MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2689

COMMODITY Uranium

Idm-E500

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 31 1953

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 23rd day of March, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Frank L. Morgan and Erma B. Morgan
P. O. Box 227
Springville, Utah

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Utah, County of Emery, described as follows:[3] Seven unpatented lode mining claims located 7½ miles south and west of Temple Mountain in Chute Canyon. See Annex No. 1, attached

the Operator represents and undertakes:[4]

(*a*) That the Operator is the 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:

None

(*b*) [redacted]
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.

ARTICLE 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

in or upon the described land; and shall bring the project to completion within a period of three months (3) from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. 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.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay ninety (90) percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $2,106.00, which is 90 percent of $2,340.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[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, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, 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. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

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

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *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 worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* .....

Executed in sextuplicate the day and year first above written.

Frank L. Morgan Erma R. Morgan
(Operator)

By .....

THE UNITED STATES OF AMERICA

By W. H. King

Executive Officer, DMEA
Field Team, Region IV

I, , certify that I am the secretary of the corporation named as Operator herein; that , who signed this contract on behalf of the Operator, was then of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

Annex No. 1.

The following unpatented mining claims of record in the County Recorder's office, Emery County, Utah

Claim	Date	Book	Page
Little Erma No. 1	3-23-1950	J - 8	517
Little Erma No. 2	3-23-1950	J - 8	518
Little Erma No. 3	3-23-1950	J - 8	518
Little Erma No. 6	6-12-1952	J - 10	112
Brown Dog No. 4	6-12-1952	J - 10	110
Wild Horse No. 2	6-12-1952	J - 10	108
Wild Horse No. 3	6-12-1952	J - 10	108

EXHIBIT "A"

Description of the Work

The work consists of improving 7½ miles of road from Temple Mountain to Chute Canyon and 3200 feet of bulldozer stripping. The stripping will be confined to the ore bearing horizon near the base of the Shinarump conglomerate and the present workings, and must be deep enough to expose the sandstone and mudstone where the carbonaceous material is concentrated. This work will be done on the Little Erma No. 1, 2, and 3, and the Brown Dog No. 4 claims as shown on Figure 4 which is attached and made a part of this exhibit.

Estimated Costs of the Work

Improving 7½ miles of road including rental of D-8 caterpillar or equivalent including operator, fuel, repairs, and any other costs incident to completing the work -	$ 468.00 1/
3200 feet of rim stripping with D-8 caterpillar or equivalent including operator, fuel, repairs, and any other costs incident to completing the work -	1,872.00 1/
Total Cost of Project	2,340.00
Government Participation at 90%	2,106.00

1/ The entire work constitutes the unit of work.

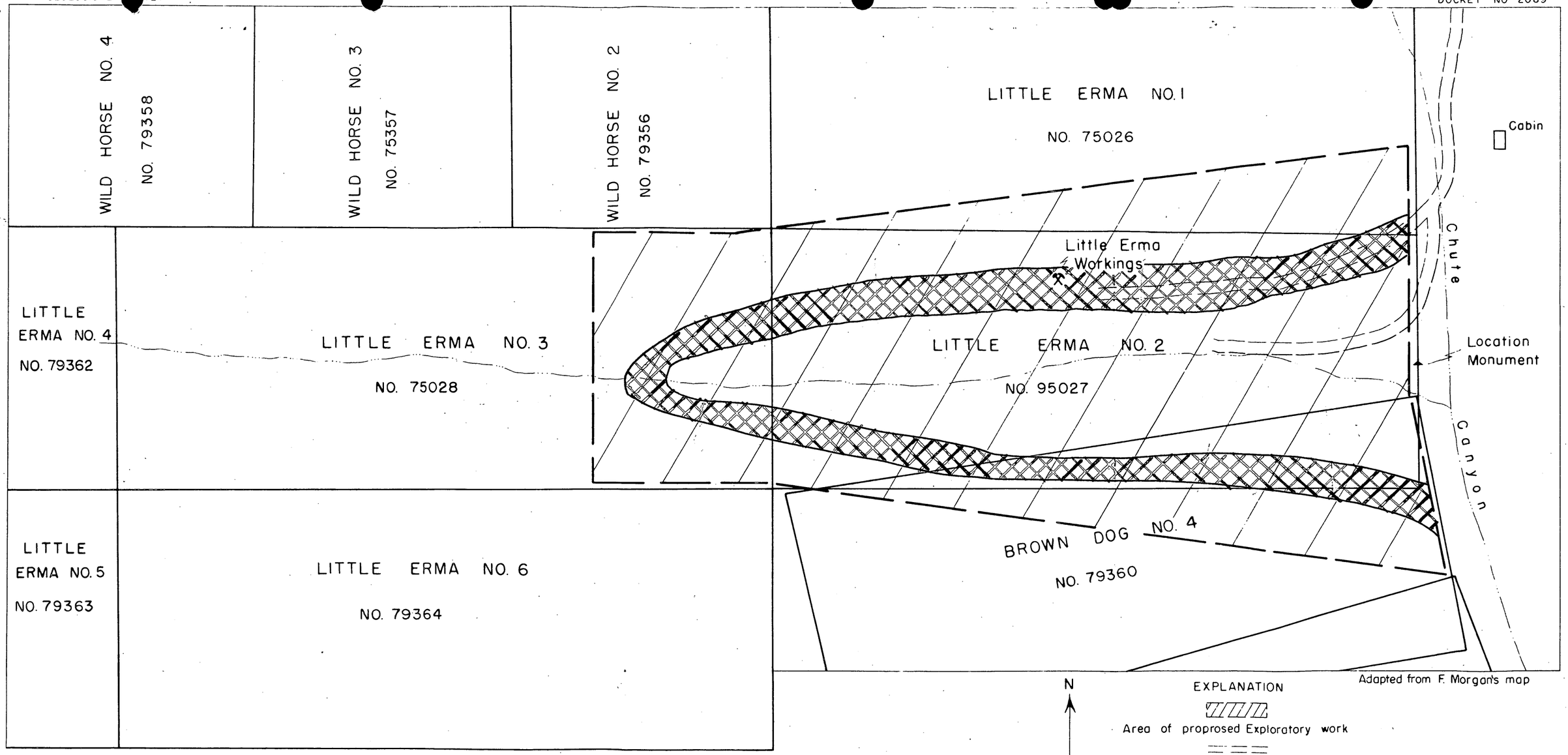

FIG. 4

SKETCH MAP OF CHUTE CANYON CLAIMS
EMERY COUNTY, UTAH

0 200 400 600 FEET
Scale

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

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

DATE: January 22, 1954

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

SUBJECT: Final Field Team Report, DMEA Docket 2689 (Uranium), Contract Idm-E500, F. L. and E. R. Morgan, Contractors; Little Erma Claim group, Chute Canyon, Emery County, Utah

The Final Field Team Report on results of exploration at the property indicated in the subject above has been reviewed.

Bull dozer stripping of cover along 1800 feet of line or outcrop of the Shinarump conglomerate failed to find any minable uranium ore, and little uranium-bearing mineralized rock. Only one of eleven samples contained more than 0.10 percent U_3O_8, and in eight of them the U_3O_8 content is less than 0.01 percent. Two small scour channels filled with Shinarump conglomerate were revealed and two ~~mag~~ insignificant zones of slightly abnormal radioactivity were exposed.

The Field Team recommends that no further exploratory work be done under DMEA auspices at the present time and that no certificate of discovery be issued. I concur in these recommendations.

Arthur P. Butler, Jr.

Copies to: E. Wm. Ellis (2)

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

Defense Minerals Administration
RECEIVED
DEC 28 1953

224 New Customhouse
Denver 2, Colorado

December 16, 1953.

Memorandum

To: Secretary to the Operating Committee

From: DMEA Field Team, Region IV

Subject: DMEA Docket No. 2689 (Uranium), Contract No. Idm-E500, Frank L. Morgan and Erma R. Morgan, Emery County, Utah.

Reference is made to our memorandum of October 30, 1953 to the Chairman of the Operating Committee whereby we transmitted the original and three copies each of the final engineering report by the Bureau of Mines and the final geological report by the Geological Survey, and wherein we advised that the Operator's final report, attached to his final MF-104 report for the month of April 1953, would be forwarded upon processing of the MF-104 report by the Fiscal Office, Region IV.

We have today processed the Operator's final Form MF-104, Operator's Monthly Progress Report and Voucher for the month of April 1953 for final payment to him in conformance with the final Report of Review by the Contract Administration and Audit Division, dated October 21, 1953, which was released to this office December 15, 1953. The Operator's report for the month of April is the only monthly report submitted inasmuch as the work was completed within that period. Washington Office copies of the April report will be forwarded to you upon processing by the Fiscal Office, Region IV.

The exploration work consisted of 1800 feet of rim stripping and preparation of roads and trails at a total accepted cost of $2,340, in which the Government participated to the extent of 90% or in the amount of $2,106. The exploration work did not result in a significant discovery of Uranium ore; therefore, no Certification of Discovery or Development is recommended.

for John F. Shaw
W. H. King

E. N. Harshman
for A. H. Koschmann

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

NOV 1 8 1953

Frank L. Morgan and [illegible] . Morgan
P. O. Box 227
Price, Utah

Joint Docket No. [illegible]-261 P (Premium)
Contract No. Idm-[illegible]500
Chute Canyon Claims
Emery County, Utah

Dear Sir and Madam:

This is with reference to the subject exploration contract between you and the Government.

The final audit of the contract expenditures and the final reports of the operator and of the field team have been received and accepted by this administration. The total amount of $[illegible],340.00 approved under the contract was expended, [illegible] percent of which, or $[illegible],106.00, represented the Government's share. There were no unused materials, supplies or equipment to be disposed of for the joint account of the operator and the Government. The exploration work was completed in a satisfactory manner.

Because the results of the exploration were unfavorable, it is not our intention to make a certification of discovery or development which would create a lien against the subject property. We are, therefore, closing our books and reports with respect to this project. Your attention is called, however, to Article 5 (a) of the Contract which requires the operator to "keep and preserve said records and data for at least 3 years after the completion of the project or the termination of this contract".

Your interest in the exploration program of the Defense Minerals Exploration Administration and your willingness to participate therein are appreciated.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

MEnouse/jlm
cc to: Adm. Reading File
Operating Committee
Docket
Messrs. H.L.Reiser, Jr. 2641
A.P.Muller, Jr. 3412, GSA
Ellis
Knouse
DMEA Field Team, Region IV (2)

P.C.y.
11-18-53

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

PROJECT SUMMARY REPORT

By: F. L. Knouse November 16, 1953

1. DMEA Docket No. 2689 (Uranium)
Contract No. Idm-E500
Property - Chute Canyon claims
Emery County, Utah

Operator: Frank L. Morgan and Erma R. Morgan
P. O. Box 227
Springville, Utah

Operator's Property Rights:

Owner

2. Contract - dated March 23, 1953

Work authorized -

* Improving 7-½ miles access road with D-8 Caterpillar tractor	$ 468.00
* 3200 ft. Rim Stripping with D-8 Caterpillar	$1,872.00
Total cost of project	$2,340.00
Government participation @ 90%	$2,106.00

* Both items set up as a complete unit of work.

Amendments - None

Work completed -

7-½ miles of road improvement and 1800 feet Rim Stripping D-8 Caterpillar tractor * 18 days @ $148/day	$2,664.00

(* Worked in excess of 8 hours)

Labor:

Supervision	360.00
Jackhammer and powder man	229.00
Compressor expense, gasoline, oil and drill steel	655.00
Explosives	216.09
Total	$4,124.09
Government participation	$2,106.00

3. Audit Certificate -

Report of Review, dated October 21, 1953

Total Accepted Cost (no exceptions)	$2,340.00
Government participation @ 90%	$2,106.00

4. Certification of discovery or development was not recommended since exploration work did not result in a significant discovery of uranium ore.

5. Comments:

Small bodies of uranium mineralization were found on the property associated with carbonaceous tree and "trash carbon" material in conglomerate and coarse sandstone lenses near the base of the Shinarump formation.

This project was established to find additional uranium ore bodies in the highly carbonaeeous sandstone, conglomerate, and mudstone along and near the Shinarump-Moenkopi contact by stripping the talus overburden to expose the contact zone. It was believed the probability of finding more and larger orebodies along this zone were favorable. The rim-stripping exposed only two small Shinarump-filled scour channels along this contact zone showing encouraging mineralization. Radiometric observations and sampling of these channels showed little uranium content. Out of eleven samples cut across these scour channels ten (10) contained

0.003 to 0.056% U_3O_8 and one showed 0.101 U_3O_8 content. In view of the above findings no additional exploration is recommended.

The project work was conducted in an efficient and economical manner.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare & Misc. Metals Division

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

224 New Customhouse
Denver 2, Colorado

October 30, 1953

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region IV

Subject: Docket No. DMEA 2689 (Uranium), Contract Idm-E500, Frank L. Morgan and Erma R. Morgan, Emery County, Utah

Reference is made to your letter of October 27, 1953, wherein you request advice as to when you will receive the final reports of the Field Team and the operator, and also request recommendations relative to the issuance of a certificate of discovery.

In conjunction therewith, enclosed are the following final reports relative to work performed under the contract:

1. Original and three copies of the final engineering report by the Bureau of Mines.

2. Original and three copies of the final geologic report by the Geological Survey.

The operator's report, attached to his final MF-104 form for the month of April 1953, appears to be adequate as a final report under the circumstances and we recommend that it be accepted as such.

Processing of the operator's final MF-104 report for the month of April 1953 has been deferred pending release of a report of review by the Contract Administration and Audit Division. The Washington office copies of the forms will be forwarded immediately upon processing by the Fiscal Office, Region IV.

The exploration work did not result in a significant discovery of uranium ore, therefore no certification of discovery or development is recommended.

W. H. King
W. H. King

E. N. Harshman
for A. H. Koschmann

Reviewed by
DMEA OPERATING COMMITTEE
11-10-53
(date)

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

DEPARTMENT OF THE INTERIOR
Bureau of Mines
RECEIVED
JUL 20 1953

Mining Division
Date Rec'd.
JUL 22 1953
BUREAU OF MINES
Denver, Colorado

July 20, 1953

Memorandum

To: W. H. King, Chief, Mining Division, Region IV

From: Chief, Minerals Development Branch, Mining Division, Region IV

Subject: DMEA-2689, Contract Idm-E500, Frank L. Morgan and Erma R. Morgan, Chute Canyon Mines, Emery County, Utah

Enclosed are the original and 10 copies of a final engineering report covering work completed under the subject contract. The permissible work included a small amount of road building and rim stripping only, and was started and completed during April 1953. The final and only set of MF-104 forms was mailed to your office June 15, 1953.

No ore discovery resulted from the exploratory work. The contract was drawn on the short-form MF-200 (A), with all work completed on a unit basis. The Government has no equity in unused supplies and materials, or equipment.

The memorandum transmitting the above-mentioned MF-104 forms included a recommendation that reimbursement to the operator be withheld until receipt of proper final report from the operator and final audit. The operator has been requested to submit a final report, but to date none has been received. Because of the apparent difficulty in obtaining a final report from the operator, the relatively simple nature of the project and the improbability of addition of information not already at hand, it is recommended that the requirement concerning the operator's final report be waived.

It is believed this recommendation is in conformance with instructions contained in Memoranda Nos. 14 and 20 from the Operating Committee to all Field Teams.

Stephen R Wilson
Stephen R. Wilson

Enclosure

Reviewed by
DMEA OPERATING COMMITTEE
11-10-53
(date)

FRANK L. MORGAN AND ERMA R. MORGAN
CHUTE CANYON MINES
EMERY COUNTY, UTAH
DMEA-2689
Contract Idm-E500
Uranium

Final Report

By H. K. Thurber, Jr.
Mining engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE

11-10-53
(date)

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Exploratory work under Contract Idm-E500 on the Little Erma No. 2 claim belonging to Frank L. and Erma R. Morgan of Springville, Utah, was completed on April 28, 1953. The property is located in the Chute Canyon area of Emery County, Utah (fig. 1). Work consisted of stripping the Shinarump-Moenkopi contact in areas partially exposed in a small canyon tributary to Chute Canyon. The work in relation to the claim boundary is shown on fig. 2, attached.

Rim stripping in the somewhat difficult terrain revealed two small, Shinarump-filled, scour channels cut into the underlying Lower Triassic Moenkopi formation. Radiometric observation and sampling as indicated on fig. 2, however, show little uranium mineralization. Only one sample is above the minimum grade acceptable under current AEC guaranteed price schedules.

In view of the above, it is recommended that no additional exploration or development be financed by the DMEA. It is further recommended that no certification of discovery be made. It is believed the grade of the ore, as indicated by that mined by the operator prior to the DMEA contract and by observation of the stripped areas, precludes the possibility of economical production from property.

DESCRIPTION OF THE WORK

Work conducted under DMEA Contract Idm-E500 consisted of rim stripping approximately 1,800 linear feet of outcrop on the Little Erma No. 2 claim. The talus and weathered material was removed by bulldozing to expose the Shinarump-Moenkopi contact for sampling and observation. The rim stripping was accomplished with a Caterpillar D-8 tractor-dozer, a portable 105-cfm. air compressor, and a hand-held drill and accessories. The tractor-dozer was furnished and operated by a subcontractor on an hourly rental basis.

