IN REPLY REFER TO:

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

May 3, 1957

Re: DMEA 4711
Merit Uranium Corp.
Fall Claim
San Juan County, Utah
$11,738.69 - Uranium

Memorandum

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

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

Subject: Review of Field Team memorandum

The applicant requested assistance in exploring by drifting a claim underlain in part by the Salt Wash member of the Jurassic Morrison formation. The claim apparently straddles a gully wash, or draw of some sort in the course of the making of which some of the Salt Wash rocks were eroded and the favorable rock area in the ore claim was reduced but the rim opened to inspection increased.

Apparently one typical small orebody of marginal grade was exposed and probably mined out. It produced a 47-ton shipment of 0.13% U_3O_8 material in 1951. Another 12 tons of 0.04% U_3O_8 material was mined. The production history since 1951 is not satisfying and the limited acreage decreases the potential. The conclusion of the reviewer based on the production record and experience in the area, that an examination was not warranted appears justified and the recommendation of denial apt.

I concur with the conclusion and recommendation.

N. E. Nelson

N. E. Nelson

NENelson:jeh
5/3/57
cc: Director's reading 4212
Branch reading 4212
DMEA (3)
J. E. Crawford, 3641 Int.
Jack Kratchman, 834-B, AEC Bldg.
Docket file
Chron. file

4711

EXTRA COPY
DMEA
RECEIVED APR 19 1957

DATE	INITIALS	CODE

224 New Customhouse
Denver 2, Colorado

April 17, 1957

AIR MAIL

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 4711 (Uranium) Merit Uranium Corporation (Fall Claim) San Juan County, Utah

Enclosed are the original and three copies of a memorandum by D. P. Elston, United States Geological Survey, in which he recommends that the subject application be denied without a field examination.

We regret that we were not notified at an earlier date that such recommendation was to be made so that you could have been advised before referring this application to the field.

We concur with the recommendation made by Elston and note that it agrees with the preliminary review made by W. P. Williams.

Original signed by
E. N. HARSHMAN

By E. N. Harshman
Acting Executive Officer

Enclosures

MHM:eh
cc: Harshman) With
King (2)) Copy
Hasler) of
Docket) Memorandum
Chron.

Reviewed by
DMEA OPERATING COMMITTEE

_____
(date)

EXTRA COPY
DMEA
RECEIVED APR 19 1957

DATE	INITIALS	CODE

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

IN REPLY REFER TO:
MINERAL DEPOSITS
DMEA
RECEIVED
APR 16 1957
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

April 15, 1957

Memorandum

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

Through: E. N. Harshman
J. William Basler

From: D. P. Elston

Subject: Application for aid, Merit Uranium Corporation, Fall claim, San Juan County, Utah (DMEA 4711)

The unsurveyed Fall claim is in sections 19 and 30, T. 35 S., R. 24 E., S.L.M., in the Montezuma Mining District, San Juan County, Utah.

The applicant proposes about 200 feet of exploration and mining drifting in the Salt Wash member of the Jurassic Morrison formation on the subject claim at an overall estimated cost of $11,738.69.

Production of marginal ore-grade material from the Fall claim dates from 1951 (?) when 47 tons averaging 0.13 percent U_3O_8 and 1.72 percent V_2O_5 were shipped. In the period July-September, 1955, 12 tons of material averaging 0.04 percent U_3O_8 and 0.47 percent V_2O_5 were produced.

Ore deposits in the Montezuma mining district are typically small and low grade. Hand sorting commonly is done in order to insure the shipment of material that will be paid for at the mill. The largest mine in the district has produced about 2,500 tons. Production from individual mines commonly is a few tons to about 100 tons. The applicant and his consultants, Geoprofessional Services, Inc., present no data that would suggest a deviation from the Montezuma type deposits on the Fall claim. The geologic report accompanying the application intimates that the "ore" on the claim and in the general vicinity is "pockety". This is substantiated by their own observations that the layers of ore minerals are localized in festoon cross beds. Such deposits are typified by their small size and erratic distribution.

Reviewed by
DMEA OPERATING COMMITTEE

_____
(date)

The ore deposits and outcrops of the Salt Wash member in the Montezuma district have been investigated and studied by various Government agencies since 1944. These agencies are the Union Mines Development Company, the U. S. Geological Survey, the U. S. Atomic Energy Commission, and DMEA examining teams that have investigated specific properties. Thus, general information and data pertaining to habit of the deposits are rather well known.

