ASSESSMENT REPORT
WALL 1-24 CLAIMS
(YA 76868 - YA 76891)
MAYO MINING DISTRICT

091494

GEOLOGICAL MAPPING AND GEOCHEMICAL SAMPLING

JULY 9th - JULY 18th, AUGUST 11th, 1983

NTS 105-O-8

LATITUDE: 63°21'

LONGITUDE: 130°04'

By: A.D. McLaughlin

November, 1983

091494

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 12,000.00.

Kathryn Grapes

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

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1. INTRODUCTION

1.1 General Statement

This report describes the exploration program completed by AGIP Canada Ltd. in 1983 on the Wall 1-24 Quartz Claims. The claims were recorded on November 29, 198~~3~~2 (YA76868 - YA76891). The exploration program included geological mapping, prospecting, and rock and soil geochemistry. The main exploration program was carried out from a fly camp located on the claim block between July 9th and July 18th. Brief visits to the claims were made on June 23 and August 11, 1983.

1.2 Location and Access

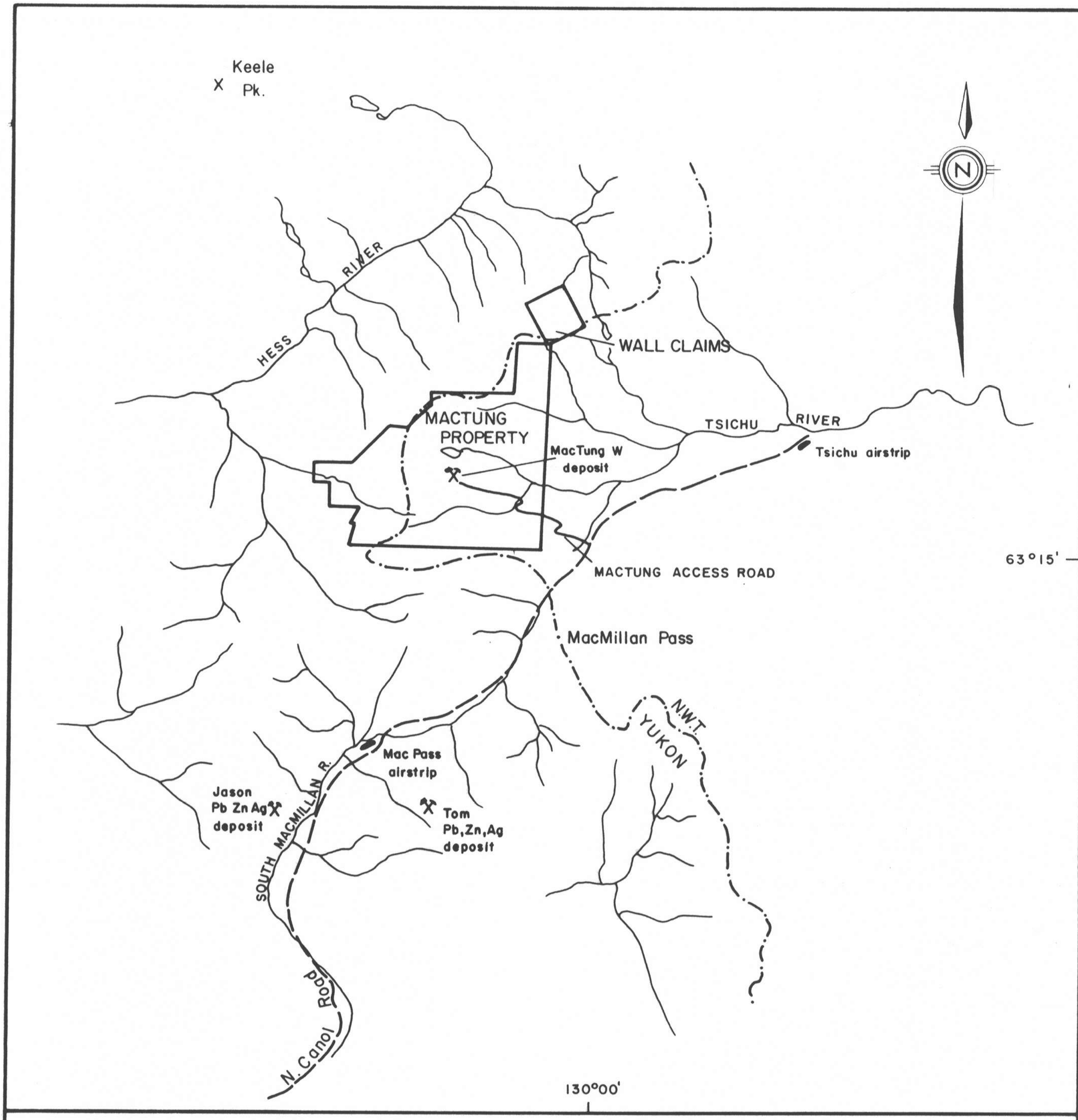
The claims are located in the MacMillan Pass area of eastern Yukon along the N.W.T. border (Figures 400340-1 and 1a) on map sheet NTS 105-O-8. They are approximately 200 kilometers northeast of Ross River and 20 kilometers from the MacMillan Pass airstrip. The North Canol Road passes within 10 kilometers.

Logistical support was provided by an expediter in Ross River and casual helicopter service in MacMillan Pass.

Topography is rugged in the area of the intrusion with several cirques and a few small rock glaciers. The main work area is in a valley marked by typical alpine vegetation. Maximum elevation is 2,300 meters dropping to 1,675 meters in the valley.

1.3 Regional Geology

The MacMillan Pass area lies on the eastern margin of the Selwyn Basin, a site of marine sedimentation from the Cambrian to the Triassic. The basin is underlain by Precambrian clastic sediments derived from the western edge of the North American craton.



