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

FEB 17 1956

Messrs. George S. Young, J. Chester Young,
and Theodore R. Young
Big Smoky Uranium Company
Austin, Nevada

Re: Docket No. DMEA-373 (Uranium)
Smoky Stone, et al., claims
Lander County, Nevada

Gentlemen:

Reference is made to our letter dated January 11, 1956, in which we stated that the subject docket would be considered closed unless certain information required to process the captioned application had reached this office within thirty days from the date of that letter. No answer to our communication having been received, we therefore inform you that the subject docket is considered closed as of February 11, 1956.

This is without prejudice to the merits of your proposed project. We regret the necessity of this action and express appreciation for your interest in the exploration program during the period your application has been under consideration.

Sincerely yours,

[illegible]

Administrator

FMMurphy/gla
2-17-56
cc to: Admr.'s Reading File
Docket
Messrs. JHCrawford, Rm. 3641
THKillingsord, Rm. 3626
JCHarted, Rm. 3210, GSA
Code 700, Mr. Murphy
DMEA Field Team, Region II (2)

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

JAN 13 1956

Messrs. George S. Young, J. Chester Young,
and Theodore K. Young
Big Rocky Uranium Company
Austin, Nevada

Re: Docket No. DMEA-3753 (Uranium)
Rocky Stone, et al., claims
Lander County, Nevada

Gentlemen:

Reference is made to our letter of April 26, 1955, which requested additional information necessary to process the captioned application, and to Mr. Theodore K. Young's response of May 2, requesting that the subject application be held in abeyance until the information could be submitted.

Inasmuch as we have received no further word from you, we assume that you no longer desire to proceed with the application. We wish to cooperate with you in the matter of allowing ample time, but if the needed data have not been received within thirty days from the date of this letter, we will then consider the docket closed.

Sincerely yours,

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Ferro and Miscellaneous
Metals Division

FWMurphy/gla/lam 1-11-56

cc to: Docket
Code 700
Admr.'s Reading File
Mr. Murphy
DMEA Field Team, Region III (2)
Messrs. JRCrawford, 3641 - TMKillegnard, 5224 - JGHosted, 3210, GSA

IN REPLY REFER TO:

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

April 15, 1955

Re: DMEA-3753
Big Smoky Uranium Co.
(Big Smoky Property)
Lander Co., Nevada
$49,200 - Uranium

Memorandum

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

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of application

The applicant has proposed a project consisting of 24 drill holes to an average depth of 300 feet to test possible uranium-bearing fissures in the Reese River district.

The locations of the claims are contiguous and possibly in conflict with property of the Eldorado Uranium Corp. (DMEA-3715). Our comments in the memorandum of March 16, 1955, with reference to DMEA-3715 are applicable to the Big Smoky application.

The report attached to the application by N. C. Williams indicates that further prospecting and geological study will be required before a feasible exploration program can be planned by the operator.

I recommend the applicant be requested to submit more complete data, i.e. geologic maps, sections, sample locations and assays, radiometric survey maps, etc. before further consideration is given to this application.

E. L. Newcomb

ELNewcomb:hlm
G-4/15/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Defense Minerals Administration
RECEIVED
APR 4 1955

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. 3753
Metal or Mineral Uranium, Vanadium
Date Received 3/29/55 4-4-55
Estimated Cost $49,200
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: BIG SMOKY URANIUM COMPANY, Austin, Nevada

(*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. See supplement # 1,(d).

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 The claims to be explored are in Sections 1 & 2, T. 18 N. Range 43 East: Sections 35 and 36 in T. 19 N. Range 43 East of M. D. M. Reese River mining district, Lander County, Nevada

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise 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. See supplement # 3. (f)

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. Given in Supplement #4 (a).

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

(*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. Given in supplement map # 4 (c).

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. Given in supplement # 4 (d).

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power. Manpower is available; Materials and supplies will have to be purchased and hauled in; We own trucks which can be used for this purpose; We have a RD 7 caterpillar with Dozer blade, and have an option on a Diamond Drill, other equipment will have to be purchased ; water is available but power will have to be provided.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Uranium, Vanadium and other minerals.

(*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 supplement # 5,(b).

(*c*) The work will start within 30 days and be completed within six 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. See supplement # 5 (d).

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.). See supplement # 6, (a).

(*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. See supplement # 6 from (a) to (h).

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated 17th day of March, 1955

Kent B. Berger
Peter K. Cleveland
Geo. D. Young
B. Rigby Young

Big Smoky Uranium Company
(Applicant)

By Geo. D. Young
J. Lehister Young
Theodore K. Young Jr.