The chance of finding a significant ore deposit on the subject claim is very poor. It is recommended that the application for DMEA aid be denied without a field examination.

D P Elston

D. P. Elston,
geologist

DPE/bn

IN REPLY REFER TO:

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

April 5, 1957

Memorandum

To: [illegible] Willis, Defense Minerals Exploration Administration

From: [illegible] Williams, U. S. Geological Survey

Subject: Review of application, [illegible] 4711, Merit Uranium Corp., Hall claims, San Juan County, Utah, (uranium).

The applicant proposes to explore for uranium ore deposits on a single mining claim located in the Montezuma Canyon area of southeast Utah.

Serious disadvantages of the applicant's Hall claim exist when appropriateness for DMEA participation in expenditures is considered. First, the claim is located in an area, Montezuma Canyon, that has a poor production history. Second, ore deposits in the vicinity are known to be small and scattered - a fact that even the applicant acknowledges in his application. Third, the claim lies astride a tributary of Long Canyon in such a position that much of the potential ore host, the Salt Wash member, has been eroded.

Past production from the property consists of two truck-loads of ore that were mined for vanadium. Grade of the ore is not submitted.

It is my opinion that this application of the Merit Corporation has little merit. I believe the application could justifiably be denied without field examination, as much is known about the area; and several other DMEA applications from Montezuma Canyon have been denied. The application should be referred to the Field Team for final analysis.

[illegible] Williams

Williams:btr
4/5/57

cc: J. G. Crawford
Jack Kratchman
Director's reading file
Branch reading file
[illegible] (3)
Chron. file
Docket file

4711

U.S.G.S. Copy

LLOYD WALTER VIVELL
Attorney at Law Average Adjuster
232 SPRECKELS BUILDING
San Diego 1, California

Telephone
BElmont 9-1030

March 24, 1957

DMEA
DEPARTMENT OF THE INTERIOR
MAR 29 1957
REGION III
DENVER, COLORADO

The Regional Director,
Defence Minerals Exploration Adm.
Bureau of Mines,
224 New Custom House Building,
Denver 2, Colorado.

Dear Sir: Re: APPLICATION OF MERIT URANIUM CORPORATION

Enclosed herewith is the Application for Aid in an Exploration Project of Merit Uranium Corporation together with supporting, maps, sketches, geological report, estimates etc., as required by the Instructions to said application.

With respect to Instruction 3 (f) the information will be furnished by seperate letter as soon as ascertained.

Instruction 4. Physical Description,- (a) (b) (c) and (e) are covered in detail in the enclosed geological report and map.

Instruction 5. (b) The Exploration Project.

Attached is a sketch of the property showing the present exploration tunnel and indicating the proposed exploration work. This sketch also indicates various contacts and indications of ore.

It is our intention to explore the various contacts as well as what we have reason to believe is the main ore shoot which appears to extend roughly at a 45 degree angle from the existing tunnel. It is estimated that a total of approximately 200 ft. of drifting in at various points should be sufficient to uncover the main ore body.

Instruction 5 (d) The applicant has operated the Fall Claim since May 1955 and has conducted the exploration work performed to date as shown on the sketch accompanying 5 (b). The proposed work will be under the supervision of Curtis V. Odom, the General Superintendent of Neptune Uranium Corporation for which organization and its predecessor Europa Exploration and Mining Corporation he conducted successful exploration work on a large scale in both the Elk Ridge Mining District of San Juan County, Utah and the Green Valley Mining District of Gila County, Arizona.

U.S.G.S. Copy

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DMEA

DEPARTMENT OF THE INTERIOR
MAR 29 1957
REGION III
DENVER, COLORADO

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. 4711
Metal or Mineral Uranium
Date Received
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: HENIF URANIUM CORPORATION, A Nevada Corporation
520 Ash Street, San Diego, California.
Sam Orivello, President, 520 Ash Street San Diego, Calif.
L. W. Vivell, V.P Thomas W. West, Secy Treas. 520 Ash St. S. D.

(*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
Sections 19 and 30, Township 35 South, Range 26 East, Salt Lake Base and Meridian, San Juan County, Utah

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

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

(*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. Not applicable

(*e*) If you own the land, describe any liens or encumbrances on it
Not applicable

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

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

(*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. See Geological Report.

