

4660

KENNCO EXPLORATIONS, (WESTERN) LIMITED

REPORT

ON

MAGNETOMETER SURVEY

NUP No.'s 1, 2, 3 & 4 Groups
(NUP Mineral Claims 33-40, 42, 61-68, 123-126)

Situated 15 miles west of Turnagain Lake,
Liard Mining Division,
British Columbia

Latitude 58°18'N; Longitude 129°35'W

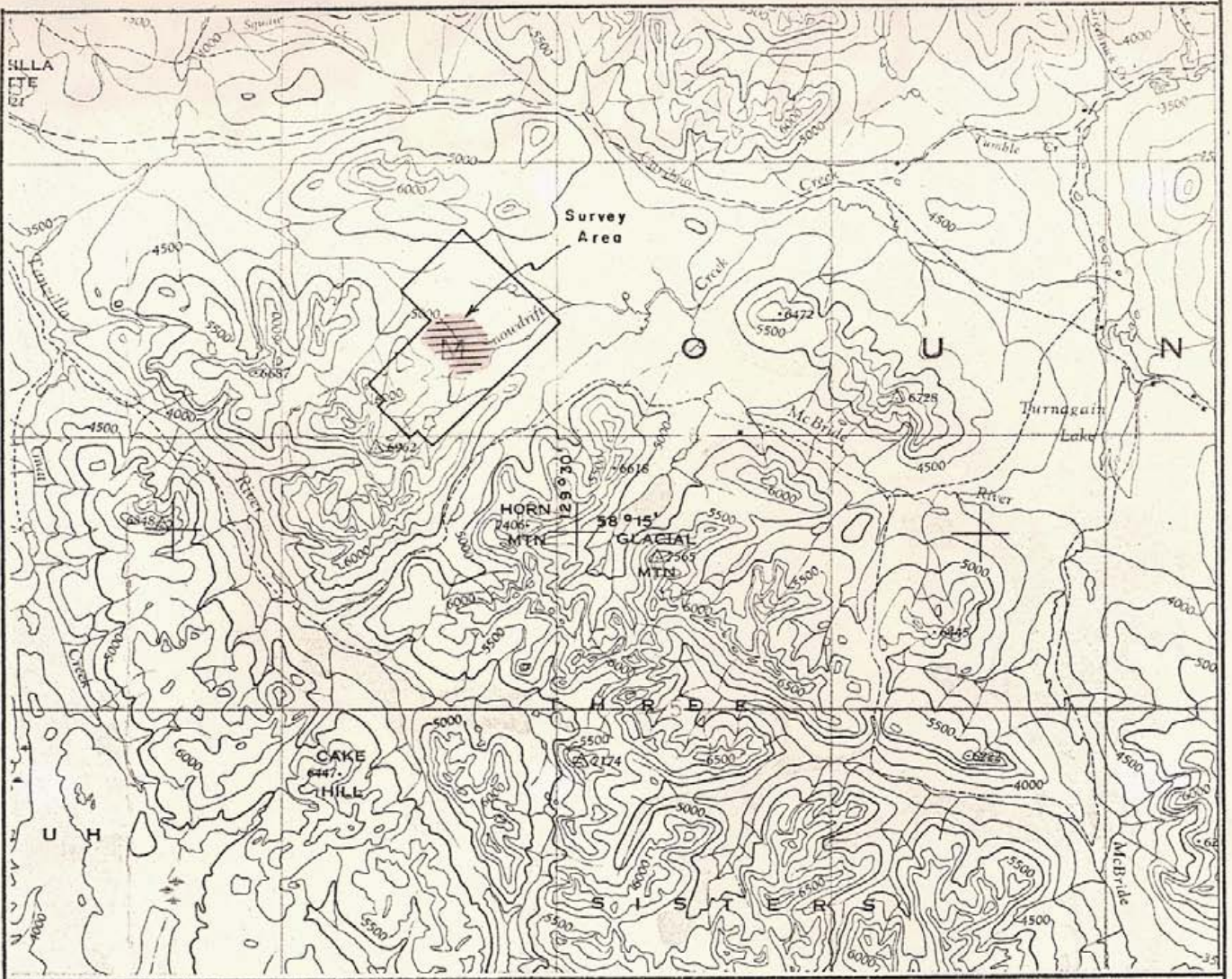
Department of Mineral and Geotechnical Resources NO. 4660 M.P.

by

R.W. Stevenson, P.Eng.

