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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

Office of
Executive Officer
DMA Field Team
Region III

July 20, 1951

Memorandum

To: Tom Lyon, Chairman, Coordinating Committee, Defense Minerals Administration, Washington, D. C.

From: Executive Officer, DMA Field Team, Region III

Subject: DMA-345X - Stalin's Present Prospect, Pershing County, Nevada.

Reference is made to your subject letter dated May 25, requesting us to determine if the subject project has merit and if a diamond drilling program would better accomplish the proposed results than by a shaft and underground development as proposed by the applicant.

The docket was referred to the Geological Survey and the property was examined by Robert F. Johnson and George W. Walker, Geologists, U. S. Geological Survey. Attached are four copies of their report "DMA-345X - Stalin's Present Prospect, Pershing County, Nevada (Uranium)", dated July 18, 1951.

The examining geologists report that the property has changed hands since the original loan application was made and that Mr. E. J. Bottomley, one of the new owners, expects to submit a new application probably for a like amount of Government funds.

The examining geologists report the property contains no mineable ore reserves, but there is some chance that exploration might reveal enough ore to make for an economic operation. They recommend that in the event the new owner applies for an exploration loan he be granted sufficient funds to do a limited amount of work although they emphasize it would be a risk venture and should be judged largely on the basis of the need for new sources of uranium. In the opinion of the Region III DMA Field Team, the sum to be granted for exploration probably should not exceed $10,000, and perhaps half that amount would be sufficient to prove the worth of the property.

HCMiller:ejs
Files
Chron
Attachment

H. C. MILLER
H. C. Miller
Executive Officer, DMA Field Team
Region III

Copy to: E. H. Bailey, U. S. Geological Survey

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMA-345x, Stalin's Present Prospect

Pershing County, Nevada

(Uranium)

Robert F. Johnson, Geologist
U. S. Geological Survey

George W. Walker, Geologist
U. S. Geological Survey

July 18, 1951

DMA-345x, Stalin's Present Prospect
Pershing County, Nevada

(Uranium)

Summary

In December 1950 the Stalin's Present prospect, in Pershing County, Nevada, was held under lease by Mr. A. B. Thomas who applied for a $25,000 government loan (DMA-345x) to be used in exploring uranium-bearing veins on the property. Subsequently the lease was terminated and the property reverted to the owners, Mr. E. J. Bottomley and Mr. Gus Rogers of Lovelock, Nevada. Mr. Bottomley intends to submit a new application for an exploration loan. Although the writers have not seen his application, he has stated it would be for the same amount to be used in underground development and purchasing mining equipment.

The docket was referred to the field team on May 25, 1951, and the property was examined by G. W. Walker and R. F. Johnson of the U. S. Geological Survey on July 4, 1951.

The uranium minerals pitchblende and gummite (?) occur at the Stalin's Present prospect in several replacement veins in a quartz porphyry dike or sill intruding Mesozoic metasediments. Faults of small displacement are common in the mineralized area, and some of the exposed veins, which are narrow and discontinuous, may be faulted segments of a single vein.

The work proposed in oral discussion by Mr. Bottomley will explore extensions of the known mineralized zone. Unless it increases either in width or grade it will be unmineable under present economic conditions. Underground development is proposed, with diamond drilling as an alternative.

It is recommended that a loan be granted for a limited amount of exploration by surface trenching across the quartz porphyry, and by underground development along the mineralized zone. The object of the first exploration is to determine whether parallel mineralized zones are present, and the underground exploration will determine if the known zone increases in width or grade at depth. The proposal is a risk venture dependant on the need for uranium.

Introduction

An application is made in DMA docket 345x for a $25,000 loan to explore the lateral and vertical extension of a uranium-bearing zone on the Stalin's Present prospect, Pershing County, Nevada. In response to a request from the Chairman of the Coordinating Committee of DMA to Mr. H. C. Miller, executive officer of Region III, dated May 25, 1951, a field examination was made of the property by George W. Walker and Robert F. Johnson of the U. S. Geological Survey on July 4, 1951.

The property had previously been sampled by Charles Towle and Thomas Anderson of the Atomic Energy Commission, and at a later date was reexamined and sampled by M. H. Staatz of the Geological Survey and Charles Towle. Mr. Staatz / prepared a map and memorandum report,

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/ Staatz, M. H., Stalin's Present property, Pershing County, Nevada, a preliminary report: Trace Elements memorandum report 223.

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which has been used in the preparation of this report.

