NOTE: Use a separate form for each request.

DESCRIPTION OF RECORD(S) OR INFORMATION REQUESTED

DMEA 1931

REMARKS

NATURE OF SERVICE

☐ FURNISH COPY OF RECORD(S) ONLY ☐ PERMANENT WITHDRAWAL ☐ LOAN OF RECORD(S) ☐ OTHER (Specify)

RECORD GROUP NO.	ACCESSION NO.	FRC BOX NO. OR RECORDS CENTER LOCATION NO. (If known)
	64A0709	18T 14/52:15-3

TO General Services Administration
Federal Records Center NARS

(City) (State) (Zip Code)

NOTE: In Washington, D.C. area send to STOP 38[redacted]

FOR RECORDS CENTER USE ONLY

☐ RECORDS NOT IN CENTER CUSTODY ☐ RECORDS DESTROYED

☐ WRONG BOX NUMBER — PLEASE RECHECK

☐ ADDITIONAL INFORMATION REQUIRED TO IDENTIFY RECORDS REQUESTED

☐ MISSING (Neither record(s), information nor charge card found in container(s) specified)

☐ RECORDS PREVIOUSLY CHARGED

OUT TO (Name, agency and date):

REMARKS Special

Pick Up 2/9/76 at 12:00 by her mother

FEB 9 8:11 AM '76 RECEIVED NATIONAL ARCHIVES WASH. D.C. 20408

DATE	SERVICE	TIME REQUIRED	SEARCHER'S INITIALS
2-9-76			RW

FOR USE OF REQUESTER

NAME OF REQUESTER Gail Wiegand TELEPHONE NO. 703/860-6681 DATE 2/9/76

NAME AND ADDRESS OF AGENCY (Include building, room no. and Zip Code) U.S. Geological Survey
Office of Mineral Exploration
Stop 953

(In Washington, D.C. area also include STOP number)

RECEIPT OF RECORDS

Requester please sign, date and return this form, for file item(s) listed above, *ONLY* if the block to right has been checked by the Records Center. ☐

SIGNATURE	DATE

OPTIONAL FORM 11
REVISED FEBRUARY 1971
GENERAL SERVICES ADMINISTRATION
FPMR (41 CFR) 101 - 11.4
5011 - 104

REFERENCE REQUEST — FEDERAL RECORDS CENTERS
AGENCY SUSPENSE FILE COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

~~Terminated~~ (or cancelled) without certification. DMEA No. 1931

This is the official contract file containing all official records of the project. Duplicate material has been removed. The records contained in the files are checked and are arranged in this manner:

Left Side

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.

Schedule of Collections.

Operator's monthly reports and all attachments (latest on top).

✓ 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.

Interim Reports.

✓ On-site Exam Report(s). (Tab)

Settlement Sheets.

If additional folders are required because of volume of records, show folder numbers and contents below:

Maps in folder number _____

Operator's Monthly Reports in folder number _____

P. S. G.
Reviewer's Initials

7973

NOTICE OF TERMINATION OF EXPLORATION PROJECT CONTRACT, UNDER THE TERMS OF THE CONTRACT, BEFORE THE COMPLETION OF THE WORK

To: White Canyon Mining Company
Cortez, Colorado

Operator under Exploration Project Contract Idm-E260, Docket DMA 1931, dated February 19, 1952.

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, under the terms of the above mentioned contract, hereby terminates the contract on the following grounds:

> In the opinion of the Government, you have failed to prosecute operations pursuant to the terms of the contract.

Upon the receipt of this notice, as provided in said contract, you are required to dispose of any remaining materials, supplies, facilities, buildings, fixtures, equipment, or other items, in which the Government has an interest, for the joint account of yourself and the Government; and to render to the Government a full and final accounting of your operations under the contract and of your expenditures of money on account thereof.

Any work prosecuted or costs incurred by you after the receipt of this notice shall be for your sole account, except for (a) such necessary and reasonable costs and expenses as may be incurred in preserving and disposing of any facilities, buildings, fixtures, equipment, or other items, to the cost of which the Government has contributed and in which the Government has an equity, and (b) the costs of any reports, accounts, and winding-up and settlement actions provided for in the contract.

Dated this 2nd day of March 1953.

UNITED STATES OF AMERICA

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

No. 1
Government Copy

AMENDMENT OF CONTRACT: No. Idm E-260

Contract Docket No. DMA 1931, dated February 19, 1951, between the United States of America and White Canyon Mining Company is hereby amended as follows effective as of the date of said contract:

Referring to Exhibit A attached to Exploration Contract Form MF-200 under title "Estimated Costs of the Project" subtitle "Summary":

Delete the figure 396.00. Insert in lieu thereof the figure 1356.00

Delete the figure 350.00. Insert in lieu thereof the figure 375.00

Delete the figure 15597.00. Insert in lieu thereof the figure 12997.00

Delete the figure 23000.00. Insert in lieu thereof the figure 24680.00

Delete the figure 13033.00. Insert in lieu thereof the figure 12968.00

Referring to title "Estimated Details of Cost" subtitle "Operating Equipment" subheading To be purchased; add the following:

"6 tons of 20-pound rail at $160.00 per ton $960.00"

Delete the figure "$396.00". Insert in lieu thereof the figure "$1,356.00"

Referring to the same title and subtitle under the subheading "To be furnished by operator": Delete the figure "$350.00". Insert in lieu thereof the figure $375.00.

Referring to the same title and subtitle under the subheading "To be rented": Delete the following:

3 power carts @ $130.00 each per month	390.00
3 3 K.V.A. generators @ $60 each per month	180.00

Add the following:

1 Portable electric welder	$ 65.00 per month
3 Ore cars @ $15.00 each per month	$ 45.00 per month

Delete the figure "$1665.00". Insert in lieu thereof the figure $1205.00.

After the phrase "1 D-7 Bulldozer or equivalent," delete "280 hours". Insert in lieu thereof 330 hours. Delete the figure "3,360.00". Insert in lieu thereof the figure 3,960.00. Delete the figure 15,597.00. Insert in lieu thereof the figure 12,997.00.

Referring to the title "Estimated Details of Cost", subtitle "Labor and Supervision", delete the figure 20,500.00. Insert in lieu thereof the figure 22,000.00. Delete the figure 2,500.00. Insert in lieu thereof the figure 2,680.00. Delete the figure 23,000. Insert in lieu thereof the figure 24,680.00.

Referring to title "Estimated Details of Costs", subtitle "Supplies", delete the following: "Electric power cable 900 feet @ $.35 315.00" Add the following:

Ties, bolts, spikes, fish plates 250.00
Delete the figure "13,033.00". Insert in lieu thereof the figure 12,968.00.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may pay or the percentage of the costs which the Government may pay under the provisions of Article 13 of the contract form.

Dated April 18, 1952.

WHITE CANYON MINING COMPANY

By Edmund Key, Pres

By _____

By _____

UNITED STATES OF AMERICA

By J. H. Ewing
Executive Officer - DMEA

MF-200
(June 1951)

Docket No. DMA 1931
Commodity Uranium
IdmE-260

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

GOVERNMENT'S COPY

EXPLORATION PROJECT CONTRACT [1]

It is agreed this 19th day of February, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] White Canyon Mining Company, (a corporation organized and existing under the laws of the State of Colorado) Cortez, Colorado

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Utah, County of San Juan described as follows: [3] 10 unpatented claims; Hideout No. 1, Dead Buck, W. N., W. N. No. 1 and Point, situated in T 36S R.17E S.L.B.M., Yoke, White Canyon No. 1, Fry No. 4, North Point, and Gonaway claims; situated in unsurveyed land in the White and Frey Canyons 40 to 45 miles west of Blanding, Utah

with respect to which the Operator represents and undertakes: [4]

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

No Encumbrances

(*b*) ~~That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.~~

3. *Exploration project.* The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for [5] Uranium; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] twelve (12) months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 90 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $47,138.40, which is 90 percent of the agreed estimated total cost of this project, $52,376.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

White Canyon Mining Company
(Operator)

By Edmund Kay Pres.

THE UNITED STATES OF AMERICA

By C. Mitteudorf
Acting Administrator, Defense Minerals Exploration Administration

U. S. GOVERNMENT PRINTING OFFICE 16—64060-2

EXPLORATION PROJECT CONTRACT
WHITE CANYON MINING COMPANY
DOCKET NO. DMEA-1931

EXHIBIT "A"

Statement of the Work

The purpose of this project is to explore for uranium in the Shinarump formation.

The project consists of constructing one and one-half miles of road from the White Canyon No. 1 claim to the Point claim; 2,900 feet of lineal stripping and 2,100 feet of drifting as indicated in Figures 2 and 3 of the maps attached. This work will be divided among ten claims in the following manner:

Project No.	Claim	Stripping, lineal ft.	Adits, feet
1	Yoke and Hideout No. 1	700	300
2	Dead Buck		300
3	W. N. and W. N. No. 1	400	300
4	White Canyon No. 1		300
5	Fry No. 4	600	300
6	North Point and Gonaway	600	300
7	Point	600	300
	Total	2,900	2,100

The location and direction of the exploratory adits shall be agreed to mutually between the Operator and the Government field engineers. Only such underground excavation is to be done as is warranted by present showings or by stripping results if favorable in the opinion of both parties to this contract.

The adits are to be approximately 5' x 7' in cross sections.

Estimated Costs of the Project

Summary

Operating equipment (To be purchased)	$ 396.00
Operating Equipment (To be furnished by the Operator)	350.00
Operating equipment (To be rented)	15,597.00
Labor and supervision	23,000.00
Supplies	13,033.00
Total cost -	$52,376.00

Estimated Details of Cost

Fixtures and improvements

None

Operating Equipment

To be purchased:

900 feet of 2-inch pipe @ $.35	$315.00
3 wheelbarrows @ $27	81.00
Total -	$396.00

To be furnished by operator:

2 pickup trucks, allowable monthly depreciation for each truck, $25.00

Total estimated depreciation -	$350.00

The above depreciation shall be allowed for each item of equipment only for the months during which that particular item is used for the benefit of the project.

To be rented:

	Monthly Rental
3 compressors, 125 cu.ft. @ $145 ea. per month	$ 435.00
3 jackhammers and 3 jacklegs @ $55 ea. per month	165.00
3 water tanks @ $5.00 ea. per month	15.00
3 power carts @ $130.00 each per month	390.00
3 3 k.v.a. generators @ $60 each per month	180.00
3 blowers @ $50 each per month	150.00
3 slushers with dippers @ $110 each per month	330.00
Total monthly rental -	$1,665.00
1 D-7 Bulldozer or equivalent, 280 hours @ $12 per hour, includes operator, repairs and supplies	$3,360.00
Total estimated rental	$15,597.00

Labor and Supervision

3 miners @ $1.60/hr.
3 muckers @ $1.40/hr.
1 utility man @ $1.50/hr.
1 superintendent @ $500/mo.
1 clerk-bookkeeper @ $100/mo.

Total estimated labor & supervision	$20,500.00
Compensation, insurance, payroll taxes	2,500.00
Total estimated labor	$23,000.00

Supplies

Drill steel and bits	$ 750.00
Small tools	400.00
Dynamite, caps, fuse	3,000.00
Oil, gasoline, grease	5,000.00
Assaying	700.00
Timber	410.00
Freight	1,000.00
900 feet of ventilation tubing @ $1.00 per ft.	900.00
6 - 50 ft. lengths of 3/4 in. air hose @ $30.50	183.00
3 - 50 ft. lengths of 1/2 in. water hose @ $25.00	175.00
Pipe fittings	100.00
Electric power cable 900 feet @ $.35	315.00
Carbide	100.00
	$13,033.00

Rehabilitation and Repairs

None

Reports

Maps showing the monthly progress of the exploration with sample locations and assay results indicated are to be included with the monthly report required under section 12 of the contract. In case such maps are not submitted, the Government at its discretion may have the necessary work performed and charge the cost of such work to the contract.

Form MF-103
(April 1951)

U. DEPARTME OF THE INTERI
DEFENSE MINERALS ADMINISTRATION

Bud ureau No. 42-R1035.
App expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1931

Date received 8-6-51

Participation

Name and address of applicant

Date July 23, 1951

White Canyon Mining Company, CORTEZ, COLORADO

FILL IN THIS BLOCK

Date of application July 23, 1951

Estimated cost $70,260.00

Mineral or metal Uranium

Percentage of Government participation 90%

Location of mine White Canyon Area

San Juan County, Utah (unsurveyed)

Date of filing MF-100 -

DMA Docket Number, if available 1931

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the a is approved, you will be presented with an explor ion project contr Form MF-200, for your signature.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

- See attached sheets for answers to questions -

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

White Canyon Mining Company
(Name of company)

By Edmund Kay
(Signature of authorized official)

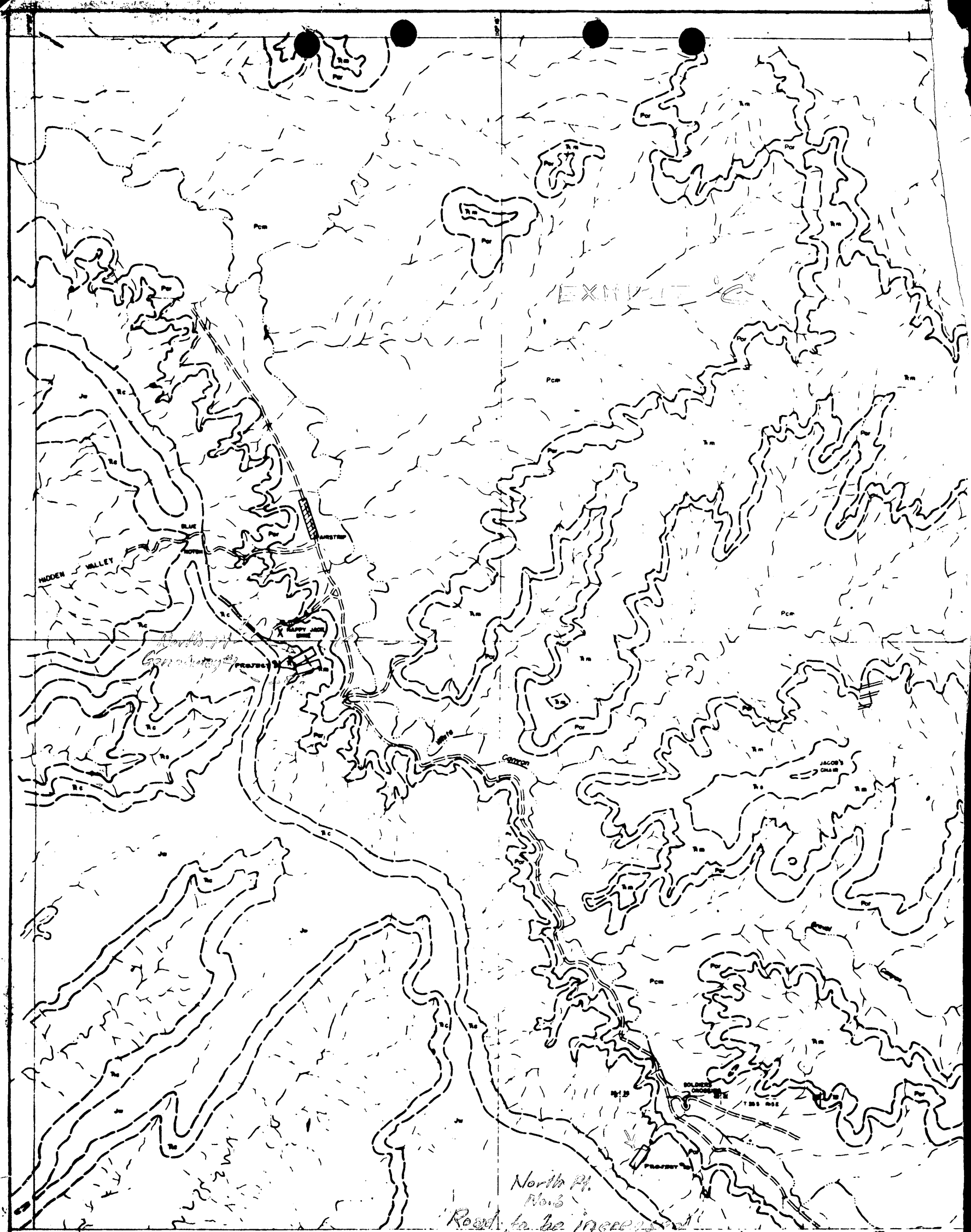
July 23, 1951
(Date)

Vice President & General Manager
(Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE



JURASSIC ROCKS
- Jw — Wingate

TRIASSIC ROCKS
- Trc — Chinle
- Trs — Shinarump
- Trm — Moenkopi

PERMIAN ROCKS
- Pcr — Cutler Rock
- Pcm — Cedar Mesa

NOTE

Map constructed by Photogrammetric Methods based on sparse, horizontal control of unknown accuracy. Date of photography 1939. Scale of photography approx. 1:31,680. Geology interpreted on photographs. Roads constructed after 1939 do not appear on photography and were sketched on base by field observation.

SHEET & RELIABILITY DIAGRAM

3	2	1
4	5	6

A. RELIABLE
B. FAIRLY RELIABLE
C. DOUBTFUL

1000 0 1000 2000 3000 4000

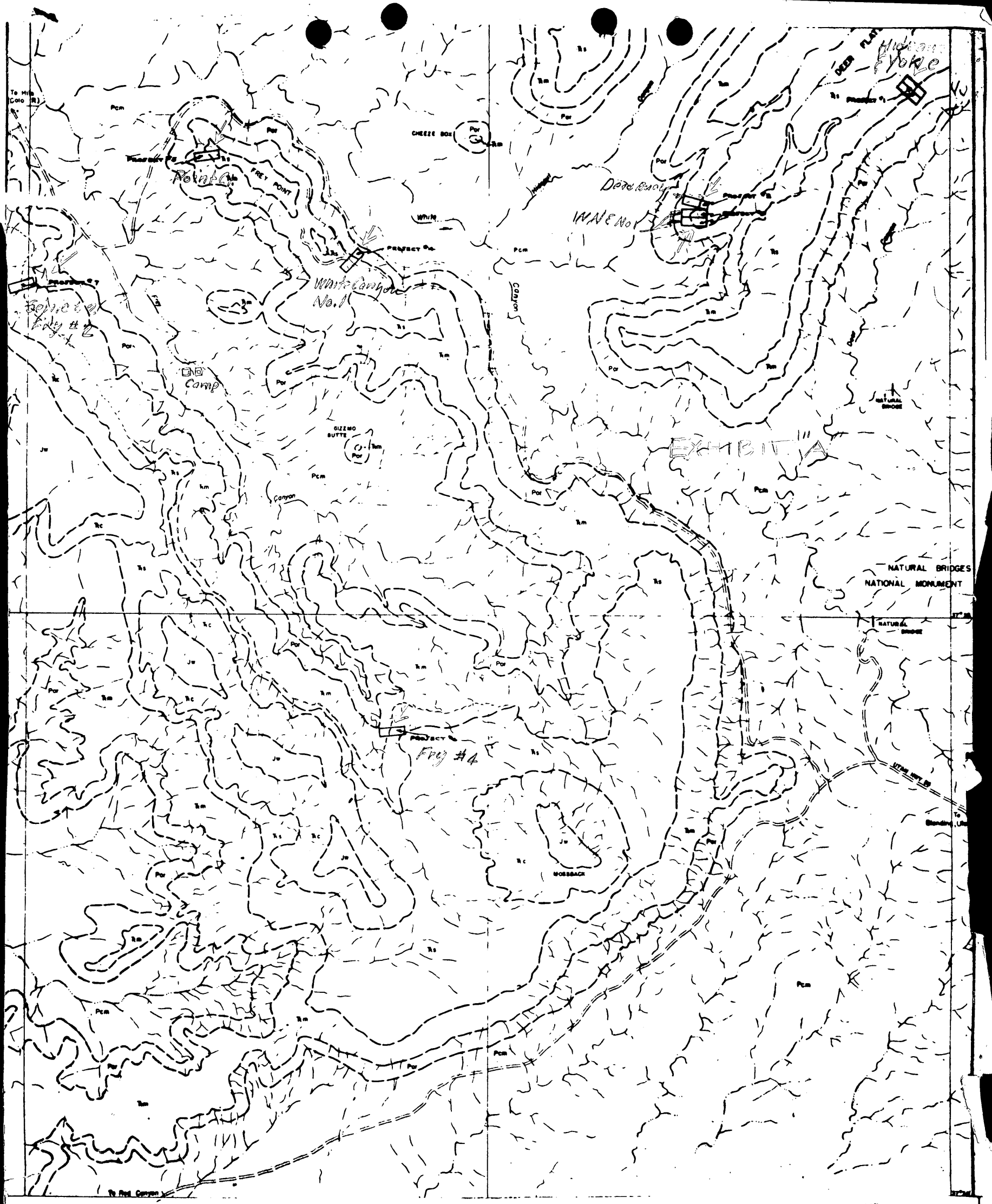
1:4,000

U.S. ATOMIC ENERGY COMMISSION

WHITE CANYON RED CANYON DISTRICT
SAN JUAN CO., UTAH

SCALE: 1:4,000 | GEOLOGY: [illegible]

GEOL. BY: A.R. BRADY | ASSISTANTS:
PROJ. BY: | DRAWN: | DATE: MAY 1955
PHOTO INTERPRETATION BY: | DRAWN: | DATE:
FIELD CHECK BY: | DRAWN: | DATE:



JURASSIC ROCKS

- Jw — Wingate

TRIASSIC ROCKS

- Rc — Chinle
- Rs — Shinarump
- Rm — Moenkopi

PERMIAN ROCKS

- Por — Organ Rock
- Pcm — Cedar Mesa

NOTE

Map constructed by photogrammetric methods based on sparse horizontal control of unknown accuracy. Date of photography 1959. Scale of photography approx 1:31,680. Geology interpreted on photographs. Roads constructed after 1959 do not appear on photography and were sketched on base by field observation.

