OFFICIAL FILE COPY
DMEA
RECEIVED APR 28 1958

DATE	INITIALS	CODE

Rapid City, the largest community in western South Dakota, and a supply and equipment center, is 23 miles by road northeast of the claims. Rapid City is served by the Chicago and Northwestern and C. B. and Q railroads and by intra and interstate truck lines. Custer, a small pegmatite mining and timbering community on the C. B. and Q railroad, is 28 miles by road southwest of the property.

The property is near the eastern edge of the Black Hills uplift in a region of moderate to fairly rugged terrain; altitudes on the property range from about 3,900 feet at the level of Iron Creek, which cuts across the claims from west to east near the southern end, to about 4,320 feet at the northern boundary. The slope of the property southward to the creek level is constant and fairly steep.

A considerable growth of Ponderosa pine is found on the claims, with much of the timber suitable for mine use. Iron Creek, a permanent stream, can easily supply sufficient water for exploration and mining purposes. No electric power is available at the property, and diesel or gasoline powered equipment would have to be used.

The climate is moderate with mild summers and only short periods of severe or sub zero weather during the winter. Operations can be carried on practically the year around. Winter and early spring snow and rainfall might make travel over dirt and county roads difficult for brief periods.

OWNERSHIP

The Blue Ox and Bernard Original unpatented mining claims and a parcel of land lying between the north boundary of the Blue Ox claim and the center of the Keystone-Hayward road are held under a lease agreement between Amelia E. and Vincent L. Cordes, the owners, and the Blue Ox Mining Company, Inc., the applicant. By an assignment of Lease Agreement, the rights and interest of John M. Stolley in the claims and land were transferred to the Blue Ox Mining Co., Inc.

A discrepancy is noted between the claims and land described in the lease and that shown on the claim map and described in the application. The last two show a full claim, the Blue Ox No. 1, as extending 450 to 500 feet north of the road (Keystone-Hayward) whereas the lease puts the north boundary of the property at the center of the road. This inconsistency was noted after the examination, and was not discussed with the applicant.

Approximately 22 acres are included in the three full claims listed in the application.

A check of the records at the Register of Deeds office at Rapid City, the county seat of Pennington County, South Dakota was made and the claims were recorded as follows:

Claim	Book No.	Page No.	Date Recorded
Blue Ox	Misc. No. 48	333	11/13/50
Blue Ox No. 1	Loc. 50	382	7/11/51
Bernard Original	Loc. 51	42	9/13/57

HISTORY AND PRODUCTION

The Blue Ox and Blue Ox No. 1 claims were located by J. W. Tinsley and J. B. Cordes, both of Keystone, South Dakota, on October 20, 1950, and June 27, 1951, respectively. Vincent L. Cordes located the Bernard Original claim August 20, 1957. The discovery work was done on all three claims, and on the Blue Ox claim the northernmost dike ("A", fig. 2) was explored by two small opencuts on the east end and a short adit near the center. A small quantity of beryl is reported to have been taken from the opencut; however, there are no records of any sales of beryl or of sheet or scrap mica from the property. On the Bernard Original claim a small pit had been excavated for the discovery work at the end of a large pegmatite outcrop.

PRESENT STATUS

The applicant has improved the road into the property from the county road and has slightly enlarged the old opencut on the northernmost dike on the Blue Ox claim. Also an opencut approximately 60 feet

long, 10 feet wide, and 40 feet deep at the face was made on the south dike ("B", fig. 2) of the Blue Ox claim.

No milling or mining equipment or other facilities are on the property.

GEOLOGY

The Blue Ox property lies at the eastern edge of the exposed Precambrian crystalline and metamorphic rock core of the Black Hills uplift. The Precambrian core, composed predominantly of mica-schist, quartzitic-schists, and quartzite, contains large granite and pegmatite intrusive masses, and swarms of pegmatite dikes at several localities. The Blue Ox property is in the Keystone district, the easternmost area of numerous pegmatite dikes.

