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**GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT**

for the

**His and Her claims**

**His 1-4 and Her 1-4**

**YB44185-YB44188 and YB44181-YB44184**

**N.T.S.**  
**105 O/11**

**131°22' WEST (LONGITUDE), 63°33' NORTH (LATITUDE)**

**Mayo Mining Division**

**Yukon Territory**



**AUTHOR: B.A.Lueck**

**WORK PERFORMED: JULY 1 to SEPT. 1, 1995**

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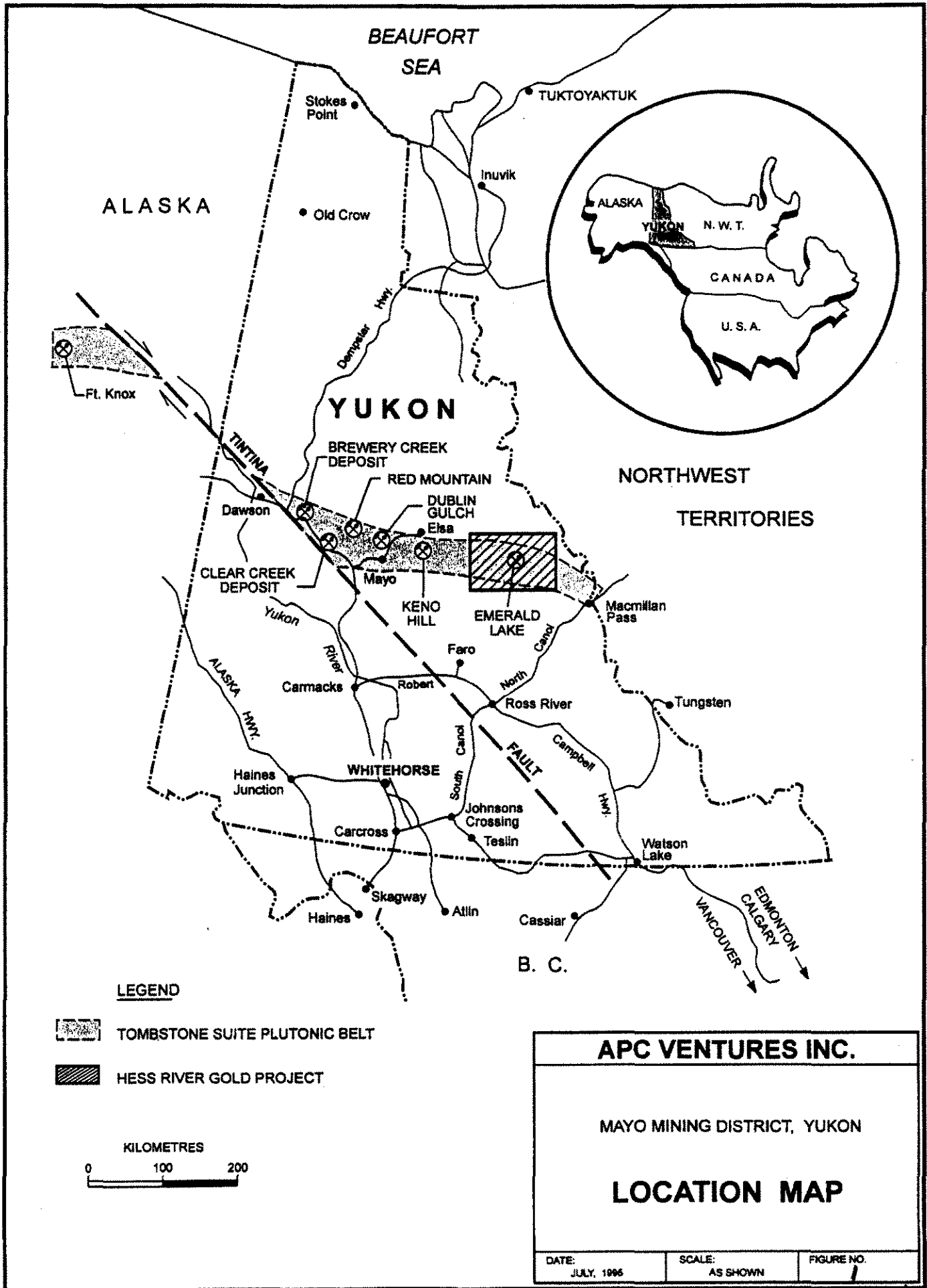
## **INTRODUCTION**

The His 1-4 and Her 1-4 Claims, record numbers YB44185-YB44188 and YB44181-YB44184 are located in the Mayo Mining Division of the Yukon Territory, on map sheet 105 O/11. The claim groups are situated in mountainous terrain approximately 15 km west-southwest of Emerald Lake. The claims are owned by Brian Lueck (50%) and Ann Mark (50%) and are optioned to Yukon Gold Corp. for the entire 100% interest..

