

Investigation of the
Tig and Ley Placer Claims

NTS 115N2

120051

By

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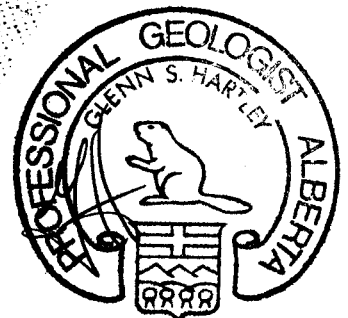


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II. LOCATION AND ACCESS

The Moosehorn property is located in the western half of the Ladue River area NTS 115 N2 immediately east of the Yukon Alaska border approximately $140^{\circ} 55'W$ and $63^{\circ} 00'N$. The Tig an Ley claims lie on a unnamed creek approximately 2 miles East of Kenyon Creek.

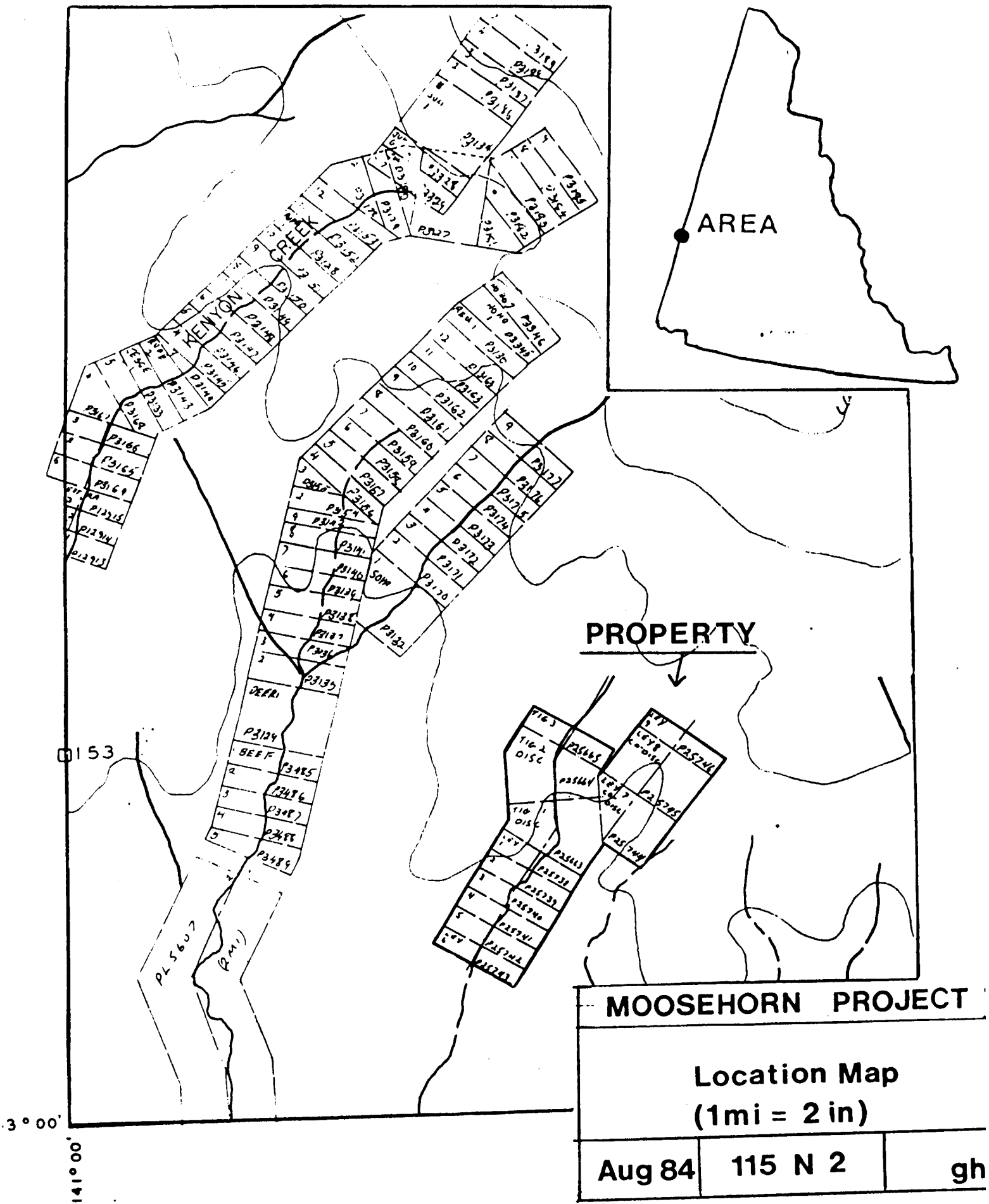
Access to the area is fixed wing aircraft 405 km north west of Whitehorse. Two private airstrips exist on either side of Moosehorn Mountain. A 65 km winter tote road connects the property to the Alaska Highway near Beaver Creek.

