Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington
June 21, 1961

Memorandum

To: Chief, Division of Field Operations

From: Acting Field Officer, Region I

Subject: Application examination
OME-6127 (Zinc-Lead-Copper)
Soren Mining and Milling Corporation
Diamond Property
Skagit County, Washington

INTRODUCTION

William R. Soren, Route 1, Sedro-Woolley, Washington, applied for OME aid to explore on the Diamond property situated in secs. 25 and 26, T. 35 N., R. 13 E. W.M., Cascade District, Skagit County, Washington. A prior application under Docket No. DMEA-2718 was denied. Since the denial, the applicant reported that he had built about 1,200 feet of access road and that at the end of the road a vein believed to be that exposed in an upper tunnel had been cut. Because of the new work it was decided that another examination should be made.

The applicant proposed to drive 1,000 to 1,200 feet of drift, 6½ x 7½ feet in cross section, starting at the road and following the structure northeasterly. He estimated that his proposal would cost about $40,000.00.

The property was inspected June 13, 1961, accompanied by Mr. Soren and his son. About 4½ hours were spent on the property during which the new exposure was examined and sampled, a Brunton and tape survey was run from the new exposure to the lowermost of 2 old trenches, and the 2 old trenches were examined and sampled.

The upper and lower tunnels were examined, sampled, and described in reports by E. A. Magill, Mining Engineer, U. S. Bureau of Mines, in July 1933 and Donald L. Anderson in August 1960. This report will therefore be limited to conclusions, recommendations, and a

See Map "A"
in Envelope

discussion of the findings in the new exposure and their relation to the earlier described structures.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the structure recently exposed in the new road work is not the same as that exposed in the upper tunnel or that exposed in the old trenches; that it is doubtful, though not impossible, that the structure exposed in the old trenches is the same as that exposed in the upper tunnel; and that the chance of making a significant discovery by drifting on the newly exposed structure is poor.

If the vein exposed in the upper tunnel is projected on the strike and dip as it is there measured, it should pass about 100 feet beyond the end of the road. However, it is further concluded that such a projection, amounting to about 1,400 feet horizontally and about 800 feet vertically, is too great to justify recommending extension of the road as a first stage of a recommended program.

It is therefore recommended that this application be denied without prejudice to the property.

DISCUSSION

In a shallow road cut near the end of the new road is a silicified shear zone 1 to 2 feet wide which strikes N. 52° E. and dips vertically. The zone and wall rock for a few inches on each side are slightly stained by iron oxides. The shear zone contains thin seams and small lenses of quartz, some of which contain a few small iron-stained vugs. A few partly oxidized pyrite crystals up to an eighth of an inch on a side were found in heavily iron-stained lenses 4 or 5 inches long and from 1/2 to 1 inch thick. A chip sample was taken from there and other iron-stained and pyritic zones to determine whether any other sulfide minerals, gold, and silver might be present. This sample, No. 127-C, assayed trace gold and 1.0 ounce silver per ton, no lead, and no zinc. The sample was not assayed for copper as there was no trace of any copper oxide in the exposure.

Starting from the above exposure a traverse was run up the hill, which slopes about 35° and is heavily timbered, to the westernmost old trench. Inclined measured distances were corrected and vertical distances were computed. It was assumed that the locations of the lower and upper tunnels and the exposure at the end of the new road, as shown on the map accompanying the application, are correct. The elevations for these three locations were taken from the section on the applicant's map. The traverse

course is shown on plate 1. The location of the 2 trenches as indicated by the traverse is about 80 feet, N. 30° E. of that shown on the applicant's map, but the elevation checked that shown on his longitudinal section.

The two old trenches expose a silicified shear zone striking N. 68° E. and dipping 80° S. to vertically. Some pyrite and a few quartz stringers were seen in the shear zone which is about 2 feet wide. Along the north wall there is a soft iron-stained streak about 6 inches wide. No copper oxide stains were observed. A sample, No. 126-C, taken of the oxidized and pyritized material assayed trace gold and 0.2 ounce silver per ton, no lead, and no zinc.

Mr. Soren said that high water and recent cutting of the bank rendered the upper tunnel inaccessible and precluded the possibility of examining the fault zone in the creek bed. According to Magill the vein in the upper tunnel strikes N. 80° E. and dips 73° SE., and the fault zone exposed in the creek strikes N. 68° E. On plate 1, I have indicated where the vein, projected on this strike and dip, should lie at the elevations of the westernmost old trench, the end of the new road, and the lower tunnel. At the old trenches the projected location of the vein is so close that a slight change of strike or steepening of dip could place it in the trenches. However, the strike and dip of the shear zone observed in the trenches make it appear more likely that the shearing is related to the faulting in the bed of Midas Creek. The sparse mineralization of the shear zone also appears to coincide more nearly to that of the fault zone as described by Magill.

At the elevation of the exposure near the end of the road, the location of the vein projected from the upper tunnel is about 70 feet north of the newly exposed shear zone. This coupled with the considerable difference in strike between the two structures makes it most improbable that the exposed zone is the same as the upper tunnel vein, although it may be a poorly mineralized branch of the latter. In the vicinity of the first traverse station easterly from the end of the road Mr. Soren reported that his men had found some galena but had covered it up before he saw it and that he had never been able to find it. Its general location would be close to the projected location of the upper tunnel vein, but the questionable existance of the find makes it of doubtful value in appraising the probability of finding the tunnel vein beyond the end of the road.

At the elevation of the lower tunnel, the projected vein passes through the diamond drill hole drilled from the breast of the lower tunnel. No evidence of its existence was found in the tunnel and drill hole, nor was it observed in the road cut south of the tunnel.