Pegmatite dikes in the Keystone district are of several types with regards to predominant mineralogy or economic commodity. Some of these pegmatites have been producers of lithium minerals, beryl, mica, and small amounts of other rarer minerals, but most of them are simply granite pegmatites composed of feldspar and quartz. The mica mined in the Keystone district has been predominantly scrap mica; only minor amounts of sheet mica have been produced.

The Blue Ox property, at the eastern edge of the Keystone district, is underlain by Precambrian mica schist and interbedded conglomerate

and quartzite of the Cambrian Deadwood formation (fig. 2). The mica schist in the area is strongly foliated. The foliation trends about N 70° W and dips about 70° northward. The relatively flat-lying Deadwood formation unconformably overlies the schist on the crest of ridges in the form of outliers separated by erosion from the extensive main outcrop farther east (fig. 2).

Several pegmatite dikes and bodies are exposed on the Blue Ox property. All trend about N 70° W, parallel to the foliation in the mica schist. Two dikes have been exposed by cuts on the Blue Ox claim, and three dikes are conspicuous in natural outcrop on the Bernard Original claim; of these last three dikes only two are noteworthy. No dikes were found on the Blue Ox No. 1 claim. Of the four notable pegmatites on the property only one, about 400 feet long, is of significant length; all other dikes appear to be less than 100 feet long. The applicant's contention that six dikes, three proven and three unproven, cross the property from east to west, is unfounded and false. In fact, the uppermost dike referred to on the applicant's sketch map if present would be covered by 20 to 40 feet of Deadwood conglomerate and quartzite.

The known significant dikes have been lettered "A", "B", "C", and "D" on figure 2 in order that each can be described briefly. The two dikes ("A" and "B") on the Blue Ox claim are exposed by deep cuts into the slope of the hill; no natural outcrops were found. Dike "A" is

exposed in a cut, 30 feet long and about 15 feet deep at the face, which follows along the dike into the slope of the hill. A 6-foot-deep trench, 50 feet eastward and down hill from the cut, partly exposes dike "A" at a second site. The dike, about 10 feet wide in the cut face, swells abruptly to about 20 feet at the road cut and then appears to pinch to 4 feet or less in the pit eastward below the road, a total distance of about 100 feet. The dike is composed of pink feldspar and quartz, generally mixed, in crystals and masses up to 3 inches across. Muscovite books up to 3 inches across were noted, but the mica is not of strategic grade. Small scrap mica books are scattered throughout the dike. The dike does not appear to be zoned, although a few quartz masses, a foot across are exposed. The dike is highly altered and kaolin clay is a conspicuous component of the upper part of the dike in particular. No beryl was seen in dike "A".

Dike "B" is exposed in a 60-foot cut that extends into the slope of the hill and crosscuts the dike at a depth of about 50 feet. This dike is about 6 feet wide, strikes N 70° W, and dips about 76° northward. The composition of the dike changes somewhat from the upper to the lower part as exposed in the cut. The lower part is quartz and feldspar with a fine-grained granular texture. The upper part is much coarser in texture and contains muscovite as small books up to 4 inches across. The mica is not of strategic grade. No beryl was noted in dike "B".

This dike, like dike "A", apparently is not regularly zoned. No additional outcrops of dike "B" were seen. The road cut east from the main 60-foot cut does not expose a conspicuous dike, and this fact strongly suggests that the dike pinches out before the road cut is reached a distance of about 100 feet.

Dike "C" is the only large pegmatite exposed on the property. It stands out as a prominent reef-like feature striking about due east and dipping almost vertical. Along most of its outcrop length the dike is about 5 to 10 feet wide, but the eastern end swells abruptly to about 30 feet in width, and then abruptly pinches out. The dike is predominantly feldspar and quartz with medium to coarse-grained pegmatite texture. Muscovite books 2 to 3 inches across are abundant at the bulbous east end but the mica is of scrap quality. Small beryl crystals, 1 inch and less across, were found in small clusters at only two sites and the beryl content of this dike appears to be insignificant. The main body of the dike has not been sampled or exposed by openings of any kind.