LEGEND

- Airstrip
- Road-serviced
- Access road
- Mineral deposits

0 5 10
KILOMETRES

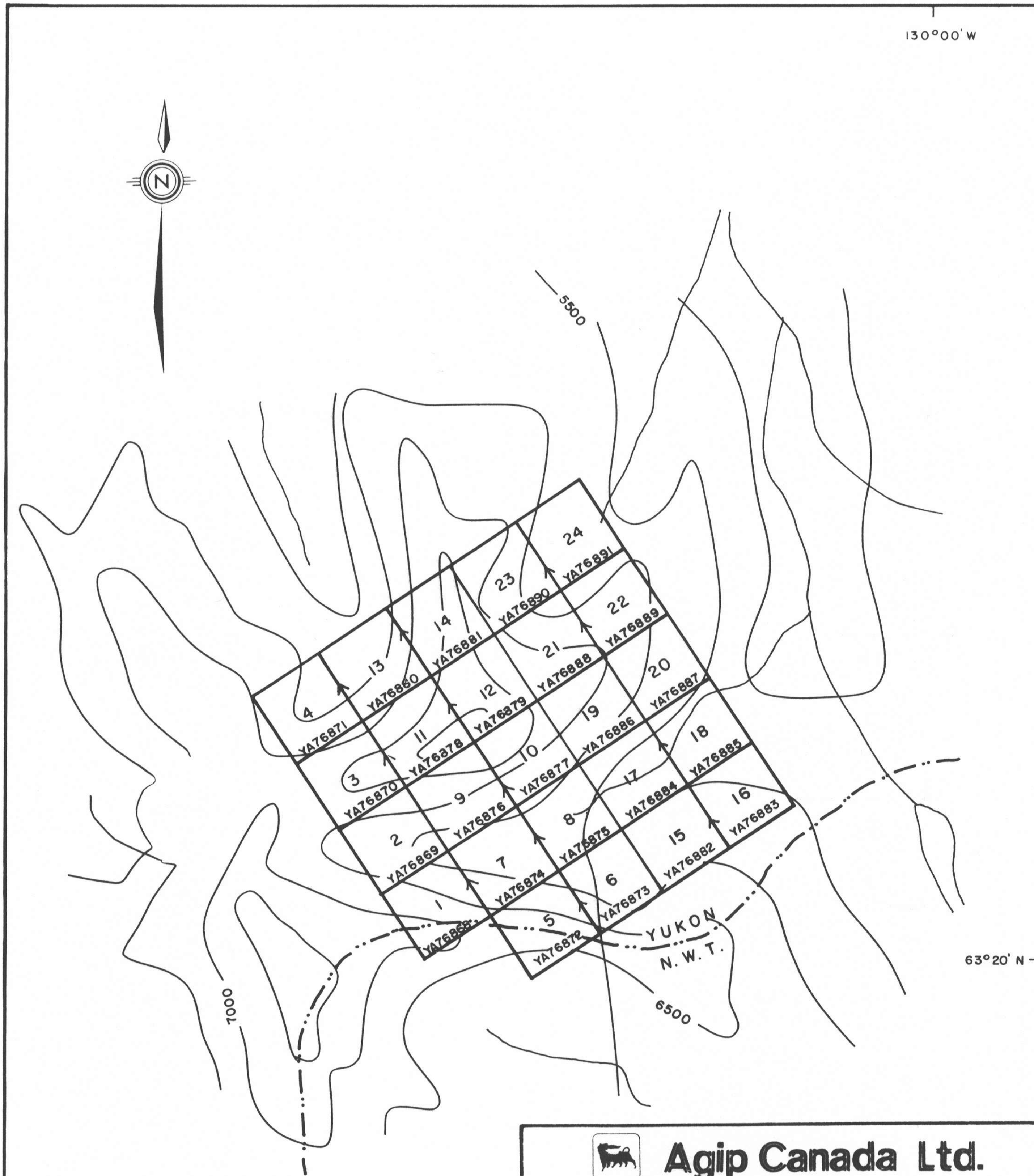
AGIP CANADA LTD.

WALL CLAIMS

Location Map

YUKON

Scale: 1:250,000	NTS: 105-5	Date: NOV. 1983
Author: T.G.	Drawn by: J.B.	Figure: 400340-1



Agip Canada Ltd.

WALL 1-24 CLAIMS

LOCATION MAP

YUKON

N.T.S. 105-0-8

SCALE:	AUTHOR:	DATE:	FIGURE:
1:31,680	A.D.M.	NOV. 1983	400340 - 1a

During Devonian time, faulting and uplift of the central part of the basin formed a series of grabens and horsts. The grabens were infilled with clastic sediments derived by erosion of the uplifted portions.

A major period of regional folding and faulting during the Cretaceous caused east-west shortening of the sedimentary package. This regional crustal thickening caused partial melting and intrusion of acid to intermediate igneous rocks such as the Bord intrusion, present on the project area.

Major deposits in the MacMillan Pass area include the MacTung tungsten deposit, 5 kilometers south of the Wall claims, and the Tom and Jason lead-zinc-silver deposits, 15 kilometers south.

2. CLAIM GROUP EXPLORATION

2.1 Introduction

The Wall claims were staked to acquire an area of gold-bearing arsenopyrite veins located by prospecting in 1982. In 1983 exploration work emphasized extending the strike length of the known veins through prospecting and geochemical sampling. In addition, prospecting traverses were conducted around the intrusion perimeter and airphoto lineaments to locate other mineralized structures.

