

ASSESSMENT REPORT

GEOLOGICAL REPORT

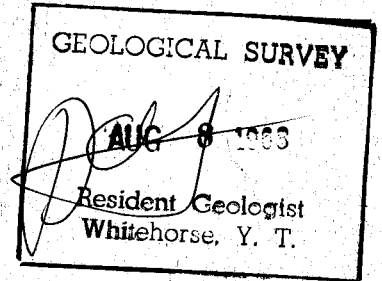
ON THE

POOLY CLAIM GROUP

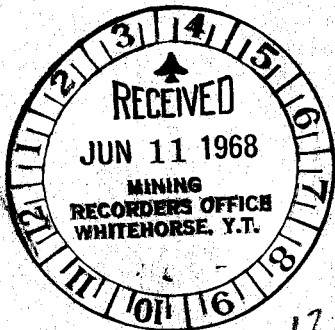
Montana Mountain  
Windy Arm - Carcross Area  
Whitehorse Mining District  
Yukon Territory

Claim Sheet 105-D-2  
Latitude 60°03'  
Longitude 134°41'

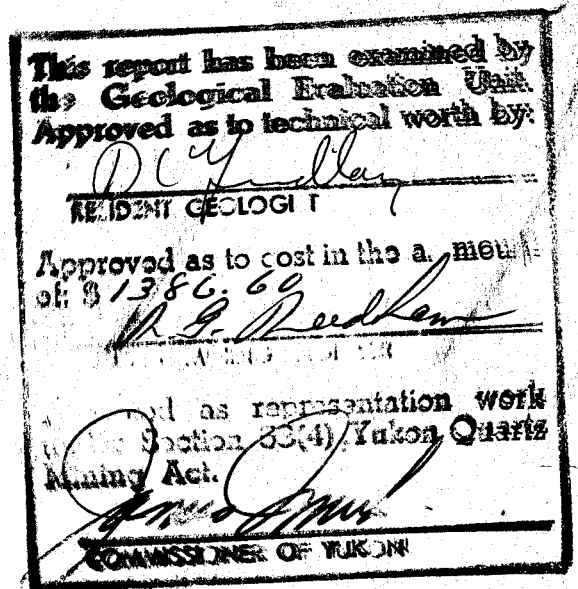
by  
D. Waugh, Geologist  
supervised by  
M.D. Kierans, Geo. Eng., P. Eng.  
for  
International Mine Services Ltd.



Field Work: July 13-July 28, 1967



1386.60



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GEOLOGICAL REPORT  
ON  
POOLY 1-6 MINERAL CLAIMS  
FOR  
INTERNATIONAL MINE SERVICES LTD.

May 27, 1968

D.H. Waugh, Geologist

INTRODUCTION

During the period of July 13th through July 28th, 1967, the author conducted a geological and topographical survey on the Pooly Claim Group under the supervision of M.D. Kierans, Professional Engineer of the Province of British Columbia. The Pooly Group includes the six adjoining mineral claims Pooly 1-6, located on the southeasterly flank of Montana Mountain, Windy Arm - Carcross area in the Whitehorse Mining District of the Yukon Territory.

The Pooly claims are situated adjacent to the Montana Vein and Joe Petty Vein and the down dip and strike projections of these veins passes through the area of intersection of the Pooly claims.

The purpose of the geological and topographical survey carried out by the author for International Mine Services Ltd. of Suite 1601 - 8 King St. East, Toronto 1, Ontario, was to survey and map the Pooly claims and to locate the known mineralized veins and old workings of the Montana and Joe Petty claims with the Pooly ground in preparation for a surface drill program to test the down dip extensions of the veins on the Pooly.