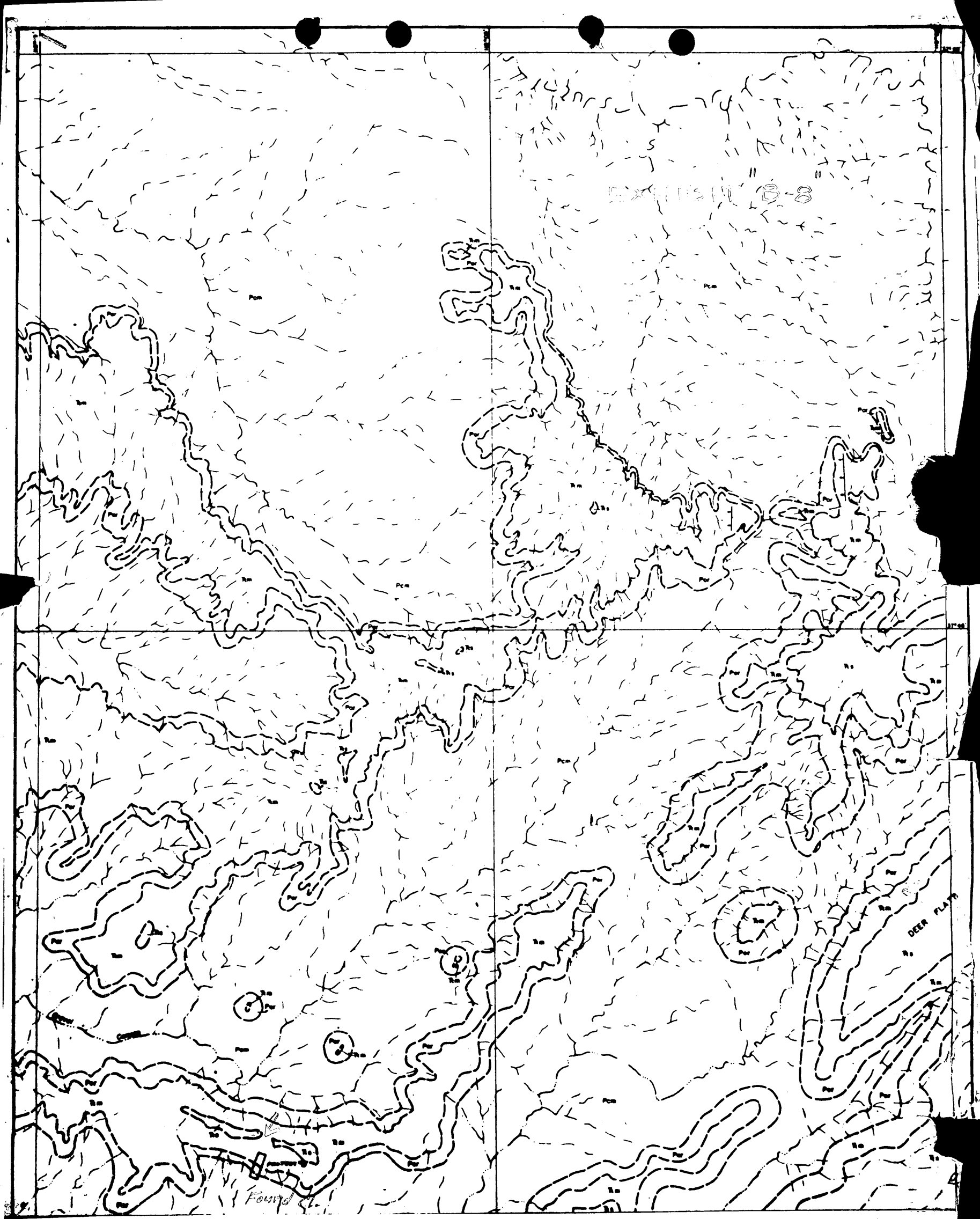
SHEET & RELIABILITY DIAGRAM

3	2	1
6	5	4

A RELIABLE
B FAIRLY RELIABLE
C SKETCHY

U.S. ATOMIC ENERGY COMMISSION
GRAND JUNCTION EXTENSION, NEW YORK RAW MATERIALS OPERATIONS
WHITE CANYON RED CANYON DISTRICT
SAN JUAN CO., UTAH

SCALE 1:31,680	CONTOUR INTERVAL	
GEOL. BY J.R. BOWN	ACCOMPANIES	
TOPO BY	CHECKED	DATE MAY 1951
DRAWN BY J.R. BOWN	CORRECT	CHANGE
TRACED BY J.R. BOWN	APPROVED	FILE NO.



JURASSIC ROCKS

Jw	Wingate

TRIASSIC ROCKS

Ꞧc	Chinle
Ꞧs	Shinarump
Ꞧm	Moenkopi

PERMIAN ROCKS

Pcr	Organ Rock
Pcm	Cedar Mesa

NOTE

Map constructed by Photogrammetric Methods based on sparse horizontal control of unknown accuracy. Date of photography 1939. Scale of photography approx. 1:31,680. Geology interpreted on photographs. Roads constructed after 1939 do not appear on photography and were sketched on base by field observation.

SHEET & RELIABILITY DIAGRAM

3	2	1
6	5	4
9	8	7

A. RELIABLE
B. FAIRLY RELIABLE
C. SKETCHY

TRUE NORTH
MAG NORTH

1000 0 1000 2000 3000

1:31,680

U.S. ATOMIC ENERGY COMMISSION

WHITE CANYON RED CANYON DISTR
SAN JUAN CO., UTAH

SCALE: 1:31,680

GEOL. BY: J.W. SPENCER

TOPO BY:

- ANSWERS TO QUESTIONS -

- THE APPLICANT -

(1)
Applicant is a Corporation

(3)
R.O. Dulaney, Chairman of Board. P.O. Box 608, Cortez, Colorado
R.O. Dulaney Jr., President. P.O. Box 608 Cortez, Colorado
Edmund Key 111 Vice-President, P. O. Box 608 Cortez, Colorado
Mrs. Virginia Cash, Secretary and Treasurer, Dove Creek, Colorado

Applicant is a Colorado Corporation authorized to do business in Utah. Paid in capital stock is $100,000.00. The principal stock-holders are: Dulaney Mining Company, R. O. Dulaney Jr., and E. Key 111.

(4)
Applicant and associates are actively engaged in developing and mining uranium bearing ores on the Colorado Plateau and also on the Navaho Indian Reservation in northeastern Arizona. During the past years production from the mines has materially increased ore receipts at the Government plant at Monticello, Utah; at the Durango plant of Vanadium Corporation of America and at the Uravan plant of U. S. Vanadium Corporation.

Associates in this venture have had years of business experience in the oil industry. Supervising personnel connected with the exploration and mining operations are technical men with years of experience in the mining profession. One of these men, Mr. W. E. Janakka, will supervise and direct the Exploration Project.

(5)
Applicant is the owner of the claims with title vested in the right of location of claims on the Public Domain. None of the claims under consideration are patented.

(6)
There are no claims, liens or encumberances against the claims.

(9)
Applicant is prepared to invest 10% of the total exploration cost. As detailed in question 23 this amounts to $7,026.00. Furthermore, if the proposed exploration loan is approved, applicant is prepared and agrees to place this amount ($7,026.00) in any bank designated by DMA to the credit of the exploration project.

(10)
Reference is made to the attached map marked Exhibit "A-1". On this map is indicated the proposed underground exploration as drifts (dashed lines) and the proposed prospecting of the rim with dozer cuts (shaded lines). The proposed exploration covers the Yoke claim and the Hideout #1 claim and is designated as Project #1. Ten such separate projects considered together make up the Exploration Project for which an exploration loan is requested. The project units are:

UNIT PROJECT	MAP REFERENCE	CLAIMS INVOLVED
#1	Exhibit "A-1"	Yoke and Hideout #1
#2	" "A-2"	Dead Buck
#3	" "A-3"	WN AND WN#1
#4	" "A-4"	White Canyon #1
#5	" "A-5"	Point Claim
#6	" "A-6"	Fry #4
#7	" "A-7"	Fry #2 and Scenic #2
#8	" "B-8"	Found Claim
#9	" "C-9"	North Point and Gonaway
#10	" "C-10"	North Point #6

The U. S. Atomic Energy Commission has prepared a Geologic map of the White Canyon area. Photostatic copies of certain sections of this map have been made. Each proposed unit project is located on the proper map section and the location of the claims involved can be had from noting the reference on the project map.

WHITE CANYON MINING COMPANY
Cortez, Colorado

(12)
The fourteen claims under consideration for which exploration funds are requested are located in White Canyon, San Juan County, Utah. The area embraced by the claims is unsurveyed and is distant some 65 miles west of Blanding, Utah, over a dirt road usually in poor condition. The average distance from the claims to the Governments processing plant at Monticello, Utah, is about 90 miles.

(13)
The only water required for the exploration project would be a limited amount for underground drilling. The area is extremely arid. However, a Spring in Frey Canyon will supply the necessary water for underground drilling and camp facilities. A spring in Deer Flat will supply the needs for the exploration of the claims in that area. Past experience indicates that the springs will continue to flow and provide sufficient water for the exploration.

(15)
The U. S. Atomic Energy Commission owns and operates through a Contractor a uranium processing plant at Monticello, Utah. The American Smelting and Refining Co. acts as Contractor in the purchasing and sampling of the ores. This plant would provide a market for ores originating in the White Canyon area.

It might be mentioned that the Vanadium Corporation of America has operated a small pilot plant on the Colorado river at Hite, Utah, for the past two years. When and if a satisfactory flow-sheet can be developed for this type of ore, it is planned to build a 100 ton plant in the area. Should the plant be built or VCA be authorized by the Commission to purchase ores for stock-pile pending construction of the plant, a closer market for the ore would be provided. Hauling costs would be reduced.

(20)
The exploration will be conducted in an attempt to discover bedded deposits of uranium-copper bearing ores. The favorable mineralized bed is in the Moenkopi formation. It is a coarse-grained sandstone and conglomerate lying under a thin bed of gray and green shale.

(21)
There are ten units of exploration proposed which comprise the total exploration project. On each unit project it is proposed to drive 300 feet of tunnel or drifts and to prospect with dozer cuts certain sections of the mineralized outcrop along the rim. While the exploration drifts and dozer cuts have been indicated on each unit project it is felt that the location of the drifts should be flexible and subject to change when structural conditions encountered warrant it.

It is planned to carry the drifts at about 5'x7' size, rock breakage. In starting the tunnels and while near the rim, the muck will be removed with wheelbarrows. As the tunnels advance the removal of muck will be by slushing. Should ore be encountered in drifting which warrants saving, it is planned to install track and hand muck. In this way all ore can be saved even though it becomes necessary to blast the ore and waste separately. The exploration work proposed for each unit project is:

UNIT PROJECT	MAP REFERENCE	DRIFTS	RIM PROSPECT DOZER CUTS	ACCESS ROAD
#1	Exhibit A-1	300 ft.	700 ft.	-
#2	" A-2	300 ft.	-	-
#3	" A-3	300 ft.	400 ft.	-
#4	" A-4	300 ft.	-	-
#5	" A-5	300 ft.	600 ft.	-
#6	" A-6	300 ft.	600 ft.	-
#7	" A-7	300 ft.	600 ft.	-
#8	" B-8	300 ft.	600 ft.	1½ miles
#9	" B-9	300 ft.	600 ft.	-
#10	" C-10	300 ft.	600 ft.	2 miles
	Total -	3,000 ft.	4700 ft.	3½ miles

To initiate the exploration it is planned to place in the field three units of equipment as listed below in question "23 G" and operate 3 unit projects simultaneously. It is estimated that each unit will drive 300 feet of drifts in four months. The total expected time to complete the exploration project is 12 months. To accomplish this it may be necessary to add one additional equipment unit during the last four months of the year.

WHITE CANYON MINING COMPANY
Cortez, Colorado

(22)
In the White Canyon area the favorable mineralized bed occurs in the upper Moenkopi formation. All of the claims on which exploration funds will be expended are located on this bed. Radiometric surveys made by both the applicant and the U. S. Atomic Energy Commission show that certain sections of the mineralized bed are radioactive. Assays of samples taken from these sections, especially fresh faces, verify the presence of uranium minerals. At several points where underground tunnels have extended back from the rim there is indication of a change in the character of mineralization from oxides to sulphids with an increase in the uranium content.

The Cooper-Bronson mine in White Canyon is an example of an impoverished, leeched out-crop developing back from the rim into a major uranium ore deposit.

The proposed openings and dozer cuts, together with assays and underground workings are shown on the unit project maps which are attached. The U. S. Atomic Energy Commission's Geologic maps which are also attached are a reduction in size of the original.

In support of the Geologic possibilities of the White Canyon area and the favorable location of the claims on which an exploration loan is requested, there is attached a copy of a paper prepared by Phillip H. Dodd, Research Section, Atomic Energy Commission, Grand Junction, Colorado. The paper is marked Exhibit "D"

(23)
(a) It is assumed that a unit project crew of 2 miners and 1 mucker will advance a 5'x7' drift 84' per month of 24 working days or $3\frac{1}{2}$ feet per 8 hour day. It is quite possible that the labor required in driving the drifts will be contracted, which would reduce somewhat the estimated labor costs. It is planned to have the Superintendent look after three exploration units.

<u>One Unit Costs:</u>

Labor:

		84' Advance
2-Miners @ $12.50/8 hr. shft	- $25.00 x 24 days -	$600.00
1-Mucker @ $12.50/8 hr. "	- $12.50 x 24 " -	300.00
		$900.00

$\frac{\$900.00}{84 \text{ ft.}}$ - $10.70/ft. x 3000' - $32,100.00 — Total $32,100.00

(b) Supervisor (one directing 3 units)
Salary of $500 per month
1/3 x $500.00 - $\frac{\$170.00}{84 \text{ ft.}}$ - $2.00/ft. x 3000' - $ 6,000.00 — $ 6,000.00

(g) 1-105 cu. ft. gasoline powered compressor
1-Jackhammer and jackleg
1-Double drum air tugger, slusher and cable
1-12 cu. ft. mine car
1-Blower for ventilation
1-Wheelbarrow (rubber tire)
1-Pick-up truck for Supt. use (haul supplies)
1-Water tank for drilling water (miners haul drilling water)
Rental on above equipment $250/month
$\frac{\$250}{84'}$ - $3.00/ft. x 3000' - $9,000.00 — $ 9,000.00

(h)

1-Ton 12# rails @ $160/ton	- $ 160.00
300' - 2" pipe @ 34¢/ft.	102.00
300' - 1" " @ 24¢/ft.	72.00
Drill steel & bits	60.00
Small mine tools & supplies	30.00
Powder caps & fuse	350.00
Carbide	20.00
Gas & oil ($8.00/da.)	192.00
Timber (ties & stulls)	90.00
	$\frac{\$1076.00}{300'}$ - $3.58/ft.x 3000' - $10,760.00
	Total Dr. Costs - $57,860.00

hoses.
mucker pipe.

TOTAL DRIFT COST $57,860.00
" FOOTAGE 3000 feet
COST PER FOOT $19.28

(g) continued:
The present rental on a D7 Dozer is $10.00 per hour for the White Canyon area. Owner furnishes and pays for the Operator. The time required in hours to prospect the rims with dozer cuts is estimated for each unit project. This figure multiplied by $10.00 gives the total estimated cost of the rim prospecting cuts.

WHITE CANYON MINING COMPANY
Cortez, Colorado

		Total Dr. Cost	- $57,860.00
700'	Project #1 - 80 hours x $10.00/hr. -	$ 800.00	
400'	" #3 - 48 " x $10.00/hr.	480.00	
600'	" #5 - 48 " x $10.00/hr.	480.00	
600'	" #6 - 48 " x $10.00/hr.	480.00	
600'	" #7 - 48 " x $10.00/hr.	480.00	
600'	" #8 - 56 " x $10.00/hr.	560.00	
600'	" #9- 56 " x $10.00/hr.	560.00	
600'	" #10- 56 " x $10.00/hr.	560.00	
	Total Estimated Cost Rim Dozer Cuts -	$4400.00	4,400.00

- COST OF PROPOSED ACCESS ROADS -

Project #8 - 1½ mi. - 500 hrs. x $10.00/hr. -	$5,000.00	
Project #10-2 mi. - 300 hrs. x $10.00/hr. -	3,000.00	
Total Exploration Cost - -		8,000.00
		$70,260.00

90% by Government -	$63,234.00
10% by Applicant -	7,026.00
	$70,260.00

(24)
As outlined above, applicant is prepared and plans to place in the field 3 units to initiate the exploration. It is expected that each unit will advance the drifts or tunnels 84 feet per month. Operating 3 units it will require approximately 4 months to complete 3 projects or one year to complete the ten projects. During the last four months of the year it may be necessary to put 4 operating units to work. This will depend on the progress made at that time.

From the date work is initiated it will require approximately 7 months to complete the proposed dozer work.

WHITE CANYON MINING COMPANY
Cortez, Colorado

PRELIMINARY COMMENTS ON COPPER-URANIUM MINERALIZATION FOUND IN THE WHITE CANYON DISTRICT OF SOUTHEASTERN UTAH

ADDRESS BY PHILLIP H. DODD, RESEARCH SECTION
ATOMIC ENERGY COMMISSION, GRAND JUNCTION, COLORADO
AT THE MEETING OF THE COLORADO MINING ASSOCIATION
DENVER, COLORADO, FEBRUARY 2, 1951

COPY OF PORTION OF PAPER - - EXHIBIT "D"

1. INTRODUCTION - Purpose and Scope:

I am very glad to have this opportunity to bring to the attention of the mining industry a type of uranium mineralization, which if not new, is of relatively recent interest as far as uranium production is concerned. It is hoped that the publicity for this type of mineralization gained by this presentation, together with the few facts and inferrences I will offer, will stimulate further interest in the field of copper uranium mineralization.

These are definitely preliminary comments on our findings to date. It is felt that lack of completeness will be outweighed by promptness of presentation with the hope that some utilization may be found before the ore bodies have been mined out. Further field work and laboratory research will continue to expand our present knowledge of the subject and future reports should be both more complete and scientifically documented.

11. HISTORY

Many of the copper-uranium deposits of White Canyon, Utah, were first discovered and staked in the late 1800's. At this time the bright colored secondary copper minerals attracted the prospectors and limited amounts of hand-sorted copper ore were packed out on burros. During each succeeding period of new high copper prices the area has been p artially awakened to prospecting. B. S. Butler visited the area and the now famous Happy Jack mine was described in his Professional Paper 111 under the former name of Blue Dike. This visit in 1907 appears to be the first recognition of the uranium association with the copper. More recently, and as an outgrowth in the current interest in uranium, prospectors have been active in locating new copper-uranium bodies and relocating many of the old copper showings. Due to the copper content of these ores, the carnotite mills were unable to economically extract the uranium. The Vanadium Corporation of America therefore embarked on the construction of a suitable mill and the development of metallurgical methods. This mill, located at Hite on the Colorado River, is in production and is constantly experimenting with new metallurgical methods to cope with the problems of the copper-uranium ores.

1V. STRATIGRAPHY

The question then arises as to what is the best stratigraphic horizon to prospect in order to find this type of mineralization. As far as the prospector is concerned it is of little importance what geologic formational name is applied as long as the ore is there. However, from the geologists point of view, in seeking information as to the genesis of these mineral bodies in order to better evaluate or predict them, it is of some value to place them in the proper horizon.

All of the mineralized outcrops which I have seen so far in the White Canyon District have been in approximately the same horizon. The rocks exposed in the White Canyon District range from the Permian Cedar Mesa member of the Cutler formation to remnants of the Jurassic Navajo Formation. The floor of White Canyon is formed from the upper 150 feet of the White, calcareous, cross-bedded sandstone of the Cedar Mesa member of the Cutler formation. The lower portion of the walls of White Canyon are formed by steep slopes and upper vertical cliffs of the red-brown sandy shales and shaley sandstones of the Organ Rock member of the Cutler Formation. The De Chelly and Hoskinnini members of the Cutler are apparently absent in the White Canyon proper, although there is a possibility that a few feet of light colored sandstone found near the mouth of the canyon and becoming more distinct to the north may represent the De Chelly member.