2.2 Geology

The Cretaceous Bord pluton has intruded Hadrynian or possibly Cambrian fine-grained clastic rocks (Figures 400340-2 and 3). The intrusion is a massive and equigranular biotite-quartz-monzonite with occasional alkali-feldspar megacrystic phases. A few quartz-feldspar porphyry and aplite dykes and sills are present. Alteration is minimal and restricted to minor clay and secondary iron minerals along fractures and local chloritization of mafic minerals.

The intruded sediments are maroon, grey to black and green shales and siltstones. Regional strike is northeast with a phyllitic cleavage locally present.

A rusty weathering hornfels zone occurs in the sediments up to one kilometer from the intrusion. Here contact metamorphism has resulted in biotite and quartz-rich hornfels of gneissic appearance. Foliation is essentially parallel to the intrusive contact. The rusty weathering is due to the increased sulphide content in the hornfels zone.

Emplacement of the intrusion has folded and fractured the country rock. As a result bedding strikes east-northeast immediately west of the intrusion and north-south to the east of it. Well developed fracture and joint systems in the hornfels zone display radial and concentric patterns.

Gold-bearing veins of arsenopyrite and quartz are only found within the hornfels zone and are restricted to the concentric series of fractures (ie. parallel to the intrusive contact).

Radial fractures, developed perpendicular to the contact, are generally barren but occasionally contain quartz or quartz and tourmaline.

On a larger scale, numerous lineaments up to 2 kilometers in strike length have been outlined from an airphoto interpretation. The predominant strike directions are northeast and north-south paralleling the regional strike of the sedimentary units and the intrusive contact. The majority of lineaments occur in the southeast sector of the intrusive contact where the main gold-bearing arsenopyrite veins have been located.

2.3 Mineralization and Alteration

Detailed exploration in 1983 has outlined one major arsenopyrite vein system within 100 meters of the intrusion, and several vein outcrops further east.

The main system strikes north-south with mainly vertical to steep west dips (Figure 400340-3). Total strike length is 325 meters although the vein is not continuous. Maximum width is 1.0 meters but averages only 10-20 centimeters. Veins pinch and swell in both horizontal and vertical dimensions, often thinning from a one meter vein to a narrow barren fracture over horizontal and vertical distances of ten meters or less. Small vein outcroppings 300 and 400 meters to the south and north respectively may be extensions of the system.

Vein mineralogy is simple consisting of arsenopyrite, quartz and clays with lesser amounts of pyrite, muscovite and tourmaline. Accessory minerals include apatite and titanium oxide. Gold occurs in the native form hosted or enclosed by the arsenopyrite. Varying amounts of silver have been found with the gold.

The wallrock is commonly fractured or cut by closely spaced joints parallel to the strike of the vein and altered to a pale green colour. Muscovite, secondary iron minerals and locally clay are also present with occasional disseminated arsenopyrite. This alteration halo is less than one meter wide. The vein system is often brecciated with the development of iron-arsenic oxides (scorodite, etc.) and green coloured quartz.

A number of gold-bearing arsenopyrite veins were located in outcrop and float east of the main system, up to 500 meters from the intrusion. These veins are very erratic in distribution with maximum strike length being less than 50 meters and again not continuous. Vein mineralogy and wallrock alteration is identical to that of the main system.

Elsewhere on the property, away from the main zone of arsenopyrite veining, only minor mineralization was located. Arsenopyrite, galena and pyrite occur in minor irregular veins or pods near the intrusive contact but without any significant dimensions.

2.4 Geochemistry

2.4.1 Introduction

An extensive rock and soil geochemistry program was carried out in the area of the arsenopyrite veins as described above. A small grid (6.5 line kilometers) was established to control the sampling and the geological mapping. Rock sampling was completed over selected sections of the exposed arsenopyrite veins and wallrock, and also in areas of quartz and tourmaline veining, and along breccia zones. The entire grid was soil sampled at 25 meter stations along the winglines. The rocks were analyzed for gold and silver, and the soils for gold and arsenic.

Outside the grid area soil sampling was conducted in adjacent cirques and valleys along strike with the main arsenopyrite veins and in areas with interpreted lineaments. Selective rock sampling was done over vein outcrops and fault zones.

The grid geochemistry results are presented in Figures 400340-3 and 4, and the other results are on Figure 400340-2.

2.4.2 Rock Geochemistry

The arsenopyrite veins are consistently enriched in gold. Values range from greater than 0.5 g/t Au to 17.8 g/t Au over one meter sample widths. Accompanying silver values are low with a maximum of 1.8 ppm Ag, but generally less than 1.0 ppm Ag. The brecciated and altered wallrock does not contain any significant precious metal results; mainly less than 100 ppb Au and 0.2 ppm Ag.

Grab samples of altered and brecciated arsenopyrite vein float returned comparable gold values, but much higher silver values, up to 46.3 ppm Ag. These samples have a higher percentage of scorodite with variable amounts of green coloured quartz and clay minerals.

Results of the quartz and tourmaline vein sampling do not indicate any precious metal mineralization.

The few irregular arsenopyrite and galena veins located away from the grid area also contain high gold and silver values. Maximum results obtained this year are 1.92 g/t Au and 57.6 g/t Ag in a grab sample.

2.4.3 Soil Geochemistry

Results from the grid soil sampling indicate only a few scattered gold anomalies but several well developed arsenic trends. Generally the soils are not responding to the massive unaltered arsenopyrite veins but only to the brecciated scorodite-rich veins. Using 400 ppm As as the threshold value, the results reflect the larger amount of scorodite-rich vein material located at the southern end of the grid. The largest anomalous zone is approximately 150 x 150 meters, although strongly influenced by topography. The anomalous arsenic zone in the northwest section of the grid is upslope of the main arsenopyrite vein system, centered around the intrusive contact.