These claims cover Cretaceous stocks intruded into Paleozoic sedimentary rocks of the Selwyn Basin. Current work in this region is focused on exploring for large, bulk tonnage gold deposits associated with plutonic rocks known as the Tombstone Suite. As employed in this document the term “Tombstone Suite” refers to a distinctive type of alkaline igneous intrusion associated with Cu and Au deposits of economic value that occurs in western North America. Previous work in this region was done by Geological Survey of Canada and Agip Explorations.

## **SUMMARY**

Geologic mapping, geochemical sampling and rock sampling by previous operators in this area has established the presence of a number of granitic stocks. The “His” and “Her” claims together cover two of these stocks which are similar in age and composition to other mineralized bodies in the Cordillera known as the Tombstone Suite Intrusives. Previous soil, rock and silt sampling by government and industry geologists



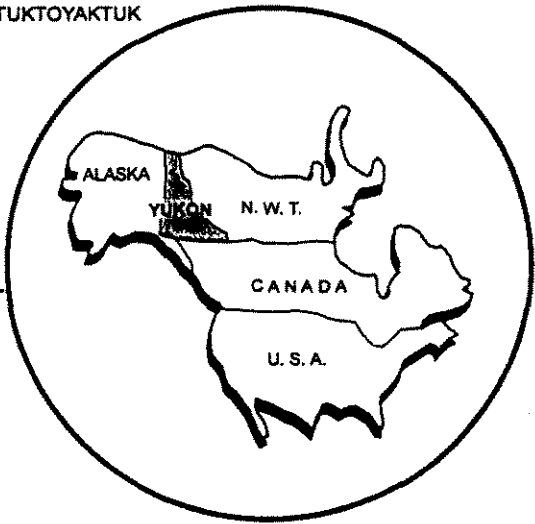
ALASKA

BEAUFORT SEA

Stokes Point  
Old Crow

TUKTOYAKTUK

Inuvik



YUKON

NORTHWEST TERRITORIES

Ft. Knox

BREWERY CREEK DEPOSIT

RED MOUNTAIN

DUBLIN GULCH

Dawson

Elsa

Mayo

KENO HILL

EMERALD LAKE

Macmillan Pass

CLEAR CREEK DEPOSIT

Yukon River

Fero

Robert

North

Ross River

Tungsten

ALASKA HWY.

Carmacks

WHITEHORSE

Haines Junction

Carcross

Johnsons Crossing

Teslin

Campbell Hwy.

Watson Lake

Haines

Skagway

Allin

Cassiar

B. C.

VANCOUVER  
EDMONTON  
CALGARY

LEGEND

TOMBSTONE SUITE PLUTONIC BELT

HESS RIVER GOLD PROJECT



APC VENTURES INC.