Resting on the Cutler formation is the Moenkopi formation which represents the lower Triassic in the White Canyon district. The aggregate thickness of the Moenkopi sandstones and shales ranges from 186 to 390 feet. The color is characteristically chocolate brown, especially in the lower half of the formation, while the upper half may be represented in places by a predominance of gray to gray-green and maroon shales. Locally, a light buff, gray, gritty sandstone or conglomerate may be found near the middle or upper two-thirds of the Moenkopi. Where developed, this horizon forms the locus of copper-uranium mineralization. For the most part, the Moenkopi beds are irregular in thickness, composed of fine-grained sandstone and arenaceous shale, which is often gypsiferous. Ripple marks and mud cracks are common, suggesting fluviatile or lacustrine environment of deposition.

WHITE CANYON MINING COMPANY
Cortez, Colorado

The Shinarump formation, which stratigraphically overlies the Moenkopi, ranges in thickness from 0 to 60 feet. I have observed localities in White Canyon where the typical facies, at least, is completely absent; while immediately adjacent the thickness was estimated to be in excess of 50 feet. When present, the well-cemented, course sandstone, grit, and conglomerate of the Shinarump forms a resistant vertical cliff and often a flat bench on top. The light buff weathering of the pale gray, conglomeratic grit generally stands out in sharp contrast to the red beds above and below it.

Above the Shinarump formation are 400 to 800 feet of the generally reddish shales and sandstones of the Upper Triassic Chinle formation. These form steep slopes in the outer walls of White Canyon and are capped by the vertical cliff forming Wingate Formation of Jurassic age. Only remnants of Kayenta and Navajo are found in the district on isolated high ridges well back from the outcrop of the ore horizon.

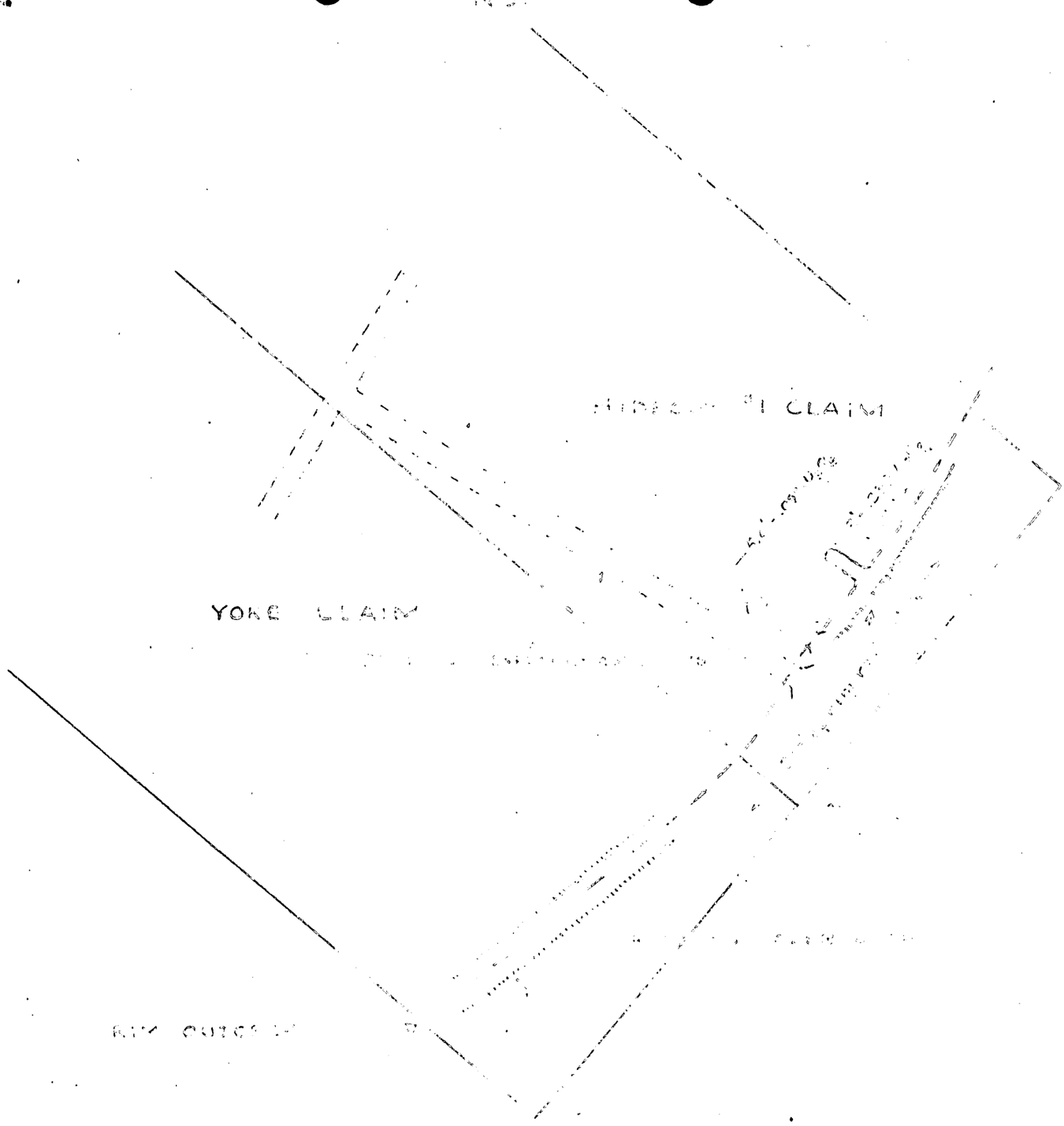
In the past, the ore horizon has been called Shinarump. From more recent work in the area, but not speciallized stratigraphic studies, I prefer to place it in the middle of the Moenkopi. Where measured, the ore occurrences have been found 127 to 140 feet above the Organ Rock member. To call this Shinarump would of necessity require a reduction of the Moenkopi thickness of nearly one-half, and additional thickening of the Chinle formation, and placing a typical Shinarump lithologic unit in the Chinle.

V. ECONOMIC GEOLOGY

A. Mineralized Sandstones are "Channel" Deposits.

The prospectors of the District have learned to look for mineralization in what they call "channels". The more extensive and richer deposits which have come to my attention are found in the lower portion of the gritty sandstone and conglomerate with excellent geologic evidence that the locus is in a fluviatile channel deposit. Except where leaching has moved some of the mineralization into the underlying siltstone, the ore is found near the base of the sandstone lenses where the stream has scoured into the underlying beds and deposited the fast-water sediments of conglomerate, grit, or well-sorted coarse sandstone. Minor showings are found in rocks reflecting proximity to these channels. At this stage of our knowledge of these deposits it seems probable that the greater porosity and permiability of the channel sediments are the structural controls of the ore bodies. Detailed structure contour maps based on the top of the underlying shale appear to show a close correlation between the channel scours and the distribution, thickness, and, possibly the grade of the ore bodies.

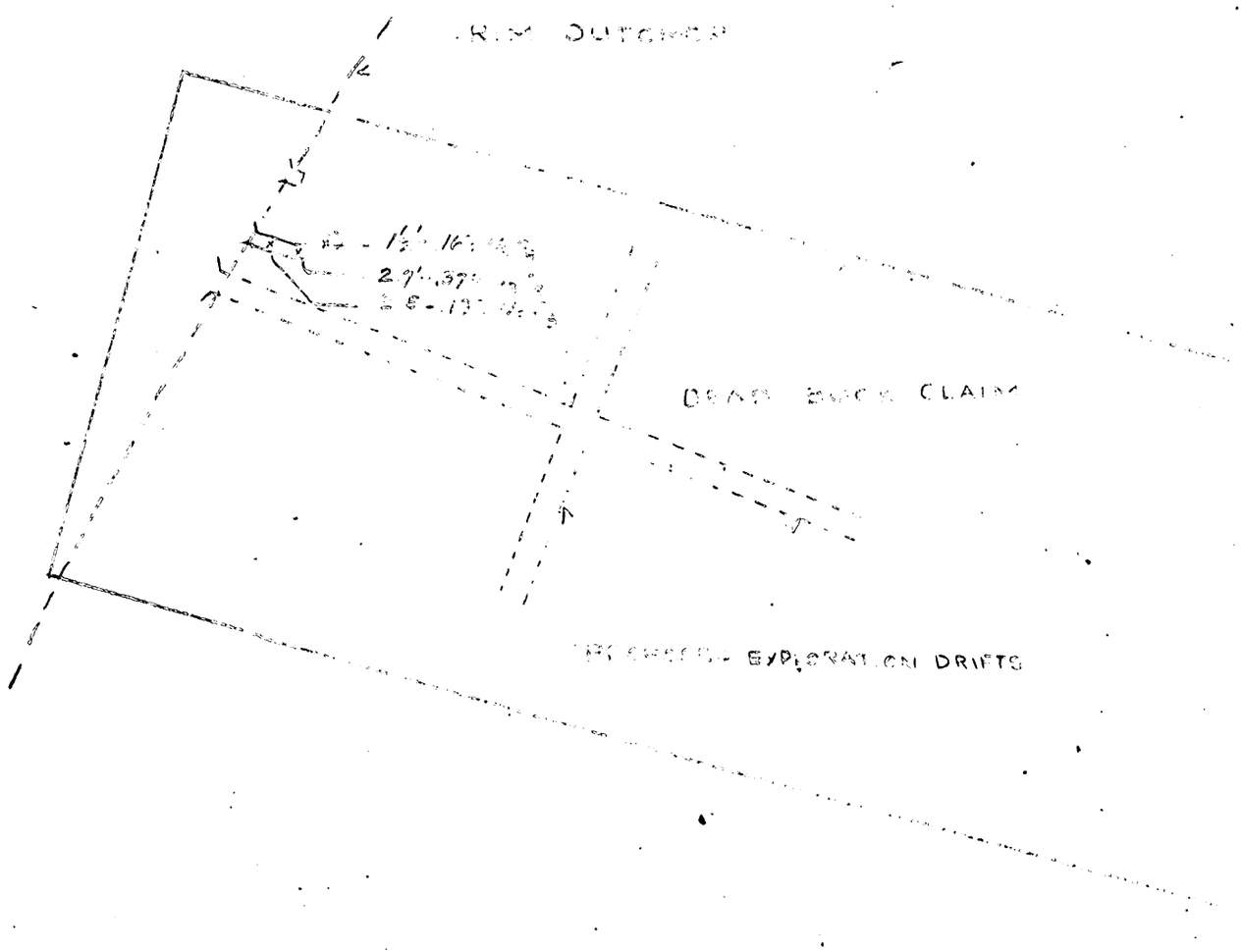
WHITE CANYON MINING COMPANY
Cortez, Colorado



CLAIM LOCATIONS (EXHIBIT A)

LR FTS: 1" = 50' CLAIMS DOZER CUTS

PROPOSED EXPLORATION



— PROJECT #2 —

SEE CLAIM LOCATION MAP (EXHIBIT A)

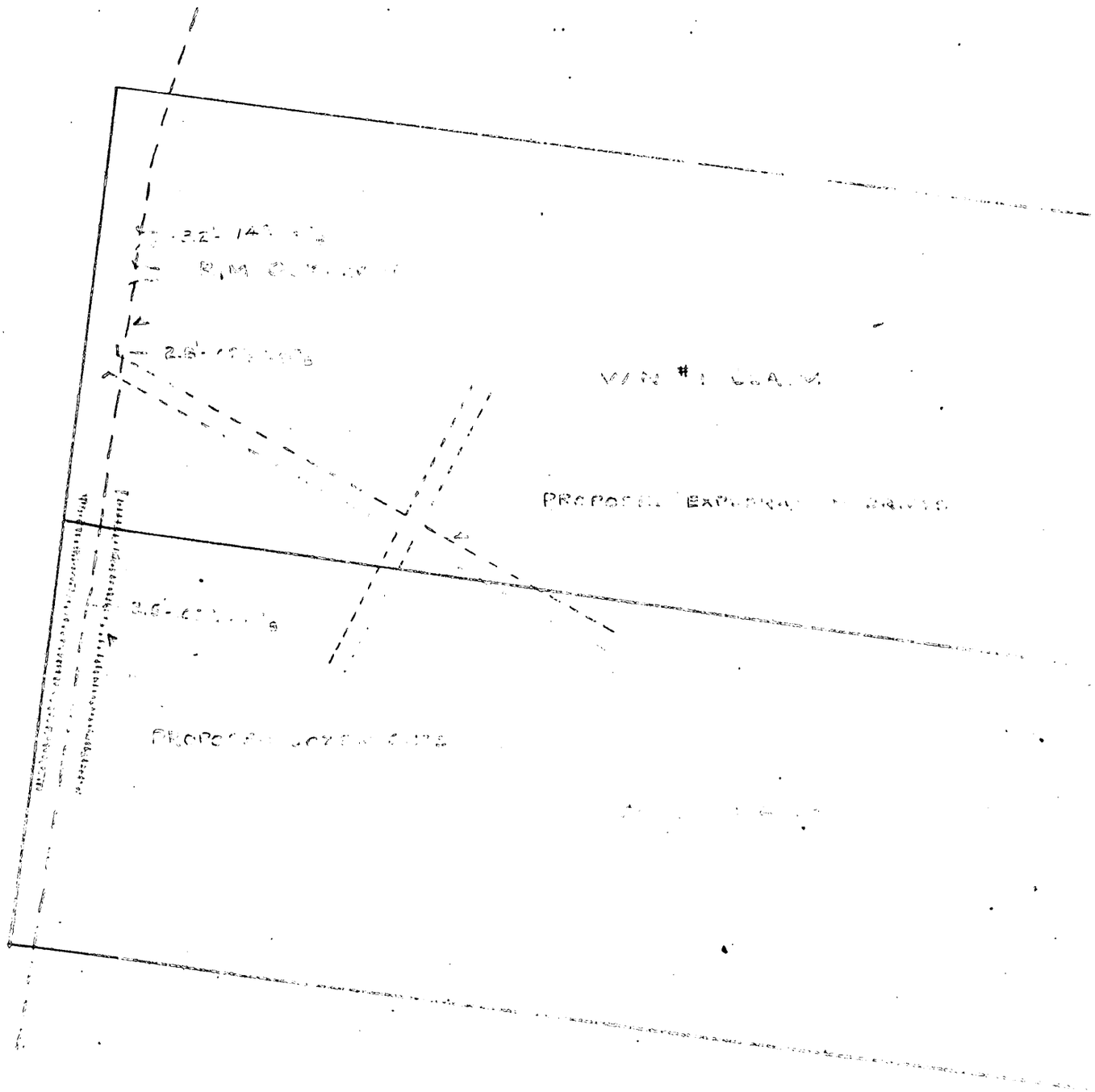
WHITE CANYON MINING COMPANY

SCALE

DRIFTS, 1" = 50'

— PROPOSED EXPLORATION

300 Ft. - Drifts



-PROJECT #3-

(SEE CLAIM LOCATION MAP) (EXHIBIT A)

WHITE CANYON MINING COMPANY

- SCALE -

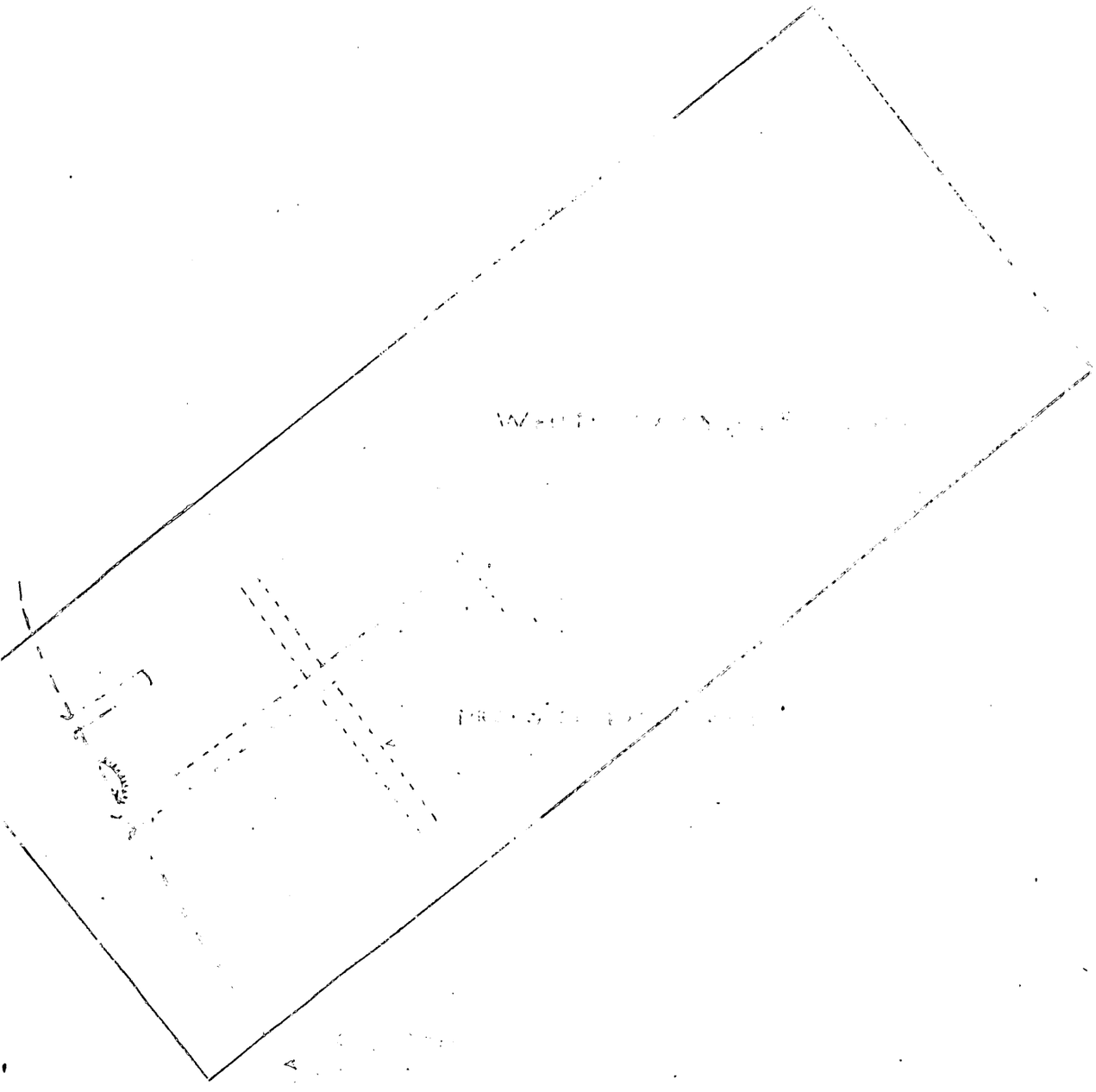
DRIFTS [illegible] CLAIMS and DOZER CUTS; 1" = 200'

- PROPOSED EXPLORATION -

300 Ft. - Drifts

400 Ft - DOZER CUTS

NORTH



PROJECT #4

NORTH

- PROJECT [illegible]

[illegible] (Exhibit A)

WHITE CANYON [illegible]

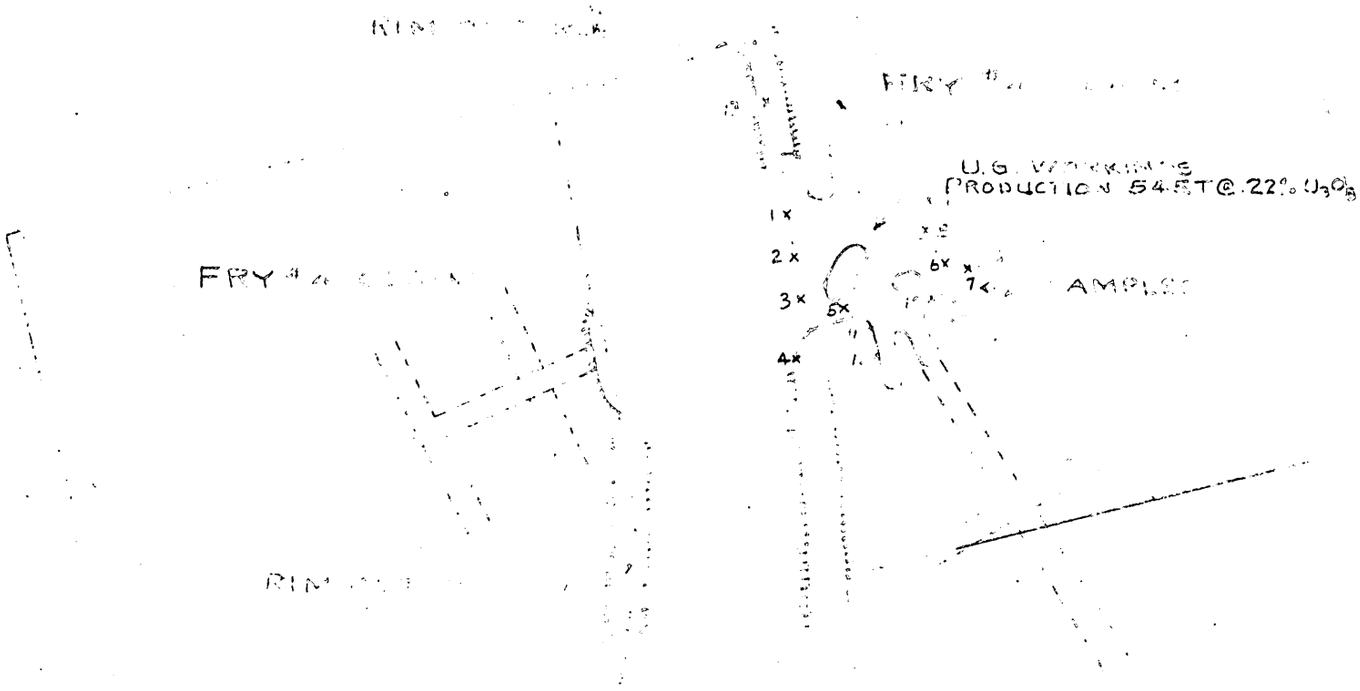
DRAFTED 1" = 50' [illegible] Dozer [illegible]