## HISTORY OF AREA

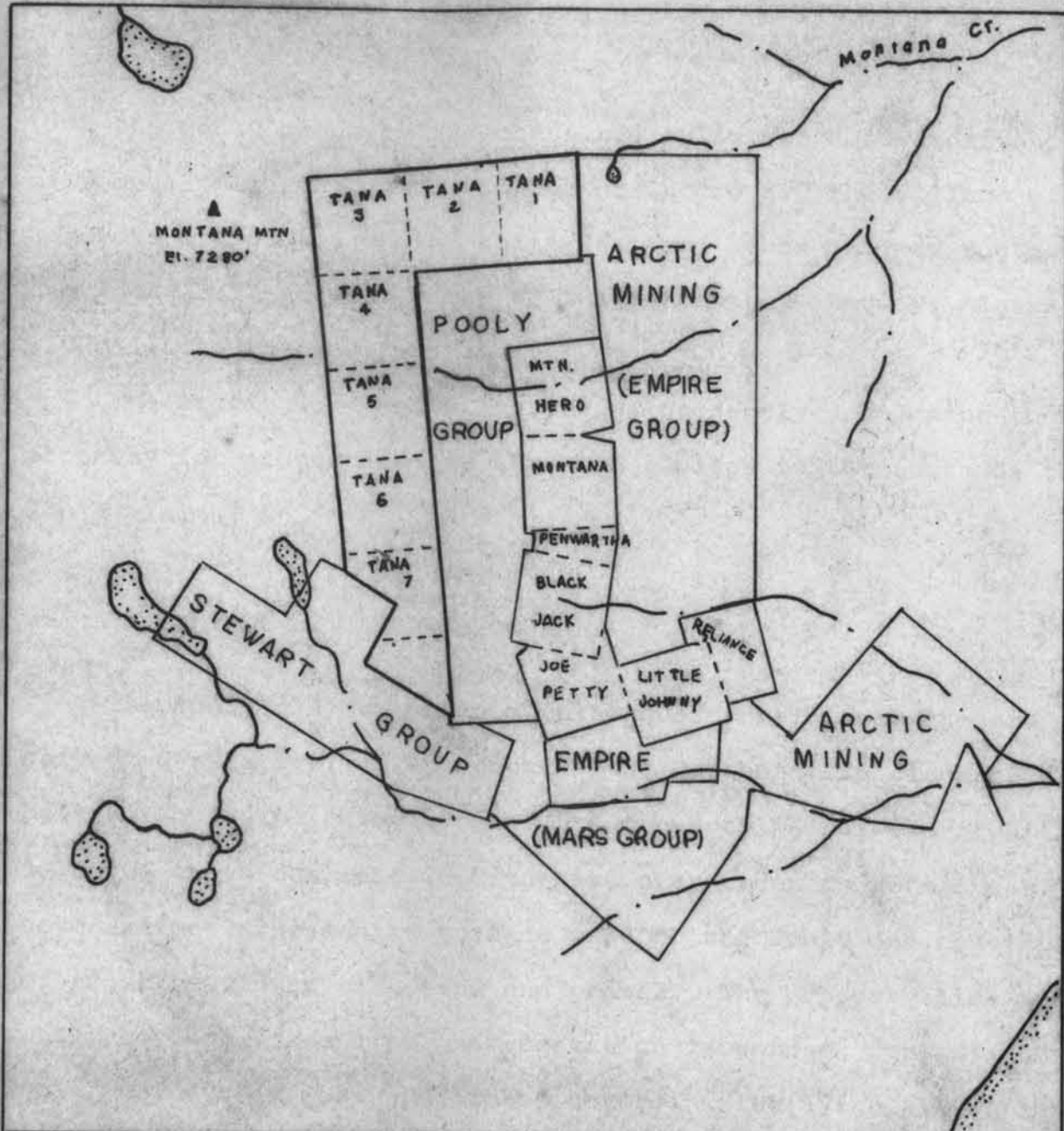
The properties of the Montana Mountain area, adjacent to the Pooly, were discovered in 1904-1905 and were owned and developed by Conrad Consolidated.

Work on the Montana vein included a 320 foot inclined shaft and 700 feet of drifting on one level plus an unknown amount of stoping. On the Mountain Hero claim 300 feet of adit crosscut was driven but reportedly failed to intersect the northern extension of the Montana vein. Work on the Joe Petty vein consisted of a number of surface trenches and a shallow shaft sunk to a depth of about 50 feet with drifting along the vein.

Operations on the Montana and Joe Petty veins terminated by 1912. The recent increase in silver prices has renewed interest in the area and at the time work was being performed on the Pooly, preparations for rehabilitating the Montana Mine had started with plans to drive a new adit level below the existing drift.

## PROPERTY LOCATION AND ACCESS

The Pooly Claim Group is situated in the Whitehorse Map-Area of southwestern Yukon in the Windy Arm - Carcross District. The Pooly is located approximately 50 miles in a southwesterly direction from Whitehorse and some 9 miles south of the village of Carcross. Co-ordinates of the property are Latitude  $60^{\circ}03'$  and Longitude  $134^{\circ}41'$ .



# CLAIM LOCATION MAP

## Pooly Group

FIG. 1

INTERNATIONAL MINE SERVICES LTD.

Scale: 1" = 1/2 mile.

The Pooly property is accessible by summer road a distance of some 12 miles from the village of Carcross. The village of Carcross is located on the White Pass and Yukon Railway route providing rail access to the saltwater port of Skagway, Alaska, 110 miles to the southwest.

The Arctic Gold and Silver Mine, presently developing their property for production, is situated 3 miles to the north of the Pooly claims.

#### PHYSIOGRAPHY

The Pooly claims lie in mountainous terrain, situated in part on a relatively flat bench on the Southeastern flank of Montana Mountain. Elevation of the property is between 5600' to 6000' above sea level. Extensive overburden in permafrost covers almost the entire surface area of the Pooly and consists of frost heaved rubble, sand and gravel. The property lies well above the tree line and vegetation is sparse, consisting solely of a thin moss and lichen cover in flat lying areas and a few alpine flowers.