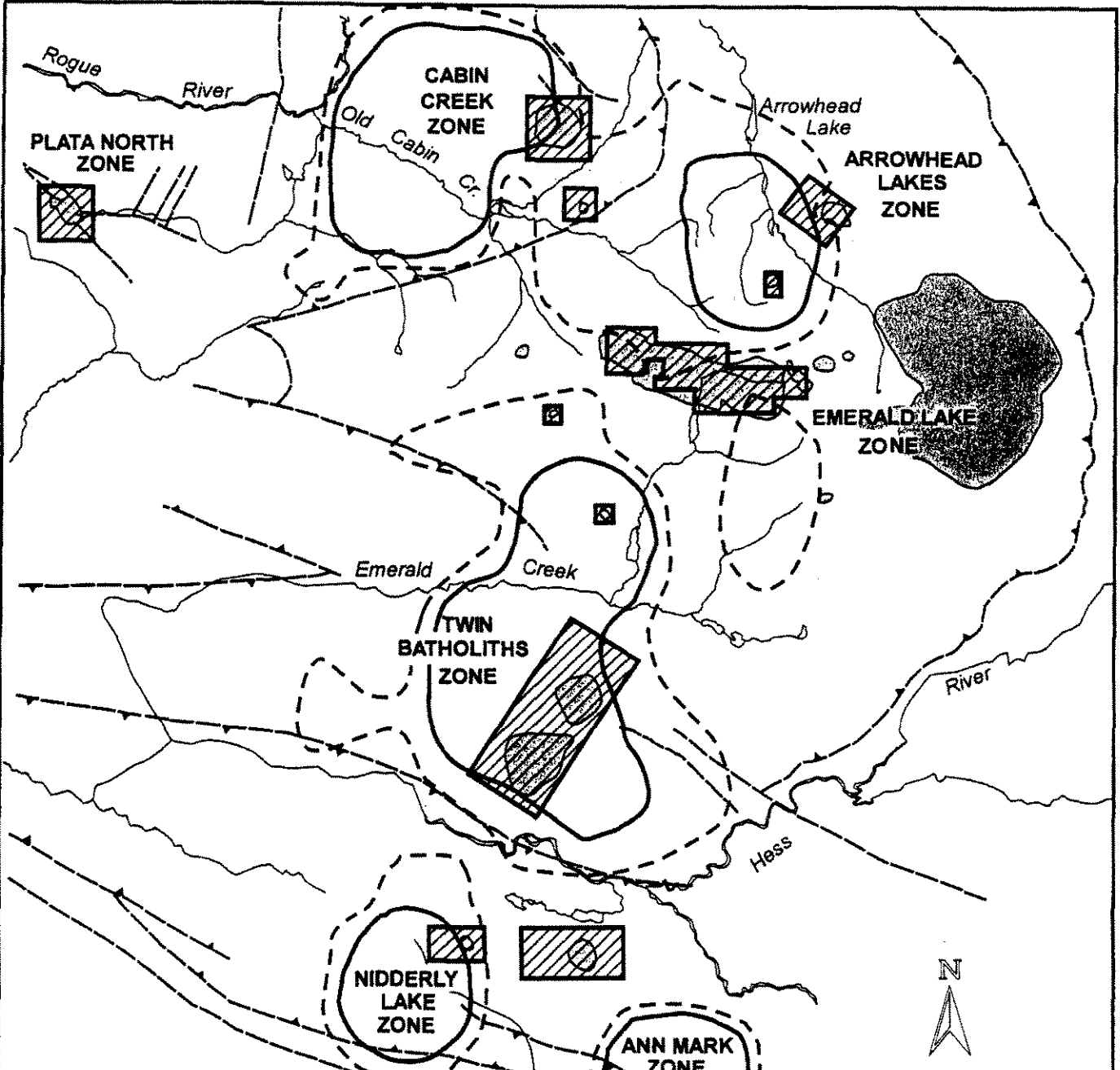
MAYO MINING DISTRICT, YUKON

LOCATION MAP






DATE: JULY, 1996

SCALE: AS SHOWN

FIGURE NO. 1



**LEGEND**

-  TOMBSTONE SUITE PLUTONS
-  FAULT (NORMAL)
-  FAULT (THRUST)
-  90-95 PERCENTILE AU IN SILT
-  +95 PERCENTILE AU IN SILT



<b>APC VENTURES INC.</b>		
MAYO MINING DISTRICT, YUKON		
<b>GOLD ANOMALIES</b>		
DATE: JULY, 1995	SCALE: AS SHOWN	FIGURE NO. <b>2</b>

