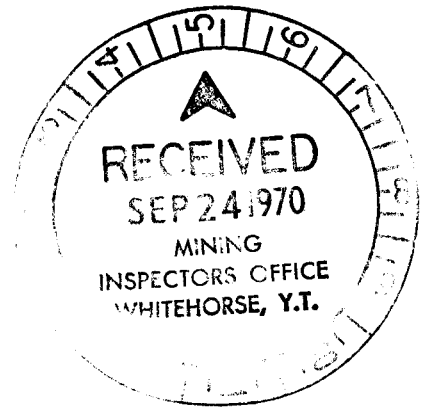
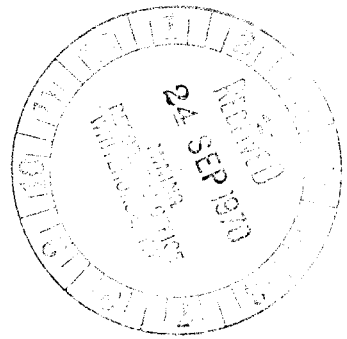


NEW DAVIES PETROLEUMS LTD.

KOPAN DEVELOPMENTS LTD.

GEOPHYSICAL - GEOCHEMICAL SURVEY

CARMACKS AREA, YUKON



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$4936

D. B. Craig
District Geologist or
District Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.

[Signature]
Commissioner of Yukon Territory

TABLE OF CONTENTS

Summary	
Property, Location, Access	p. 1-2
Geology	2
Economic Considerations	2-3
Geophysical Survey	
Field Procedure	2-4
Results	4
Geochemical Survey	
Field Procedure	4
Laboratory Procedure	4-5
Results of Survey	5
Conclusions and Recommendations	5-6
Folder: Map of Geophysical-Geochemical findings	

SUMMARY:

New Davies Petroleums Ltd. - Kopan Developments Ltd. recently completed a joint magnetic - geochemical soil sampling program over the 1,200 acre BRAN group of claims, Carmacks Area, Yukon Territory.

Although the property is shown as being underlain by favourable granite porphyry, the identical rock formation underlying Casino Silver Mines holdings adjacent to the north where large tonnages of copper-molybdenite are currently being drill - indicated, no anomalous conditions indicating drill targets were outlined by the survey.

The subject New Davies - Kopan property has been assessed on a preliminary basis for copper concentrations.

It is recommended that well before lapse of claim group, a re-appraisal of the results of work done on the BRAN group be made in light of results of work being done in the region particularly on the adjacent property of Casino Silver Mines Ltd. This study may point to areas on the New Davies - Kopan property warranting further investigation.



G. L. Kirwan

July 20, 1970.

New Davies Petroleums Ltd.,
Kopan Developments Ltd.,
10th Floor,
366 Bay Street,
Toronto 110, Ontario.

Gentlemen:

This report covers results of a program consisting of magnetic coverage and geochemical soil sampling with copper determinations performed over your property located in the Carmacks Area, Yukon Territory.

PROPERTY, LOCATION, ACCESS:

The New Davies - Kopan holdings, situated 190 miles northwest of Whitehorse, Yukon Territories, in the northwest quadrant of National Topographic Series claim sheet 115-J-10, consists of a single block of 24 claims referred to as the BRAN group totalling some 1200 acres numbered 1-24 inclusive with respective Grant Nos. Y39239 to Y39262 inclusive. The claim group is located in the Whitehorse Mining Division and is regulated under the jurisdiction of the Quartz Mining Act. Publications indicate that the subject property is contiguous

on the southwest with holdings of Casino Silver Mines Ltd.

The best means of access is by fixed wing aircraft from Whitehorse to the nearby landing strip of Casino Silver Mines Ltd., thence by chartered helicopter onto the New Davies claim group.

GEOLOGY:

Government geological coverage of the region and of the property is sparse. G.S.C. Map No. 1702 indicates the subject property and that of adjacent Casino Silver Mines Ltd. are both underlain by Cretaceous or Jurassic granitic type rocks with associated porphyritic varieties.

