

STATE OF ALASKA  
DIVISION OF MINES AND MINERALS

PROPERTY EXAMINATION REPORT

J. W. HUFF PROSPECT

LOWER EAST SIDE OF NELSON GLACIER

BRADFIELD CANAL (B6) QUADRANGLE

WILLIAM H. RACE  
State Mining Engineer

August 1963

PROPERTY EXAMINATION REPORT  
J. W. HUFF PROSPECT  
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BRADFIELD CANAL (B6) QUADRANGLE

INTRODUCTION

This particular Huff prospect is located in the Bradfield Canal Quadrangle at  $56^{\circ}29'$  N latitude and  $131^{\circ}59'45''$  W longitude. The location of the prospect is shown on the accompanying map. The prospect is on the lower east side of Nelson Glacier at an elevation of 2600 feet. It is approximately 14 miles east of Wrangell and to the east of Glacier Basin. Drainage from the area flows southerly into Aaron Creek.

This prospect has become exposed during the past twenty years as Nelson Glacier melted. Aerial photographs taken in the early 40's show the prospect covered with ice. Glacier, Groundhog, and Berg Basins were prospected extensively from 1899 to 1908.

The prospect was examined August 19 to 21 by Race. Transportation to and from the prospect was by Temsco helicopter at no cost to the Division of Mines and Minerals. The U.S. Bureau of Mines had the helicopter under charter while moving a crew into Groundhog and Glacier Basin and kindly offered to fly Race in to visit Huff. The Bureau later made separate investigations of Huff's prospects in the Groundhog area which Race was unable to investigate due to inclement weather. Huff was prospecting the area under the State's Prospector Assistance Program and his report is in the files of the DM&M office in Juneau.

GEOLOGY AND MINERAL DEPOSIT

The general geology of the area immediately to the east of the prospect is described in U.S.G.S. Bulletin 998-B, Some Zinc-Lead Deposits of the Wrangell District Alaska, by H. R. Gault, D. L. Rossmann, G. M. Flint, Jr., and R. G. Ray, 1953. They, however, did not spend any time in the immediate vicinity of the

prospect. The prospect is in easterly pitching metamorphics limited on the north and east by diorite and covered on the west by Nelson Glacier. Sulphides of lead, zinc, and copper are found as lenticular replacement in a marble bed striking 325° and dipping 55° to the east. The metamorphics to the west resemble the schists and phyllites typical of the coast between Wrangell and Berners Bay. The metamorphics to the east are more granular and less schistose. Mafic and aplite dikes and sills are quite numerous. Some of the mafics contained visible metal but the aplite seemed to be barren. Quartz was scarce but it is understood that Huff later found a quartz vein 5 feet wide that carried good values in lead and silver. This vein was found on the contact about a mile to the north.

SAMPLES AND ASSAYS

During the course of this investigation sample number one was taken while on a reconnaissance of an area of about 6,000 square feet to the north of the prospect. Number one sample was composed of chip samples of various formation encountered. Samples 2 through 5 were taken across the prospect over a combined width of 35.5 feet.

<u>Sample No.</u>	<u>Length</u>	<u>% Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Oz/T Au</u>	<u>Ag</u>
1.	general area	0.1-0.2	1.1	0.5	Tr	Tr
2.	7'	-0.1	-0.1	1.6	0	0
3.	16'	-0.1	2.6	-0.1	0	0
4.	8.5'	0.2-0.3	0.4	1.4	0.1	Tr
5.	4'	-0.1	0	-0.1	0	0

These results indicate that the prospect does not contain sufficient value to be economic. They do however indicate mineralization near the contact of the diorite which was not mentioned in earlier reports. It seems logical therefore, that this contact should be very carefully prospected. It is recommended that a geochemical investigation be made of the drainage of the intrusive including the drainage of the slope immediately south of the prospect on strike with the limestone.



Metamorphics (granulite?). Sample No. 1 taken from the top of this ridge westward to limestone bed.

