

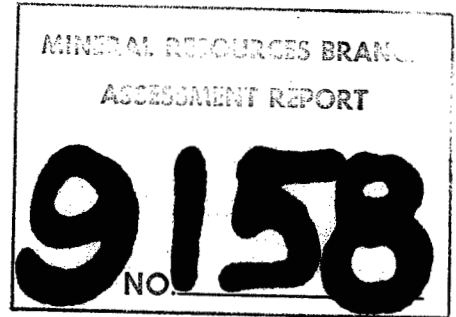
181-#349-#9158

GEOLOGICAL REPORT

on the
TWIST GROUP

Consisting of

| | | | | | |
|------|---|------------------|--------|---|-------|
| KENO | 1 | CLAIM RECORD NO. | 638(4) | 6 | UNITS |
| KENO | 2 | CLAIM | 639(4) | 4 | UNITS |
| KENO | 3 | CLAIM | 640(4) | 6 | UNITS |
| KENO | 4 | CLAIM | 641(4) | 4 | UNITS |



Situated in the
CLINTON MINING DIVISION

N.T.S. 92N/11E
LATITUDE: 51° 36' N
LONGITUDE: 125° 02' W

Approximately
46 KMS SOUTH WEST OF
TATLA LAKE, B. C.

Owners and Operators

JOHN MIRKO
MEL de QUADROS

Author

MEL de QUADROS,
Geologist
North Vancouver, B. C.
15 May 1981

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INTRODUCTION

The Twist Group consisting of four claims (20 units) was staked to overlie the former PW Claims of Cities Services Minerals. They overlie a prominent gossan zone on a steep and deeply gullied south-facing slope facing the southern end of Twist Lake, at the source of Mosely Creek. The geochemical survey of largely fine talus samples taken by Cities indicated a small area of very anomalous Cu-Mo values over an altered biotite-feldspar porphyry (Salazar and Murton 1975, Assesment Report No. 5495). The purpose of the 1980 work was simply to examine and evaluate the PW Prospect, to see if the property warranted further work during 1981. The following is a report on the work done in a brief exploration programme during the summer of 1980.

