

REPORT ON A

GEOCHEMICAL SURVEY

OF

THE KIRK GROUP,

WHITEHORSE MINING DIVISION

GEOLOGICAL SURVEY
NOV 1968
Resident Geologist
Whitehorse, Y. T.

AGILIS EXPLORATION SERVICES LTD.

JUNE 29, 1968

This report has been examined by
the Geological Evaluation Unit.
Approved as to technical worth by:

D. G. Fiedler
RESIDENT GEOLOGIST

Approved as to cost in the amount
of: \$ 2273.97

R. E. Radler
RESIDENT MINING ENGINEER

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

[Signature]
COMMISSIONER OF YUKON

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Maps

Scale

Index Map
 Reconnaissance Geochemical Survey
 Detail Geochemical Survey

1 inch = 20 miles
 1 inch = 500 feet
 1 inch = 200 feet



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REPORT ON A
GEOCHEMICAL SURVEY
OF
THE KIRK GROUP,
WHITEHORSE MINING DIVISION, Y.T.

INTRODUCTION:

The Kirk Group consists of 15 claims situated immediately east of Kirkland Creek, 70 miles in a N70°W direction from Whitehorse. The claims were staked following preliminary prospecting in the area of an aeromagnetic anomaly. Early in the summer of 1967 reconnaissance dip needle and geochemical surveys were carried out over much of the claims area. Later, a detailed geochemical survey was carried out over an anomalous area located during the earlier survey.

LOCATION AND ACCESS:

The claims lie 70 miles north 70° east of Whitehorse, extending east from Kirkland Creek. Coordinates are 61° 32½' north latitude, 136° 26' west longitude.

Access during the past season was by helicopter operating out of Whitehorse.

CLAIMS:

The property consists of the following 15 contiguous mineral claims situated in the Whitehorse Mining District, Y. T.

Kirk 1 - 15 Record No.'s Y 18910 - 24

GEOLOGY:

The claims lie along the eastern flank of the Coast Intrusions, where volcanics and sediments of Palaeozoic and/or Mesozoic Age are in contact with these intrusives.

Overburden is extensive and very little outcrop was noted within the claim group. Andesite was noted near the western edge and in the southeastern portion of the claims, and is believed to underlie most of the claim group. The andesite is mainly dark green, fine-grained with variable amounts of magnetite. A medium grained granodiorite also occurs near the western edge of the group.

Considerable outcrop is found in a small westerly flowing tributary to Kirkland Creek, immediately north of the Kirk claims. Here, andesitic volcanic rocks are in contact with strongly sheared and altered granite lying to the east.

Minor amounts of chalcopyrite were noted in andesites near the western edge of the property, and together with malachite in volcanics to the north.

GEOCHEMICAL SURVEY:

Field Procedure:

For the initial reconnaissance survey claim

lines were used as base lines and samples collected at 300 foot intervals on lines varying from 300 - 500 feet apart. Cross-lines were run by pace and compass and samples taken with a pick. An area equivalent to approximately 8 claims was sampled in this manner.

Samples from this survey were tested in the field using the dithizone method for total heavy metals, and arbitrary values are assigned to anomalous samples.

A more detailed survey was later carried out over approximately 5 line-miles in the anomalous area. Samples were collected at 100 foot intervals on lines spaced either 200 or 400 feet apart. At this time samples were taken with an auger, permitting better samples to be taken below the humous layer, although the survey was still hampered in places by permafrost. All lines were run by chain and compass and sample locations marked.

Samples were sent to Vancouver and tested for total copper content by hot acid extraction by T.S.L. Laboratories Ltd. In this case copper values are reported in parts per million (ppm).

Due to the cost of access to the area by helicopter the reconnaissance survey was carried out between the period of staking and recording.

RESULTS OF SURVEY:

The reconnaissance survey indicated two anomalous zones, one trending southeast and the other northeast, joined at their eastern ends. The former extends for approximately 3500 feet, varying from 100 - 700 feet in width. The latter, varying up to approximately 500 feet in width extends for a distance of 2000 feet.