Copper-molybdenite concentrations on the Casino property are located in a quartz-monzonite porphyry intruding the regional Klotassin porphyry. Indications are the assemblage extends onto the New Davies property.

The property, at mean elevation 3000 ft. A.S.L., is characterized by hilly topography and scrub bush growth. Water is available for diamond drilling.

ECONOMIC CONSIDERATIONS:

The area of the subject property is one that is

currently receiving explorational emphasis in the search for copper-molybdenite concentrations with the property of Casino Silver Mines Ltd. as focal. A large tonnage, low-grade deposit in the 300 million ton range is being indicated through diamond drilling on the latter firm's Patton Hill block. Brameda Resources Ltd. supplied initial financing for the exploration project with Tech Corporation as well as Brameda financing the current "fill-in" holes. Results appear most encouraging.

Mineralization is in quartz-monzonite porphyry, similar to rock type underlying the New Davies - Kopan holdings tying onto the Casino property to the south of the Patton Hill Area.

GEOPHYSICAL SURVEY:

Field Procedure: Control was established through north - south linecutting, blazed, picketed, and flagged, on a grid of 400 ft. x 100 ft. tied into an east - west base control line established about mid location in the 24 claim block.

A Sharpe M.F.-1 Fluxgate magnetometer was employed to measure the vertical component of the earth's magnetic field in gammas. Base stations for determining diurnal were established at 600 ft. intervals along the baseline. Recordings were taken each 100 ft.

Enclosure system was employed where instrument operator

commences recordings at the baseline and proceeds along a given crossline returning to original baseline starting point along adjacent crossline.

Approximately 1160 magnetic stations were established in the 22 mile survey.

Results: Through inspection, magnetic background is in the order of 700 gammas.

The area of the survey is magnetically flat, there being no recorded magnetic highs or lows. Results may indicate the area of the property to be underlain by a single homogeneous type rock, probably porphyritic granites, host rock for copper-molybdenite regionally.

GEOCHEMICAL SURVEY:

Field Procedure: Control was established by means of grid employed for geophysical survey.

Employing normal soil auger equipment, samples of soil were removed from the "B" horizon immediately below the topmost or humus horizon each 100 ft. along grid.

Laboratory Procedure: All samples were dried than passed through 80 mesh nylon screen to eliminate possible humus contamination.

Half gram samples were then analysed by hot nitric and hydrochloric acid extraction then subject to atomic absorption methods at the Bondar-Clegg Laboratory Ltd., Vancouver, for copper content which is expressed in parts per million (PPM).

Results of Survey: General base level of Copper throughout the soil in the area surveyed is 20 PPM.

No areas of copper buildup were recorded over the BRAN group of claims.

CONCLUSIONS AND RECOMMENDATIONS:

New Davies Petroleums Ltd. - Kopan Developments Ltd. recently completed a joint magnetic - geochemical soil sampling program over the 1,200 acre BRAN group of claims, Carmacks Area, Yukon Territory.

Although the property is shown as being underlain by favourable granite porphyry, the identical rock formation underlying Casino Silver Mines holdings adjacent to the north where large tonnages of copper-molybdenite are currently being drill - indicated, no anomalous conditions indicating drill targets were outlined by the survey.

The subject New Davies - Kopan property has been assessed on a preliminary basis for copper concentrations.

It is recommended that well before lapse of claim group, a re-appraisal of the results of work done on the BRAN group be made in light of results of work being done in the region particularly on the adjacent property of Casino Silver Mines Ltd. This study may point to areas on the New Davies -- Kopan property warranting further investigation.

Respectfully Submitted,



G. L. Kirwan, B.Sc.

Vancouver, British Columbia

July 20, 1970.

CERTIFICATE

I, GERALD L. KIRWAN of the cities of Toronto and Vancouver, certify as follows:

1. THAT I am a Geologist with offices at Ste. 205 - 160 Bay Street, Toronto, and Ste. 214 - 475 Howe Street, Vancouver, B.C.
2. THAT I have been graduated from Carleton University, B.Sc., 1957, and that I have practised my profession continuously.
3. THAT I am a Fellow of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.
4. THAT I have no interest direct or indirect in the property of New Davies Petroleums Ltd. or Kopan Developments Ltd., nor do I beneficially own directly or indirectly any security of the Company or affiliates thereof.
5. THAT the accompanying report has been prepared by myself and is based upon study of pertinent government reports and maps and supervision of program herein noted.
6. THIS report herein may be used in the prospectus of the Company and amendments thereto.