July 17 to 23, 1973

September 19, 1973



Kennco Explorations (Western) Limited

Department of
Mines and Petroleum Resources

ASSESSMENT REPORT

Nup Claims **4660** MAP # **1**

Situated 15 miles west of Turnagain Lake
Liard M. D., B. C.

Latitude 58° 18' N; Longitude 129° 35' W

Location Map

R. H. Stevenson

Scale : 1 : 250,000

Date : Sept. 28, 1973

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PLATES

⊞ LOCATION MAP	1:250,000
*) PLATE NO. 1 Magnetometer Survey	1"=400' Pocket

INTRODUCTION

The mineral property discussed in this report is 15 miles west of Turnagain Lake, at the headwaters of Snowdrift Creek. A limited ground magnetic survey was used to define more precisely granite/volcanic contacts that had been outlined by a helicopter airborne magnetic survey. The survey work was done by R.W. Stevenson, P.Eng., during the period July 17 to 23, 1973. The magnetic contours were drawn by H.W. Fleming, Chief Geophysicist for Kennco Explorations.

LOCATION AND ACCESS

The property is situated at Latitude 58°18'N; Longitude 129°35'W, about 20 miles southeast of the town of Dease Lake. It is at the headwaters of Snowdrift Creek, 15 miles west of Turnagain Lake. Most of the property drains into Snowdrift Creek, which is part of the Arctic Watershed; however, the west margin of the property drains into the Tanzilla River, which drains into the Stikine River and Pacific Watershed. Most of the property slopes down gently to the north, at elevations ranging from 4600' to about 5500'. Near the south edge of the property, the topography is more rugged, and elevations locally exceed 6500'.

Vegetation on the lower part of the property is characterized by broad expanses of mountain alder (*Alnus tenuifolia*). Scrub alpine fir (*Abies lasiocarpa*) grows in small patches, but does not form a significant portion of the vegetation cover. Several species of willow (*Salix*) occur in small shrubby clumps in wet areas. Grass grows in open areas among the mountain alder; a deep layer of moss is associated with the alpine fir. With increasing elevation, the mountain alder becomes stunted, and eventually gives way entirely to sparse grass.

There is considerable swamp near the northeast margin of the property. The steep slopes near the south margin of the property are well drained. The intervening area slopes gently but consistently to the north; however, the drainage pattern is frequently interrupted by the old beds of ice-edge streams and melt-water channels. There are rapid variations between swamps, moderately well drained knolls, and boulder patches. Recent local streams are not deeply incised. The beds of old melt-water channels commonly have a U-shaped cross-section, a few feet deep and a few tens of feet across.

There were two modes of access to the property. Frontier Helicopters Limited had a Bell 206-A helicopter based at Dease Lake, a 25-minute round trip flight to the property. This was generally used in flying personnel or fragile technical equipment to the property. A Bombardier Muskeg tractor was used for weekly supply trips to reach the Stewart-Cassiar road, 15 miles to the northwest of the property. The latter was also extremely useful in moving equipment and personnel on the property.

MAGNETOMETER SURVEY

Magnetic Survey Method

The survey grid had previously been established on the property for use in various geophysical and geochemical surveys. Assessment credit for it has been applied for separately. The grid Baseline has an azimuth of 45° astronomic, and is termed grid north-south. Readings were taken at 100' intervals along 6.7 miles of line, as shown on Plate No. 1 at a scale of 1" = 400'.

A McPhar M-700 flux gate magnetometer was used. This measures the vertical component of the earth's magnetic field. It is practically insensitive to orientation; however, all readings were taken with the operator's shoulders in the plane of the earth's magnetic field, and the operator facing west.

The instrument was adjusted so that the camp base station was 60 gammas, and thus all readings could be taken on the 1K scale. There are 20 gammas per scale division on that range. Readability is 1/4 scale division, or 5 gammas. This is sufficient resolution to distinguish between the two rock types present. The M-700 magnetometer weighs 10 1/2 pounds.

The lines were run in loop patterns, with the average time between check stations being one hour. This was used to make drift calculations to the nearest 5 gammas, and to check for any unusual magnetic activity caused by magnetic storms.

