Mr. Virgil D. Taylor
Shamrock Silver-Lead Mine
Keller, Washington

Re: Docket No. DMA 1390X - Nichol
Shamrock Silver-Lead Mine
Ferry County, Washington

Dear Mr. Taylor:

Your application for aid for an exploration project and other data relating to your application available to us in Washington have been carefully reviewed.

The information suggests that under the proposed exploration program, it would be extremely unlikely that a significant mineral discovery would be made. We regret, therefore, to inform you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Program and for bringing this property to our attention.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge'lm
3/24/52

cc: Admn. Reading File
Docket
H. W. Davis, USBM
T. P. Thayer, USGS
Field Team Reg. II
G. C. Selfridge

IN REPLY REFER TO:

G-MD-TPT

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

March 10, 1952

Memorandum

To: George C. Selfridge

From: T. P. Thayer

Subject: DMA 1590 Nickel Shamrock mine.

Please refer to my previous memorandum (undated) commenting on the original proposal. I still believe the chance of developing an economic deposit of nickel is infinitesimal, and the only reason for any project would be for geologic information. I went along on the proposal for underground instead of surface work on the premise that information would be obtained on the primary mineralization.

I wonder how much surface information would be worth on this deposit. Migration of nickel may be important under certain circumstances, so absence or only traces in outcrop would not be very significant. If the project depends on finding high-grade ore shoots at the surface, rather than getting basic information with a minimum of underground work, I would recommend denying it.

Mr. Hundhausen indicates lack of technical ability on the part of the applicant, and does not answer the financial aspects of the query. I wonder if the applicant has been fully informed of the risk he would be taking, and whether he can afford it?

TPThayer:gt

Mr. A. F. Weissenborn
Executive Officer, Region II
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. DMA 1590 - Nickel
Shamrock Mine
Ferry County, Washington

Dear Mr. Weissenborn:

Please refer to the field team report on the subject property by Mr. R. J. Sundhausen, dated June 28, 1951, and the enclosed copy of the proposed exploration contract that was worked out by the applicant with Sundhausen's assistance.

The report states that supergene, low grade nickel mineralization occurs in two wide and long zones, the western one of which has been cut at depth. This underground exposure was sampled by W. H. Green in 1943. Two ten foot samples assayed 0.25 and 0.07 percent nickel and 0.10 and 0.02 percent cobalt respectively. Seemingly the general consensus of opinion is that the deposits would be low grade and that their only merit, based on present indications, is the strength of the structures.

The applicant originally proposed trenching of the outcrop of the western zone at five places, reopening an adit crosscut and diamond drilling the zone from the face. The exploration contract proposes testing of the outcrop with a power auger in conjunction with tests for nickel by means of field methods and spot assays. Subsequent diamond drilling would be contingent on the results obtained from the surface work.

We note that the applicant has no personal funds to finance a project and there is serious doubt as to his competence as an operator to perform the proposed work, a factor which was mentioned in your letter of transmittal. The use of the power auger to secure samples is questionable. It would seem that little more than the badly weathered and leached near-surface rock would be secured which would indicate only more low grade mineralization, if anything. In Green's report, no description was given regarding the type of vein material sampled. In the loan application, the owners describe the

mineralization of the west zone as secondary where traversed by the adit.

It would seem that an underground program would be more feasible, as a preliminary step, than a surface one under the conditions suggested. Since the adit was open in 1943, it would probably take a minimum of work to reopen it. If this were done, the west vein could be studied for criteria suggesting the possibility of ore shoots laterally or at depth rather than the concentration of minute quantities of nickel freed from the original dominant iron sulphides. Possibly some drifting would be warranted. With regard to the eastern zone, the map shows it just ahead of the face where a lack of 900 feet is reported. At that depth there should be little, if any, oxidation. This zone could be tested and concrete information secured by continuing the drift but a short distance. Further information could be secured for both veins by fanning out diamond drill holes both to depth and laterally. This type of program should settle for all time any questions regarding ore possibilities in the sulphides in the near vicinity of the Shamrock mine and might suggest what could be expected along the zone as a whole. If surface work is suggested, preliminary trenching to give metal content and structural information might be preferable to drilling by auger.

Please give us your thoughts on the above. Regardless of the type of project, it appears that the owners must secure some financing if only to initiate a program.

On page 3 of the report, mention is made of a sample taken in the breccia, the analysis of which was not available. What did the sample assay?

Please return the copy of the proposed contract when it has served its purpose.

Sincerely yours,

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
Administration

Enclosure

cc: Admn. Reading File
Mails and Files Br.
C. O. Mittendorf
E. W. Davis, ~~BMM~~ USBM
T. P. Thayer, USGS
Field Team Reg. II
Docket
G. C. Selfridge

GCSelfridge'lm
1/5/52

P. H. Pesonen

T. P. Thayer

DMA 1590-X Shamrock Mine, Keller, Washington. Nickel

The prospects of finding an economic deposit of nickel are believed to be extremely small. Contrary to Mr. Hundhausen's implication, the geology of the deposit is completely different from the deposits at Riddle, Oregon. I know of no minable deposit of nickel or cobalt in a geologic setting similar to the deposit described in the field report.

If the exploration contract is approved, it should be for the smaller amount only, and primarily with the idea of getting geologic information, with only the faintest of hopes of developing an economic deposit of nickel.

On the above basis, I would reluctantly approve a $5,000 project.

I wonder how effective a power auger would be in sampling material of the type described, but I suppose Mr. Hundhausen gave it due consideration.

TPThaywright