The attached map, fig. 2, indicates by symbol the area that was stripped during the project. It will be noted that the total length of stripping does not equal the total length estimated by the original examining geologists and permitted by contract. The difference between the contract footage and the actual work done arose from the original acceptance by the examining geologists of the applicant's sketch map showing the area proposed to be stripped. This map shows a considerably larger area than the Geological Survey's recent plane table map. All the area intended by the original examining geologists to be stripped has been stripped. The money has been expended in an efficient and workmanlike manner, and, although the cost per foot was higher than originally estimated, it is not believed to be excessive for this type of bulldozer work.

Work under the contract was started April 7, 1953, and completed April 28, 1953. During this period, the operator was able to work nearly the full number of days indicated, since there was little mechanical difficulty. A total of approximately 2 days was lost due to breakage of bulldozer blade parts. The repairs were completed at the camp of Utah Uranium Corp. at Temple Mountain, approximately 7½ miles distant.

The nature of the talus material which had to be moved to expose the Shinarump-Moenkopi contact was such that, over most of the length of outcrop, the rock was easily moved. However, in some areas, notably at the point of intersection of the outcrop with the line of the draw, and in the areas where the stripping nears the south sideline of the Little Erma No. 2 claim, large boulders of conglomerate and coarse sandstone, which had slumped from the outcrop above, required blasting.

Two delays in the actual rim stripping were the result of the bulldozer slipping from the rim cut, toward the bottom of the canyon. Fortunately, the machine remained upright each time this mishap occurred, and neither driver nor machine was injured. Blasting was required in both cases before the bulldozer could be returned to the rim cut.

Money allocated by the contract for road improvement was expended in changing the grade and rerouting some sections of the access road from the Temple Mountain camp of Utah Uranium Corp., a distance of approximately 7½ miles.

DESCRIPTION OF THE DEPOSITS

The Lower Triassic Moenkopi formation represents the oldest rocks exposed in the immediate area of the project. This formation is composed mainly of thin beds of brown-to-purple shale, with a few beds of brown sandstone and sandy limestone. The unconformably overlying, ore-bearing Triassic Shinarump formation is composed of interbedded conglomerate lenses and coarse sandstone lenses 30 to 50 feet thick and generally brown-to-gray in color, and in some areas containing a considerable percentage of fossil trees and carbon trash, all lying on a persistent gray mudstone. A well-defined contact may usually be observed between this gray mudstone and the immediately underlying purple shales of the Moenkopi formation. The unconformable Shinarump-Moenkopi contact often exhibits channeling or stream scouring which is filled by the rocks of the Shinarump formation. These channels are considered to be the most favorable areas for uranium deposition, and thus are sought in rim stripping.

The conformably overlying Upper Triassic Chinle formation is composed mainly of red shales, with some variegated, sandy shale and sandstone beds. The bedding in the Chinle is uniform in color and thickness.

The distinctive, massive, cliff-forming Lower Jurassic Wingate formation overlies the Chinle formation and is the youngest formation in the project area. The Wingate in this part of the San Rafael Swell is

buff colored, contrasted to the usual red and salmon color observed in the canyons of the Green and Colorado Rivers.

The uranium mineralization on the Chute Canyon property is found associated with carbonaceous material in conglomerate and coarse sandstone lenses near the base of the Shinarump formation. The small tonnage of ore mined by the operator was taken from the adits shown on the attached map. The ore consisted of tree material and sandstone containing "trash carbon" adjacent to the tree material. The production was closely sorted and represented only a small percentage of the total volume of waste moved. The operator reported that results from the buying station showed the shipment to assay only 0.18 percent U_3O_8. Ores of this grade are uneconomical for other than hand mining by a single miner.

Sample results by the DMEA representative are tabulated below and on fig. 2, attached. The samples were taken over what is considered to be a minimum minable thickness, and the small areas of high-grade tree material were avoided.

The 11 samples tabulated below are believed to be indicative of the general tenor of the ore in this area:

Sample No.	Length of cut, feet	Percent U_3O_8	Percent $CaCO_3$
1	2.0	0.005	12.5
2	2.2	0.056	15.0
3	3.0	0.007	7.85

Sample No.	Length of cut, feet	Percent U_3O_8	Percent $CaCO_3$
4	2.0	0.101	9.3
5	2.0	0.017	22.15
6	1.5	<0.003	21.8
7	0.9	0.004	2.85
8	1.9	<0.003	2.65
9	1.2	0.005	23.2
10	2.0	0.003	15.35
11	2.0	0.005	23.55

Only one sample of the group tabulated is above the minimum acceptable grade listed on current AEC price schedules; thus no ore reserves can be calculated.

EXPENDITURES

The short-form contract under which the work was accomplished permits a total expenditure of $1,372 for rim stripping and $468 for access road improvement, or a total of $2,340 for the entire project.

The inspecting engineer's memorandum accompanying the operator's only MF-104 forms recommend reimbursement of $2,106 to the operator, or 90 percent of $2,340, the total allowable expenditures under the contract. An amount in excess of funds allowable was expended by the operator to complete the project work, as shown on fig. 2. This excess amounted to approximately $1,000; thus the total amount actually expended by the operator totaled approximately $3,300.

The small production mentioned in an earlier paragraph was mined by the operator prior to the contract date; thus no royalty can be claimed on this ore. Production from this deposit is not believed to be economically feasible, due to the small, discontinuous and erratic nature of the uranium deposition. On this basis, it is recommended that no certification of discovery be made.

The short-form contract under which this project operated, provided that the work be paid for in a lump sum, the entire job constituting the unit of work; thus the Government has no equity in equipment or supplies purchased for the rim stripping or the road improvement. The tractor-dozer was furnished and operated by a subcontractor on an hourly rental basis.

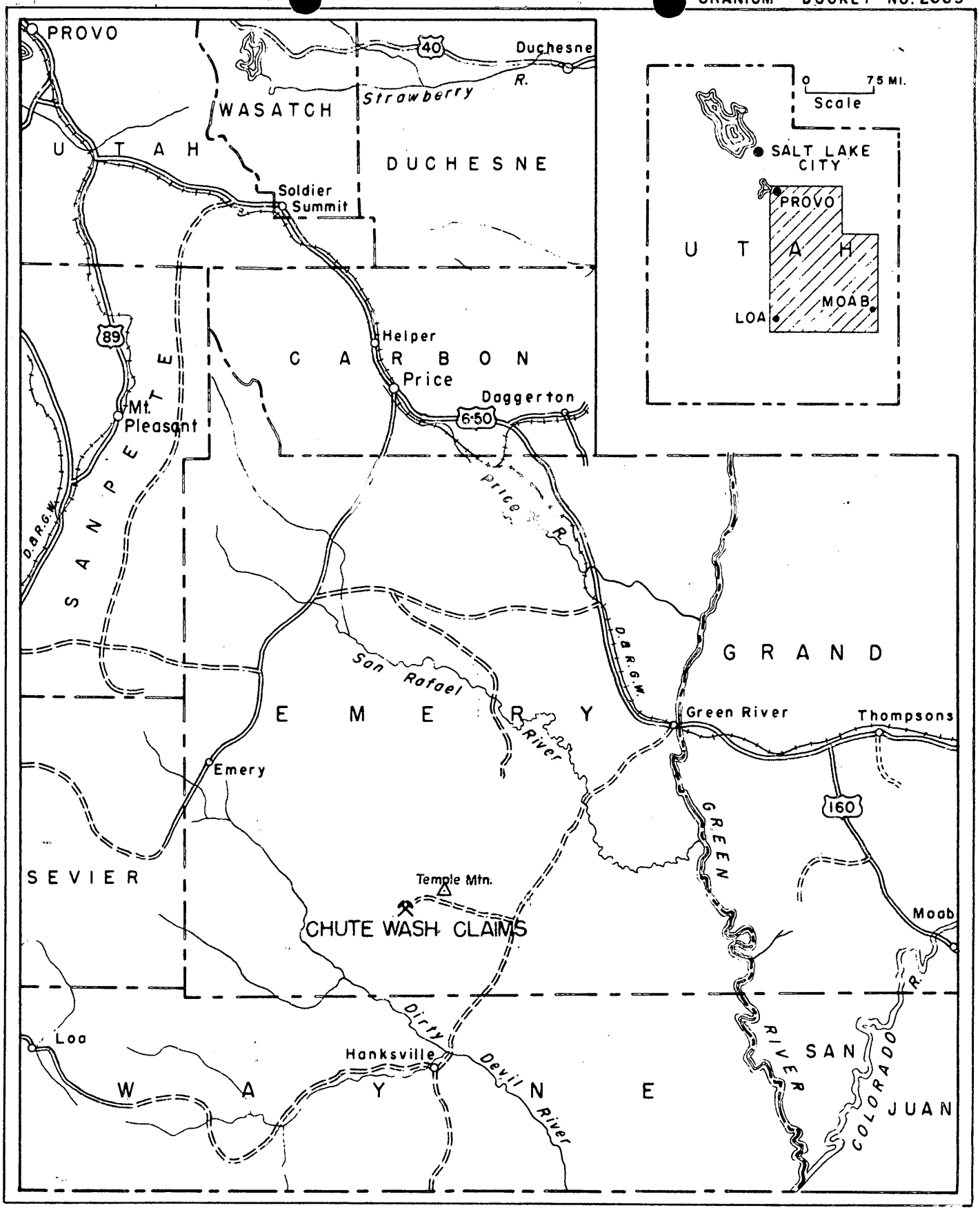

FIG. I INDEX MAP OF UTAH

0 5 10 15 20 MILES
Scale

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

July 22, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2689, Contract Idm-E500, Little Erma, Chute Wash, Emery County, Utah

Enclosed are 11 copies of a final geologic report by John F. Powers of the U. S. Geological Survey covering the above docket.

No significant discovery of uranium ore was made under subject contract and it has been recommended that no further exploratory work be done at the present time.

A. H. Koschmann

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (11)

Reviewed by
DMEA OPERATING COMMITTEE
11-10-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 208 - 222 So. West Temple
Salt Lake City 1, Utah
July 17, 1953

Memorandum

To: A. H. Koschmann, Field Team, Region IV

From: J. William Hasler, for R. J. Roberts
Utah-Nevada District Office

Subject: DMEA 2689, Little Erma, Chute Wash, Emery County, Utah

Enclosed are eleven copies of a final geologic report on the Little Erma Mine, Chute Wash, Emery County, Utah (Uranium), Docket DMEA 2689, by John F. Powers.

A contract was executed, and the applicant rim-stripped 1,800 feet, on the west side of Chute Wash to explore the base of the Shinarump formation for uranium ore of commercial grade.

Ore minerals occur in the basal part of the Shinarump conglomerate in small scour channels, however, the rim stripping under DMEA at the Little Erma property did not find any uranium ore of commercial grade. No significant discovery of uranium ore was made and it is recommended that no further exploratory work be done under DMEA at the present time.

Ralph J. Roberts

By: J. William Hasler
J. William Hasler

Reviewed by
DMEA OPERATING COMMITTEE
11-10-53
(date)

JUL 1953
RECEIVED
U.S. Geological Survey
Mineral Deposits Branch
Denver

JUL 1953
RECEIVED
U.S. Geological Survey
Mineral Deposits Branch
Denver

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 2689, LITTLE ERMA

CHUTE WASH, EMERY CANYON, UTAH

(Uranium)

By

John F. Powers
U. S. Geological Survey

July 17, 1953

Reviewed by
DMEA OPERATING COMMITTEE
11-10-53
(date)

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Summary, Conclusions, and Recommendations	3

ILLUSTRATIONS

Fig. 1 - Index Map of Utah

Fig. 2 - Geologic Map of the Little Erma No. 2 Claim

GEOLOGIC REPORT

DMEA 2689, LITTLE ERMA

CHUTE WASH, EMERY COUNTY, UTAH

INTRODUCTION

The Defense Minerals Exploration Administration entered into contract with Mr. Frank Morgan, owner of the Little Erma group of claims, to explore for uranium on his property in Chute Wash, Emery County, Utah.

The government's share of the money expended in this program was $2,188.00. The loan was used in rim stripping 1,800 feet at the base of the Triassic Shinarump. No commercial quantities of ore were discovered.

While the work was in progress the property was mapped by John F. Powers and C. G. Tillman on April 6 and 7, and later sampled by H. K. Thurber of the U. S. Bureau of Mines.

LOCATION AND ACCESSIBILITY

The Little Erma Claims are located in Sec. 24, T. 25 S., R. 10 E., SLB&M, 7 1/2 miles southwest of Temple Mountain.

The property can be reached from Green River, Utah by driving south 38 miles on Utah State Highway 24, thence 10 miles west to Temple Mountain, thence southwest 7 1/2 miles to Chute Canyon (Fig. 1).

The exploration work was confined to the west side of Chute Canyon.

GEOLOGY AND ORE DEPOSITS

The Little Erma No. 2 property is on the southeastern flank of the San Rafael Swell in Chute Canyon, Emery County, Utah. The San Rafael Swell is an eroded anticlinal fold trending northeast. The sedimentary rocks in Chute Canyon make up part of the southeastern limb of this fold.

The rocks exposed at the Little Erma property are the Triassic Moenkopi

formation, Shinarump conglomerate and Chinle formation (Fig. 2). The Shinarump conglomerate overlies the Moenkopi formation and is below the Chinle formation; lithologically, the Shinarump formation is made up of sandstone, conglomerate and some green mudstone lenses. The top of the formation is made up of current bedded buff sandstone with lenses of conglomerate. The next unit is coarse sandstone with interfingering conglomerates and shale lenses with some carbonaceous matter. The lowest unit is current bedded sandstone with a grey-green mudstone at the contact. The thickness varies from 50 to 75 feet.

The strike of the formations is about N. 30° E. and dip 10° southeast.

The ore minerals occur in the basal part of the Shinarump conglomerate in small scour channels. At the Little Erma the scour channels trend north-south and are about 200 feet in width. Throughout the channels there is more carbonaceous matter present than in the adjacent rock, particularly at the base of the channels.

The main primary uranium ore mineral is pitchblende(?) which is disseminated in a sandstone lense at the base of the Shinarump. Galena, sphalerite, chalcopyrite and unidentified cobalt and nickel minerals accompany the pitchblende(?). Secondary minerals include malachite, azurite, chalcanthite, erythrite, torbernite, and autunite.

The rim stripping at the base of the conglomerate did not disclose any minable bodies of uranium.

Exploratory Work

Exploratory work at the Little Erma amounted to 1,800 feet of rim stripping the base of the Shinarump. No minable ore body was found by the stripping, as demonstrated by the sampling (Fig. 2); however, two additional zones of abnormal radioactivity were found but they are unimportant economically.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The Little Erma No. 2 claim is on the southeastern flank of the San Rafael Swell in the Triassic Shinarump conglomerate. The Shinarump strikes N. 30° E. and dips 10° SE.

The uranium ore minerals occur with carbonaceous material in sandstones and shale scour channels at the base of the Shinarump. The uranium mineralization consists of pitchblende(?) and its alteration products. There are no blocked out ore reserves. The applicant has "rim stripped" 1,800 feet at the base of the Shinarump. No minable ore body was discovered. Slight radioactivity was found at two locations, but they are unimportant economically.

Because the exploratory work did not find minable ore bodies it is recommended that no discovery be certified. No further exploratory work is recommended at this time.