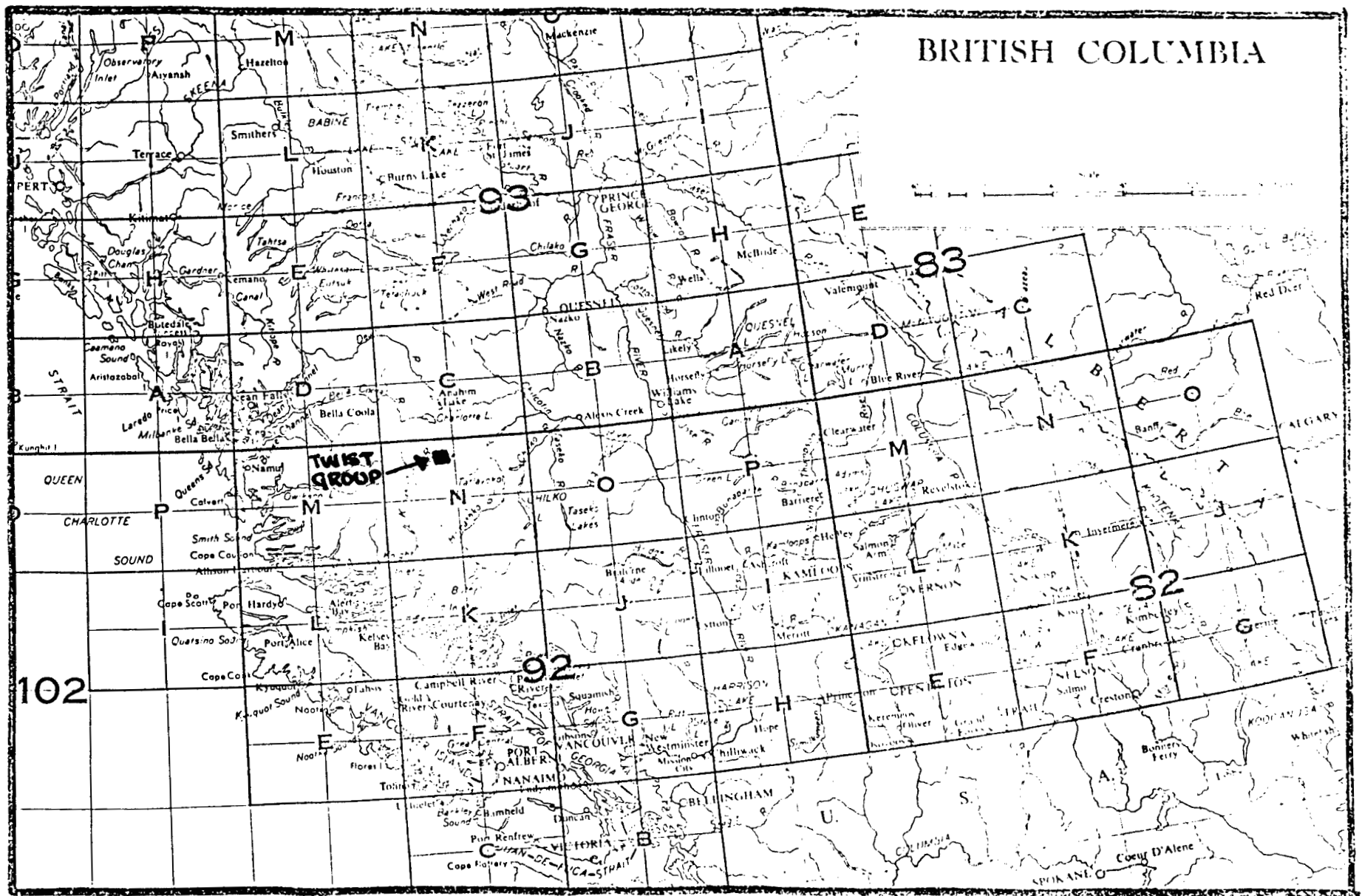


Fig. 1: LOCATION MAP

LOCATION AND ACCESS

The Twist Group is located on the north bank of Twist Creek, on a steep ridge overlooking Twist Lake. It is approximately 46 kilometres southwest of Tatla Lake. A dirt road joins the Twist Lake to Tatla Lake, but the last 3 kilometres may be a private road.

Access to the property may be had by helicopter from the Lower Mainland centres like Vancouver, Whistler or Pemberton; the time from Pemberton being about 1-1/2 hours by jet 206B or 500D. The more usual route is by road through Williams Lake and Alexis Creek to Tatla Lake and thence by White Saddle Helicopters (20 min.) to the property.

The basin of Homathko River to Twist Creek are a Hydro reserve and it is possible that the lower reaches of Twist Creek, Twist Lake and Moseley Creek may be flooded in the future.

PROPERTY

The Twist Group consist of 4 Claims as follows:

KENO 1 Record No. 538(4) 6 units

KENO 2 Record No. 639(4) 4 units

KENO 3 Record No. 640(4) 6 units

KENO 4 Record No. 641(4) 4 units

They were staked by M. de Quadros on 3rd April 1980 and recorded soon thereafter.