#### PROPERTY AND OWNERSHIP

The six contiguous mineral claims discussed in this report comprise the Pooly Claim Group. These claims, Pooly 1-6, are registered in the name of J.B. Aird. The claims are presently in good standing and are located on Yukon Claim Sheet No. 105-D-2.

Particulars on the claims are as follows:

Pooly 1-6: Those mineral claims located in the Whitehorse Map-Area of the Yukon Territory, being in the Montana Mountain area, Windy Arm - Carcross District approximately 9 miles south of the village of Carcross and being more particularly described as follows:

<u>Claim</u>	<u>Record Number</u>	<u>Expiry Date</u>
Pooly No. 1	77823	June 21, 1968
" " 2	77824	" " "
" " 3	77825	" " "
" " 4	77826	" " "
" " 5	77827	" " "
" " 6	81870	September 13, 1968

#### METHOD OF CONTROL SURVEY

Chain and compass survey method was employed to obtain horizontal and vertical control over the survey area.

The collar of the Montana Mine inclined shaft was established as a base station using an elevation of 6000 feet as datum. Bearings and dip angles were measured between survey stations using a Brunton Compass and slope distances were measured by 100 foot chain. Traverse locations and survey stations are plotted on the accompanying geological and topographical map Fig. 4. Locations of old workings and rock exposures were tied into the eastern claim boundary of the Pooly group. Latitude and departure were computed for each survey station using the Standard Field Traverse Table.

## GEOLOGY

The Pooly claims are in most part covered by extensive overburden, in permafrost, consisting mainly of frost heaved rubble, talus and some sand and gravel. Rock exposures in situ are few and generally confined to areas having steep slope gradients.

The Pooly ground is entirely underlain by volcanic rocks of andesitic to basaltic composition and some felsite. The andesite is dark grey-green coloured having a massive fine grained texture and porphyritic texture. The porphyritic andesite is mapped on the enclosed geology map Fig. 4 as porphyrite.

Volcanics mapped on the Pooly property belong to the Hutshi group, late Lower or early Upper Cretaceous period, Mesozoic Era. The andesite exposed on the Pooly show distinct horizontal colour banding in places and dip gently westward and reportedly form the basin of a northwesterly trending syncline.

The adjacent mineralized veins Montana and Joe Petty were examined by the author to determine the size, orientation and type of mineralization present. The two veins are partially exposed on surface by old workings and recent bulldozing. Both veins were found to strike and dip, on projected extensions, into the Pooly ground.

The Montana vein outcrops in the vicinity of the Montana shaft to the north and is exposed by recent bulldozing some 300' south at the shaft a distance of 1000 feet to the east of the common Pooly 2 and Montana claim boundary. The vein strikes approximately N10°W north of the shaft and dips 20° to 30° west.

The vein consists of quartz in a fissure in a host rock of andesite porphyry. Reported width of the vein varies in thickness from a few inches to five feet with richly mineralized sections near the walls. The metallic minerals are galena, pyrite, arsenopyrite, argentite, pyrargyrite and tetrahedrite and occur as bands and lenses in the vein. Fresh mineralized vein material was examined from the ore dump located at the shaft site.

The Joe Petty vein outcrops to the east of Pooly 6 and is exposed by old pits and trenches for a strike length of approximately 1500 feet in an east west direction. The vein dips to the north at 60° and is a mineralized shear zone approximately 6 feet in width. Principle mineralization in this shear zone consists of quartz, arsenopyrite and tetrahedrite. On visiting this vein the author found the old workings to be sloughed in. Recent bulldozing has exposed weathered rusty iron-stained quartz and some mineralized host rock bearing appreciable quantities of arsenopyrite.

The volcanics of the area are faulted by east-west trending vertical faults. The new adit crosscut and drifting along the Montana vein disclosed vertical faults displacing the vein 5-25 feet to the right of the drift that cut the vein at right angles every few hundred feet.

#### INTERPRETATION

From information available and observations made by the author the Pooly claims will capture the projected down dip and

LOCATION and  
REGIONAL GEOLOGY

MAP of the  
POOLY GROUP

CARCROSS, YUKON TERR.