In order to achieve maximum sensitivity by using the 1K scale, both plus and minus readings were taken relative to the zero point. In order to have all readings as positive values, a constant value of 700 gammas was added to each reading before plotting on Plate No. 1.

INTERPRETATION

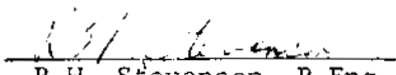
Two rock units can be distinguished by their magnetic response. Granodiorite underlies most of the area surveyed; it has a magnetic intensity of about 400 to 800 gammas with relatively flat magnetic relief. Along the east half of Line 0+00N, the magnetic intensity is somewhat lower, but the same rock type is indicated.

Near the east edge of the survey area, the granodiorite is in contact with intermediate volcanics that are probably of Upper Triassic age. Magnetic relief is somewhat greater than over the granodiorite, and magnetic intensity ranges from about 800 gammas to 1545 gammas. A linear magnetic low occurs immediately to the west of the volcanics.

The position and shape of the area underlain by volcanics corresponds well with that indicated by the helicopter-borne magnetic survey, except that there is more detail on the ground survey. Another granodiorite/volcanic contact was indicated by the airborne survey to lie in the vicinity of Line 0+00N; however, the ground magnetic survey indicates that it lies entirely south of this line. The extreme low readings on part of Line 0+00N may indicate a polarization low adjacent to the volcanics.

Except for a few small outcrops of granodiorite near 17+00E on Line 0+00N, the entire area is drift-covered. The ground magnetic survey has added considerable precision to the extrapolated geologic interpretation.

Vancouver, B.C.
September 19, 1973


R.W. Stevenson, P.Eng.

STATEMENT OF COSTS INCURRED

DOMINION OF CANADA: }
PROVINCE OF BRITISH COLUMBIA. }
To Wit: }

In the Matter of a ground magnetic survey done on the Nup No. 1, 2, 3, and 4 Groups of mineral claims in July of 1973.

