IMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 4579

Application (Denied ✓
(~~Withdrawn~~
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

This is the official contract file containing all official records of the project. The records contained in the files are checked and are arranged in this order:

Left Side

Interim Royalty Audits
Reports of Royalty Review
Certification of Discovery
Certificate of Audit (Final)
Interim Audit(s)
Report of Review
Termination Notice or Agreement
Recision Notice
Assignment of Contract
Contract Amendments (latest on top)
Contract with all exhibits and annexes
Owner's Consent to Lien
Subordination Agreement
Leases and assignments of leases
✓Application and attachments
(3) Envelope for maps

Right Side

✓Project summary
Work completed analysis
All other material is filed in chronological order with correspondence including the following reports as checked:

Final Field Team Report (Tab)
Operator's Final Report
(2R) Interim Reports
(2R) Operator's monthly reports and all attachments (latest on top)
✓On-site Exam Report(s) (Tab)
(4) Settlement Sheets

When the volume of records is expected to warrant additional folders, or when convenience of reference warrants separate folders for certain records, they should be set up in this order:

Left Side

Folder No. 2: (In chron. order) Interim Summary Reports by W. O. Engineers

Right Side

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

Folder No. 3: Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

9776

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

RECEIVED DEC 21 1956 D.M.E.A.

224 New Customhouse
Denver 2, Colorado

December 17, 1956

Memorandum

To: J. W. Hasler

From: DMEA Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Delta Mining Company (Texan Claims) San Juan County, Utah

Three copies of the subject application have been received in this office together with your memorandum of transmittal.

Will you please discuss this application with the Bureau of Mines representative at the Grand Junction Office, DMEA and the AEC, and forward nine copies to this office of your joint recommendations concerning the advisability of making a field examination on the subject property.

DMEA Field Team, Region III

Original signed by
W. M. TRAVER

By W. M. Traver
Executive Officer

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

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

225 New Customhouse
Denver 2, Colorado

December 18, 1956

RECEIVED DEC 21 1956 D.M.E.A.

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid (Uranium) Delta Mining Company (Texan Claims) San Juan County, Utah.

Enclosed are the original and one copy of the subject application in the amount of $59,230.20.

The Applicant submitted the application to the Grand Junction Office, DMEA, where one copy was retained, and we are holding one copy in our file.

The Applicant proposes 2,000 feet of rotary drilling, but has submitted no drilling bids.

W. M. Traver

W. M. Traver

Enclosures

DELTA MINING COMPANY

P. O. BOX 1603
CORTEZ, COLORADO

December 13, 1955

RECEIVED
DEC 21 1956
D.M.E.A.

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

Gentlemen:

You will find enclosed Application for Aid in an Exploration Project, Pursuant to DMEA Order 1, Under the Defense Production Act of 1950, as Amended, in quadruplicate, together with accompanying information, as prepared by Delta Mining Company.

Your early consideration of this matter will be greatly appreciated.

Very truly yours,

DELTA MINING COMPANY

Charles T. Voyles

Charles T. Voyles
General Partner

Enc.-Form MF103 (4)
Accompaniments

DMEA
DEPARTMENT OF THE INTERIOR
DEC 17 1956
REGION III
DENVER, COLORADO

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

DMEA
DEPARTMENT OF THE INTERIOR
DEC 17 1956
REGION IV
DENVER, COLORADO

RECEIVED DEC 21 1956 D.M.E.A.

Not to be filled in by applicant

Docket No. 4579
Metal or Mineral Uranium
Date Received 12-21-56
Estimated Cost $59,230.20
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: DELTA MINING CO., a partnership, P. O. Box 895, Cortez, Colorado

Charles T. Voyles, Box 1603, Cortez, Colorado, general partner; E. M. McDowell, 2229 S. Kentucky Ave., Evansville, Ind., general partner; and William Hadley, 2229 S. Kentucky Ave., Evansville, Ind., general partner.

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

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

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

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

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

See Schedule I attached.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Texan claims described in Schedule I owned by Ula Uranium under lease; otherwise owned by Delta Mining Co.

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

(*e*) If you own the land, describe any liens or encumbrances on it None

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

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

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

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

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

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

16—66551-1

Attached.

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

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

(c) The work will start within 10 days and be completed within 8 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

[x] Money [x] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated December 13, 1956

DELTA MINING CO.
(Applicant)

By Charles T Voyles.

General Partner

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

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

Delta Mining Co.
Cortez, Colo.

RECEIVED
DEC 21 1956
D.M.E.A.

SCHEDULE I

ULA URANIUM, INC., a corporation

Unpatented mining claims:

Amended Location Notice Recorded in Book 142 at Page 133, San Juan County, Utah

TEXAN #11
Beginning at a point which is North 62° 11' 43" West from the AEC flag on top of the Chocolate Drop 645.5 feet; thence South 41° 48' West for 204.4 feet to the SW corner of Texan #11; thence North 48° 12' West for 1500 feet to the NW corner of Texan #11; thence North 41° 48' East for 504.4 feet to the NE corner Texan #11; thence South 48° 12' East for 1500 feet to the SE corner Texan #11; thence South 41° 48' West for 300 feet to the point of beginning.

Amended Location Notice Recorded in Book 142 at Page 134, San Juan County, Utah

TEXAN #12
Beginning at a point which is North 62° 11' 43" West from the AEC flag on top of the Chocolate Drop 645.5 feet; thence North 41° 48' East for 300 feet to the NE corner of Texan #12; thence South 48° 12' East for 1500 feet to the SE corner Texan #12; thence South 41° 48' West for 504.4 feet to the SW corner Texan #12; thence North 48° 12' West for 1500 feet to the NW corner Texan #12; thence North 41° 48' East for 204.4 feet to the point of beginning.

Amended Location Notice Recorded in Book 142 at Page 135, San Juan County, Utah

TEXAN #13
Beginning at a point which is South 88° 17' 45" West from the AEC flag on top of the Chocolate Drop 864.5 feet; thence South 41° 48' West for 285.07 feet to the SW corner Texan #13; thence North 48° 12' West for 1500 feet to the NW corner Texan #13; thence North 41° 48' East for 519.49 feet to the NE corner Texan #13; thence South 48° 12' East for 1500 feet to the SE corner Texan #13; thence South 41° 48' West for 234.42 feet to the point of beginning.

Amended Location Notice Recorded in Book 142 at Page 136, San Juan County, Utah

TEXAN #14
Beginning at a point which is South 88° 17' 45" West from the AEC flag on top of the Chocolate Drop 864.5 feet; thence North 41° 48' East for 234.42 feet to the NE corner Texan #14; thence South 48° 12' East for 1500 feet to the SE corner Texan #14; thence South 41° 48' West for 519.49 feet to the SW corner Texan #14; thence North 48° 12' West for 1500 feet to the NW corner Texan #14; thence North 41° 48' East for 285.07 feet to the point of beginning.

NOTE: The above four (4) mining claims are at the present time under lease to Delta Mining Co., a partnership

DELTA MINING CO., a partnership
Unpatented Mining claims:

Amended Location Notice Recorded in Book 142 at Page 137, San Juan County, Utah

AJAX #1
Beginning at a point which is South 19° 13' 31" West from the AEC flag on top of the Chocolate Drop 1391.7 feet; thence South 82° 07' East for 340 feet to the WC to the SE corner Ajax #2; thence 67.23 feet running South 85° 24' East to the SW corner Ajax #1; thence North 4° 36' East for 1500 feet to the NW corner Ajax #1; thence North 84° 38' East for 573.15 feet to the NE corner Ajax #1; thence South 4° 36' East for 1500 feet to the SE corner Ajax #1; thence South 84° 38' West for 573.15 feet to the SW corner Ajax #1; thence North 85° 24' West for 67.23 feet to the WC to the SE corner Ajax #2; thence North 82° 07' East 340 feet to the point of beginning.

Amended Location Notice Recorded in Book 142 at Page 138, San Juan County, Utah

AJAX #2
Beginning at a point which is South 37° 30' 17" West from the AEC flag on top of the Chocolate Drop 1690.7 feet; thence North 85° 24' West for 278.7 feet to the SW corner Ajax #2; thence North 04° 36' East for 1500 feet to the NW corner Ajax #2; thence South 85° 24' East for 578.7 feet to the NE corner Ajax #2; thence South 4° 36' West for 1500 feet to the SE corner Ajax #2; thence North 85° 24' West for 300 feet to the point of beginning.

Amended Location Notice Recorded in Book 142 at Page 139, San Juan County, Utah

AJAX #3
Beginning at a point which is South 59° 41' 29" West from the AEC flag on top of the Chocolate Drop 1736.5 feet; thence South 37° 23' West for 464 feet to the SW corner of Ajax #3; thence North 4°36' East for 1500 feet to the NW corner of Ajax #3; thence South 81° 08' East for 479.43 feet to the NE corner of Ajax #3; thence South 4° 36' East for 1500 feet to the SE corner of Ajax #3; thence North 81° 08' West for 200.37 feet to the SEnd center of Ajax #3; thence North 81° 08' West for 279.06 feet to the SW corner of Ajax #3; thence North 37° 23' East for 464.0 feet to the point of beginning.

Amended Location Notice Recorded in Book 142 at Page 149, San Juan County, Utah

AJAX #13
Beginning at a point which is South 7° 45' 44" West from the AEC flag on top of the Chocolate Drop 2848.9 feet; thence South 4° 22' East for 10 feet to South end Center Ajax #13; thence South 85° 38' West for 300 feet to SW corner Ajax #13; thence North 4°22' West for 1500 feet to NW corner Ajax #13; thence North 85° 38' East for 600 feet to NE corner Ajax #13; thence South 4°22' East for 1500 feet to the SE corner Ajax 13; thence South 85° 38' West for 300 feet to S. end Center; thence North 4° 22' West for 10 feet to point of beginning.

Delta Mining Co. - Unpatented mining claims

Amended Location Notice Recorded in Book 142 at Page 150, San Juan County, Utah

AJAX #14
Beginning at a point which is South 4° 23' 46" East from the AEC flag on top of the Chocolate Drop 2785.3 feet; thence South 4° 22' East for 10 feet to South end Center Ajax #14; thence South 85° 38' West for 300 feet to SW corner Ajax #14; thence North 4° 22' West for 1500 feet to NW corner Ajax #14; thence North 85° 38' East for 600 feet to NE corner Ajax #14; thence South 4° 22' East for 1500 feet to SE corner Ajax #14; thence South 85° 38' West for 300 feet to S. end Center, thence North 4° 22' West for 10 feet to point of beginning.

Amended Location Notice Recorded in Book 142 at Page 151, San Juan County, Utah

AJAX #15
Beginning at a point which is South 16° 44' 34" East from the AEC flag on top of the Chocolate Drop 2806.1 feet; thence South 4° 22' East for 54.4 feet to South end Center Ajax #15; thence South 85° 38' West for 300 feet to SW corner Ajax #15; thence North 4° 22' West for 1500 feet to NW corner Ajax #15; thence North 85° 38' East for 600 feet to NE corner Ajax #15; thence South 4°22' East for 1500 feet to SE corner Ajax #15; thence South 85° 38' West for 300 feet to S. end Center, thence North 4° 22' West for 54.4 feet to point of beginning.

Amended Location Notice Recorded in Book 142 at Page 152, San Juan County, Utah

AJAX #16
Beginning at a point which is South 27° 41' 58" East from the AEC flag on top of the Chocolate Drop 3033.4 feet; thence South 4° 22' East for 10 feet to South end Center Ajax #16; thence South 85° 38' West for 300 feet to SW corner Ajax #16 ; thence North 4° 22' West for 1500 feet to NW corner Ajax #16; thence North 85° 38' East for 600 feet to NE corner Ajax #16; thence South 4° 22' East for 1500 feet to SE corner Ajax #16; thence South 85° 38' West for 300 feet to S. end Center, thence North 4° 22' West for 10 feet to point of beginning.

Amended Location Notice Recorded in Book 142 at Page 153, San Juan County, Utah

AJAX #17
Beginning at a point which is South 27° 33' 03' East from the AEC flag on top of the Chocolate Drop 3051.7 feet; thence North 4° 22' West for 10 feet to North end Center Ajax #17; thence North 85° 38' East for 300 feet to NE corner Ajax #17; thence South 4° 22' E st for 1500 feet to SE corner Ajax #17; thence South 85° 38' West for 600 feet to SW corner Ajax #17; thence North 4° 22' West for 1500 feet to NW corner Ajax #17; thence North 85° 38' East for 300 feet to N. end Center; thence South 4° 22' East for 10 feet to point of beginning.

Amended Location Notice Recorded in Book 142 at Page 154, San Juan County, Utah

AJAX #18
Beginning at a point which is South 16° 28' 32" East from the AEC flag on top of the Chocolate Drop 2867.1 feet; thence North 4° 22' West for 8 feet to North end Center Ajax #18; thence North 85° 38' East for 300 feet to NE corner Ajax #18; thence South 4° 22' East for 1500 feet to SE corner Ajax #18; thence South 85° 38' West for 600 feet to SW corner Ajax #18; thence North 4° 22' West for 1500 feet to NW corner Ajax #18; thence North 85° 38' East for 300 feet to N. end Center; thence South 4° 22' East for 8 feet to point of beginning.

Delta Mining Co. - Unpatented mining claims

Amended Location Notice Recorded in Book 142 at Page 155, San Juan County, Utah	AJAX #19 Beginning at a point which is South 4° 23' 44" East from the AEC flag on top of the Chocolate Drop 2834.2 feet; thence North 4° 22' West for 38.9 feet to North end Center Ajax #19; thence North 85° 38' East for 300 feet to NE corner Ajax #19; thence South 4° 22' East for 1500 feet to SE corner Ajax #19; thence South 85° 38' West for 600 feet to SW corner Ajax #19; thence North 4° 22' West for 1500 feet to NW corner Ajax #19; thence North 85° 38' East for 300 feet to N. end Center; thence South 4° 22' East for 38.9 feet to point of beginning.
Amended Location Notice Recorded in Book 142 at Page 156, San Juan County, Utah	AJAX #20 Beginning at a point which is South 7° 29' 17" West from the AEC flag on top of the Chocolate Drop 2913.7 feet; thence North 4° 22' West for 56.3 feet to North end Center Ajax #20; thence North 85° 38' East for 300 feet to NE corner Ajax #20; thence South 4° 22' East for 1500 feet to SE corner Ajax #20; thence South 85° 38' West for 600 feet to SW corner Ajax #20; thence North 4° 22' West for 1500 feet to NW corner Ajax #20; thence North 85° 38' East for 300 feet to N. end Center; thence South 4° 22' East for 56.3 feet to point of beginning.

Delta Mining Co.
Cortez, Colo.