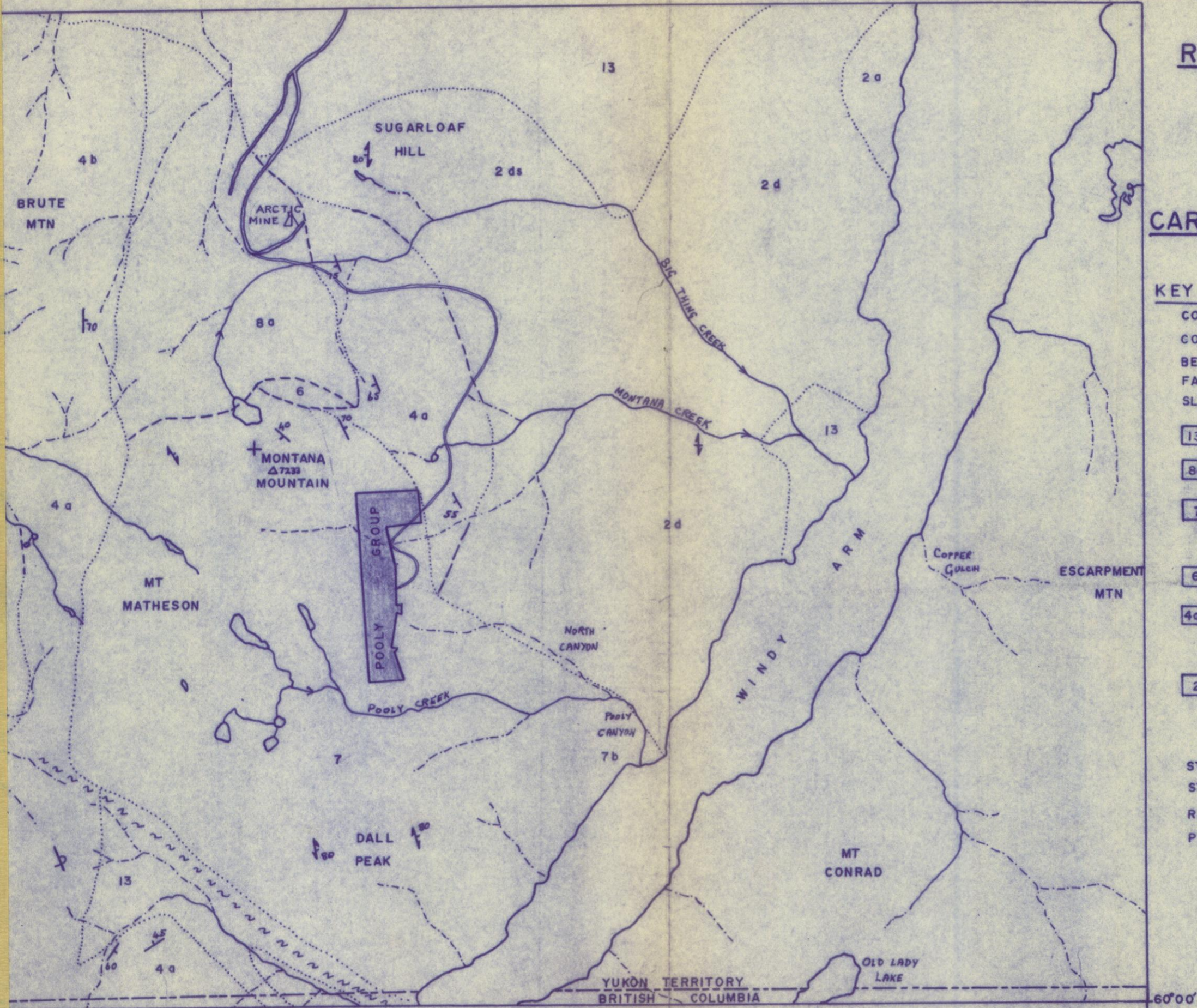
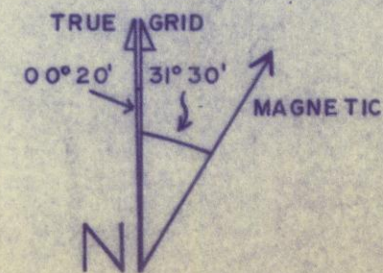
FIG. 2

KEY :-

- CONTACTS (approximate) -----
- CONTACTS (inferred) .....
- BEDDING (horizontal, inclined, overturned) + / x
- FAULTS (assumed) ~~~~~
- SLATY CLEAVAGE ↗
- 13** Quaternary alluvium & glacial deposits.
- 8a** Hbl - biot - olig - granodiorite. (Cretaceous)
- 7** Basalt, andesite, quartz latite, & rhyolite flows, breccias, & tuffs; conglomerate; minor greywacke & argillite. HUTSHI GROUP  
7b - altered volcanics.
- 6** Peridotite, dunite, serpentinite, pyroxenite.
- 4ab** 4a - greywacke, arkose, quartzite, conglomerate, siltstone, argillite, hornfels.  
4b - mainly conglomerate.
- 2a** - mainly chert
- 2** 2d - metamorphosed volcanic rocks (prob. Taku)  
2ds - as 2d but containing numerous serpentine bodies.
- STREAMS ----->
- STREAMS (intermittent) - - - - ->
- ROAD = = = = =
- PROVINCIAL BOUNDARY - - - - -



SCALE: 1:25" = 1 mile (approx).