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

Supplement 1 (d)

Theodore K. Young,	Austin, Nevada
B. Rigby Young,	Fillmore, Utah
Heber K. Cleveland,	646 So. 9th E., Salt Lake City, Utah
David B. Darger,	15 74 S.5th E., Salt Lake City, Utah
William R. Young,	1510 Indian Hills Dr. Salt Lake City, Utah
[redacted],	[redacted]
George S. Young,	Milford, Utah
J. Chester Young,	Milford, Utah

RECEIVED
Nevada Mineral Exploration Co.
Nevada Mineral Administration
1984 - 1987

Supplement # 3 (f)

(f) Lucky Stone # 1	Recorded	in	Book	K	page	311,	Lander,	county,	Nevada
Lucky Stone # 2	"	"	"	K	"	311,	"	"	"
Lucky Stone # 3	"	"	"	K	"	312,	"	"	"
Yellow Sand # 1	"	"	"	K	"	274,	"	"	"
Yellow Sand # 2	"	"	"	K	"	275,	"	"	"
Nola 1	"	"	"	K	"	313,	"	"	"
Nola # 2	"	"	"	K	"	324,	"	"	"
Campsite	"	"	"	K	"	306	"	"	"
Campsite # 1	"	"	"	K	"	307	"	"	"
Campsite # 2	"	"	"	K	"	307	"	"	"
Richter # 1	"	"	"	K	"	313	"	"	"
Richter # 2	"	"	"	K	"	314	"	"	"
Richter # 3									
Richter # 4	"	"	"	K	"	325	"	"	"
Kayleen # 6	"	"	"	K	"	157	"	"	"
Kayleen # 7									

SUPPLEMENT SHEET # 4, (a).

(a), Location work was done with Caterpillar and blade in the form of cutting and stripping. A road was built from the mouth of the canyon up through the claims. This road is now open and passable.

Considerable prospecting and surface exploring was done showing several good uranium bearing fissures.

The road has been opened and is now passable for examination of the property.

Supplement # 4 (c).

Is map and geologic report inclosurer.

Supplement # 4 (d),

(d). There is a county graveled road with in one mile of this property and the distance to Battle Mountain the nearest Railroad point is one-hundred (100) miles, ninety-five of this is ailed hiway.

Some roads will have to be constructed in order for drilling equipement to get to the drilling locations as described on map in geology report.

There are residences available in the town of Austin, Nevada about five (5) miles away.

Supplement # 5 (d).

(d). The men who will be overseeing the operations have had extensive experience in corporation management and in the supervision of men and machinery, also considerable mining work and experience.

The man who will have direct charge of operations has had much experience in Geology, Mining and Milling. He has spent thirty (30) years in mining operations and is an expert mechanic on mining and milling machinery.

Our Geological work has been done by Norman C. Williams, of Geoprofessional Services Inc., Salt Lake City, Utah. We have planned the drilling program under his supervision.

Supplement # 6 (a) to (h).

(a). Independent Contracts: Drilling twenty-four (24) holes average depth of three-hundred (300) feet, at $5.00 per foot. Total cost thirty-six thousand dollars ($36,000.00)

Road work and stripping, RD 7 caterpillar with12' X 36" blade ($12.50) per hour, four-hundred hours, total ($5,000.00) five-thousand dollars.

(b). Labor, supervision, consultants: Supervising Foreman, three dollars ($3.00) per hour, total 500 hours, Fifteen-hundred dollars ($1,500.00).

(c). Operating materials and supplies: Overall fuel costs, five-hundred dollars, ($500.00); car mileage allowed for supervisors, fifteen-hundred dollars, ($1,500.00).

(d). Operating equipment: One Dodge four by four rental price one-dollar ($1.00) per hour, total five-hundred dollars ($500.00). Compressor and Jack hammer rental price one dollar and fifty-cents ($1.50) per hour, total five-hundred dollars ($500.00).

(e). Rehabilitation and repairs: Purchase of Trailer House, two-thousand dollars ($2,000.00). Pipe for water system six-hundred dollars ($600.00). Trenching and Reservoirs six-hundred dollars ($600.00).

(h). Contingencies: Five-hundred dollars ($500.00).

Grand Total: Forty-nine thousand two-hundred dollars ($49,200.00).

SUPP. 4 (c)

REPORT OF URANIUM INVESTIGATION

VEETCHES CANYON AREA, LANDER COUNTY, NEVADA

Norman C. Williams

Salt Lake City, Utah

March 12, 1954

The investigation upon which this report is based was conducted on a group of claims in the Toiyabe Range approximately three miles south of Austin, Nevada. The area, known as Veetches Canyon, was examined during the 4th, 5th, 6th and 7th of March, 1954. The investigation was made on behalf of Dr. William R. Young and associates for the purpose of appraising the area for possible uranium deposits and to advise the claim owners of the most advantageous areas for exploratory work and for further prospecting.