III. PHYSIOGRAPHY

The area has not suffered continental glaciation. Outcrops are restricted to heights of land where boulders and felsenmeer predominate. Erosion and weathering has resulted in the development of residual soil on the intermediate slopes.

IV. GENERAL GEOLOGY

The geology of the area is poorly exposed by known to majorly consist of metasedimentary rocks intruded by granodiorite to quartz diorite phases of Klotassin batholith.



PROPERTY



MOOSEHORN PROJECT

**Location Map
(1mi = 2in)**

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115 N 2

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3° 00'

141° 00'

Inclusions of amphibolite are locally common. Where they occur, the granite is enriched in hornblende, suggesting hornblende phases may be due to assimilation by the melt.

VI. ECONOMIC MINERALS

Quartz veins containing visible gold and sulfides outcrop on the summit of the Moosehorn Mountain.

The quartz veins vary from 5 cm to .5 m strike NNW and dip 20-40° NE. A 260 lb sample of the one vein outcropping near the summit assayed 20.01 oz/ton and a 12.67 oz/ton Ag.

VII. EXPLORATION HISTORY

In 1974 the discovery of visible gold, in quartz veins outcropping along the summit of the Moosehorn range, sparked both lode and placer exploration programs in 1975. The principals were Claymore Resources Ltd. and Great Bear Mining Ltd. Both companies tested the veins by short diamond drill programs. Extensive placer evaluation was carried out by Claymore on Kenyon Creek and to a much lesser extent by Great Bear on Great Bear Creek, that drains the Summit of Moosehorn Mountain to the North.

PLACER GOLD ON KENYON CREEK

In 1976 Claymore and Linstrom Construction of Prince George began a placer recovery project. Organizational and many mechanical difficulties ultimately lead to Linstroms withdrawal under financial stress, the operation recovered approximately 2000 oz. of raw gold.

In 1978 the Goldwin Joint venture group operating under a lease agreement resumed production on Kenyon Creek and declared placer recovery for 1978 exceeding 4000 oz. of raw gold.

Goldwin has operated continuously since that time, and total declared production to the end of 1981 exceeded 10,100 oz.

PLACER GOLD ON THE TIG LEY CLAIMS

In 1976, the entire length of the creek, on which the TIG-LEY claims are located, was held under a placer lease by speculative private interests, Claymore was thus prevented from evaluating its potential. Claymore did however trench the creek immediately to the west and favorable values were obtained. This creek, has been continuously held by Claymore since that time.

The TIG-LEY claims were staked by the author following the discovery of Placer Gold in 1983.

MAGNETIC SURVEY

Magnetic Data is a useful tool in the evaluation of a placer property. Accumulations of resistate minerals, magnetite and gold can be identified as magnetic highs if the gross lithology and depth of overburden remain constant.

The magnetic survey of the Tig-Ley claims was conducted using a McPhar M700 Magnetometer. The survey was run down stream along the base line of the creeks in order to obtain the magnetic profiles.

The survey was run using the closed loop method and data was corrected for drift.