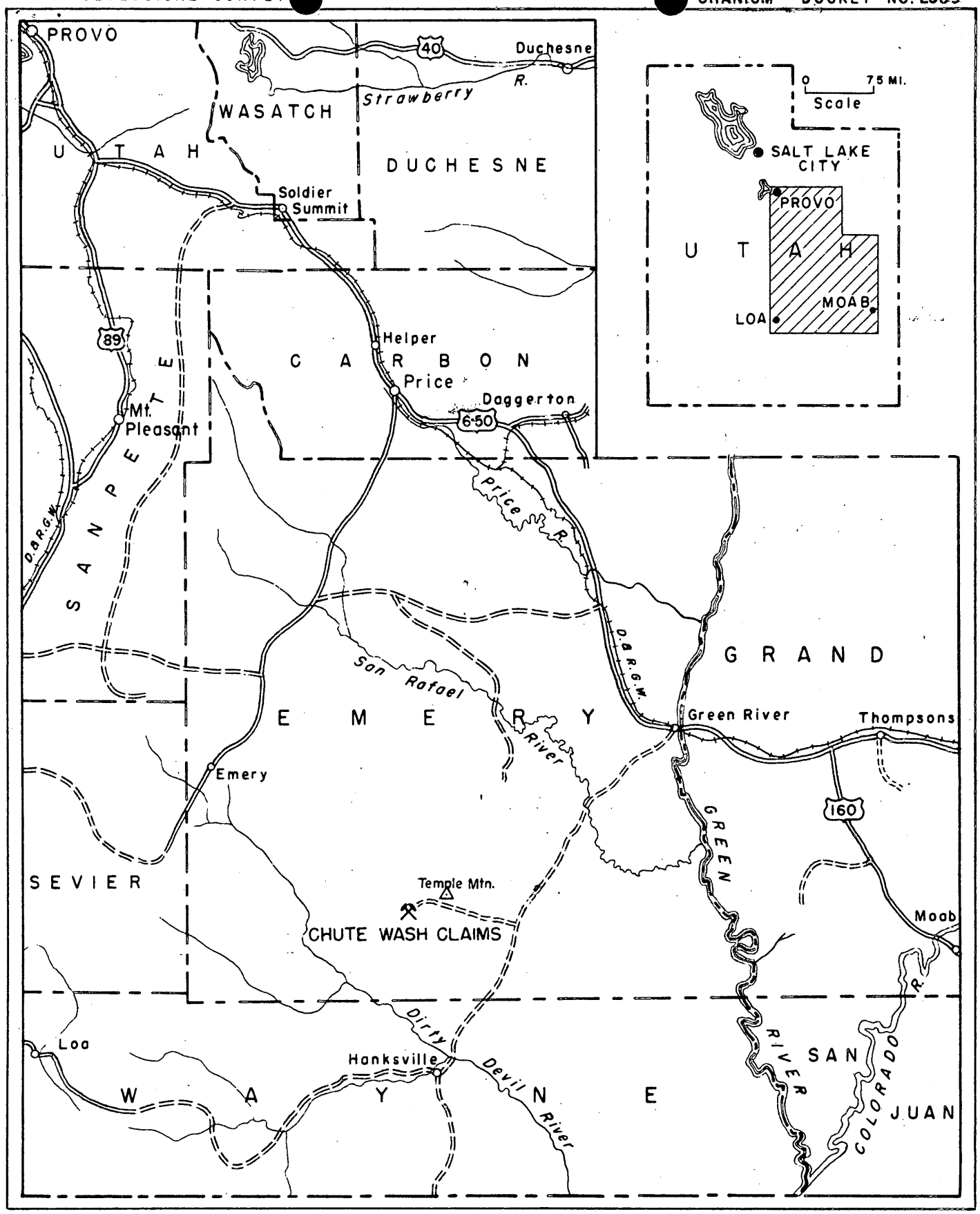

FIG. I

INDEX MAP OF UTAH

0 5 10 15 20 MILES
Scale

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

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

DATE: October 22, 1953

Defense Minerals Administration
RECEIVED
OCT 27 1953

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

SUBJECT: Memorandum of September 25, 1953, and supporting information from Region IV, DMEA Docket 2689 (Uranium), Contract Idm-E500, Frank L. and Erma R. Morgan, contractors, Springville, Utah, Little Erma Claim Group, Chute Canyon, Emery County, Utah

The memoranda indentified in the subject above concerning exploration on the Little Erma Group of claims have been reviewed.

Owing to an inaccurate map supplied by the operator, the linear distance to be stripped in exposing possibly uranium bearing Sinarump conglomerate turned out to be 1,800 instead of an estimated 3,200 feet. In addition, because the ground was more difficult to strip than anticipated, the contractor spent more money than the contract maximum in stripping the shorter distance. Work performed however, was toward defined objectives, and all agree that the contract maximum was expended on work performed within the limits defined by the contract and on the ground. No particular geologic condition is involved with respect to allowing a settlement.

Inasmuch as the specified work was completed, a settlement on any basis that seems equitable to DMEA would be appropriate.

Copies to: E. Wm. Ellis (2)

Arthur P. Butler Jr.

FILE COPY
SURNAME:

FLKnouse
Ellis
Selfridge
Gilmer
Hattendorf

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

OCT 27 1953

Mr. [illegible] King
Executive Officer
[illegible] Field Team, Region IV
[illegible] Cartorhouse Building
Denver 2, Colorado

Re: Docket No. [illegible]A-26[illegible]9 (Uranium)
Contract No. [illegible]-1500
Frank L. Morgan and
Irma R. Morgan
Emery County, Utah

Dear Mr. King:

In order for us to keep our records current, kindly advise when we may expect to receive the final reports of the Field Team and the Operator for the captioned project. In this connection please also furnish your recommendations concerning the issuance of a certificate of discovery.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (2/6)

[illegible]:

J. H. Hedges (2/6)
Member, Bureau of Mines

T. P. Thayer (2/6)
Member, Geological Survey

FLKnouse/db
10-23-53
cc to: Adm. Reading File
Operating Committee
Docket
Messrs: H.D.Keiser, Rm. 3641
A.P.Butler, Jr., Rm.3212, GSA
Ellis
Knouse

R.C.S.
10-27-53

140

FILE COPY
SURNAME: SB

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

OCT 19 1953

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

Re: Frank L. Morgan and
Erma R. Morgan
Docket DMEA-2689 (Uranium)
Contract Idm-E500
Emery County, Utah

Dear Mr. King:

Reference is made to your memorandum of September 25, 1953, in regard to stripping work done on the above-cited project.

In Exhibit "A" of the contract, under the heading "Description of the Work," the following specification is made:

> "The stripping will be confined to the ore-bearing horizon near the base of the Shinarump conglomerate and the present workings, and must be deep enough to expose the sandstone and mudstone where the carbonaceous material is concentrated. This work will be done on the Little Erma No. 1, 2, and 3, and the Brown Dog No. 4 claims as shown on Figure 4 which is attached and made a part of this exhibit."

Figure 4, attached to the contract and made a part of it, is a drawing of the work required. However, under the heading "Estimated Costs of the Work," the phrase, "3200 feet of rim stripping . . .," is used.

It is agreed by all parties that the rim stripping outlined in Figure 4 has been accomplished; but that it amounted only to 1800 and not 3200 feet. Nevertheless, the objective of the contract has been accomplished, and the Operator should be paid the entire amount of the costs of the unit, as agreed to in the contract, without any amendment thereof being necessary. Enclosed is a memorandum of the Chief Counsel to the Administrator explaining in detail the reasons therefor.

[Note: This refers to memo dated October 7, 1953]

R.L.S.
10-19-53

A copy of this letter and the enclosure should be placed in the contract folder of the Finance Officer as an interpretation of the contract for the bulldozing work. This interpretation also has the approval of the Chief of the Contract Administration and Audit Division and does not violate policy of this office that in an agreed-unit-costs contract the unit is the basis for payment.

Sincerely yours,

Frank E. Johnson (fw)

ACTING Administrator

Enclosure

JLChambers:AEK:ep 10-14-53

Copy to: Mails & Files
Adm. Reading File
Mr. Chambers
Mr. Johnson
Mr. Ellis
Mr. Hofflund
Mr. Kane
Chron.
Pending
Operating Committee

140

FILE COPY
SURNAME:

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

N/S in R.R.

October 7, 1953

Memorandum

To: The Administrator

From: Chief Counsel

Subject: Frank L. & Erma Morgan, Docket No. DMEA-2689
Contract Idm-E500 (Uranium)

In a memorandum of the Executive Officer, Region IV, to you, dated September 25, Mr. King points out that this unit-cost contract, prepared and executed in the field, describes one unit of the work as "3,200 feet of rim stripping . . .", whereas the actual amount of stripping performed by the Operator is only 1,800 feet. This discrepancy arose, Mr. King says, by reason of an erroneous map of the work furnished by the Operator and accepted by the Field Team. Although the actual amount of stripping required is much less than that indicated in the description of the unit, yet the cost of the finished work, according to Mr. King, is more than the unit cost fixed by the contract, which is $1,872.00.

In these circumstances, Mr. King recommends ". . . that the contract be amended to change the presently stipulated 3,200 feet to read 1,800 feet."

It is my opinion that no such amendment is necessary, and that the Operator should be paid the amount stipulated for the performance of the unit, in the sum of $1,872.00.

The description of the work in the contract states that the work is to be done ". . . as shown on Figure 4 which is attached and made a part of this exhibit." The map referred to delineates the rim stripping to be performed, without any indication on the face of the map of the number of feet. The language used in the estimate of costs, "3,200 feet," may be taken simply as a further description of the unit of work which is delineated and set forth on Figure 4.

It is my understanding that the Operator has performed the unit of work delineated on Figure 4, and that no further rim stripping is desired. The fact that the performance of this unit of work actually cost more than the unit price provided for it, aids in coming to this conclusion.

Suppose that a unit of work should be described as: "100 feet of drifting, from x to y, as delineated on the map, $3,000.00." Suppose that the distance from x to y actually turned out to be 80 feet instead of 100 feet. If no more than 80 feet of drifting is necessary to accomplish the purpose, the operator will be entitled to his unit price of $3,000.00 regardless of the erroneous description of the unit. However, if it had turned out that the distance from x to y was 120 feet instead of 100 feet, it is my opinion that the operator would have to perform the drifting from x to y at the unit price agreed upon regardless of the extra distance. These conclusions might be different if it is established that "100 feet" was viewed by both parties as an essential element of the description of the unit, but was fixed at that amount through a mutual mistake of fact. Where the actual cost of performing the unit is as much and more than that agreed upon in the contract, and where the performance of the unit accomplishes the purpose of the contract, it seems unnecessary to me to hunt for a mutual mistake of fact or to deprive the operator of the Government's contribution to his actual cost.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

AEKane/JLHofflund/emd
Copy to: Mails and Files
Region II, W. H. King (2)
E. W. Ellis
J. L. Hofflund
A. E. Kane
chron.

This is an example of too little field work and too simple a contract. It makes for easy work and administration, but brings forth other problems.

A careful field inspection of area where work was to be performed should have indicated stripping distance on map was over estimated.

Cost estimates were not realistic.

Based on previous instructions to the Field Team as to what constitutes a unit of work, the Operator should be paid only 9/16% of the cost of the item for rim stripping. Approving the entire item sets a bad precedent for the Field Team in view of our instructions to pay only for that part of a unit of work that has been completed.

However, because of the small amount of the contract and approval by the Field Team that the work performed was satisfactory, and accomplished the purpose intended under the contract, full payment should be made for the item of rim stripping. The cost per foot for stripping under the conditions stated by the Operator and Field Team under dates of 9/2/53 and 9/25/53 does not appear excessive.

Frank E. Johnson

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

October 7, 1953

Memorandum

To: The Administrator

From: Chief Counsel

Subject: Frank L. & Erma Morgan, Docket No. DMEA-2689
Contract Idm-E500 (Uranium)

In a memorandum of the Executive Officer, Region IV, to you, dated September 25, Mr. King points out that this unit-cost contract, prepared and executed in the field, describes one unit of the work as "3,200 feet of rim stripping . . .", whereas the actual amount of stripping performed by the Operator is only 1,800 feet. This discrepancy arose, Mr. King says, by reason of an erroneous map of the work furnished by the Operator and accepted by the Field Team. Although the actual amount of stripping required is much less than that indicated in the description of the unit, yet the cost of the finished work, according to Mr. King, is more than the unit cost fixed by the contract, which is $1,872.00.

In these circumstances, Mr. King recommends ". . . that the contract be amended to change the presently stipulated 3,200 feet to read 1,800 feet."

It is my opinion that no such amendment is necessary, and that the Operator should be paid the amount stipulated for the performance of the unit, in the sum of $1,872.00.

The description of the work in the contract states that the work is to be done ". . . as shown on Figure 4 which is attached and made a part of this exhibit." The map referred to delineates the rim stripping to be performed, without any indication on the face of the map of the number of feet. The language used in the estimate of costs,"3,200 feet," may be taken simply as a further description of the unit of work which is delineated and set forth on Figure 4.

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J. L. Hofflund
Chief Counsel

Copy to: W. H. King, Reg. IV

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

October 7, 1953

Memorandum

To: The Administrator

From: Chief Counsel

Subject: Frank L. & Erma Morgan, Docket No. DMEA-2689
Contract Idm-E500 (Uranium)

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J. L. Hofflund

J. L. Hofflund
Chief Counsel

Copy to: W. H. King, Reg. IV

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

224 New Customhouse
Denver 2, Colorado

September 25, 1953

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA-2689 (Uranium), Contract Idm-E500, Frank L. Morgan and Erma R. Morgan, Emery County, Utah

Enclosed are the following memorandum reports and data relevant to a discrepancy between the work authorized under the contract and that actually performed by the operator:

usual Distribution made

1. Four copies of Forms MF-104 and MF-104A submitted by the operator for work performed during the month of April 1953.

2. Four copies of a letter, dated September 1, 1953, from S.R. Wilson, Chief, Minerals Development Branch, Mining Division, Region IV, to Frank L. Morgan, the operator.

3. Four copies of a letter, dated September 2, 1953, from Frank L. Morgan to S.R. Wilson in reply to Wilson's letter under item 2.

4. Original and three copies of a memorandum report, dated September 2, 1953, from C.G. Tillman for R.J. Roberts, Utah-Nevada District, U.S. Geological Survey, to A.H. Koschman, Field Team, Region IV.

5. Original and three copies of a memorandum report, dated September 2, 1953, from H.K. Thurber, Jr., to S.R. Wilson, and transmittal thereof, dated September 3, 1953, from the Chief, Minerals Development Branch, Mining Division, Region IV, to W.H. King, Executive Officer, DMEA Field Team, Region IV.

The contract authorized 3200 feet of rim stripping at an agreed unit cost of $1,872.00. The operator completed the rim stripping of the intended area which actually consisted of only 1800 feet.

The discrepancy is due to the fact that the map supplied by Morgan as a part of his original application for Government assistance was in error as to the extent of rim to be stripped. The operator's map was used as a basis for the recommendations of the examining engineer and geologist, in conformance with which the contract was prepared. Mapping of the area by the Geological Survey during April 1953 revealed

the inaccuracy of the operator's map. The matter to be resolved before final payment can be effected is the discrepancy between the 3200 feet of rim stripping authorized in the contract which in reality amounted to only 1800 feet.

Apparently there was no intent on the part of the operator to defraud the Government or intentionally misrepresent facts. The costs to the operator of performing the 1800 feet of rim stripping were considerably in excess of the agreed costs stipulated in the contract for performing the authorized 3200 feet. Therefore, we recommend that the contract be amended to change the presently stipulated 3200 feet to read 1800 feet.

W. H. King

W. H. King

Enclosures

COPY

Springville, Utah
September 2nd, 1953.

Mr. S. R. Wilson, Chief
Minerals Development Branch
Mining Division
Region IV

Dear Mr. Wilson:

In reply to your letter of September 1st regarding DMEA Docket No. 2689 Contract Idm-E500 wish to submit the following information.

When this project was started April 7th pictures were taken by Mr. Thurber to show the condition of the proposed rim stripping these no doubt will show the rough terrain we proposed to strip.

Present was, Mr. Thurber, Mr. Finch, Mr. Powers, Mr. Tillman and Mr. Hinkley they inspected the property and all agreed that the rim should be stripped to the face and down to the purple shale as that was the contact zone, they marked out an area they wanted stripped and all agreed that they would consider the project completed when this area was exposed, also it was the opinion of all I was short of funds to do this stripping.

I completed this stripping as designated, besides went over a trail I had made to get machinery to the upper part of the canyon and stripped it down to the purple shale in the hopes of exposing something interesting, when I made application for an additional $600.00 to complete the circle on the Brown Dog No. 4 I had been advised by Mr. Powers and Mr. Tillman that I had a very good chance of opening up a channel, the application was turned down but I stripped it on my own and completed the circle.

This rim stripping turned out to be a lot heavier than anticipated and in order to strip it up to the face that was in place required moving several thousand yards of material, besides the air compressor and Powder man were working constantly drilling boulders and shooting ahead of the bull dozer.

The bull dozer worked straight through the week, Sundays and all in order to get the job completed, and worked from daylight to dark.

I dated my Narrative report and final report April 25th, the contract called for $2,340.00 worth of work as a unit, listed please find a list of expenditures from July 7th to July 25th inc.,

18 days Bull Dozer Work	$2,664.00	
Jack Hammer & Powder Man	229.00	
Supervision	360.00	
Compressor, Gas, Oil, Steel, Bits & Etc.,	655.00	
Dynamite, Caps, Fuse & Etc.,	216.09	Total $4,124.09

I was informed that it was not necessary for me to break down the actual costs of this exploration project or I would of done this before, I realize that the original contract was below the amount that I put into the project, but after I had completed what the engineers had specified that I do to complete the contrac and the additional loan was turned down, I did not want to stop in the middle of the area so made arrangements to complete the circle to take in the area that I was told looked to be the most promising, and make the area more accessible for the Geologists to really see what the formation looked like.

I am at a loss to try and figure out just what this is all about, I have more than completed what I was supposed to do in order to complete my contract, the Company that I had do the work are wondering why they do not get their money, the job was well done and the proof of the amount of material moved shows for itself on the property, it would be impossible to move this much material in the length of time spent on this project without the cooperation of the Company I dealt with and the operators and equipment I used.

When the engineers and field men saw where the proposed stripping was to be done they did not believe I would get half way down for it was rough going, but the men I had working there were seasoned road construction men that knew how to operate machinery and they worked it long and hard hours to complete the job in order to get the machinery loose to move out on a road construction job that was waiting for it, this is one job where we were not just trying to get in time, we had a job to do the same as if we were on contract, so we put in every hour that daylight would let us work, and the men came in many a time after it was dark and refuled by electric light in order to have the equipment ready to go the next morning.

I have made several trips to the property since this project was completed, and I have contacted Mr. Thurber several times but to date I have not been able to get any information of any kind regarding the results of the exploration project, I am ready to cooperate in every way to make this operation a success and ready to move machinery in that is needed to mine and start mining.

