

GEOLOGICAL MAPPING REPORT
ON CLAIMS "D", "E", AND "F"

LOCATED IN THE
OMINECA MINING DIVISION
FAWNIE NOSE AREA

LATITUDE: 53° 17'
LONGITUDE: 125° 10'

OWNER & OPERATOR

GRANGES EXPLORATION LTD.
900 - 625 HOWE STREET
VANCOUVER, B. C.
V6C 2T6

JUNE 26, 1985

G. W. ZBITNOFF, P. ENG.
(J. J. WILLIAMS)

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,805

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ENCLOSURES

GEOLOGICAL MAP CENTRE SHEET	SCALE 1:2500
GEOLOGICAL MAP NORTH SHEET	SCALE 1:2500
LOCATION PLAN	SCALE 1:50,000

CAPOOSE D, E AND F CLAIMS

INTRODUCTION

A program of geological mapping was undertaken to help delineate the rocks of interest and to try and unravel the structure of the area. The significance of the rhyolites was confirmed and it is proposed that the faulted southern block should be mapped in more detail.

CLAIMS

The majority of the work was carried out on the D and E claims. The "D" claims Record No. is 152, and consists of 18 units recorded on September 26th. The "E" claim record no. is 429, and consists of 4 units recorded on September 23rd and the "F" claim record no. is 662 which consists of 6 units and has a record date of July 4th.

LOCATION AND ACCESS

The D, E and F claims are located approximately 467 Km north, north-west of Vancouver, B.C. and 115 Km south-west of Vanderhoof, B. C. The claims lie astride the Fawnie Range centered approximately 1.5 Km south of the Fawnie Nose Mountain.

The major portion of the claims lie above timberline with the slopes dropping away steeply on the east and west sides of the claims. The top, however, is relatively flat.

Access to the claims is from Vanderhoof via the Plateau Mill's Kluskus-Ootsa Road for approximately 150 Km to the junction of the Granges Capoose Lake Road.

GEOLOGICAL SURVEY

According to G.S.C. Memoir 324, Nechako River Map Area, British Columbia, the claims are underlain by the Takla Group (Unit 2) which consists of andesite and basaltic flows, tuffs and breccia, interbedded argillite and minor limestones.

The mapping program undertaken during the period of July 4th to Sept. 4th, 1984, was aimed at providing a more detailed breakdown of the G.S.C. survey, with the hope that exploration targets could be more easily defined.

The area is dominated by a volcanic package consisting of basalts, andesites, dacites and rhyolites. The geology is fairly complex due to repeated volcanic activity, but where possible ages have been assigned to the formations.

1. The oldest rocks of the area are the basalts and andesites which are seen in the N.E. corner of the center sheet. The basalts are usually massive but can also be amygdatoidal or brecciated. The andesitic flows, and their associated tuffs and breccias, may be dark grey, green or purple and usually form massive flows. These basalts and andesites together form the Takla group of Upper Triassic Age.

2. Overlying the above, and accounting for the major portion of the area mapped, we have a second sequence of andesites, their related tuffs and breccias, rhyolite and a rhyolite dyke. The rhyolite, which is light grey and siliceous is the most common rock and typically overlies the andesite. It is most commonly found as a tuff but also occurs as a breccia and as massive cherty flows. The rhyolite dyke is a cream-coloured chalky unit occurring mostly as rubble. These units together form the Hazelton group of the Mid Jurassic.

3. The youngest rocks present are the argillite and argillaceous limestones found in the central portion. These rocks are black and well-bedded, with the limestone containing belemnite fossils. They represent a thin sedimentary sequence and probably were deposited in shallow water. They are upper Jurassic in Age.

4. Faulting in the area was late stage, as it cross-cuts all units, and follows a very general east-west trend. The fault plane is steeply dipping but the amount and type of movement cannot be determined from the map.

STRATIGRAPHY

QUATERNARY COVER: GLACIAL DRIFT & TALUS

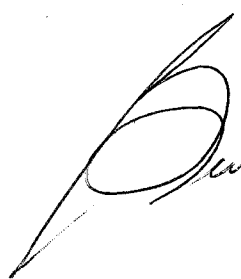
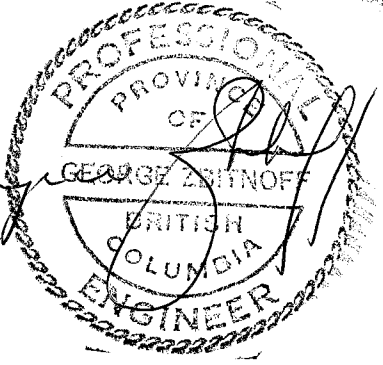
UPPER JURASSIC: MOTTLED SILTSTONE
ARGILLITE