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

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.
18 miles from Blanding and 17.5 from Montecello, Utah where all mentioned items are available.

16551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Ura. 1.p

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

(*c*) The work will start within 14 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. Not applicable

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated March 24, 195 7

MERIT URANIUM CORPORATION
(Applicant)

By Sam Grivella

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

MERIT URANIUM CORPORATION

4. Physical Description.
(A) (B) (C) (D)

December 22, 1954

GEOLOGIC REPORT ON THE FALL CLAIM

LONG CANYON AREA

INTRODUCTION.

The Fall Claim is in sections 19 and 30, Township 35 South, Range 24 East, Salt Lake Base and Meridan, San Juan County, Utah. It was examined in December, 1954. The property may be reached from Monticello, Utah, by travelling south on Utah Highway 47 a distance of 10.5 miles; thence easterly on dirt roads 6.5 miles to the Ore outcrop on the claim. The ore-hauling distance to Monticello, Utah is 17.0 miles. The dirt roads are in good condition but are subject, however, to flash floods and winter snows, which may render them temporarily impassible to normal vehicle travel.

The Fall claim which is of standard lode claim dimensions, is unsurveyed, and its location on the accompanying map is based on verbal description only. The discovery monument is in the center of the claim, near the ore outcrop.

The topography consists of flat, juniper-covered mesas, transsected by deep canyons and gullies. Drainage is into Long Canyon which connects with Montezuma Canyon 3 miles to the east.

GEOLOGY

The Dakota sandstone, of Upper Cretaceous age, is the youngest exposed rock unit in the general area of the property. The Dakota forms resistant bench lands which are a protective cap for the underlying Brushy Basin shale.

The Morrison formation of Late Jurassic age, composed of the upper Brushy Basin shale member and the lower Salt Wash sandstone member, outcrops extensively in the area. The Brushy Basin is composed of varicolored, altered volcanic ash or bentonite, which is soft and easily eroded. It is about 250 feet thich in this vicinity.

Below the Brushy Basin member is the Salt Wash sandstones, which is the foremost producer of uranium in the Colorado Plateau. It is approximately 300 feet thick and is composed of loosely cemented, white to buff sandstone containing interbedded red and green sandstone shale.

The upper formations of the San Rafael group, of Lower Jurassic age, are the oldest rocks exposed in the vicinity.

All beds are essentially flat-lying in the area, and there are no outstanding geologic structural features present.

MINERALIZATION AND ORE OCCURRENCE.

Within the Salt Wash Sandstone, uranium mineralization is restricted to permeable beds formed by ancient flood plains and stream channels. These beds, being more permeable than the rock units above and below, served as passageways for the circulating uranium bearing solutions. Deposition of uranium minerals is generally most intense where organic matter such as twigs, leaves, and trees accumulated in past geologic times.

On the Fall Claim, uranium and vanadium ores occur in festoon bedding, which is a type of cross-bedding that occupies elongate, symmetrical, scoop-shaped troughs cut in beds of streams by strong current action. On the north side of the canyon, where some ore has been mixed, the festoon bedded sandstone is approximately 56 feet wide and the same features can be observed on the south side of the canyon about 50 yards distant. The south side is also mineralized. A large accumulation of fossil trees and other carbonaceous material is present. The trend of the festoon as determined by taking a bearing between the two outcrops on either side of the canyon in N. 25° E. and this was verified by calculations on the north side alone. A sudden dip in the bedding of 8 degrees was observed. This is typical of festoon-type bedding.

Chemical assays of ore taken at the outcrop are as follows:

Sample	%U308	%V2O5
5 foot vertical sample near center of outcrop.	0.201	2.30
5.2 foot vertical sample near center of outcrop	0.258	2.36
Sample from Northeast edge of ore outcrop	0.020	1.54
Sample slightly Southwest of center of outcrop	0.245	2.93
Sample from thin high-grade seam at centerof outcrop	0.834	6.41

*Analyses by J. Earl Smith, Moab, Utah.

MINING HISTORY.

In the past years two truck loads of ore were mined and shipped from the Fall Claim for the vanadium content only. There is no record of the grade of ore that was shipped. A 20 foot drift is the only evidence of exploration on the ore outcrop.

The Bumblebee Mine in the Salt Wash lies 5,550 feet distant on a bearing S. 83° 30' E. of the Fall Claim ore outcrop. There is no record of the amount or grade of ore shipped from the mine.