DATED at the City of Vancouver, in the Province of British Columbia, this 20th day of July, 1970.



G. L. Kirwan

NAMES AND ADDRESSES OF PERSONS EMPLOYED IN THE SUBJECT SURVEY

Mr. A. Clark, Field coordinator, 647 Andover Place, West Vancouver,
British Columbia

Mr. M.V. Currie, Linecutting, Magnetometer, Soil Sampling;
Gen. Del., Tehinie Trailer Court, Whitehorse, Yukon

Mr. L. Foster, Linecutting, Magnetometer, Soil Sampling,
508 Main St., Box 18, Whitehorse, Yukon

Mr. G.L. Kirwan, Supervisor, 647 Andover Place, West Vancouver,
British Columbia

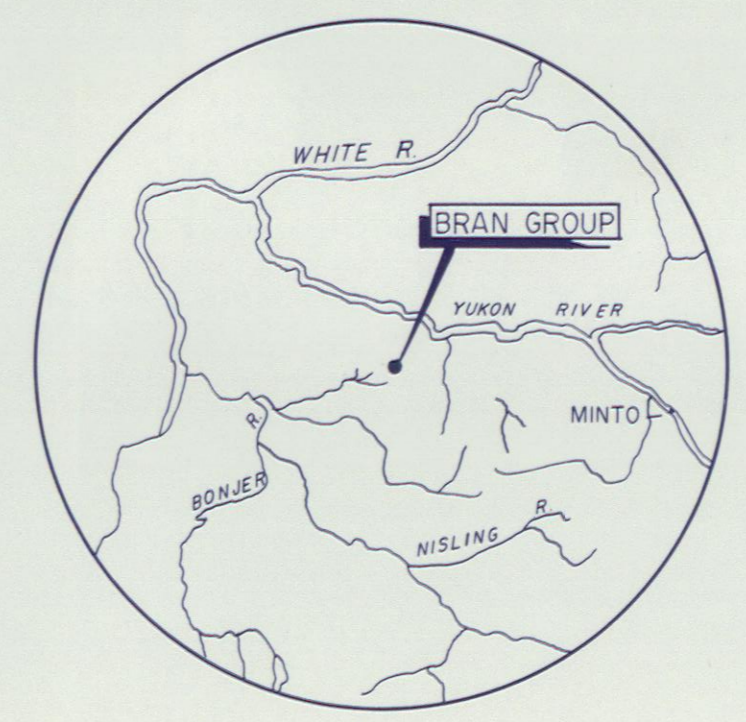
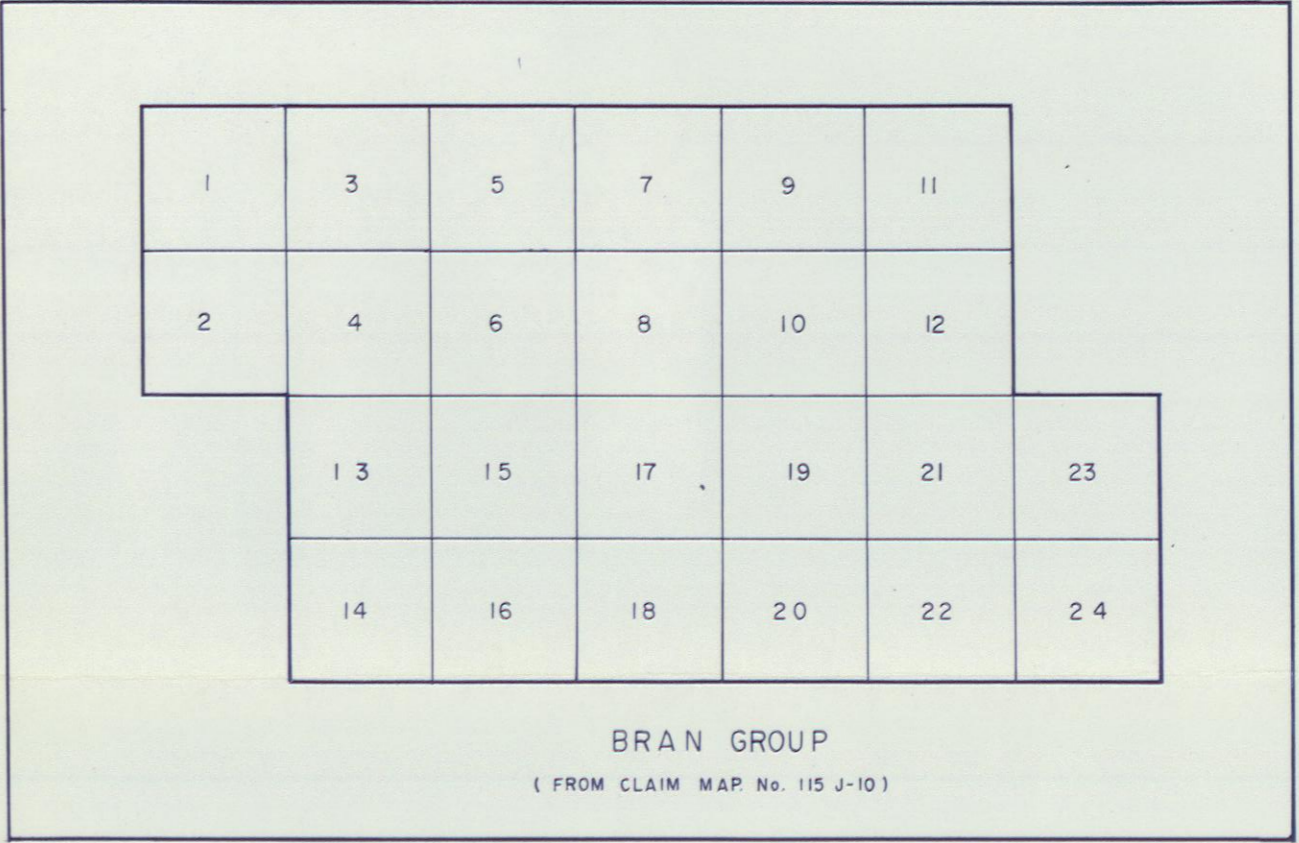
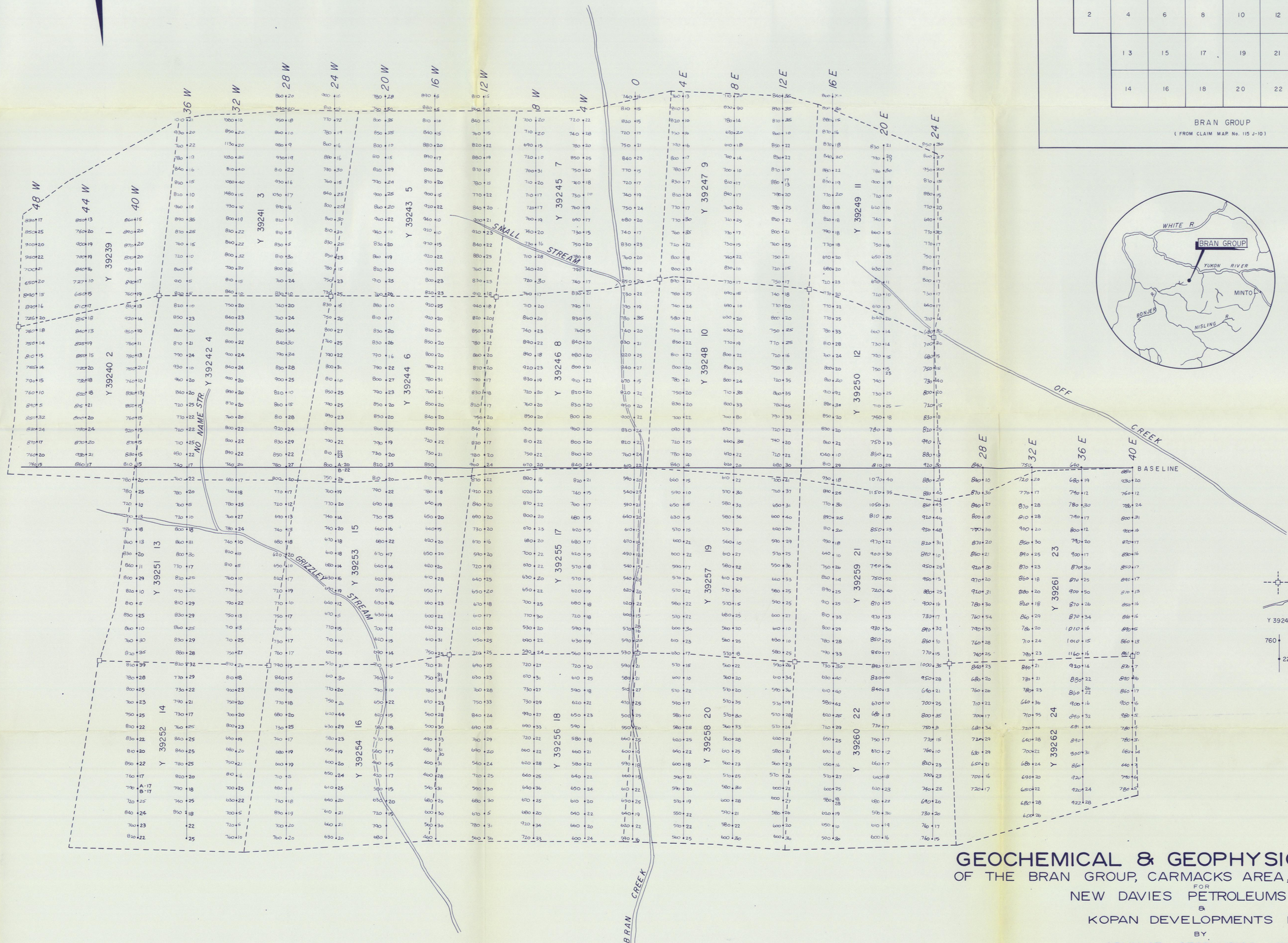
Mrs. G.L. Kirwan, Typing-Data Coordination, 647 Andover Place,
West Vancouver, British Columbia.