The A.E.C. Crew in charge of Dave Hinkley have passed me up on the core drill program and worked all around me, I developed two good water holes so they would have water to drill with, they used it on other property, they did do some plane table work but I never hear any of the results.

Trusting that this information is what you requested and that it will enable you to complete your files, I remain.

Very truly yours,

Frank L. Morgan
Box-227
Springville, Utah.

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 East First South St.
Salt Lake City 1, Utah

RECEIVED

September 1, 1953

Mr. Frank L. Morgan
P.O. Box 227
Springville, Utah

Re: DMEA Docket No. 2689
Contract Idm-E500
Operator's estimate of
expenditures during
project period.

Dear Mr. Morgan:

Mr. H.K.Thurber, Jr., of this office, visited you in Springville on August 17, 1953, and discussed the desirability of obtaining from you a letter stating how much money was expended by you to strip the rim under the subject contract. Such a statement will aid in justifying the increased cost per foot of rim stripping due to the fact that less rim was stripped than called for in the contract. This difference arose from a disagreement of two maps made by the D.M.E.A. and through no oversight of yours.

Our records show that you expended approximately $3,255 up to April 20, 1953, at which time you were at the limit of the stripping area outlined in the contract. Between this date and approximately April 28, you comtinued to strip rim outside the project area and thereby increased your total expenditures to approximately $4,124. It was understood that this additional work would not be paid for by the D.M.E.A. since your request for amendment was desired on a geologic basis.

Please confirm that the above expenditures are correctly stated and, if not, supply the actual costs of the project during the above dates.

Sincerely yours

S. R. Wilson, Chief
Minerals Development Branch
Mining Division
Region IV

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 208 - 222 So. West Temple
Salt Lake City 1, Utah
September 2, 1953

Memorandum

To: A. H. Koschmann
Field Team, Region IV

From: C. G. Tillman for R. J. Roberts
Utah-Nevada District

Subject: DMEA Docket 2689, Little Erma Claims, Chute Canyon, Emery County, Utah.

The following memorandum was prepared at the request of H. K. Thurber, U. S. Bureau of Mines, to expedite payment of Mr. Frank Morgan for work done under DMEA contract, docket 2689, on the Little Erma No. 2 claim, Chute Canyon, Emery County, Utah.

Figure 4 of the original geologic report entitled, "Sketch Map of Chute Canyon claims," was supplied by Mr. Morgan and the outline of the proposed exploratory work as represented on the sketch map was thought by him to be accurate. Later mapping of the area of exploration by Powers and Tillman, figure 2 of the final geologic report entitled, "Geologic Map of the Little Erma No. 2," revealed that the claim map was inaccurate both in the orientation of the claims and in showing the proposed exploratory work to extend from the Little Erma No. 2 claim onto the Little Erma No. 3 claim. The exploratory work was actually performed on the Little Erma No. 2 claim and the Brown Dog No. 4 claim.

Copies of both figures referred to above are attached.

Ralph J. Roberts
Utah-Nevada District

By C. G. Tillman
C. G. Tillman

CGT/rs
Enclosure - 2

SEP 1953
RECEIVED
U.S. Geological Survey
Mineral Deposits Branch
Denver

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

Mining Division
Rec'd
SEP 30 1953
BUREAU OF MINES
Denver, Colorado

September 3, 1953

Memorandum

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

From: Chief, Minerals Development Branch, Mining Division, Region IV

Subject: Docket No. DMEA 2689 (Uranium), Contract Idm-E500, Frank L. and Erma R. Morgan, Emery County, Utah

Enclosed are six copies of a memorandum prepared by H. K. Thurber outlining information concerning discrepancies between the originally estimated footage of bulldozer stripping and that actually performed under the contract.

Thurber's memorandum discusses the source of information shown on figure 4. An original map prepared by the owner proved to be incorrectly prepared, as disclosed by later work by the Geological Survey. The original estimate of the amount of stripping to be performed was taken from the owner's map; thus the distances were incorrect.

We have been unable to obtain actual costs of the project work from the operator. Thurber discussed the problem with Frank L. Morgan August 17, 1953, and at that time requested the operator to submit cost information. No word has been received to date.

It is recommended that the operator be reimbursed in the amount of $2,106. This amount is 90 percent of $2,340, the total allowable cost established in the contract.

Stephen R. Wilson
Stephen R. Wilson

Enclosure

S. R. Wilson

September 2, 1953

H. K. Thurber, Jr.

DMEA Docket No. 2689, Contract Idm-8500, Frank L. and Emma R. Morgan, Chute Canyon Mines, Emery County, Utah. Discussion of difference in length of stripping outlined in the contract and that actually done.

The work under the subject contract was completed on April 28, 1953, with the finishing of approximately 1,800 feet of rim stripping within the area designated as the project area in the contract and attachments thereto. MF-104 forms have been presented by the operator requesting reimbursement for the total contract amount which was based upon a total of 3,200 feet of stripping as outlined on Figure 4, "Sketch map of Chute Canyon Claims, Emery County, Utah." This map, attached hereto, is included in the contract as an exhibit and is the basis for the estimate that 3,200 feet of stripping would be required to properly explore the Shinarump-Moenkopi contact in the area shown. Figure 2, "Geologic plan and sample map, Little Emma Mine No. 2, Chute Canyon, Emery County, Utah," attached hereto, shows that length of rim within the limits of the project area actually stripped during the period of the project totals approximately 1,800 feet. This topographic and geologic map was made by C. G. Tillman and John Powers of the Salt Lake City office of the Geological Survey. The work shown on Figure 2 stripped all of the Shinarump-Moenkopi contact exposed in Little Emma Canyon and inside the established project area as outlined on the map attached to the contract. This represents the entire area intended to be stripped by the examining geologists.

The obvious differences between the two maps mentioned above arose from the fact that Figure 4 was enlarged from an incorrect sketch map furnished by the owner which had no formal survey or geologic map as a basis. As noted in the foregoing paragraph, it was from this map that the estimate of the length of outcrop to be stripped was made. Apparently no measurements of the length of rim to be stripped were made during the geologists' original examination.

The views of the Salt Lake City office of the Geological Survey relative to the discrepancies of the two maps are expressed in a memorandum from Ralph T. Roberts to A. H. Koschmann dated August 31, 1953.

Cost records maintained by the operator show that approximately $915 more than the amount of the estimated contract costs were expended in stripping the 1,800 feet of rim actually uncovered. The total allowable expenditures under the contract are $2,340.00, while the operator actually spent $3,255.00 in active rim stripping within

the areal limitations imposed by Figure 4, attached to the contract. He spent an additional $869 in continuing the rim stripping beyond the areal limits of the project for which cost he has not asked reimbursement. Although the cost per foot of stripping was actually higher than it would have been had 3,200 feet of stripping been done, the cost is not believed to be excessive for this type of bulldozer work. The blocky nature of the talus encountered in the area necessitated much blasting to enable the bulldozer to move the covering material and expose the contact.

The operator pursued the work diligently in a workmanlike manner and attempted, to the best of his ability, to find ore within the limits of the project area. It should be noted that all the rim intended by the examining geologists to be stripped has been stripped.

An apparently favorable scour channel was delimited by the work, but, unfortunately, only very low-grade uranium mineralization was found. Samples taken at random intervals along the Shinarump-Moenkopi contact are shown on Figure 2.

In view of the above facts and comments, it is recommended that the operator be reimbursed in the amount of $2,106.00 which is 90 percent of $2,340.00, the total agreed cost set forth in the contract and reported on the MF-104 forms for April 1953, the only forms for the project, which were transmitted to the Denver office June 15, 1953.

H. K. Thurber, Jr.

H. K. Thurber, Jr.

Enc.

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

224 New Customhouse
Denver 2, Colorado

May 7, 1953

Frank L. Morgan and Erma R. Morgan
P. O. Box 227
Springville, Utah

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 11 1953

Re: Docket DMEA 2689
Contract Idm-E500

Dear Sir and Madam:

Reference is made to your letter of April 20, 1953 to Mr. Stephen R. Wilson, Chief, Minerals Development Branch, Mining Division, Region IV, wherein you apply for an increase of funds under Contract Idm-E500 in the amount of $600.00 to permit additional rim stripping. The letter was referred to the DMEA Field Team, Region IV, for reply.

The rim stripping performed under the contract failed to disclose the presence of significant mineralization and it has been concluded from investigation of the exposures that additional rim stripping is not warranted. Therefore, your application for additional funds is denied.

Very truly yours,

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

A. H. Koschmann
A.H. Koschmann
DMEA Field Team, Region IV

JWT:jp
cc Sec. Oper. Committee w/copies incoming correspondence
AHKoschmann
SRWilson
JWTownsend
Contract
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

May 1, 1953

Memorandum

To: W. H. King, Chief, Mining Division, Region IV

From: Chief, Minerals Development Branch, Mining Division, Region IV

Subject: DMEA 2689, Contract Idm-E500, Chute Canyon mines, Emery County, Utah

Enclosed are six copies of a letter received from the subject operator requesting an amendment to permit additional funds for continuing bulldozer work under the contract.

Personnel from the Geological Survey examined and mapped the property April 7, 1953. The geologists conclude that rim stripping completed under the contract has not exposed encouraging uranium mineralization, and that additional bulldozer work is unlikely to disclose ore bodies of significance. It is therefore recommended that the request for additional funds be denied. I concur with this recommendation.

A memorandum concerning the subject was mailed to A. H. Koschmann by Ralph Roberts April 28, 1953.

Stephen R. Wilson

Stephen R. Wilson

Enclosure

IN REPLY REFER TO:

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 208, 222 So. West Temple
Salt Lake City 1, Utah
28 April 1953

Memorandum

To: A. H. Koschmann, Field Team, Region IV

From: Ralph J. Roberts

Subject: DMEA-2689, Idm-E 500, Chute Canyon Mines, Frank L. Morgan, Emery County, Utah. Uranium.

Mr. Frank Morgan, owner of the Little Erma group of claims, Chute Canyon, Emery County, Utah, wishes to amend his contract, DMEA Docket 2689, to provide for $600.00 additional funds for more rim stripping.

John Powers and C. G. Tillman of the U.S.G.S. examined and mapped this property April 7, 1953. They conclude that on the basis of work already completed, this additional work is unlikely to reveal significant mineable ore bodies.

According to the applicant, the rim stripping has not exposed any encouraging results and the funds have been expended. Therefore, it is recommended that the request for additional funds be denied. A field examination and a final report will be made as soon as possible.

/s/ J. William Hasler

for - Ralph J. Roberts

cc: King
Wilson
Fischer

Received May 1, 1953
U.S.G.S., Mineral Deposits Branch
Denver

Springville, Utah.
April 20th. 1953.

Mr. Stephen R. Wilson, Chief
Minerals Development Branch
Mining Division, Region IV
Bureau Of Mines, 1600 E 1st S
Salt Lake City 1, Utah.

Re: Docket DMEA 2689.

Dear Mr. Wilson:

Regarding the above DMEA contract, I would like to make application for an amendment as follows.

We have worked straight through the week and have never stopped since starting this project, working 10 hours a day average in order to complete it and have followed the reccomendations of Mr. Thurber and Mr. Finch after their field inspection, and have now completed additional stripping to a point that the geologists that made the plane table mapping felt should be stripped.

I would like to make application for an additional $600.00 extension on the above DMEA loan in order to extend the stripping on the Brown Dog #4 Claim to a point that would intersect the bottom of the wash in Chute Canyon as this is a point that was brought to the attention of Mr. John Powers and Mr. Jake Tillman while they were making their mappings in Chute Canyon, this is an extension of the original plan and was not included in the first application.

The equipment is still on the property and they would like to complete the project before moving it, they have work for this equipment and are very anxious to get it moved.

Trusting that the above meets with the approval of the board I remain,

Sincerly,
Frank L Morgan
Frank L Morgan
Box-227.
Springville, Utah.

Erma R Morgan

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

224 New Customhouse
Denver 2, Colorado

May 7, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAY 11 1953

Frank L. Morgan and Erma R. Morgan
P. O. Box 227
Springville, Utah

Dear Sir and Madam:

Information supplied this office indicates that work under Contract Idm-E500 was started April 7, 1953 and completed April 27, 1953.

With reference to the completion of work under the contract, your attention is directed to Article 5 of Exploration Project Contract Form MF-200(A). Particular reference is made to Article 5 "(b) Final Report". The required final engineering and geologic report, in narrative form, complete with maps which show work accomplished, is necessary in addition to the brief narrative report which must accompany Form MF-104, Operator's Monthly Report and Voucher, which you will submit as a claim for reimbursement under the terms of the contract. The final narrative report should be captioned "Final Report" and include statements as follows:

1. Starting and completion dates of the project work.

2. Amount of work accomplished and costs thereof.

3. Geologic conditions encountered in performing the work, results of the work accomplished, and extent or absence of a discovery.

Very truly yours,

W. H. King

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

JWT:jp
cc Sec. Oper. Committee
AHKoschmann
SRWilson
JWTownsend
Contract
Chron

Attorney
4/27/53
Pontin

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

April 15, 1953

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare & Misc. Metals Division

Subject: Clearance on Region IV finalized contracts

Mr. Ellis has reviewed the following contracts and approves them:

DMEA-2689 Idm-E500 Frank L. Morgan and Irma R. Morgan (Uranium)
Dated March 23, 1953 Total amount: $2,340.00

DMEA-2776 Idm-E506 Kay Hunt and Andrew Hunt, a partner- (Uranium)
ship, dated April 9, 1953 Total amount: $7,368.00

Grace L. Ault
Grace L. Ault

Posted 4-16-53

RECEIVED
APR 22 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Docket Copy

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

224 New Customhouse
Denver 2, Colorado

March 24, 1953

REGISTERED

#79554

Memorandum

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 31 1953

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract Idm-E500, Docket DMEA 2689, Frank L. Morgan and Erma R. Morgan (Uranium)

Enclosed are the original and two copies of Contract Idm-E500. Copies of this contract have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King
W. H. King

Enclosures

cor
3/31

STANDARD FORM NO. 64

4/20/53 gla

Office Memorandum • UNITED STATES GOVERNMENT

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

DATE: April 15, 1953

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

SUBJECT: Final report, DMEA Docket 2689 (Uranium), Chute Canyon Mines, Emery County, Utah.

Frank L. Morgan

Defense Minerals Administration
RECEIVED
APR 1 2 1953

I have reviewed the report by the Field Team pertaining to the property identified in the subject above. The Field Team recommends 3,200 feet of rim-stripping to explore the Shinarump conglomerate for additional radioactive zones near the Chute Canyon claims, and necessary repair of access road.

I concur with the recommendations of the Field Team that Government assistance for exploration, as set forth in the Field Team report, be granted for the Government's proportionate share of the total cost of $2,342.00.

Arthur P. Butler, Jr.

Arthur P. Butler, Jr.

Copy to: E. Wm. Ellis (2)

6 el

IN REPLY REFER TO:

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

E. Wm. Ellis, DMEA Member
Uranium Commodity Committee
Arthur P. Butler, Jr., USGS Member, Uranium Commodity Committee

April 15, 1953

Final report, DMEA Docket 2689 (Uranium), Chute Canyon Mines, Emery County, Utah.

I have reviewed the report by the Field Team pertaining to the property identified in the subject above. The Field Team recommends 3,200 feet of rim-stripping to explore the Shinarump conglomerate for additional radioactive zones near the Chute Canyon claims, and necessary repair of access road.

I concur with the recommendations of the Field Team that Government assistance for exploration, as set forth in the Field Team report, be granted for the Government's proportionate share of the total cost of $2,342.00.

Arthur P. Butler, Jr.

Copy to: E. Wm. Ellis (2)

4/13/53 gla

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

April 9, 1953

Memorandum

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4640

From: H. D. Keiser, Bureau of Mines Member,
Uranium Commodity Committee

Subject: Final report, DMEA Docket 2689, Chute Canyon Mines,
Emery County, Utah.

I have reviewed the subject final report by the Field Team, Region IV, and have discussed it with Joseph O. Hosted, representative of the Atomic Energy Commission.

It is recommended that the report be approved.

The report has been forwarded to the Chief, Minerals Division, in accord with the routing slip attached thereto.

H. D. Keiser

H. D. Keiser

2

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

224 New Customhouse
Denver 2, Colorado

March 26, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 30 1953

Memorandum

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

From: Field Team, DMEA, Region IV

Subject: Final Report, DMEA Docket 2689 (Uranium), Chute Canyon Mines, Emery County, Utah

Enclosed are four copies of the final report on Docket 2689. A contract has been prepared and is in effect.

W. H. King
W. H. King

for Ogden Tweto
A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
4-3-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

January 14, 1953

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2689 (Uranium) Chute Canyon Mines, Emery County, Utah

Enclosed are 11 copies of the final engineering report on the subject docket.

Promising exposures of uranium ore have been found in the small amount of exploratory work done to date. The examining engineer recommends ~~xxx~~ stripping 3200 feet at a total cost of $2342.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
4-3-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

January 9, 1952

Memorandum

To: W. H. King, Chief, Mining Division, Region IV

From: Chief, Minerals Development Branch, Mining Division, Region IV

Subject: DMEA-2689, Chute Canyon Mines, Emery County, Utah. Your memorandum of December 17, 1952

Enclosed are the original and 10 copies of a memorandum engineering report which includes information requested in your memorandum of above date.