Gulley No. 4 in Glacier Basin





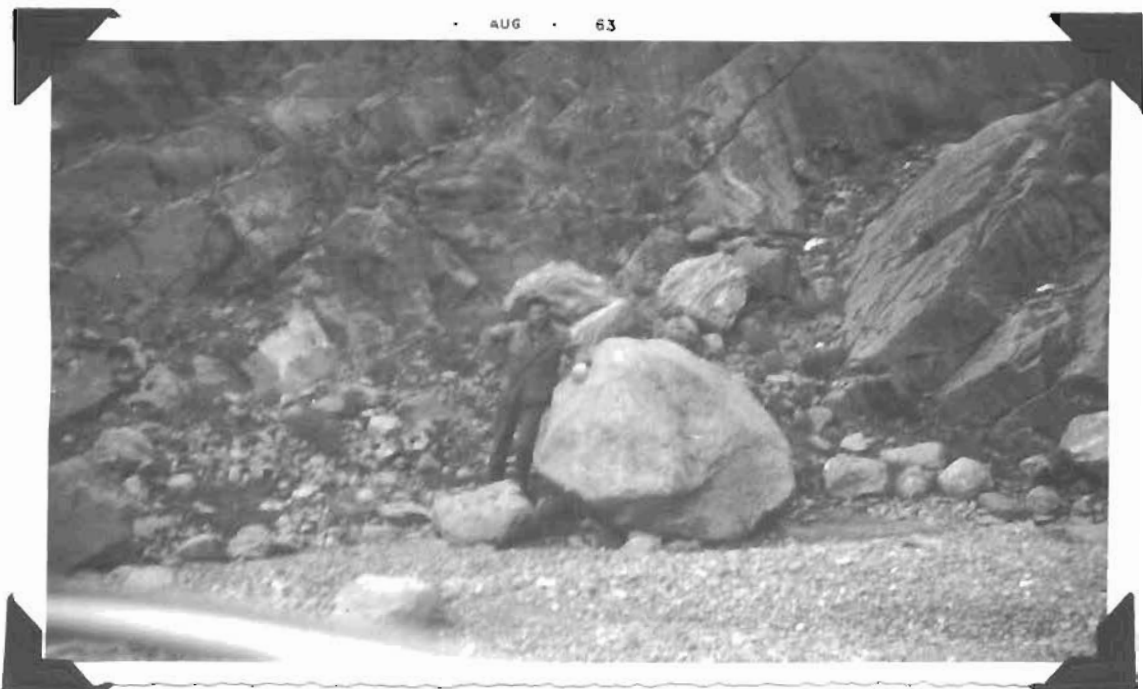
View of limestone beds. Bed in center contains sulphides. Bed at left capped by mafic sill. Lake in center on small fault. Occasional fluorite found near right hand snow bank. Snow bank also location of cross fractures filled with sulphides.

AUG . 63



Camp site in valley between intrusive on the right and the metamorphics to the left.

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J. W. Huff leaning on granite boulder. Lower picture angles off at the left of the upper picture.

Division of Mines  
and Minerals

Form M-1-8-62-3M

Assay Office Anchorage, Alaska

Date November 14, 1963

### REPORT OF ASSAY

On samples received from Bill Race - Division of Mines & Minerals

Address Box 1391 - Juneau, Alaska

Assay No.	Sample Marked	OUNCES PER TON		Value per Ton	Percentage of
		GOLD	SILVER		
15713-C	GB-1				Zn - 0.5%
15716-C	GB-5				Zn - Less than 0.1%
15718-C	GB-2				Zn - 1.6%
15717-C	GB-4				Zn - 1.4%
15714-C	GB-3				Zn - Less than 0.1%

REC'D. JUNEAU

NOV 18 1963

Div. Mines & Minerals

I.W. Mitchell

Assayer.

Division of Mines  
and Minerals

Form M-1-8-62-3M

REC'D. JUNEAU

NOV 7 1963

Div. Mines & Minerals

Assay Office Anchorage, Alaska

Date November 6, 1963

### REPORT OF ASSAY

On samples received from Bill Race - Division of Mines & Minerals

Address Box 1391 - Juneau, Alaska

Assay No.	Sample Marked	OUNCES PER TON		Value per Ton	Percentage of
		GOLD	SILVER		
15713-B	GB-1				Pb - 1.1%
15714-B	GB-3				Pb - 2.6%
15716-B	GB-5				Pb - Nil
15717-B	GB-4				Pb - 0.4%
15718-B	GB-2				Pb - Less than 0.1%



I.W. Mitchell Assayer.



Division of Mines  
and Minerals

Form M-1-8-62-3M

Assay Office Anchorage, Alaska

Date October 24, 1963

### REPORT OF ASSAY

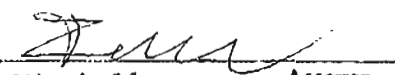
On samples received from Bill Race

Address Div. of Mines - Juneau, Alaska

Assay No.	Sample Marked	OUNCES PER TON		Value per Ton	Percentage of
		GOLD	SILVER		
15717-A	GB-4				Copper - 0.2-0.3%
15718-A	GB-2				Copper - Less than 0.1%
15714-A	GB-3				Copper - Less than 0.1%
15713-A	GB-1				Copper - 0.1-0.2%
15716-A	GB-5				Copper - Less than 0.1%

NOTE: Lead and Zinc assays on these samples will follow.

REC'D. JUNEAU  
OCT 24 1963  
Div. Mines & Minerals

  
I.W. Mitchell Assayer.