SCHEDULE II

MINING AGREEMENT

THIS AGREEMENT made and entered into this 11th day of January, 1956, by and between Ula Uranium, Inc. Corporation, authorized to do business in the State of Colorado, whose post office address is Cortez, Colorado, party of the first part, hereinafter called Company, and Delta Mining Co., a partnership authorized to do business in Utah, whose post office address is Cortez, Colorado, party of the second part, hereinafter referred to as Lessee.

WHEREAS, Company owns certain mining claims situate in San Juan County, Utah, which Company and Lessee believe have valuable deposits of ores containing uranium and vanadium and other fissionable materials and minerals, and

WHEREAS, the Company desires to have Lessee mine and recover said ores,

NOW, THEREFORE, in consideration of the premises and the further consideration of the sum of Ten Dollars ($10.00) Cash in hand paid, receipt of which is hereby confessed and acknowledged, the parties hereto agree as follows:

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1. Lessee agrees to construct, build and maintain such tunnels, drifts and other workings as shall be necessary, expedient and proper, to prospect for, develop and mine the premises herein agreed to be mined, and described as follows:

> Those certain 14 mining claims located by Company in San Juan County, Utah in 1954 known and described as Texan No. 1 to Texan No. 14 inclusive. Those claims are not patented.

2. The Lessee agrees to enter upon the property within thirty (30) days from the execution of this agreement and begin exploration work and to cause to be driven such tunnel or other passages through which the ore, if discovered, can be mined and recovered, and the Lessee agrees that as soon as ore is encountered that it will work the property in such manner as to recover the greatest amount of ores. The Lessee shall keep and maintain policy of workmen's compensation insurance, and shall mine and load the ores and cause the same to be delivered to the premises of the buying agents.

3. Lessee shall conduct the mining operations in strict accordance with the applicable regulation of the State of Utah or other legally constituted governmental authority.

4. All ores mined, recovered and sold shall be sold in the name of the Lessee, and Lessee shall be entitled to receive eighty-five (85) percent of the gross sales price and Company shall be paid as rent and royalty fifteen (15) percent of gross sales price. The term "gross sales price" is herein defined to mean the sales price of the ores, including bonus, at the premises of the buying agent, less freight not compensated by government at buying agent. In addition thereto and as a further consideration to the Lessee, Lessee shall receive all of the development allowances

which development allowances shall be expended in the development of said property as required by law.

5. Lessee agrees to work continuously and without delay, weather conditions permitting, and to mine, recover and sell all ore as may be mined with due consideration to working conditions and conditions of the premises being worked.

6. The Lessee is obligated to do and perform all assessment work required by law and file proof thereof by May 15, 1950, and annually thereafter by May 15 each year, and to furnish to Company proof of such filing, by May 15 each year. Lessee further agrees to survey and map said claims, & furnish Company with copies of the same.

7. The Lessee agrees to forever indemnify and save harmless the Company for all work and labor performed on said premises.

8. The term of this agreement shall be for a period of [illegible] years and as long thereafter as the Lessee is mining the leased premises and recovering ore in commercial quantity, provided however, the Lessee may upon thirty (30) days written notice to Company, surrender and terminate this agreement. If the Lessee shall fail or neglect to perform all the duties imposed upon them under this agreement, then in that event on the giving of thirty (30) days notice in writing to the Lessee, the Company shall terminate this agreement unless during said thirty (30) day period the grounds of default shall be removed. It is further agreed the cessation of work for sixty (60) days shall be cause for cancellation.

9. Lessee shall keep the premises in a clean and orderly condition and all drifts and tunnels shall be free and clear of all debris.

10. Lessee upon termination of this agreement shall have the right to remove all equipment and shall have the right to remove any building or improvements placed on said premises during the term of this agreement.

This agreement constitutes the entire agreement between the parties hereto and there is no other agreement, written or oral except as included herein and this agreement may be modified or changed only by instrument in writing.

Executed and by resolution of Directors in a [illegible] Meeting, Jan 16, 56.

Pursuant to authority

Director

Director

Smith's Laboratory

CHEMIST AND ASSAYER

MOAB, UTAH

Delta Mining Co. Samples By P. M. Mosier Dec. 1.
Cortez
Colorado

Dec. 2, 1956

Sample Description	% U_3O_8	% V_2O_5	% Cu	%	%	%			
Copper at 300'	0.021		2.32	1 Ft. Bottom Contact Section C-C					
Xcut 4' from contact	0.083			1 Ft. - 4' Above Contact					
Xcut at Shinarump chunks ore of contact	0.101			1 Ft. Shinarump 1 Ft. Above Contact					
Chunks ore from contact	0.057			1 Ft. Chunks at Contact					
Basal Shinarump	0.074			1 Ft. Chunks Taken Along Contact 10' long East from No. 3 - No. 4					

RECEIVED DEC 27 1956 D.M.E.A.

TOTAL CHARGES $ 16.00 Paid

J. Earl Smith
CHEMIST

DELTA MINING COMPANY

P. O. BOX 1603
CORTEZ, COLORADO

RECEIVED
DEC 21 1956
D.M.E.A.

D.M.E.A. Loan Application, Delta Mining Company

4- Physical Description

(a)

Mining operations consist of driving II30 feet of drift and tunnel in a North Easterly direction, from an outcrop of Shinarump on the West or Red Canyon side of the Chocolate Drop Ridge.

The tunnel was projected in this direction to take advantage of the South West Pitch of the formations and to intersect any Shinarump channels were swinging to the North West. The Main tunnel heading almost Due North, at the face N.I2 East is approximately 850 feet from the portal.

At a distance of 300 feet from the portal a shallow East West dip in the contact, contained a copper impregnation of Calcopyrite with a slight increase in the Radioactive count.

At a distance of 600 feet in the tunnel a stronger dip in the contact and a wider zone in the possible channel occurance, brought a much greater increase in radioactivity, with the best showing of uranium content in the approximate centre of the shallow channel.

Short drifts to the East and to the West failed to bring out any increase in the quality or the quantity of the ore.

Extension of the East drift is highly desirable as greater Chinle cover is to be had in that direction.

The Tunnel was continued ahead of these drifts for 300 feet with no increase in radioactivity but with a greater pitch of the contact with the Moenkopi Shinarump contact at the face being two feet above the track level .The last 50 feet of tunnel showed a great increase in the hardness of the Shinarump with more conglomerate along the contact. Very nice showings of Carbon trash and shale blobs occur thruout.

A drift was started 60 feet back from the face in a N. 70degrees East direction. The Shinarump encountered in this drift was very hard and the hardness increased as the drift continued.

At I00 feet large and small pebbles in increasing amount were found in the basal Two feet of the Shinarump with their presence diminishing upward. The contact of the Shinarump-Moenkopi rose to about the same Elevation as in the main heading, and the last 25 feet of the drift was turned almost due East, to stop the rise in the contact and as thereseemed to be a steepening of the contact in that direction, as tho the drift was alonside of a channels Edge.

Chalcopyrite has become increasingly prevalent in the lower Shinarump contact, and very small sooty spots can be found that show an increase in radiation . Much carbon and clay seams are prevalent

DELTA MINING COMPANY

P. O. BOX 1603
CORTEZ, COLORADO

RECEIVED DEC 21 1956 D.M.E.A.

D.M.E.A. Loan App lication, Delta Mining Company

4- Physical Description

(a)

All this developement has been driven by Delta Mining Co. in 1956, with all expenses paid. Most of the work was under an independent contractor. Sometimes the contractor furnished all materials and supplies and sometimes only the labor. The proposed extensions of the workings will cost 25% more than the ones driven. The work was under the supervision and management of Chrles T. Voyles, who has an interest in Delta Mining.

The entire tunnel and drifts are open to inspection. the tracks are clear and the roof is good, and the tunnel has excellent shape.

(b)

There has been no production from the operation, as all ore that has been found has been below .20 U308.

(c)

The Shinarump crops occuring on the West and the East side of the Chocolate Drop, of which there are many, have the appearance of bein being feeder Shinarump streams, with several showing definite Channel structure tho of small depth.

Slippage of blocks of the overlying Chinle Shales have obscurred the picture of the Shinarump occurences around the rim of the Moenkopi Shinarump contact.

As the large ore bodies of the Happy Jack, The Radium King, the Maybe mine and others in the District, have been found under Chinle covering and in Shinarump Channels of shallow to medium scour, and not under the Wingate, it was felt that the presence of similar conditions here , warranted a try at finding ore bodies by drifting underground and supplementing this work with drilling.

Thus the tunneling and the drifting has shown a continuous bed of Shinarump, and several shallow channels, and a bedding structure indicating a former swamplike area similar to that occuring on the Radium King West side, but of course without having found similar values, but there has been exposed a thich continuous bed of Shinarump which has confused many expert geologists.

(d)

Roads to the property are all weather except for cloudburst damage. The property is reached by taking the White Canyon- Hite road from Blanding, Utah , until the turn off South to Redhouse Springs. This road turns leftaafter passing the natural Bridges road turnoff.

It is 12 Miles to Red House Springs where the Red Canyon road turns N.W. The road follows Red Canyon to the Chocolate Drop.A Road turns right from Red Canyon up over the chocolate drops shoulders, and is the only ingress to Blue and Copper Canyons.

The Mine Camp and tunnel is on this road and cannot be missed. The ore haul to the buying station in White Canyon is 53 miles. Domestic water is hauled from Blanding,Drilling water can be found

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D.M.E.A. Loan Application Delta Mining Co.

4- Physical Description.

(a)

Blanding is the nearest Mine Supply point, and Frye Canyon at Ferreeville furnishes the closest Postoffice and store. Mail is delivered three times weekly by air at Ferreeville. There is an airplane strip within 100 yards of the camp, which is suitable for small planes. This strip has been used many times.

The Mine can also be reached by taking the road from the buying station in White Canyon, up over Blue Notnch and down Hidden Valley to Red Canyon. Then up Red Canyon on a poor road, until just past the Chocolate Drop, where a road turns left.

(e)

Plenty of man power is available, which boards itself. The Materials used in the mine have to be hauled from Blanding or from farther points. Blanding is 70 miles from the property.

Mine and industrial water is available at all times on the East side of the Chocolate Drop, in Blue Canyon. This has to be hauled two or four miles. No Electric power is available in the District.

5--The Exploration Project.

(a)

The project is to explore for uranium thru underground tunnels and drifts.

(b)

The proposed work is as follows.

To drive the main tunnel ahead as per the map 400 feet approx. marked NoI.

To drive the Right hand drift 400 feet, curving to the South East, Marked No.2 on the map.

To drive NorthEast or East along the Channel shown at the 600 Ft. Mark in the tunnel 400 feet, after the other two headings have been driven, and several drill holes spotted along the Channel course.

The work in the two farthest advanced headings to proceed simaltaneously and first.

Three drill holes to be drilled ahead of the 600 Ft. Channel and to the East.

Four drill holes to be drilled to the East of No.2 Drift.

Before any work is done, an accurate survey of the workings, should be ma made with accurate elevations, to any probable drill points. The maps made to date have a transit survey for 650 feet in the tunnel made by John Shepperd Reg. Surveyor. From that point to the drift faces the map is a Brunton survey.

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5--The Exploration Project.

(c) The work will start within 10 Days, and be completed within 8 Months from the date of an exploration contract.

(d)
The Delta Mining Co. is a limited partnership formed by business men who have been interested in Uranium Mining for the past three years. They have easily and quickly raised the money necessary to accomplish the work to date. All bills are paid, and they are very well satisfied with the accomplishments

Charles T. Voyles, has been associated with Uranium Mining for the past two years, and in many successful business enterprises.
He was in charge of the developement that opened up the large ore bodies on Ula Uranium property, that are now being worked by Radium King. This work accomplished under extreme difficulties .

He has been the prime mover in forming Delta Mining Co., and has been in complete charge of all its work.

P.M.Mosier who is the consulting Engineer, has had 49 years mining experience, in all pases of mining and milling of metals. Including 9 years supervising large coal operations. His report on the probability and the occurance of ore Channels on Ula property has been thoroughly proven to be essentially correct, and ahead of the accepted theories.

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D.M.E.A Application- Delta Mining Co.

6- Estimate of Costs

(a) Independent contracts.

I200 feet of drifting, @ $ I5.00 per Ft. Miner to furnish all labor, Drilling Blasting and tramming muck. Company to furnish all supplies. Contractor to service equipment and machines and tools. Company hauls water.	$ I8000.00
Rotary Drilling, 2000 Feet @ $ I.85 per Ft.	3700.00
25 hours of Bulldozing @ $ I4.00 per Hr.	350.00
Total Independent contracts	$ 22050.00

(b) Labor, Supervision, Consultants.

8 Months Supervision @ $ 600.00 per month	4800.00
Consultant Engineering and Geology. @ $ 250.00 per Month	2000.00
Extra Labor, 30 Days @ 2.50 per Hr.	600.00
Total Labor, Supervision, Consultants	$ 7400.00

(c) Operating Supplies and materials.

Powder 230 Boxes @ $ I0.70	$ 246I.00
Fuse, 24,000 Ft. @ $ I.25 per Hundred	300.00
Blasting Caps, 4,320 @ $ 2.25 per hundred	97.20
Gasoline-300 Gal. per Month 2400 Gal. @ 33 cents	792.00
Diesel Fuel-I000 Gal. per Month @ $ .20	I600.00
Mine Rail I6# , 2400 Ft., 6.4 tons @ $ 300.00 per ton	I920.00
Mine Rail Splices, 320 @ $ 9.00 per 26	III.00
Track Bolts I00# @ $ 30.00	30.00
Track Spikes- I00# @ $ I8.00	I8.00
Mine Ties-400@ .50	200.00
600 Blocks for slide Rails 80 Per Month	27.00
4- Mine Switches I6 # Rails @ $ 20.00	80.00
	80.00
Miners Picks with Handles 2 @ $ 3.75	7.50
Spare Handles 2 @ $ I.25	2.50
Sledge Hammer handles 2 @ $ I.00	2.00
Fwd.	$ 7648.20

DELTA MINING COMPANY

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D.M.E.A. Application- Delta Mining Co.

6- Estimate of Costs.

(c) Operating Supplies and materials.Contd.