The Survey's geologic report, transmitted to Denver November 20, 1952, includes figures 1, 2 and 3. Eleven copies of figure 4, enclosed, are to become part of the Survey's report. Nine extra copies of figure 4 are attached for use in contract preparation.

It is believed limited exploration on this property may disclose minable uranium ores. The engineering proposals are feasible.

A copy of the brochure is enclosed.

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

November 25, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2689, Little Erma No. 2, Chute Canyon, Emery County, Utah.

Enclosed are 11 copies of the geological report by John Powers and Allen Taylor, of the U. S. Geological Survey, covering the above docket. It has been recommended that the loan be approved.

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

Enclosures (11)

Room [illegible] [illegible] W. Temple
Salt Lake City 1, Utah
November [illegible], 195[illegible]

Memorandum

To: [illegible] E. Rosenbaum, Director
Field Team, Region IV

From: Ralph J. Roberts, Acting
District Supervisor

Subject: DOE Docket [illegible]69, Little Arm No. 2

Enclosed are eleven copies of a geologic report on the Little Arm group of claims, Chute Canyon, Emery County, Utah.

Mr. Frank Morgan applied to the Defense Minerals Exploration Administration for a loan to explore for uranium on the Little Arm claims in Emery County, Utah. In response to a request by the Field Team, Region IV, the property was examined and appraised for a DMEA loan by John [illegible] and [illegible] Taylor of the U. S. Geological Survey.

The Little Arm claims lie on the southeastern flank of the San Rafael Swell. The uranium ore occurs with carbonaceous material in pockets near the base of the Shinarump conglomerate. The uranium mineralization consists of pitchblende(?) and its alteration products. Inferred ore reserves are [illegible] tons of ore averaging 0.119 percent U_3O_8.

The possibilities of finding additional bodies of commercial ore are good. It is therefore recommended that the government enter into a contract with the applicant to do the work proposed in the accompanying geologic report. The government's share on a 90:10 participation basis will be $2,188.00.

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

Ralph J. Roberts

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 2689, LITTLE ERMA NO. 2, CHUTE CANYON

EMERY COUNTY, UTAH

John Powers & Allen Taylor
U. S. Geological Survey

November 19, 1952

Reviewed by
DMEA OPERATING COMMITTEE

4-3-53
(date)

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Costs of the Proposed Exploration	4
Summary and Conclusions	4

Illustrations

Figure 1. Index Map of Utah

2. Photogeologic map of Chute Canyon, Emery County, Utah

3. Geologic Sketch, Map of Little Erma No. 2, Chute Canyon, Emery County, Utah

RECEIVED
NOV 1958
U.S. Geological Survey
Mineral Deposits Branch
Denver

LITTLE ERMA #2, CHUTE CANYON, EMERY COUNTY, UTAH

DMEA 2689 (Uranium)

Introduction

Mr. Frank L. Morgan, owner of 18 claims that include the Little Erma, Wild Horse and Brown Dog claims located in Chute Canyon, 7½ miles southwest of Temple Mountain, Emery County, Utah, has applied to the Defense Minerals Exploration Administration for a loan to explore for uranium ore on these claims.

A field examination was requested by the Field Team, Region IV, September 11, 1952, to determine the advisability of government assistance. An examination was made September 10-11, 1952 for the Trace Elements section of the Mineral Deposits Branch, U. S. Geological Survey, by John F. Powers, Allen O. Taylor and Leo F. Emmett. This examination serves as a basis for this report.

Location and Accessibility

The Little Erma claims are located in Sec. 24, T. 25 S., R. 10 E., SLBM, (unsurveyed). The claims can be reached by driving 38 miles southwest from Green River, Utah via Utah State Highway 24, thence driving west 10 miles through South Temple wash to Temple Mountain, thence southwest 7½ miles to Chute Canyon. The road from Green River to Temple Mountain is an all-weather improved dirt road; the seven and 1/2 miles of road from Temple Mountain to Chute Canyon, however, is unimproved road in poor condition. (Fig. 1)

History and Production

There has been no production of uranium from the Chute Canyon Claims. Of the 18 claims owned by the applicant in Chute Canyon, exploratory work has been done only on the Little Erma No. 2. The work consists of 20 feet of drift, a 20 foot trench, and 60 feet of rim stripping.

Geology

The Little Erma No. 2 prospect is on the southeastern flank of the San Rafael Swell in Chute Canyon, Emery County, Utah. The San Rafael Swell is an eroded anticlinal fold about 70 miles long and whose main axis trends northeast. The property is eleven miles southeast of the main axis of the anticline.

The sedimentary rocks exposed in the area are of Triassic and Jurassic age (fig. 2). The Moenkopi formation of Triassic age is the oldest formation exposed. It is a thin-bedded, brown to lavender-colored shale that contains some brown sandstone and sandy limestone. The Triassic Shinarump conglomerate overlies the Moenkopi formation and is composed of conglomerate and lenses of brown sandstone with green mudstone. The sandstone and mudstone are locally carbonaceous. Overlying the Shinarump is the Chinle formation also of Triassic age. The Chinle formation is mainly composed of varigated shales and red sandstone.

The Wingate sandstone of Jurassic age rests on top of the Chinle formation and is generally a massive red to brown cross-bedded sandstone. In places, however, it is cream-colored; the cream color is unusual and may be due to bleaching by migrating hydrocarbons in the formation. The Jurassic Kayenta formation lies over the Wingate, and is composed of red sandstone with some brown and red shales. The Navajo sandstone rests conformably over the Kayenta and is also of Jurassic age. The Navajo sandstone is mainly a massive, cross-bedded, light brown to grey sandstone.

The strike of the formations are from N 45° E to East-West and dip 10° SE to S. The rocks are displaced by high-angle normal faults that are nearly perpendicular to the main axis of the anticline. The main set of faults strike East-West and dip steeply either North or South. Another set of faults strike Northwest and dip either Northeast or Southwest.

Ore Deposits

At the Little Erma No. 2 the ore occurs in the basal part of the Shinarump conglomerate. The Shinarump locally is between 30 and 50 feet thick and is composed of conglomerate and lenses of coarse brown sandstone underlain by green mudstone. In this area the sandstone and mudstone are highly carbonaceous. The highest grade uranium ore is in the sandstone and mudstone where the carbonaceous material is concentrated.

The main primary uranium ore mineral is pitchblende(?) which is disseminated in coarse-grained, cross-bedded, carbonaceous sandstone. The sandstone is iron-stained and is cemented by calcite. Galena, sphalerite, chalcopyrite and unidentified cobalt and nickel minerals accompany the pitchblende(?). Secondary minerals include malachite, azurite, chalcanthite, erythrite(?) and other unidentified uranium, vanadium and copper minerals. With the exception of the pitchblende and the secondary uranium minerals, the other ore minerals are of little commercial significance at present. There is a distinct resemblance in this suite of minerals as well as in the geologic setting of the Little Erma No. 2 and the Happy Jack Mine at White Canyon, Utah, and the Lucky Strike Mine in the San Rafael Swell, Utah.

The Shinarump conglomerate has been explored in the Little Erma No. 2 by 60 feet of rim stripping and a combined total of 40 feet of drift and open cut. (Fig. 3) The workings have uncovered small pockets of high grade ore and a larger volume of lower grade ore.

Ore Reserves

There are no blocked out ore reserves at the Little Erma property, but the triangular area extending from B adit to five feet southeast of A adit with an average thickness of 1.5 feet is inferred to contain 230 tons of uranium ore. The ore in the workings contains on the average of 0.119% V_3O_8; it is reasonable to assume that ore of comparable grade and thickness is present in the intervening area.

At the present price of uranium, the inferred ore should have a value of approximately $2,100.00 with an A.E.C. bonus.

Proposed Exploration

The applicant has proposed 12 days or 3,200 feet of rim stripping with an RD 8 bulldozer to explore for other radioactive zones along the Shinarump and three days of bulldozer work repairing the road.

By bulldozer stripping of the Shinarump as well as stripping and exploring under the present workings, additional radioactive zones may be found. This proposed exploration appears to be sound and should adequately test the rim of the Shinarump formation at this location.

Costs of the Proposed Exploration

The costs of the exploratory work at the Little Erma No. 2 are as follows:

15 days of RD 8 bulldozer work, includes 3 days of road work and drayage	$1,782.00
Supervision for 15 days	300.00
Laborer for 15 days	200.00
Powder fuse and caps	60.00
TOTAL	$2,342.00

Summary and Conclusions

The Little Erma No. 2 property is on the southeastern flank of the San Rafael swell in the Shinarump conglomerate. The Shinarump strikes generally East-West and dips 10°S.

The uranium ore occurs with carbonaceous material in pockets near the base of the formation in a brown sandstone and green mudstone. The uranium mineralization consists of pitchblende(?) and its alteration products. Inferred ore reserves are 230 tons of ore averaging 0.119% V_3O_8.

The applicant proposes to strip 3,200 feet with an RD 8 bulldozer the base of the Shinarump conglomerate to uncover additional radioactive spots on

the Little Erma No. 2 property and also to improve existing road from Temple Mountain to Chute Canyon. The total cost of the stripping and road repairs is $2,431.00.

The program appears sound, and the chance of finding uranium ore good. It is recommended that the government enter into a contract with the applicant as outlined. The government's share on a 90:10 participation basis would be $2,188.00.

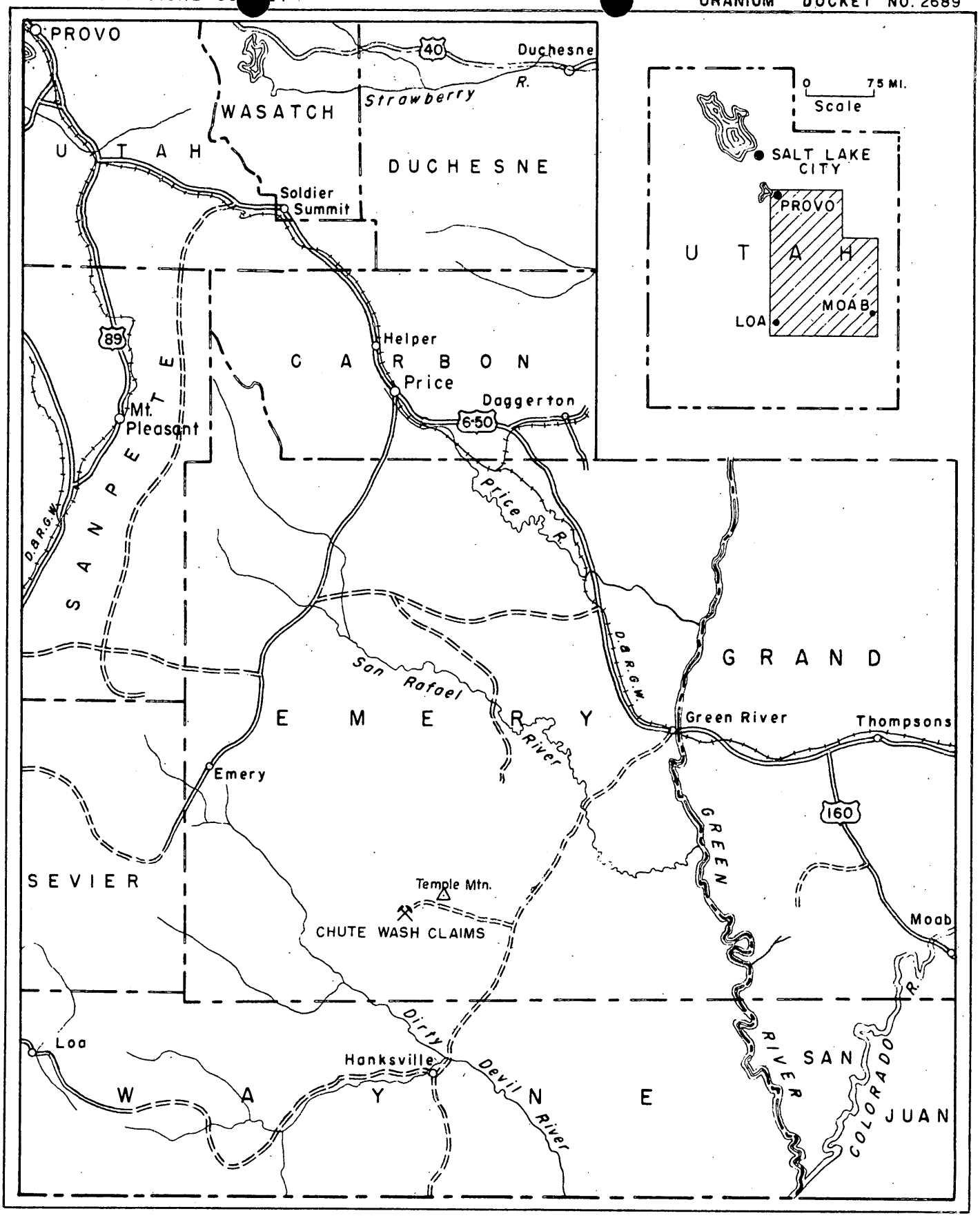


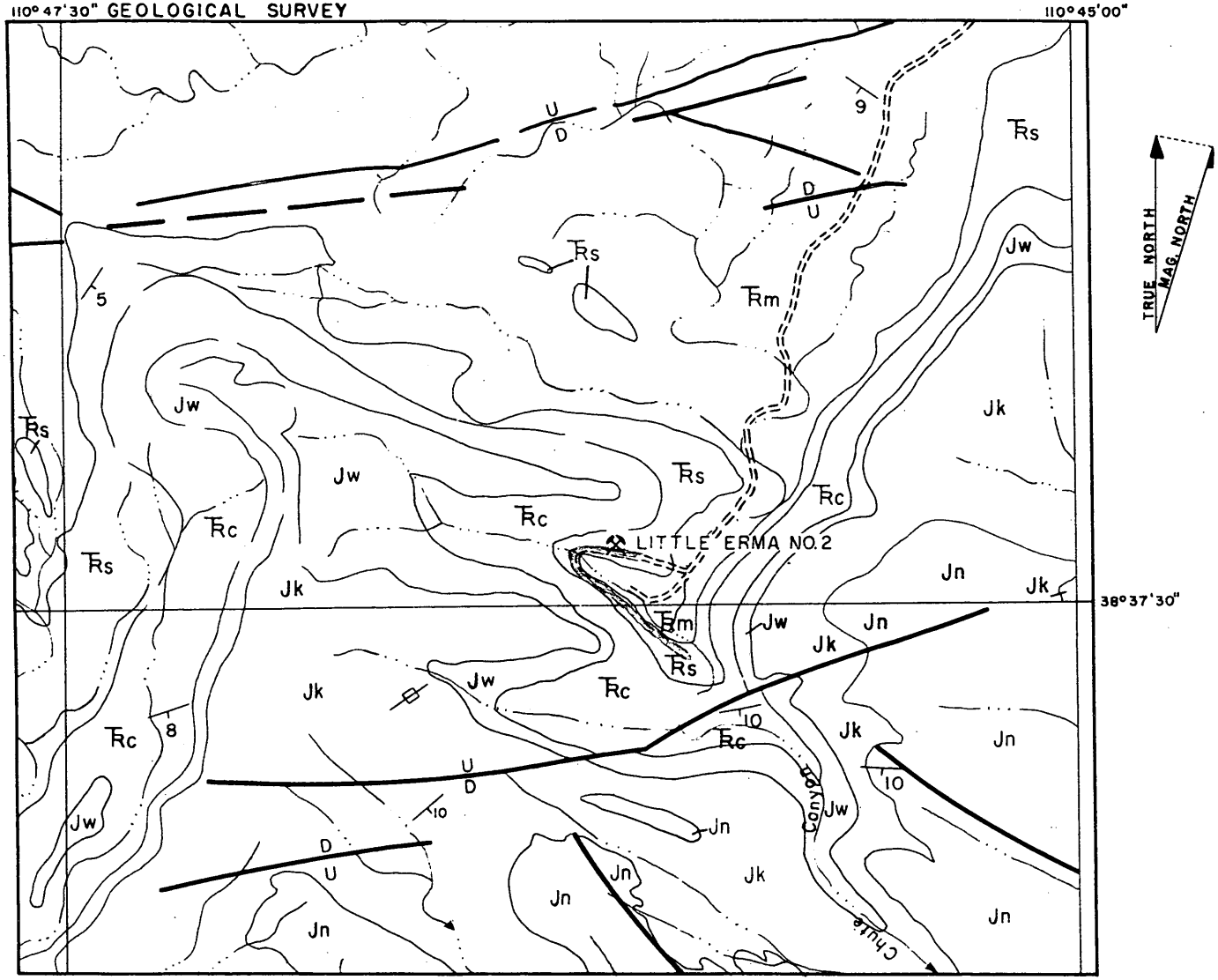
FIG. I

INDEX MAP OF UTAH

0 5 10 15 20 MILES
Scale

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET NO. 2689 Uranium.



ADAPTED FROM PHOTOGEOLOGIC MAP
OF STINKING SPRING CREEK II-14
PHOTOGEOLOGY BY C. E. BATES

EXPLANATION

JURASSIC (?)