Outside the grid area, soil and talus fines results generally reflect the proximity of the intrusion. Within 100 meters of the contact, soil samples often range up to 300 ppb gold and greater than 1,000 ppm arsenic. Other anomalous gold and arsenic results can usually be attributed to porphyry dyke outcrops or intrusive float rock. The best example of this is a 2370 ppb gold value from below an unaltered quartz feldspar porphyry dyke cutting green phyllites.

2.5 Discussion

It appears that the gold mineralization is controlled strictly by the arsenopyrite veining which in turn is hosted only by the concentric structures located close to the contact of the biotite-quartz-monzonite intrusion. Previous AGIP Canada Ltd. exploration has shown that gold-bearing sulphide veins are common near Selwyn Basin intrusions. While the gold values in the Wall veins are much higher than normal for this type of occurrence, the veins themselves are very thin and erratic in occurrence. As a result only a limited and very discontinuous vein system has been outlined.

Although bedrock exposure is not great in this area, the soil geochemical results and the location of vein float rock do not suggest the presence of a major hidden vein system. It has been interpreted that the vein system dips steeply towards the intrusion. However, the vein's surface characteristics coupled with the lack of mineralization and significant alteration in the intrusion downgrade the possibility of a major vein system existing at depth and in the intrusion.

Exploration in the remaining project area supports only the fact that minor precious metal mineralization has occurred with sulphide deposition. None of the sulphide veins are considered to have potential due to their small size and irregularity of occurrence.

3. REFERENCES

Boyle, R.W.,

1979: The Geochemistry of Gold and its Deposits, G.S.C., Bulletin 280, 584 pages.

Templeman-Kluit, D.,

1981: Geology and Mineral Deposits of Southern Yukon; in Yukon Geology and Exploration 1979-1980; D.I.A.N.D., pages 7-31.

APPENDIX A

ANALYTICAL METHODS

Soil samples are dried and sieved to minus 80 mesh. Rock chip samples are pulverized and a split of the minus 100 mesh fraction is analyzed.

Silver and lead analyses: the sample is dissolved in hot aqua regia and analyzed by atomic absorption spectrophotometry. Silver analyses require a correction for background.

Arsenic analyses are by perchloric-nitric acid digestion and colorimetric determination.

Gold analyses are by fire assay techniques but, after preparation of the bead, the bead is dissolved in acid and the gold content determined by atomic absorption spectrophotometry.

APPENDIX B

STATEMENT OF COSTS

1. Labour

AGIP Canada Ltd. Personnel:

F.Perfido, Assistant Exploration Manager: 1 day @ $280/day	$ 280.00
R. Robertson, Senior Geologist: 0.5 day @ $227.50/day	113.75
A.D. McLaughlin, Project Geologist: 11 days @ $189/day	2,079.00
T. Garagan, Project Geologist: 10.5 days @ $170/day	1,785.00
L. Lalonde, Senior Assistant: 11 days @ $105/day	1,155.00
J. O'Connor, Intermediate Assistant: 10 days @ $100/day	1,000.00
C. Evert, Intermediate Assistant: 10 days @ $95/day	950.00
	$7,362.75

2. Geochemistry

Analyses by Bondar-Clegg and Co. Ltd., Vancouver, British Columbia.

59 rock analysis @ $10.60 each	$ 625.40
2 rock analysis @ $14.47 each	28.94
217 soil analysis @ $9.92 each	2,152.64
	$2,806.98

3. Helicopter

Bell 206-B chartered from Northern Mountain Helicopters, MacMillan Pass, Yukon:

8.4 hours @ $500/hour	$4,200.00
Plus: Fuel @ $92/hour	772.80

Hughes 500-D contracted from ALC Airlift Corp., Pitt Meadows, British Columbia:

0.8 hours @ $400/hour	320.00
	$5,292.80

4. Food

Two grocery orders from Ross River Service Centre, Ross River, Yukon:

Food	$ 857.13
Truck transportation to work area	120.00
	$ 977.13

Total Cost of Work for Assessment Credit on Wall 1-24 Claims-$16,439.66

APPENDIX C

STATEMENT OF QUALIFICATIONS

I, ARTHUR DOUGLAS McLAUGHLIN, of the City of Calgary in the Province of Alberta, HEREBY CERTIFY:

THAT I am a geologist employed by AGIP Canada Ltd. and that I caused to be performed the work described in this report.