The cooperation of Mr. Bottomley who furnished transportation to the property is greatly appreciated.

Location and Accessibility

The Stalin's Present prospect is near the head of Rocky Canyon in the Humboldt Range, Pershing County, Nevada, 25 miles northeast of Lovelock (see index map). The property is in sec. 6, T. 29 N., R. 34 E., Mount Diablo base and meridian, and is included on the Lovelock quadrangle topographic map.

Good roads lead to within 5 miles of the property, and a poor road passable only for vehicles with 4-wheel drive extends the rest of the way. Oreana, 12 miles distant, is the nearest railroad station.

The following road log is taken from the report by M. H. Staatz:

Mileage	
0.0	Log Cabin Court, northeast edge of Lovelock. Go north on U. S. 40.
13.9	Road junction at Oreana, turn right off U. S. 40.
14.1	Crossroads, turn left.
18.2	Road joins on right, continue straight.
18.8	Road turns off 45° to right, turn right.
20.1	Deserted cabin at mouth of Rocky Canyon. Road from here to mine passable for 4-wheel drive vehicles only.
25.0	(Approx.) End of road at property.

Ownership and Description of Workings

The property which consists of 4 claims, Stalin's Present and Stalin's Present Nos. 1, 2, and 3, is owned by E. J. Bottomley and Gus Rogers of Lovelock, Nevada. Mr. Bottomley's address is P. O. Box 653, Lovelock. In December 1950 Mr. A. B. Thomas of Salt Lake City, Utah held a lease on the property, and he submitted the original loan application at that time (DMA-3h5). Subsequently the lease was terminated, and Mr. Bottomley is submitting another loan application.

The mine workings, as shown on the accompanying plan, consist of an open cut 25 feet long connecting with an adit 37 feet in length. A winze 8 feet deep is located 12 feet from the portal of the adit. A 3- by 6-feet pit 28.5 feet above the floor of the adit marks the original discovery.

Geology

Rocks exposed in the vicinity of the workings are metasediments intruded by a sheared dike or tongue of quartz porphyry. The metasediments which according to Jenney / are probably Triassic in age,

/ Jenney, C. P., Geology of the central Humboldt Range, Nevada: Univ. Nevada Bull., vol. 29, no. 6, pp. 17-18, 1935.

consist of silicified grit beds and shales. Alteration along north striking shear zones locally has caused the development of white mica in both the metasediments and the quartz porphyry. The quartz porphyry dike is about 75 feet wide and strikes nearly north. It was not mapped north or south of the workings as it may be related either to a granite porphyry mass to the southeast, or to a granitic intrusive exposed about 600 feet southwest of the workings and reported by Jenney to intrude both the metasediments and the granite porphyry.

Narrow, discontinuous, northerly trending veins of diopside-rich rock transgress the quartz porphyry. The owner believes there are 3 such veins on the property, but exposures are not good enough to rule out the possibility of some repetition by faulting. Staatz / describes

/ Staatz, M. H., op. cit., p. 4.

the mineralogy of the vein material, and reports that it contains diopside, epidote, biotite, chlorite, calcite, and quartz, with minor garnet, corundum, zircon, and sulphides.

Faults of small displacement, most of which strike roughly parallel to the strike of the quartz porphyry are common in the area. All observed offsets of the replacement veins are small, so the operators should have no difficulty in following the veins in underground exploration. In the event diamond drilling is undertaken, the quartz porphyry and replacement veins will be easily recognizable.

Ore Deposits and Reserves

Uranium minerals identified by X-ray methods in the U. S. Geological Survey's radiometric laboratory are pitchblende and a yellowish-green alteration mineral, probably gummite. These minerals together with pyrite are found in 6-8 inch replacement veins, and in lesser amounts disseminated in the adjoining quartz porphyry. Only the replacement veins contain material of commercial grade. Samples taken across the veins range from 0.06 to 0.22 percent uranium; the 0.06 assay includes 1 foot of wall rock and 8 inches of vein material. Assays obtained by Mr. Thomas and Mr. Bottomley range up to 0.60 percent uranium, but were probably from picked specimens.

The property has no mineable ore reserves. In a block of ground between the bottom of the winze and the prospect pit, partially explored by the adit, there are an indicated 54 tons of replacement vein material with a grade of about 0.15 percent uranium. An additional 160 tons of vein material of similar grade can be inferred by extending the known vein 25 feet to the south and 25 feet down. This indicated and inferred material contains about 640 pounds of uranium.

