

ARIS SUMMARY SHEET

District Geologist, Nelson

Off Confidential: 90.02.13

ASSESSMENT REPORT 18746

MINING DIVISION: Nelson

PROPERTY: Aspen
LOCATION: LAT 49 10 30 LONG 117 11 00
UTM 11 5446707 486637
NTS 082F03E

CAMP: 003 Salmo - Sheep Creek Area

CLAIM(S): Smuggler 2
OPERATOR(S): South Kootenay Goldfields
AUTHOR(S): Macdonald, E.D.
REPORT YEAR: 1989, 11 Pages
COMMODITIES
SEARCHED FOR: Gold, Silver, Zinc, Lead, Copper
KEYWORDS: Cambrian, Laib Formation, Carbonates, Argillites, Monocline, Breccia
Skarn, Base metals, Precious metals, Jurassic, Nelson Batholith
Granites, Lamprophyre dykes

WORK
DONE: Geological, Geochemical
GEOL 90.0 ha
Map(s) - 1; Scale(s) - 1:2000
SOIL 305 sample(s) ; CU, PB, ZN, AG
Map(s) - 4; Scale(s) - 1:2000

RELATED
REPORTS: 12985
MINFILE: 082FSW001, 082FSW305

LOG NO: 0523	RD.
ACTION:	
FILE NO:	

FILMED

ASPEN PROPERTY
ASSESSMENT REPORT

OWNER: EXTOTAL RESOURCES LTD.
OPERATOR: AUCKLAND EXPLORATION LTD.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,746

AUCKLAND EXPLORATION LTD.

ASSESSMENT REPORT

ON

GEOCHEMICAL & MAPPING PROGRAMS

SMUGGLER 1,2 CLAIMS W.S. DOC #168
AND REVERTED C.G.'S W.S. DOC #146

NELSON MINING DIVISION

NTS 82 G/3

Latitude 49° 10'N Longitude 117° 10'W

Owner: EXTOTAL RESOURCES LTD.
827 WEST PENDER ST.,
VANCOUVER, B.C.
V6C 3G8

Operator: AUCKLAND EXPLORATION LTD.
305 - 675 WEST HASTINGS ST.
VANCOUVER, B.C.
V6B 1N2

Author of Report: ERIC MACDONALD

Date Submitted: May 15, 1989

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SURFACE GEOLOGY MAP	in pocket
SOIL GEOCHEMISTRY	
Lead in ppm	in pocket
Zinc in ppm	in pocket
Silver in ppm	in pocket
Copper in ppm	in pocket

INTRODUCTION

1

- i) The Smuggler 1 and Smuggler 2 mineral claims are located 5 km due east of Salmo, B.C., at the headwaters of Aspen Creek which flows south into Sheep Creek.

Access to the property is west off of Highway 3 to the H.C. Mine and then north 6 km along the west side of Aspen Creek.

- ii) The Aspen Property consists of nine Reverted Crown Grants optioned from Extotal Resources Inc. by Auckland Exploration Ltd. Auckland Exploration Ltd. owns two modified grid claims consisting of 18 units each.

Auckland Exploration Ltd. is the operator.

The details of the claims are as follows:

<u>Claim</u>	<u>Record#</u>	<u>NTS</u>	<u>Mining Div.</u>	<u>Units</u>	<u>Expiry Dte</u>
Caroline	944	82F/3E	Nelson	R.C.G.	Feb.14/89
Silverton	944	82F/3E	Nelson	R.C.G.	Feb.14/89
Emma	948	82F/3E	Nelson	R.C.G.	Feb.14/89
Aspen	945	82F/3E	Nelson	R.C.G.	Feb.14/89
Mohawk	946	82F/3E	Nelson	R.C.G.	Feb.14/89
International	947	82F/3E	Nelson	R.C.G.	Feb.14/89
Salmo Malartic No. 2	950	82F/3E	Nelson	R.C.G.	Feb.14/89
Salmo Malartic No. 1	949	82F/3E	Nelson	R.C.G.	Feb.14/89
Salmo Malartic No. 3	951	82F/3E	Nelson	R.C.G.	Feb. 14/89
Smuggler 1	5014	82F/3E	Nelson	18	Apr.06/89
Smuggler 2	5015	82F/3E	Nelson	18	Apr.06/89

*R.C.G. - Reverted Crown Grant (1 unit)

The Aspen Property covers a syngenetic and metasomatic skarn deposit containing Ag-Pb-Zn mineralization within brecciated limestones and dolostones of the Reeves Member of the Cambrian Laib Formation. Argillaceous rocks identified by Fyles and Hewlett (1959) as belonging to the overlying Emerald Member and underlying Truman Member of the Laib Formation occur at various elevations on the property also.

iii) Summary of work reported on:

Geological mapping, rock sampling and soil sampling were carried out on an 80 meter spacing grid over an area of approximately 153,000 square meters. The 305 soil samples were analyzed for lead, zinc, silver and copper. The area covered by mapping and sampling represents the southeast quadrant of the property.