The Montezuma Canyon area has long been known as a producer of uranium and vanadium ores. In general, the ore in the Salt Wash member in this area is restricted to relatively small pockets, however, the Shumway Brothers of Blanding, Utah are reported to have mined 4,000 tons of uranium and vanadium ore from one deposit in the area. Also, since the area has not been thoroughly explored in comparison to the Salt Wash in other areas, it cannot be said that only small bodies of ore will be found in the future.

RECOMMENDATIONS.

The drilling depth to the ore zone in the Salt Wash on the Fall Claim is estimated to be 150 feet. In order to place a drilling program into operation on the north side of the canyon, costly bull-dozing work for the location of drill sites and access roads would be necessary. Therefore, drilling is not recommended in the locality at the present time.

It is recommended that exploration work by drifting in on the ore outcrop be undertaken. Thus, the owners would be shipping ore and exploring the ore deposit at the same time. The drift should trend N. 25°E., keeping in mind that because of the meanders of the ancient stream channels and the pockety nature of the average Salt Wash deposits, the ore body can turn or disappear suddenly. It must also be kept in mind that the Fall Claim ore outctop may be the remaining portion of an ore body that has been destroyed by the eroding elements that formed Long Canyon and its tributaries.

It is possible to explore the mineralized zone on the south side of the canyon by drilling. The drilling depth is estimated to be 100 feet. Only slight cost should be involved in the building of access roads and location of drill sites. However, exploration in this vicinity should be delayed until the ore body on the north side has been thoroughly exploited.

A radiometric survey of adjacent outcrops is recommended.

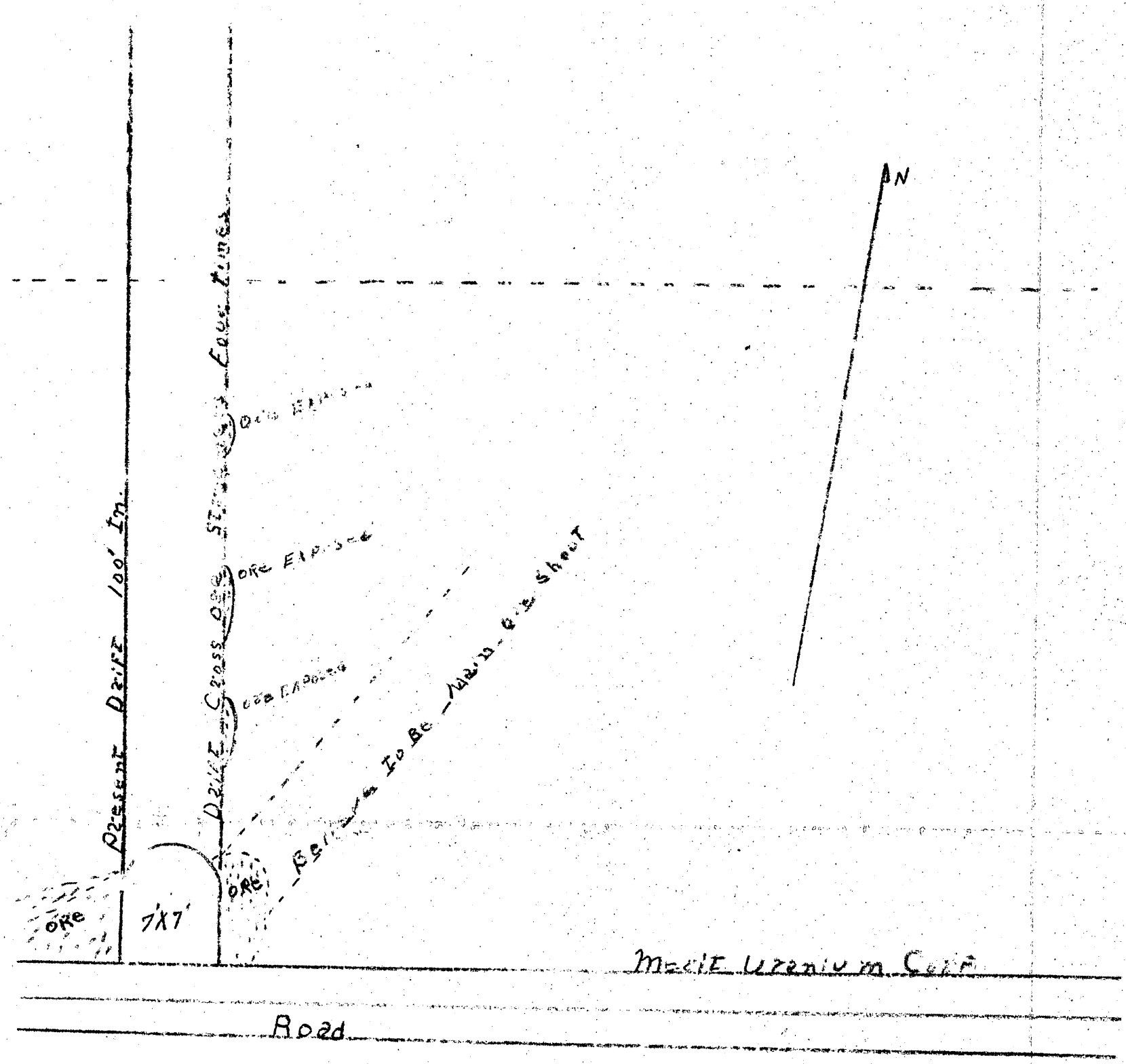
Submitted by
GEOPROFESSIONAL SERVICES, INC.