Testing for total copper in the more detailed survey showed background in the area to be low, ranging between 10 and 20 ppm copper, with few samples containing greater than 30 ppm. A weakly anomalous zone with a high of 52 ppm copper occurs on Kirk 4, where an area twice background measures approximately 700 by 100 feet. This coincides in general with a swampy section.

A second narrow, weakly anomalous area occurs intermittently for 1300 feet in the southern portion of Kirk 13.

CONCLUSIONS:

The main anomalous area can probably be attributed to swampy conditions rather than to conditions in the underlying bedrock. Although no outcrop occurs within the other anomalous areas, the readings of 2 - 3 times background can probably be attributed to weak copper mineralization scattered throughout much of the andesites in the region.

Respectfully Submitted,

R. H. D. Philp, P. Eng.
AGILIS EXPLORATION SERVICES LTD.

TIME AND COST DISTRIBUTION

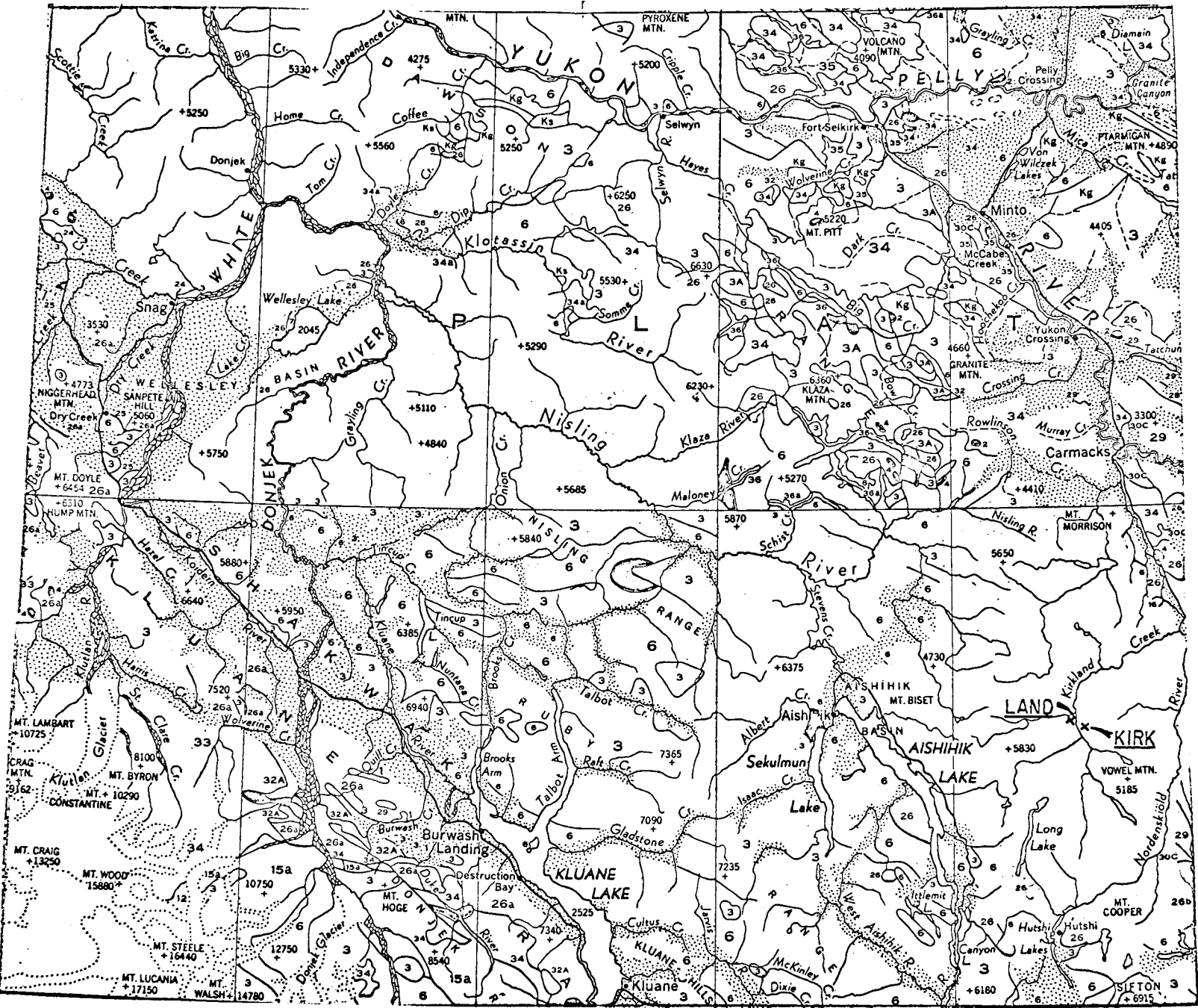
Reconnaissance Surveys - Kirk and Land Groups
(June 20 - July 4, 1967)