MIDDLE AND LOWER JURASSIC:
HAZELTON GROUP: RHYOLITE
RHYOLITE DYKE
RHYODACITE
DACITE
ANDESITE

UPPER TRIASSIC:
TAKLA GROUP ANDESITE
BASALT

CONCLUSIONS AND RECOMMENDATIONS:

The mineralized areas are concentrated in the rhyolites in the centre portion of the map. It would appear that this area represents the Caldera and possibly a secondary cone. It is possible that the area was not deeply submerged as shown by the presence of shallow water sediments and poor concentration of mineralization. The mineralized rhyolites are cut by faulting to the south, and it is recommended that more detailed mapping be carried out in this area to determine what may have happened to the southern block.

The seal is circular with a double-line border. The text inside the seal reads: "PROFESSIONAL ENGINEER" at the top, "PROVINCE OF" in the middle, "GEORGE ZHITNOF" in the center, and "BRITISH COLUMBIA" at the bottom.

EXPENDITURES

SUPERVISION

R. Wright 60 days @ \$92.50 \$ 5,550.00

PERSONNEL

P. Nieweglowski 60 days @ \$65.00 3,900.00

FOOD AND ACCOMMODATION

120 days @ \$25.00 3,000.00

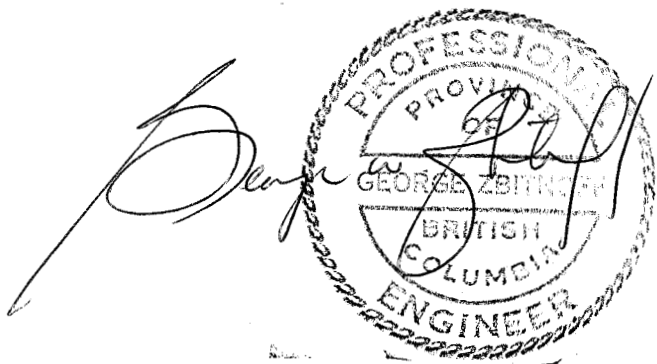
TRANSPORTATION

500.00

REPORT PREPARATION

J. J. Williams 10 days @ \$90.00 900.00

TOTAL \$13,850.00



GRANGES EXPLORATION LTD.

STATEMENT OF QUALIFICATIONS

Name: Zbitnoff, George Wm.

Profession: Geologist

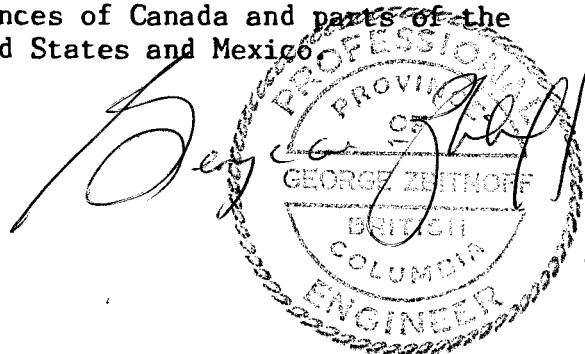
Professional Associations:

- Member of the Association of Professional Engineers of the Province of Manitoba
- Member of the Association of Professional Engineers of the Province of British Columbia since 1973.
- Member of the Canadian Institute of Mining and Metallurgy.

Experience:

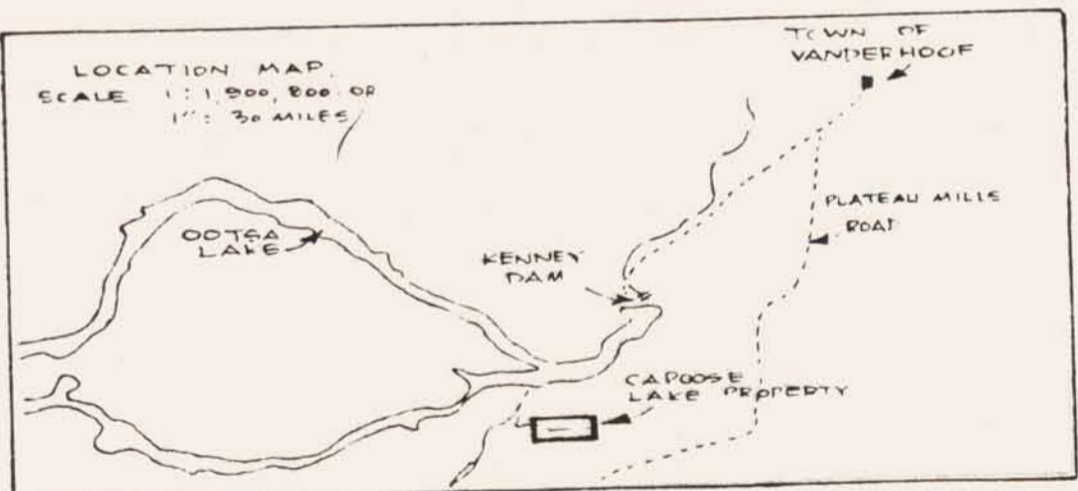
- Pre graduation experience in geology with the Department of Mineral Resources of Saskatchewan.
- Two and a half years, field geologist with Hudson Bay Exploration and Development, Central Canada.
- Six years, field and resident geologist with Noranda Exploration Ltd., Central Canada.
- Fourteen years geologist and Vice-President at Granges Exploration Ltd. Vancouver, B. C.