Brot Fwd.	$ 7648.20
Miners Lamp Carbide 400# @ $ 9.50 /cwt	38.00
I00# 40 Pfg. Nails	I2.00
Three 50 Ft. Lengths I" Air Hose with couplings@$45.00	I35.00
One length of ~~I~~ ½ " water hose and couplings	38.00
Two Inch Pipe I200 Ft. @ .50	6600000
3- 2" Valves @ $ 22.50	37.50
6-2" Unions @ $ 6.00	36.00
6- 2" Tees @ $ 4.00	24.00
6- 2" Plugs @ $ I.00	6.00
6- 2" Reducers @ $ 2.50, 2" -I"	I5.00
6- I" Pipe to Hose Spuds @ $ 3.00	I8.00
Drill Steel 50 Chisel Bit6' Sweede Drill Steel TungstenCarbide	I025.00
Dri Drill Steel 2 " " 8' " " " "	49.00
Drill Bitts-Liddicoat and throw away Hard surfaced 50@ $ I.75	87.50
Resharpening Drill steel ~~@-Idellar-~~ 50 @ $ I.00	50.00
Repairing broken steel I0 @ 2.50	25.00
Oil filters for Compressor 30 Day use @ 5.30 for I6	84.80
Fuel Filters for Compressor 30 day use @ 3.20 for I6	5I.20
Oil and filters for pickup @ $ %.00 per month x 8	40.00
Grease for pickups @ 2.50 per month x 8	20.00
Tires for pickups. 1 sets at $ 40.00 per tire	200.00
Oxygen and Acetylene 4 refills @ $ II.00	44.00
Butane 2-I00# Bottles for 4 Months,I for 4 months	66.00
Forward $	I0348.20

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D.M.E.A. Loan Application, Delta Mining, Co.

6- Estimate of costs

(c) Operating supplies and materials, Contd.

Forward		$ 10398.20
2000 Board feet Of I" Bds., 2 x 4, 2 x 6, 2 x 8, Lumber		200.00
200 Lineal feet of 6 x 6, Timber- 600 Bd. Ft.		60.00
I- Cleveland Model Jackhammer No 55 with telescopic Leg		750.00
Repairs for Jackhammers		
8- Chucks	@ $ 22.50	I80.00
2- Pistons	@ $ 53.00	I06.00
2 Steel Pullers	@ $ 25.00	50.00
2 Tappets	@ $ I5.00	30.00
4- Rifle Bars	@ $ 23.00	92.00
6- Rifle Nuts	@ $ 9.00	54.00
6- Water Needles	@ $ 3.00	I8.00
I- Machine Barrel	@ $ 65.00	65.00
2- Side Rods	@ $ 2.00	4.00
500 Ft. Blowing vent tube 8"	@ .90	450.00
~~Total Operating Supplies~~		$I2407.20
2- Roller Bearing Mine Cars, 200 Cu. Ft.		6I6.00
Total Operating Supplies		$ 13023.20

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D.M.E.A. Loan Application, Delta Mining Company.

6- Estimate of Costs

(d) Operating equipment Owned By Delta Mining Co.	Costs
I- Trotwood Trailer 22 Ft. Modern with Butane heating, lighting cooking and Refrigeration I956 Model A-I shape.	$ 2206.00
I-Leroi Diesel Driven wheel Mounted 365 Cu.Ft. Compressor I956 Model. A-I, shape	I0500.00
I- Dodge Power Wagon I948. For hauling water supplies Etc. Good shape, New motor, spare tire.	800.00
I- Ford Pickup ½ Ton, I955, canvas covered body in excellent shape . Spare tire.	II00.00
I- Eimco Mucking Machine,I2 B. A-I Condition.	3200.00
I- Cleveland Model Jackhammer %%, Telescopic Leg. A-I,Cond.	750.00
I- Air Trammer, S.and M. 250 # Pressure,A-I, Cond.	I400.00
2- New Roller Bearing Mine Cars, 20 Cu. Ft.	6I6.00
I- Mine Blower, 8 Inch Discharge, driven by Wisconsin 3 H.P Air Cooled Gas engine, A-I condition.	675.00
I- Briggs and Stratton Centrifugal Aircooled water pump with 30 Ft. of two inch hose for pumping drilling water.	I40.00
'800Ft. ventilation tubing 8" 300 Ft. Galvanized,	700.00
I- Oxygen and Acetylene Outfit complete with I welding tip and 4 cutting tips.	I25.00
I- Babbel Counter and I000 Ft. reel and probe.	7500.00
I- Bay Mare and Harness, Can be Bred, A-I shape.	60.00
I- Building used by miners, to be used as storage.	200.00
I- I80 Gal Water tank. Galv. Skid Mounted, used for domestic Water supply, With Hose and pipe 300 Ft. to camp.	230.00
I-I40 Gal. water tank Galv.Portable for domestic water haul.	70.50
I000- Ft. 2" pipe and fittings in mine	500.00
I200-Feet mine track I6 # Rails with splices and bolts	2000.00
2- I00# Butane Tanks part full	40.00
I- 25 # Butane Tank	7.50
Fwd.	$ 26070.00

DELTA MINING COMPANY

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D.M.E.A. Loan Application, Delta Mining Co.

6- Estimate of costs

(d) Operating equipment owned by Delta Mining Co. Forward	$26070.00
Small tools and supplies	
2- 50Ft. I" Air Hoses with Gardner Denver Couplings	90.00
I- 50 Ft. Water Hose, ½ inch, and Jack tank with fittings	75.00
Drill Steel 7/8 Hex.	
2- New 6 Ft. Chisel Bit, Tung. Carbide Bitts, Swede steel	40.90
4- Used and shanked to be reshanked	40.00
8-5Ft drill steel for throwaway bitts	40.00
8- 4Ft." " " "	32.00
36 feet-7/8 Oct. with I.R. Couplings for deep holes, 3 Bitts	I03.00
I0 Boxes of 40% Powder	I007.00
I000 Blasting Caps	22.50
I000 Ft. Blasting fuse	I2.50
I- Bay Mare and Harness, Can be bred.	60.00
2- 24" Pipe wrenches	24.00
I- I4" Pipe Wrench	4.75
I-I2" Crescent wrench	4.50
I- Track Wrench	3.50
2- Large Carbide lights	9.00
4- Small carbide lights	9.00
I-8#, I4# hammers	6.00
2- Mine picks	7.50
I- X Cut hand saw	6.00
I- Hack saw and blades	3.75
I- Pipe Cutter for 2" pipe and under	6.00
6- 5 Gal. gas cans Galv. with spouts	I2.00
I- 50 Ft. Air Hose and chuck for putting air in tires	6.75
I- Hose Clamp mender	4.50
3- Pairs of Pliers, one with side cutters.	4.50
3- Screw drivers	2.20
Fwd.	$ 26806.85

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D.M.E.A. Loan Application, Delta Mining Company

6- Estimate of Costs

(d) Operating equipment owned by Delta Mining Co. Small tools and supplies.	Forward $ 26806.85
6- small wrenches	3.00
50# New Track spikes	9.00
20# 40 Pfg. Nails	4.00
40 Blocks for slide rails	I.80
5-I5 Ft. new I6# Mine Rails	78.00
50 # Track Bolts @ .30	I5.00
2- Grease guns @ 3.75	7.50
I- Oxygen Bottle-Full-Small I- Acetylene Bottle-Full- Small	II.00
I- New chuck for Jackhammer	22.50
3- Bars, Spike, Crow bar and slabbing bar	I0.00
Total, Operating Equipment, Small Tools and supplies owned by Delta Mining Co.	$ 26968.65

It is suggested that a use allowance of $ I500.00 per month, be the basis for the use of the above equipment.

$\frac{1500}{12 \text{ months}}$ $\frac{\$18000}{1200'}$ = $10.00/ft

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6- Estimation of costs.

(e) Rehabilitation and repairs.

At the present time all equipment is in excellent shape and does not need repairs. Compressor needs moving to mine mouth,Taken care of in other items.No Building repairs contemplated.

(f)New Buildings improvements, Installations.

A new mine bunk house needs to be built. This should be of the portable type , I2x 24, with a partition and butane for heat and cooking. Four cots and mattresses

Bunkhouse		$ I200.00
Cots		66.00
Mattresses		48.00
	Total	$ I3I4.00

(g) Miscellaneous

Cost of repairs to and maintenance of operating equipment has been taken care of in item(c), as far as past use and requirements can be ascertained.Gas for mining andtrips to town for supplies,tires,machine repairs, etc included in(c). There is a liberal allowance for these. With the same care in future work that has been given this equipment in the past, the allowance should be more than ample .

Analytical work includes assaying, Etc.	$ 75.00
Accounting. $ I00.00 per month	800.00
Workmans compensation on Contractors, and supervisor is carried by the company.	500.00
Employers Liability Insurance Carried In above item	
Payroll deductions on Co.work and on Superviser	I08.00

(h) Contingencies.-

One trip to town per week is necessary to obtain drinking water supplies, and telephone etc. Average trip 400 miles.Meals and Hotel at $30.00 per week $ 960.00

Unforseen and Expenses from Acts of God $I000.00

DELTA MINING COMPANY

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CORTEZ, COLORADO

D.M.E.A. Loan Application- Delta Mining Company.

6- Estimate of costs- Summary.

				1200'
(a)	Independent Contracts.	I200 Ft. Drifting	$ I8000.00	$15.00
	" "	2000Ft. Rotary Drilling	3700.00	—
	" "	25 Hrs. Bulldozing.	350.00	—
(b)	Labor Supervision, Consultants		7400.00	6.17
(c)	Operating Materials and Supplies		I3023.20	10.85
(d)	See seperate sheets $ 26968.65	— rental/purchase		10.00
(e)	No Rehabilitation or repairs at present.	1 Jackhammer $750 2 Mine cars $616		
(f)	New Buildings. Bunkhouse		I3I4.00	1.09
(g)	Miscellaneous		I483.00	1.24
(h)	Contingencies.		I960.00	1.63
	Total Costs.		$ 47230.20	45.98
(d)	Proposed use allowance of Equipment listed in Thattached sheets of $ I500.00 per month		I2000.00	
	Grand Total Cost		$ 59230.20	
Delta Mining Co. Share			$ I4807.55	
D.M.E.A. share			$ 44422.65	

Estimated Cost of Drifting under loan $ 35.9 Per Ft.
A contract can be made with an independent contractor for This amount or a slightly lower price.

The distance from the portal increase the cost of any mine tunnel, approx 25% every thousand feet driven. The above estimated cost will undoubtedly be reduced.

DELTA MINING COMPANY

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DmM.E.A.Loan application,Delta Mining Company.

7.Furnishing share of cost.

(a) We are prepared to furnish our share of the cost of the proposed project, in accordance with the regulations on Government Participation (Sec.7,DMEA No.I)

(b) Delta Mining Company's share of the cost by First a use allowance of $ I500.00 per month and also by making up any difference from the companys money. Delta Mining Company will have ample funds in their treasury to do this .

Delta Mining Co.
Cortez, Colo.

P. M. MOSIER, E. M.

REGISTERED PROFESSIONAL ENGINEER — STATE OF COLORADO

Examinations — Appraisals — Consultation — Management

The Mining Operation of the Delta Mining Co., in Red Canyon, under the Chocolate Drop, San Juan County, Utah, as of December 1st., 1956.

The Property.

The property consists of four unpatented Mining Claims, the Texan No. 11, 12, 13, 14, located by Ula Uranium Co., and leased by Delta Mining with a 15% royalty, and 11 Ajax unpatented Mining Claims, owned by Delta Mining Co. These are the Ajax 1, 2, 3, and 13, 14, 15, 16, 17, 18, 19 and 20. The territory is unsurveyed.

Location.

The claims are located in Red Canyon, White Canyon Mining District, San Juan County, Utah, and cover the hill known as the Chocolate Drop, and the Shinarump crops on the South and West of the Chocolate Drop with extensions covering the Shinarump projections.

They are reached by the road from the head of Red Canyon, past the Blue Lizzard Mine, and turning North from the Canyon onto the road that crosses the Chocolate Drop and the property and which branches out to Blue and Copper Canyons.

There is a 50 mile haul from this property to the buying station at the Happy Jack Mine in White Canyon.

The property can also be reached from the buying station by the road over Blue Notch down Hidden Valley to Red Canyon, and then up Red Canyon on a poor road to the Mine.

Geology.

Prefactory Statements.

The known commercial ore bodies of the White Canyon - Red Canyon area until 1954 were confined to the White Canyon side of the area and the Frye Canyon outcrops of Shinarump. With the exception of the Blue Lizzard Mine and the Posey Mine in upper Red Canyon.

During the Winter of 1953-1954 the A.E.C. drilled Shinarump crops up and over the ridge separating Frye and Red Canyon, and delineated several ore bearing channels in the Shinarump. Until this drilling was

P. M. MOSIER, E. M.

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Delta Mining Co. - Chocolate Drop Mine.

Geology - contd.

done there were no access roads in the area between White and Red Canyon. It was during this time that the road over Blue Notch into Lower Red Canyon was built. The A.E.C. stopped drilling in this area in the Summer of 1954, and their drilling led to the location of thousands of mining claims covering the area from the Frye Canyon Pass to the Happy Jack mine. Claims covering the entire area were filed at Monticello with locations on the ground covering about one-half of the filed acreage.

The A.E.C. roads were extended by Ula Uranium during 1954 and 1955, and drilling in that period found many Shinarump ore bodies and channels. Practically without exception on the S.East side of the Wingate plateaus, between Frye Canyon and the Blue Lizzard Mine.

The cutting of the road over the Chocolate Drop by Ula Uranium in 1954 opened up an access of the vast area Northwest of the Ula-Spook and other producing properties on the S.East side of the Wingate Mesas, with the large ore bodies of the Happy Jack Mine on the N.West end. Even with the greater part of this area having the Shinarump formation eroded by nature, there remained to be seen many outcrops of large Shinarump Channels, some of which were with shallow cover and some of which would take deep and expensive drilling to delineate and trace for commercial ore bodies.

Some superficial drilling has been done in this area where dry hole drilling can be done, but no large drilling campaign has been attempted in any property to my knowledge.

Studies of this area by the A.E.C. and U.S.G.S. has left an unproven picture of the Shinarump Channels curving S.West from the Frye Canyon area to the vicinity of the Blue Lizzard and then curving N.West to the Happy Jack Mine.

This ignores the heavy Shinarump crops and Channels crossing the West side of Red Canyon on which extensive drilling has found but small ore bodies.

The picture of where the Ore Channels of the Radium King, the C.O.G. and other adjacent operations, can be found on the Blue Canyon side of the area has not been painted, and the cost and troubles of wet drilling in this extra dry and primitive section, led to the decision of Delta Mining to take advantage of the gradient of the beds and

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REGISTERED PROFESSIONAL ENGINEER — STATE OF COLORADO

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Delta Mining Co. - Chocolate Drop Mine.

Geology - contd.

drive a tunnel on the Moenkopi-Shinarump contact as cheaply as possible. As the area under the Chocolate Drop seemed to be underlain with Shinarump with many small and possible channels intersecting the area, after drilling four holes and surveying the claims a tunnel was started to intersect possible channels and ascertain the presence of commercial ore.