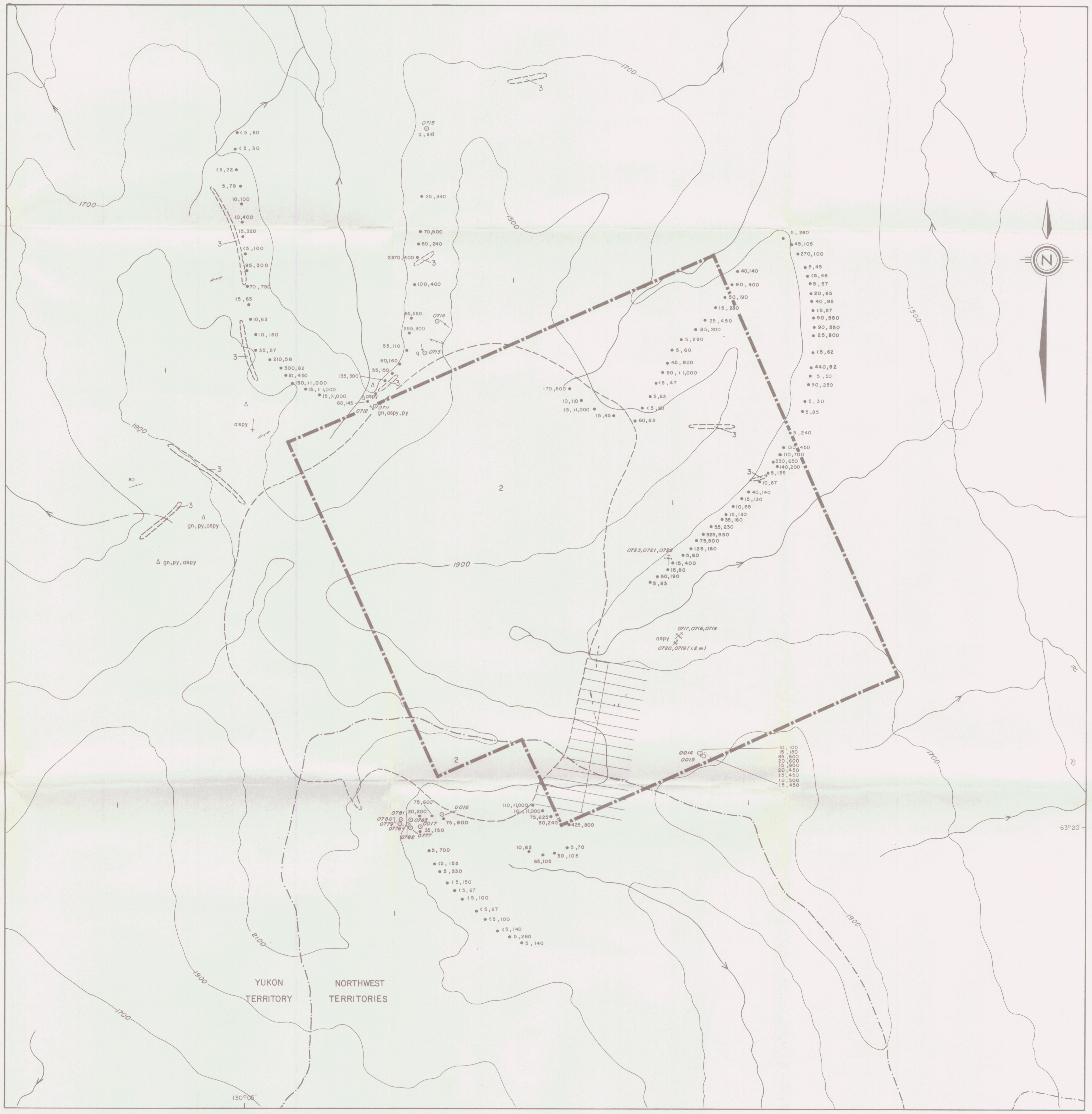
THAT I obtained a Bachelor of Science degree in Geology from Acadia University, Nova Scotia, in 1977.

THAT I have been engaged in mineral exploration on a full-time and part-time basis for five years, of which two years have been spent on exploration programs in the Yukon Territory.

SIGNED at the City of Calgary in the Province of Alberta this 16th day of November, 1983.

Doug McL

Arthur Douglas McLaughlin



LEGEND

CRETACEOUS

3 Quartz Feldspar Porphyry Dyke

2 Biotite Quartz Monzonite

HADRYNIAN (CAMBRIAN ?)

1 Shale, Siltstone

SYMBOLS

Vein (Arsenopyrite unless noted)

Float

Cleavage or Foliation

Rock sample (Grab, Chip 1 meter unless noted)

2040723 Sample number
Soil sample (Au ppb , As ppm)

Geological contact

1000 Topographic contour (meter)

Territorial Border

Claim boundary

Stream

Fault

Mineral Occurences

aspy arsenopyrite

gn galena

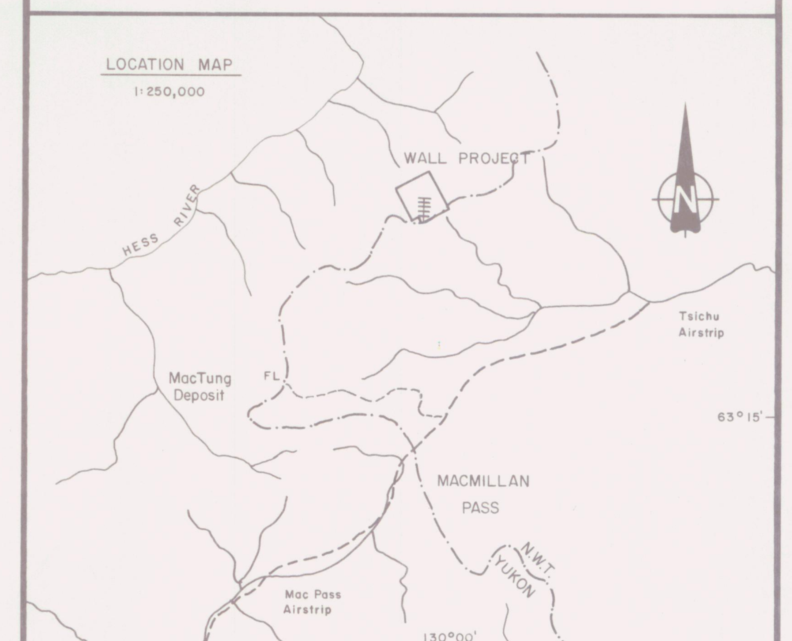
py pyrite

q quartz

sid siderite

ROCK GEOCHEMISTRY

SAMPLE #	Au ppb or Grams/Tonne	Ag ppm	Pb ppm	As ppm
2040014	20	0.3		
015	20	<0.2		
016	10	<0.2	11	
017	2130	<0.2	99	
711	1.92 g/t	57.6g/t	3.2%	>1,000
712	1.58 g/t	11.0	5650	>1,000
713	5	<0.2	104	330
714	10	0.3	78	300
715	<5	<0.2	21	145
716	2.54 g/t	0.4		
717	15	<0.2		
718	10	<0.2		
719	510	<0.2		
720	130	<0.2		
721	1.27 g/t	<0.2		
722	25	<0.2		
723	35	<0.2		
2040777	80	0.7		
778	75	0.3		
779	5	<0.2		
780	90	<0.2		
781	5	<0.2		
782	15	<0.2		
2040783	10	<0.2		



0 100 200 300 400 500
METERS

Agip Canada Ltd.