B horizon

by Kootenay Analytical Laboratories Ltd.
using standard AA method.

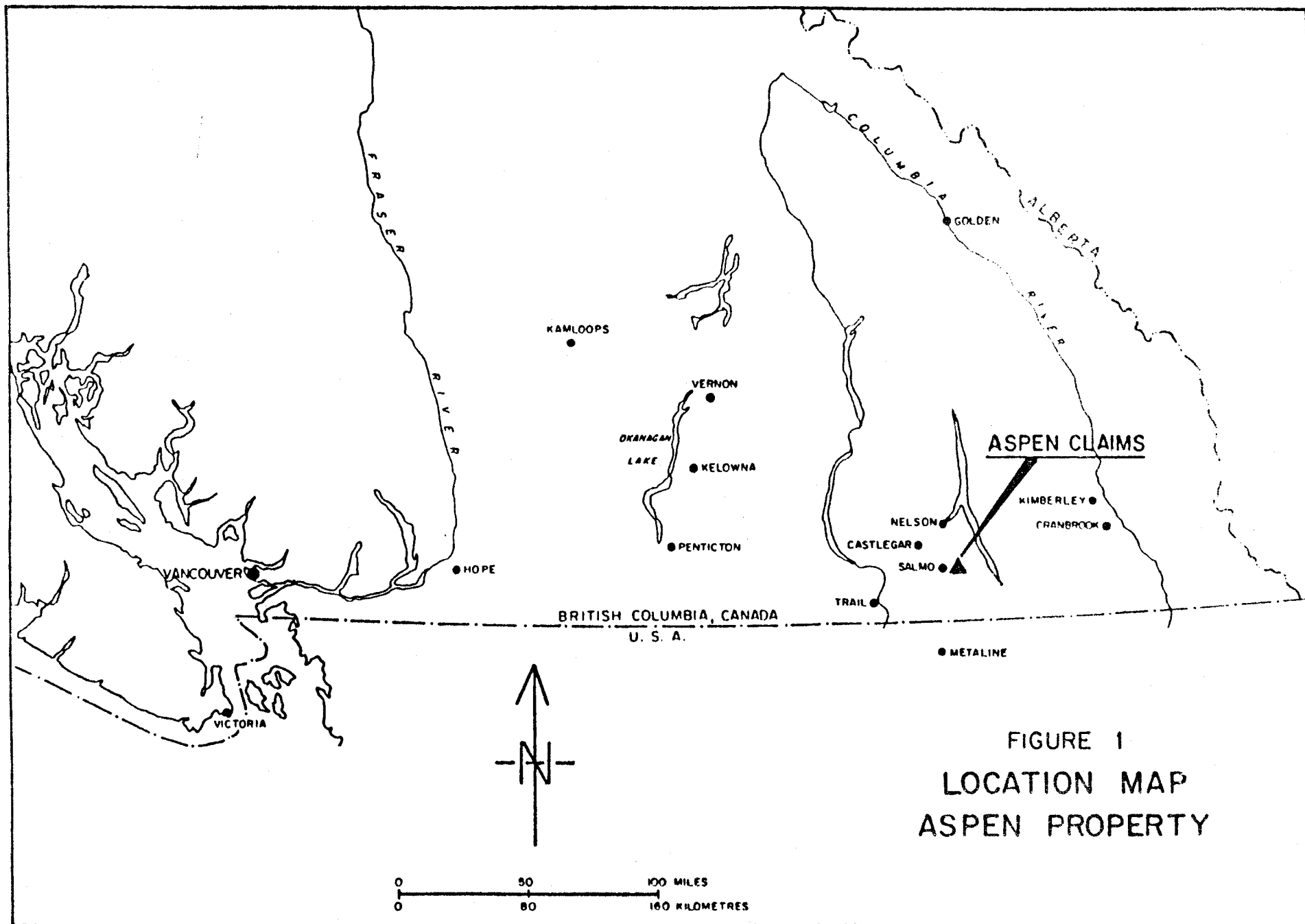
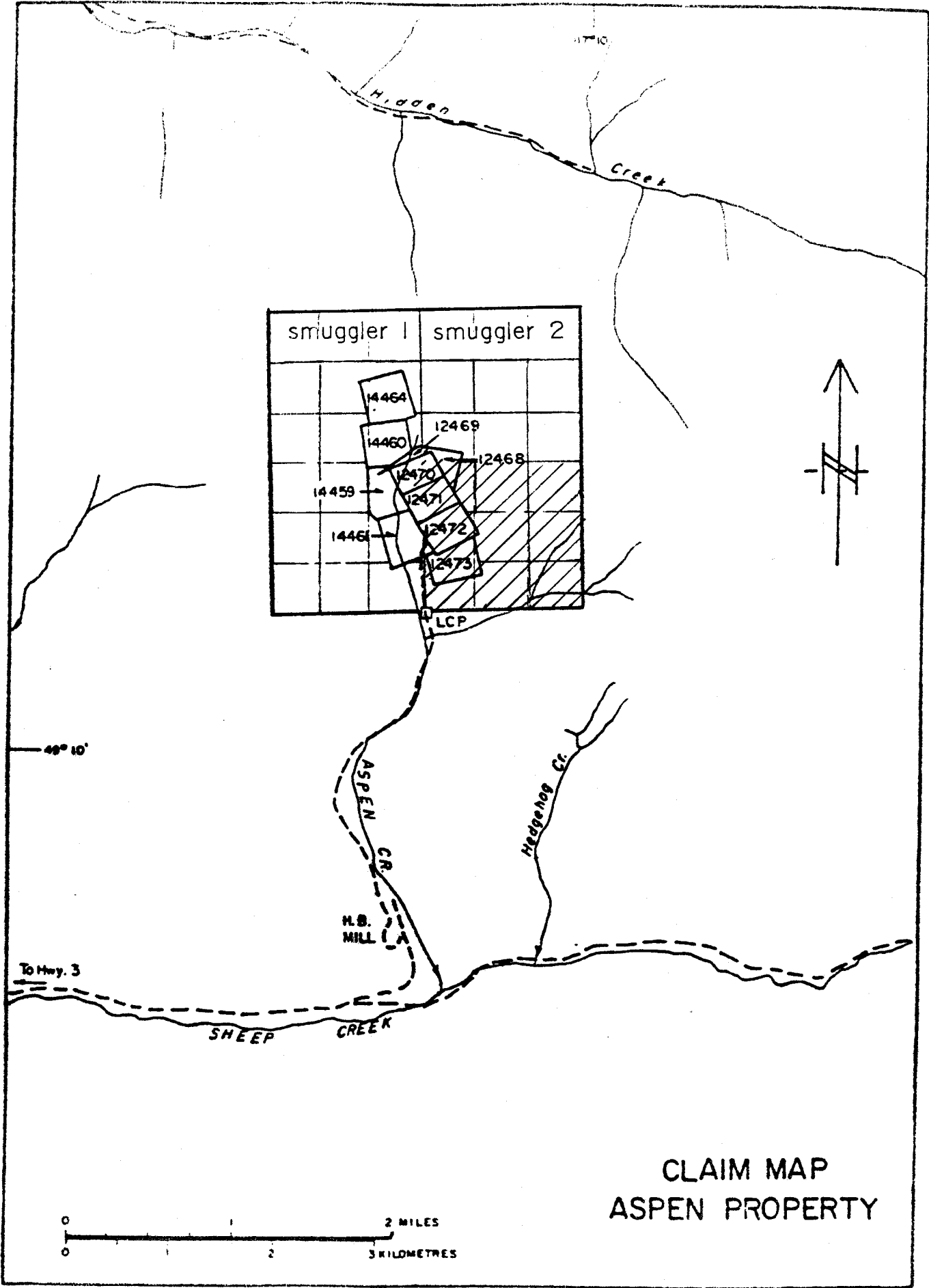