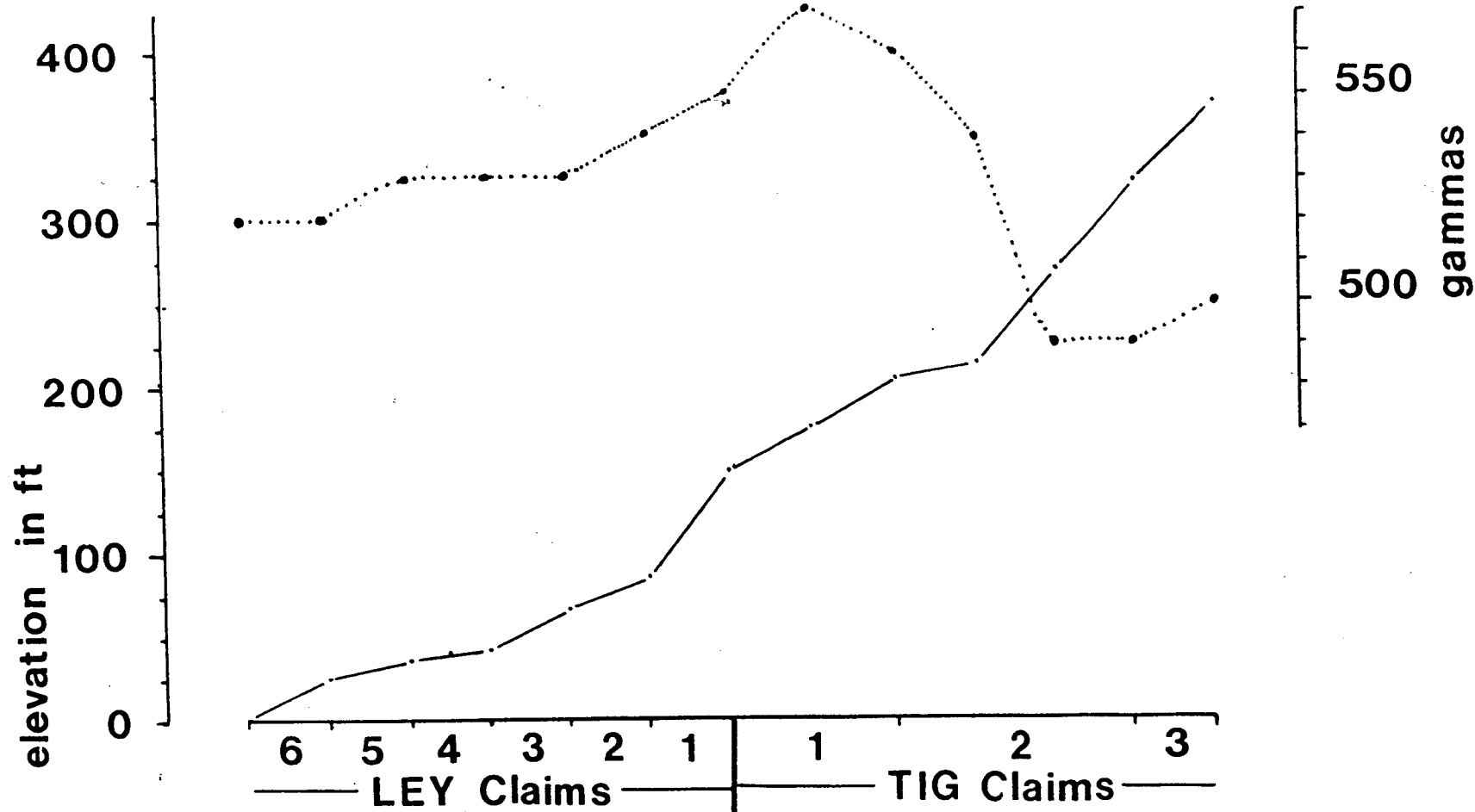
The magnetic profile of the claims is shown together with the topographic profile as maps 2 and 3.

Originally the magnetic survey was intended to be much more detailed but instrument failure precluded a larger survey.