The general geology of the area consists of a body of quartz diorite intruded into a series of metasediments, dominantly quartzites and silicified limestones. After emplacements, the intrusion and the host rock were fractured and possibly faulted along several zones, most of which t trend east. Such fracture zones range from three to fifty feet in width and may extend several hundred yards in length. The fracture zones or fissures later served as conduits for ascending mineral bearing solutions which carried, among other elements, a uranium content.

The iron present in the mineralizing solutions passing through the fissures served to change the color and gives to the fracture zones a rust colored appearance which contrasts with the adjacent unmineralized rock. Furthermore, in some fissures the deposition of iron has served to indurate andharden the fissures. Accordingly, they resist erosion more strennuously than the adjacent country rock and consequently stand out as bold outcrops.

As the mineral bearing solutions ascended into the upper, cooler

zones of the intrusion and adjacent host rock, some deposition of the uranium minerals occurred. An abnormal uranium content, as determined by Geiger counter, was found in several of the mineralized fissures in both the quartz diorite and in the metasediments, but the greatest concentration in the fissures occurs in close proximity to the actual quartz diorite-metasediment contact.

The processes of intrusion, fissuring and mineralization described in the foregoing paragraphs occurred while the area was deeply buried beneath a great thickness of superincumbent rocks which have subsequently been removed by erosional processes. It is by virtue of the deep erosion that processes that were operative at great depths are now revealed at the surface. Plate I attempts to depict this sequence of geological events schematic drawings.

As erosion progressed deeper and deeper, the mineralized fissures became in part exposed at the surface and were subjected to the chemical action of the atmosphere and weather. Certain of the minerals, uranium included, were formed into new minerals by these chemical processes. During the alteration process some minerals are rendered water soluble and are partially leached from the upper part of the exposed fissures. The primary uranium mineral in the fissures was most probably pitchblend, but by alteration torbernite was formed and torbernite is now the chief uranium mineral in evidence at the surface. In most areas of abnormal radioactivity the upper several inches of the ground surface is of relatively low count, but one to two feet beneath the surface the count may be much greater. It appears therefore that very nearly complete leaching of radioactive minerals has taken place in the upper few inches of the surface. Accordingly, proper prospecting will entail excavation of numerous shallow trenches and pits. At considerable depth it is to be expected that primary uranium minerals will be present. However, with the present status of exploration it is impossible to predict the depth at which such primary minerals will be encountered.

RECOMMENDATIONS

The geologic nature of the uranium occurrences in the Veatch Canyon area are sufficiently understood to serve to dictate the most advantageous prospecting methods. The prospecting program should be based upon four observable geologic conditions. (1) Uranium mineralization was restricted to the fissures. (2) Within the fissures the greastest uranium content is found in close proximity to the quartz diorite-metasediment contact both in the quartz diorite and in the metasediment. (3) Radioactive minerals have largely been leached from the fissures in the uppermost one two feet. (4). The chief uranium mineral present(torbernite) is a secondary products produced by the chemical action of surface waters and the atmosphere. A fifth factor, not at present demonstrable is that at some indeterminate depth below the reaches of percolating surface waters primary uranium minerals should be present.