FIGURE 1
 LOCATION MAP
 ASPEN PROPERTY



DETAILED TECHNICAL DATA & INTERPRETATION

i) Purpose:

Geological mapping and sampling was extended from previous mapping to complete the southeast quadrant of the property that contains most of the known mineral occurrences.

Soil sampling was carried out at 80 meter centers to cover the southeast quadrant of the property to determine the signature if any of known mineral occurrences and in the hope of discovering yet undetected zones of significant mineralization.

ii) Results:

The known surface mineral occurrences demonstrated significant anomalous signatures in lead, zinc silver and in some cases copper. Several areas of anomalous values unrelated to known mineral occurrences were discovered with values exceeding those over known sources. The signatures are variable in regard to metal ratios with some of the latter anomalies demonstrating higher copper values.

Anomalies demonstrating higher copper values are rock type or structure, but occur over carbonates, argillites and granites.

iii) Interpretation:

The anomalous values occurred associated with different lithologies. This suggests the possibility of syngenetic, skarn and fissure vein mineralization.

iv) Conclusions:

The areal distribution, metal ratios, magnitude of values and geological association of the anomalies suggest the possibility of more than one mode of mineralization. Testing geophysical methods, by trenching and or diamond drilling is warranted.

ITEMIZED COST STATEMENT

Geological Mapping and Sampling	\$10,800.00
Assaying	2,287.50
Geological Services and Consulting	<u>3,800.00</u>
Total	\$16,887.50

CERTIFICATE

I, Eric D. MacDonald of P.O. Box 90, Balfour, B.C. V0G 1C0 hereby certify that:

- 1) I am a graduate of St. Francis Xavier University, holding a B.Sc degree in Geology, 1956.
- 2) I have practiced my profession as a geologist since graduation.
- 3) I am a member in good standing of the Geological Association of Canada.
- 4) That this report is based on work performed in 1988.
- 5) That I have no interest in the properties described herein.



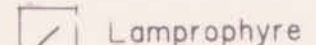

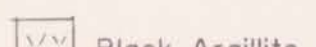
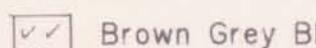
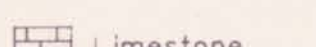
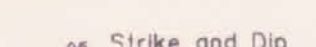
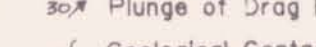
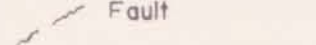
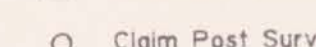
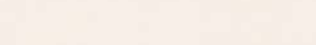
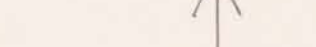
Dated in Cranbrook, B.C. this 21st day of April, 1989.