Mr. H. Cummings, Drafting, Ste. 5-821 West Pender St., Vancouver,
British Columbia

Bondar-Clegg Ltd., Assay Determinations, 1500 Pemberton St.,
North Vancouver, British Columbia

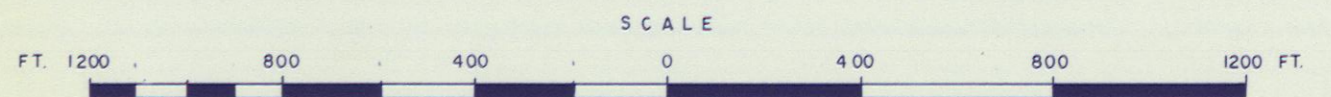


36 N
32 N
28 N
24 N
20 N
16 N
12 N
8 N
4 N
0
4 S
8 S
12 S
16 S
20 S
24 S
28 S
32 S
36 S



- INDEX**
- CLAIM POST IN CENTRE WITH CLAIM LINES
 - DENOTES CREEK OR STREAM
 - CLAIM NUMBER
 - MAGNETOMETER RECORDINGS IN GAMMAS VERTICAL COMPONENT OF EARTH'S MAGNETIC FIELD
 - GEOCHEMICAL SOIL SAMPLES, COPPER IN PARTS PER MILLION (HOT EXTRACTION)

GEOCHEMICAL & GEOPHYSICAL SURVEY
 OF THE BRAN GROUP, CARMACKS AREA, YUKON TERRITORY
 FOR
 NEW DAVIES PETROLEUMS LTD.
 BY
 KOPAN DEVELOPMENTS LTD.
 ADVANCE GEOPHYSICS LTD.
 TORONTO VANCOUVER



Handwritten signature and date: J. J. [unclear] July 1960