- Active geological experience in all provinces of Canada and parts of the United States and Mexico



GEOLOGICAL BRANCH
ASSESSMENT REPORT

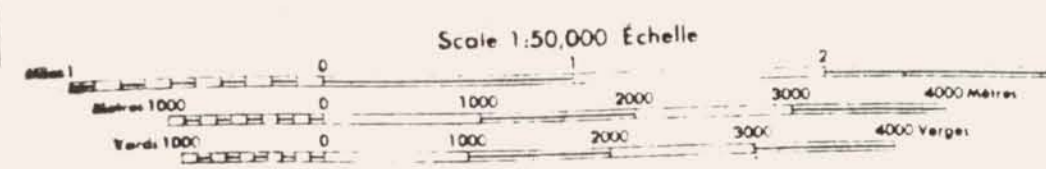
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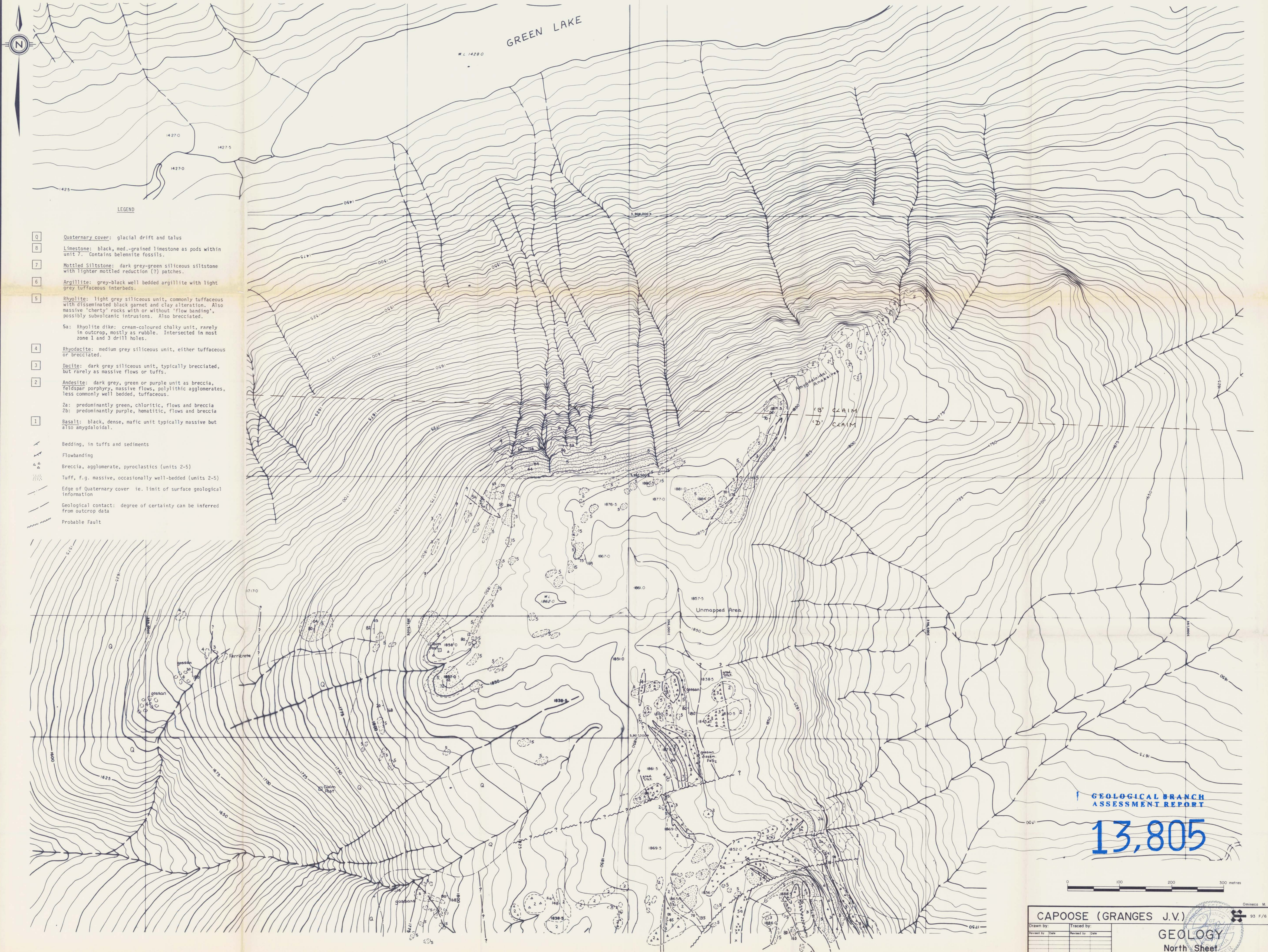