Eric D. MacDonald

Eric D. MacDonald
Geologist

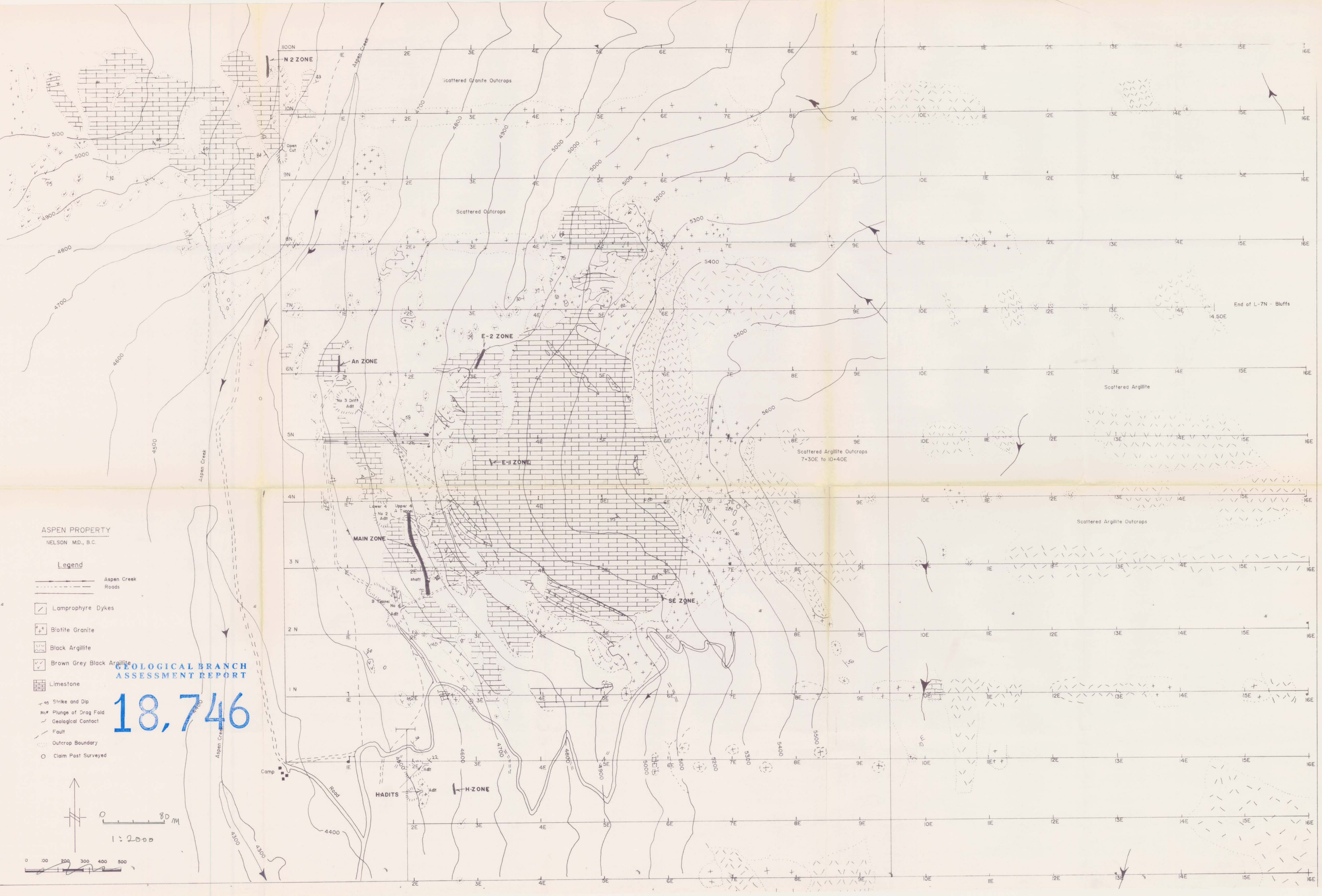
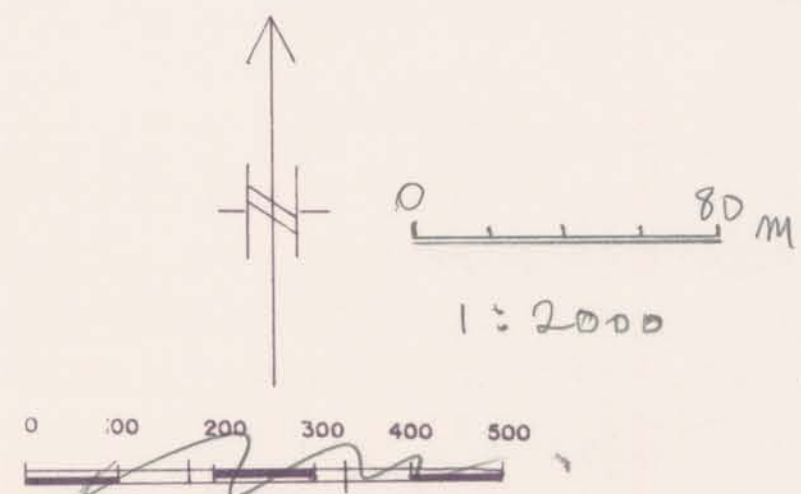
ASPEN PROPERTY
NELSON M.D., B.C.