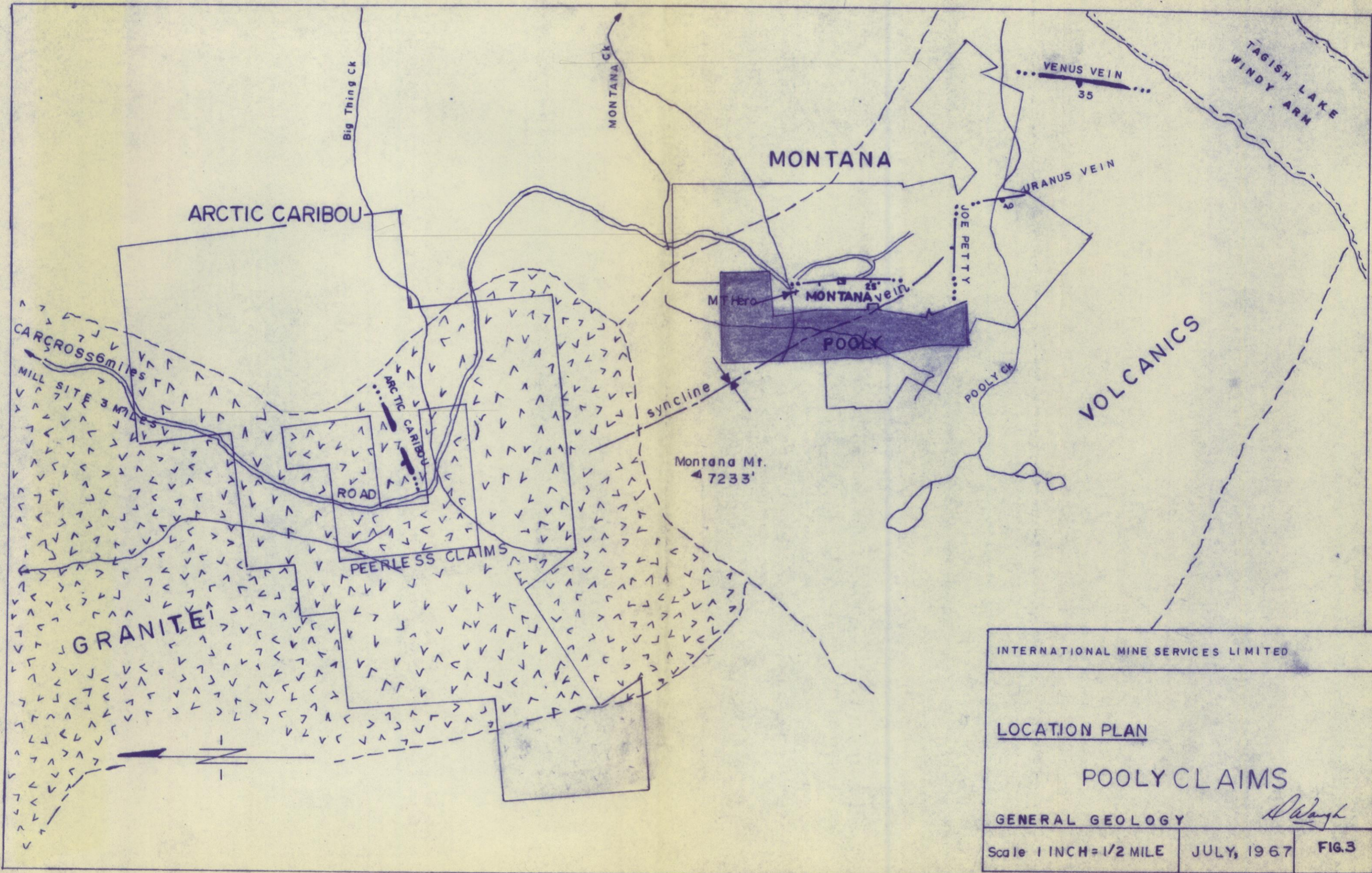


*Dalrymple*

45'

134° 30'

60° 00'



strike extensions of the Montana vein and the Joe Petty vein. The Montana vein will be captured by the Pooly at a depth of approximately 600 to 700 feet below surface near the common Pooly No. 2 and Montana claim boundary. See Fig. 5.

No vein outcropping was observed on the Pooly property to the west of the projected strike extension of the Joe Petty vein due to extensive overburden.

#### CONCLUSIONS AND RECOMMENDATIONS

The projected down dip and strike extensions of the Montana vein and Joe Petty vein are captured by the Pooly. Reported assays of grab samples, taken in 1951 from the Montana vein, assayed 0.08 ounce a ton gold and 110.14 ounces a ton silver, evidencing a richly mineralized vein that warrants investigation on the Pooly by drilling.

Due to the extensive overburden and depths at which the projected extensions of the Montana and Joe Petty veins cut into the Pooly ground, no further surface investigation is recommended.