Enclosure
Distribution:
OME(3)
USGS(SRO)
Docket
MacLaren

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION 6/26/61

TO:	DATE	INITIALS
1. Chief, Div. of Field Operations		
Re: OME-6127 (Zinc-Lead-Copper)		
2. Soren Mining & Milling Corp.		
Diamond Property		
3. Skagit County, Wash.		
4. ~~Donald R. MacLaren~~		
5. D. R. MacLaren		
FROM: Acting Field Officer, Region I		

FOR: Check items for action desired

x Action	____ Reply for signature of ____	
____ Approval	____ Investigate	____ Surname
____ Comment	____ Recommendations	____ Signature
____ Conference	____ Rewrite	____ File
____ Instructions	Your information	

REMARKS:

On 6/22 we sent to you three copies of our application exam. report on this property. Would you please substitute the enclosed plate 1 for the copies attached to our report. Thank you.

INT.-DUP. SEC., WASH., D.C. M50943

U. S. Department of the Interior
Office of Minerals Exploration

Application Examination

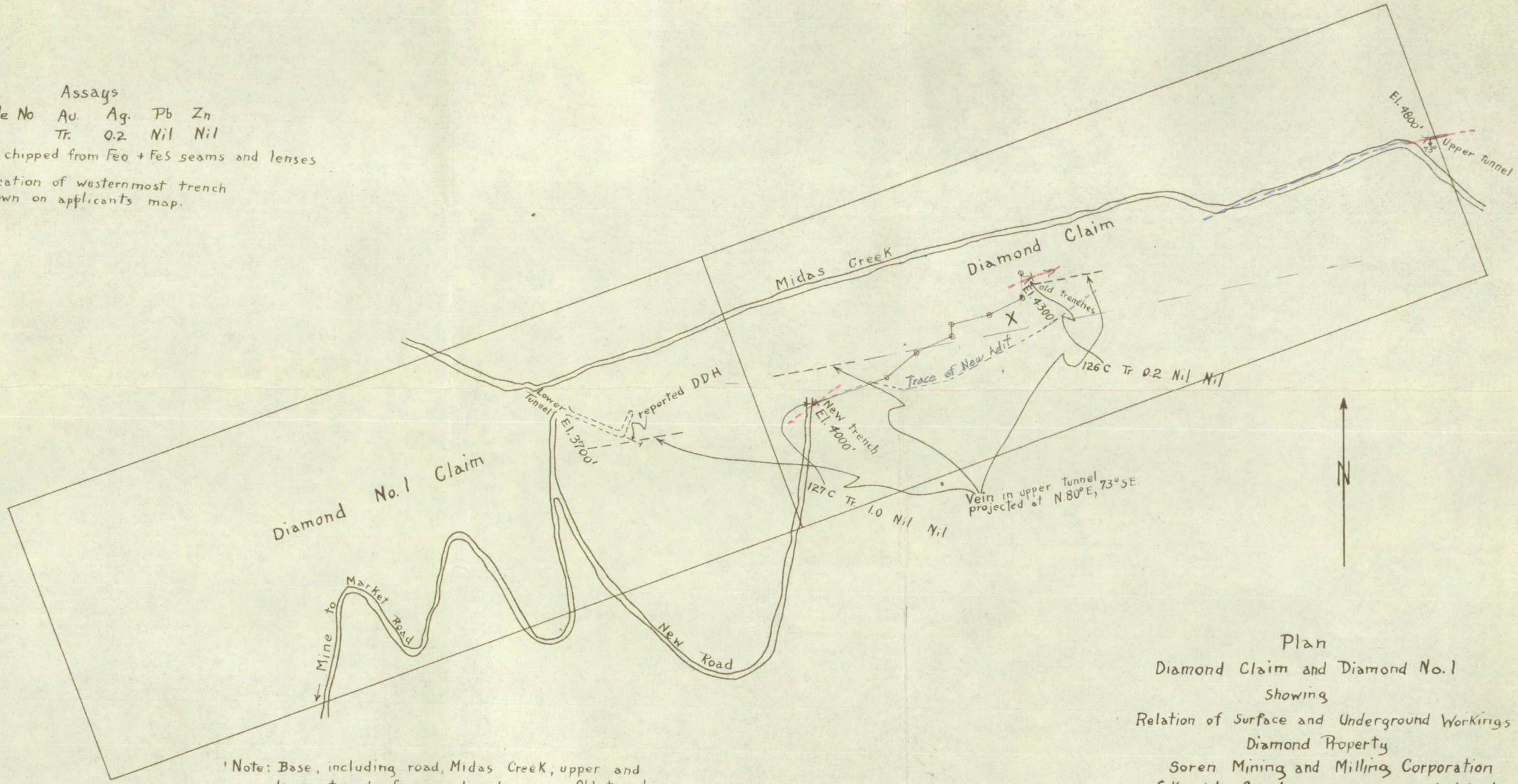
Docket OME 6127

Assays

Sample No	Au.	Ag.	Pb	Zn
126 C	Tr.	0.2	Nil	Nil

Note: chipped from FeO + FeS seams and lenses

X Location of westernmost trench shown on applicants map.



Note: Base, including road, Midas Creek, upper and lower tunnels from applicants map. Old trenches located by brunton and tape traverse from new trench.
Up-dated to June 1966 for OME-6386 Valumines

Plan
Diamond Claim and Diamond No. 1
Showing
Relation of Surface and Underground Workings
Diamond Property
Soren Mining and Milling Corporation
Skagit County Washington

200 100 0 200 Feet

June 1961

Plate I

Map "A"