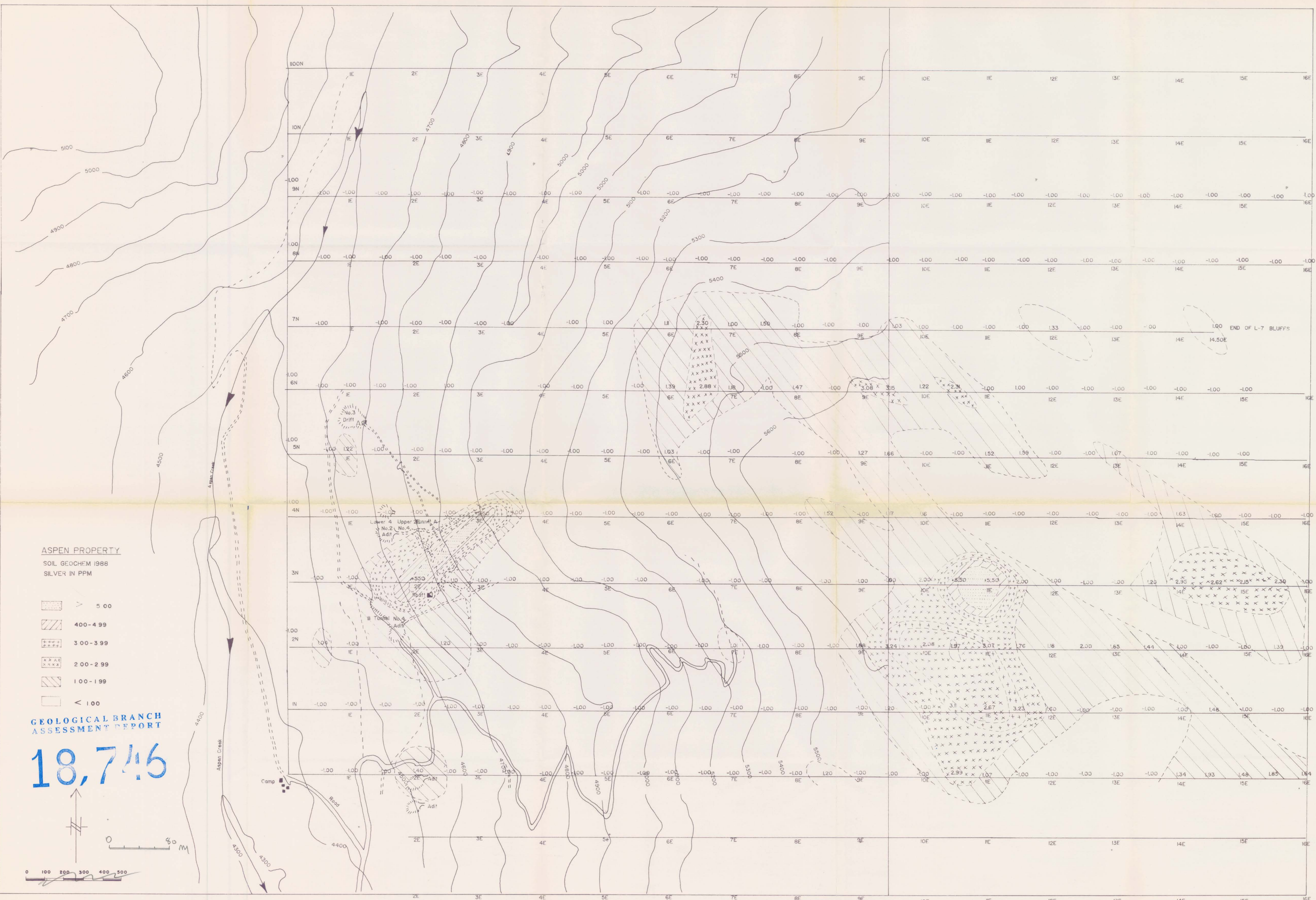
Legend

-  Aspen Creek
-  Roads
-  Lamprophyre Dykes
-  Biotite Granite
-  Black Argillite
-  Brown Grey Black Argillite
-  Limestone
-  Strike and Dip
-  Plunge of Drag Fold
-  Geological Contact
-  Fault
-  Outcrop Boundary
-  Claim Post Surveyed

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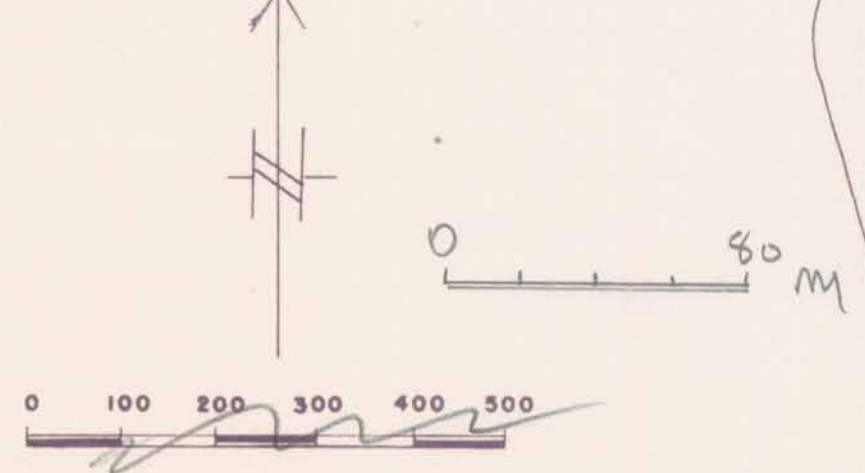


ASPEN PROPERTY
 SOIL GEOCHEM 1988
 SILVER IN PPM

- > 500
- 400-499
- 300-399
- 200-299
- 100-199
- < 100

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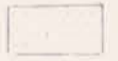