Division of Mines  
and Minerals

Form M-1-8-62-3M

Assay Office ...Anchorage, Alaska.....

Date ...October 21, 1963.....

### REPORT OF ASSAY

On samples received from ..... Bill Race .....

Address ..... Div. of Mines - Juneau, Alaska .....

Assay No.	Sample Marked	OUNCES PER TON		Value per Ton	Percentage of
		GOLD	SILVER		
15713	GB-1	Trace	Trace		
15714	GB-3	Nil	Nil		
15716	GB-5	Nil	Nil		
15717	GB-4	0.1	Trace	\$3.50	
15718	GB-2	Nil	Nil		

REC'D. JUNEAU

OCT 22 1963

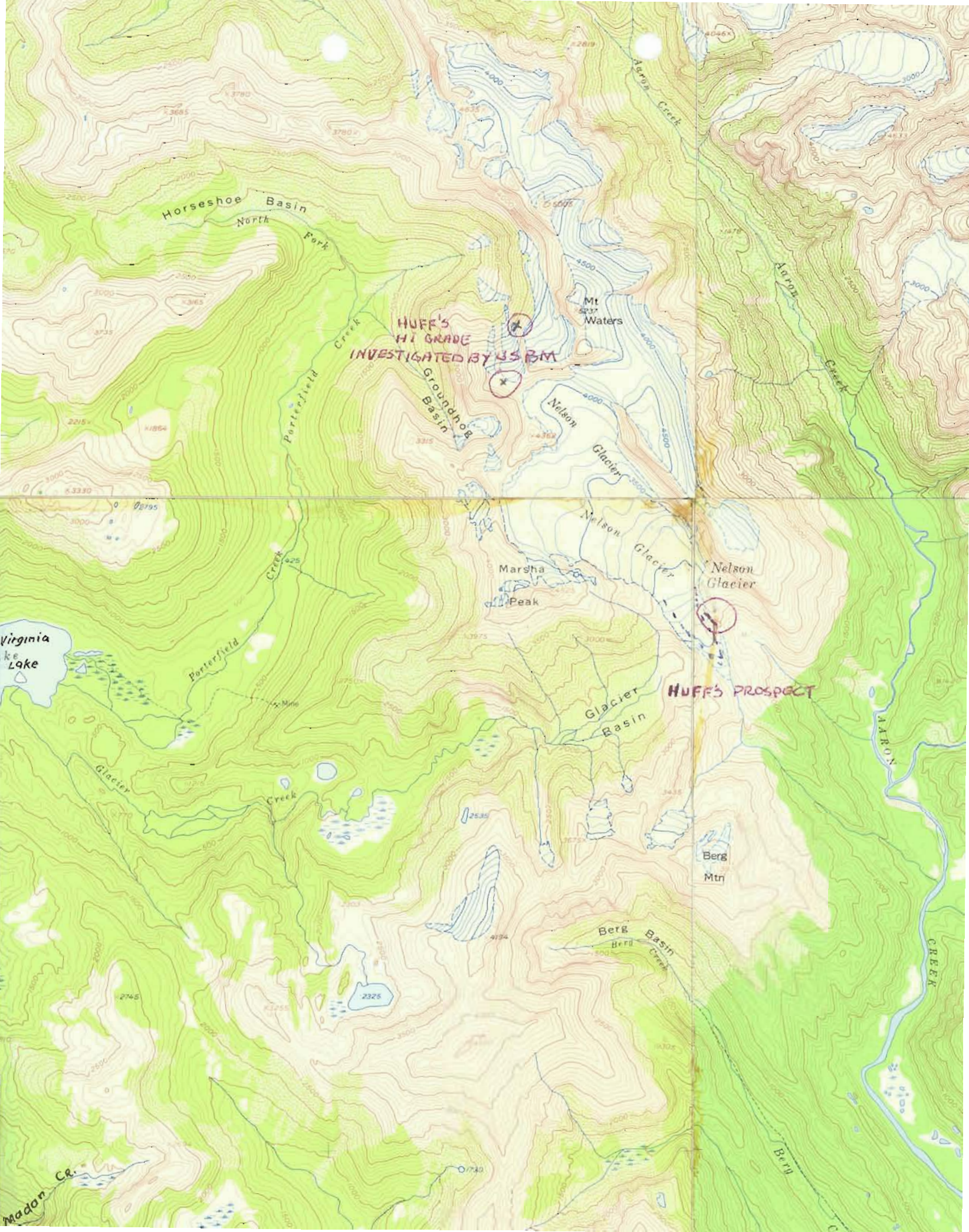
Div. Mines & Minerals



I. W. Mitchell

Assayer.