The average grade of the replacement veins is 0.15 percent uranium over a width of 8 inches. Dilution of this material, assuming a 3-foot mining width, would lower the grade to such an extent that economic recovery would not be possible.

Exploration Proposal

During the field examination Mr. Bottomley stated that in his application he would request a loan to explore the possible extension of the replacement veins at depth to see if they increase either in size or grade. He favors exploration by means of a shaft and drifts but would be agreeable to diamond drilling.

No equipment is on the property at present. Mr. Bottomley has 2 air drills, one a light drifter and the other a sinker, but all other equipment would have to be purchased. Major items would be a compressor, hoist, pipe and track, ore car, and a skip or bucket.

Mr. Bottomley estimates mining costs at $60 per foot for shaft sinking, and $20 per foot for drifting and crosscutting. Diamond drilling costs are not known, but would be high because of the limited footage involved and the difficulty of getting equipment to the property. Even though diamond drilling would probably be the cheapest way to explore the ground, due to the necessity of purchasing mining equipment for underground work, underground exploration would be more satisfactory as the veins can be followed and changes in size or grade will be apparent.

Surface trenching across the quartz porphyry is not proposed, but it should be considered as it would show the surface extent of the known mineralized zone and it might reveal the presence of parallel zones.

Conclusions and Recommendations

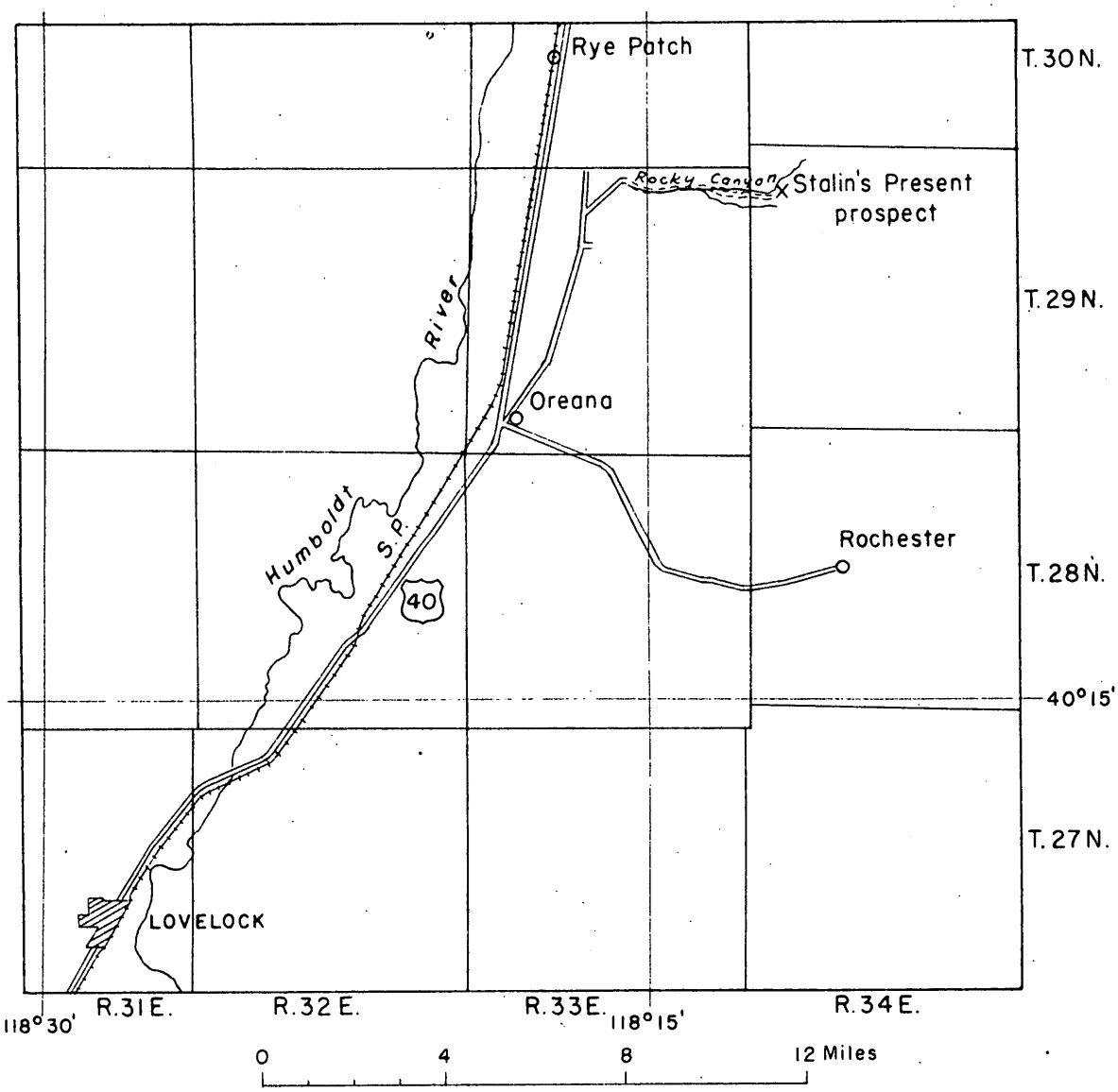
Small amounts of primary uranium are found to occur in replacement veins in a quartz porphyry dike.