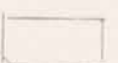
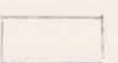
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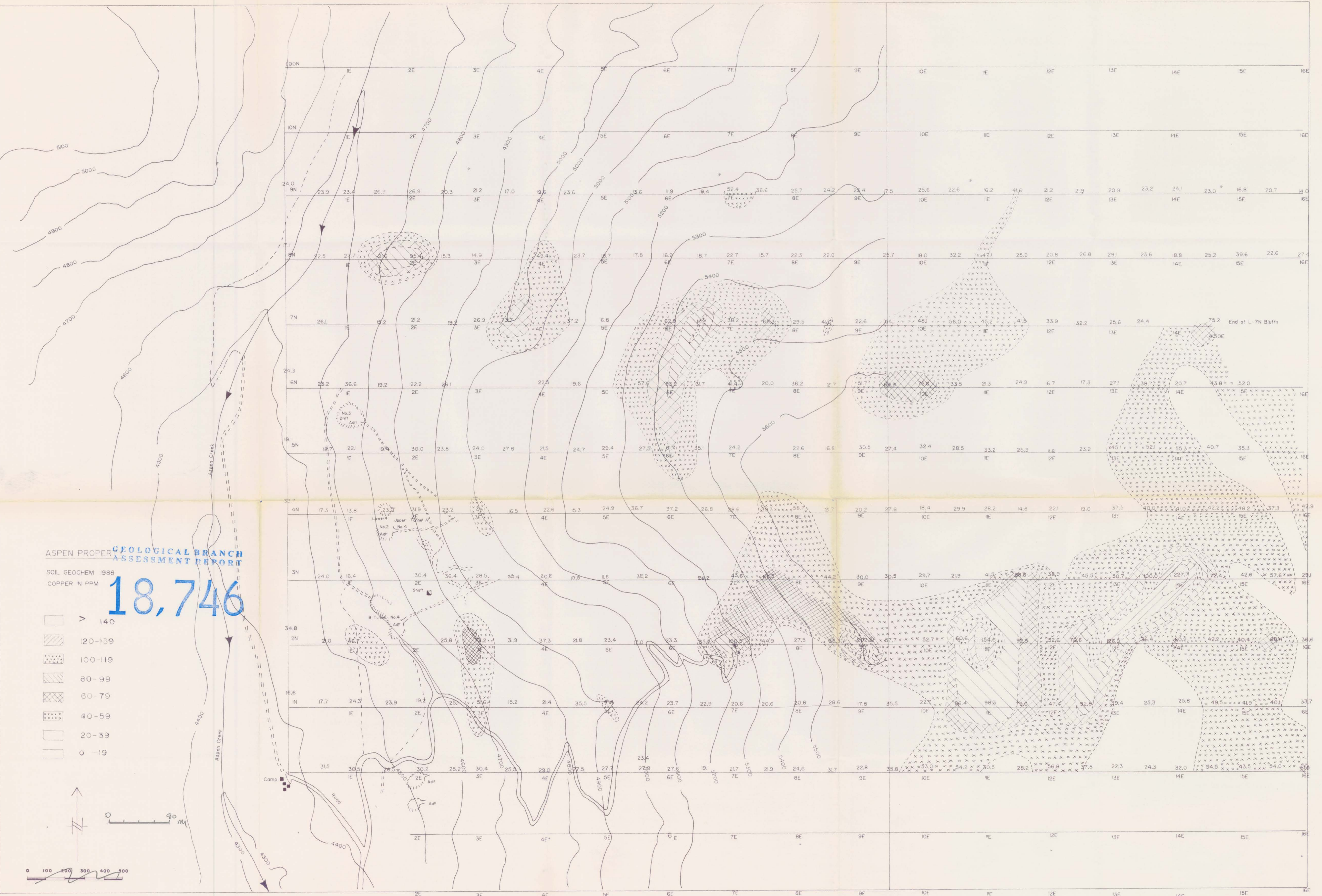
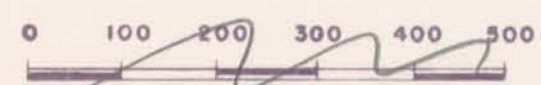
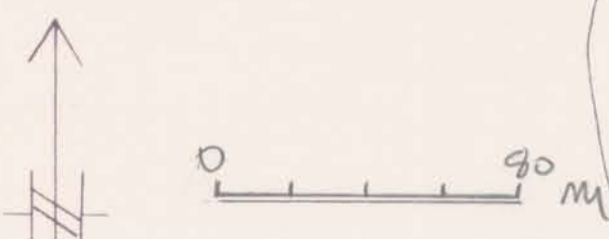