WALL PROJECT
Claim Group

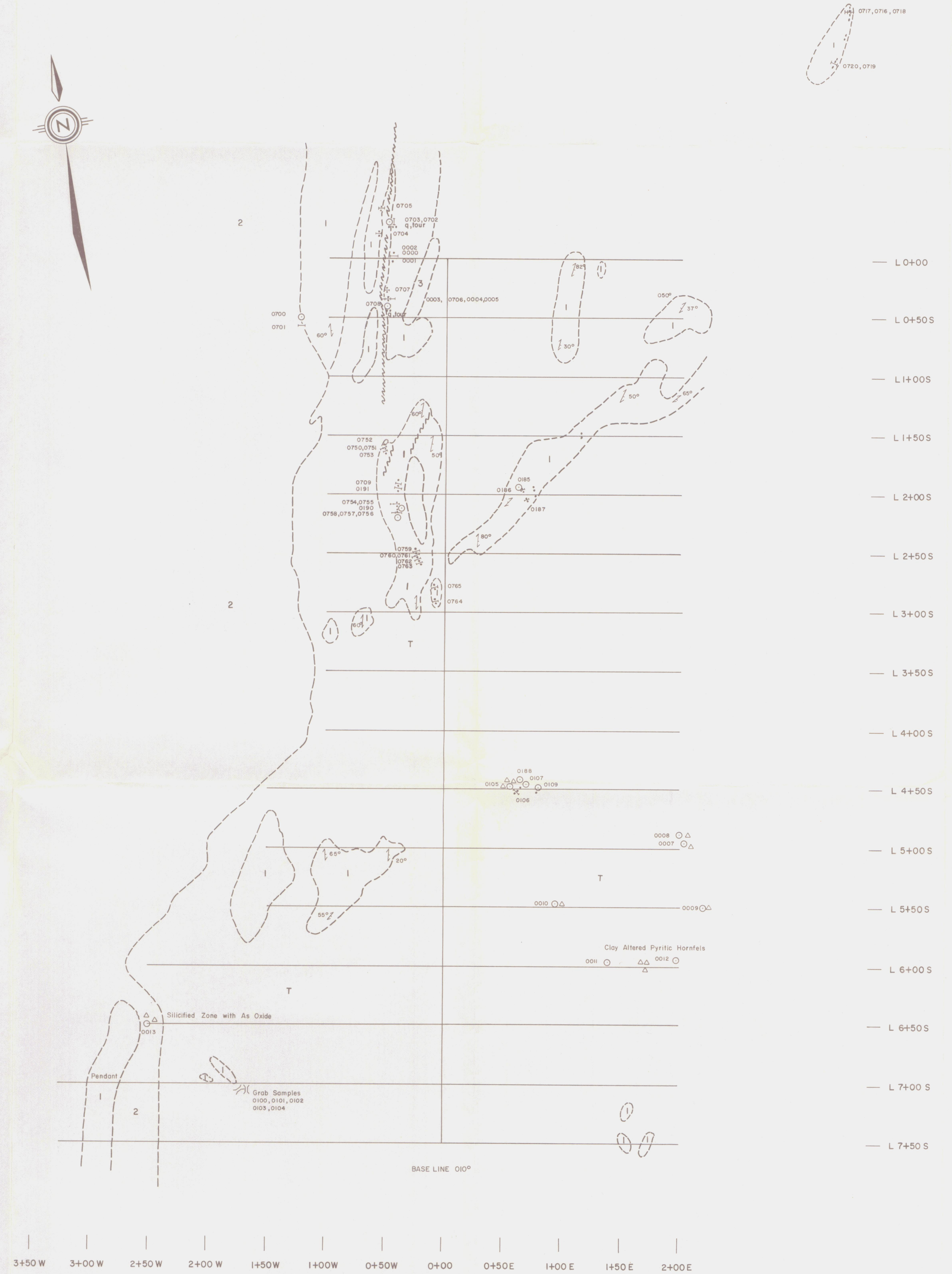
GEOLOGY AND GEOCHEMISTRY

N.T.S. : 105-0-8 YUKON

SCALE: 1:10,000	AUTHOR: A.D.M. ,T.G.	DATE: Oct., 1983
REVISED:	DRAWN BY: J.B.	FIGURE: 400340-2

091494

SAMPLE NUMBER	Au PPB OR GRAMS/TONNE	Ag PPM
2040000	2.3 g/t	0.5
001	40	<0.2
002	10	<0.2
003	214	<0.2
004	0.93 g/t	<0.2
005	20	<0.2
007	7.23 g/t	19.0
008	675	2.5
009	2.3 g/t	6.5
2040010	12.34 g/t	11.0
011	20	<0.2
012	15	<0.2
013	1.34 g/t	4.3
2040100	4.49 g/t	18.0
101	65	0.6
102	9.39 g/t	6.0
103	8.26 g/t	7.0
104	2.54 g/t	12.0
105	3.74 g/t	1.5
106	1.51 g/t	3.0
107	13.03 g/t	46.3
108	195	0.2
109	7.51 g/t	4.1
2040700	<5	<0.2
701	<5	<0.2
702	10	<0.2
703	15	<0.2
704	270	<0.2
705	565	<0.2
706	15	<0.2
707	7.23 g/t	0.2
708	2.26 g/t	0.4
709	380	<0.2
710	635	<0.2
716	2.54 g/t	0.4
717	15	<0.2
718	10	<0.2
719	510	<0.2
720	130	<0.2
750	5.76 g/t	0.3
751	1.37 g/t	0.2
752	1.68 g/t	0.3
753	1.65 g/t	0.4
754	2.4 g/t	0.3
755	145	0.2
756	1.65 g/t	0.2
757	565	<0.2
758	10	<0.2
759	735	0.2
760	180	0.3
761	70	0.2
762	100	<0.2
763	6.03 g/t	0.7
764	475	0.5
765	575	0.2
0040185	3330	0.5
186	3910	0.3
187	2420	0.2
190	11.4 g/t	0.7
0040191	17.8 g/t	1.8