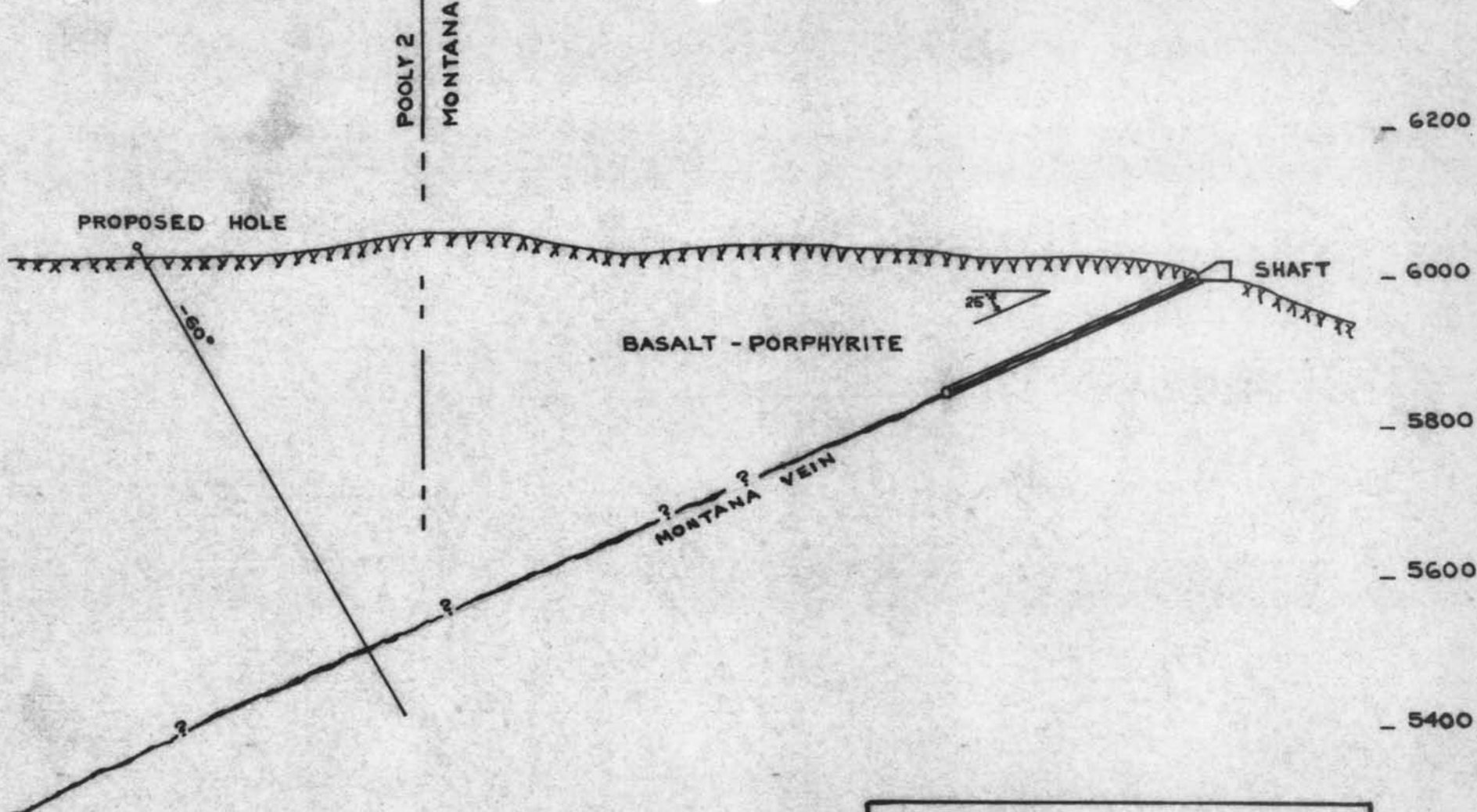
To test the down dip extensions of these veins, a minimum of 3000 feet of surface drilling is recommended at a preliminary estimated cost of \$45,000.00.

Respectfully submitted,



David H. Waugh, Geologist

Whitehorse, Yukon Territory  
May 27, 1968



INTERNATIONAL MINE SERVICES LTD.

SECTION A - LOOKING NNW

MONTANA VEIN PROJECTION

POOLY-MONTANA CLAIMS

FIG. 5

SCALE : 1" = 200'

July 1967  
D. Waugh

LIST OF REFERENCES

- (1) G.S.C. Memoir 284, Yukon Territory, H.S. Bostock,  
Montana Vein, Joe Petty Vein
- (2) G.S.C. Memoir 312, Whitehorse Map-Area, J.O. Wheeler,  
Montana Vein, Joe Petty Vein