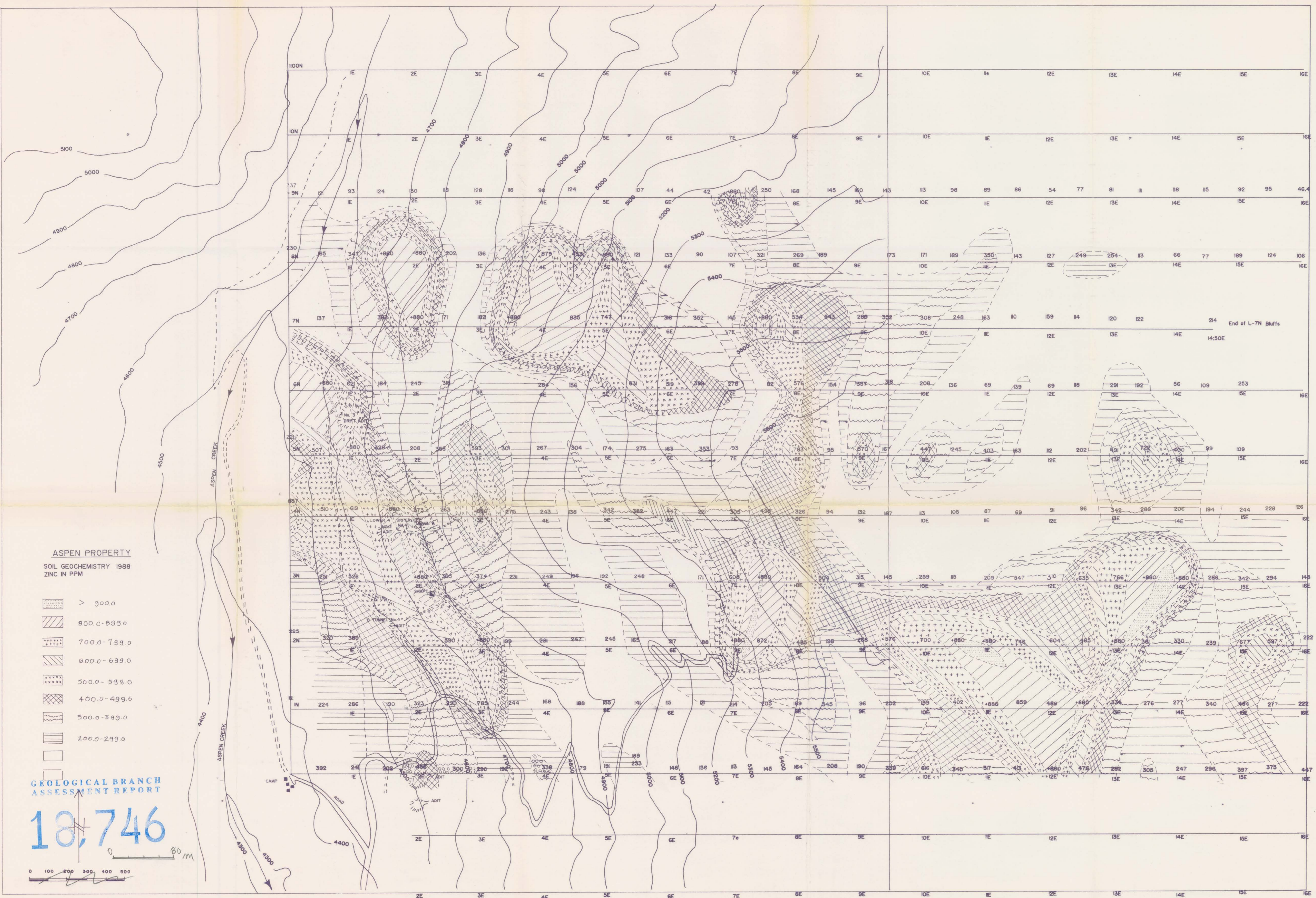
ASPEN PROPERTY GEOLOGICAL BRANCH
ASSESSMENT REPORT

SOIL GEOCHEM 1988
COPPER IN PPM

18,746

-  > 140
-  120-119
-  100-119
-  80-99
-  60-79
-  40-59
-  20-39
-  0-19



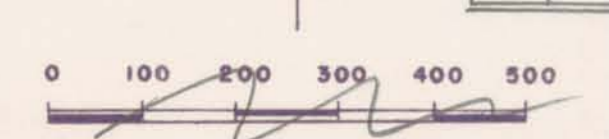


ASPEN PROPERTY
 SOIL GEOCHEMISTRY 1988
 ZINC IN PPM

- > 9000
- 800.0-899.0
- 700.0-799.0
- 600.0-699.0
- 500.0-599.0
- 400.0-499.0
- 300.0-399.0
- 200.0-299.0
- 0

GEOLOGICAL BRANCH
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80 M

End of L-7N Bluffs
 14:50E