- Proposed Exploration

300 ft - Drifts

600 ft - Dozer-Cuts

NORTH



SAMPLE ASSAYS

No.	WIDTH	% U_3O_8
1	5'	.05
2	5'	.06
3	5'	.15
4	5'	.13
5	5½'	.83
6	2'	.23
7	4'	.13
8	5'	.09
9	5½'	.03
10	2.5'	.26
11	3.5	.93
12	3'	.29
13	1.5'	.55

(EXHIBIT A)

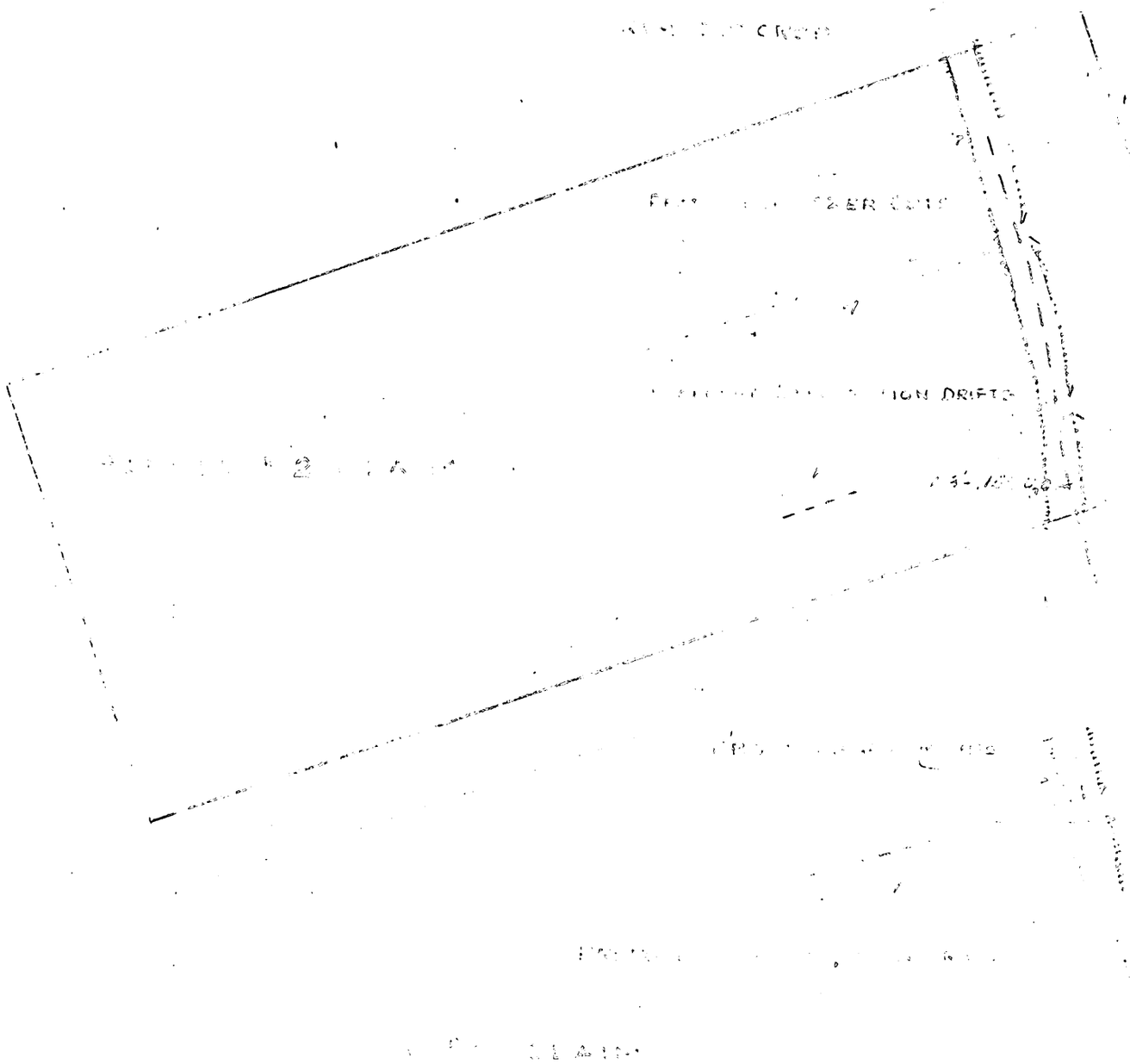
DRIFTS: [illegible] CLAIMS [illegible]

[illegible] TAYLOR [illegible]

300 ft - Drifts

600 ft - Dozer [illegible]

NORTH



PROPERTY

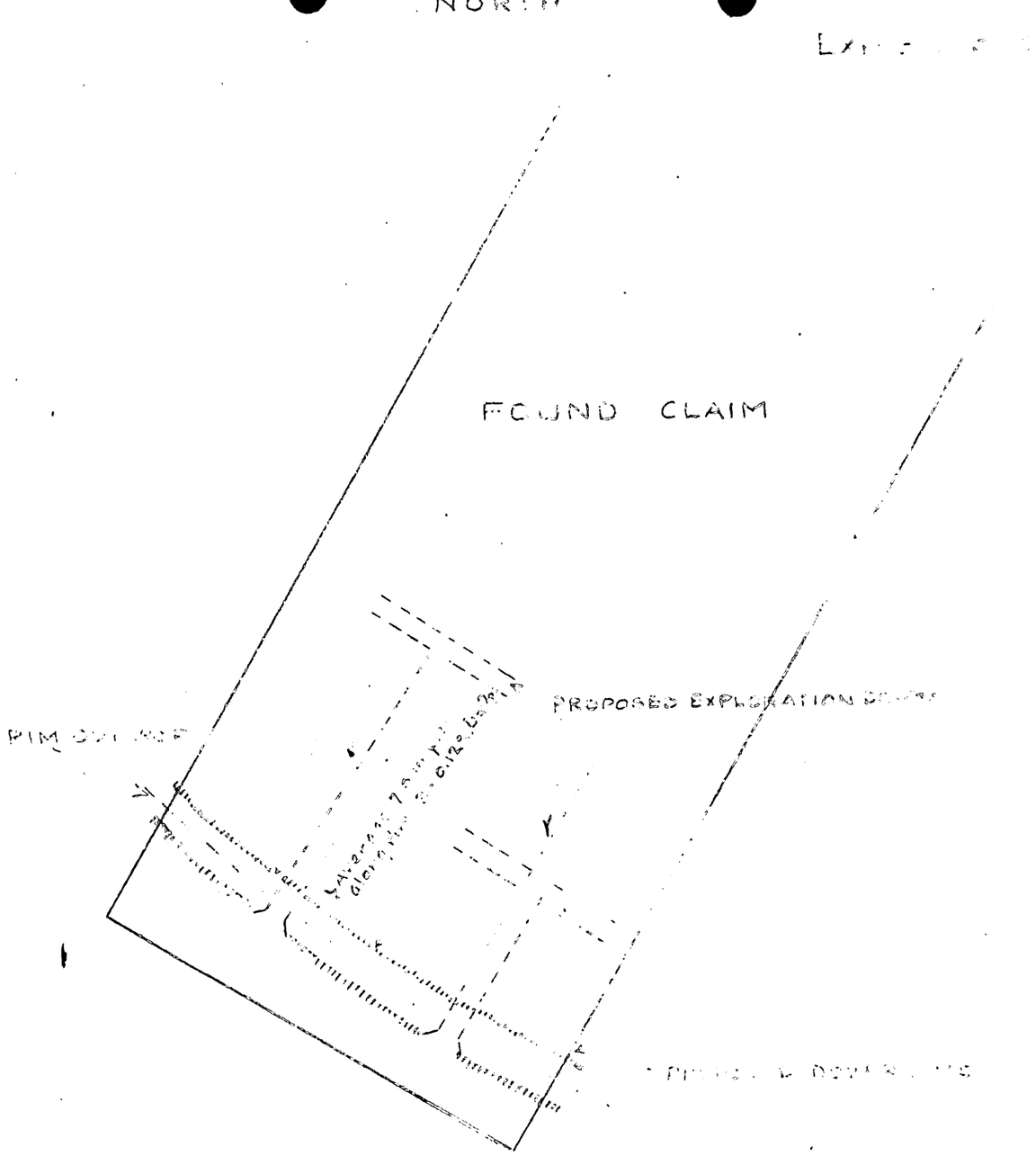
DETAIL LOCATION MAP (EXHIBIT A)

SCALE

1" = 50' CLAIMS and DOZER CUTS: 1" = 200'

EXPLORATION

600 FT - DOZER CUTS



- PROJECT # 8 -

SEE CLAIM LOCATION MAP (EXHIBIT B)

WHITE CANYON MINING COMPANY

- SCALE -

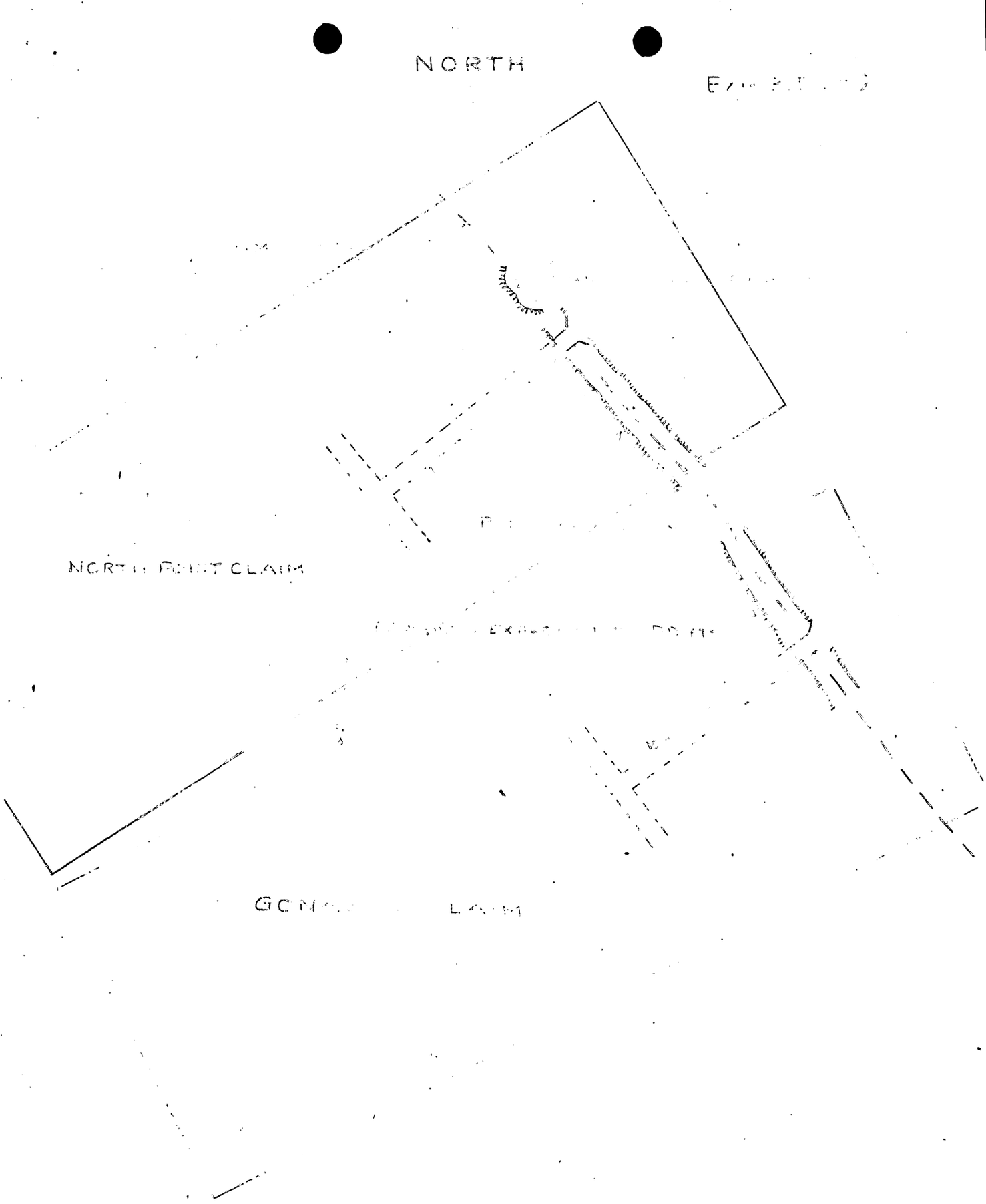
DRIFTS: 1" = 50' CLAIMS and DOZER CUTS: 1" = 200'

- PROPOSED EXPLORATION -

300 Ft - Drifts

600 Ft - DOZER CUTS

1½ MILES ACCESS ROAD



- PROJECT # 9 -

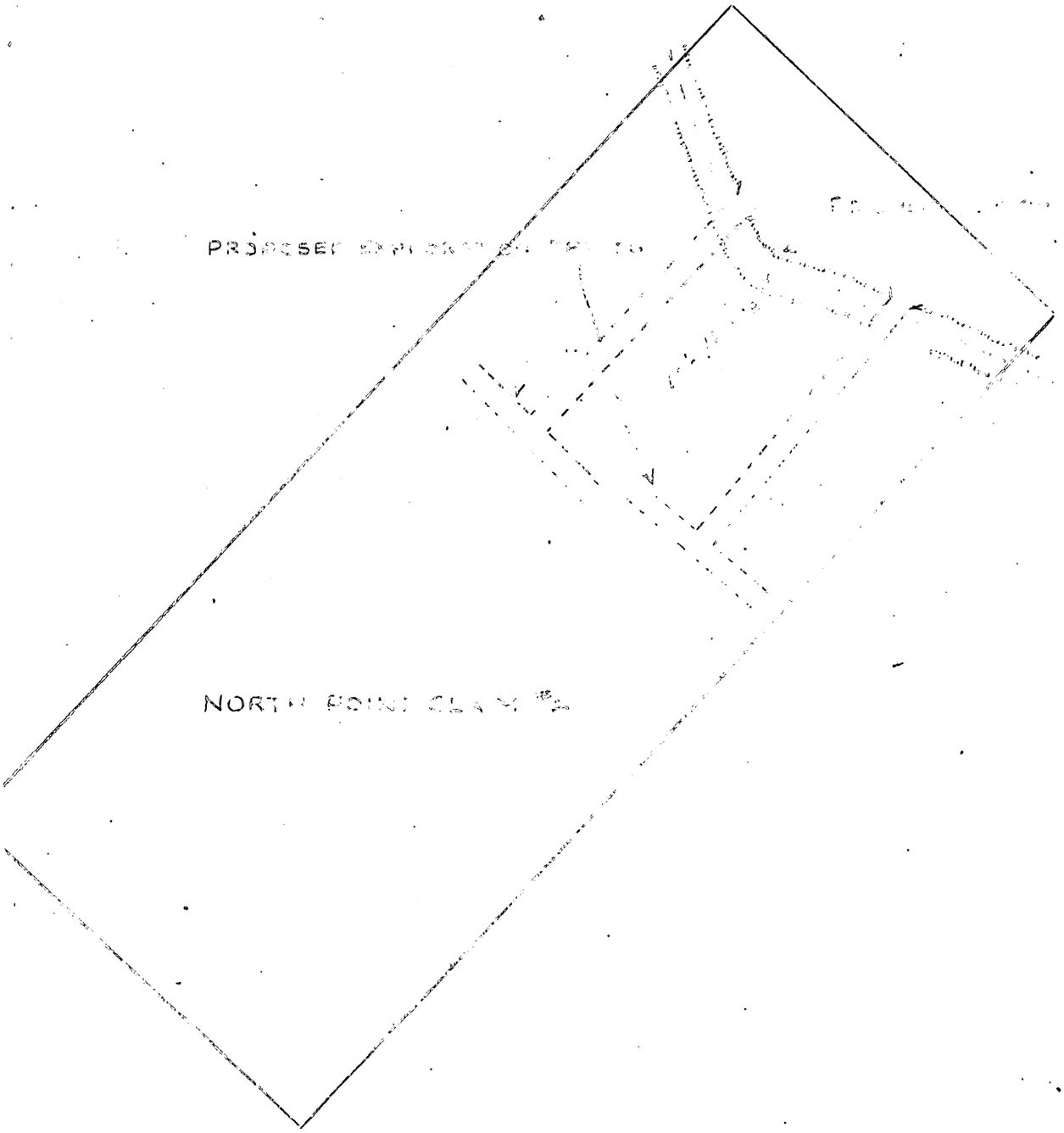
SEE CLAIM LOCATION MAP (EXHIBIT C)

WHITE CANYON MINING

DOZER CUT

300 Ft. Drill

DOZER CUT



- PROJECT #1 -

SEE CLAIM LOCATION MAP (EXHIBIT C)

- SCALE -

DRIFTS 1" = 55' CLAIMS [illegible] CUMULATIVE

- PROPOSED EXPLORATION -

300 Ft - Drifts

600 Ft - DOZER [illegible]

2 MILES - ACCESS ROAD

FILE COPY
SURNAME:
Talbert

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

OCT 23 1953

Mr. Thomas H. Reading
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

Dear Mr. Reading:

Receipt is acknowledged of your letter of October, 19, 1953 in reference to certain completed contracts, and also your letter of the same date transmitting copies of your Audit Report and Certificate on Idm-E16, DMA-1094, Haildriver Mining Company.

With reference to Idm-E260, DMEA-1931, White Canyon Mining Company and Idm-E458, DMEA-1549, Mathis & Mathis, it appears that the wrong form was used by the Executive Officer in closing these contracts. The Notice of Termination *** Before Completion of Work infers that the work was started and it has been our procedure to withhold release of the obligated funds and the closing of the Operator's account until receipt of the final Audit Certificate or Report of Review.

In these two cases, however, it appears from your letter that no work was done and no costs were incurred on these projects, with the result that no Audit Certificates or Reports of Review are required. Accordingly, we will use your letter as the basis for releasing the obligated funds and closing the accounts the same as if the Rescission of Exploration Project Contract form had been used.

Your Audit Report and Certificate on Idm-E16, DMA-1094, Haildriver Mining Company is acceptable and may be distributed. Also, please advise Mr. Finch that his Report and Certificate on Idm-E100, DMA-1099, United Park City Mines also has been accepted and distribution may be effected.

Sincerely yours,

(Signed) E. D. Talbert

E. D. Talbert, Acting Chief
Contract Administration
and Audit Division

EDTalbert/wb
October 23, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers

C
O
P
Y

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

224 New Customhouse
Denver 2, Colorado

October 19, 1953

Mr. Jay L. Chambers, Chief
Contract Adm. & Audit Div.
Defense Minerals Exploration Adm.
Interior Building
Denver 2, Colorado

Dear Mr. Chambers:

The following is the status of the "Be Whiskered" completed exploration contracts in Region IV.

Idm-E260 DMEA Docket 1931-White Canyon Mining Co.
Idm-E458 DMEA Docket 1549-Mathis and Mathis.

No work was started on either of the above contracts, consequently no disbursements were made. Inasmuch as you have probably had similar cases to these in other regions, you, no doubt, have developed a form of report to handle them. Please advise me the form of report to use in these two instances, and I will be happy to comply with your instructions.

Idm-E71-DMEA 789-Erickson and Baer-One of the examining engineers contacted Mr. Baer at Telluride about sixty days ago, and he promised immediate action on the disposition of the equipment under this contract. An effort will be made to see Mr. Baer in the immediate future, and definite steps taken to close this deal.

Idm-E124-DMEA 1318-Kenneth L. Porter-Attached are copies of letters regarding this contract:

(1) Letter dated September 21, 1953-Frank E. Johnson, Acting Administrator to Mr. Porter.
(2) Memo regarding inspection of deposits under subject contract, and statement regarding certain materials in storage.

Sincerely yours,

/s/ T. H. Brading

DMEA Auditor

Enclosures

10/14/53 gla

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

Reply from Bryding Oct. 19. No work was started on E260. Reply on Oct. 23 by Chambers

Mr. Thomas H. Bryding
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

OCT 13 1953

Dear Mr. Bryding:

In reviewing the terminated and completed exploration projects in Region IV, it appears there are several "be-whiskered" ones for which neither Reports of Review nor Audit Reports have been issued. These are:

Idm-E71	DMEA-789	Erickson & Baer
" E260	" 1931	White Canyon Mining Co.
" E458	" 1549	Mathis & Mathis

The Erickson & Baer contract apparently was completed on August 18, 1951 except for the disposition of equipment; the White Canyon Mining Co. contract was terminated before completion of the work by notice dated March 2, 1953; and the Mathis & Mathis contract was terminated before completion of the work by notice dated March 6, 1953. Every effort should be made to close these accounts by final audit or review, so that the obligated funds may be released.

Please advise the present audit status of these contracts.