Dike "D" is about 500 feet west of the large dike "C". It occupies a position at the crest of a narrow nose, and extends only part of its outcrop length into the claim area. This dike is an unzoned granite pegmatite consisting principally of large feldspar and quartz crystals. Muscovite and black tourmaline are minor components, no beryl was seen.

The other pegmatite locations marked on figure 2 represent small dikes or pits where pegmatite rubble was uncovered. They are not considered important in the evaluation of the property.

None of the dikes on the Blue Ox property, as exposed, contain strategic quality mica or significant amounts of beryl, nor do they have features that suggest they will contain significant amounts of either commodity.

ORE RESERVES

There are no known reserves of beryl or mica on the property.

APPLICANT'S PROPOSED EXPLORATION PROGRAM AND COSTS

The exploration program as proposed by the applicant consists of seven stages of progressively arranged work. Stages I and III consist of building 3,700 feet of access road; Stages II, IV, V, VI, and VII are all units of underground work. Stage I is a lower or creek road, 2,200 feet in length, designed to furnish access to a lower crosscut adit and work area. Stage III is an upper road 1,500 feet in length that will furnish access to a middle or upper crosscut adit. Underground work under Stage II is to consist of 220 feet of crosscut adit and approximately 2,680 feet of drifting along the strike of two inferred pegmatites. Under Stage IV another adit at altitude 4,200

feet would be driven 500 feet and then 3 drifts with a total length of approximate 3,900 feet would be driven east and west along the strike of inferred pegmatites. Stage V is to consist of extending the lower crosscut adit 540 feet and drifting approximately 3,900 feet east and west along 3 inferred pegmatites. Extension of the upper crosscut adit for 380 feet and drifting for 650 feet east and west along an inferred pegmatite is to be done under Stage VI. The same would be done on the lower adit, under Stage VII; the adit being extended 380 feet and drifts being driven approximately 650 feet east and west along the strike of an inferred dike. Total footage from the two levels of work amounts to 15,100 feet of crosscutting and drifting. The work to be done and the costs of the seven stages are as follows:

Stage I, lower access road 2,200 feet at $3.50/ft.			$ 7,700.00
Stage II, lower crosscut adit	220 ft.		
2 drifts	2,680 ft.		
	2,900 ft.	at $52.00/ft.	150,800.00
Stage III, upper access road	1,500 ft.		5,250.00
Stage IV, upper crosscut adit	500 ft.		
3 drifts	3,900 ft.		
	4,400 ft.	at $52/ft.	228,800.00
Stage V, lower adit extension	540 ft.		
3 drifts	3,860 ft.		
	4,400 ft.	at $52/ft.	228,800.00
Stage VI, upper adit extension	380 ft.		
1 drift	1,320 ft.		
	1,700 ft.	at $52/ft.	88,400.00
Stage VII, lower adit extension	380 ft.		
1 drift	1,320 ft.		
	1,700 ft.	at $52/ft.	88,400.00
Total Stages I through VII			$798,150.00

A bid of $16.00 per foot for timbering a 5' x 7' drift is submitted.

The Government's share at 75 percent participation would amount to $598,612.50.

Much time was spent in discussing the foregoing program with the applicant's representatives. Suggestions were offered that the program be viewed from aspects more in keeping with geologic facts determinable from a field survey of the property, and known geologic characteristics of pegmatites in general. Suggestions were offered that a greatly modified exploration program be considered--a program of trenching or trenching with a moderate amount of shaft sinking. Such a program would be modest in extent but would adequately explore the dikes exposed on the property. Although these points were discussed at some length, the applicant's representatives were of the opinion that the property could be explored best by the illogical program outlined above.

The specific features of the pegmatite dikes exposed on the property were discussed with members of the U.S.G.S. who have worked for long periods mapping and studying the resources of the dikes in the Black Hills. These authorities were consistent in their opinion that none of the dikes had features common to good mica and/or beryl producing pegmatites.