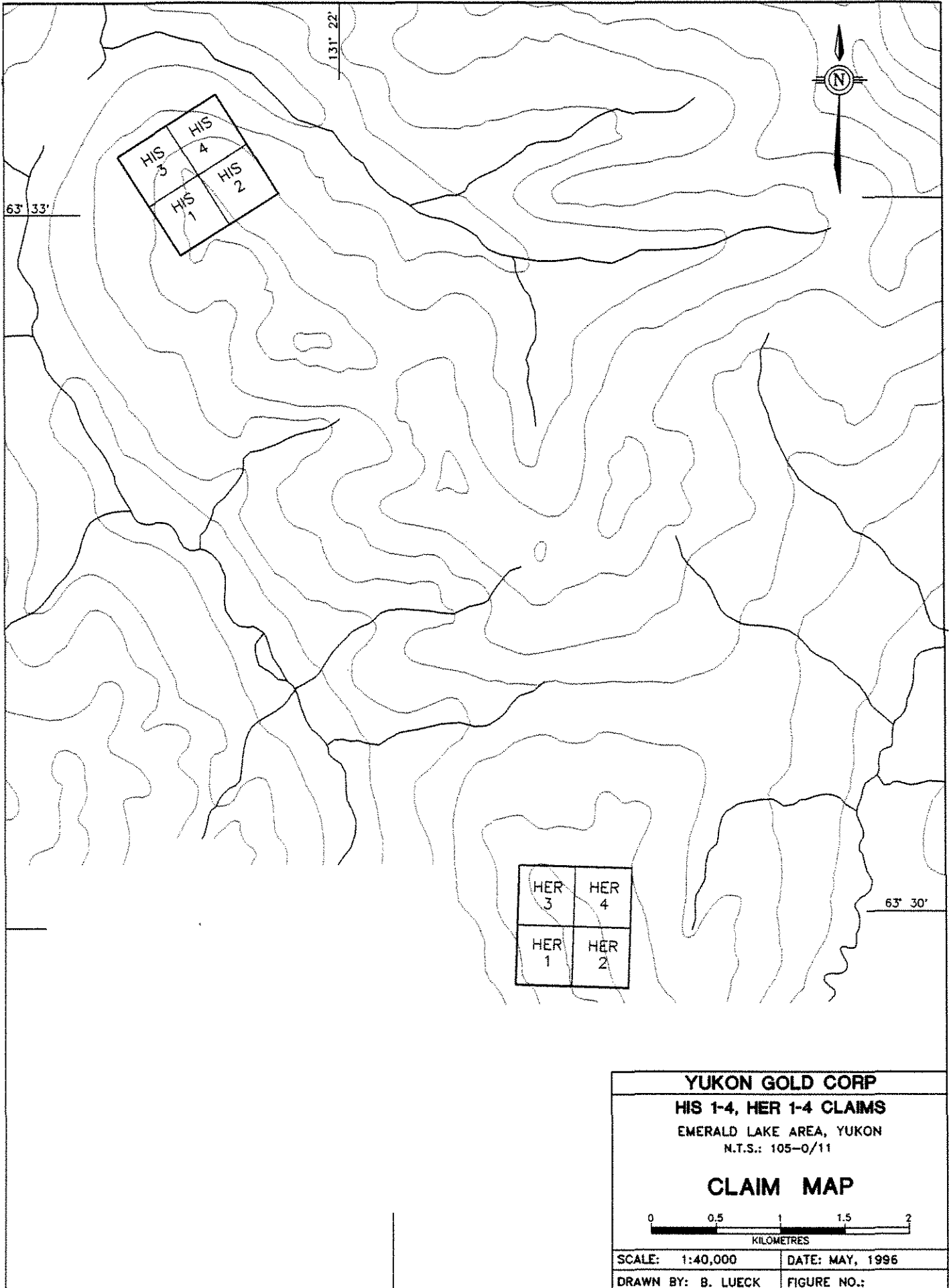
has identified widespread gold, arsenic and antimony mineralization and other geochemical anomalies associated with the plutons covered by these claim blocks. Further investigation is clearly warranted to determine the nature and extent of the mineralization.

### **LOCATION , ACCESS and PHYSIOGRAPHY**

The His and Her claims are located in the Mayo Mining Division of the Yukon Territory, NTS 105 O/11. The His claim block is situated approximately 10 kilometres west of Emerald Lake and the Her claim block is situated approximately 6 kilometres southwest of Emerald Lake. The claim blocks can be accessed by helicopter or by float plane into Emerald Lake. The property lies within the Selwyn Mountains on a rugged ridge attaining an elevation of 1800m. The topography is very steep and rugged making traversing by land difficult and limiting access to some of the more rugged areas on the properties.

### **REGIONAL GEOLOGY and MINERALIZATION**

The claim blocks cover Cretaceous granodiorite stocks which intrude sedimentary rocks of the Selwyn Basin. These sediments range in age from Cambrian to Silurian and consist mostly of maroon and green argillites, sandstones and dark grey cherts. Intrusive bodies are common throughout the Selwyn Basin in the Yukon. Some of these stocks are



<b>YUKON GOLD CORP</b>	
<b>HIS 1-4, HER 1-4 CLAIMS</b>	
EMERALD LAKE AREA, YUKON	
N.T.S.: 105-0/11	
<b>CLAIM MAP</b>	
SCALE: 1:40,000	DATE: MAY, 1996
DRAWN BY: B. LUECK	FIGURE NO.:

associated with gold mineralization analogous to the Fort Knox deposit, an intrusive-hosted gold deposit of large tonnage and low grade

The His and Her granodiorites are the potential hosts for a stockwork gold deposit. These plutons are medium-grained and equigranular and are composed of quartz, plagioclase, biotite and hornblende. The granodiorites are cut by 1cm wide pyrite-pyrrhotite-molybdenite quartz veins.