The work has been very economically handled and has to date shown some low grade ore and one possible ore channel. I believe that more information and more channels will be found with a doubling of the present footage, and that the mine warrants a Govt. mining loan to extend this working.

If the recently advocated theory that the Shinarump channels will be barren under the Wingate Mesas is true, and that the ore in the known developed channels was carried down and precipitated from the leaching of the Chinle formations, then the area under and around the Chocolate Drop should prove to be a fertile field for exploration.

Geology

Practically all of the area covered by the claims of the Delta Mining Company is overlain with Chinle formation. Only a small area at the top of the Chocolate Drop is covered with the Wingate sandstone.

The Shinarump formation, the only known ore bearing formation in this region, outcrops along the greater part of the contact perimeter of the Chinle.

Several outcrops resembling channels, can be seen on the West and on the East side of the Chocolate Drop.

The development work was started, by tunnel on the West side of the property and directed to discover and connection between the East and West Shinarump crops.

The tunnel was started under a Shinarump crop that offered the strength and thickness to hold and was gradually brought up until the Moenkopi-Shinarump contact was carried on the bottom.

At 300 feet from the tunnel entrance, heavy copper mineralization was found above the contact of the Moenkopi and Shinarump. This

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Delta Mining Co. - Chocolate Drop Mine.

Geology - contd.

extended at least 1.5 feet above the contact and for 10 - 12 feet horizontally. The copper consisted of both oxide and sulphide. Samples of the best copper showed 5.20%. With the Uranium content from .03 to .05. I chipped an average sample from this copper occurence that ran .021 U_3O_8 and 2.32 Cu.

Carbon trash and mud seams with standstone similar to that found in operating mines has been continuous throughout the workings. Holes drilled into the roof of the tunnel has shown a thickness of Shinarump above 10 feet.

At 580 feet in the tunnel the contact began to show a downward dip with the maximum somewhere between 600 feet and 620. Thus a length of 60 feet can be imagined as a shallow channel. The count came up and nearly approached commercial grade. Samples taken from the best count ran chemically .18 U_3O_8.

The direction of this scour is almost East - West, and I believe that this channel outcrops about 500 feet West of the portal where the road at that point shows a channel-like outcrop of Shinarump.

The presence of hematite in a banded structure with coarse sandstone and carbon trash has evidently acted as a precipitant of larger amount of Uranium minerals.

Drifts were turned off the tunnel on this channel both East and West, and a considerable number of samples taken and ran chemically to check the balance with the counter findings. There was little difference in the two; a very good balance was found.

While the best continuity of values was found just above the contact, the highest grade sample was taken about 4 feet above the contact on the West side of the drift wall. Cut samples from this point have run as high as .18. A sample I cut one foot thick ran .083 U_3O_8. Samples from the East Drift ran .101, .057, .074 U_3O_8. See sketch.

From the X cuts at the Channel, the tunnel continues North 12 degrees East until it intersects The Texan No. 13 claim. The pitch of the contact steepened until at the face the contact is 2 feet above the track. The Shinarump is full of carbon trash and some pebbles can be seen. The last 50 feet of the drift is very hard but has very

P. M. MOSIER, E. M.
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Delta Mining Co. - Chocolate Drop Mine.

Geology - contd.

count. The East-West strike of the fact contact is almost level. An 8 ft. hole was drilled in the roof of the tunnel to test the thickness of the Shinarump, and it was entirely in the formation.

60 feet back from this tunnel face a drift was started to the right at a course of North 70 degrees East. This drift was at the time of writing driven 110 feet with the Moenkopi-Shinarump contact about 2 feet above the track. The contact has a definite dip to the right at the face, and the drift has now been turned to the East to test the possibility that this eastward dip will lead to an ore channel. Possibly the channel exposed at the 600-foot mark of the tunnel.

The last 50 feet of this drift has been extremely hard Shinarump, and only tungsten carbide bits have drilled it satisfactorily. From one to two feet of hard quartz and chert pebbles have overlain the contact with hard coarse sandstone above. Thin layers of shale and vegetable trash are in all parts of the Shinarump exposed with copper sulphides. Small sooty spots appear in the Shinarump that show a great increase in Uranium on the counter. The downward dip and the great increase in quartz pebbles could lead to the surmise that there was a channel bend somewhere on the right of the drift. Eight feet of Shinarump is shown by a hole drilled in the roof of the drift.

Recommendations.

The findings and the development of the sub-surface Shinarump structure has been so successful that I cannot help but recommend a continuation of the present method with possibly a few shallow drill holes behind apparent channels and a doubling of the present footage.

My experience on Ula, Mineral Mining, in the Grants District and others with drilling for Shinarump channels, is that is so expensive and so erratic that only underground development can substantiate the possible ore values. Should ore bodies of commercial grade be found in any of the channels, the plant as set up can be used to cheaply extract the ore.

The information found by the continuing of the tunnels under the thicker Chinle, along the channel cut, or along others, should prove

P. M. MOSIER, E. M.

REGISTERED PROFESSIONAL ENGINEER — STATE OF COLORADO

Examinations — Appraisals — Consultation — Management

Delta Mining Co. - Chocolate Drop Mine.

Recommendations - contd.

to be a valuable contribution to the future development of the District. Therefore, I recommend that a DMEA loan be sought for a continuance of the work, as I know of no comparable undertaking where so much work has been accomplished with such a low unit cost.

Summary.

Very little additional equipment will be necessary to drive the one thousand feet of development recommended.

The method of drifting now in use where the company furnishes the supplies, and the contractor the labor, has worked to the satisfaction of both parties. It should be continued, and on the same conditions as now used. With a few modifications in the equipment a rate of progress of 160 feet a month can be expected. While a speed-up in this rate of footage can be had, any increase will add to the unit cost.

The low cost of this present operation has been largely due to the use of good mining practice and the energy and ability of the man in charge, Mr. Charles Voyles.

Signed, Dec. 1st, 1956.
P. M. Mosier, Reg. Engr. No. 2270 State of Colo.

P. M. Mosier

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/6	[illegible]	100
6/7	[illegible]	220
		225

JUN - 7 1957

Hon. Winfield K. Denton
House of Representatives
Washington, D. C.

Re: Docket No. DMEA-4579 (Uranium)
Delta Mining Company
Texan and Ajax Groups
San Juan County, Utah

Dear Mr. Denton:

I wish to thank you for your letter of May 29 and the enclosed copies of letters from Mr. Ole J. Olsen and Mr. Charles T. Voyles, dated May 24 and 27, 1957, respectively, which relate to the above-referenced application. I regret exceedingly that neither Mr. Ellis nor I had a full understanding of Mr. Olsen's connection with this case at the time of our discussions with you on May 27. We were both under the impression that the constituent referred to in your discussions was in no way directly connected with the applicant, but was seeking information as to the final disposition of this case for his personal gain. Had we known the facts as we know them now, I assure you that we would not have "hedged" in informing you that we had actually denied the request for financial assistance on May 13, 1957.

On May 29, Mr. Callaway, of your office, again phoned to say he had received another letter which would give us a clear understanding of the identity of the persons making the inquiries through your good office. He then read me excerpts from Mr. Voyles' letter of May 27. At this point I had no hesitancy whatsoever in telling Mr. Callaway that the application had been denied and that a notice setting forth our decision was mailed to Mr. Voyles at Box 895, Cortez, Colorado.

As I recall, I again told Mr. Callaway that it is our policy to make regular announcements, through the medium of press releases, giving the identity and location of all contract recipients, together with the amount of financial assistance which the Government has committed for the individual project. We do not reveal the identity of those who have been denied assistance. This policy is consistent with that followed by the Small Business Administration and other Government lending agencies, such as the old Reconstruction Finance Corporation.

8623

Mr. Galloway obviously phoned Evansville, Indiana, shortly after the conclusion of our discussion, because in a very short time Mr. Olsen phoned me direct. I read to him the contents of our letter of denial of May 13, and he had it recorded by his secretary. He asked me several questions about the operations of DMEA and whether we personally examine the properties which are the subject of a request for financial assistance. I explained our working relations with the U. S. Geological Survey and the U. S. Bureau of Mines. Our conversation was conducted on a very pleasant and cordial basis, and Mr. Olsen expressed his intention of calling on me personally on his next visit to Washington.

With regard to your question as to what deficiencies may have been found in Mr. Waylen's application, or other factors which led to our decision to deny the application, I can say that the principal reason was that geological factors indicated that the property was unfavorable for deposition of significant deposits of uranium ore. Uranium ore in the Skimmerup formation is found in sour channels cut into the Moenkopi formation. Although the subject property has been explored by about 1200 feet of drift and several drill holes, no indication of a sour channel is evident except in one place. The deposit formed in this minor sour is too small and too low-grade to be mined economically. The extensive outcrops of the thin blanket-like Skimmerup formation occurring on the property show no evidence of channels or other structures on which an exploration program could be based.

I trust that the above gives you the information you desire. Again I wish to assure you that my reluctance in divulging the information requested by your office on May 27 was due entirely to the obscurity of the identity of the inquiring constituent and his relationship to the application.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

COMittendorf/fw/esf
6/6/57
cc to: Docket
Admr. R. File
FT, REG. III
Mr. Mittendorf

WINFIELD K. DENTON
EIGHTH DISTRICT OF INDIANA
WASHINGTON ADDRESS
1217 HOUSE OFFICE BUILDING
INDIANA ADDRESS
222 COURT BUILDING
EVANSVILLE

Congress of the United States
House of Representatives
Washington, D. C.

COMMITTEE:
APPROPRIATIONS

SECRETARIES:
MARY P. VERKOUTEREN
EVA MAUZY
CHARLES C. CALLAWAY
ELAINE JONES
VAL A. DIETSCH
FRANCES LUCKETT
ALLEN NUTTING

OFFICE FILE COPY
DMEA
RECEIVED MAY 31 1957

DATE	INITIALS	CODE
5/31	C	220
	Murphy	700
	Ellis	700
		100
		225

May 29, 1957

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

Ref: DMEA file 4579

Dear Mr. Mittendorf:

I am enclosing for your reference Thermofax copies of a letter to me from Mr. Ole J. Olsen, Attorney at Law, Evansville, Indiana, under date of May 24, 1957, and of a letter to me from Mr. Charles T. Voyles, who states he is managing partner in the Delta Mining Company, under date of May 27, 1957.

The matters set out in these letters were the subject of inquiries by me and by my secretary to you and to Mr. Ellis, of your office, in telephone conversations on May 29 and today, when I sought to obtain information for Mr. Olsen and Mr. Voyles as to whether the company represented by them would be granted financial aid by your agency upon an application which was submitted some five months ago.

As I understand, you stated to my secretary today that this application has been denied, and that Mr. Voyles was so notified by your office on May 13, by letter addressed to him at Delta Mining Company, P. O. Box 895, Cortez, Colorado. Mr. Olsen and Mr. Voyles state that this letter was never received.

While I have mentioned to Mr. Olsen your suggestion that they communicate directly with you to arrange to receive the notice and information contained in that letter, I would appreciate it if you would confirm by letter to me what has been said in our telephone conversations. Also, I should like very much to have any information which you can supply as to what deficiencies may have been found in Mr. Voyles' application or as to the factors which resulted in your agency's unfavorable determination on it, in order that I may make adequate reply to the request of my constituents.

I remain unable to understand the reasons or statutory authority for the extreme reluctance you have shown about discussing with me any of the aspects of this matter. A question involving the use or non-use of public funds is involved; both you and I are public officials; and, in my case, I owe responsibility to the public in general and to my constituents as individuals, whose legitimate needs I must attempt to serve.

Yours very truly,

WINFIELD K. DENTON, M. C.

WKD:cc

See memorandum, Mary 27 and 29, 1957, re telephone conversations

[illegible]

[illegible]

[illegible]

LAW OFFICES OF
OLSEN AND NIEDERHAUS
18 PARK PLACE
EVANSVILLE, INDIANA
HARRISON 3-3143

OLE J. OLSEN
CLARENCE E. NIEDERHAUS

May 21, 1947

Winfield K. Denton
1217 House Office Building
Washington, D. C.

Re: Delta Mining Company
San Juan County, Utah

Dear Winfield:

A group of Evansville [illegible] formed a partnership [illegible] the Delta Mining Company with an office at Cortez, Colorado. The company's mailing address is P. O. Box [illegible], Cortez, Colorado. They are engaged in [illegible] cate and operate a uranium mine. At the present time, they are driving a tunnel on their property in San Juan County, Utah. [illegible] tunnel has been driven approximately [illegible] Cortez. [illegible] Cortez, Colorado, filed with the A. E. C. an application for a D. M. E. A. loan. Said application was filed at the A. E. C. office at Grand Junction, Colorado. It is my understanding that the government makes loans to persons engaged in the mining of defense minerals and that [illegible] so [illegible]. This loan has been pending for approximately five (5) months. During this interim, mining has continued. All of the general partners have been to the mine and are personally acquainted with the property.

I have been requested by this group to ask if you could assist them by obtaining the following information:

1. The present whereabouts of their application.

2. If there is any additional information needed by the A. E. C.

3. If there is anything incorrect about their application.

Of course, their request is predicated upon the facts being as represented. Most of the partners in this venture are Evansville businessmen and they will appreciate your efforts in their behalf.

Thanking you for the courtesy I know you will show us in this matter, I am

Very sincerely yours,

Ole

Ole J. Olsen

OJO/ls

Diary Wednesday, May 29, 1957

Callaway, of Congressman Denton's office (Indiana), phoned again this morning to discuss DMEA-4579, Delta Mining Co. He referred to the phone conversations which Ellis and I had with the Congressman last Monday and which I very well recalled.

Following those earlier conversations, in which Ellis and I declined to tell Denton we had denied the application, Denton must have phoned to his constituent who was requesting the information. This morning, another letter was received, which gave Callaway a better understanding of the case, especially as to the identity of those with whom he was dealing. The letter was from Charles T. Voyles, the applicant in the case and the person to whom we addressed our denial letter. In this letter Boyles appointed the Congressman attorney-in-fact, to act in his behalf to ascertain what action DMEA had taken on his application. The letter was mailed from Evansville, Indiana.

I told Callaway we had mailed our letter to Voyles at Box 895, Cortez, on May 13, 1957. He said the Post Office box which he has is 1603, instead of 895. I didn't feel that that difference alone would be responsible for the letter not reaching Mr. Voyles' box, because in small towns such as Cortez few people have boxes anyway.

I offered to send a copy of the letter by registered mail to Voyles at Evansville, Indiana, in care of Olis J. Olsen, the attorney who made the first inquiry which led to our conversations of last Monday. Callaway said Voyles, in appointing the Congressman attorney-in-fact, had requested him to ascertain the facts and phone him back collect. In the circumstances, I felt that I was justified in telling him the application was denied.