There is one other "old" termination in Region IV, that is the Kenneth L. Porter contract, Idm-E124, DMEA-1318, which was the subject of your letter of August 28, 1953. I am planning on sending an auditor from the Washington office to New York for this audit, but, in view of the small amount involved, a trip for this purpose alone is not justified. Therefore I am delaying the proposed audit until late November or December, when we expect to perform a few audits in New England. Please, however, keep me currently informed on the progress of the property disposition under this contract.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

HDTalbert/wb
October 13, 1953

Copy to: Docket
Admr. Reading File
Mr. Ellis
Mr. Griswold
Mr. Chambers

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

224 New Customhouse
Denver 2, Colorado

March 2, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 5 1953

Mr. Edmund Key, III, President
White Canyon Mining Company
Cortez, Colorado

Re: Docket DMA 1931
Contract Idm-E260

Dear Mr. Key:

Enclosed is a copy of notice of termination of Contract Idm-E260.

Contract Idm-E260 is dated February 19, 1952. The life of the contract is twelve months. Since this contract has expired, we believe it is in the best interest of the Government to submit a formal notice of termination and thus avoid any misunderstanding.

If at some later date you obtain clear title to the property involved, we will be glad to consider another contract.

Very truly yours,

W. H. King

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

Enclosure

JFS:jp
cc, w/copy of notice:
COMittendorf
TAChristensen
SRWilson
AHKoschmann (2)
Contract
Chron

9/9/52 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 8 1952

224 New Customhouse
Denver 2, Colorado

September 5, 1952

Memorandum

To: C. O. Mittendorf, Acting Administrator
Defense Minerals Exploration Administration

From: Executive Officer, Field Team, Region IV

Subject: Contract Idm-E260, Docket DMA 1931, White Canyon Mining Co. (Uranium)

Enclosed is a copy of a letter dated September 2 from the White Canyon Mining Company regarding adverse claims against their property. Also enclosed is a copy of our reply.

W. H. King
W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

September 5, 1952

Mr. Thomas E. Potts
Secretary-Treasurer
White Canyon Mining Co.
First National Bank Building
Grand Junction, Colorado

Re: Docket DMA 1931
Contract Idm-E260

Dear Mr. Potts:

Thank you for your letter dated September 2, 1952, regarding the adverse claims on your property.

Kindly send us a copy of your attorney's opinion on your rights to the property and any other information which is pertinent.

Very truly yours,

W. H. King

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

C
O
P
Y

WHITE CANYON MINING COMPANY
First National Bank Building
Grand Junction, Colorado

September 2, 1952

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

Re: Exploration Contract Idm E 260, Docket DMA 1931

Dear Mr. King:

With reference to the above Exploration contract, which was processed for the White Canyon Mining Company, we wish to advise you that we are not a lessee, but since there are certain parties who are making adverse claims against the property, we thought it might be necessary to furnish some type of Subordination Agreement signed by them, before we use any Government funds on this contract.

Our attorney is now making a study of the existing conditions and as soon as we have an opinion from him, we hope to be able to start the work.

Yours very truly,

WHITE CANYON MINING COMPANY

/s/ Thomas E. Potts

TEP:eip

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

224 New Customhouse
Denver 2, Colorado

September 2, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

Subject: Amendment No. 1 - Contract Idm-E260, Docket No. DMA-1931, (Uranium), White Canyon Mining Company

The contract provides for the use of electrical power buggies in place of ore cars and rail. Owing to a shortage of material these electrical power buggies were not available to the operator. Therefore the contract was amended to provide for mine cars and rail.

A copy of a letter from the operator requesting this amendment is attached.

W. H. King

W. H. King

Enclosure

COPY

WHITE CANYON MINING CO.
Cortez, Colorado

April 1, 1952

Mr. J. R. East, Jr.
Executive Officer
DMA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

ATTN: Mr. Shaw

RE: Docket No. DMA 1931
Uranium
Idm E-260

Dear Sir:

After further consideration of the work outlined in our Exploration Project Contract, I am of the opinion that the contract should be amended, or the original contract changed again if that is still feasible.

As you know, our contract provides for the use of electrical power buggies in place of ore cars and rail. The type of buggy which we have seen successfully used is not immediately available, and another similar buggy on the market still has some minor "bugs" to be worked out.

To be safe, I believe that for our contract it would be best to use the rail and cars. This would remove the power carts and generators from the list of equipment to be rented, and the electric power cable from the list of supply items. In place of these, we would add the following:

To be purchased:	6 Tons 20# rail @ $160.00	$960.00
Supplies:	Bolts, spikes, fish Plates, etc.	100.00
	Ties	150.00
To be Rented:	3 ore cars @ $15.00 ea. mo.	45.00 per Mo.
	1 Portable electric welder	65.00 per Mo.

The portable welder is something we previously over-looked, but it is an item which we have found almost indispensable, in our other mining operations in remote locations. These changes would reduce the monthly rental of mining equipment from $1,665.00 to $1,205.00.

Mr. J. R. East, Jr.
RE: Docket No. DMA 1931
Uranium Idm E-260

On checking the road situation I find that some repair work will be necessary before operations can be commenced. This will be in addition to the bulldozer work already listed, and I believe another thirty hours would be about right. I suppose this repair work on existing mine roads should also be added to the statement of the work.

By making the above changes, and extending the estimated time from seven to seven and one-half months the amount of money for the project remains the same, as shown on the enclosed detail sheet.

If this letter is sufficient, please consider this our recommendation and request that our contract be amended as indicated above. I plan to be in Denver sometime within the next week or so, and if the contract amendment can be handled there, I would appreciate it if you will let me know what day would be convenient for you.

With best personal regards.

Very truly yours,

/s/ E. Key III
E. Key III
President
White Canyon Mining Co.

EK:jw
Encl: 1

ESTIMATED DETAILS OF COST

Fixtures and Improvements

None

Operating Equipment

To be purchased:

900 feet of 2-inch pipe @ $0.35	$315.00	
3 Wheelbarrows @ $27.00	81.00	
6 Tons 20# rail @ $160.00	960.00	
		$1,356.00

To be furnished by Operator:

2 Pickup trucks, monthly depreciation for each truck, $25.00	$ 375.00

To be rented:

3 Compressors, 125 cu. ft. @ $145.00 each per month	$435.00	
3 Jackhammers w/legs @ $55.00 per month each	$165.00	
3 Water tanks @ $5.00 ea. per month	$ 15.00	
3 Blowers @ $50.00 ea. per month	$150.00	
3 Slushers w/dippers @ $110.00 each per month	$330.00	
1 Portable Electric Welder	$ 65.00	
3 Ore Cars @ $15.00 ea. per month	$ 45.00	
Total Monthly Rental	$1,205.00	
Total Mining Equipment Rental	$9,037.00	
1 D-7 Bulldozer or equivalent, 330 hrs. @ $12.00	$3,960.00	
Total Estimated Rental		$12,997.00

Labor and Supervision

3 Miners @ $1.60 per hr.	
3 Muckers @ $1.40 per hr.	
1 Utility Man @ $1.50 per hr.	
1 Superintendent @ $500.00 per month	
1 Clerk-bookkeeper @ $100.00 per month	
Total Estimated Labor and Supervision	$22,000.00
Compensation, Insurance and Payroll Taxes	$ 2,680.00
	$39,408.00

Balance Forward

Balance Forward		$39,408.00

Supplies:

Drill Steel and bits	$750.00	
Small tools	400.00	
Dynamite, caps, fuse	3,000.00	
Oil, Gasoline, grease	5,000.00	
Assaying	700.00	
Timber	410.00	
Freight	1,000.00	
900 Ft. ventilation tubing @ $1.00	900.00	
6 50-ft. lengths 3/4" air hose @ $30.50	183.00	
3 50-ft. lengths of 1/2" water hose @ $25.00	175.00	
Pipe Fittings	100.00	
Carbide	100.00	
Ties	150.00	
Bolts, spikes, fish plates, etc.	100.00	
		$12,968.00

Rehabilitation and Repairs

None

TOTAL	$52,376.00

9/3/52 rgla

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

224 New Customhouse
Denver 2, Colorado

August 27, 1952

Memorandum

To: Secretary to the Operating Committee

From: Executive Officer, Field Team, Region IV

Subject: Docket No. DMA 1931, Contract Idm E260, White Canyon Mining Company (Uranium)

Enclosed are two copies of a letter dated August 16, 1952, from Thomas E. Potts, Secretary-Treasurer, White Canyon Mining Company, requesting Landlord's Subordination Agreements. Also enclosed are two copies of our reply.

It is our understanding that at the time the application was made, the White Canyon Mining Company believed that they had clear title to the property involved, but later found that another party had a claim on it.

We believe that the Legal Department should pass on the lease and also make whatever changes are necessary on Form MF-200 before the applicant commences work.

W. H. King

W. H. King

Enclosures

COPY

WHITE CANYON MINING CO.
First National Bank Building
Grand Junction, Colorado
August 16, 1952

Mr. J. R. East, Jr.
Executive Officer
DMA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMA 1931 - Uranium IDM - E-260

Dear Mr. East:

We are in need of Subordination by Landlord forms for our use in connection with the above DMA docket number. Will you please send us twelve copies of this form.

Yours very truly,

WHITE CANYON MINING COMPANY

Thomas E. Potts
Secretary-Treasurer

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

224 New Customhouse
Denver 2, Colorado

August 27, 1952

Mr. Thomas E. Potts
Secretary-Treasurer,
White Canyon Mining Co.
First National Bank Building
Grand Junction, Colorado

Dear Mr. Potts:

Enclosed are six copies of Form MF-202, Landlord's Subordination Agreement as requested in your letter dated August 16, 1952.

When Contract Idn E260 between the Government and the White Canyon Mining Company was signed, it was our understanding that the White Canyon Mining Company was the sole owner of the property involved, and the contract was drawn up accordingly.

It now appears that you are a lessee of the property. In addition to the Landlord's Subordination Agreement, we will require two copies of your lease.

It is suggested that you do not start operations under this contract until your lease and the Subordination Agreement have been cleared by the Legal Department.

Very truly yours,

W. H. KING
W. H. King
Executive Officer
Field Team, Region IV

Enclosures

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

224 New Customhouse
Denver 2, Colorado

April 18, 1952

Memorandum

To: C. O. Mittendorf, Acting Administrator
Defense Minerals Exploration Administration

From: Executive Officer, Field Team, Region IV

Subject: Amendment to Contract Idm E-260, Docket DMA 1931, White Canyon Uranium Company

Enclosed are the original and two copies of an amendment to Contract Idm E-260. Copies of this amendment have been given to the Operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

J. H. East, Jr.

J. H. East, Jr.

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 25 1952

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

224 New Customhouse
Denver 2, Colorado

March 20, 1952

REGISTERED MAIL

Memorandum

To: C. O. Mittendorf, Acting Administrator, Defense Minerals Exploration Administration

From: Executive Officer, Field Team, Region IV

Subject: Contract IdmE-260, Docket DMA 1931, White Canyon Mining Company

Enclosed are the original and three copies of the above contract. All copies have been signed by Edmund Key, President, White Canyon Mining Company, and the corporate seal affixed. All copies have also been signed by the Acting Administrator, DMEA.

Several changes have been made in this contract because equipment which was available to the applicant at the time of the application is not available now.

One copy of this contract has been given to the applicant and one copy has been retained for our files.

W. H. King
W. H. King, for
J. H. East, Jr.

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 24 1952

700 FILE COPY
SURNAME:

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

MAR 17 1952

AIR MAIL

Mr. J. H. East, Jr.
Executive Officer, Region IV
DMEA Field Team
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMA-1931 (Uranium)
White Canyon Mining Company
Cortez, Colorado

Dear Mr. East:

This is to acknowledge receipt of your memorandum of March 6 concerning some changes that you made in the proposed contract of the subject application.

We are in agreement with the changes made on sheet No. 3 of Exhibit 3 of the proposed contract, inasmuch as they will facilitate the auditing of the monthly progress reports and do not alter the overall estimated cost of the project.

Your understanding of the monthly depreciation is correct in that the allowable depreciation per month of each individual item is fixed, whereas the total depreciation must be an estimated cost depending on the extent each item is used during the life of the project.

Sincerely yours,

(signed) FRANK E. JOHNSON (HB)

S.N. 3-17-52

Chairman, Operating Committee
Defense Minerals Exploration
Administration

HFKeller/gla 3-12-52
cc to: Adm. Reading File
✓Docket
Operating Committee
Messrs. A. J. Kauffman, Jr. Rm. 1347
A. P. Butler, Jr. Rm. 3206 GS
Ellis
Keller

APPROVED:

C. H. Johnson (HB)
For Bureau of Mines

T. P. Thayer (HB)
For Geological Survey

3/11/52 gh

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 10 1952

224 New Customhouse
Denver 2, Colorado

March 6, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee
Defense Minerals Exploration Administration

From: Executive Officer, Field Team, Region IV

Subject: DMA 1931 (Uranium) White Canyon Mining Company, Cortez, Colo.

IDM-E260

This is in reference to your letter dated February 19, 1952, with which you enclosed six copies of the proposed contract on Docket DMA 1931.

The contract as submitted, contained some items which would cause difficulty in auditing the monthly progress report forms, MF-104. It was believed advisable to change these items in light of our experience in processing monthly progress report forms. Under monthly allowable depreciation we changed Total allowable depreciation $196.00 for nine months, $1,764.00 to read: Estimated depreciation, $1,764.00, and added: The above depreciation shall be allowed for each item of equipment only for the months during which that particular item is used for the benefit of the project.

Our understanding is that the monthly depreciation is a fixed figure, but the total depreciation is estimated. Maximum amounts require this office to maintain cumulative totals of all items so that we will be aware when and if the operator exceeds the maximum allowed under the contract. If the contract as originally written should last longer than nine months, it would require an amendment to allow more depreciation.

We changed the schedule of labor and supervision to eliminate the maximum number of shifts for each of the men and reduced the salary of the bookkeeper from $300 per month to $100 per month. The total estimated labor and supervision remains the same.

These changes involved retyping Page 3 of the contract, three pages of which are attached to this letter. Six copies of the contract as revised are being transmitted to the applicant for signature.

J. H. East, Jr.

J. H. East, Jr.

Enclosures

10M-E160

	Value	Monthly Allowable Depreciation	
2--Water pressure tanks	$ 130.00	$ 2.00	
1--International pickup	1,500.00	25.00	
1--Ford pickup	1,500.00	25.00	
		$196.00	
Estimated depreciation			$1,764.00

The above depreciation shall be allowed for each item of equipment only for the months during which that particular item is used for the benefit of the project.

To be rented:

1--Compressor, 105 cfm, 9 mos. @ $164.00	$1,476.00	
3--Blowers, 9 months @ $40.00 each	1,080.00	
1--Pressure tank, 9 months @ $5.00	45.00	
1--D-7 Dozer, 280 hours @ $10.00 per hr.; operating time includes operator, repairs and supplies	2,800.00	$,401.00

Labor and supervision

3--Miners @ $12.50 per day

3--Muckers @ $12.50 per day

1--Utility Man @ $12.50 per day

1--Superintendent @ $500.00 per month

1--Clerk-Bookkeeper @ $100.00 per month

The above daily wage is based on an 8-hour day, 5-day week, with time and one-half for overtime.

Total estimated labor and supervision:	$[illegible],920.00
Compensation, insurance, payroll taxes	3,071.00

Rehabilitation and repairs

None.

FILE COPY
SURNAME:

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

FEB 19 1952 AIR MAIL

Mr. J. H. East, Jr.
Executive Officer, Region IV
DMEA Field Team
224 New Customhouse Building
Denver 2, Colorado

Re: Docket DMA-1931 (Uranium)
White Canyon Mining Company
Cortez, Colorado

Dear Mr. East:

We are enclosing six copies of a proposed contract on the above captioned project.

You will note, that we have reduced the estimated cost of this project, from the $70,260.00 estimated by the applicant to a total of $52,376.00. In doing this we have reduced the amount of exploration work to only 2900 feet of stripping and 2100 feet of drifting, which work corresponds only to the exploration program for the claims actually visited by the field teams and which apparently are those which have the more favorable showings.

If as a result of this exploration project and further field team studies, you believe, that the other claims should be explored, the operator can file another application.

If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to Washington, delivering the operators copy to him and retaining one copy for your files.

Sincerely yours,

2/19

(Signed) FRANK E. JOHNSON (EL)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures-6

Approved:
C. V. Johnson (EL)
Member, Bureau of Mines
L. P. Shaver (EL)
Member, Geological Survey

HFKeller/jem 2/12/52
cc to: Adm. Reading File Docket
Messrs. Kauffman, AJ Rm. 1347
Butler, AP Rm. 3212 GS
Ellis Keller
Field Team, Reg. IV

STANDARD FORM NO. 64

2/6/52 gla

Office Memorandum • UNITED STATES GOVERNMENT

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

DATE: February 5, 1952

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

SUBJECT: Contract-DMA Docket 1931, White Canyon Mining Company, applicant: White and Frey Canyon Uranium Deposits, San Juan County, Utah.

Between the time when my memorandum of January 3 was transmitted and the time the letter transmitting the proposed contract for exploration in connection with this docket came to me for surname, a report was received on the results of an AEC examination on some of the applicant's claims.

The AEC's work shows that the Point claim has favorable showings of ore. This claim was not examined by the Field Team and at the time my memorandum was written no information on the Point claim was available in the office of the Geological Survey.

In view of the favorable recommendation made by the AEC, I believe that provisions should be made in this contract for the exploration of the Point claim as proposed in the Field Team report.

This memorandum confirms my telephone conversation of yesterday with Mr. H. F. Keller.

I understand from talking with Mr. T. P. Thayer that the copy of the Field Team report that was originally sent to me for review is for the Survey commodity files, as that copy of the report is enclosed with docket material, I am withholding it for our commodity files.

Arthur P. Butler, Jr.

Arthur P. Butler, Jr.

Attachment

Frank E. Johnson
Acting Deputy Administrator
Defense Minerals Exploration Adm.

FILE COPY
SURNAME:

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

Interior Department
14.20137 Salaries and Expenses,
Defense Production Activities,
Interior, 1952

FEJohnson
Ellis
Steidler

January 16, 1952

Ed Keyes, President
White Canyon Mining Company
Grand Junction, Colorado

PURSUANT TO INQUIRY OF LEO J. COADY, PLEASE BE ADVISED THAT CONTRACT FOR EXPLORATION PROJECT ON DMEA 1931 IS BEING PREPARED AND WILL BE FORWARDED FOR SIGNATURE IN THE NEAR FUTURE.

C. O. Mittendorf (for)

C. O. MITTENDORF
ACTING ADMINISTRATOR

7

FEJohnson/bih
cc to: Admr's. Reading File
Mr. Ellis
Docket

Not Recorded

dA

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Ernest Wm. Ellis, DMEA Commodity Committee member for uranium

DATE: January 3, 1952

FROM : A. P. Butler, Jr., Geol. Sur. Commodity member for uranium

SUBJECT: Final Report, DMA Docket 1931, White Canyon Mining Company, applicant: White and Frey Canyon Uranium Deposits, San Juan County, Utah.

Proposals with respect to Dead Buck prospect, WN and WN No. 1 claims, Hideout prospect, White Canyon No. 1, Fry No. 4 claim and prospect, Worth Point and Gone Away claims appear sound on geologic grounds. I concur in the favorable recommendation with respect to these claims.

I do not concur with the full proposals for Fry No. 2 and Scenic No. 2, North Point No. 6, and Point claims. These four claims were not examined by the field team. Available information in the TEPCO files, Geological Survey, suggest that the showings at the Fry No. 2, Scenic No. 2 and North Point 6 claims are much less favorable than the showings at the claims enumerated in the first paragraph above. We have no other information on the Point claim. The geology of the deposits is such that favorable conditions on one claim or on one part of an area cannot be inferred to extend to another claim or area not adjacent to a favorable claim or area. In the absence of new information contrary to that now available, stripping at these claims to get additional information appears reasonable, but the geology of the deposits is not such as to warrant adit driving unless the results of stripping are favorable. I believe adit driving proposed for these claims should be made contingent upon the results obtained from stripping.

Arthur P. Butler Jr.

cc: T.P. Thayer

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

Reserved by Omer Operating Comm. 11/28/51 AHB.

224 New Customhouse
Denver 2, Colorado

November 20, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report, DMA Docket 1931, White Canyon Mining Company, applicant; White and Frey Canyon Uranium Deposits, San Juan County, Utah

Enclosed herewith are the original and two copies of the report on the subject docket.

We concur with the conclusions and recommendations of the examining team that the exploration loan of $88,636 be approved.

Six extra copies of Figures 1, 2, and 3, and the brochure are enclosed.

J. H. East, Jr.

A. H. Koschmann

Enclosures

NOV 26 10 40 AM '51
DEFENSE MINERALS ADMINISTRATION WASHINGTON, D. C.

Mining Division
Region IV

November 20, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMA Docket 1931, White Canyon Mining Company, applicant; White and Frey Canyon Uranium Deposits, San Juan County, Utah

The application of the subject docket was for an exploration loan of $70,260 which is revised upwards to $88,636.

The proposed program of exploration is by 4,700 feet of surface stripping and 3,000 feet of adits and cross-cuts.