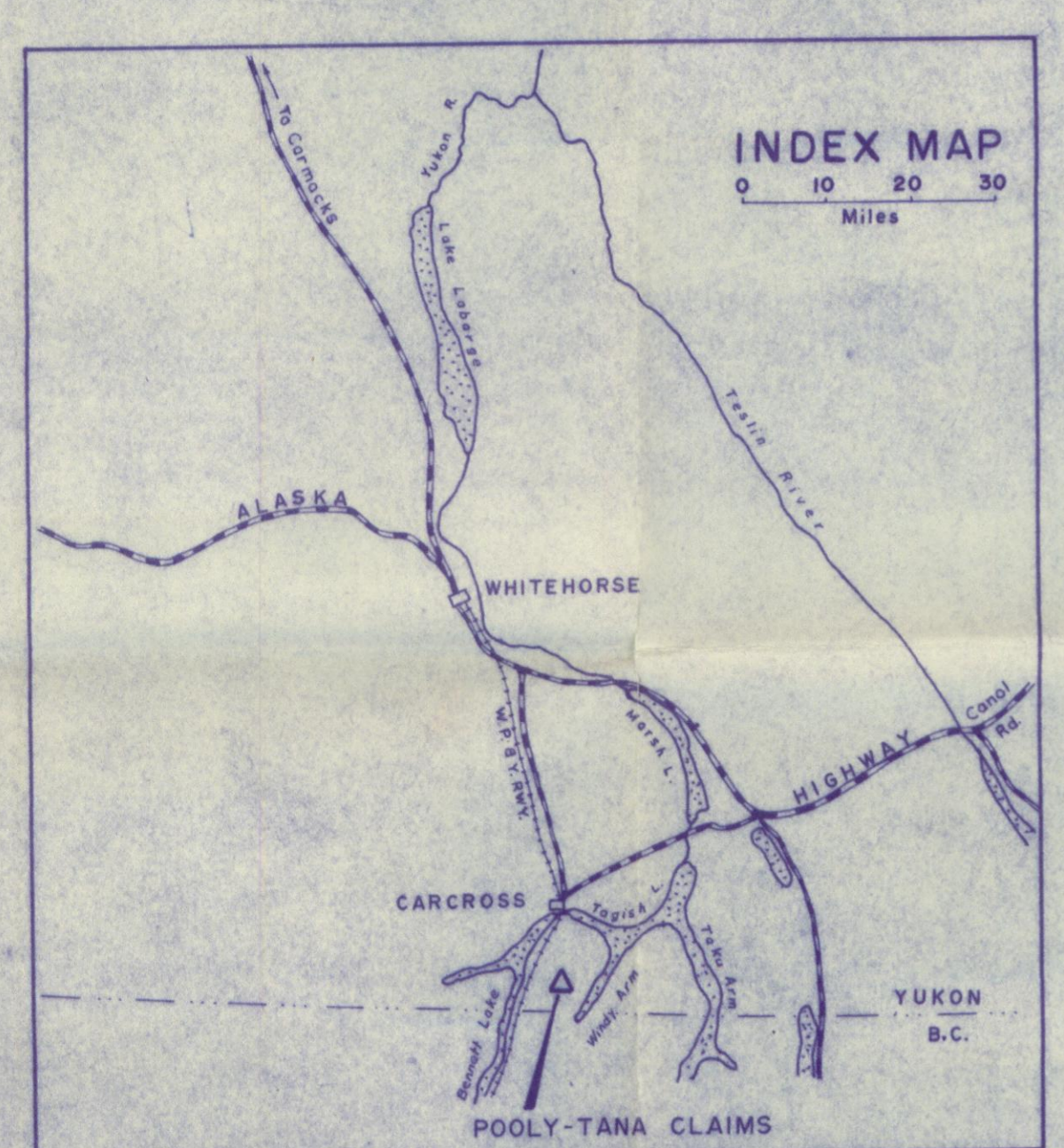
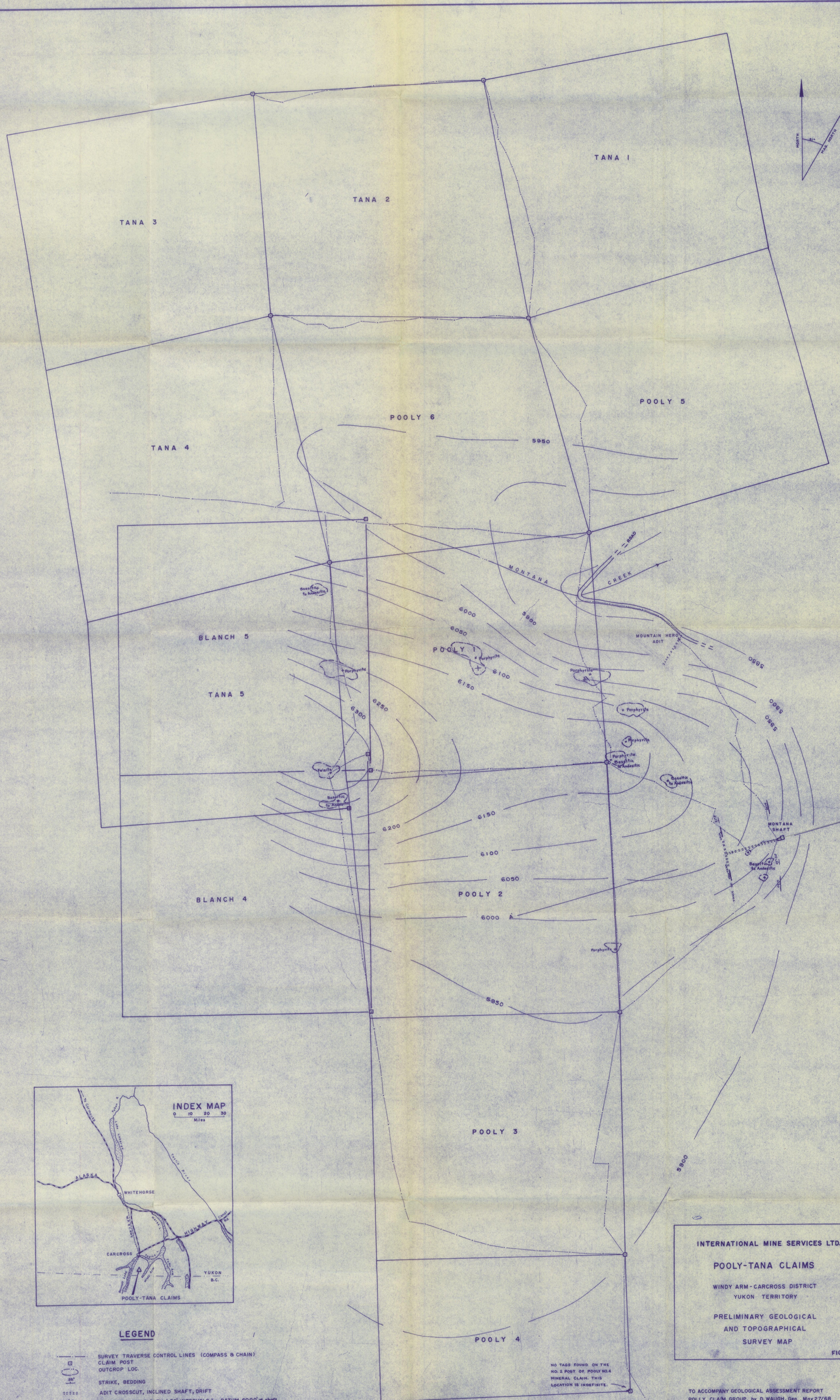
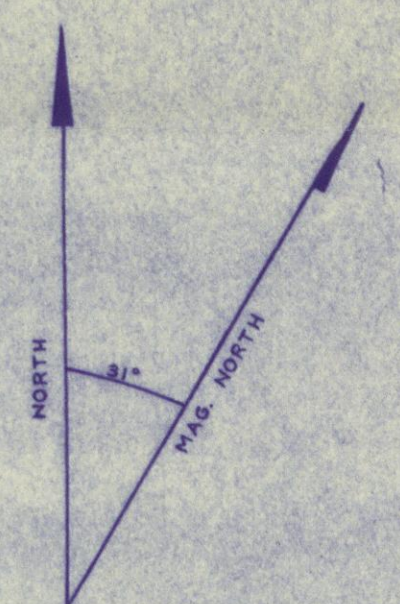
STATEMENT OF QUALIFICATIONS