- Jn — Navajo sandstone
- Jk — Kayenta formation
- Jw — Wingate sandstone

TRIASSIC

Upper

- Rc — Chinle formation
- Rs — Shinarump conglomerate

Lower

- Rm — Moenkopi formation

Contact

High angle fault
(U, upthrown side; D, downthrown side)

30
Strike and dip of beds

Strike of approx. vertical joint system
(Based on photo-interpretation)

Approx. location of road

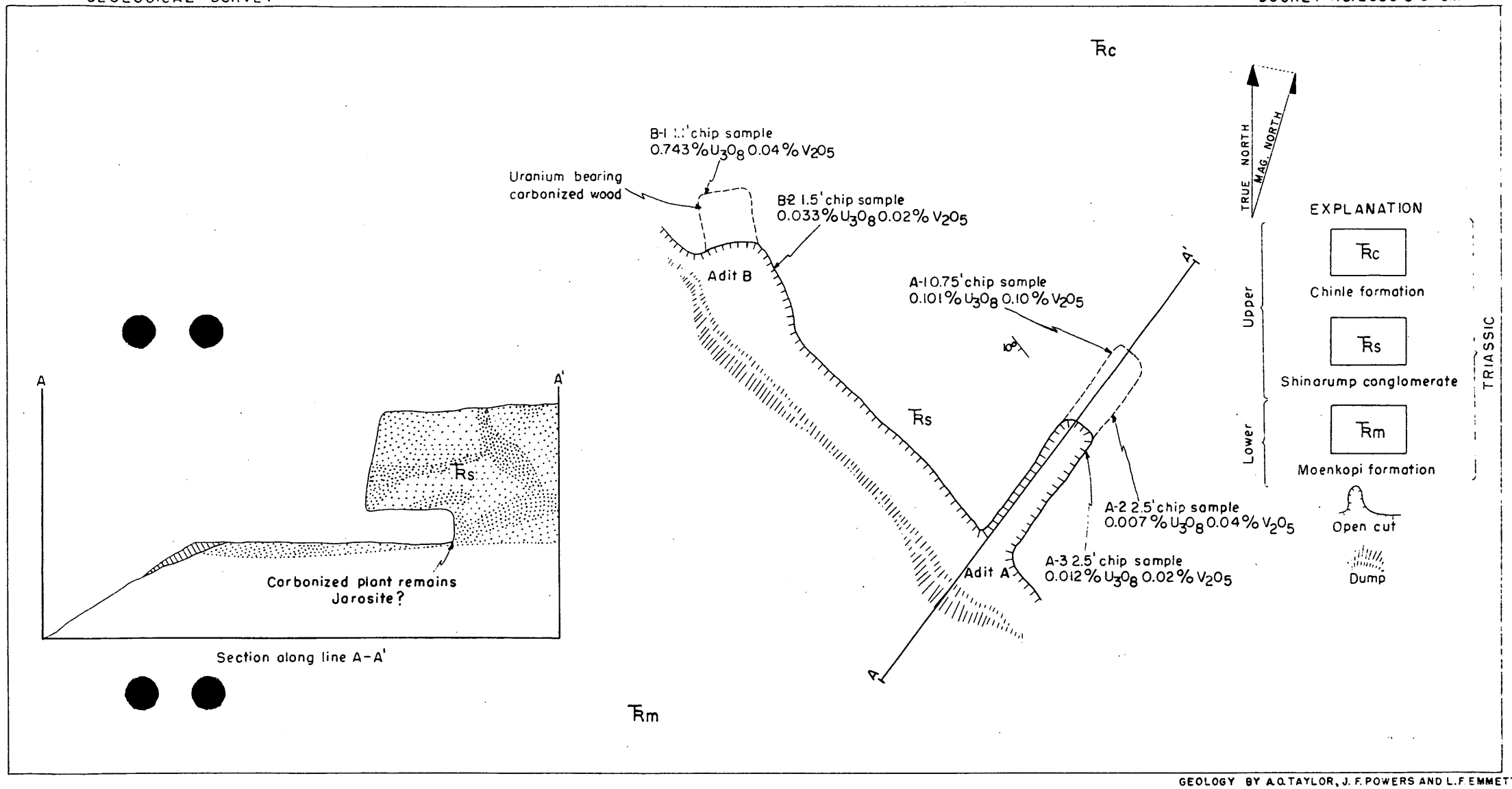
Proposed Exploratory Work

FIG. 2

PHOTOGEOLOGIC MAP OF CHUTE CANYON

EMERY COUNTY, UTAH

0 .5 1 MILE
Scale



GEOLOGY BY A.O. TAYLOR, J. F. POWERS AND L.F. EMMETT

FIG. 3

GEOLOGIC SKETCH MAP OF LITTLE ERMA NO. 2

CHUTE CANYON, EMERY COUNTY, UTAH

0 20 40 FEET
Scale

CHUTE CANYON MINES
EMERY COUNTY, UTAH
DMEA-2689
Uranium

Memorandum engineering report

By M. M. Gilkey
Mining engineer
Bureau of Mines

A memorandum dated December 17, 1952, to S. R. Wilson from the Executive Officer, Field Team, Region IV, asked for a memorandum engineering report on the subject docket.

The claims are in an unsurveyed area about 7½ miles by road southwest of Temple Mountain in Emery County, Utah. Projection of section lines places the site of the proposed work in Sec. 24, T. 25 S., R. 10 E., S.L.B.M. The locations are valid from the standpoint of withdrawals, as there are no withdrawn areas in this township.

Eleven copies of the claim map showing the proposed work with reference to the side lines accompany this report.

The minutes of the Operating Committee, No. 139, have been considered.

HISTORY AND PRESENT STATUS

To date, the only exploration on the property has been done on the Little Erma No. 2 claim. This work consists of 18 feet of drifting in Adit A, 6 feet of drifting in Adit B, and 75 feet of open cutting and rim stripping (fig. 3 of the Survey's report). There are no measured ore reserves.

The applicant reports that several samples taken from ore exposed by this work have assayed from 0.37 percent U_3O_8 to as high as 5.09 percent U_3O_8. The examining Survey geologists state that 230 tons of ore averaging 1.5 feet thick and containing 0.119 percent U_3O_8 may be inferred from this exploratory work. Although the average grade of the inferred tonnage is low, it seems probable that in stripping an addi-

tional 3,200 feet of the same horizon, ore of commercial grade and in commercial quantity will be found.

DESCRIPTION OF THE PROPOSED WORK

All of the proposed work will be subcontracted and is to be done by means of an RD-8 bulldozer. The project may be started within 30 days of the date of the contract and will require 15 days for completion.

Preliminary to the actual stripping will be three days of work on the road from Temple Mountain. The condition of this 7½ miles of road is such that, in any case, the bulldozer will be "walked" from Temple Mountain to the property. Following the road work will be 12 days of rim stripping, during which time it is expected that 3,200 feet of rim can be exposed. The stripping is to be done on four claims, the Little Erma Nos. 1, 2, and 3, and the Brown Dog No. 4 (fig. 4 of the Survey's report).

ESTIMATED COST OF PROPOSED WORK

15 days of RD-8 bulldozer work at $14.85 per hour, or $118.80 per day. (This is the standard figure in this area for an RD-8 bulldozer, and includes all drayage charges)	$1,782
Supervision for 15 days at $20 per day	300
1 laborer for 15 days at $13.33 per day	200
Powder, caps and fuse	60
Total	$2,342

Because of the short duration of the project, transportation of supplies, charge for miscellaneous tools, etc., are not included in the estimation of costs. The applicant (supervisor) will provide these items at his own expense.

RECOMMENDATIONS

The fact that promising exposures of uranium ore have been encountered in the small amount of exploratory work done to date, and the probability of finding a commercial deposit or deposits in stripping an additional 3,200 feet in the same horizon, indicate that the project is justified. It is, therefore, recommended that the Defense Minerals Exploration Administration enter into a contract with the applicant to do the proposed work at a total cost of $2,342.

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 26 1953

AGENCY Bureau of Mines

Originator:

TELETYPE

Ext.: Room:

Appro.:
Date: March 23, 1953
Time:
No.:

Unattended service WA 310

To: C. O. Mittendorf, Administrator, Defense Minerals Exploration Administration
Washington 25, D.C.

Subject:

Please assign a number to contract covering Docket No. DMEA 2689, Frank L. Morgan and Erma R. Morgan, P. O. Box 227, Springville, Utah. Contract dated March 23, 1953. Commodity uranium, property located in Emery County, Utah. Total amount of contract $2,340.00, Government participation $2,106.00.

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

Confirmation Copy

Authorized:
JFS:ld

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

SURNAME COPY

Adams

Defense Minerals Exploration Administration
Robert E. Adams

2017

14X3923.970, Working Fund, Interior, DMEA
March 25, 1953
1:45 p.m.

W.H. King, Executive Officer, Region IV, 224 New Customhouse, Bldg., Denver 2, Colo.

Assignment of Contract Number

REURTEL 3-23-53, DOCKET NO. DMEA 2689, FRANK L. MORGAN AND ERNA R. MORGAN, COMMODITY URANIUM. CONTRACT NUMBER IDM-E-500 ASSIGNED THIS CONTRACT.

n.s in R. R.

C. O. Mittendorf (for)

ADMINISTRATOR

READams/meb
cc to: Adm.Reading File
Mails & Files Br.
Audits Division
Miss Curtin

BL

SENT
MAR 25 1953
Clerical Service Section

SPECIAL

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 24 1953

Mr. C. Mittendorf
3-24-53
7:45 A.M.

W DN 234 XXXX DN 235 BUR MINES 3 23 53 4 P00 PM

C O MITTENDORF

PLEASE ASSIGN A NUMBER C TO CONTRECT COVERING DOCJET NO DMEA

WILL START OVER

PLEASE ASSIGN A NUMBER TO CONTRACT COVERING DOCKET NO DMEA ~~1689~~

XXXX 2689, FRANK L MORGAN AND ERMA R MORGAN P O BOX 227 SPRINGVILLE

UTAHMXXX UTAH. CONTRACT DATED NARCH //// MARCH 23 1953.

COMMODITY URANIUM PROPERTY KXX LOCATED IN EMERY COUNTY UTAH. TOTAL

AMOUNT OF CONTRACT

XXXXX$2340XXXXX $2340.00 GOVERNMENT PARTICIPATION $2106.00.

90%0 W H KING EXECUTIVE OFFICER DMEA

Klenner, Colo.

IDNI-E 500

MAR 24 8 20 AM '53
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

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

DEPARTMENT OF THE INTERIOR
Minerals Administration
RECEIVED
JAN 19 1953

224 New Customhouse
Denver 2, Colorado

January 14, 1953

BW

Memorandum

To: Administrator, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2689 (Uranium) Frank L. Morgan and Erma R. Morgan, Chute Canyon Mines, Emery County, Utah

The application for Government assistance in exploration work estimated to cost $2342 has been approved by us and a contract is being prepared.

Government participation will be 90 percent, or $2,107.80.

Four copies of the Final Report will be forwarded when the contract is processed.

The original and one copy of Form 3b is attached.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 20 1953

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

224 New Customhouse
Denver 2, Colorado

January 14, 1953

BW

Memorandum

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W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

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

224 New Customhouse
Denver 2, Colorado

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 8 1952

September 5, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration - Attention; Code 210

From: Executive Officer, Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate is DMA Form 3a and Form MF-103 in triplicate and supporting data pertaining to the following application for Government assistance in exploration work:

Frank Morgan & Erma Morgan
P. O. Box 227
Springville, Utah

DMEA-2689

W. H. King

W. H. King

Enclosure

Returned to Region IV; DMEA-2689 - Two copies each MF-103, map, and Assay Sheet.

SD

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 8 1952

(Rev. A-103 (Rev. A-1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. DMEA-2689
Metal or Mineral
Date Received 9-8-52
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

Frank Loraine Morgan. Erma Ruff Morgan.
P.O.Box-227. P.O.Box-227.
Springville,Utah. Springville,Utah.

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract 18 claims located 7½ miles South & West of Temple Mountain known and registered as follows,Little Erma No's-1-2-3-4-5-6. Wild Horse No's-1-2-3-4-5. Brown Dog No's-1-2-3-4-5. Chinle & Palomino.Registered Castle Dale, Emery County,Utah. Unsurveyed area,map showing locations enclosed,Located in Chute Canyon.

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

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

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

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

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

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. None.

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

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

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

5. *The exploration project.*—State the mineral or minerals for which you wish to explore Uranium & Van

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

(*c*) The work will start within 30 days and be completed within 2 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated Sept 2nd, 1952

Frank L. Morgan
(Applicant)

By

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

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

EXPLORATION PROJECT.
DMEA Order-1

No.3 Applicant's Property rights.
(F) Claims unpatented, registered County Recorder, Emery County, Utah, as follows:

Name.	Entry No.	Date.	Book.	Page.	Time.
Palomino	75041	March 23,1950	J-8	541	10:50 A.M.
Chinle	75040	March 23,1950	J-8	540	10:45 A.M.
Wild Horse No.1	75035	March 23,1950	J-8	538	10:20 A.M.
Wild Horse No.2	79356	June 12,1952	J-10	108	11:35 A.M.
Wild Horse No.3	79357	June 12,1952	J-10	108	11:40 A.M.
Wild Horse No.4	79358	June 12,1952	J-10	109	11:45 A.M.
Wild Horse No.5	79359	June 12,1952	J-10	109	11:50 A.M.
Little Erma No.1	75026	March 23,1950	J-8	517	9:35 A.M.
Little Erma No.2	75027	March 23,1950	J-8	518	9:40 A.M.
Little Erma No.3	75028	March 23,1950	J-8	518	9:45 A.M.
Little Erma No.4	79362	June 12,1952	J-10	111	12:05 P.M.
Little Erma No.5	79363	June 12,1952	J-10	112	12:10 P.M.
Little Erma No.6	79364	June 12,1952	J-10	112	12:15 P.M.
Brown Dog No.1	75029	March 23,1950	J-8	535	9:50 A.M.
Brown Dog No.2	75030	March 23,1950	J-8	535	9:55 A.M.
Brown Dog No.3	75031	March 23,1950	J-8	536	10:00 A.M.
Brown Dog No.4	79360	June 12,1952	J-10	110	11:55 A.M.
Brown Dog No.5	79361	June 12,1952	J-10	111	12:00 A.M.

No.4 Physical description.
(A) There has been 2 short tunnels started on the Little Erma No.2, the first one is in about 6 ft, and the assay sheets show the results of what was encountered, the 2 nd tunnel was drove in approximately 18 ft on a Cobalt Bloom showing and no ore was found of commercial value, this tunnel is 75 ft East of the discovery tunnel, there has been several trenches dug up to the face to determine if the Conglomerate was still carrying the carbonaceous material, which we found. this face will have to be moved with a bull dozer, stripping along the Conglomerate formation, making a road or ramp from which to work from, and will determine just where the tunnels should be. The ramp has been started, but due to financial conditions, I have not been able to extend it to the discovery tunnel, the formation shows indications along the entire face of the claim where ever I have dug a trench to it. I have built 7½ miles of road to this property that can be traveled by pick up, jeep or small car directly to the cabin on the mine sight.
(B) this is a new discovery and exploration project, the bull dozer work requested should determine the possibilities of the property, the attached assay sheets will varify the indications.
(C) The Chinarump Conglomerate carries Carbonaceous material, and tree formations all along the face, with Cobalt Bloom showings and Copper outcrops, please refer to copy of (Complete Analysis by The Colorado Assaying Co. of July 18th.1952)
(D) The present road passable for light vehicles, but would require approximately 3 days bull dozer work with RD 8 bull dozer for heavy hauling. Temple Mountain is approximately 7½ miles North and East where a good road is located, the property is 52 miles from Green River, Utah. transportation and shipping facilities would be very good.
(E) Man power and equipment available for this project, water for drilling or any working use is on the property, cullinary water would have to be hauled in.
No.5 The Exploration Project.
The bull dozer work will be let on contract, I would like to work approximately 3 days on the road to the mine, this can be done when the bull dozer is walked from Temple Mountain as that is as far as they can transport it, the distance is 7½ miles, 7 days bull dozer work at the location sight of the Little Erma No.2 moving rock and material away from the face of the mountain along the Chinarump Conglomerate face that carries the indications that promps the filing of this application, and moving material to make room for ore bins, and roads on the property to get machinery up to the proposed mining locations.

(D) The bull dozer work will be under the supervision of expierenced personel, and will be under contract by the hour.
I operated the Silver Reef Property at Leeds, Washington County,Utah. and shipped the Vitro Chemical Co. Salt Lake City, their first carload of Uranium on liquidation No.1 and have had expierence in the Uranium fields for the past 10 years. I am service man for the Illinois Powder Mfg Co. Gold Medal Explosives, and have been in the field for them for 25 years working in 28 States in general construction and mining.
No.6 Estimate of costs.
(A) The bull dozer work for this exploration will be let on contract, it will require an RD 8 bull dozer and the contract price is $12.50 per hour for everything to be furnished, the estimated working hours are 80 hours or $1.000.00.
(B) None.
(C) None.
(D) None.
(E) None.
(F) Material for loading bins, Lumber,Nails,Bolts and ect., $250.00.
Material for mine props, portals and ect., $250.00.
(G) None.
(H) None.
The total cost of this project is estimated as $1.500.00 the amount of this DMEA Application.