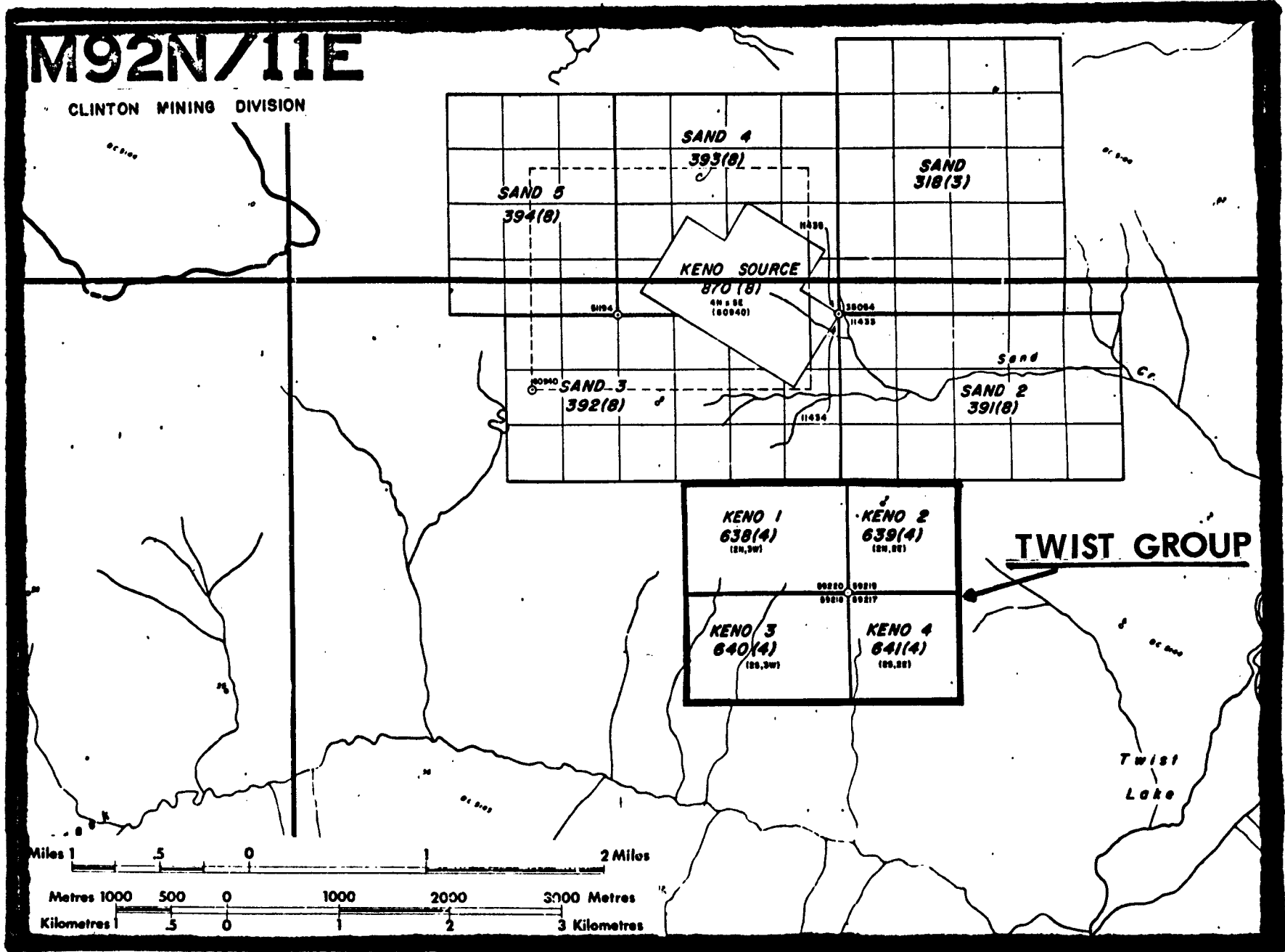


FIG 2: CLAIM MAP - KENO CLAIMS

PROPERTY GEOLOGY

The area around Twist Lake is underlain by several phases of acid and intermediate plutonic rocks of the Coast Crystalline Belt. These rocks are dated from date Cretaceous to Tertiary and appear to have a complex intrusive and tectonic history. Three phases have been noted on the property. These are:

1. A gneissose biotite-felspar granite or granodiorite.

It is a medium-grained leucocratic rock, generally a pale green to pinkish white rock with numerous feldspar phenocrysts. The mafic minerals have been chloritised and minor epidote-chlorite clots may be seen as joints and fractures. The units tend to break into large talus blocks, and weather to a dark brownish grey colour. It appears to be the oldest unit.

2. A massive biotite-granite, with a medium to fine-grained sugary texture, ranging in colour from light grey to off-white. The biotite generally occurs as fine specks, with about 10-15% in larger books. Magnetite is often visible with the mafic minerals. Alteration is generally minimal, becoming greater near the quartz vein, where it tends to be kaolinised and chloritised.

3. A dyke-like body of a very coarse and highly fractured biotite granite forms the core of the assemblage. It appears to be a stock within the others. When not altered, it is a grey to pink coarse rock, with strong rusty stained fractures. . . . Most of the feldspars appear kaolinised and the large biotite crystals appear secondary, often being brownish-black.

Numerous quartz veins occur within this unit, ranging from 10 cms to 90 cms across, generally trending N 340°. The alteration of the biotite granite appears related to the quartz veins which trend towards the massive gossan on the claim Keno Source north of the property. The whole altered and mineralized zone at the Twist Group appears to be a satellite plug to the main porphyry zone at the Keno Source.