I, David H. Waugh of 1601 - 8 King Street East, Toronto, Ontario, do hereby state that:

1. I am a geologist, educated in the geological sciences at Michigan College of Mining and Technology, class of '64.
2. I have practised my profession in the field of mining exploration and development for the past four years.
3. I personally visited the Pooly Claim Group and conducted a geological and topographical survey on the property during the period of July 13 - July 28, 1967 while under the employ of International Mine Services Ltd.
4. I am presently under the employ of International Mine Services Ltd. in the capacity of Project Manager for the 1968 Yukon field programs.

Dated this *27* day of May, 1968 at Whitehorse, Yukon Territory.

  
David H. Waugh, Geologist



- LEGEND**
- SURVEY TRAVERSE CONTROL LINES (COMPASS & CHAIN)
  - CLAIM POST
  - OUTCROP LOC.
  - STRIKE, BEDDING
  - ADIT CROSSCUT, INCLINED SHAFT, DRIFT
  - 6200' CONTOUR LINE & ELEV. (50' INTERVALS) - DATUM 6000' at shaft
  - MONTANA SHAFT LOC.
  - MONTANA VEIN

INTERNATIONAL MINE SERVICES LTD.  
**POOLY-TANA CLAIMS**  
 WINDY ARM - CARCROSS DISTRICT  
 YUKON TERRITORY  
 PRELIMINARY GEOLOGICAL  
 AND TOPOGRAPHICAL  
 SURVEY MAP

FIG. 4

TO ACCOMPANY GEOLOGICAL ASSESSMENT REPORT  
 POOLY CLAIM GROUP, by D. WAUGH, Geol., May 27/68

SCALE 1" = 200'  
 July 1967