Topographical Survey

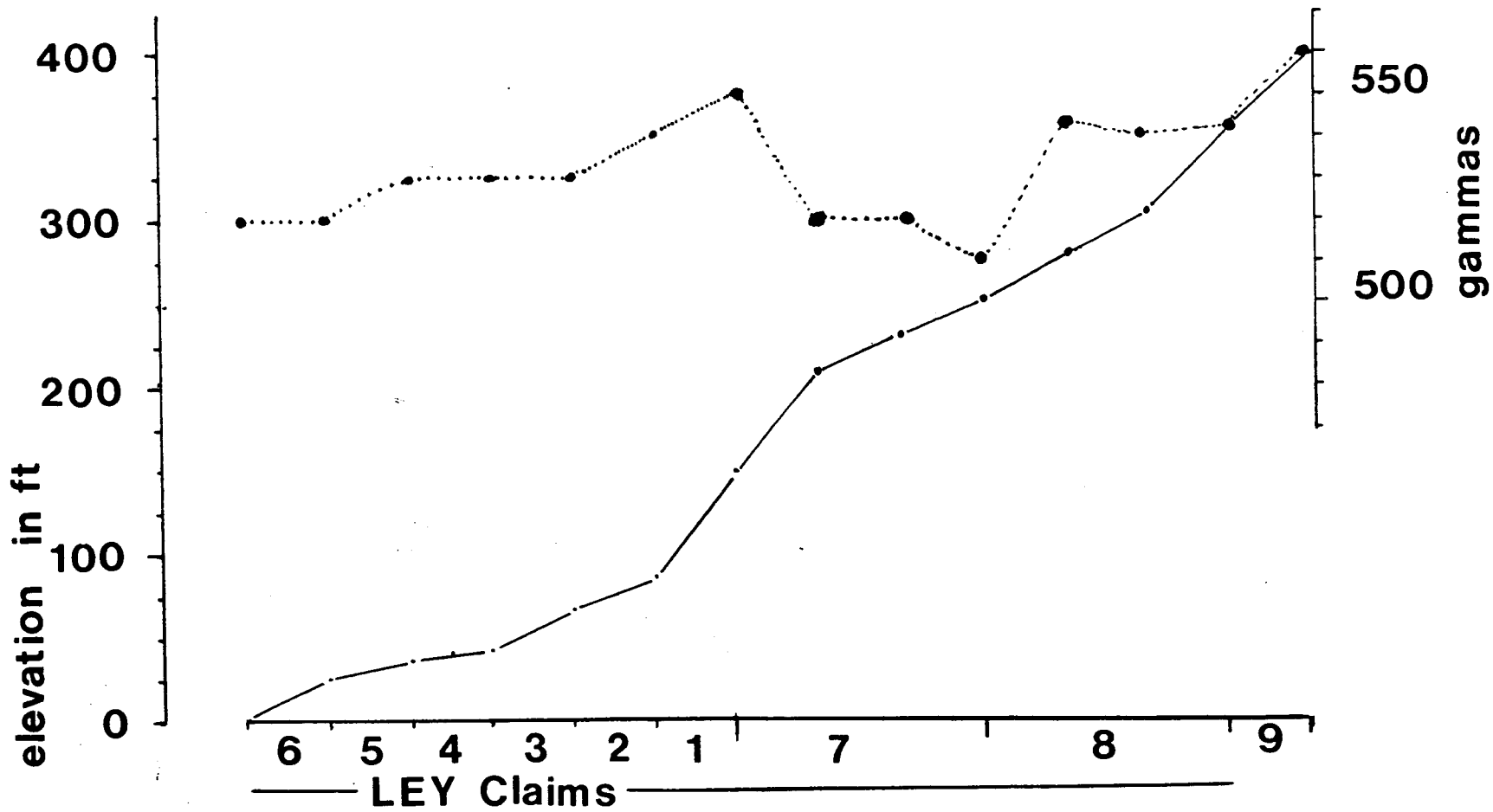
The topography of the claims is essential in order to establish potential niche points favorable for placer deposition.

The survey was carried out using a Micro Surveying Altimeter model M-1 capable of 1ft. accuracy.



(1 in equals 1000 ft horizontal)

MOOSEHORN PROJECT		
Magnetic and Topographic Survey		
2	Aug 84	gh



(1in equals 1000 ft horizontal)

MOOSEHORN PROJECT		
Magnetic and Topographic Survey		
3	Aug 84	gh

The survey commenced at the down stream end of the claims and measurements were taken along the base line of the creek at 500 foot intervals.