Obviously, Callaway phoned Voyles immediately, because in a very short time I received a long distance call from Attorney Olsen. He said they were having a stockholders' meeting in his office this afternoon and it was highly important that he know the contents of our letter of May 13. He said Voyles had left Cortez some days ago and the letter apparently was waiting there for him but time did not permit getting it forwarded to Evansville in time for the meeting.

I therefore read the contents of our letter of May 13 to Olsen and he had it taken down by his secretary.

He did not challenge the action we took; however, he did ask a few questions as to how DMEA works, and he wondered if we have our own mineralogist who looks over these properties. I told him how we utilize members of Survey and the Bureau, and also how we confer with AEC. I also explained the extent of our review here in Washington. He said he didn't know anything about mining and that most of his experience had been in oil. He said the ~~his~~ stockholders are all businessmen from Evansville, Indiana, and they were meeting this afternoon to decide whether to put any more money into the project.

See [illegible] May 29

Excerpt from Mr. Mittendorf's diary, May 27, 1957:

Ellis came in this morning to report a telephone conversation he had just had with Congressman Denton, of Indiana. It was about docket DMEA-4579, Delta Mining Co., Cortez, Colorado, which was denied on May 13, 1957.

Denton wanted to know what final disposition we took on the case. Of course, Ellis hedged because it is not our policy to reveal the identity of our denials. Apparently Denton gave Ellis a pretty hard time and insisted that I phone him. Ellis told me that Denton was waiting in his office to receive my call.

I stuck by Ellis in my conversation with Denton. He thought it strange that a Congressman would be denied information which should be of a public nature. I explained that in those cases where we commit taxpayers' money we do consider it in the public interest and we make periodic press releases giving out the information. I explained fully why we do not reveal the identity of applicants which have been denied and told him our policy is consistent with the policy of SBA, RFC, and other Government lending institutions.

He then asked me if we would have released the information, either in Washington or from Denver, if this application had been approved. I told him we would have. He said then he could make the deduction that the application was denied. I told him he could make whatever deduction he wished.

Apparently this is a case where a constituent of Denton's is considering buying into the property and he knows that an application has been filed with DMEA but does not know what action was taken on it. We told Denton he could get the information from the applicant, but the Congressman thought the applicant would not tell him the truth.

Docket

May 10, 1957

Summary of Proposed Project

Murphy
Ellis

Object: Denial of application for exploration aid.

Docket No.: DMEA-4579

Commodity: Uranium

Applicant: Delta Mining Company
P. O. Box 895
Cortez, Colorado

Property: Lessee of 15 claims (Texan and Ajax groups) situated in secs. 35 and 36, T. 36 S., R. 14 E., and in secs. 1 and 2, T. 37 S., R. 14 E., S.L.B.M., San Juan County, Utah.

Date of Application: December 13, 1956

Amount of Application: $59,230.20

Referred to Reg. 3: January 23, 1957

Field Examination made: March 12, 1957

F.T. Report received: April 29, 1957

Work Proposed:

Three ~~400~~ 400 foot drifts and 2,000 feet of rotary drilling.

Estimated Cost of Project:

1,200 ft. drifting	$18,000.00
2,000 ft. rotary drilling	3,700.00
25 hrs. bulldozing	350.00
Labor, supervision, consultants	7,400.00
Supplies	13,023.20
Depreciation Operator's equipment	10,634.00
Purchase 1 Jackhammer & 2 cars	1,366.00
New Buildings	1,314.00
Miscellaneous	1,483.00
Contingencies	1,960.00
TOTAL	$59,230.20

Excerpts from Field Team Report:

The claims are on the north side of Red Canyon. The northernmost claims are in the middle and upper strata of the Cinle formation that forms a prominent topographic feature called the Chocolate Drop. The southern part of the claims are on the Quaternary Talus breccia derived principally from sandstones of the Triassic Wingate and Jurassic formations.

The Applicant has explored the claims with about 1,100 feet of drift and several non-core drill holes. The drilling showed no mineralization but penetrated Shinarump sandstone that ranged in thickness from about 6 to 18 feet. The underground drifts along the Shinarump-Moenkopi contact showed scouring in only one place. A small deposit, 50 feet long, 10 to 15 feet wide, and 2 feet thick is reported to average 0.12% U_3O_8. The deposit could not be mined economically.

On the basis of the thin, blanket-like character of the Shinarump member which is exposed over a wide area, and upon the absence of apparent scours at the base of the member, the area in the vicinity of the claims is classed as generally unfavorable for ore. There are no known ore deposits in theimmediate area.

The nearest ore deposits are the Blue Lizard, Markey, and Posey deposits about 5 miles southeast. The Markey channel is now being drilled under DMEA-4392. Production from these deposits total about 25,000 tons, However, theShinarump in the subject area is less than half that on or near the Blue Lizard property.

The field examiners conclude that there is little possibility that a significant amount of ore-grade material will be found on the subject claims and therefore recommended denial of the application. The Field Team concurred.

Commodity Member's Comments:

USBM, James Paone, May 2, 1957:

Mr. Paone concurs in the Field Team's recommendation.

USGS, N. E. Nelson, May 7, 1957:

Mr. Nelson notes that the previous work on the property has failed to find a minable ore deposit, and that in the extensive Shinarump outcrop in the immediate area no indications of a significant scour channel exist. He agrees with the conclusions of the field examiners and therefore concurs in the Field Team's recommendation.

Rare & Miscellaneous Metals Div., F. M. Murphy, May 10, 1957:

Extensive outcrops of Shinarump occur on the property and in adjacent areas. The field examiners could find no evidence of a significant scour channel along the outcrops or in the mine workings, moreover, none of the drilling indicated possible scour channels. In view of the above, it appears that the Applicant's proposed project is based on hope rather than favorable geologic evidence of possible ore occurrences.

Conclusion and Recommendations:

This Division agrees with the conclusions of the field examiners in regard to the possibilities of the subject claim group, and therefore concurs in the Field Team's recommendation to deny application DMEA-4579.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/13	Murphy	700
5/13	Ellis	700
5/13	Lindsay	130
	Lamb	
	Kilsgaard	
5/13	[illegible]	110
"	Mittendorf	100
		220

MAY 13 1957

Mr. Charles T. Voyles, General Partner
Delta Mining Company
Post Office Box 895
Cortez, Colorado

Re: Docket No. DMEA-4579 (Uranium)
Texan and Ajax Groups
San Juan County, Utah

Dear Mr. Voyles:

Your application for aid in an exploration project and other information available to us in Washington concerning your above-named 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, although noting some uranium mineralization on your property, indicates that the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation. We regret to advise you that, under these circumstances, your application for exploration assistance is denied.

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

Sincerely yours,

C. O. Mittendorf (for)

Administrator

FMMurphy/izm 5-13-57
cc to: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
DMEA FT Reg. 3 (2)

8623

IN REPLY REFER TO:

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

May 7, 1957

Re: DMEA 4579
Delta Mining Co.,
Texan and Ajax Groups
San Juan Co., Utah
$59,233.20 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of Field Team Report.

The applicant requested assistance in exploring by drifting and rotary drilling a property consisting of 15 unpatented claims. The applicant has done 1100 feet of drifting and drilled several non-core holes without finding more than a small area of low grade mineralization in what is taken to be a shallow scour in the Moenkopi beds at the Shimarump-Moenkopi contact.

Apparently the contact has been well prospected without finding, on the property, any indication of another scour. The Shinarump member is thin and blanket-like and the absence of pronounced scours suggests to the examiners and the Field Team that the chances of finding significant deposits of uranium ore are poor. The results of the work done sustain the inference and justify their recommendation of denial of the application.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

FILE COPY
DMEA
RECEIVED MAY 8 1957

DATE	INITIALS	CODE
5/8	C	220
5/9	Murphy	700

Complete

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DMEA
RECEIVED MAY 3 1957

DATE	INITIALS	CODE
5/3	C	220
"	Murphy	700

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

Date May 2, 1957

DMEA Docket No. 4579
DMEA Contract No.
Commodity Uranium
Name of applicant Delta Mining Co.
Name of property Texan and Ajax Groups
Location of property San Juan County, Utah
Estimated cost of project $59,233.20

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: James Paone, Bureau of Mines Alternate Member
Uranium Commodity Committee

Subject: Review of Joint report of examination
(Application, Field Exam Report, etc.)

1. Date of subject document: 4/24/57. 2. Date received by reviewer: 5/2/57

3. Prior reports on this property known to reviewer: Yes ☐ No ☐

4. Prior reports on nearby properties known to reviewer: Yes ☐ No ☐

5. Information available on past production: Yes ☐ No ☐

6. Other pertinent factors known to reviewer: Yes ☐ No ☐

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 ☒
   d. Agree with Field Team ☒
      1. Consult with Mr. _____ at _____ AEC office.
   e. Disagree with Field Team ☐
   f. Suggest alternate plan ☐
   g. Request another examination ☐
   h. Approval ☐

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

April 24, 1957

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DMEA
RECEIVED APR 29 1957

DATE	INITIALS	CODE
4/29	C	220
		130
5/3	C	220
	Murphy	700

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 4579 (Uranium) Delta Mining Company (Texan and Ajax Groups) San Juan County, Utah

Enclosed are the original and three copies of the Joint Report of Examination on the subject property by W. W. Winkle, USBM, and D. P. Elston, USGS.

The field examiners conclude that the probability for making a significant discovery is not sufficiently promising to justify Government participation. Accordingly, they recommend that the applicant's work program be denied to which the Field Team concurs.

E. N. Harshman

By E. N. Harshman
Acting Executive Officer

Enclosures

ON-SITE EXAM

Reviewed by
DMEA OPERATING COMMITTEE
5-3-57
(date)

IN REPLY REFER TO:

DMEA
RECEIVED
APR 22 1957
U.S.
GEOLOGICAL SURVEY
DENVER, COLORADO

DMEA
DEPARTMENT OF THE INTERIOR
APR 22 1957
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 360
Grand Junction, Colorado

April 18, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED
APR 29 1957

DATE	INITIALS	CODE
	JHack	1302
		220

Memorandum

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

Through: E. N. Harshman
J. F. Shaw

From: J. William Hasler

Subject: Joint engineering and geologic report, DMEA 4579 (Uranium) Delta Mining Company, Texan and Ajax claim groups, San Juan County, Utah.

The Delta Mining Company, P. O. Box 895, Cortez, Colorado, applied for assistance to explore for uranium by drifting and diamond drilling on the Texas and Ajax claim groups, San Juan County, Utah. The application was referred to the field and an examination was made on March 12, 1957 by D. P. Elston, U. S. Geological Survey and W. W. Winkle, U. S. Bureau of Mines. Mr. Charles T. Voyles, general partner in the Delta Mining Company, accompanied the examining team; and the Atomic Energy Commission's geologist in the White Canyon district was consulted relative to the appraisal of the property.

The property includes 15 unpatented claims located on the north side of Red Canyon. The northernmost claims are in the middle and upper strata of the Chinle formation that forms a prominent topographic feature called the Chocolate Drop. The southern part of the claims are on the Quaternary talus breccia derived principally from sandstones of the Triassic Wingate and Jurassic formations.

The company has explored the claims with about 1100 feet of drift in several non-core drill holes. The drilling showed no mineralization but penetrated Shinarump sandstone that ranged in thickness from about 6 to 18 feet. The underground work drifted along the contact of the Shinarump member of the Chinle formation and the underlying Moenkopi formation. In only one place was there such scouring; however, a small deposit of no-pay ore was localized in this scour.

The Shinarump member on the property is thin but thickens considerably northeast of the subject claims. There appears to be scouring north of the claims, but on the applicant's property the scour is small and poorly defined and it is unlikely the scour is actually a channel; if so, there might be a significant amount of ore discovered. The thin, blanket-like character of the Shinarump in the vicinity of the property and the absence of

Reviewed by
DMEA OPERATING COMMITTEE
5-3-57
(date)

TRANSMITTED
APR 24 1957

appreciable scours suggests that the chances of finding significant deposits of uranium ore are poor. It is, therefore, recommended that the application for DMEA assistance on the Texan and Ajax claim groups be denied.

Enclosed are 12 copies of the report recommending denial and the accompanying figures. Enclosed also is the applicant's brochure.

I concur with the conclusions and recommendations of the examining team.

J. William Hasler

J. William Hasler,
Geologist

JWH/mlr

Enclosures

FOR UNITED STATES GOVERNMENT USE ONLY

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DMEA
RECEIVED APR 29 1957

DATE	INITIALS	CODE
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UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON° SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

TRANSMITTED
APR 24 1957

DMEA 4579

Delta Mining Company

Texan and Ajax claim groups

San Juan County, Utah

Uranium

Joint Engineering and Geologic Report

by

D. P. Elston
U. S. Geological Survey

W. W. Winkle
U. S. Bureau of Mines

April 1957

Reviewed by
DMEA OPERATING COMMITTEE
5-3-57
(date)

DMEA 4579
DELTA MINING COMPANY
TEXAN AND AJAX CLAIM GROUPS
SAN JUAN COUNTY, UTAH

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Applicant's proposed exploration program	10
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Conclusions and Recommendations	11

ILLUSTRATIONS

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DMEA
RECEIVED APR 29 1957

DATE	INITIALS	CODE

DMEA 4579
Delta Mining Company
Texan and Ajax claim groups
San Juan County, Utah

INTRODUCTION AND SUMMARY

On December 13, 1956 the Delta Mining Company, P. O. Box 895, Cortez, Colorado, applied for DMEA assistance for exploration drifting and drilling on the Texan and Ajax claim groups, San Juan County, Utah. The claims are in unsurveyed sections 35 and 36, T. 36 S., R. 14 E., and sections 1 and 2, T. 37 S., R. 14 E., S.L.M.

The applicant proposes 1200 feet of drifting and 2000 feet of rotary drilling in an unspecified number of holes in the Shinarump member of the Chinle formation of Triassic age. The estimated overall cost of the program is $59,233.20 with Government participation at 75 percent totaling $44,422.65.

The application, DMEA 4579, was referred to the field and an examination was made on March 12, 1957. The examining team, consisting of D. P. Elston, U. S. Geological Survey, and W. W. Winkle, U. S. Bureau of Mines, was accompanied by Mr. Charles T. Voyles, general partner for the Delta Mining Company.

Property included in the proposed project consists of fifteen unpatented lode mining claims on the north side of Red Canyon, approximately 10 airline miles southeast of the junction of Red Canyon and the Colorado River. The claims are accessible by motor vehicle, and are about 6 road miles west of the Blue Lizard, Posy, and Markey properties. The northernmost claims are on

middle and upper strata of the Chinle formation that forms a prominent topographic feature called the Chocolate Drop. The southern part of the claims are on Quaternary talus breccia derived principally from sandstones of the Triassic Wingate and Jurassic(?) Kayenta formations.