(SGD) Warren L. Anderson.
Wm. Lee Stokes.

WLA;cj

MERIT URANIUM CORPORATION

§ (b) The exploration project.



The Regional Director DMEA 4. March 24, 1957

MERIT URANIUM CORPORATION.

Instruction 6. Estimate of Costs.

6 (a) Independent Contracts

Bulldozer @ Estimate 6 days		$ 576.00

(b) Labor, Supervision etc.

Miners:		
440 hrs @ 3.00 per hr.	$1320.00	
440 " @ 1.75 " "	770.00	
440 " @ 2.00 " "	880.00	
Supervision:		
2 Months @ $650 per month	1300.00	
Engineers & Geo. Consult.	500.00	4770.00

6 (c) Operating Material & Supplies.

Steel and bits	640.00	
Pipe and hose	260.00	
Timber - For waste disposal	240.00	
" Shoring	80.00	
" Approach to operation	260.00	
Nails and spikes	60.00	
Cable and clamps	40.00	
Shovels. 3 @ $4.50 ea.	13.50	
Picks 2 @ 4.00 "	8.00	
1 wheelbarrow	24.00	
Hand tools	35.00	
Mining Lamps 3 @ $5.00 ea.	15.00	
Fuel	320.00	
Powder, fuse and caps.	750.00	2753.50

6 (d) Operating Equipment.

Pickup (rental) 60 days @ $10.00	600.00	
Air Compressor 2 Nos. @ 215.00	430.00	
Drill (purchase)	700.00	
Ore Car (purchase) used.	300.00	
Track	225.00	2255.00

6 (g) Miscellaneous:

Repairs to operating equipment	300.00	
Accounting	100.00	
Workman's Comp & Emp. Lia.	355.40	
Payroll taxes.	128.79	

6 (i) Contingencies	500.00	500.00

Estimated total of project. $11738.69

From present indications it would appear that the property can be properly inspected within the next 30 days. If you will advise our home office, 520 Ash Street, San Diego, California when your inspector is ready to examine the project we will arrange to have our Superintendent, Mr. Curtis V. Odom meet with him.

Should for any reason you would like to contact Mr. Odom prior to the meeting on the project he may be reached through General Delivery, Payson, Arizona. His telephone number at Payson is Granite 4-2376.