No.7
I am prepared to meet my part of this exploration, with cash.

This property is clear of all encumberances and is owned by me and my wife, we have filed all assessments as they came due, and this is an independant operation, due to financial conditions we have not been able to properly explore it.
We have built 7½ miles of road to the mine sight, and have built a cabin on the property, we have started 2 tunnels and submitted samples for assay purposes, all we ask is help on the bull dozer work to further our exploration, we have consulted some of the best geologists and mining men in the business in regard to the possibilities of the property, and their comments have been very favorable.

We propose to operate this property on a lessor basis and have several lessee's that are ready to move in as soon as we get the bull dozer work completed, this work will be done on a royalty basis by competent miners, (contract work) they will provide a place to live and their own mining machinery, we will in turn pay the loan out of our part of the royalty or on the basis of the terms in article No.9 Form MF-200.

These leasor's will work on short term contracts, and this will eliminate workmens Compensation and Employers Liability Insurance, and pay roll taxes.

The terms of the lease will be attractive enough to encourage the miners to want to negotiate for a contract, I have several applications on hand now, and will be able to furnish miners with expierence who are capable.

I am enclosing reports of assays showing the possibilities of this property, as I have reported this is a new exploration project, nothing has been shipped and it is purly a exploration project.

Trusting that all reports are in order, and that we may have an early report on this application, we remain.

Frank L. Morgan
Erma R. Morgan

COPY OF ASSAY SHEETS.
LITTLE ERNA #2
CHUTE CANYON CLAIM.

SAMPLE	URANIUM	VANADIUM	LIME	SOURCE OF ASSAY.
May 22,1952	0.37%	———	16.45%	SMITHS LABORATORY, MOAB, UTAH.
June 12,1952	0.80% 2.5%	SANDSTONE CONTAINING FRAGMENTS OF COAL A SMALL AMOUNT OF LIMESTONE IS PRESENT IN BOTH,THE URANIUM MINERAL WAS NIT IDENTIFIED, BUT THE URANIUM OCCURS IN THE COAL.		BUREAU OF MINES. SALT LAKE CITY,UTAH.
June 12,1952	0.59%			BUREAU OF MINES. SALT LAKE CITY,UTAH.
May 27,1952	0.43%	0.03%	18.1% EXTRACTION 86.8	VITRO CHEMICAL CO. SALT LAKE CITY, UTAH.
June 24,1952	2.99%			VITRO CHEMICAL CO. SALT LAKE CITY,UTAH.
July 17,1952	4.62%		15.25%	SMITHS LABORATORY, MOAB, UTAH.
July 31,1952	4.4% 5.09%	U.S.GEOLOGICAL SURVEY DENVER,COLORADO (SERIAL NUMBER D-68477)		(H.N.Jones) (For Lincoln R Page)

THE ORIGINAL ASSAY SHEETS AND PAPERS ARE ON FILE AT SPRINGVILLE,UTAH AND WILL BE SUBMITTED UPON REQUEST.

COPY.

THE COLORADO ASSAYING COMPANY.
DENVER COLORADO, JULY 18th,1952.

REPORT ON COMPLETE ANALYSIS SUBMITTED BY MR. FRANK L MORGAN, SPRINGVILLE,UTAH.

****

ELEMENTS PRESENT	PERCENTAGES
COMBINED WATER AND HYDRO-CARBONS	12.20
SILICA	24.53
ALUMINUM OXIDE	5.35
IRON OXIDE	3.54
IRON	13.60
SULPHUR	17.13
SULPHUR TRIOXIDE (except sulphate with barium)	6.84
BARIUM SULPHATE	4.45
NICKEL	0.18
COBALT	0.57
COPPER	0.25
LEAD	1.45
ZINC	1.90
URANIUM OXIDE	1.62
VANADIUM PENTOXIDE	0.05
CALCIUM OXIDE	5.10
MAGNESIUM OXIDE	0.30
PHOSPHORUS PENTOXIDE	0.35
MANGANESE OXIDE	0.04
SODIUM AND POTASSIUM OXIDES	0.40
	99.85

GOLD TRACE.
SILVER 0.80 OUNCES PER TON AT 90¢ PER OUNCE- 72¢ PER TON.
COPPER 0.25% AT $4.00 PER UNIT- $1.00 PER TON.
LEAD 1.45% AT $2.70 PER UNIT- $3.92 PER TON.
ZINC 1.90% AT $1.70 PER UNIT- $3.23 PER TON.
URANIUM OXIDE 1.62% AT $4.00 PER LB. $129.60 PER TON.
ARSENIC,CHROMIUM,TITANIUM TRACES,PLATINUM AND PLATINUM GROUP METALS,NONE.

THIS SAMPLE CONSISTS CHIEFLY OF FINE SAND (SILICA), SOFT CLAY (COMPLEX ALUMINUM SILICATE), BLACK LIGNITE (CARBON,HYDROGEN AND OXYGEN) AND METALLIC YELLOW IRON PYRITE (IRON AND SULPHUR).SMALLER AMOUNTS OF HEAVY WHITE BARITE (BARIUM SULPHATE) AND SOFT WHITE GYPSUM (HYDROUS CALCIUM SULPHATE) ARE PRESENT.THE METALLIC STEEL GREY CRYSTALS ARE GELENA (LEAD AND SULPHUR) THE URANIUM IS PROBABLY PRESENT IN THE FORM OF PITCHBLENDE (A HEAVY BLACK URANYL URANATE).

THIS ORE IS MOST VALUABLE FOR ITS URANIUM CONTENT. THE SILVER,COPPER,LEAD AND ZINC AND COBALT CONTENTS ARE OF COMMERCIAL INTEREST.

THE COLORADO ASSAYING CO.
EDMUND PHILLIPS.

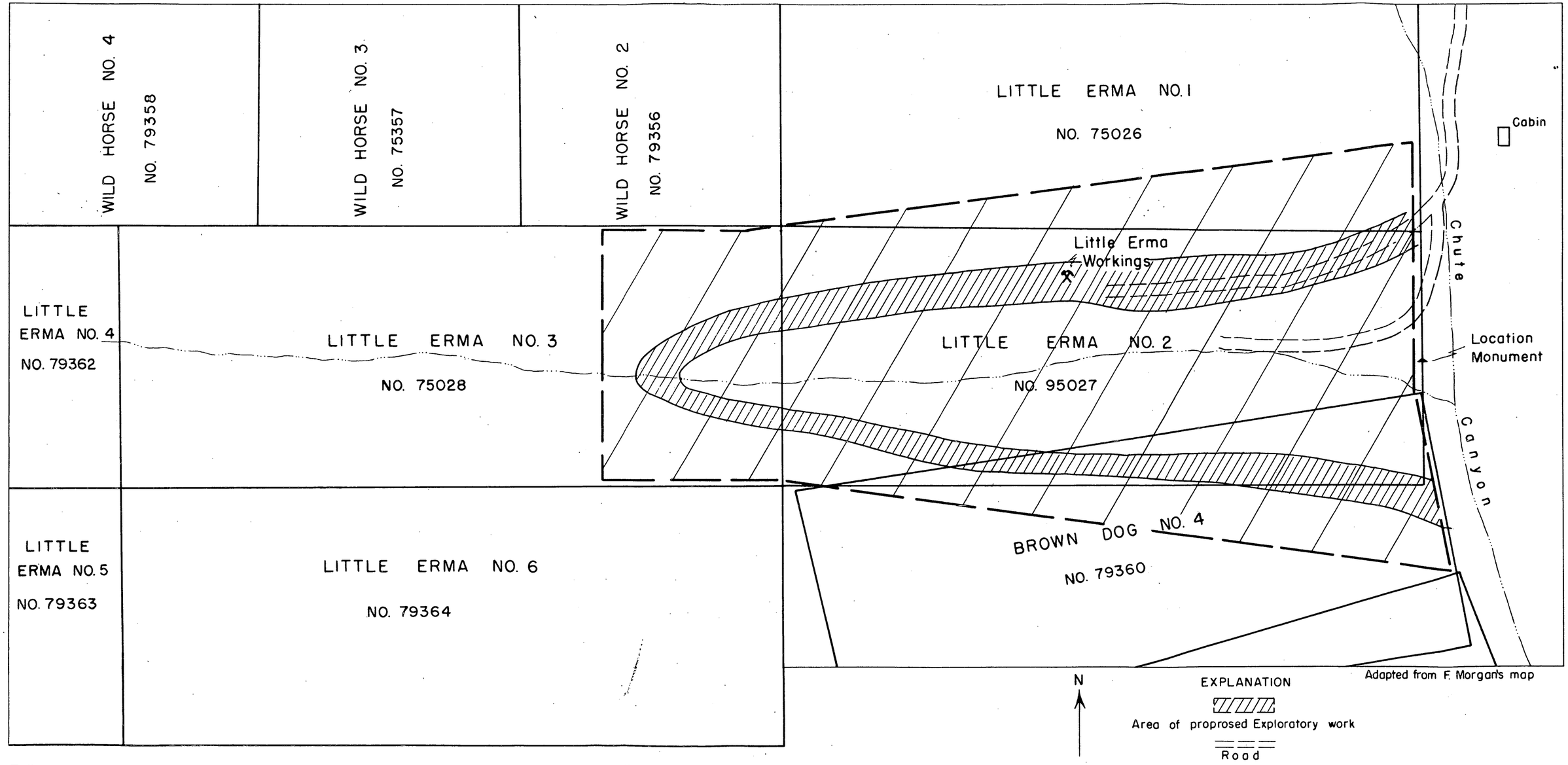
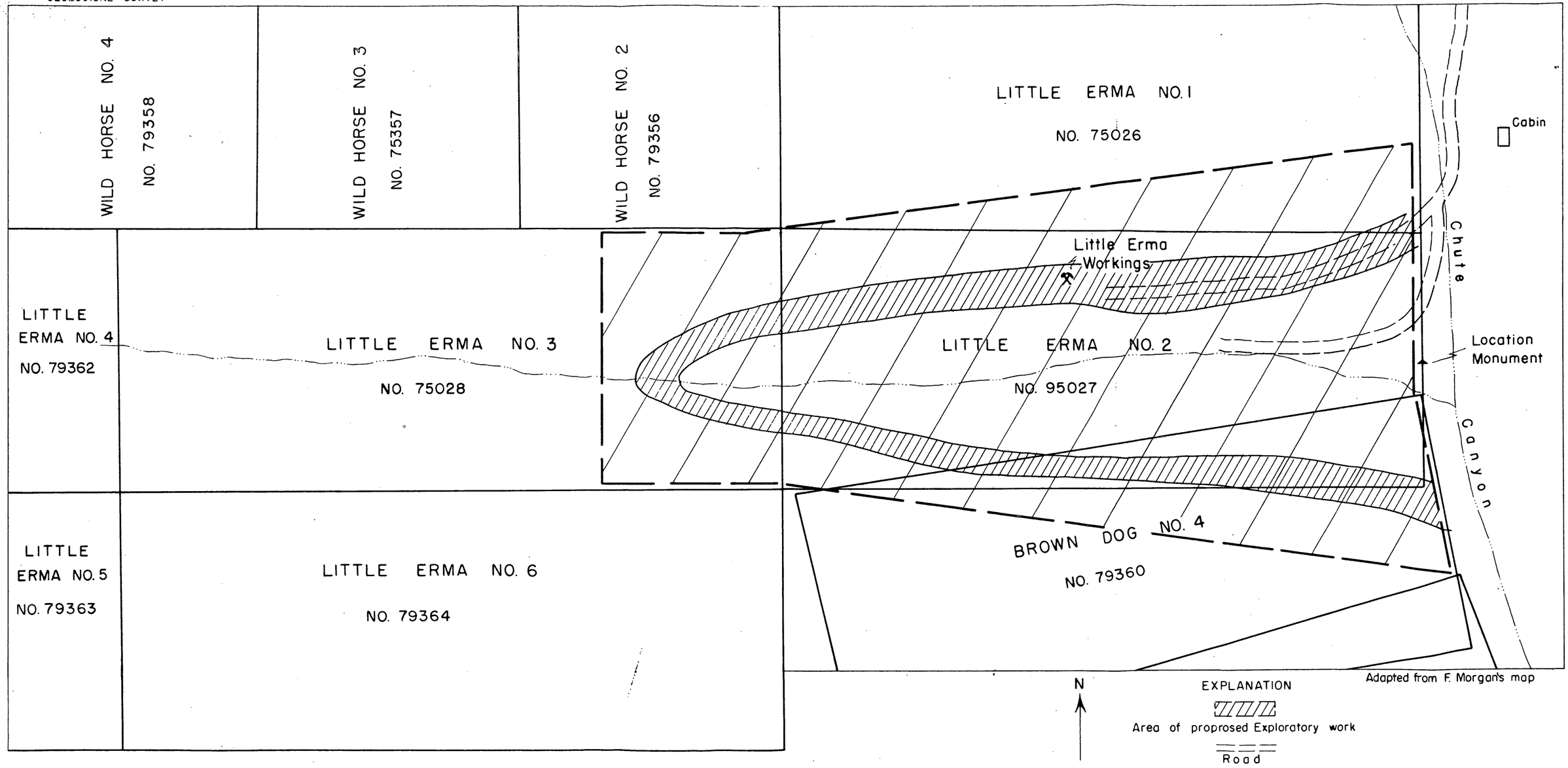


FIG. 4

SKETCH MAP OF CHUTE CANYON CLAIMS
EMERY COUNTY, UTAH

0 200 400 600 FEET
Scale



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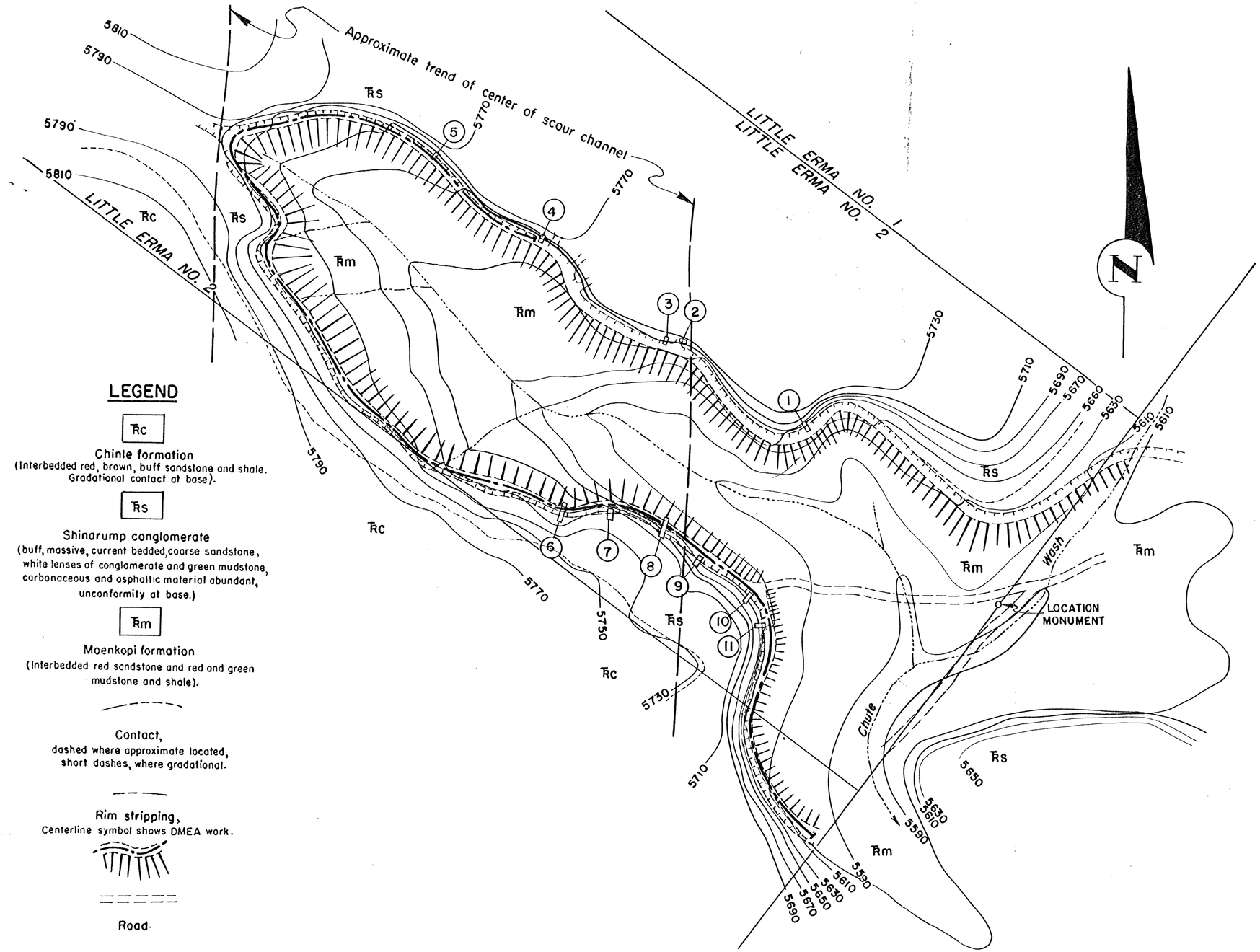
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1201 NORTH DIVISION STREET
SPOKANE 2, WASHINGTON

OFFICIAL BUSINESS

VIA AIR MAIL

SPOKANE AUG 4 630PM 1952 WASH.