### **LOCAL GEOLOGY**

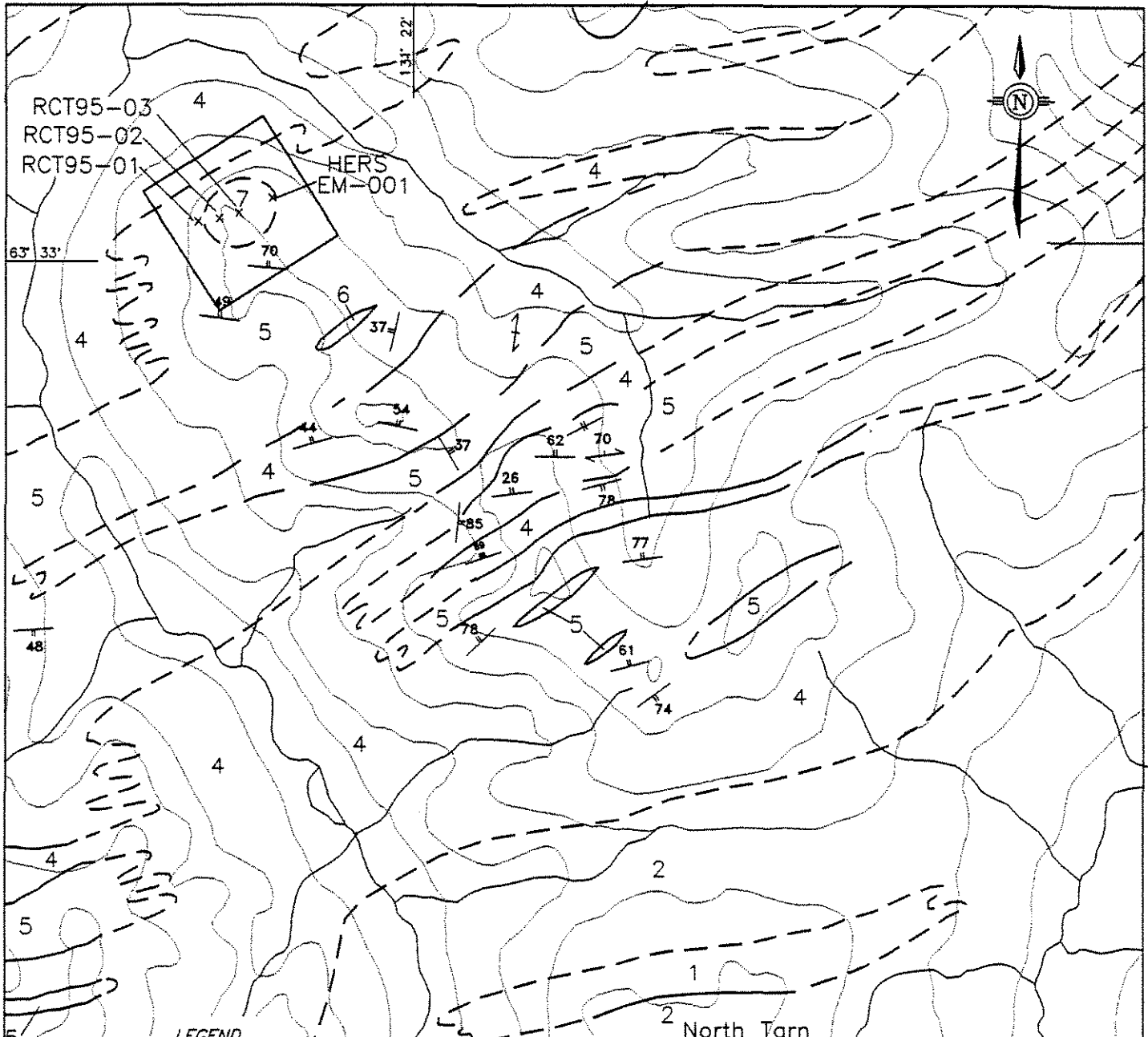
The His and Her claim blocks cover two Cretaceous granodiorite plutons which are intrusive into Cambrian to Ordovician and Silurian sediments. The following is a description of the lithologic units.