The survey was run in a closed loop method and the data was corrected for drift due to atmospheric changes.

CONCLUSIONS

From this program of field evaluation of the Tig-Ley claims a number of observations and conclusions become apparent.

I. LOCAL GEOLOGY OF THE CLAIMS

During this program approximately 2 cubic yards of active gravels were processed. The gravels may be described as being composed of four basic lithologies.

A. BROWN RHYOLITE

These buff to white volcanic rocks are aphanitic but contain occasional anhedral quartz phenocrysts up to 3 millimeters and may be equivalent to the Felsic Volcanic Unit observed in the Snag area (Templeman-Kluit, 1974).

B. GRANODIORITE

This rock type occurs in both Gneissic and Porphyritic non folliated varieties and is essentially the country rock of the Moose Horn Range.

C. FELDSPAR PORPHYRY

These rocks occur as well rounded cobbles of white to pink feldspar phenocrysts in a black to dark green aphanitic ground mass.

D. QUARTZ

Numerous quartz fragments occur in the active gravels as two distinct varieties.

1. Dense opaque milk white quartz.
2. Translucent yellow to gray quartz usually occurring as veins and stringers within the brown rhyolite.

II. COMPOSITION OF THE CREEK GRAVELS

The approximate composition of the gravels was observed to be:

Brown Rhyolite	75-80%
Granodiorite	10-15%
Feldspar Porphyry	5-10%
Quartz	2-5%

III. HEAVY MINERALS

Occasional very fine to "Color" gold is associated with substantial amounts of fine grained magnetite. Under a hand lens the gold appeared rough and very irregular.

No accurate measure of the gold content of the gravels was attempted due to the nature and amount observed.

IV. GEOPHYSICAL AND TOPOGRAPHICAL SURVEYS

Inspection of the magnetic and topographic profiles indicates a strong coincidence between magnetic response and the abrupt change in stream gradient in the area of Tig #1 and Tig #2.

This magnetic high is extremely significant. A field traverse of the area and close examination of the creek gravels indicated no apparent lithological changes.

The observed high proportion of magnetite within the fine fraction of gravels in the creek may be deposited preferentially at or near this break in slope. It is to be expected then, that this accumulation of magnetite and resistate minerals would yield the observed magnetic high.

A program of test pitting will be implemented to evaluate this anomaly.

STATEMENT OF EXPLORATION EXPENSE

Truck Travel in Yukon (1000 km)	\$ 200.00
Air Charter	2620.23
Food and Supplies	350.00
Instrument Rental	300.00
P. Geol Fees (10 x \$300)	<u>3000.00</u>
	\$6470.23

REFERENCES

- Morin, J.A. 1976: "Geology, Lode and Placer Gold Mineralization of the Moosehorn Range, 115 N2," D.I.A.N.D. Mineral Industry Report.
- Templeman-Kluit, D.J. 1974: "Reconnaissance Geology of Aishihik Lake, Snag and Part of Stewart River Map Areas, West-Central Yukon. GSC Paper 73-41.

APPENDIX I

PLACER CLAIMS COVERED BY THIS REPORT


	<u>GROUP #1</u>	<u>GRANT NUMBER</u>
1.	Tig 1 Co-Disc	P25663
2.	Tig 2 Co-Disc	P25664
3.	Tig 3	P25665
4.	Ley 1	P25738
5.	Ley 2	P25739
6.	Ley 3	P25740
7.	Ley 4	P25741
8.	Ley 5	P25742
9.	Ley 6	P25743
	<u>GROUP #2</u>	
1.	Ley 7 Co-Disc	P25744
	Ley 8 Co-Disc	P25745
	Ley 9	P25746

Certificate

I Glenn S. Hartley of 7302 - 118A Street hereby state that:

- 1) I am a Registered Professional Geologist in the Province of Alberta.
- 2) I am a member of the CIM and EGS.
- 3) Since 1970 I have been employed by various exploration firms and have conducted field programs in Alberta, British Columbia, Saskatchewan, North West Territories and the Yukon.

Respectfully Submitted



Glenn S. Hartley, P.Geol.