Mineralization at the deposits consists of copper sulphides and carbonates, iron oxides, pyrite, and the uranium minerals, torbernite and schrockingerite, which are found as lenses in erosion channels cut in the moenkopi formation which unconformably underlies the chinarump formation.

Past production from a few of the claims has amounted to 825 tons of commercial ore. Present exploration and development on the claims has been insufficient to make any estimates of reserves. Past production, sampling, and geological evidence indicate, however, that the discovery of additional reserves is favorable.

The proposed program of exploration by the applicant is sound, although the estimated costs require revision upward.

The Field Team recommends approval of a loan of $88,636, with which we concur.

P. T. Allsman

MDM:fmo

cc: Sub, Chron

Mining Division
Date Rec'd.
NOV 19 1951
BUREAU OF MINES
Denver, Colorado

November 15, 1951

Memorandum

To: Paul T. Allsman, Chief, Utah-Wyoming Branch, Mining Division

From: Chief, Utah-Wyoming Branch, Mining Division

Subject: DMA 1931, White Canyon Mining Company, San Juan County, Utah

Enclosed are the original and nine copies of the subject report with a section on Summary, Conclusions and Recommendation. The geologic report was submitted by the Survey October 26, 1951.

Ten additional copies of the maps have been mailed under separate cover. The original brochure is enclosed.

I concur with the recommendations in the engineering report.

Stephen R Wilson
Stephen R. Wilson

Enclosures - 3

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

200 New Customhouse
Denver 2, Colorado

October 30, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1931, White Canyon Mining Company, San Juan County, Utah

Enclosed are 10 copies of the geologic report by V. H. Johnson and B. J. Sharp, U. S. Geological Survey, covering the above docket. It has been recommended that the loan be approved.

The brochure will accompany the Bureau of Mines report.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (10)

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By H. K. Thurber, Jr.,
V. H. Johnson, and
B. J. Sharp

White Canyon Mining Company of Cortez, Colorado, has applied for a DMA loan of $70,260 to conduct exploration on uranium properties in the White Canyon area of San Juan County, Utah. An examination of the area was made during September, 1951 by personnel of the Bureau of Mines and Geological Survey. Reports have been prepared to appraise the merit of the properties and the proposed exploration.

Predominant rocks in the area are those of the Permian Cutler formation, the Moenkopi, Shinarump and Chinle formations of Triassic age, and the Wingate formation of Jurassic age. Uranium mineralization in the White Canyon area is usually found in lenses of coarse sandstone and shale near the base of the Shinarump formation. The mineralized lenses fill erosion channels cut in the Moenkopi formation which unconformably underlies the Shinarump formation. Mineralization consists of copper sulfides and carbonates, iron oxides, pyrite, and the uranium minerals torbernite and schröckingerite.

The applicant has proposed an exploratory program estimated to cost $70,260, consisting of surface stripping by bulldozer, drifting and crosscutting and road construction to gain access to the properties. The examining team concurs in the amount and type of exploration, but believes an expenditure of $88,636 will be required to complete the proposed work.

It is concluded that present development of the White Canyon Mining Company properties is inadequate to show measured ore reserves. However, past production from limited exposures on some claims, sampling and geologic evidence indicate the area has merit as a potential producer of uranium ores. It is therefore recommended that the company be granted a loan of $88,636 to conduct exploration as outlined in the engineering and geologic reports.

Geology

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Docket DMA-1931, White Canyon Mining Company,

San Juan County, Utah

(Uranium)

ON-SITE EXAM.

V. H. Johnson and B. J. Sharp, Geologists
U. S. Geological Survey

October 25, 1951

CONTENTS

	Page
Geology	1
Ore Deposits	1
Deer Flats Group	2
Dead Buck prospect	2
WN and WN No. 1 claims	2
Hide-out prospect	3
Frey Point	3
White Canyon No. 1	3
Frey Canyon	
Fry No. 4 claim and prospect	3
Happy Jack Vicinity	3
North Point and Gone Away claims	3
Point claim	4
Fry No. 2 and Scenic No. 2 claims	4
North Point No. 6	4
Found claim	4
Ore Reserves	4
Proposed Exploration	4
Summary and Conclusions	6

ILLUSTRATIONS

Figure 1. Index map of Utah

Figure 2. Generalized geologic map of part of White Canyon, San Juan County, Utah.

Docket DMA-1931, White Canyon Mining Company,

San Juan County, Utah

GEOLOGY

White Canyon is located in west-central San Juan County, Utah. The Cutler formation of Permian age is the predominant rock unit in the canyon. The Cedar Mesa sandstone member of the Cutler formation forms the canyon floor as well as the walls of the inner gorges. The Organ Rock Tongue member of the same formation overlies the Cedar Mesa sandstone and forms the sandstone slopes up to the mesas. Higher slopes on the mesas are formed by the Moenkopi, Shinarump, and Chinle formations, all of which are Triassic in age. The Wingate sandstone of Jurassic age, where present, forms a secondary escarpment, and isolated buttes, around the rim of the canyon. (See generalized cross-section, fig. 2.)

The silty red shales of the Moenkopi formation are overlain by fluviatile, greenish-gray shales and lenticular sandstones of the Shinarump formation, which contain the ore deposits. The contact between the two formations is an erosional unconformity. The base of the Shinarump is a conglomeratic sandstone. Lenses of coarse, friable sandstone fill most of the depressions in the old erosion surface.

ORE DEPOSITS

Throughout the region the sandstones and shales immediately above the unconformity, in the basal part of the Shinarump formation, contain uranium and copper minerals. Concentrations of these minerals commonly occur in the lenses of coarse, friable sandstone that fill depressions in the old erosion

surface. Much of the best ore has been found in lenses of this type. Silty or shaly sandstone lenses are occasionally found in the depressions, and, locally, minable concentrations of ore minerals have been found in them. The Lenses of coarse, friable sandstone are more permeable and apparently are the most favorable foci for deposition of the ore minerals.

The minerals at the locations considered in this docket conform to the general mineralization pattern found in the region. Outcrops on the claims are stained by copper carbonates, iron oxides, and torbernite, a copper uranium phosphate. In the prospect pits, pyrite, chalcopyrite and schroeckingerite, the water-rich carbonate and sulfate of uranium, are found disseminated through the rock.

An examination was made of a part of the property of the White Canyon Mining Company. Individual prospects and claims are described:

Deer Flats Group

Dead Buck prospect:— Approximately 100 feet of drifting on the Dead Buck claim exposes the lower part of a 20 foot thick sandstone lens. The sandstone is coarse, friable, and finely crossbedded. The crossbedding consists of finely interbedded bands of sandstone and silt. A few chert pebbles up to one inch in diameter are found in the sandstone. The adit was driven near the bottom of a depression, which may be a scour channel, on the Meonkopi-Shinarump contact. A Bureau of Mines sample from the adit shows 0.107 percent U_3O_8.

WN and WN No. 1 claims:—A 5-foot adit in sandstone, overlain by conglomerate, exposes crusts of gypsum, jarosite, and other salines. Fair radioactivity was indicated by a Geiger counter.

Hide-out prospect:—A 50 foot adit has been driven near the bottom of a sandstone lens approximately 210 feet wide and 300 feet long. The outcrop of the lens shows abundant copper stains, and the Geiger counter indicates favorable amounts of radioactivity. Torbernite, copper carbonates, carbonaceous matter, and some efflorescances of uranium oxide, probably schroeckingerite, are found on the walls. A four foot sample at the face of the adit contained 0.076 percent U_3O_8, and 4.06 percent Cu.

Frey Point

White Canyon No. 1:—An open cut and an adit at this claim exposed the best ore that was seen by the examiners on the Company's property. The ore occurs in a coarse sandstone lens directly above the red Moenkopi shale. Hematite, limonite, bornite, chalcopyrite, malachite, azurite, torbernite, and schroekingerite (?) are disseminated in the sandstone. A 2.6 foot sample contains 0.29 percent U_3O_8, and 0.4 percent Cu.

Frey Canyon

Fry No. 4 claim and prospect:—A few tons of ore, piled on the floor of an open-cut, contain torbernite, copper carbonates, and copper sulfides. The U_3O_8 values decreased in the adits east and north of the open-cut. The thickness of the sandstone also decreases to the east and north. Analyses and radioactivity readings show ore extending south from the portals of the adits.

Happy Jack Vicinity

North Point and Gone Away claims:— An open cut on these claims exposes 2-1/2 to 4 feet of thin-bedded, sandy shale. Torbernite and copper carbonates

are found along the bedding planes of the shale. Two samples averaged 0.187 U_3O_8, and 0.42 Cu. The outcrop has been stripped for about 300 feet, exposing minable ore.

Point claim:—Due to the inacccessibility of this claim, time did not permit an examination.

Fry No. 2 and Scenic No. 2 claims:—These claims were also not examined. They appear to be located on small lenses of sandstone, believed to represent a large part of the Shinarump formation at this locality.

North Point No. 6:—This claim was not examined. It appears to include a ledge of coarse sandstone in the ore bearing horizon. The sandstone appears to lie along along the Shinarump-Moenkopi contact. The Company reports assays up to 0.10 percent U_3O_8 from the outcrop.

Found claim:—This claim was not examined. The Company reports that an average of seven samples across 4 feet of ore contained 0.12 percent U_3O_8. An access road must be constructed before exploration work can be started.

ORE RESERVES

The present stage of development is not adequate to estimate ore reserves. One claim, the White Canyon No. 1, has a few tons of ore blocked out. Although indications for ore are favorable on several of the locations, more exploration must be done.

PROPOSED EXPLORATION

The results of the examination indicate that the property merits exploration. It is therefore recommended that the application by the White Canyon Mining Company for an exploration loan be approved.

The exploration program proposed in the application is believed to be adequate. The location and direction of drifting should be determined as the exploratory work progresses and additional data is obtained.

The following exploration program is proposed by the Company:

Claims	Road	Drifting (ft.)	Outcrop Stripping (ft.)
Hide Out and Yoke		300	700
Dead Buck		300	
WN and WN No. 1		300	400
White Canyon No. 1		300	
Point		300	600
Fry No. 4		300	600
Scenic No. 2 and Fry No. 2		300	600
North Point and Gone Away		300	600
Found	1½ mi	300	600
North Point No. 6	2 mi	300	600
	3½ mi	3000'	4700'

The Hide Out and Yoke, Dead Buck, White Canyon No. 1, North Point and Gone Away, and Found claims, are believed to be the most favorable locations for finding uranium ore on the White Canyon Company property. Why?

Exploration work at the Found and North Point No. 6 claims will necessarily include 1-1/2 and 2 miles respectively of access roads.

SUMMARY AND CONCLUSIONS

The Cutler formation of Permian age; the Moenkopi, Shinarump, and Chinle formations of Triassic age; and the Wingate formation of Jurassic age are exposed in the area. The base of the Shinarump formation is the favorable horizon for ore. Coarse sandstones fill depressions in an old erosion surface cut on the top of the Moenkopi formation. These sandstone lenses may contain disseminated copper sulfides and carbonates, iron oxides, and sulfides, and the uranium minerals, torbernite and schroeckingerite. The claims listed in this application are all located on such lenses. Whereas present development is inadequate to prove appreciable ore reserves, it is believed that the property has merit as a possible uranium producer.

Government participation in a contract for exploration on these claims is recommended.

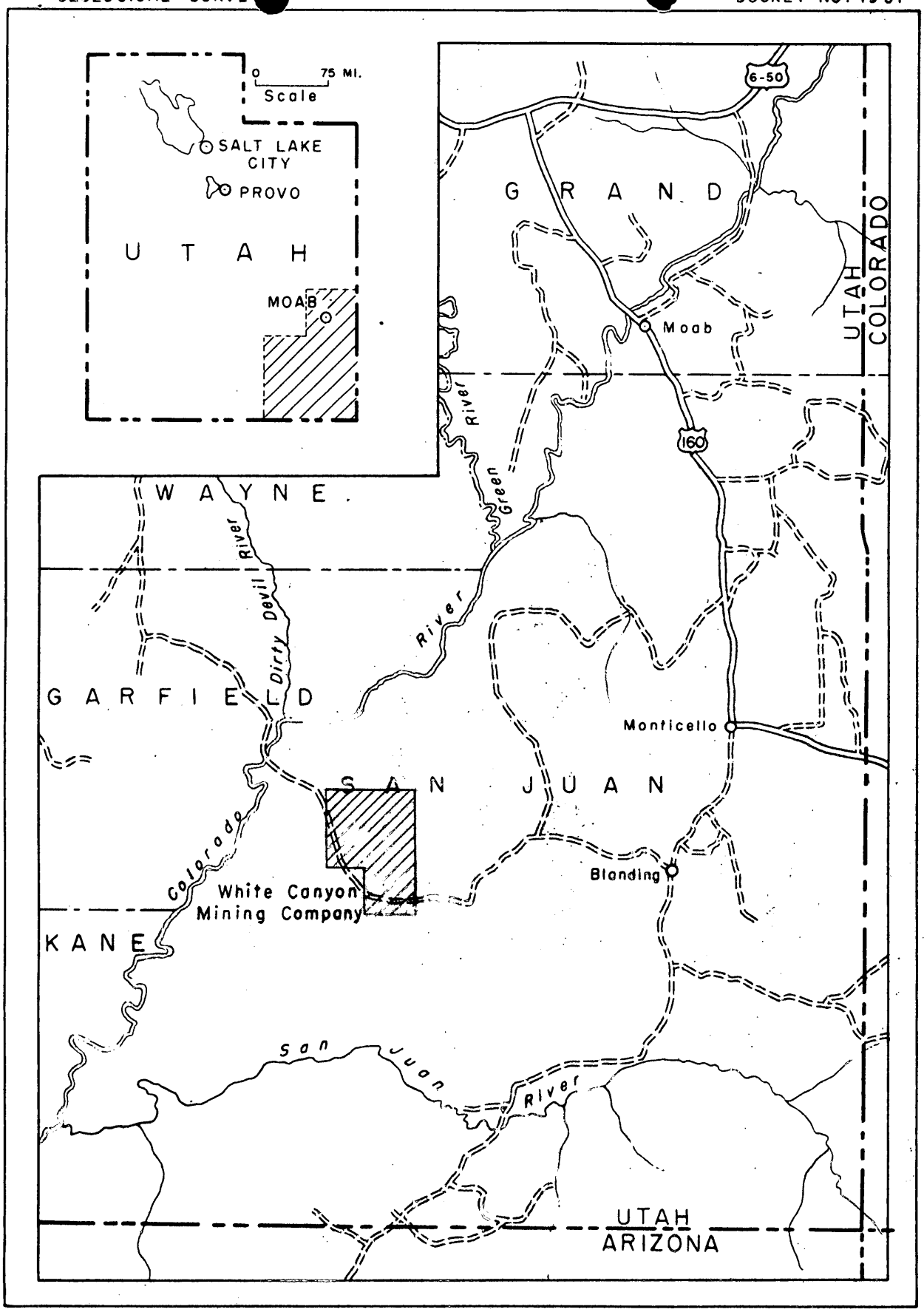


FIG. I INDEX MAP OF UTAH

0 5 10 15 20 MILES
Scale

WHITE CANYON MINING COMPANY
WHITE CANYON, SAN JUAN COUNTY, UTAH
DMA 1931
Uranium

Engineering

Engineering Report
By H. K. Thurber, Jr.
Mining engineer
U. S. Bureau of Mines

WHITE CANYON MINING COMPANY
WHITE CANYON, SAN JUAN COUNTY, UTAH

CONTENTS

Engineering report	Page
Introduction	2
Acknowledgments	2
Location and physical features	2
History and production	3
Ownership and extent	3
Description of the deposits	4
Minable ore reserves	5
Present status	5
Project proposals	5
Proposed financing	12
Conclusions and recommendations	13

ILLUSTRATIONS

Fig. 1 Location map, White Canyon Mining Company properties, San Juan County, Utah

Fig. 2 Underground and surface exploration on various claims (Sheet 1)

Fig. 3 Underground and surface exploration on various claims (Sheet 2).

INTRODUCTION

The White Canyon Mining Company, P. O. Box 608, Cortez, Colorado, has applied for an exploratory loan of $70,260 (DMA Docket 1931). The purpose of the loan is to explore uranium deposits in the White Canyon area of San Juan County, Utah

The company proposes to explore the surface by trenching and to drive adits on several claims. Some of the exploratory work will be adjacent to or continuations of existing mine workings. Also, it is proposed to conduct exploration on claims that have had no work to date.

The property was examined on September 18 and 19, 1951, by a team consisting of two geologists of the U. S. Geological Survey and an engineer of the Bureau of Mines. This report appraises the feasibility of the proposed exploratory program.

ACKNOWLEDGMENTS

The Bureau of Mines wishes to acknowledge the aid given the examining team by representatives of the company in supplying information pertaining to the deposits, and in accompanying the examining team over the property.

LOCATION AND PHYSICAL FEATURES

The claims upon which the applicant proposes to do exploratory work are located in White and Frey Canyons, San Juan County, Utah. They lie 40 to 45 miles west of Blanding, Utah, and 7 to 12 miles southeast of Hite, Utah (fig. 1). The area is approximately 65 miles from Blanding via Utah State Highway 95.

The claims are not contiguous and are widely separated. The Dead Buck, WN, WN No. 1 and the Hideout claims lie in T. 36 S., R. 17 E., S.L.B.M. The other claims are on unsurveyed land.

The topography of White Canyon is marked by wide, flat benches of Cedar Mesa sandstone, which is Permian in age and white to buff in color. The benches are deeply cut by stream courses. Mesas of upper Permian, Triassic, and lower Jurassic sediments rise above the benches. Some of the mesas are capped by the massive Wingate sandstone.

HISTORY AND PRODUCTION

The claims upon which the applicant proposes to do exploratory work were located several years ago by members of a family who have resided in the area for many years.

There has been some production from a few of the claims as follows:

Claim	Tons	Percent U_3O_8
Fry No. 4	545	0.22
North Point and Gonaway	80 (estimated)	Commercial grade
White Canyon No. 1	200	Commercial grade

OWNERSHIP AND EXTENT

The claims upon which the applicant proposes to do exploratory work are in groups totaling 87 claims. The White Canyon Mining Company purchased these claims from the original locators. The company holds by location an additional 250 claims in the area.

The groups of claims are spread over a wide area in White and Frey Canyons. Most of the claims are accessible by existing roads. The construction of access roads to two claims is included in the exploratory project.

The locations of claims on which exploration is proposed are shown on figure 2 of the Survey's report.

DESCRIPTION OF THE DEPOSITS

The uranium mineralization in the White Canyon area is usually found in lenses of coarse sandstone and shale at or near the base of the upper Triassic Shinarump formation. Evidence observed by the examining geologists indicates that mineralized lenses fill erosion channels cut in the lower Triassic Moenkopi formation, which unconformably underlies the Shinarump formation.

The most prevalent uranium mineral has been identified as torbernite, a copper-uranium phosphate. Exceptionally high radiometric measurements were observed on the Dead Buck claim. Chalcopyrite and bornite mineralization occur on the Dead Buck and Hideout claims. Considerable "trash carbon" and tree remains occur in the mineralized lenses.

A more detailed description of the geology and mineralogy of the deposits is included in the report of the geologists of the examining team.

MINABLE ORE RESERVES

It is not possible to reliably estimate ore reserves because of the limited amount of development done on the claims.

PRESENT STATUS

No mining or exploratory work was being done on the claims at the time of the examination. Work done prior to the examination is shown on figures 2 and 3.

A list of the mining equipment owned by the company follows:

2 compressors, 105 cfm., portable, LeRoi, new
2 jackhammers, I.R., JB-4, new
2 jacklegs, I.R., new
2 water pressure tanks with fittings
1 truck, International, 3/4-ton, used
1 truck, Ford, 3/4-ton, used

PROJECT PROPOSALS

The applicant's proposal for surface and underground exploration, as outlined in the loan application brochure, appears sound from geologic and engineering viewpoints. No changes in the proposed program are made in this report. The exploratory plans for the claims are shown on figures 2 and 3.

The total cost of the project, as estimated in this report, is $88,636, or $18,376 more than the application requests. The additional cost is a result of provision for overtime pay, accident and unemployment insurance, O.A.B. taxes and clerical personnel. Equipment rental was increased to provide a fourth unit should it be necessary to do so. Some supplies and equipment which evidently were overlooked when the application was made have been added.

A summary of the proposed work follows:

1. Yoke and Hideout No. 1 claims -
   300 feet of adit with crosscuts and 700 feet of surface stripping.

2. Dead Buck claim -
   300 feet of adit with crosscuts. (Note. A mineralized outcrop on this claim has been exposed by access road construction).

3. WN and WN No. 1 claims -
   300 feet of adit with crosscuts and 400 feet of surface stripping.

4. White Canyon No. 1 claim -
   300 feet of adit with crosscut.

5. Point claim -
   300 feet of adit with crosscuts and 600 feet of surface stripping.

6. Fry No. 4 claim -
   300 feet of adit with crosscuts and 600 feet of surface stripping.

7. Scenic No. 2 and Fry No. 2 claims -
   300 feet of adit and 600 feet of surface stripping.

8. Found claim -
   300 feet of adit and crosscuts, 600 feet of surface stripping, and 1½ miles access road to be constructed over rough terrain.