LEGEND

CRETACEOUS

3 Granitic Dyke

2 Biotite Quartz Monzonite

HADRYNIAN (Cambrian ?)

1 Biotite Hornfels (shale, siltstone)

SYMBOLS

T Talus

Arsenopyrite Vein, Float

Fault

Foliation

Geological Contact or Outcrop

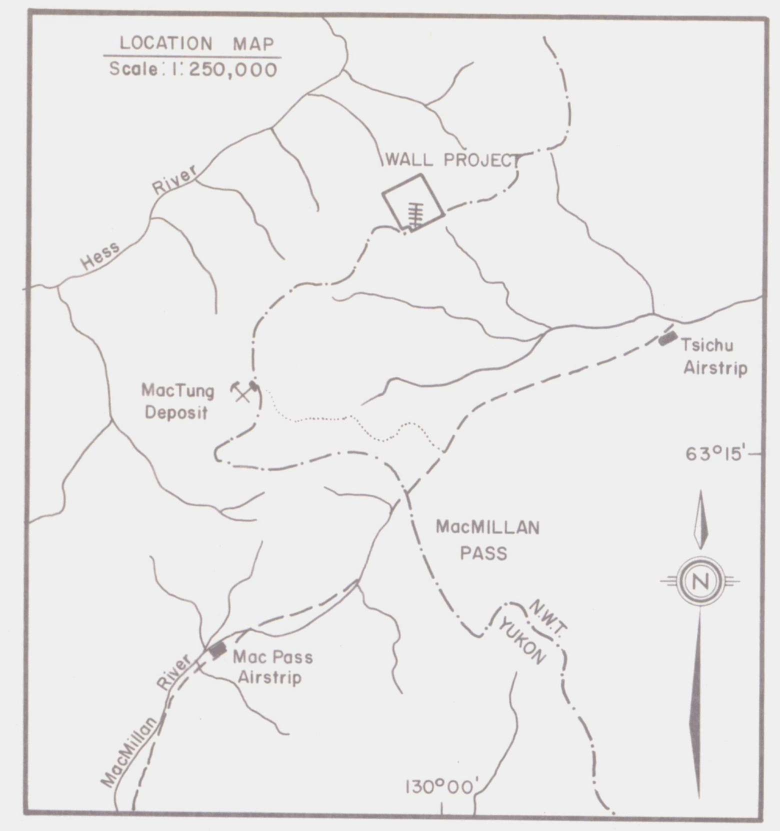
Rock Chip Sample (1 meter unless noted)