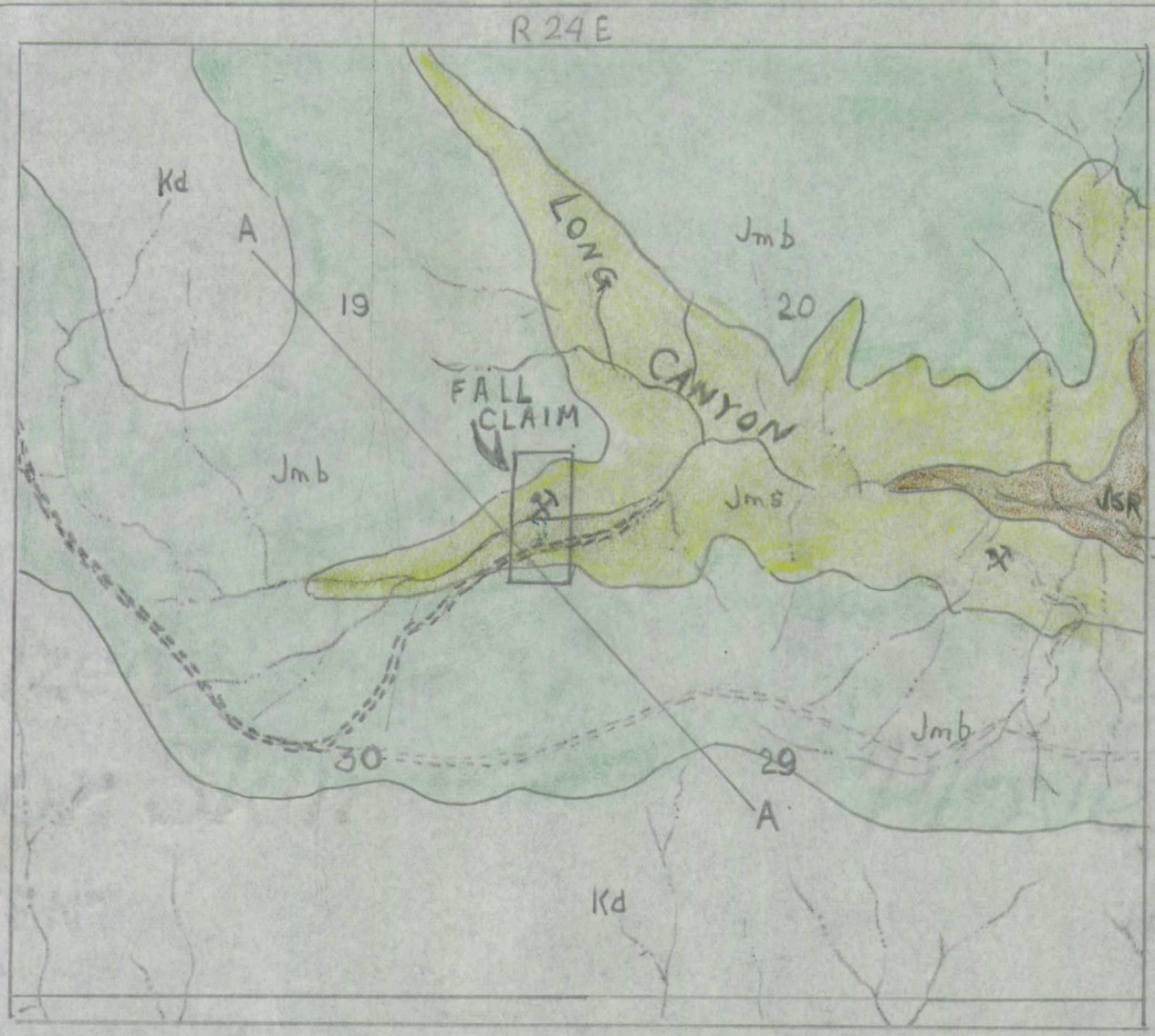
Very truly yours,

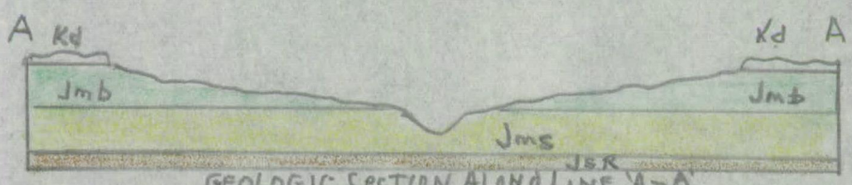
MERIT URANIUM CORPORATION

By L. W. Wall

Exec. Vice President.

LWV/W





GEOLOGIC SECTION ALONG LINE 'A-A'

EXPLANATION

Kd	DAKOTA
Jmb	BRUSHY BASIN MEMBER (MORRISON FORMATION)
Jms	SALT WASH MEMBER (MORRISON FORMATION)
JSR	SAN RAFAEL GROUP.
⚒	URANIUM-VANADIUM DEPOSIT.

GEOLOGIC MAP

FALL CLAIM

LONG CANYON AREA
SAN JUAN COUNTY UTAH

SCALE

0 1 MILE

GEOPROFESSIONAL SERVICES INC
SALT LAKE CITY UTAH

Dec. 1954

MERIT URANIUM CORPORATION