Exploration on the claims to date consists of about 1,100 feet of exploration drifting and several non-core drill holes. The drill holes were barren of uranium minerals, but penetrated sandstone of the Shinarump member that ranged in thickness from 6 to 18 feet. The drifting followed the contact of the Shinarump member with the underlying Moenkopi formation of Triassic age. Throughout most of the drifts, the contact is very even and at only one place was there a very gentle scour. The scour is about 60 feet wide and has a maximum depth of about 3 feet. A small non-commercial deposit of uranium minerals, is localized in this scour.

The Shinarump member on outcrop is thin, commonly about 6 feet thick. However, a local thickening of the Shinarump member, several thousand feet northeast of the claims, was observed on outcrop. Here, the Shinarump member is about 25 feet thick but apparent scour depth at the base is not more than 7 feet and may be less than 5 feet. The apparent scour trend is about due west and, if extended in this direction would be about 1,500 feet north of the northernmost heading of the mining operations and generally off of the claims. The width of the main thickening on outcrop is about 75 feet. The apparent scour is small and poorly defined and although anomolous radioactivity was detected here in shallow holes drilled by Mr. Voyles, it is

unlikely that this scour, if actually a channel, would contain a significant ore deposit.

The thin, blanket-like character of the Shinarump member in the general area and the absence of appreciable scours suggests that the chance for finding significant deposits of ore are poor. It is therefore recommended that this application for DMEA assistance for exploration be denied.

ACKNOWLEDGMENTS

Mr. Robert J. Cronk, geologist, U. S. Atomic Energy Commission, was consulted relative to the appraisal of the property. The ore reserve section of the Atomic Energy Commission was consulted for production and ore reserve data for the property.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Texan and Ajax claim groups are located in unsurveyed sections 35 and 36, T. 36 S., R. 14 E., and secs. 1 and 2, T. 37 S., R. 14 E., S.L.M., San Juan County, Utah (fig. 1). The claims are on the north side of the eastern part of Red Canyon and are about 10 airline miles southeast of the junction of Red Canyon and the Colorado River.

The Red Canyon area is in west central San Juan County in the southeast part of Utah. The subject claim groups can be reached by traveling about 3 miles south of Blanding, Utah, on Highway 47; thence westerly for 38 miles on a graveled access road to a junction with Highway 95; thence 8 miles west to a junction (about 1/2 mile beyond the entrance to the Natural Bridges National Monument) with an improved dirt road that leads southwesterly;

thence 11 miles to a fork in the road; thence 14 miles on the right hand fork to Red Canyon and to the general area of the Blue Lizard, Markey and Posey properties; thence continue westerly for about 6 miles on an unimproved dirt road, part of which is in the canyon bottom, to the subject group of claims on the Chocolate Drop on the north side of Red Canyon drainage.

The northern part of the claims are on the Chocolate Drop, a steep sloped remnant of Chinle strata. The southern part of the claims are on a more gently sloping bench covered by talus breccia derived from overlying formations. The property is at elevations that range from about 4,500 to 5,150 feet. The area has relatively mild winters, but hot dry summers with infrequent but occasionally heavy rainfall.

HISTORY AND OWNERSHIP

Exploration of the Red Canyon area for uranium dates from 1950. The Atomic Energy Commission and private operators have carried on extensive drilling projects in the general area outside the subject claims, notably in the area of the Blue Lizard, Markey and Posey claims, about 5 miles southeast of the subject property.

The 4 Texan and 11 Ajax claims (fig. 2) included in the application, are on the north side of Red Canyon, on and near the Chocolate Drop. The four Texan claims were located by Ula Uranium, Inc., on October 12, 1954, and leased to Delta Mining Company, the owners retaining a 15 percent royalty.

The 11 Ajax claims were filed by C. P. Voyles and E. M. McDowell on January 1, 1956. No record that these claims were assigned to Delta Mining Company was found; however, Voyles and McDowell are general partners of Delta Mining Company. The above contiguous unpatented mining claims are recorded at the San Juan County Courthouse, Monticello, Utah.

Following is a summary of recorded data on the Texan and Ajax claims:

Claim	Discovery Date	Recorded Book	Recorded Page	Recording Date
Texan Nos. 11, 12, 13, 14	Oct. 12, 1954	227	79	11/9/54
	Amended	142	133-136	9/24/56
Ajax Nos. 1, 2, 3, 13, 14, 15, 16, 17, 18, 19, 20	Jan. 1, 1956	90	293	1/19/56
	Amended	142	137-156	9/24/56

GEOLOGY

The Texan and Ajax claim groups are in the Red Canyon area of southeastern Utah. Strata exposed in the general area range from the Permian Cutler formation to the Jurassic Navajo sandstone. Strata that crop out on and near the claims consist of the Moenkopi formation of early Triassic age and the Chinle formation of late Triassic age. The Shinarump member is the basal member of the Chinle formation and is the main ore-bearing sandstone in the area. An incomplete section of the overlying strata of the Chinle formation, up to about 600 feet thick, overlies the Shinarump member

on the claims. The strata on the claims are nearly flat lying but strata in the general area have a regional dip of about 2° to the west. A small northeasterly trending normal fault is on the west side of the claims, however, the displacement along the fault is but a few feet.

The Shinarump member crops out as a thin, blanket-like layer of sandstone on and near the claims. The thickness commonly is about 6 feet but at one place about 3,000 feet northeast of the claims, is about 25 feet thick. Non-core drill holes, on and near the claims, have penetrated thicknesses of the Shinarump member that have ranged from 6 to 18 feet thick. The contact of the Shinarump member with the underlying Moenkopi formation is generally even and undulations are not readily discernible on outcrop or in the underground workings. The greatest apparent scour is about 7 feet at the thick section of Shinarump and here has a width of about 75 feet. Its apparent trend is about due west, which, if extended, would pass about 1,500 feet north of the underground workings and generally off of the claims. The thick section of Shinarump here appears to be due mainly to lenses of Shinarump sandstone being added on top of the blanket-like layer which flanks the apparent channel area. A gentle, weakly mineralized scour, about 2 to 3 feet deep and 60 feet wide, was cut during drifting on the Ajax No. 2 claim (fig. 3). The trend of this scour also is apparently west.

The Shinarump member is a fine- to coarse-grained sandstone and locally contains red and gray chert and colorless quartz pebbles in the

lower few feet of the member. Thin seams of gray-green mudstone are interbedded in the sandstone. Locally mudstone in the Shinarump member is 3 to 4 feet thick and bank-like in form. Carbonaceous trash and pyritized carbonized logs are common locally. Disseminated pyrite and copper sulfides are sparsely distributed throughout the sandstone but commonly occur in the basal few inches to few feet of the Shinarump member. Some recently developed malachite was observed on the mine walls, but is sparsely distributed. Altered mudstone at the base of the Shinarump member ranges from a few inches to about 7 feet in thickness. On outcrop, the upper few inches commonly is green to gray-green and the underlying "altered" mudstone is tan to brown in color. In the mine, the altered mudstone in places is entirely gray-green and in other places is mostly a tan to brown color. The thickness of altered mudstone here ranges from an inch to about two feet.

Paleo-stream flow in the Shinarump member, derived from festoon cross-beds, were measured on outcrop and in the mine workings. The general trend is westerly but locally paleo-stream flow varied from southwest to northwest. Directional trend of the gentle scour in the mine workings appears to be westerly to northwesterly and not southwesterly as postulated by the applicant. However, the drifting done by the applicant has cross-cut the general sedimentary structural grain of the Shinarump member.

ORE DEPOSITS

The nearest ore deposits are the Blue Lizard, Markey and Posey deposits about 5 miles southeast of the subject claims. As of January 1, 1957, production from these three deposits totaled about 25,000 tons. Only the Blue Lizard is now operating but inferred extensions of the Markey channel are now being drilled with Government assistance(DMEA 4392).

The Blue Lizard channel on the north side of Red Canyon, is a gentle flat bottommed scour, about 500 feet wide and 25 feet deep. The thickness of the Shinarump in the channel is as much as 45 to 50 feet; away from the channel the Shinarump commonly is about 20 to 25 feet thick. The ore minerals are localized near the contact of the Shinarump member with the underlying Moenkopi formation and are in the bottom and near the flanks of the channel. Thicknesses of ore minerals are as great as 8 feet. Mudstone seams interbedded in the sandstone and bank-like masses of mudstone in the channel apparently have been instrumental in the localization of ore minerals. There is very little altered mudstone, generally less than 1 foot thick even under ore, at the base of the Shinarump in this area. The Blue Lizard channel has been defined for a minimum distance of about 2,500 feet. The results of recent drilling are not available but suggest that this figure may now be doubled. The channel trends northeasterly, like that of the Markey channel, which is located on the south side of Red Canyon. The Markey channel and the Blue Lizard

channel may once have been continuous. The Posey channel lies to the east and is a smaller channel than either the Markey or Blue Lizard channels. The Posey channel trends northwesterly and is apparently subsidiary to the larger Blue Lizard-Markey channel system.

The AEC ore reserve section estimates no reserves on the Markey and Posey properties; however, they estimate about 12,000 tons of indicated and inferred ore on the Blue Lizard properties. Production from the Blue Lizard Mine, as of January 1, 1957, totals 18,951 short tons of ore, averaging 0.23 percent U_3O_8 and 0.67 percent copper.

The Shinarump member on the Texan and Ajax claims is classed as less favorable for ore than the Shinarump member exposed in the area of the Blue Lizard and Markey properties. Thickness of the Shinarump member on the Texan claims is less than half of that on and near the Blue Lizard property; the one known apparent scour near the subject claims is only about 75 feet in width and not more than 7 feet in depth. It is small as compared to the Blue Lizard, Markey, and Posey channels. These channels have widths that range from about 300 to 500 feet and scour depths that range from about 12 to 25 feet.

The gentle scour, 2 to 3 feet deep and about 60 feet wide, cut by drifting operations on the Ajax No. 2 claim (fig. 3) contained a small deposit of sub-ore grade minerals about 50 feet long and 10 to 15 feet wide. The deposit is irregular in outline and thickness. Locally parts of the deposit are about 2 feet thick and are reported to average about 0.12 percent U_3O_8 by chemical assay. The deposit could not be mined economically.

PROPOSED EXPLORATION

Applicant's Proposed Exploration Program

The applicant has proposed 1,200 feet of drifting and 2,000 feet of rotary drilling in an unspecified number of holes. The estimated overall cost of the program is $59,233.20 with Government participation at 75 percent, amounting to $44,422.65.

The underground exploration is to consist of the driving of three 400-foot drifts from headings in the rear parts of the present workings. One drift would extend the main drift northerly for about 400 feet; the other two drifts would be driven easterly from present easterly headings of the operations. The proposal includes the drilling of seven holes ahead of the two easterly drifts. There is no specification as to whether the holes would be non-core or part core holes. Specific hole locations are also not proposed.

Recommended Program

No revision of the applicant's proposed exploration program is submitted by the examining team.

CONCLUSIONS AND RECOMMENDATIONS

On the basis of the thin, blanket-like character of the Shinarump member and upon the absence of apparent scours at the base of the member, the area in the vicinity of the subject claims is classed as generally unfavorable for ore. There are no known ore deposits in the immediate area. The nearest deposits are about 5 miles to the southeast in a thicker and more channeling Shinarump environment. The only known deposit of ore minerals cut by the mining operations is small and is of sub-ore grade. This deposit is associated with a very gentle scour at the base of the Shinarump member. The chance of finding a significant ore deposit in this area is considered to be poor. It is recommended that the application for DMEA assistance for exploration be denied.

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
MARCH 1957
DOCKET 4579

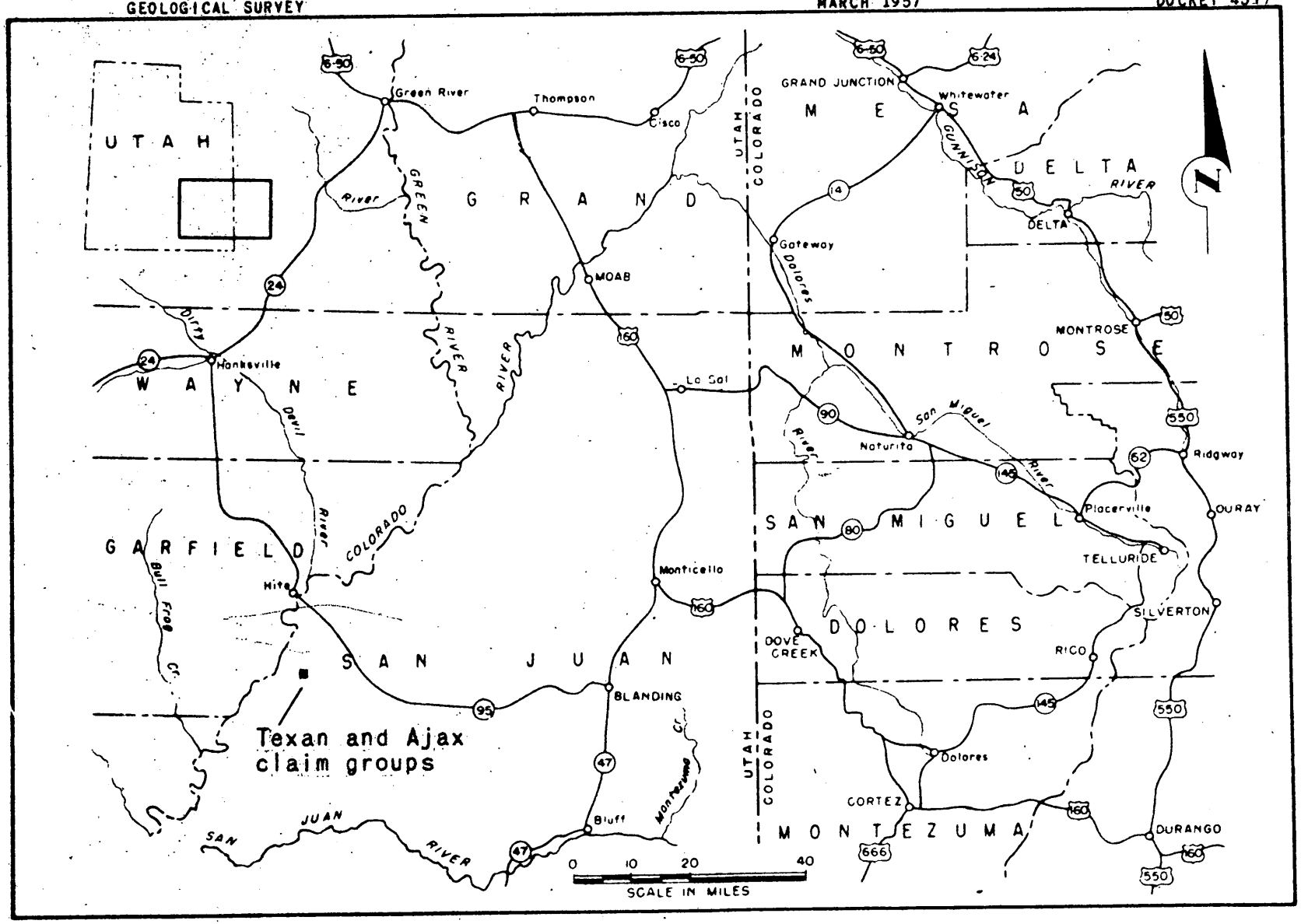


FIGURE 1.--INDEX MAP OF PART OF COLORADO PLATEAU REGION SHOWING LOCATION OF TEXAN AND AJAX CLAIM GROUPS, DELTA MINING CO., SAN JUAN COUNTY, UTAH.