Present exposures are not sufficient to indicate the presence of commercial ore.

A limited amount of exploration work seems warranted at this property to determine whether the replacement veins increase in size or grade at depth. A surface cut across the quartz porphyry north of the workings and 2 or 3 cuts to the south would show the lateral extent of the mineralized zone on the surface. In addition the winze should be deepened to about 60 feet, and the mineralized zone followed at that depth for about 100 feet. Exploration for parallel mineralized zones at the 60 foot depth could be accomplished by a crosscut driven across the quartz porphyry dike.

Diamond drilling would be an alternate method of exploration and should be satisfactory. The rock near the surface is considerably broken up but should not be too difficult to drill.

It should be emphasized that this is a risk venture based largely on the need for uranium. No ore is in sight, and, while there is no evidence that the mineralized zone will pinch out, neither is there any indication, in the 29 feet of known vein, that it will increase either in size or grade.



Index map showing location of the Stalin's Present prospect, Pershing County, Nevada

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUL 12 1951
SAN FRANCISCO, CALIFORNIA

	NELL	7/12
Answered		

102 Old Mint Building
San Francisco, California

July 11, 1951

Mr. E. J. Bottomley
Box 653
Lovelock, Nevada

Subject: DMA-345-x

Dear Mr. Bottomley:

Many thanks for your help in showing us the Stalin's Present prospect. I hope you were able to return home in time for the contests.

It will be necessary for you to submit another application for a DMA loan, since Mr. Thomas is no longer connected with the property. This will not delay action on the loan as the new application is substituted for the original. Apparently exploration loans do not cover the expenses involved in putting in or repairing access roads. Therefore, a separate application should be submitted by you to cover this additional expense. The Bureau of Mines will send you all the necessary forms within a week or two.

Sincerely yours,

Robert F. Johnson

RFJ:smh
cc to H. C. Miller
DMA-345-x
Reading

Answer to	Notes	Date
	HCW	6/20
Answered		

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUN 20 1951
SAN FRANCISCO, CALIFORNIA

102 Old Mint Building
San Francisco 3, California

Air Mail

June 19, 1951

Mr. Lincoln R. Page
Box 7618, Lakewood Branch
U.S. Geological Survey
Denver 15, Colorado

Dear Linc:

As Ward is on leave I am writing regarding DMA Dockets 345x, 775x, and 931x, all of which are familiar to you. Your letters indicate you are willing to supply us with a geologist to accompany one of our men in examining two of the three properties, although one of these seems to have little merit. In the interest of educating at least one of the men here as to what is wished on such examinations, the following proposal is submitted for your consideration.

George Walker is now here and, as I understand it, will be working for you after August 1, although he will remain stationed here for a while. He tells me he is going to have difficulty meeting the set deadline; however, it would make good sense for him to be broken in to this type of work by making a few examinations in company with one of your regular men. Thereafter he could advise our other men as to how to work a counter and out samples. His current work is urgent only in that it should be completed prior to your deadline, and it is of such a character that he can leave it for a brief period without loss. Therefore, I would like to propose that you send one of your men here to go to some, if not all, of the three deposits with the prime objective of familiarizing George with technique and procedure.

George could make these examinations during any period after June 24. I estimate it would require no more than a week of his time, but if you approve of this interruption it probably would mean he would not be able to join your group on a full time basis until a week later than now planned. If this proposal meets with your approval please let us know when we can expect your geologist to arrive.