#### *Cambrian and Ordovician*

The lowermost exposed rocks are maroon and pale green argillites, as well as grey-white quartzite with interbedded argillites and quartz-pebble conglomerate. The unit grades upwards into green argillite with thick succession of black shale, siliceous argillite and chert.

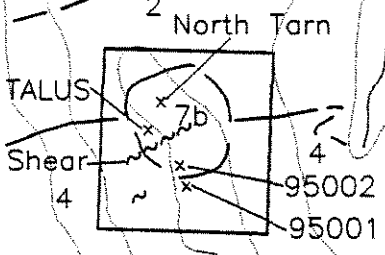
#### *Silurian*

Silurian chert with minor intercalated shales, argillites and dolomites overlies the transition phase Lower Cambrian argillites and quartzites. Silver weathering black shales and brown weathering green-grey shales in the upper part of this unit yield Silurian fossil graptolites.



**LEGEND**

- CRETACEOUS**
- 7b Alkaline syenite, quartz monzonite and granite:  
b—with biotite
- DEVONIAN**
- 6 Black shale
- SILURIAN**
- 5 Argillite, dark green to buff, minor black shale
- CAMBRIAN TO ORDOVICIAN**
- 4 White, dark grey chert
- 3 Sandstone, volcaniclastic
- 2 Green argillite, thick succession of black shale, siliceous argillite and chert
- 1 Maroon and pale green argillite, minor grey-white quartzite and quartz-pebble conglomerate
  
- Bedding
- Schistosity
- Foliation
- Vein
- Fault
- Geological Contact (assumed)
  
- x Sample Location



<b>YUKON GOLD CORP</b>	
<b>HIS 1-4, HER 1-4 CLAIMS</b>	
EMERALD LAKE AREA, YUKON	
N.T.S.: 105-0/11	
<b>GEOLOGY AND</b>	
<b>SAMPLE LOCATIONS MAP</b>	
SCALE: 1:40,000	DATE: MAY, 1996
DRAWN BY: B. LUECK	FIGURE NO.:

## *Cretaceous*

The granodiorite is of Cretaceous age and is the potential host for a stockwork gold deposit. This pluton is medium-grained and equigranular and is composed of quartz, plagioclase, biotite and hornblende. Fine-grained clastics surrounding the pluton have been metamorphosed to a dark fine-grained hornfels.

## **PREVIOUS WORK**

Geological mapping in the area by the Geological Survey exists in the form of an Open File Map 205 dated June, 1974. Previous work in the vicinity of Emerald Lake has exposed gold mineralization in a number of stockwork zones described in reports by Agip, which are intrusive hosted disseminated gold showings.

## **THE 1995 EXPLORATION PROGRAM**

The 1995 exploration season consisted of 10 mandays of helicopter supported geological mapping, prospecting and rock chip sampling. Only part of the intrusion was prospected and many anomalous areas have not been well sampled. Soil sampling was done to confirm the presence of mineralization on the claim blocks.

The soil samples were dried, screened and pulverized, and fire assayed for gold to a detection unit of 5 ppb. Sample locations are shown on the geological map and sample

values are shown in the appendix and indicate the presence of a large tonnage gold deposit of potentially economic grade.

## **DISCUSSION**

The His and Her claims host poorly explored gold mineralization, which has been partially delineated by rock chip sampling. The target is a large, low grade, disseminated or stockwork gold deposit hosted by the intrusive rocks. The presence of a large scale gold and arsenic anomaly on the His and Her claims indicates the potential for the discovery of bulk tonnage gold mineralization on these claims.

## **CONCLUSIONS and RECOMMENDATIONS**

The 1995 exploration program on the HIS and HER claims has delineated a strong gold and arsenic in soil anomaly associated with the intrusive stocks. The rock chip sampling determined the presence of a porphyry gold deposit of unknown size and grade. It is recommended that more detailed prospecting and sampling be carried out within and surrounding the plutons in order to delineate mineralized zones.