Personnel - D. Reinke 15 days @ \$27.77/day	\$409.05
C. Nelson 15 days @ \$27.77/day	409.05
Helicopter - Coast Range Airways	831.00
Camp costs, groceries, etc. \$7.50/man/day	<u>225.00</u>
	<u>\$1874.10</u>

Detailed surveys - Kirk and Land Groups
(Sept. 15 - 25, 1967)

Personnel - R. Philp - Sept. 15 - 25 incl. 10 days @ \$100.00/day	\$1000.00
C. Nelson - Sept. 15-25 incl. 11 days @ \$27.77/day	299.97
Helicopter costs	809.00
Camp costs, groceries, supplies \$7.50/man/day	<u>165.00</u>
	<u>\$2273.97</u>
Total costs	<u>\$4148.07</u>

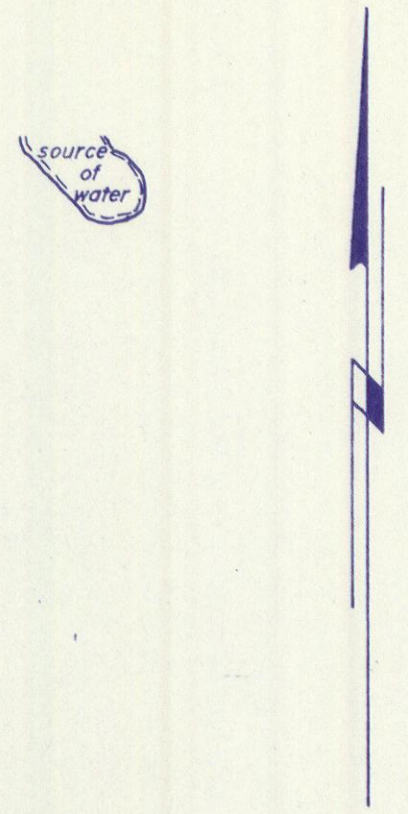
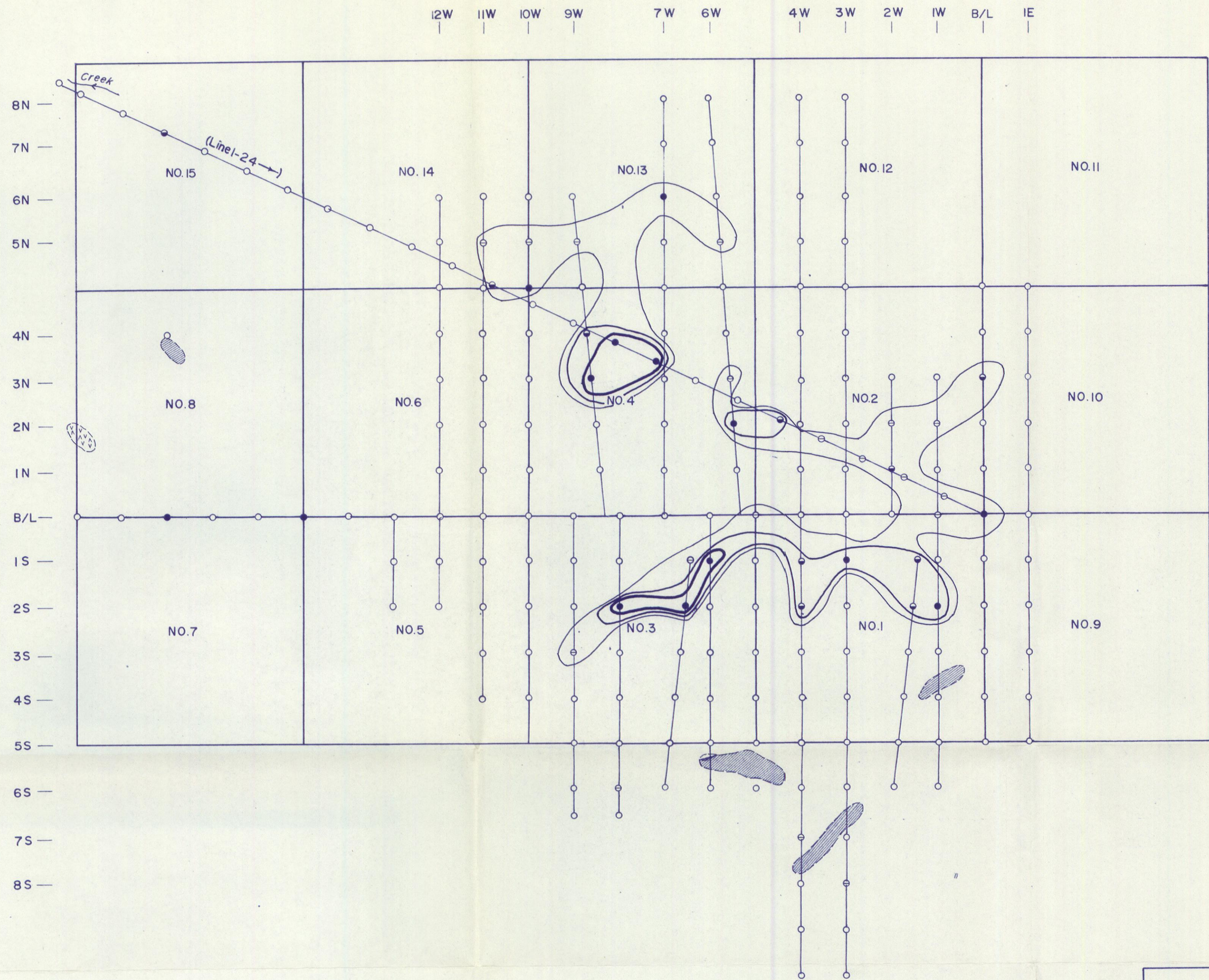
Surveys carried out on two groups concurrently
and costs to be distributed equally between them.