CONCLUSIONS AND RECOMMENDATIONS

The Blue-Ox Mining Company property contains, in outcrop or otherwise exposed, only four notable pegmatite dikes and bodies instead of six as proposed by the applicant. Also the dikes observed, with but one exception, are relatively small, and are unzoned. Generally the dikes do not exhibit features common to good mica-beryl pegmatite dikes in the Black Hills. In the two northernmost dikes ("A" and "B") no beryl and only a small quantity of scrap grade mica was noted. In the lower dike (C) a few small crystals of beryl and a minor amount of scrap mica were seen at places. Dike "D" is unzoned, only minor amounts of scrap mica and tourmaline were noted in exposures. It is the opinion of the examining team that no significant quantities of either beryl or strategic grade mica would be discovered by exploration of the dikes, and it is recommended that the application be denied.

May 27, 1958

Memorandum for the files

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

Subject: Justification for denial - Docket No. DMEA-4926-Mica
Blue Ox Mining Company

The property was examined on March 25, 1958, by a DMEA geologist and a DMEA engineer. Mr. John M. Stolley, President, and Mr. George Inhnam accompanied the examining team. On April 25, 1958, the Field Team were contacted by the Applicant and the ~~subject~~ discussion was a downward revision of the money from $798,150.00 to $500,000.00. A conference was arranged for April 30, 1958. Prior to completion of the Field Team Report forwarded on April 25, 1958, the examiners conferred with the Applicant for two days regarding a much reduced exploration program. This program included surface stripping and trenching to be followed by a modest program of sinking and/or crosscutting and drifting. On April 30, 1958, Mr. Stolley wrote the Executive Officer, Region III that he wished to reduce the scope of the program to $461,350.00 by deleting Stages 6 and 7, the last 1,400 feet of work in Stages 4 and 5, and the amount of lateral drifting on the pegmatites from 650 to 550 feet each. The total would be 7,700 feet of crosscutting and/or drifting. With 50% of the underground opening requiring timbering. The outline of the new program is as follows:

Stage 1 - 2,200 feet road
Stage 2 - 2,500 feet drifting
Stage 3 - 1,500 feet road
Stage 4 - 2,600 feet drifting
Stage 5 - 2,600 feet drifting

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

_____

_____

_____

_____

_____

Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Interior—Duplicating Section, Washington, D. C.

Signed _____

at the questions is

T~~he results of~~ the conference between Sharp and Binyon discussed in their memorandum of May 1, 1958, to Harshman, the Examining Engineers state that most of the property wanrants a modest program of surface work not to exceed a few thousand dollars. Their concluding opinions are:

1. That the dikes are relatively small
2. Do not show any strategic mica or significant amounts of beryl.
3. None of the pegmatites have favorable features common to good mica and/or beryl producing pegmatites.

The denial letter was forwarded from Washington on May 16, 1958, and was based on the probability of disclosing significant reserves.

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

_____

_____

_____

_____

_____

Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Interior—Duplicating Section, Washington, D. C.

Signed _____

DMEA Form 20
March 1958

225

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

MEMORANDUM OF CONGRESSIONAL CALL

TO: Director, Division of Legislation (DL)

FROM: Administrator, DMEA C. O. Mittendorf (Signature) 4/29/58 (Date)

Call from Senator Karl E. Mundt's Office Date of call April 29, 1958 Time 1:00 P.M.

State below subject of call and conclusions or action taken.

Mr. Robert Berry, Staff Assistant of Senator Karl E. Mundt's Office, telephoned to inquire about the Blue Ox Mining Company's application (Docket No. DMEA-4926), and was informed that the examination report is expected within the next few days, and that the Applicant could expect an answer within the next week or ten days. I checked with Miss Webster and found that the examination report was in.

1:50 P.M.