OFFICIAL FILE COPY
D M E A
RECEIVED APR 29 1957

DATE	INITIALS	CODE

DMEA
DEPARTMENT OF THE INTERIOR
JAN 31 1957
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 4 1957

DATE	INITIALS	CODE
2-4	C	220
~~2-4~~	~~[illegible]~~	~~700~~
January 30, 1957		

Memorandum

To: W. M. Traver, Executive Officer, DMEA Field Team, Reg. III

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4579 (Uranium) Delta Mining Company (Texan and Ajax Groups) San Juan County, Utah

The application for Delta Mining Company, Docket DMEA 4579, in the amount of $59,230.20 was received in this office on January 30, 1957.

A field examination will be made and suitable report prepared by an engineer from the Denver or Grand Junction office.

W. H. King

W. H. King

cc: W. M. Traver (2)
E. W. Barshman
J. W. Hasler
M. H. Salsbury
J. F. Shaw

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

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 31 1957

DATE	INITIALS	CODE
1-31	ewv	220
1-31	Murphy	900

224 New Customhouse
Denver 2, Colorado

January 29, 1957

Memorandum

To: W. H. King (2) (w/brochure)
J. W. Hasler ([redacted])

From: DMEA Field Team, Region III

Subject: Docket DMEA 4579 (Uranium) Delta Mining Company (Texan and Ajax Groups) San Juan County, Utah.

Enclosed is the subject application in the amount of $59,230.20. A field examination and suitable report are requested.

Also enclosed is the transmittal letter of the application, by the Chairman of the Operating Committee, dated January 23, 1957, together with Memoranda of review of the application by J. E. Crawford, USBM, and W. P. Williams, USGS.

Your attention is especially directed to the Chairman's transmittal letter, wherein he advises that if you anticipate approving a project, drilling bids will be necessary. Also, in the event of approval, if you will notify this office in advance, we will attempt to obtain the required Subordination Agreements.

DMEA Field Team, Region III

Original signed by
W. M. TRAVER

By W. M. Traver
Executive Officer

Enclosures
WMT:ytl
cc
Sec. Op. Comm. (2)
Harshman
Docket 4579
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 31 1957

DATE	INITIALS	CODE

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

EXTRA COPY DMEA RECEIVED JAN 31 1957		
DATE	INITIALS	CODE
1-31	CW	220
		700

224 New Customhouse
Denver 2, Colorado

January 29, 1957

Memorandum

To: W. H. King (2) (w/brochure)
J. W. Hazler (~~w/brochure~~)

From: DMEA Field Team, Region III

Subject: Docket DMEA 4579 (Uranium) Delta Mining Company (Texan and Ajax Groups) San Juan County, Utah.

Enclosed is the subject application in the amount of $59,230.20. A field examination and suitable report are requested.

Also enclosed is the transmittal letter of the application, by the Chairman of the Operating Committee, dated January 23, 1957, together with Memoranda of review of the application by J. E. Crawford, USBM, and W. P. Williams, USGS.

Your attention is especially directed to the Chairman's transmittal letter, wherein he advises that if you anticipate approving a project, drilling bids will be necessary. Also, in the event of approval, if you will notify this office in advance, we will attempt to obtain the required Subordination Agreements.

DMEA Field Team, Region III

Original signed by
W. M. TRAVER

By W. M. Traver
Executive Officer

Enclosures
WMT:ytl
cc
Sec. Op. Comm. (2)
Harshman
Docket 4579
Chron.

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
1-22	Murphy	700
1-22	[illegible]	700
1/23	Selfridge	130
	Johnson	110
	Whitendon	100
1-24	CW	220

JAN 23 1957

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

Re: Docket No. DMEA-4579 (Uranium)
Delta Mining Company
Texan and Ajax Groups
San Juan County, Utah

Paone

Dear Mr. Traver:

The captioned application is referred to Region III Field Team for investigation, a field examination, and recommendations.

Enclosed are copies of memoranda, dated January 7, and 15, 1957, by J. P. Crawford, USBM, and W. P. Williams, USGS, respectively, relating to the application. Also enclosed is an extra copy of the application for Field Team use.

The Applicant's estimate of $35.98 per foot of drifting does not include the estimated $10.00 per foot for depreciation of company owned equipment. This estimate seems high for drifting in a sedimentary formation.

In the event the Field Team believes a project to explore the property is warranted, it should advise the Applicant that we will require six executed copies of form LF-205 signed by WA Uranium, Inc., owner of the Texan Nos. 11, 12, 13, and 14 claims.

Your observation on drilling bids is noted. The field examiners should request the Applicant to submit copies of three bids if a drilling program appears to be warranted.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (24B)

Enclosures
APPROVED:

/s/ James Paone (24B)
Member, Bureau of Mines

N. E. Nelson (24B)
Member, Geological Survey

FMMurphy/izm 1-22-57
cc to: Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
Messrs. JECrawford, 3643
THKiilsgaard, 5224
JKratchman, AEC

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
1-22	Murphy	700
1-22	[illegible]	700
1/23	Selfridge	130
	Johnson	110
	Mittendorf	100
		225

Paone
Nelson

JAN 23 1957

Mr. Charles T. Voyles, General Partner
Delta Mining Company
Post Office Box 895
Cortez, Colorado

Re: Docket No. DMA-4579 (Uranium)
Texan and Ajax Groups
San Juan County, Utah

Dear Mr. Voyles:

The application for assistance in exploring your property, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred for a field examination to:

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

The Regional Office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

C. O. Mittendorf

Administrator

FMMurphy/izm 1-22-57
cc to: Docket
Code 700
Admr.'s Reading File
DMEA FT Reg. 3 (2)

8623

IN REPLY REFER TO:

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 18 1957
DEPARTMENT

DATE	INITIALS	CODE
1-18	C	220
1-18	Murphy	700

Complete

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

January 15, 1957

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of application, DMEA 4579, Delta Mining Company, Texan and Ajax claims, Red Canyon, San Juan County, Utah (uranium).

The applicant proposes to explore for uranium ore deposits in a general area where large deposits are known. It is not possible to tell, from the maps attached to the application, exactly where in Red Canyon the applicant's property is located.

The proposed work would consist of 1,200 feet of drifting from an existing adit and 2,000 feet of rotary drilling at a total estimated cost of $59,230.

The applicant states that a well developed Shinarump channel exists on the property. Copper and uranium minerals have been found on the claims, but the applicant so far has not been successful in finding ore grade uranium.

The geologic structure and reported uranium minerals should be checked in the field. I recommend, therefore, that the application be referred to the Field Team for examination and report.

W. P. Williams

W. P. Williams

OFFICIAL FILE COPY DMEA RECEIVED JAN 7 1957		
DATE	INITIALS	CODE
1-8-57	EWE	700

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

Date January 7, 1957

DMEA Docket No. 4579
DMEA Contract No.
Commodity Uranium
Name of applicant Delta Mining Company
Name of property Texan and Ajax Claims
Location of property San Juan County, Utah
Estimated cost of project $59,230.20

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Review of Application
(Application, Field Team Report, etc.)

1. Date of subject document: 12/2/56. 2. Date received by reviewer: 1/2/57.

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 [x]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

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

10. Remarks: (Use back of page if necessary) Mr. J. O. Hosted, Washington representative of the Atomic Energy Commission, assisted in the review.

DEC 31 1956

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

224 New Customhouse
Denver 2, Colorado

December 27, 1956

Memorandum

To: Secretary of the Operating Committee, DMEA

From: Field Team, Region III

Subject: Docket DMEA 4579, (Uranium), Delta Mining Company, (Texan and Ajax Claims), San Juan County, Utah

Enclosed are the original and three copies of a Joint Memorandum of Review of the subject application by members of the Grand Junction office, DMEA.

Because of the fact that no detailed work on the property has been done by the AEC, little is known about the value of the property; they therefore recommend that a field examination be made on this property. We concur in this recommendation.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

RECEIVED DEC 31 1956 D.M.E.A.

Ame
to WO.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA
DEPARTMENT OF THE INTERIOR
DEC 27 1956
REGION III
DENVER, COLORADO

P. O. Box 360
Grand Junction, Colorado

December 21, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

Through: E. N. Harshman
John F. Shaw

From: J. William Hasler
M. H. Salsbury

Subject: Letter relative to the advisability of making a field examination on the Delta Mining Company's Texan and Ajax claims, San Juan County, Utah

The Delta Mining Company submitted an application for DMEA aid to explore for uranium on the Texan and Ajax claims in Red Canyon, San Juan County, Utah. The applicant proposes an underground exploration program to explore some channels that are reported to occur on their property. In a cursory examination of the application and consultation with members of the Atomic Energy Commission, it is reported that the applicant's certainty of channels on the subject claims are not too well founded. However, the AEC has done no detailed work on the property and as a result, not too much is specifically known as to the existence and the possible continuance of ore-bearing channels on the property. The applicant reports the presence of copper minerals above the Moenkopi Shinarump contact with minor amounts of uranium.

Because of the fact that little is known about the value of the property, it is deemed advisable to examine the property in the field.

J. William Hasler,
Geological Survey

M. H. Salsbury,
Bureau of Mines

JWH/mlr

RECEIVED
DEC 31 1956
D.M.E.A.

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

December 21, 1956

Delta Mining Company
P. O. Box 895
Cortez, Colorado

Subject: DMEA-4579

Gentlemen

Your application for exploration assistance, dated December 13, 1956 submitted to our office at Denver, has been assigned Docket Number DMEA-4579 and referred to the Rare and Miscellaneous Metals Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

(Sgd) Allen S. Dakan

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to:

Region III, Denver 2, Colorado

Code 700

6416

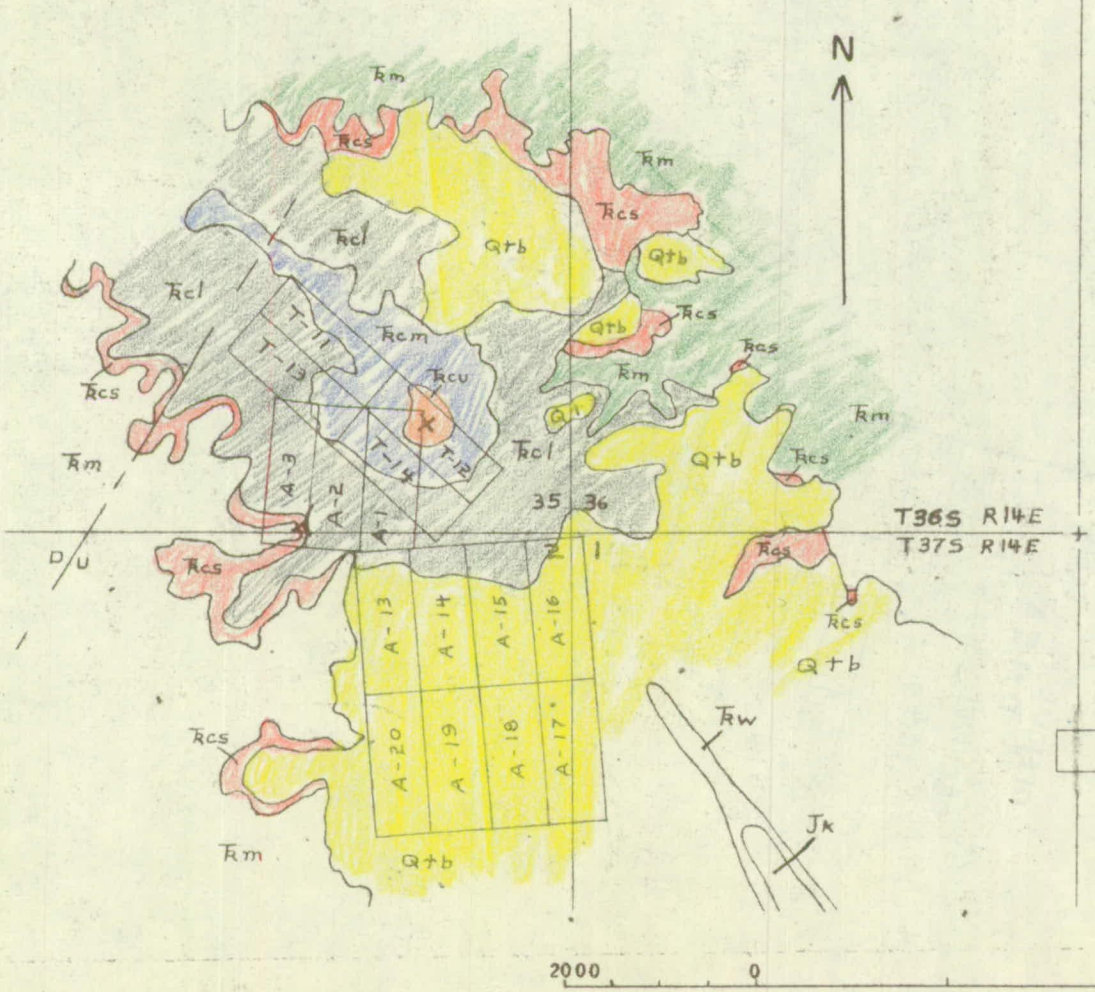
Delta Mining Co.
Cortez, Colo.

PHOTOSTATIC COPY OF WHITE CANYON 3 SE, UTAH U 323 SE

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
MARCH 1957 DOCKET 4579



EXPLANATION

SEDIMENTARY ROCKS

Qtb Ql	QUATERNARY TALUS BRECCIA AND LANDSLIDE
JK	KAYENTA FORMATION OF JURASSIC(?) AGE
Rw	WINGATE SANDSTONE OF TRIASSIC AGE
Rc	CHINLE FORMATION OF TRIASSIC AGE; u-UPPER MEMBER; m-MIDDLE MEMBER; l-LOWER MEMBER; s-SHINARUMP MEMBER
Rm	MOENKOPI FORMATION OF TRIASSIC AGE
D/U	FAULT; U-UPTHROWN SIDE; D-DOWNTHROWN SIDE
	ADIT
X	TOP OF CHOCOLATE DROP
	CLAIM; A-AJAX CLAIM; T-TEXAN CLAIM; LOCATIONS FROM APPLICANTS MAP

Note: GEOLOGY FROM UNPUBLISHED U.S. GEOLOGICAL SURVEY MAP BY A.F. TRITES, JR.