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



LEGEND

Rc

Chinle formation
(Interbedded red, brown, buff sandstone and shale. Gradational contact at base).

Rs

Shinarump conglomerate
(buff, massive, current bedded, coarse sandstone, white lenses of conglomerate and green mudstone, carbonaceous and asphaltic material abundant, unconformity at base.)

Rm

Moenkopi formation
(Interbedded red sandstone and red and green mudstone and shale).

Contact,
dashed where approximate located, short dashes, where gradational.

Rim stripping,
Centerline symbol shows DMEA work.

Road.

Underground workings.

SAMPLE LIST		
SAMPLE NO.	CUT	U_3O_8 %
1	2.0'	0.005
2	2.2'	0.056
3	3.0'	0.007
4	2.0'	0.101
5	2.0'	0.017
6	1.5'	0.003
7	0.9'	0.004
8	1.9'	0.003
9	1.2'	0.005
10	2.0'	0.003
11	2.0'	0.005

NOTES

1) DATA TRACED FROM USGS DMEA DRAWING.
2) CONTOUR INTERVAL 20 FT., DATUM ASSUMED.

0 100 200 300
SCALE OF FEET

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

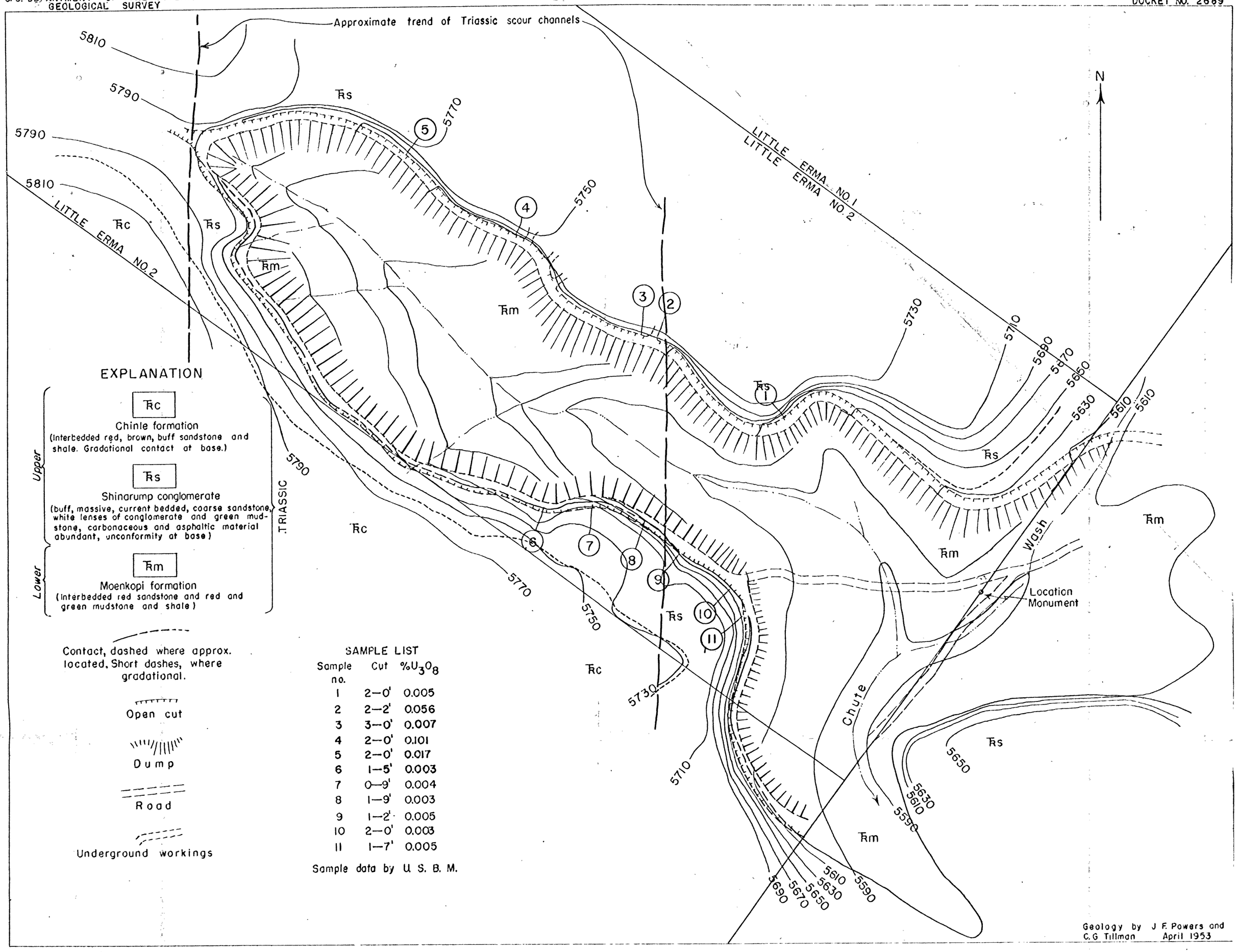
Fig. 2 DMEA Docket No. 2689

Geologic Plan and Sample Map

LITTLE ERMA MINE NO. 2

CHUTE CANYON, EMERY COUNTY, UTAH

ENGINEER: *H. K Thurber*	JUNE 1 1953
TRACED: JUNE, 1953; BY: A.P.T.S.	1900-217-D
CHECKED:	



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CHUTE CANYON, EMERY COUNTY, UTAH

Contour Interval 20 ft., Datum assumed

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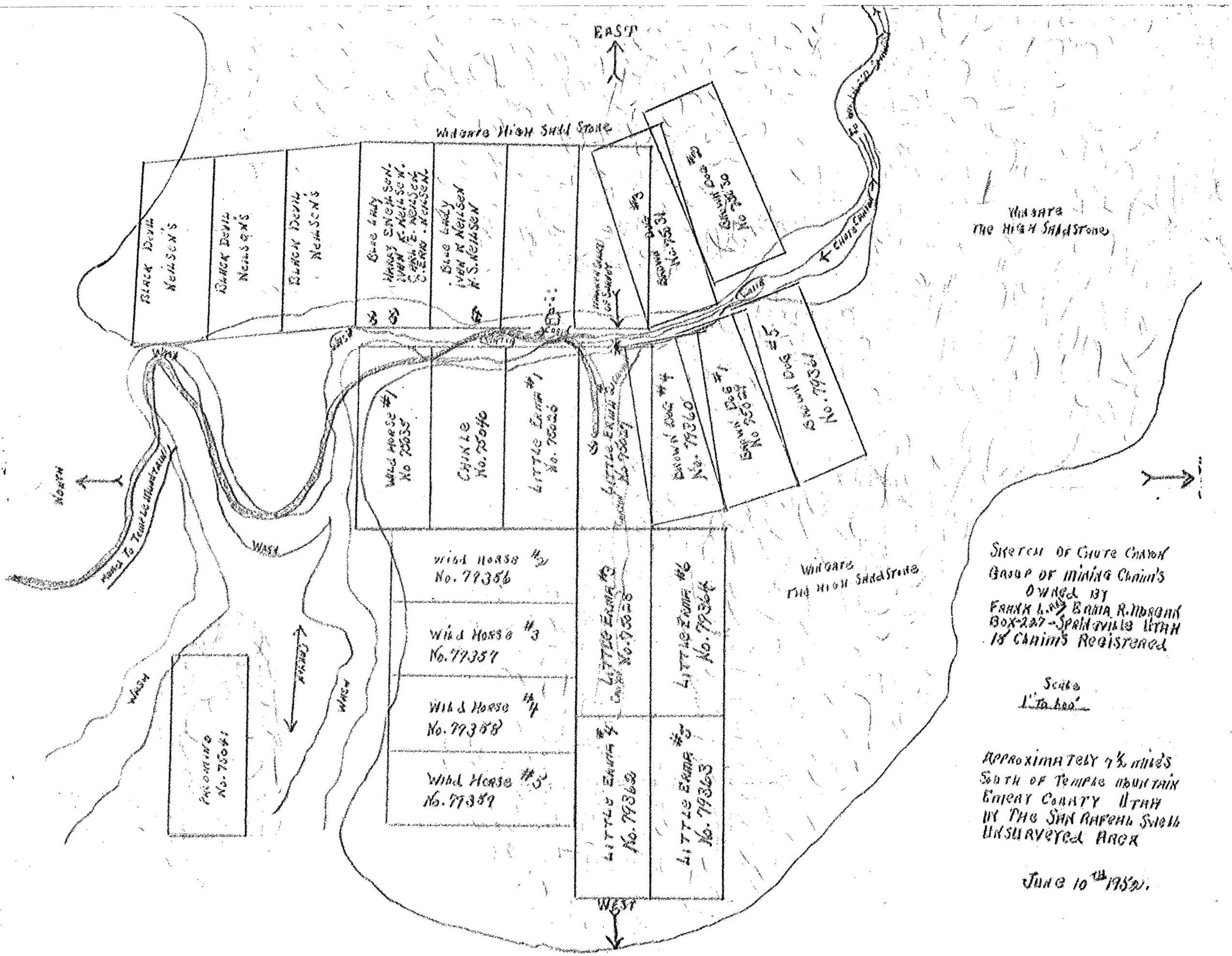
Scale

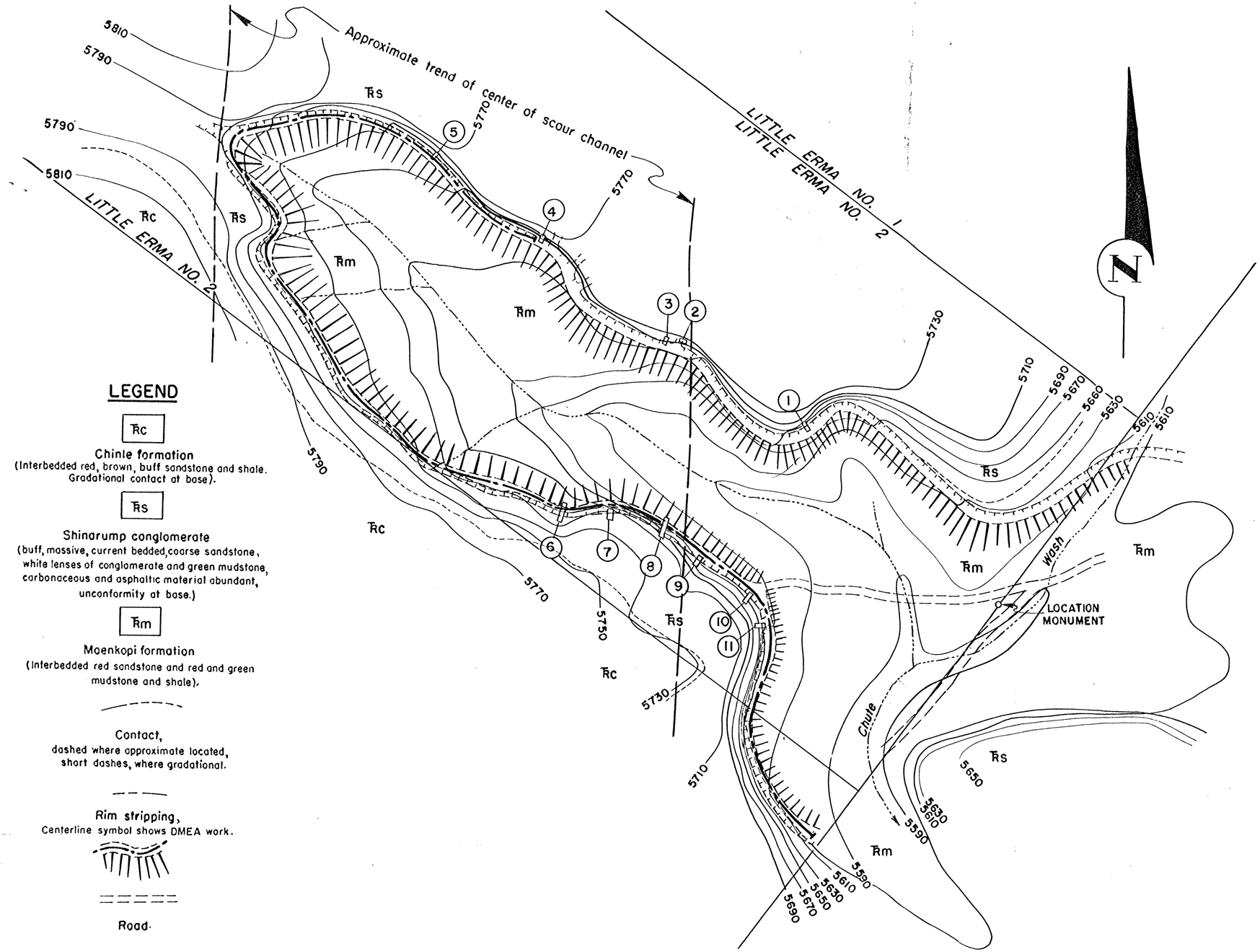


Sketch of Chute Canyon
Group of mining Claim's
owned by
Frank L. and Emma R. Morgan
Box-227 - Springville Utah
18 Claim's Registered

Scale
1" To 200'

Approximately 7½ miles
South of Temple Mountain
Emery County Utah
In The San Rafael Swell
Unsurveyed Area

June 10th 1952.



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U. S. DEPARTMENT OF THE INTERIOR
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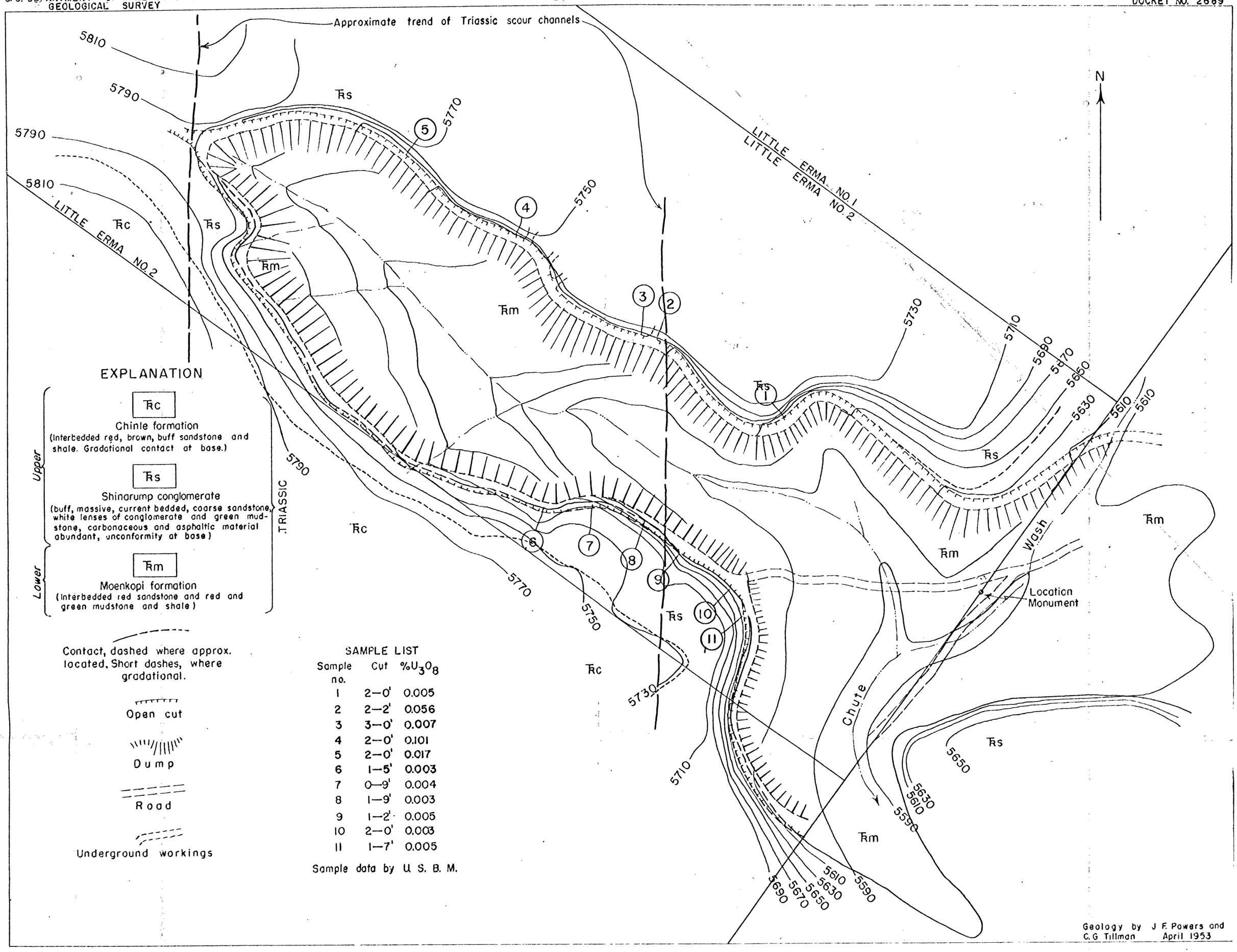

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