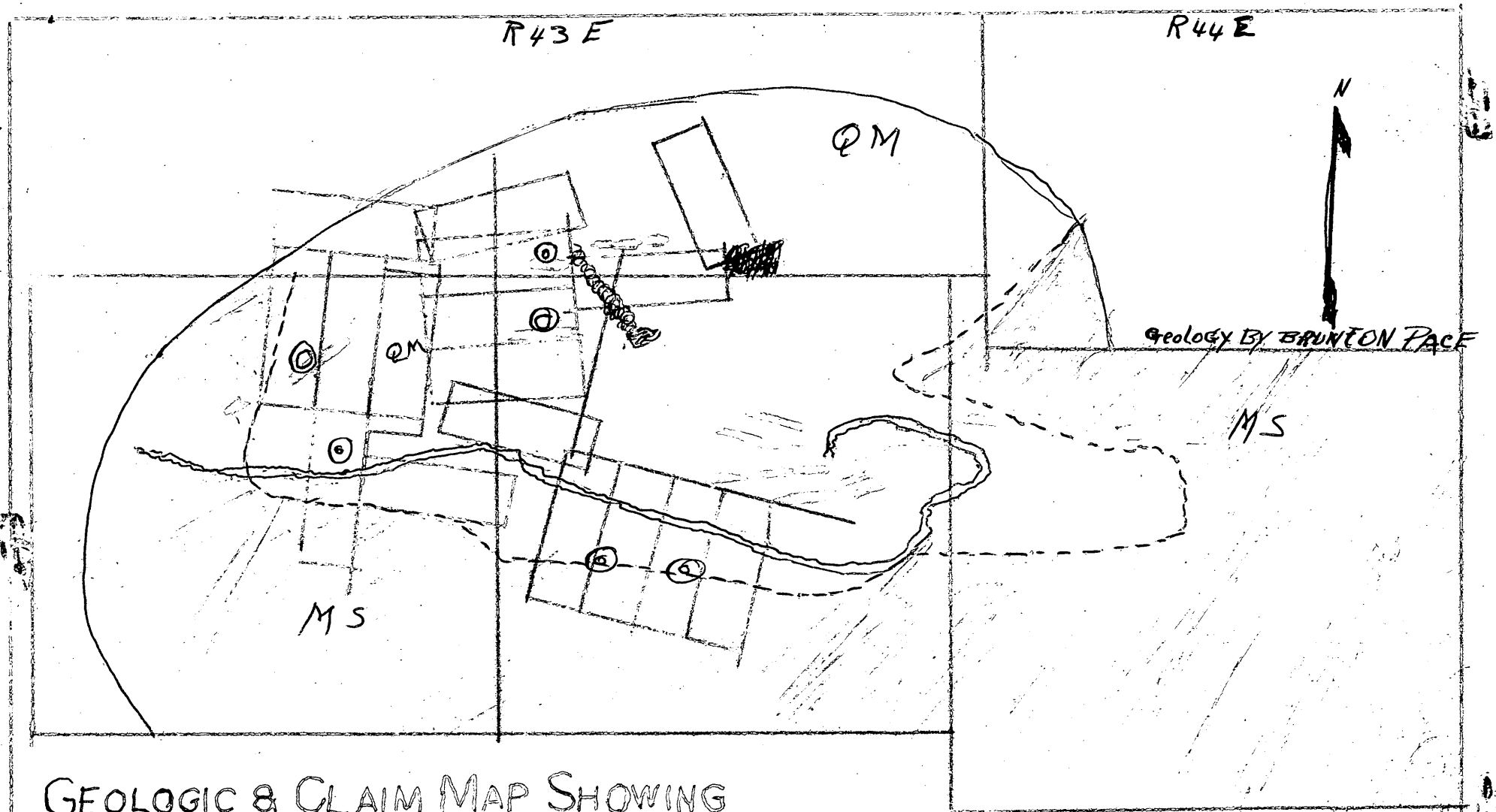
In accordance with the geologic conditions, recommendations for continued prospecting consist of (1) restricting all activity to the fissured zones. These are identified in the quartz diorite by their contrasting rust color and to a lesser extent by their often prominent outcrop. In the metasediments the fissured zones can not be detected by color difference butare characterized only by intense brecciation. (2) The fissure zones should be most carefully examined with the Geiger counter. Keeping in mind that the surface has been considerably leached, areas that show as much as 2x background count should be stripped to a depth of at least two feet to permit better appraisal of the radioactive count. The fissures will not be conspicuous in the metasediments and must be searched for with great care. (3) Places where the fissures transect the quartz diorite-metasediment contact should be searched for and given especially careful examination.

For the present it is considered adviseable to continue deepening the prospect now being worked. The next site for extensive exploration

is the westernmost prospect located north of the mouth of Vestch Canyon. When these are opened up, two or three more such areas should be located in accordance with the foregoing recommendations and similarly opened up. With four or five such prospects developed the operators, as they desire, would be in a stronger position to request federal aid for more extensive exploration.

In summary, the Vestch Canyon area is one of considerable interest from the standpoint of potential uranium production. It is a new and undeveloped area and accordingly many characteristics of the uranium mineralization and its extension in depth are unknown. Never theless, surface indications of uranium are sufficiently widespread and of high enough grade to justify continued exploratory activity. It is believed that if the operators follow the suggested program of exploration set forth in this report that the ultimate value of this property will be fairly assessed and the advisability of continued exploration can be judged.

The map accompanying this report is based upon compasspace traverse, and distances are subject to considerable error. However, the map shows the chief geologic relationships and is intended only to serve to illustrate the items discussed in the text of the report. It is hoped also that the map will serve to clarify the geology of the area for the operators.



GEOLOGIC & CLAIM MAP SHOWING
PROPERTY OF BIG SMOKY URANIUM CO.
LANDER COUNTY, NEVADA

SCALE
0 1/4 1/2 MILE

MS Metasediments
QM Quatz Monzonite
Basic Dikes
Fissures, Locally Uraniferous
Proposed drilling Locations

Supplement #4 (d)