Rock Grab Sample

2040706 Sample Number

Trench

q, tour Quartz, tourmaline vein



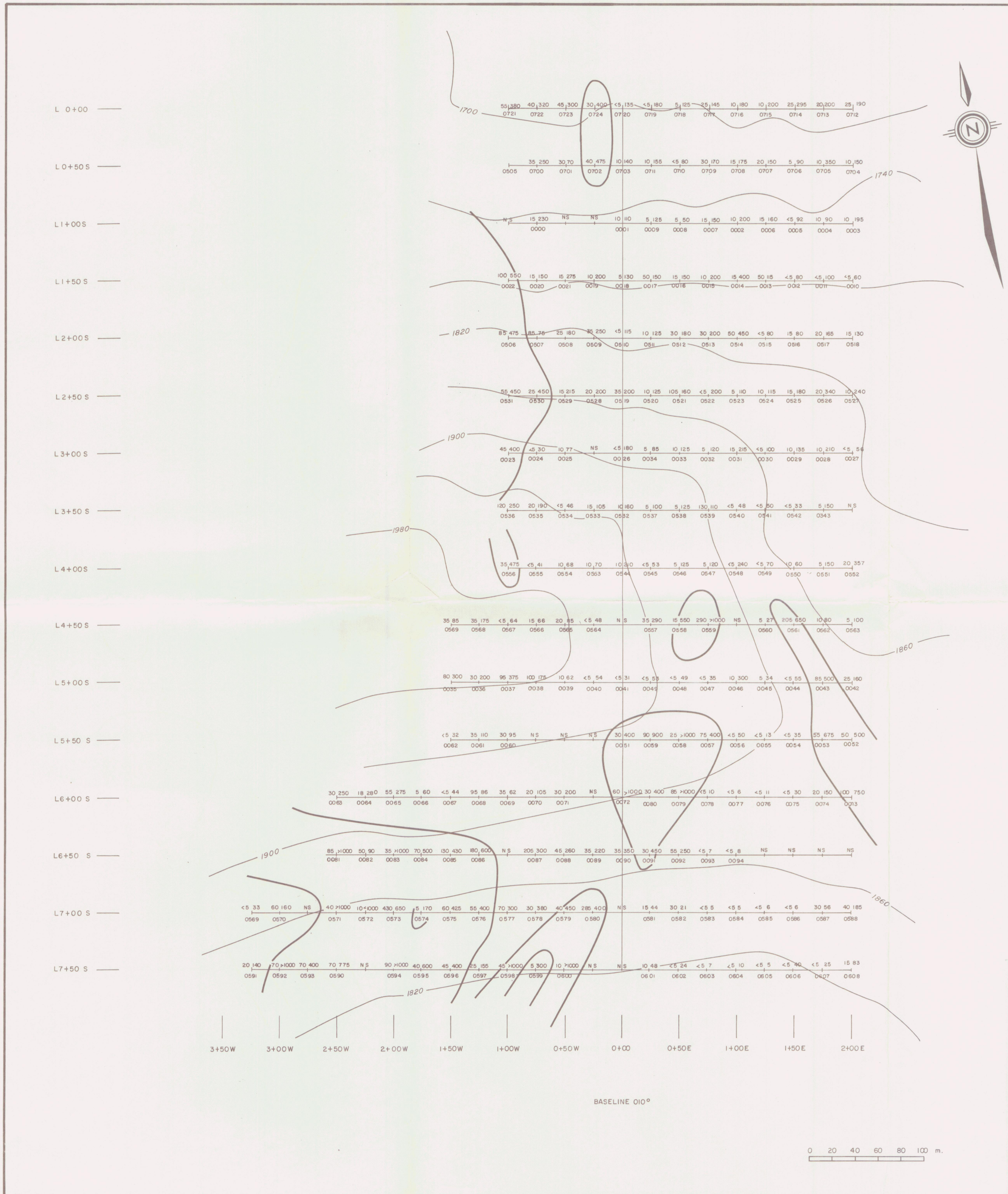
0 100
METERS

Agip Canada Ltd.

WALL PROJECT
Grid Geology And Rock Geochemistry

YUKON 091494

SCALE: 1 : 2,000	AUTHOR: D.M., T.G., L.L.	DATE: Nov., 1983
REVISED:	DRAWN BY: J.B.	FIGURE: 400340-3

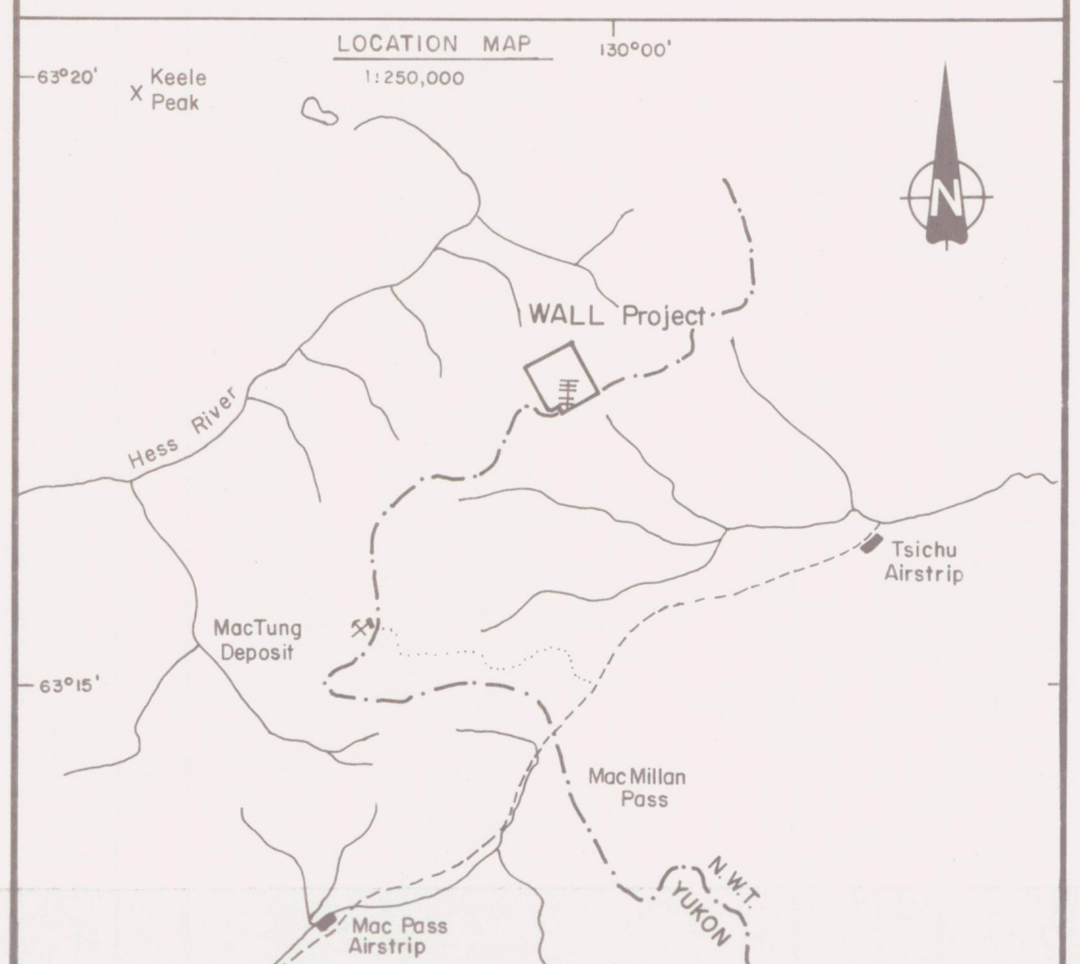


LEGEND

Au ppb | As ppm — 20 | 165
Sample No. — 2030516

Contour Line ≥ 400 ppm As

1700 Topographic contour interval 40 meters



AGIP CANADA LTD.

WALL PROJECT

Grid Soil Geochemistry

YUKON

091494

SCALE: 1:2000	AUTHOR: A.D.M.	DATE: Nov., 1983
DRAWN BY: GTSz	N.T.S: 105-0-8	FIGURE: 400340-4