Index Map

KIRK & LAND GROUPS

1" = 20 miles

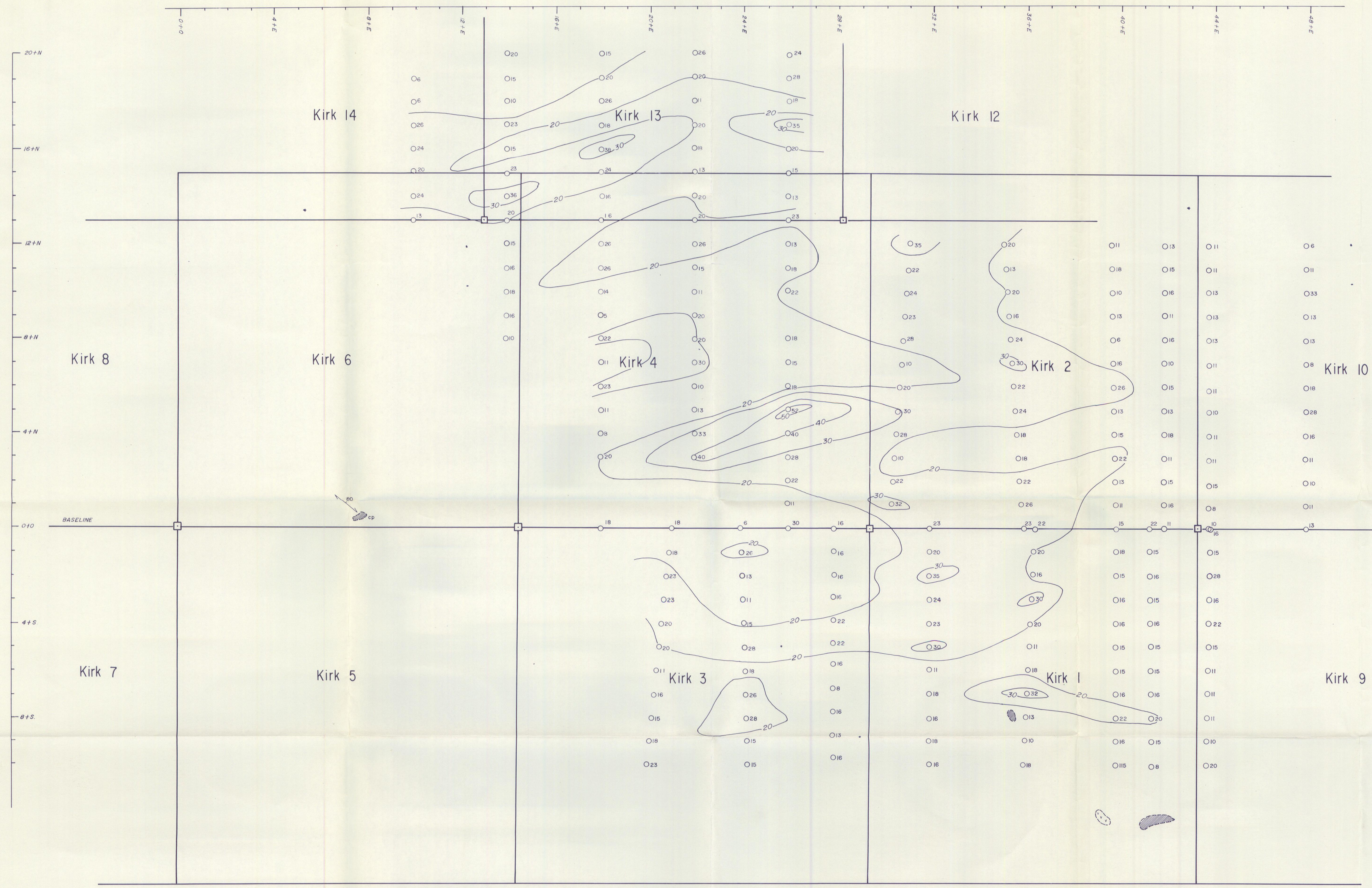


LEGEND

- SOIL SAMPLES
- Nil
- ⊖ Low
- Medium
- High
- Soil Anomaly
- ▨ Andesite
- ▨ Granite

AGILIS EXPLORATION SERVICES LTD.	
AISHIHK SYNDICATE	
KIRK CLAIM GROUP	
GEOCHEMICAL SURVEY	
DRAWN : K. K.	SCALE : 1" = 500'
CHECKED :	DATE : OCTOBER, 1967

N.B. Contours related to T.H.M. values.
 Sample tested in field for T.H.M. by DITHIZONE METHOD.



Legend

- Andesite
- Tuff
- Shearing
- Chalcopyrite
- Geochemical contour
- Copper values (ppm)

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AISHIHK SYNDICATE
KIRK CLAIM GROUP
DETAIL GEOCHEMICAL SURVEY

DRAWN : K. K.	SCALE : 1" = 200'
CHECKED :	DATE : JANUARY, 1968