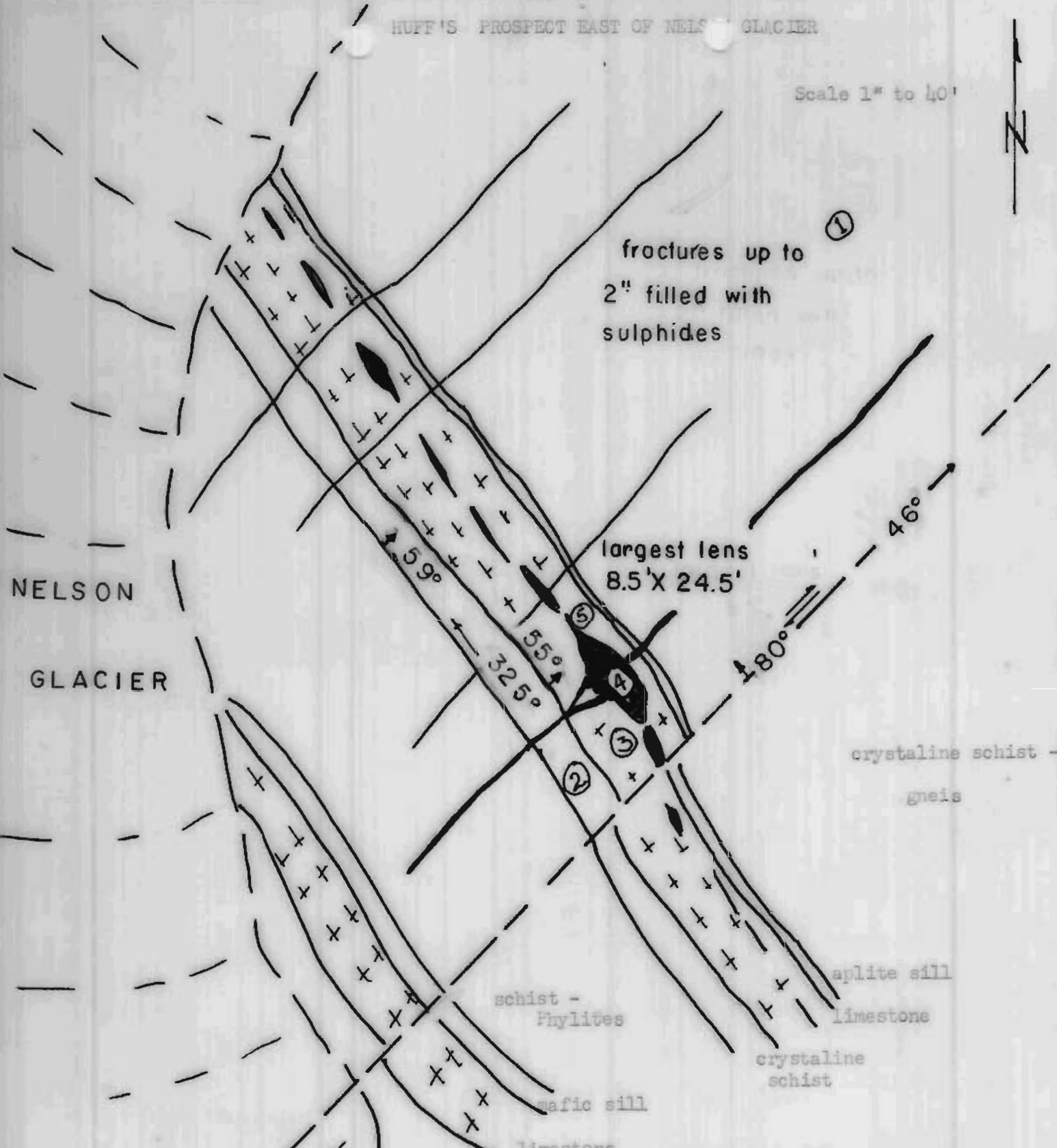
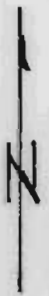






HUFF'S PROSPECT EAST OF NELSON GLACIER

Scale 1" to 40'



NELSON  
GLACIER

fractures up to  
2" filled with  
sulphides

largest lens  
8.5' X 24.5'

crystalline schist -  
gneis

schist -  
Phyllites

aplite sill  
limestone

crystalline  
schist

mafic sill

limestone

Sample No.	length	% Cu,	Pb,	Zn,	oz/T Au,	Ag
1	chips	0.1	0.2	1.1	0.5	Tr
2	7' chip	-	0.1	0.1	1.6	0
3	16' "	-	0.1	2.6	-0.1	0
4	8½' "	0.2-0.3	0.4	1.4	0.1	Tr
5	4' "	-	0.1	0	-0.1	0