**PROPOSED EXPENDITURES (STATEMENT OF COSTS)**

**His/Her Project, Yukon Territory**

DESCRIPTION	EXPENSE	BALANCE
<b><u>CAMP SETUP</u></b>		
tent frames, tents	\$6000	
lumber	\$2000	
stoves, heaters	\$2800	
plumbing	\$2000	
propane, tanks, hose fittings	\$4000	
generator, set wire, lights	\$4000	
stove, fridge, freezer	\$2500	
<b>SUBTOTAL</b>		<b>\$23,300</b>
<b><u>HELICOPTER FUEL</u></b>		
Jet 'B' fuel, delivered	160 drums @ \$450/drum	
<b>SUBTOTAL</b>		<b>\$72,000</b>
<b><u>MOBILIZATION</u></b>		
Single Otter aircraft	220 miles @ \$6.50/mile	
	~\$1500/trip for 10 trips	
<b>SUBTOTAL</b>		<b>\$15,000</b>
<b><u>EXPLORATION</u></b>		
personnel, 3 persons	45 days @ \$600/day	\$27,000
helicopter, 2 persons	90 hrs @ \$700/hr	\$63,000
camp costs, 5 persons	45 days @ \$250/day	\$11,250
expediting	45 days @ \$100/day	\$4,500
flights, supplies	5 flights @ \$1500/flight	\$7,500
<b>SUBTOTAL</b>		<b>\$113,250</b>
<b>PROJECT TOTAL</b>		<b>\$223,550.00</b>

**EXPENDITURES (STATEMENT OF COSTS)**

<b>Geologist</b>	<b>- 10 days at \$300.00/day</b>	<b>\$3000.00</b>
<b>Crew Foreman</b>	<b>- 10 days at \$250.00/day</b>	<b>\$2500.00</b>
<b>Prospector</b>	<b>- 10 days at \$200.00/day</b>	<b>\$2000.00</b>
<b>Truck and Fuel</b>	<b>- 2 days at \$100.00/day</b>	<b>\$200.00</b>
<b>Helicopter</b>	<b>25 Hrs. @ \$1000/Hr.</b>	<b>\$25,000.00</b>
<b>Camp costs</b>	<b>- flagging- tents- food- etc. - 60 mandays at \$75.00/manday</b>	<b>\$4,500.00</b>
<b>Report and Drafting</b>		<b>\$5,000.00</b>
<b>Assays</b>	<b>- 8 samples @ \$20/sample</b>	<b>\$160.00</b>
<b>Total</b>		<b>\$42,360.00</b>

*Personnel:*

Brian Lueck; 607 Berry St., Coquitlam, B. C., V3J 6C2

Dave Sufady, General Delivery, Whitehorse, Yukon

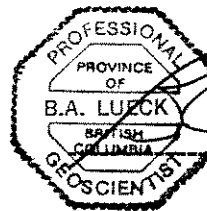
Tom Morgan, General Delivery, Dawson City, Yukon

Marco Van Wermeskerken, 1210-675 W. Hastings, Van., B.C.

*Statement of Qualifications:*

I, Brian A. Lueck, of the City of Whitehorse, Yukon Territory do hereby certify that:

1. I am a graduate of the University of British Columbia and possess a B. Sc. (honours) in Geology.
2. I have been employed as a consulting geologist or a government geologist since June of 1985.
3. I am currently enrolled in a M. Sc. program in geology at U. B. C.
4. I am a member in good standing of *The Association of Professional Engineers and Geoscientists of the Province of British Columbia*, and am currently registered as a *P. Geo.*
5. I have reviewed the data and inspected the field work and I believe this report to be an accurate reflection of the work performed on the property during 1995.



A handwritten signature in black ink that reads "B. Lueck". The signature is written over a horizontal dashed line.

Brian A. Lueck

P. Geo.

Geologist

His and Her - claims							
<b>SAMPLE #</b>	<b>Au-ppb</b>	<b>Ag-ppm</b>	<b>Cu-ppm</b>	<b>As-ppm</b>	<b>Bi-ppm</b>	<b>Sb-ppm</b>	<b>Mo-ppm</b>
RCT 95-01	<5	0.7	32	124	<1	49	2
RCT 95-02	5	0.4	60	306	3	31	3
RCT 95-03	27	0.4	18	665	1	44	2
EM-001	55	1.9	170	1879	2	21	3
95001	6	0.3	12	107	<1	92	1
95002	16	0.7	17	596	<1	45	1
North Tarn	33	7	189	683	<1	6	17
Talus	11	0.2	7	87	<1	2	2
Shear	55	0.5	112	331	<1	6	7