I, R.W. Stevenson for Kennco Explorations (Western) Limited
of Vancouver

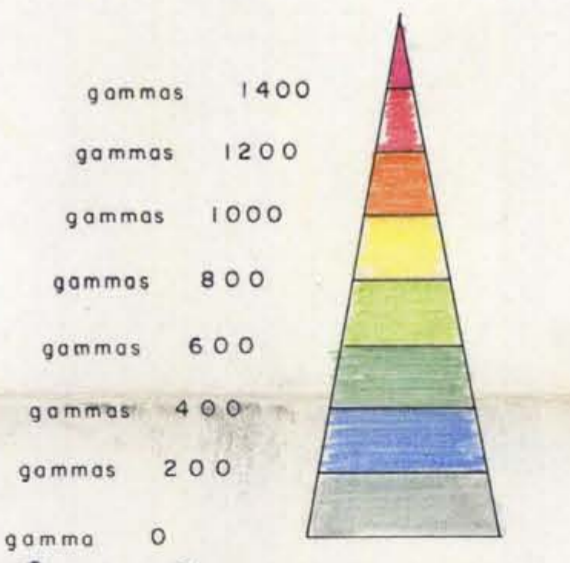
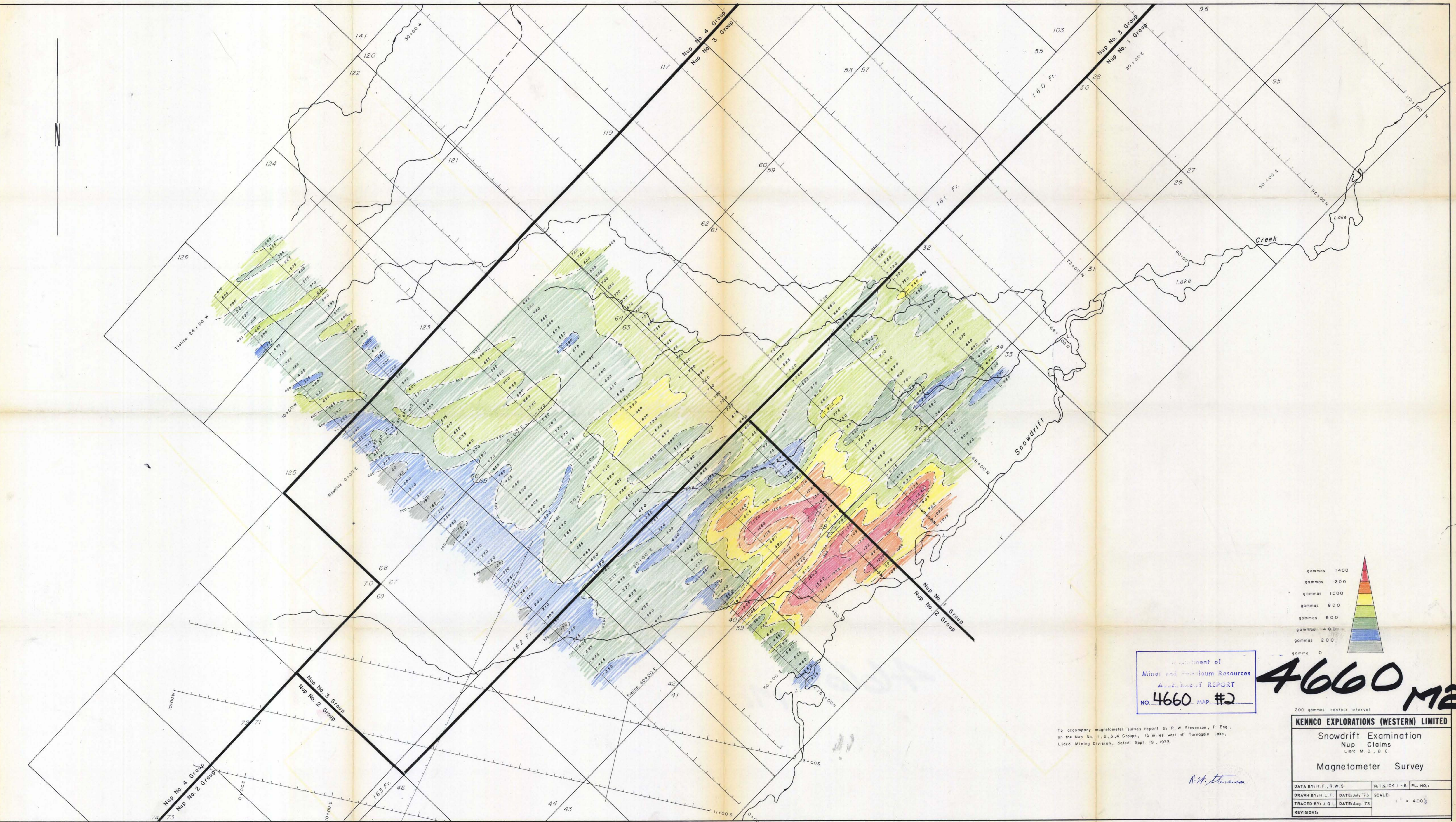
in the Province of British Columbia, do solemnly declare that the costs incurred on assessment work on the Nup No. 1, 2, 3, and 4 Groups were as follows:

Magnetometer Rental (M-700 from McPhar Geophysics) - minimum	\$180.00
Wages & Board: R.W. Stevenson July 17, 20, 22, 23 @ \$65.00 + \$10.00	\$300.00
Drafting & Typing	\$ 40.00
	<u>\$520.00</u>
Amount spent on Nup No. 1 Group	\$ 99.00
Amount spent on Nup No. 2 Group	\$124.00
3 Group	\$198.00
4 Group	\$ 99.00
	<u>\$520.00</u>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
of Vancouver, in the R.W. Stevenson
Province of British Columbia, this 1
day of October 1973., A.D. }

Julie Turner
A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.
Sub - mining Recorder



Department of
 Mineral and Petroleum Resources
 ASSESSMENT REPORT
 NO. 4660 MAP #2

4660 M2

To accompany magnetometer survey report by R. W. Stevenson, P. Eng.,
 on the Nup No. 1, 2, 3, 4 Groups, 15 miles west of Turnagain Lake,
 Liard Mining Division, dated Sept. 19, 1973.

R. W. Stevenson

KENCO EXPLORATIONS (WESTERN) LIMITED	
Snowdrift Examination Nup Claims Liard M. D., B. C.	
Magnetometer Survey	
DATA BY: H. F., R. W. S.	N.T.S. 104 1-6 PL. NO.:
DRAWN BY: H. L. F.	DATE: July '73
TRACED BY: J. O. L.	DATE: Aug '73
REVISIONS:	SCALE: 1" = 400'