I called Mr. Robert Berry back and told him that the examination report had been received and would be processed as rapidly as possible. Mr. Berry stated that the President of the Blue Ox Mining Company had told Congressman E. Y. Berry that it was willing to modify its program, and that the President of the Blue Ox Mining Company had been instructed to contact the Denver Office to modify the program and asked if that was the correct procedure. I said that it was but it would delay the answer that I had promised him (Mr. Robert Berry), a week to ten days hence. Mr. Berry decided to do some telephoning to determine if the official request for a modified program had been made. He will then call back if the request has been made, otherwise we will process the examination report in the normal manner with the facts we have on hand.

Lawrence G. Houk, Director
Division of Nonmetallic Minerals

Call received by — April 29, 1958 (Date)

Prepare in duplicate when call is received. Send both copies to Administrator who will send original to DL and copy to DMEA Central Files. If call pertains to application or contract, copy will be recorded and filed in official docket.

34038

April 25, 1958

Mr. E. N. Harshman, Acting Executive Officer, Reg. III telephoned
Mr. L. G. Houk

Re: Docket No. DMEA-4926-Mica-Beryl
Blue Ox Mining Company, Inc.
Blue Ox Claim et al.
Pennington County, South Dakota

The Operator had just called him and intimated that Mr. Mittendorf had promised Senator Case that we would write a contract here. Mr. Houk told Mr. Harshman that Mr. Mittendorf had not promised anything as we have not received the examination report. I tried to transfer the call to Mr. Mittendorf but was unsuccessful. Mr. Harshman said the examination report would be sent in shortly.

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

_____

_____

_____

_____

_____

Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Signed _____

Interior—Duplicating Section, Washington, D. C.

✓

Congressman E. Y. Berry (S.D.) (D)

wants someone to call him re status of

DMEA 4926, Blue Ox Mng Co.

Received 1/24/58 (Friday)

Acknowledged 1/28/58 (Tuesday)

Sent FT for exam. 2/14/58

FT report not yet received. (Not in this morning's mail.)

T 180, X5165

April 25, 1958

Mr. Mittendorf telephoned the Congressman and answered his questions.

2/21 C 220
2/24 Hook 600

224 New Customhouse
Denver 2, Colorado
February 19, 1958

Memorandum

To: E. N. Harshman w/enclosures 1-5 below
DMEA/DFC - Binyon w/enclosures 1-5 below

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4926 (Mica-Beryl) Blue Ox Mining Company, Inc. (Blue Ox Claim et. al.) Pennington County, South Dakota

Enclosed is the following material relating to the subject docket:

1. Copy of application for government assistance in exploration work under the DMEA program.
2. Memorandum of Review by W. F. Dietrich USBM.
3. Memorandum of Review by N. E. Nelson USGS.
4. Letter of transmittal of the foregoing to this office dated February 14, 1958, from the Chairman, Operating Committee DMEA.
5. Routing Control sheet.

A Field Examination of the property and a Joint Report of Findings and Recommendation pertaining to the applicant's work proposal are requested.

Please note that both Nelson and Detrich recommend consideration of a trenching and drilling program. We believe you should consider their recommendation.

If the Field Examiners recommend government participation in the proposed exploration program, please submit 11 extra copies of each map used in the Joint Report which show the land to be subordinated and the location and extent of recommended work, relative to property boundaries.

Original signed by
W. H. KING

W. H. King
Executive Officer

HMC:dp
Enclosures
cc: Sec. Oper. Comm.
Docket
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/13	Houk	600
2/14	Martin	130
"	Johnson	110
"	Pattendorf	100
2/18	C	220
		600

600

FEB 14 1958

Mr. William H. King
Executive Officer, DMEA
Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-4926-Mica-Beryl
Blue Ox Mining Company, Inc.
Blue Ox Claim et al.
Pennington County, South Dakota

Dear Mr. King:

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

Copies of memoranda dated January 29 and February 10, 1958, by Mr. N. E. Nelson, USGS, and Mr. W. F. Dietrich, USBM, respectively, relating to the project are enclosed. There are also enclosed two copies of the application for the use of the Field Team.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee (HB)

Approved:

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

Thor H. Kiilsgaard (HB)
Member, Geological Survey

Enclosures 8

LGHouk:gad 2/13/58
Copy to: Admr. R. File
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/13	Houk	600
2/14	Martin	130
2/14	Lamb	130
2/14	Kiilsgaard	0
"	Johnson	110
"	Mittendorf	100
		220

600

FEB 14 1958

Blue Ox Mining Company, Inc.
Box 1925
Rapid City, South Dakota

Re: Docket No. DMEA-4926-Mica-Beryl
Blue Ox Mining Company, Inc.
Blue Ox Claim, et al.
Pennington County, South Dakota

Gentlemen:

Your application for assistance in exploring the subject property has been reviewed by the Division of Nonmetallic Minerals of the Defense Minerals Exploration Administration and has been referred to Mr. William H. King, Executive Officer, DMEA Field Team, Region III, 224 New Customhouse Building, Denver 2, Colorado, 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,

C. O. Mittendorf (for)

Administrator

LGHouk:gad 2/13/58
Copy to: Admr. R. File
Operating Committee
Field Team, Region III
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk

8623

OFFICE FILE COPY
DMEA
RECEIVED FEB 11 1958
CODE
600

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

February 10, 1958

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

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

Subject: DMEA - 4926 (mica)

Applicant: Blue Ox Mining Company, Inc. (John M. Stolley)

Name and Location of Property: Blue Ox Claim et al
Pennington County, South Dakota

Date Application Rec'd. by Br. of Ceramic & Fertilizer Materials: 1/28/58

Comments:

1. The applicant requests assistance in exploring by cross cutting and drifting on 6 possible pegmatites possibly containing strategic mica, etc.

2. There appears to be some justification for some exploration work.

3. Perhaps exploration by diamond drilling would be a more reasonable approach to this prospect; it certainly would not be necessary to institute the entire 7-stage program outlined in the proposal.

4. Costs for work outlined are excessive.

Recommendation:

It is recommended that the field team visit this mine when in that vicinity to ascertain if an exploration project for mica 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

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 30 1958

DATE		
1/30	C	220
2/3	Trust	600

IN REPLY REFER TO:

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

January 29, 1958
Re: 4926
Blue Ox Mining Co.
Blue Ox Group
Pennington Co., S. D.
$798,150.00 - mica, beryl

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 prospecting by crosscutting and drifting six possible "pegmatites or vertical ledge formations containing high quality mica etc."

Probably little if any work has been done on the property, but "a considerable amount of mica and beryl appears on the surface of these claims as float in the proximity of the dikes" Bernard A. Gira. Also work is being done on adjoining properties. The work on the Nickels dike is being done by the Vicker's Feldspar Corporation. Perhaps the mica, beryl, etc. recovered have been by-products of the feldspar mining. Large crystals of beryl have been found in the Ferguson Lode on the southwest of the Blue Ox claims.

The topography as depicted on the section appears to lend itself to the trenching and diamond drilling suggested by the Executive Officer.

Referral of the application to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

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

January 28, 1958

Blue Ox Mining Company, Inc.
Box 1925
Rapid City, South Dakota

Gentlemen:

Subject: DMEA-4926

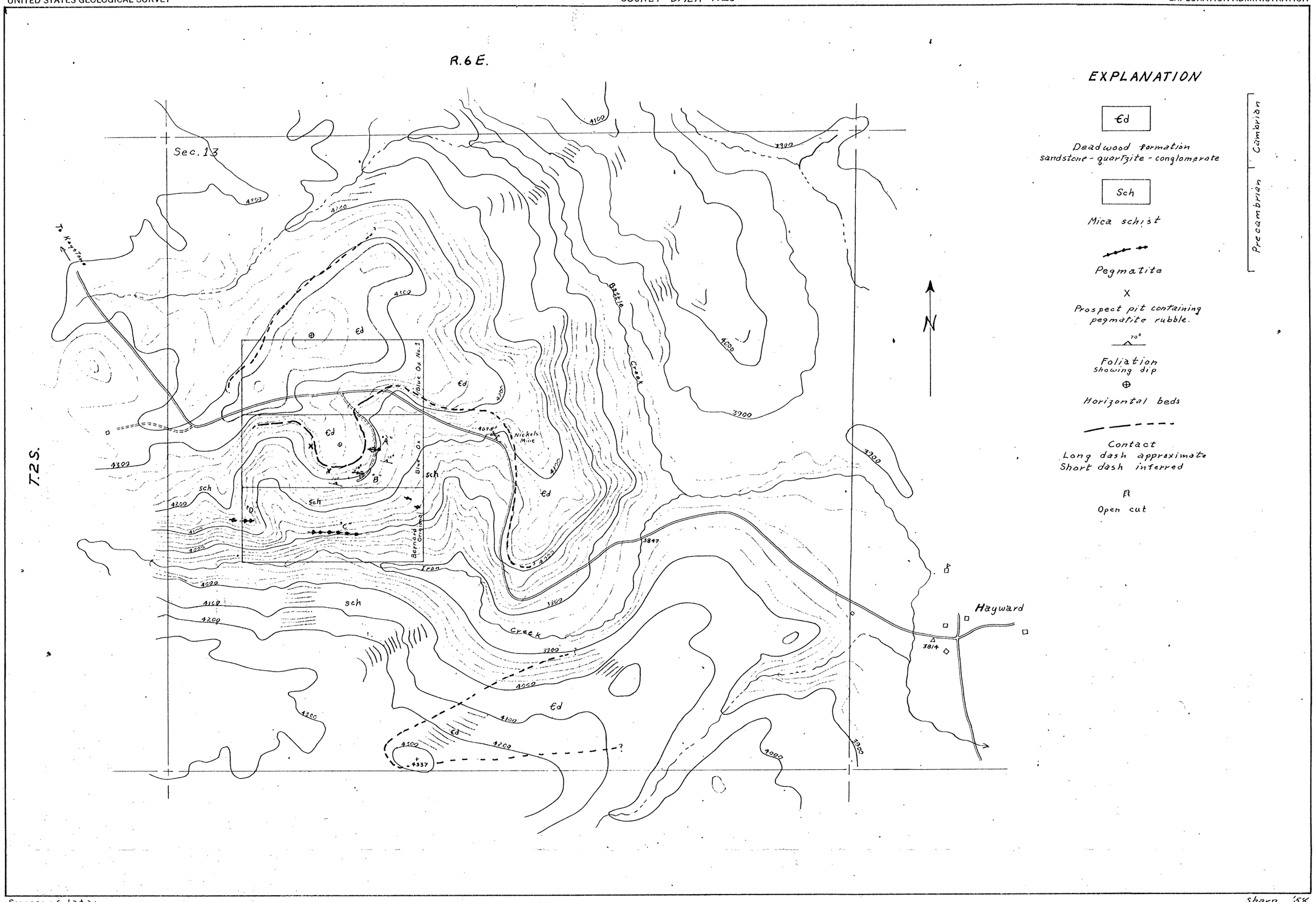
Your application for exploration assistance, dated January 20, 1958 submitted to our office at Denver, Colorado has been assigned Docket Number DMEA-4926 and referred to the Nonmetallic Minerals Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to:

Region III



Source of data:
Reconnaissance mapping and
USGS Atlas Folio 219, 1925

Sharp '58

Fig. 2. GEOLOGIC MAP OF THE BLUE OX MINING CO., INC. PROPERTY AND VICINITY
SEC. 13; T2S, R6E, PENNINGTON CO., S.D. DMEA - 4926

500 250 0 500 1000 1500 feet

Scale : 1 inch = 500 feet
Contour interval 20 feet