9. North Point and Gonaway claims -
   300 feet of adit and crosscuts and 600 feet of surface stripping.

10. North Point No. 6 claim -
    300 feet of adit and crosscuts, 600 feet of surface stripping and 2 miles access road.

<u>Totals</u>

Adits and crosscuts -------- 3,000 feet

Surface stripping ---------- 4,700 feet

Access roads ---------- 3½ miles

Estimates of Cost

Drifting and Crosscutting

Labor (cost per foot based on 84 feet advance per month)

2 miners at $12.50 per 8-hr. shift,	$ 600.00
1 mucker at $12.50 per 8-hr. shift	300.00
Overtime	75.00
	$ 975.00
O.A.B., workmen's compensation, unemployment insurance, etc., at 11 percent of payroll.	$ 107.25
	$1,082.25

$\frac{\$1,082.25}{84}$ = $12.88 per foot x 3,000 feet = $38,640.00

Supervisor (one directing 3 units) at $500 per month	$ 6,000.00
Clerical and accounting (one for 3 units) at $300 per month	$ 3,600.00

Equipment, Company Owned (three units of work)

2 compressors, 105 cfm., new, at $3,800	$ 7,600.00
2 jackhammers, JB-4, new, at $330.	660.00
2 jacklegs, I.R., new, at $185	370.00
2 water pressure tanks at $65	130.00
1 3/4-ton pickup International truck, used	1,500.00
1 3/4-ton pickup Ford truck, used	1,500.00
	$11,760.00

Allowable depreciation on 5-year basis, per month $\frac{\$11,760.00}{60}$ = $ 196.00

Equipment, Rented

	Per Month
1 compressor, 105 cfm.	$ 164.00
1 jackhammer	36.00
1 jackleg	18.00
3 double drum air hoists at $75	225.00
3 scrapers at $25	75.00
3 mine cars at $26	78.00
3 blowers at $40	120.00
3 water tanks at $5	15.00
1 pressure tank at $5	5.00
	$ 736.00

Total equipment per month for 3 units, --- $ 932.00
$196 + $736

$932 per month for 12 months = $11,184 per year ----- $11,184.00

Additional unit which may be required for last 4 months of project (rental calculated assuming mine cars or slusher hoist and scraper are available from another unit):

1 compressor, 105 cfm., at $164 per month	$ 656.00	
1 jackhammer at $36 per month	144.00	
1 jackleg at $18 per month	72.00	
1 water tank at $5 per month	20.00	
1 pressure tank at $5 per month	20.00	$ 912.00

Grand total, equipment rental for 1 year ---------- $12,096.00

$$\frac{\$12,096.00}{3,000} = \$4.03 \text{ per foot}$$

Supplies for Each Unit

1 ton 12 lb. rail at $160 per ton	$ 160.00
300 feet 2-in. pipe at $0.34 per ft.	102.00
300 feet 1-in. pipe at $0.24 per ft.	72.00

Drill steel and bits ----------	$ 60.00
Small tools and supplies ----------	30.00
Powder, fuse caps----------	350.00
Carbide ----------	20.00
Gas and oil (8.00 per day) ----------	192.00
Timber (ties and stulls) ----------	90.00
300 feet vent pipe at $0.80 per ft. ------	240.00
400 feet 5/16-in. wire rope at $0.08 /ft.-	32.00
400 feet 3/8-in. wire rope at $0.09 /ft.--	36.00
2 50-ft. lengths 3/4-in. air hose at $50-- per length	100.00
2 50-ft. lengths ½-in. water hose at $36-- per length	72.00
1 wheelbarrow, rubber tired ----------	34.00
	$1,590.00

$\frac{\$1,590}{300}$ = $5.30 per foot x 3,000 ---------- $15,900.00

Summary of Drifting and Crosscutting Costs

Item	Cost per foot	Cost for 3,000 feet
Labor	$ 12.88	$ 38,640.00
Supervision	2.00	6,000.00
Clerical and accounting	1.20	3,600.00
Equipment	4.03	12,096.00
Supplies	5.30	15,900.00
Total	$ 25.41	$ 76,236.00

Surface Stripping by Bulldozer

(Based on rental of D-7 dozer at $10 per hour. Operator and supplies furnished by owner.)

Project No.	Claims	Footage of stripping	Estimated hours	Estimated cost
1	Yoke and Hideout No. 1	700	80	$ 800.00
3	WN and WN No. 1	400	48	480.00
5	Point	600	48	480.00
6	Fry No. 4	600	48	480.00

7	Fry No. 2 and Scenic No. 2	600	48	$ 480.00
8	Found	600	56	560.00
9	North Point and Gonaway	600	56	560.00
10	North Point No. 6	600	56	560.00
Totals		4,700	440	$4,400.00

Access Roads

(Cost calculated at $10 per hour rental on D-7 dozer. Operator and supplies furnished by owner.)

Project No.	Claims	Length of road, miles	Estimated hours	Estimated Cost
8	Found	1.5	500	$ 5,000.00
10	North Point No. 6	2	300	3,000.00
Totals		3.5	800	$ 8,000.00

Note: The terrain which the road to Project 8 will traverse is much rougher and more difficult to build road over than that to Project 10.

Summary of Exploration Costs

Total cost of drifting and crosscutting	$76,236.00
Total cost of surface stripping	4,400.00
Total cost of access road construction	8,000.00
	$88,636.00

Government participation, 90 percent ---- $79,772.40
Application participation, 10 percent --- $ 8,863.60

Manpower

The following labor will be employed if three exploratory units are operated simultaneously:

Miners, 2 per unit for 3 units	6
Muckers, 1 per unit for 3 units	3
Superintendent, 1 for 3 units	1
Clerical and accounting, 1 for 3 units	1
Total	11

The labor can be obtained from towns and ranches in southeastern Utah and southwestern Colorado.

Power

There are no electrical transmission lines in the vicinity of the project. It is improbable that the exploratory work will require electricity as all proposed equipment will burn gasoline or Diesel fuel.

Water

Water for drilling is available from springs in Deer Flat and Frey Canyon. The water from the spring in Frey Canyon is potable. It will be necessary to haul water to the portal of the adits.

Time Schedule for Completion of the Project

The applicant plans to place three underground exploratory units in the field to initiate the exploration. It is estimated that each unit will advance adits or crosscuts 84 feet a month or 252 feet a month for three units. On this basis, three units should complete 10 underground projects in approximately 1 year.

It is estimated that approximately 7 months will be required to complete the bulldozer work including construction of the access roads.

Rate of Production

Since the exploratory work will be conducted on practically virgin ground, no information can be submitted at the present concerning ore reserves, tenor of the ore, or rate of production. The U. S. Atomic

Energy Commission owns and operates a uranium processing plant at Monticello, Utah, through a contractor. This plant provides a probable market for any ores originating from White Canyon. A small pilot plant is also operated at Hite, Utah. If this mill is enlarged, or should the Atomic Energy Commission authorize a stock pile at Hite, a ready market would be provided.

Summary

A recapitulation of the cost of the proposed exploratory program follows:

Cost of underground exploration	$76,236.00
Cost of surface stripping	4,400.00
Cost of access road construction	8,000.00
Total cost of project	$88,636.00

The above amount represents the total estimated expenditures required to complete the exploratory program as outlined in the preceding paragraphs. As previously stated, no estimate of ore reserves, tenor of the ore, or mining costs can be made prior to the completion of the project.

PROPOSED FINANCING

The application for an exploratory loan indicates that the cost of the project would be divided into 90 percent participation by the government and 10 percent by the applicant. This division will result in $79,772.40 for the government and $8,863.60 for the applicant.

The physical assets owned by the corporation and the financial statement attached to the application for DMA exploratory loan indicate the corporation's ability to furnish the required 10 percent under DMA regulations.

CONCLUSIONS AND RECOMMENDATIONS

Past production from limited exploration on some of the claims, results of sampling, and geologic evidence on these and other claims indicate the claims under consideration are potential producers of uranium ores.

In view of the above conclusions, it is recommended that the White Canyon Mining Company be granted an exploratory loan of $88,636.00 to conduct the exploration outlined herein.

Room 307, 320 South Main
Salt Lake City 1, Utah
25 October 1951

Memorandum

To: A. E. Kaufmann, Field Team, Region IV

From: Ralph J. Roberts

Subject: Docket DMA-1931, White Canyon Mining Company, San Juan County, Utah.

Enclosed are 10 copies of a geologic report regarding Docket DMA-1931, White Canyon Mining Company, San Juan County, Utah.

The rocks in the area are sedimentary and belong to the Cutler formation of Permian age; the Moenkopi, Shinarump, and Chinle formations of Triassic age; and the Wingate formation of Jurassic age. The base of the Shinarump is the favorable horizon for ore. Canyon sandstones fill depressions in an old erosion surface cut on the top of the Moenkopi formation. These sandstone lenses may contain disseminated copper sulfides and carbonates, iron oxides, and sulfides, and the uranium minerals torbernite and autunite. The claims listed in the application are all located on these favorable lenses.

Present development is inadequate to appraise appreciable ore reserves. It is believed that the property has merit as a possible producer of uranium ore. It is therefore recommended that the Defense Minerals Administration enter into a contract with the White Canyon Mining Company to do the proposed work.

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

An engineering report from the U. S. Bureau of Mines will follow. Please hold the geologic report in Denver pending its arrival.

for - Ralph J. Roberts

330

FILE COPY
SURNAME:

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

Gordon
Bourret
Mom
Ron

AUG 20 1951

A. E. C.

Mr. Edmund Key, Vice President
White Canyon Mining Co.
Cortez, Colorado

Re: Uranium
DMA-1931

Dear Mr. Key:

Your application, docket 1931, for an exploration project in the amount of $70,260, has been received by the Minor and Rare Metals Branch of the Supply Division.

Before a decision can be reached on your request we find it is necessary to obtain additional information on your property. Your application therefore is being referred ot the office of the Executive Officer of DMA field team Iv, Mr. J. H. East Jr., 224 New Customhouse Building, Denver 2, Colorado, with the request that the needed information be supplied to us.

In the event you have additional information that will assist the field engineers in evaluating this proposition we request that you submit such data in writing to Mr. East. During the period your application is in the hands of the field team, we would suggest you direct all inquiries to that office.

Yours very truly,

SIGNED

Tom Lyon, Director
Supply Division

EGordon/mh 8-15-51
cc: Adm. Read. File
Reports and Records
Lyon
Keiser, Hosted-USGS
Bourret
Field Team IV
DMA docket files

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

REGIONAL DIRECTOR'S
OFFICE
REGION IV
AUG 22 1951
BUREAU OF MINES
DENVER, COLORADO

AUG 20 1951

Mr. J. H. East, Jr.
224 NewCustomhouse Bldg.
Denver 2, Colorado

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 1931

Commodity Uranium

Applicant Mr. Edmund Key

Please expedite the consideration of this application with particular reference to the points noted in the attached "Review."

Very truly yours,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

Lowell B. Moon
For Bureau of Mines

Olof T. Rorr
For Geological Survey

6/5/51

Defense Minerals Administration Aug 13, 1951

Review of Application for Exploration Assistance

Docket No. DMA - 1931

Commodity Uranium

Total Amount $70,260

Govt. Participation $63,234

1. Name and Address of Applicant White Canyon Mining Company

Cortez, Colorado

2. Location of Property White Canyon Area, San Juan County, Utah

3. Mineral or metal Uranium Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination Report by Field Team is required. See Item 17.

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated?
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached?

Does the lease have sufficient time to run to cover a future

productive period?

*question numbers are those of MF-103

7. Are subordination agreements necessary?_____

a) MF-201?_____

b) MF-202_____

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower_____

b) Equipment and supplies_____
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)*_____

d) Water (question 13)*_____

e) Power (question 13)*_____

Is a field check needed on any of these points?_____

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)*_____

_____

Is a field check needed on this point?_____

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described?_____

If not, are there sufficient data given so that you can describe the project?_____ If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work?_____

_____

c) Is the proposed work "exploration" under the definition of Section 8, MO-5?_____

If not, what part of it is?_____

_____

_____

_____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed?_____

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data?_____ If so, attach a draft.

e) Are the cost estimates reasonable?_____

f) Should more information be requested from applicant?_____

g) Is a field examination necessary to complete Exhibit A?_____

11. Exhibit B (question 23-d)*

a) Is it applicable?_____

b) If so, are sufficient data furnished?_____ If so, attach a draft.

c) Is a field check needed?_____

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable?_____

b) Sufficient data?_____ If so, attach a draft.

c) Are rents and charges reasonable?_____

d) Is a field check needed?_____ _____

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data?_____

b) Is the schedule adequate for the work proposed?_____

c) Is the schedule excessive for the work proposed?_____

d) Are the proposed wages and salaries reasonable?_____

e) Is a field check needed?_____

14. Exhibit E (question 23-c)*

a) Is it applicable?_____

b) Sufficient data?_____

c) Reasonable?_____

d) Field check needed?_____

15. In your judgment, can the proposed work be done in the proposed time?_____

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? It is recommended that this application be reviewed with Mr. Richard P. Fischer, U.S. Geological Survey, and Mr. T.W. Oster U.S. Atomic Energy Commission, Grand Junction, Colorado.

Reviewed by: H.W. Keyser U.S.G.S.
Geo Hosted, AEC

Date August 13, 1951

INT.-DUP. SEC., WASH., D.C. 99009

Letter written by Blakemore - not sent

Mr. H. East, Jr. Executive Officer
Field Land Region IV
Naval Construction Battalion
Denver Colorado

Re Contract No. E
Rocky Bar Mining Co.
Lily Claim
Tooele County, Utah

Dear Mr. East

[illegible] the subject claim I have been designated for the Government and are enclosed herewith for your [illegible] and to the Quartermaster's signature. Thanks -

The contract is duly signed by the Rocky Bar Mining Co. and the original has been filed in the Tooele County Recorder's office as required by the Statute.

Upon visiting the Contract area with the representatives of the Contractor and Government Reports, Dwyer the Field Man reported that all did not exist there, the mining claims Claim, Kind, Dynamite, Cocaine, Little Joe and Good were not included in accordance with the Eliminated and two of the claims were the only ones requiring occupancy.

As these claims were not worth a cent, Dwyer was instructed to be certain that all claims are included in another, we have received the recommendation of Mr. Dwyer.

However, the estimated total cost is only $1295.00 less than that estimated in the Quantis application even though the accessories and replacement claims were not included. Therefore, I believe the total cost allowed for the work specified in the contract will provide the Grantee with a suitable heavy.

If the Operation is satisfied with the contract enclosed please return duplicate this office together with a letter outlining Resolutions thereto.

Sincerely

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

OFFICE OF
REGIONAL DIRECTOR

REGION IV

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

August 2, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

Memorandum

To: Landon Strobel, Executive Secretary
Defense Minerals Administration

From: Executive Officer, DMA Field Team, Region IV

Subject: DMA Applications, Form MF-103

Enclosed herewith are applications for exploration aid, Form MF-103, for the following:

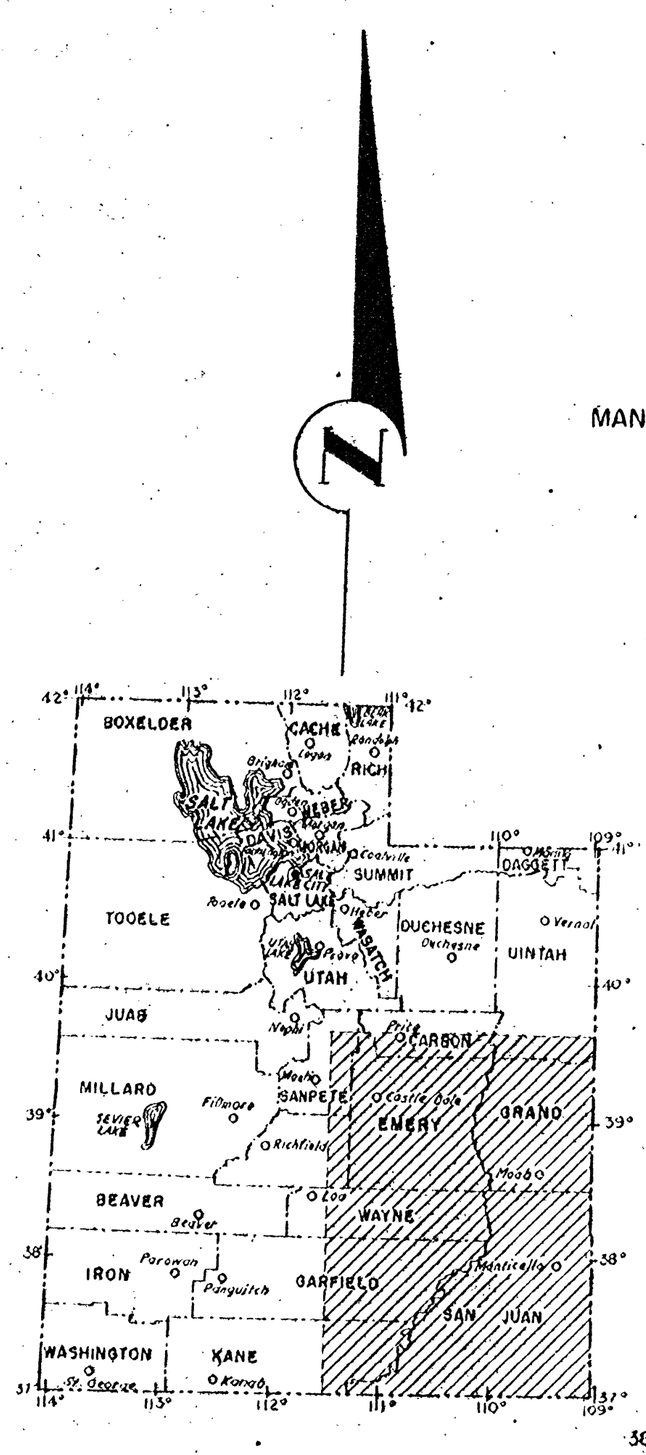
White Canyon Mining Company
Cortez, Colorado

Glen Rust
Cortez, Colorado

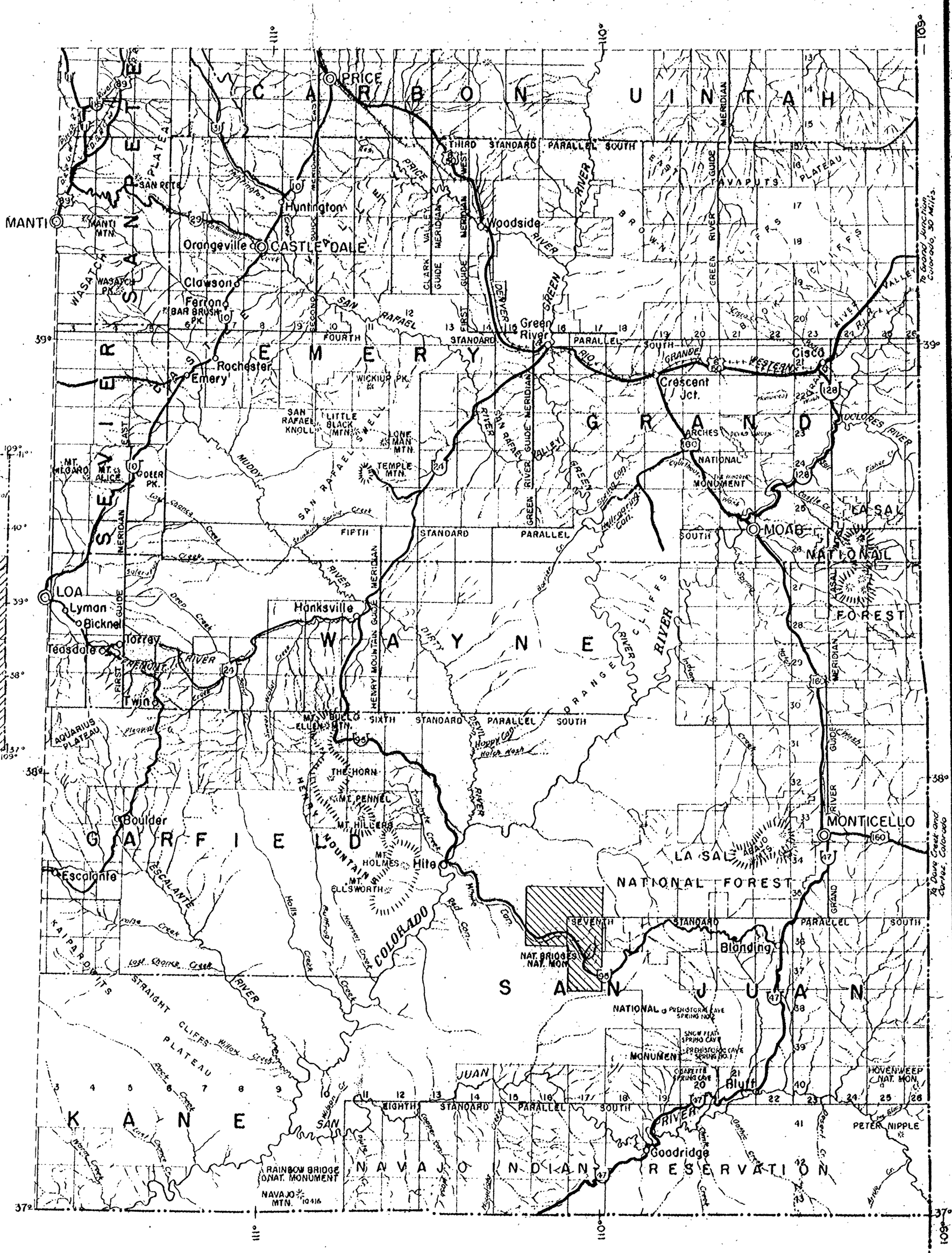
Charles Gresser
940 Colorado Boulevard
P. O. Box 446
Idaho Springs, Colorado

P. T. Allsman, for
J. H. East, Jr.

Enclosures



VICINITY MAP



NOTE

COMPILED FROM GENERAL LAND OFFICE
U. S. G. S. AND STATE ROAD COMMISSION
OF UTAH GENERAL HIGHWAY MAPS.