Sincerely yours,

Edgar H. Bailey

cc: H. C. Miller
cc: DMA 345x
cc: DMA 775x
cc: DMA 931x
cc: Reading

DEPARTMENT OF INT.
BUREAU OF MINES
REGION III
RECEIVED
JUN 6 1951
SAN FRANCISCO, CALIFORNIA

Refer to	Noted	Date
	HWM	6/6
Answered		

102 Old Mint Building
San Francisco 3, California

June 5, 1951

Air Mail

Memorandum

To: Lincoln R. Page, Box 7618, Lakewood Branch, Denver, Colo.

From: Ward C. Smith

Subject: DMA-345

The attached docket is referred to you for expert advice.

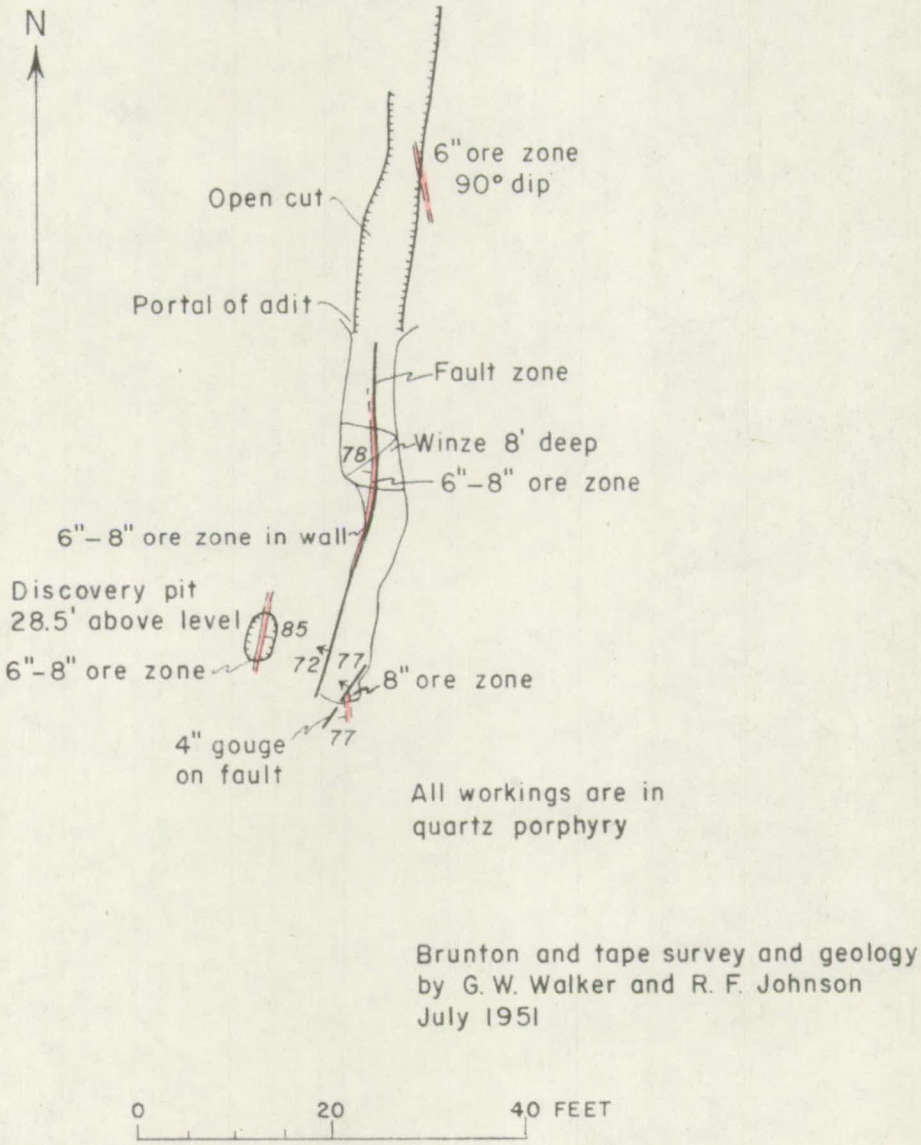
If you wish us to make this field examination, please so instruct us promptly. If you send a geologist from your group, please let us know a few days in advance so that we may have one of our geologists join him for the examination.

Please have your advice or instruction on the dockets typed as a separate letter for each one and return with the complete docket. Also please send with your original letter five carbons for the essential files of the Survey, Bureau of Mines, and DMA, here and in Washington.

Ward Smith

Attachment

CC: H. C. Miller



Plan of workings, Stalin's Present prospect, Pershing County, Nevada