Numerous dykes occur and are described by Salazar and Murton (1975). The quartz dykes, quartz monzonites and the aplites all appear late and seem to originate from the Keno Source porphyry. A few cross-cutting dykes were seen but these do not appear related to the mineralization.

MINERALIZATION

The area underlain by the last complex phase of biotite-granite and dykes is covered by an impressive gossan, ranging in colour from a dark brownish-red limonitic to a brighter yellow ferrimolybdenite stains. Examination of the stained zone and of the quartz vein shows a great deal of molybdenite and minor pyrite in these zones. The molybdenite occurs as sheets of variable widths filling fractures, hairline fissures and also as clots and vugs with quartz in the biotite-granite. The most spectacular molybdenite occur in quartz veins and aplites.

Chalcopyrite was identified in a few pieces of float but it does not appear to be of economic interest at present. It was found mainly as coatings on fractures.

The rocks showed scheelite under U.V. Light and an assay on a quartz vein gave an assay of 0.09% WO_3 . It would appear that tungsten may be a valuable by-product at this prospect.

CONCLUSIONS

The brief geological exploration of the Twist Group confirmed that the area was well-mineralized with significant Mo and W occurring in a system of quartz veins intrusive into a highly altered biotite-granite plug.

Though it appears that the system may be related to the main porphyry zone at Keno Source Plain, the visual impact of the molybdenite in the quartz veins is strong enough to suggest that the claims may be economically viable on their own.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Mel de Quadros', with a horizontal line extending to the right.

MEL de QUADROS,
Geologist

STATEMENT OF COSTS

The property was visited three times

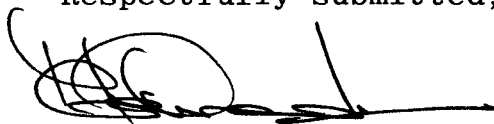
- a. July 23rd 1980 with John Mirko
- b. July 25th 1980
- c. August 23rd-24th 1980 with John Mirko

A total of five days was spent on the property.

Access from the property from either Whistler or Pemberton.

| | |
|---|--------------------------|
| A. Helicopter: (one trip only - August 23rd-24th 1980) | \$2,230.00 |
| B. Equipment and Supplies (food, gas, truck use) | 250.00 |
| C. Wages | |
| A. M. de Quadros, geologist 5 days @ \$160.00 | 800.00 |
| John Mirko, assistant 5 days @ \$110.00 | 550.00 |
| D. Report Preparation, typing, duplicating | <u>210.00</u> |
| TOTAL | <u><u>\$4,040.00</u></u> |

Respectfully submitted,



A. M. de QUADROS,

15th May 1980

STATEMENTS OF QUALIFICATIONS

I, Antonio M. De Quadros, certify that:

a) I hold the following degrees in Geology:

| | | |
|--------------|-----------------------|------|
| B. Sc. Hons. | University of London | 1964 |
| M. S. | U.C.L.A. | 1968 |
| Ph. D. | University of Nairobi | 1972 |

b) I have worked on geological projects since 1959, including:

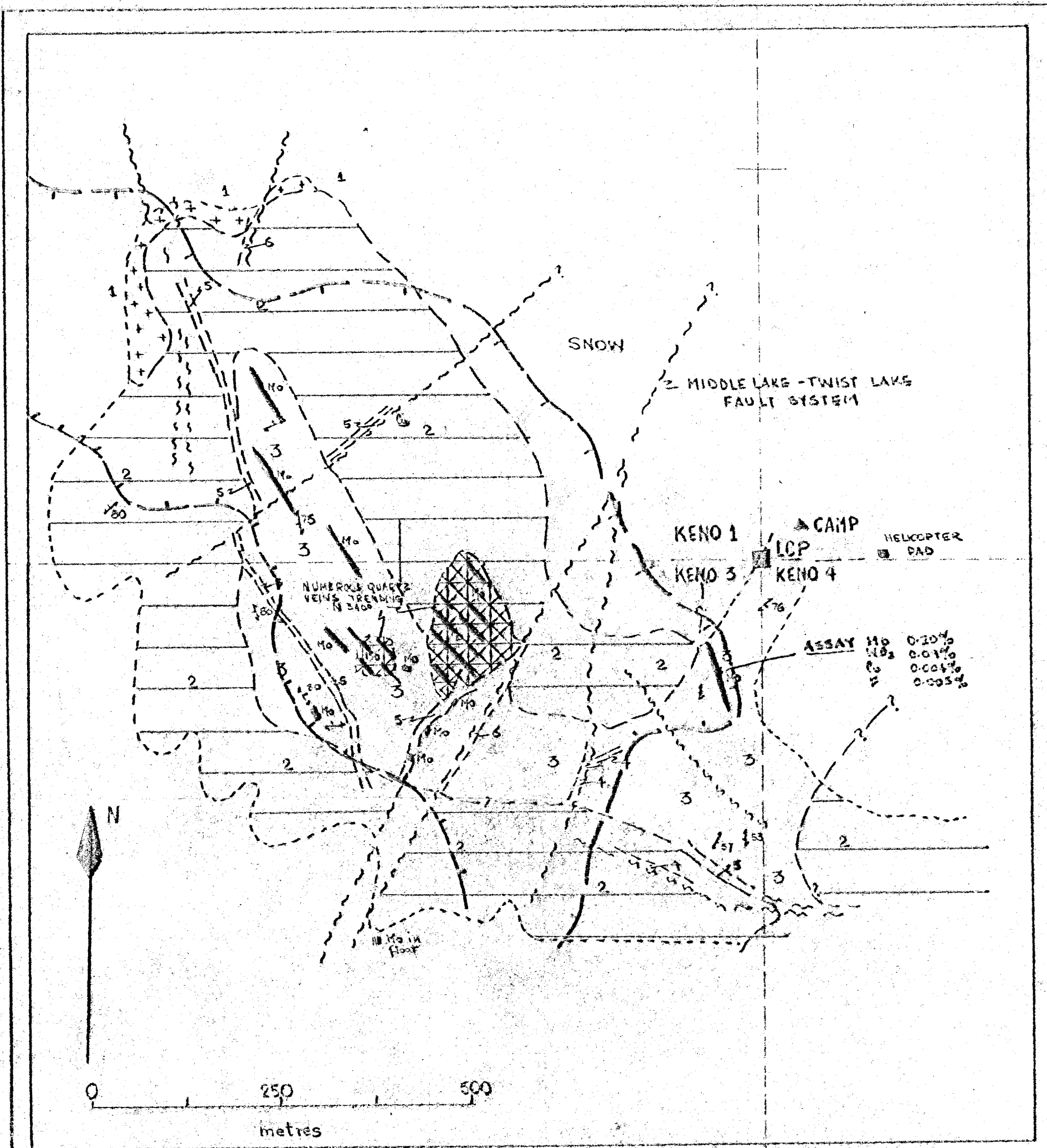
| | | |
|------|--------------|--|
| i | 1964-1965 | Geologist, Geological Survey of Tanzania |
| ii | 1968-1972 | Lecturer in Geology, University of Nairobi, Kenya |
| iii | 1973 | Geologist, Agilis Exploration Services, Vancouver, B. C. |
| iv | 1974 | Geologist, Union Carbide Exploration, Vancouver, B. C. |
| v | 1974-1975 | Geologist, Dolmage Campbell & Associates |
| vi | 1975-1976 | Geologist, Kerr Addison Mines |
| vii | 1976-1977 | Geologist, Dolmage Campbell & Associates |
| viii | 1977-1978 | Project Geologist, Chinook Construction & Engineering Ltd. |
| ix | 1978-Present | Self-employed geologist and prospector |

c) I am

- i) a Fellow of the Geological Association of Canada
- ii) an Engineer-in-training of the Association of Professional Engineers of B. C.



A. M. de QUADROS
Geologist



- BIOTITE-FELDSPAR PORPHYRY
HATCHED WHERE HIGHLY ALTERED
AND COATED WITH LIMONITE AND FERRIMOLYBDITE
- BIOTITE GRANITE
- GNEISSOSE GRANITE
- QUARTZ VEINS
- VEINS 6 ANDESITE
- 5 QUARTZ-EYED MONZONITE
- 4 MONZONITE
- Mo VISIBLE MoS₂ AND/OR FERRIMOLYBDITE
- FOLIATION
- VISIBLE CONTACTS
- OUTCROP
- SHEAR/FAULT
- GOSSAN

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

9158
NO

Fig 3: Geology
KENO 1-4
TWIST LAKE
PROSPECT