CAPOOSE LAKE PROPERTY
GRANGES EXPLORATION AKTIEBOLAG.
(CLAIMS: NED, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, S, T, NED 1, 2, 3 FR, U, V, W, X, Y, Z, NED 1 FR, 2 FR, 3 FR)
(22 CLAIMS, 25 UNITS, 5 FR)

Completed Tractor Roads ———
New road construction 1984
Camp Site —⊗—
Drillim Areas —○—

NOV. 1977
APR. 1978
APRIL 1978
OCT. 1978





GREEN LAKE

W.L. 1428.0

LEGEND

- Q Quaternary cover: glacial drift and talus
- 8 Limestone: black, med.-grained limestone as pods within unit 7. Contains belemnite fossils.
- 7 Mottled Siltstone: dark grey-green siliceous siltstone with lighter mottled reduction (?) patches.
- 6 Argillite: grey-black well bedded argillite with light grey tuffaceous interbeds.
- 5 Rhyolite: light grey siliceous unit, commonly tuffaceous with disseminated black garnet and clay alteration. Also massive 'cherty' rocks with or without 'flow banding', possibly subvolcanic intrusions. Also brecciated.
- 5a Rhyolite dike: cream-coloured chalky unit, rarely in outcrop, mostly as rubble. Intersected in most zone 1 and 3 drill holes.
- 4 Rhyodacite: medium grey siliceous unit, either tuffaceous or brecciated.
- 3 Dacite: dark grey siliceous unit, typically brecciated, but rarely as massive flows or tuffs.
- 2 Andesite: dark grey, green or purple unit as breccia, feldspar porphyry, massive flows, polyolithic agglomerates, less commonly well bedded, tuffaceous.
- 2a predominantly green, chloritic, flows and breccia
- 2b predominantly purple, hematitic, flows and breccia
- 1 Basalt: black, dense, mafic unit typically massive but also amygdaloidal.
- X Bedding, in tuffs and sediments
- Flowbanding
- Breccia, agglomerate, pyroclastics (units 2-5)
- Tuff, f.g. massive, occasionally well-bedded (units 2-5)
- Edge of Quaternary cover i.e. limit of surface geological information
- Geological contact: degree of certainty can be inferred from outcrop data
- Probable Fault

AMBELORIDA
ANAKIHEK
(B) CLAIM
(D) CLAIM

Unmapped Area

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,805



CAPOOSE (GRANGES J.V.)

Drawn by:	Traced by:
Revised by:	Revised by:

GEOLOGY
North Sheet

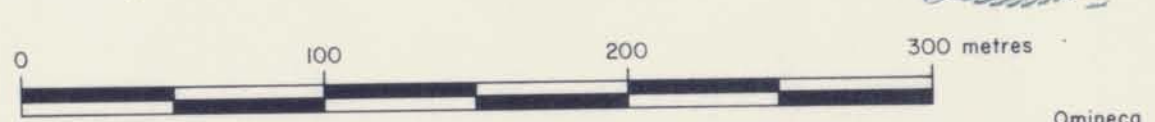
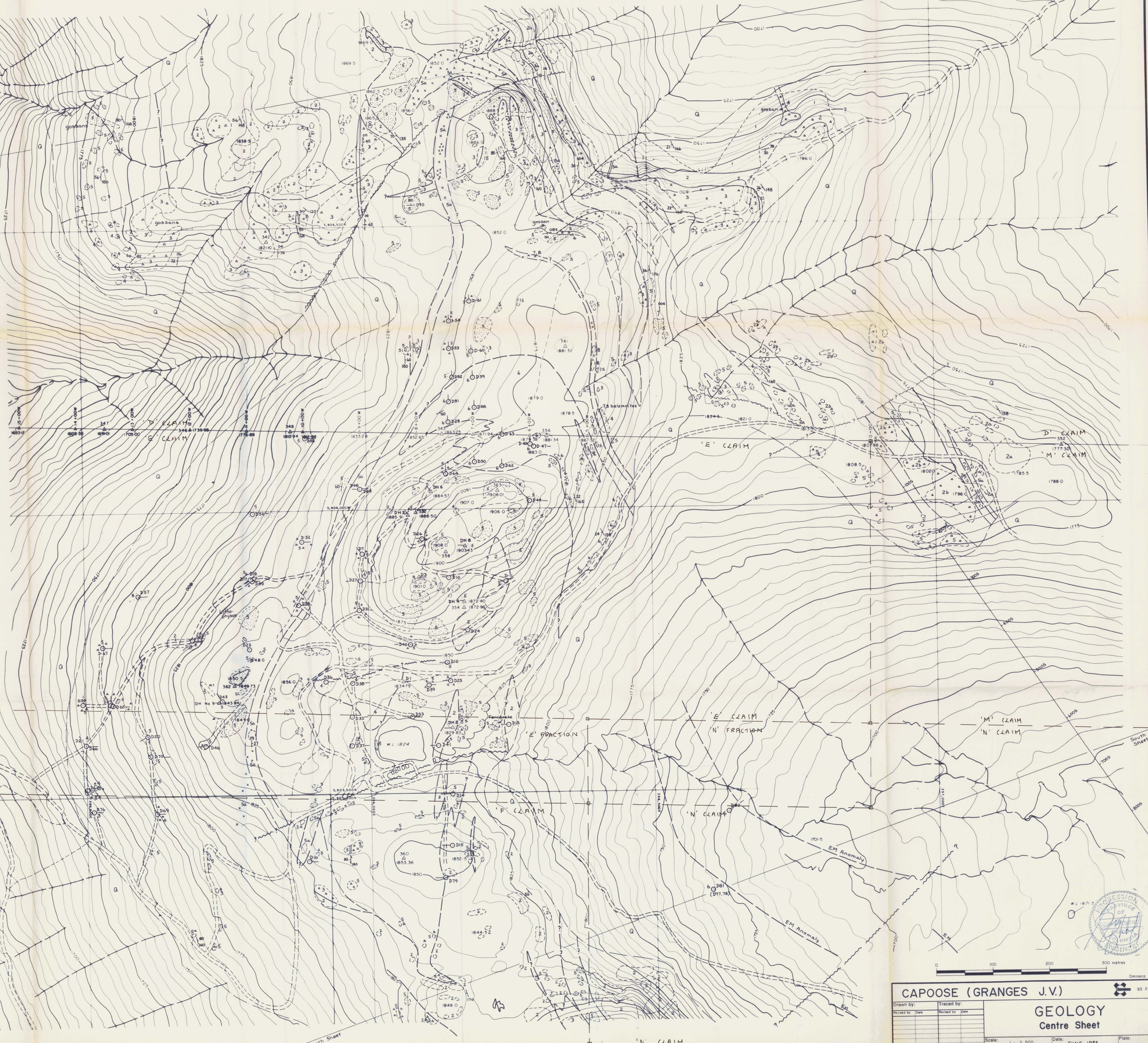
Scale 1:2,500 Date: JUNE, 1985 Plate



North Sheet

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 - 2a: predominantly green, chloritic, flows and breccia
 - 2b: predominantly purple, hematitic, flows and breccia
 - 1 Basalt: black, dense, mafic unit typically massive but also amygdaloidal.
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 - Breccia, agglomerate, pyroclastics (units 2-5)
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 - Edge of Quaternary cover i.e. limit of surface geological information
 - Geological contact: degree of certainty can be inferred from outcrop data
 - Probable Fault



CAPOOSE (GRANGES J.V.)

Drawn by: _____ Traced by: _____

Checked by: _____ Received by: _____

GEOLOGY
Centre Sheet

Scale: 1 : 2,500 Date: JUNE, 1955 Plate: _____

Form 210-1686

SOUTH SHEET

SOUTH SHEET