2000 0 4000 FEET

FIGURE 2.—GEOLOGIC SKETCH MAP SHOWING LOCATION OF TEXAN AND AJAX CLAIMS, IN PARTS OF UNSURVEYED T.36 S., R.14 E. AND T.37 S. AND R.14 E. SAN JUAN COUNTY, UTAH.

U. S. Government Messenger Envelope

Standard Form No. 65 (~~Revised 1/46~~)

1. Use blocks consecutively, one at
2. Void previous block.
3. Write clearly.

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROO	
~~Mr. Carty~~	RUN		RUN
~~2222 G & A~~	STOP		STOP
~~Mr. Rogers~~	RUN		RUN
~~Rm 5212~~	STOP		STOP
~~Accounts Branch~~	RUN		RUN
	STOP		STOP
Mr. J. Graffius	RUN		RUN
Budget & Finance	STOP		STOP
Rm. 5429 Interior Bldg	RUN		RUN
	STOP		STOP
	RUN		RUN
	STOP		STOP
Mary Ratliff	RUN		RUN
GSA. Room 4211	STOP		STOP
~~Mr. Richards~~	RUN		RUN
~~5429 Int~~	STOP		STOP
Mr. E. H. Ellis	RUN		RUN
Rm. 4449	STOP		STOP
Interior Bldg.	RUN		RUN
	STOP		STOP

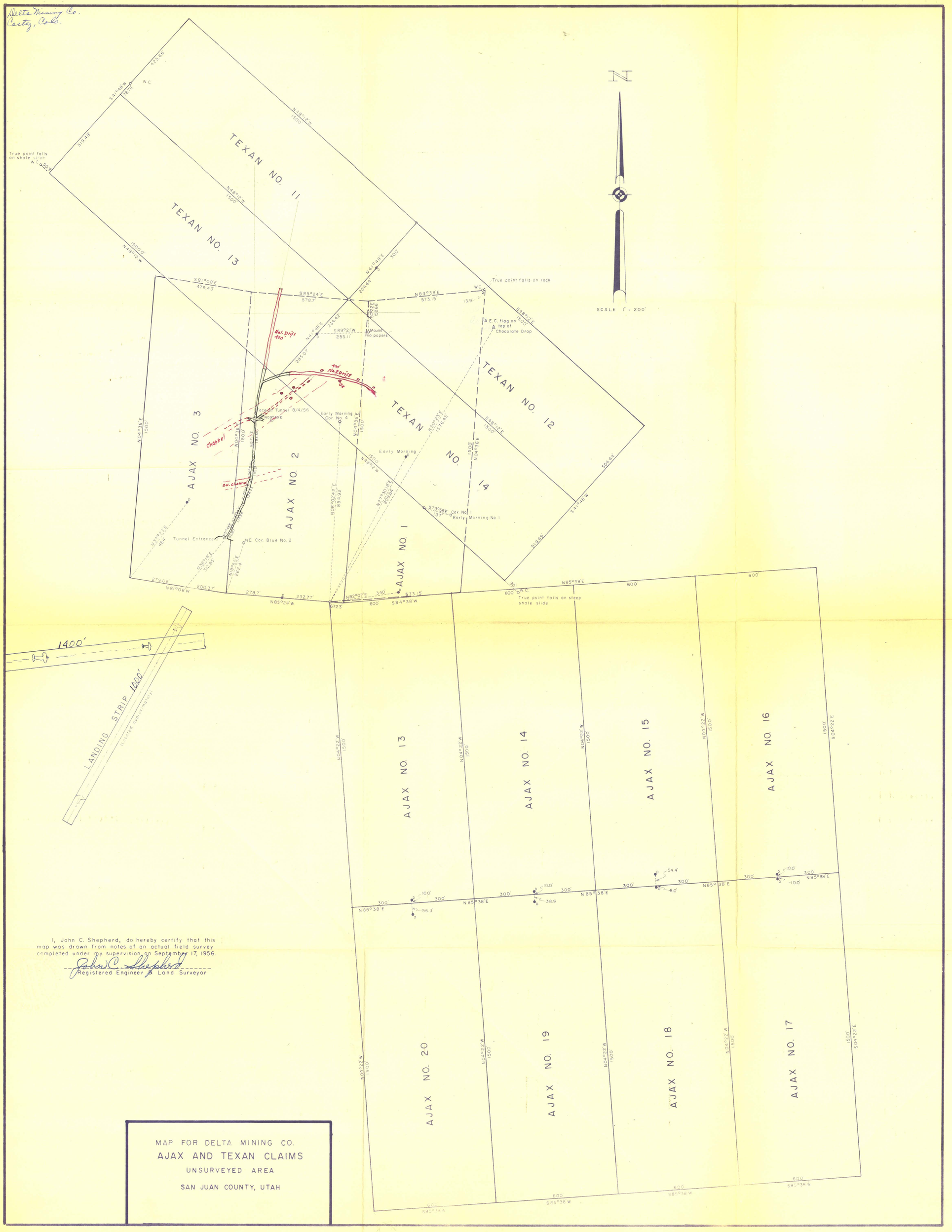
Send surplus envelopes to supply room for reissue.

Use other side

16-

Use RUN and STOP only when messenger service between Government buildings in Washington is required. Your mail room has RUN and STOP information.

Delta Mining Co.
Cortez, Colo.

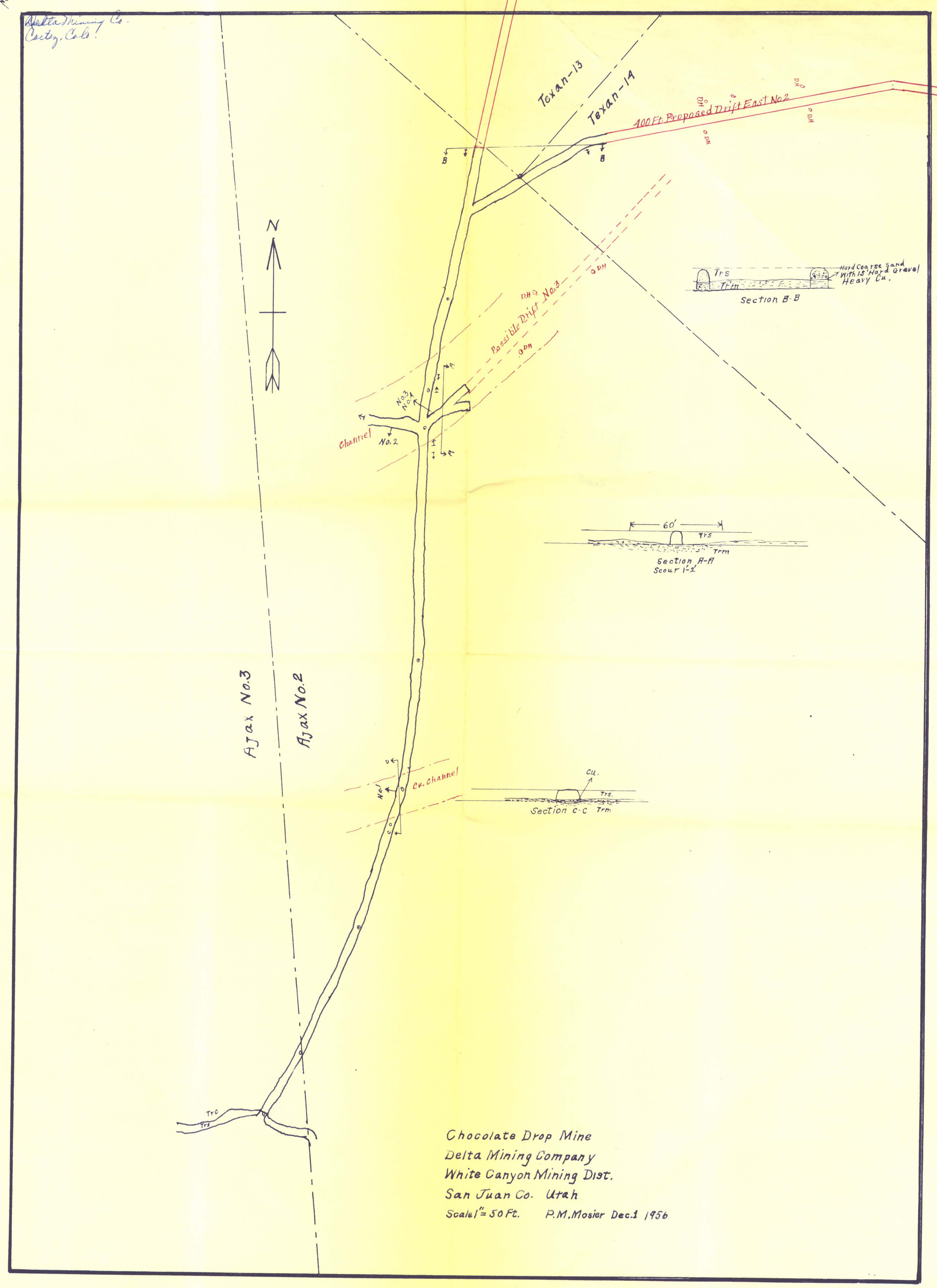


I, John C. Shepherd, do hereby certify that this map was drawn from notes of an actual field survey completed under my supervision on September 17, 1956.

John C. Shepherd
Registered Engineer & Land Surveyor

MAP FOR DELTA MINING CO.
AJAX AND TEXAN CLAIMS
UNSURVEYED AREA
SAN JUAN COUNTY, UTAH

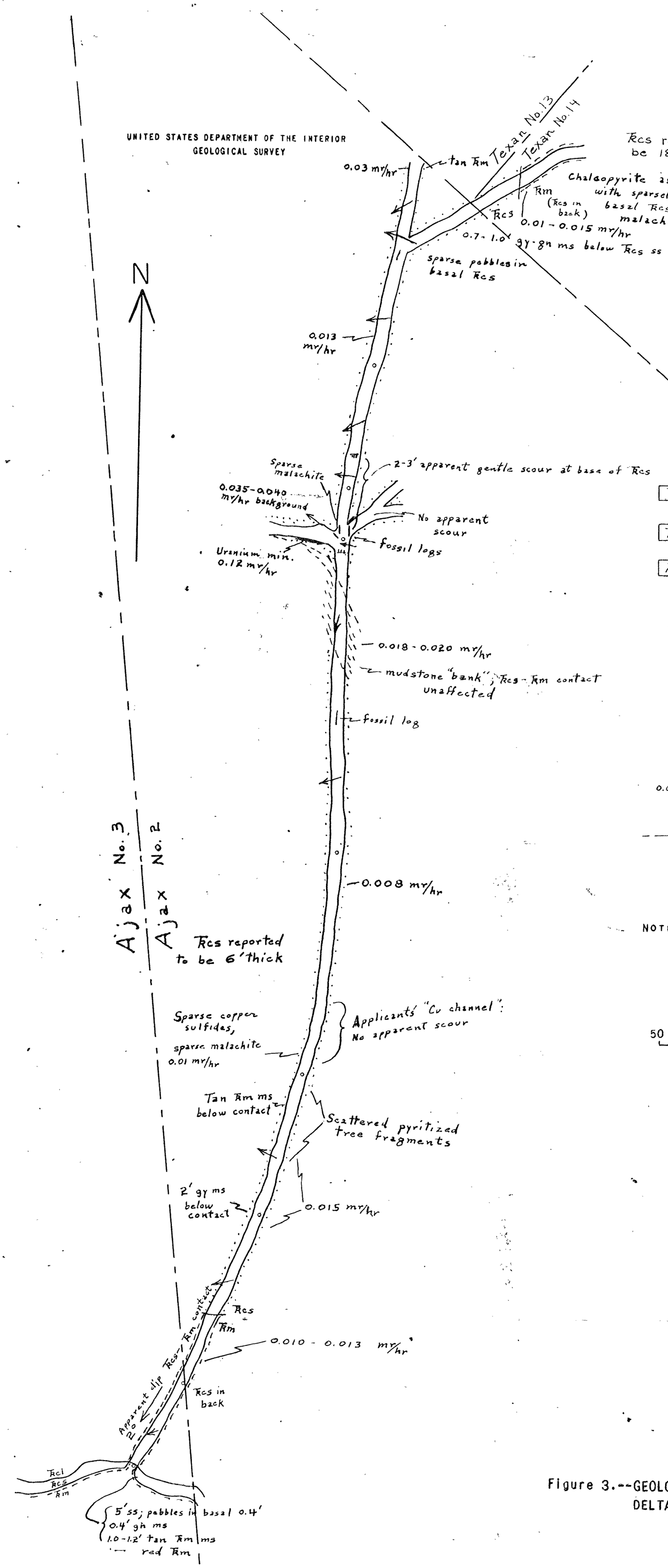
Delta Mining Co.
Cortez, Colo.



Chocolate Drop Mine
Delta Mining Company
White Canyon Mining Dist.
San Juan Co. Utah
Scale 1" = 50 Ft. P.M. Mosier Dec. 1 1956

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
MARCH 1957
DOCKET 4579



EXPLANATION

- Ꞧcl — LOWER MEMBER OF TRIASSIC CHINLE FORMATION
- Ꞧcs — SHINARUMP MEMBER OF TRIASSIC CHINLE FORMATION
- Ꞧm — MOENKOPI FORMATION OF TRIASSIC AGE
- SANDSTONE
- MUDSTONE
- MINERALIZED ROCK (URANIUM)
- FOSSIL LOG
- DIRECTION OF PALEO - STREAM FLOW
- APPROXIMATE EDGE OF APPARENT CHANNEL
- 0.010 mr/hr — MILLIROENGTENS PER HOUR MEASURED WITH PRI SCINTILLOMETER, MODEL ~~500~~ 111
- CLAIM BOUNDARY
- SURVEY STATION

NOTE: GEOLOGY MAPPED AT WAIST LEVEL. CLAIM BOUNDARY AND OUTLINE OF WORKINGS FROM APPLICANTS MAP. GEOLOGY BY D.P. ELSTON, MARCH 12, 1957.

50 0 100 FEET

Figure 3.--GEOLOGIC SKETCH MAP OF CHOCOLATE DROP MINE, DELTA MINING CO., SAN JUAN COUNTY, UTAH.