LEGEND

WHITE CANYON MINING COMPANY PROPERTIES

0 10 20 30 40 50
SCALE OF MILES

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

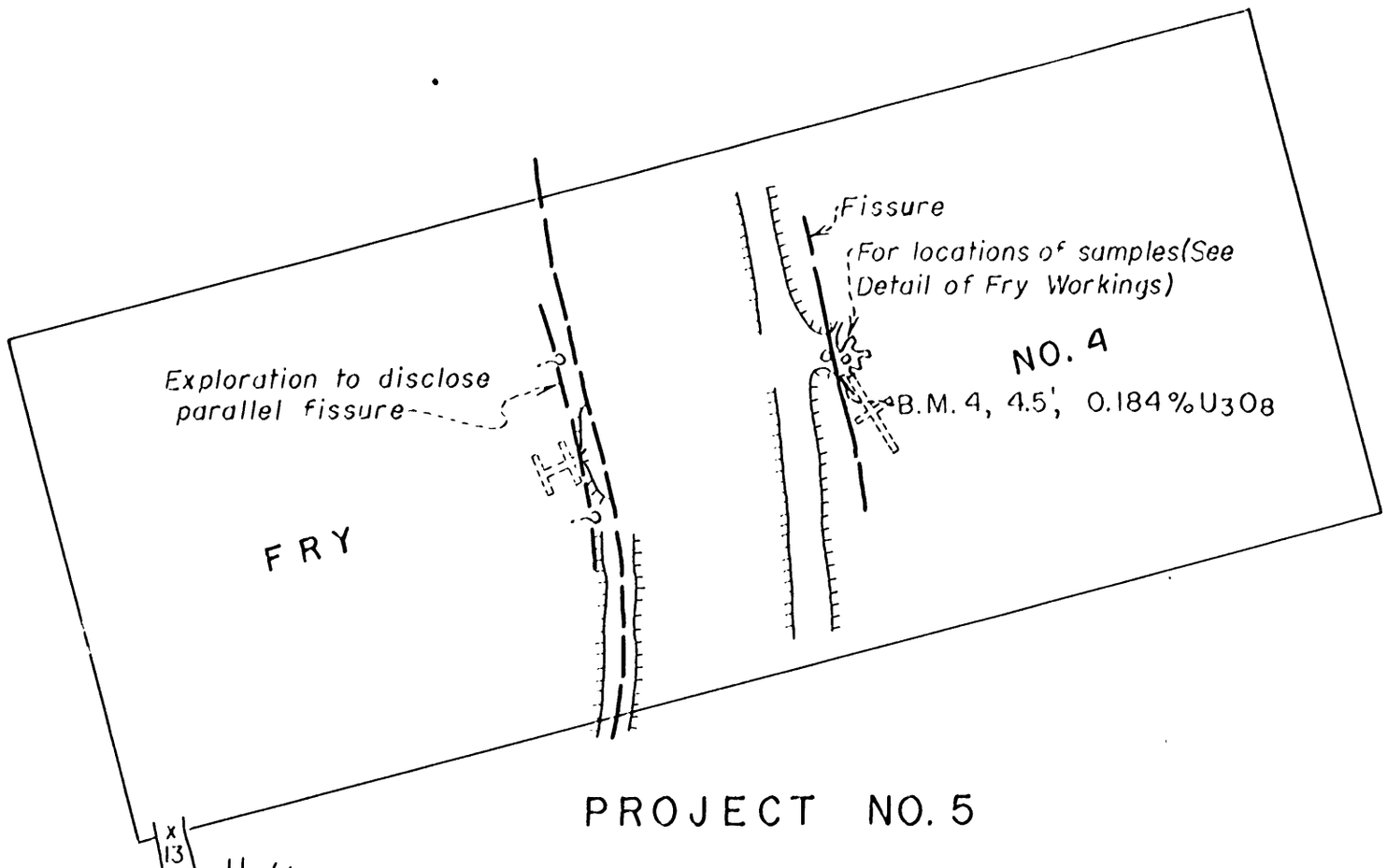
Fig. 1 DMA Docket

Location Map

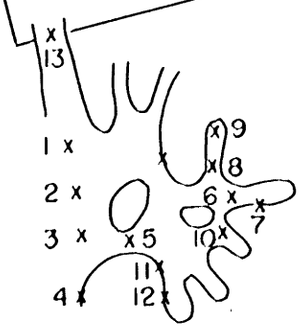
WHITE CANYON MINING COMPANY PROPERTIES

WHITE AND FREY CANYONS
SAN JUAN COUNTY, UTAH.

ENGINEER: BEN WIDEMAN	DATE: NOV. 9, 1951
DRAWN: NOV., 1951; BY: A.P.T.S.	1900-158-C
CHECKED:	

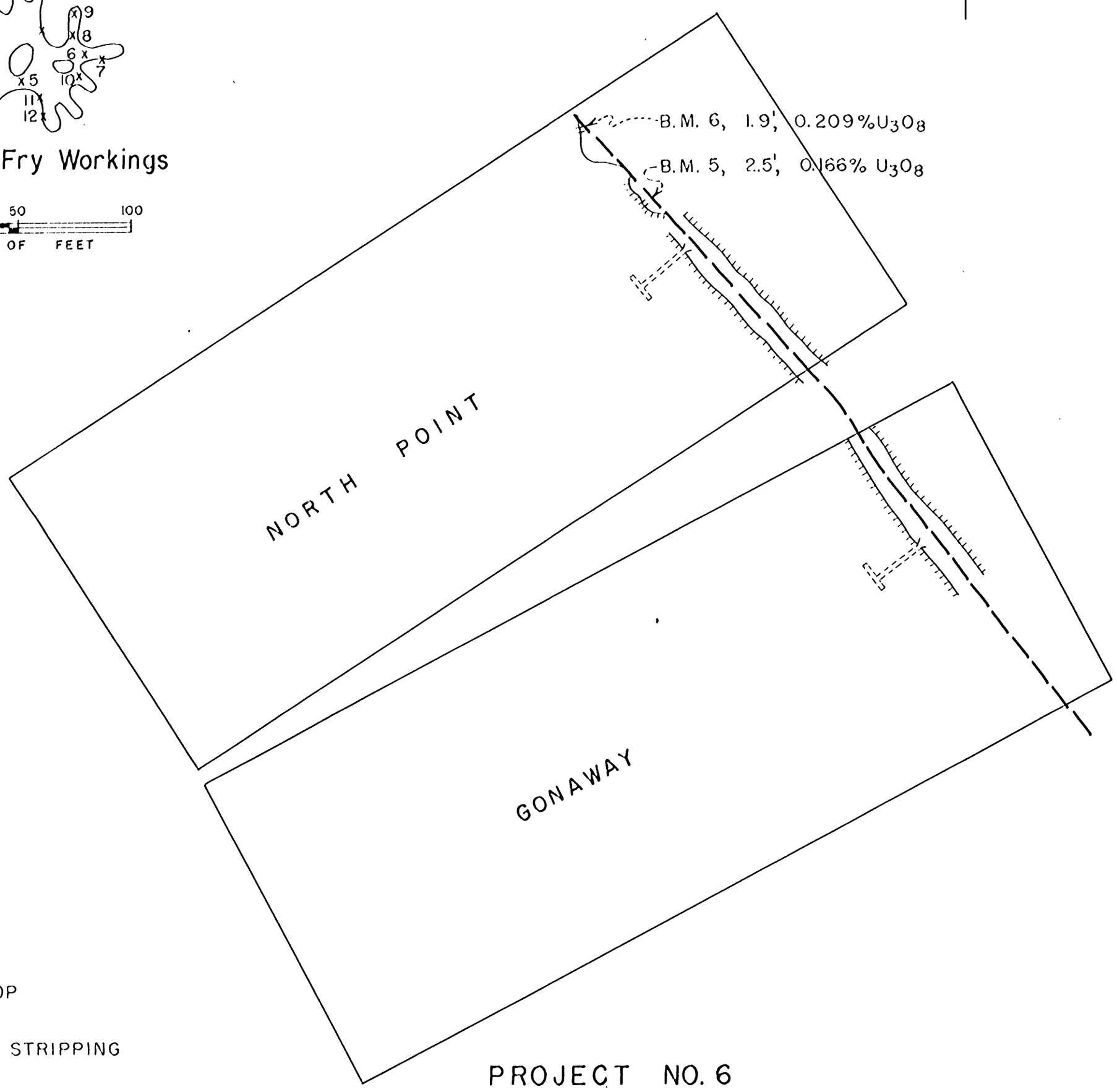


PROJECT NO. 5



Detail of Fry Workings

0 50 100
SCALE OF FEET



PROJECT NO. 6

SAMPLE ASSAYS

No.	Width	% U_3O_8
1	5'	.05
2	5'	.06
3	5'	.15
4	5'	.13
5	5.5'	.83
6	2'	.23
7	4'	.13
8	5'	.09
9	5.5'	.03
10	2.5'	.26
11	3.5'	.93
12	3'	.29
13	1.5'	.55

LEGEND

RIM OUTCROP

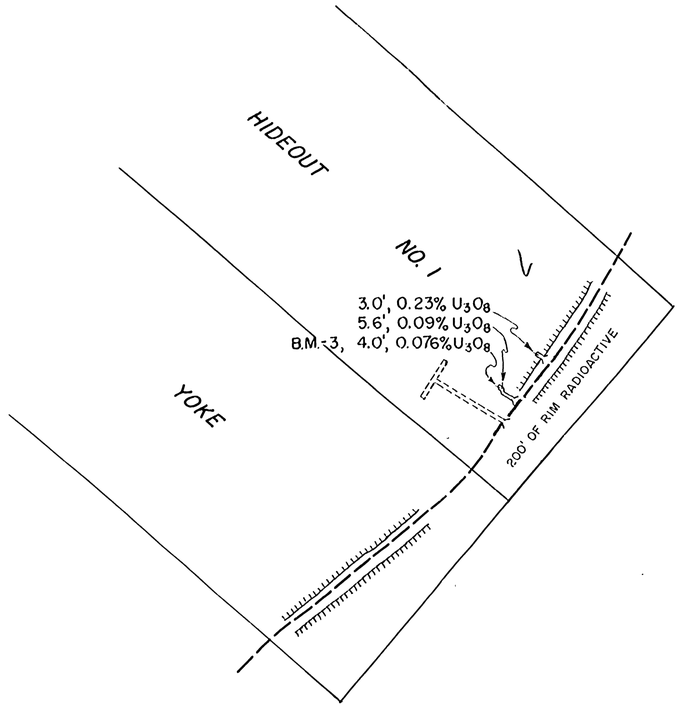
BULLDOZER STRIPPING

PROPOSED UNDERGROUND WORKINGS

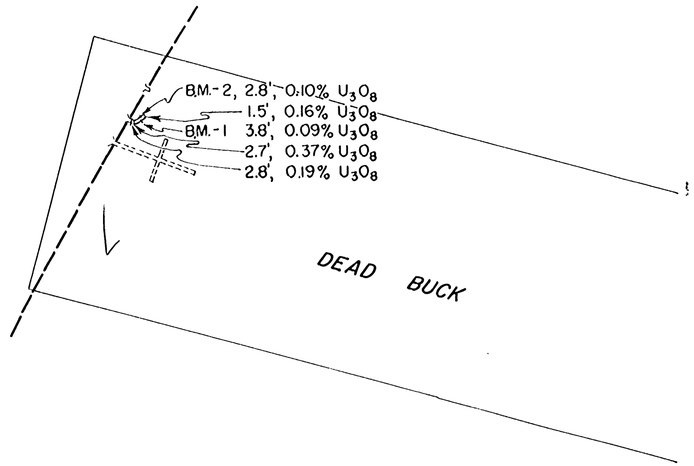
200 0 200 400 600
SCALE OF FEET

NOTE: TRACED FROM COMPANY MAP

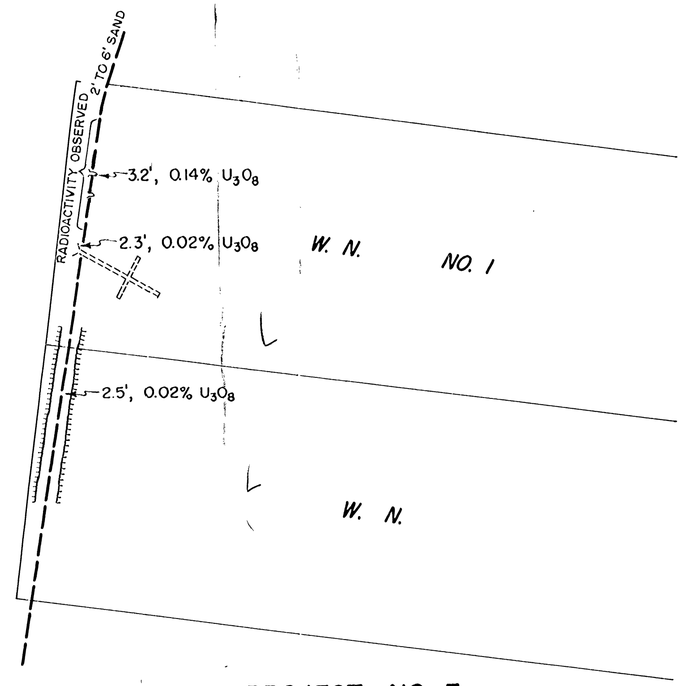
FIG. 3—WHITE CANYON MINING COMPANY PROPERTIES, SAN JUAN COUNTY UTAH, DMA 1931



PROJECT NO. 1



PROJECT NO. 2



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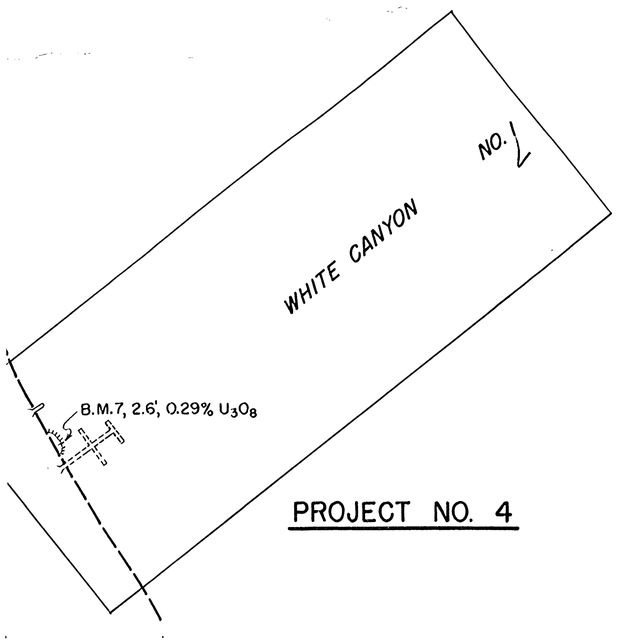
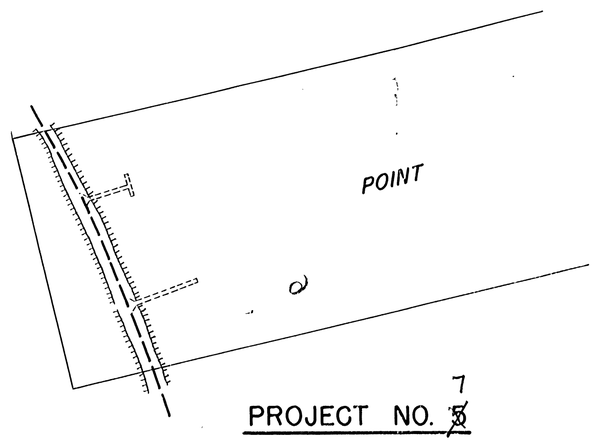


PROJECT NO. 4



PROJECT NO. ~~5~~ 7

LEGEND

- RIM OUTCROP
- BULLDOZER STRIPPING
- PROPOSED UNDERGROUND WORKINGS

NOTE

DATA TRACED FROM COMPANY MAP.

0 200 400 600 800
SCALE OF FEET

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 Proj. No.

Underground and Surface Exploration on various Claims

WHITE CANYON MINING COMPANY PROPERTIES. (SHEET 1 OF 2)

WHITE AND FREY CANYONS, SAN JUAN COUNTY, UTAH

ENGINEER:	DATE: NOV. 15, 1951
TRACED: NOV., 1951, BY: A.P.T.S.	1900 - 159 - C
CHECKED:	

U.S. DEPARTMENT THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS ADMINISTRATION
DOCKET NO. 1931

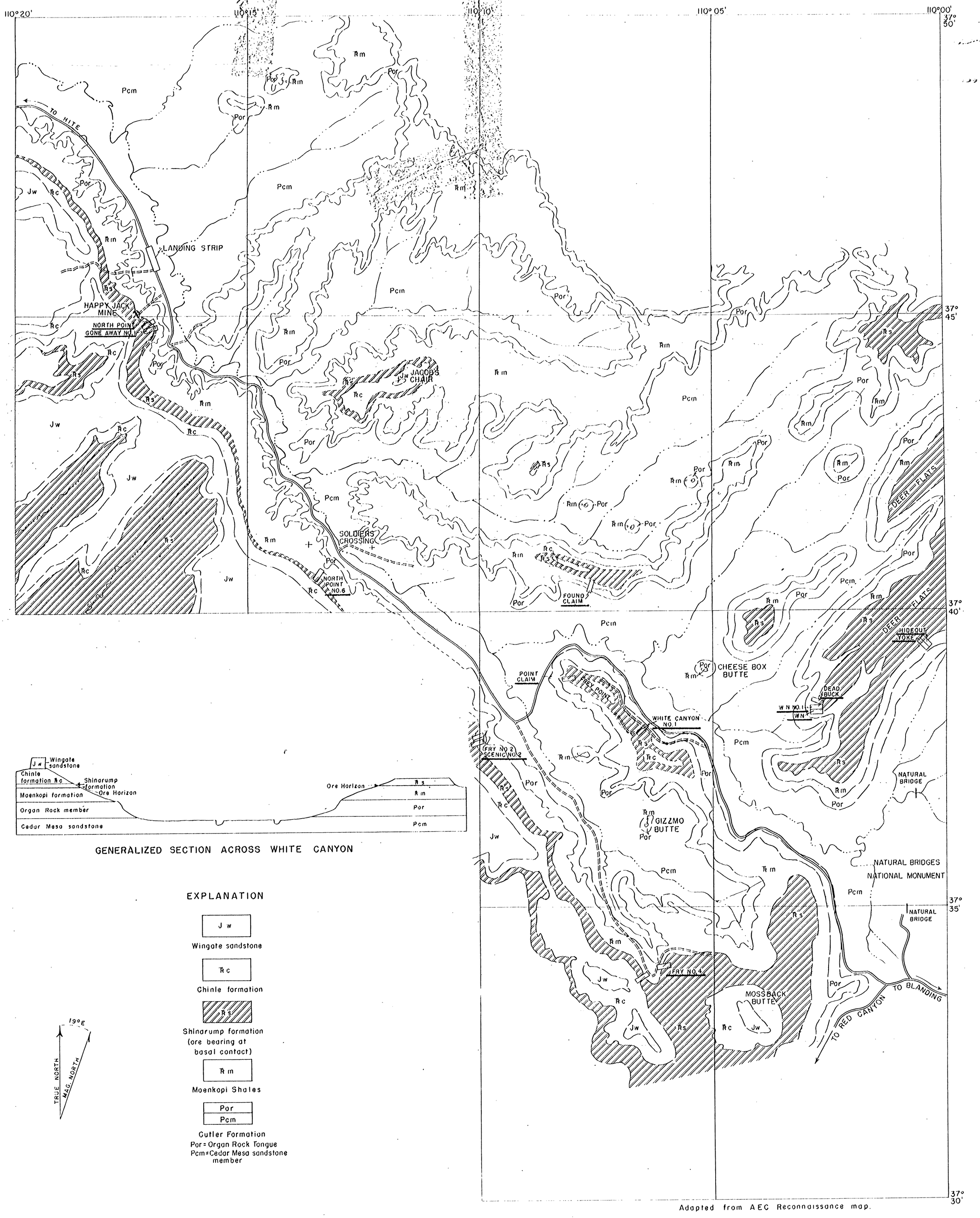


FIG. 1 GENERALIZED GEOLOGIC MAP OF PART OF WHITE CANYON, SAN JUAN COUNTY, UTAH
(Showing location of Claims for proposed Exploration for Uranium – by White Canyon Mining Company)