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**GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT**

for the

**HR 1-64 Claims and ET 1-16 Claims**

YB44117 to YB44180 and YB44189 to YB44204

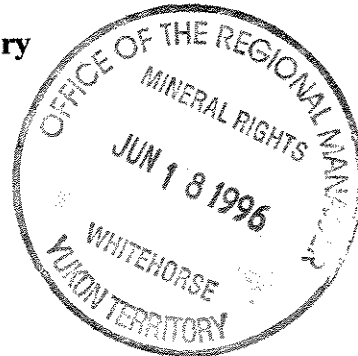
**N.T.S.**

**105 O-~~3~~ //**

131°29' WEST (LONGITUDE), 63°42' NORTH (LATITUDE)

Mayo Mining Division

Yukon Territory



**AUTHOR: B.A.Lueck**

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

058500

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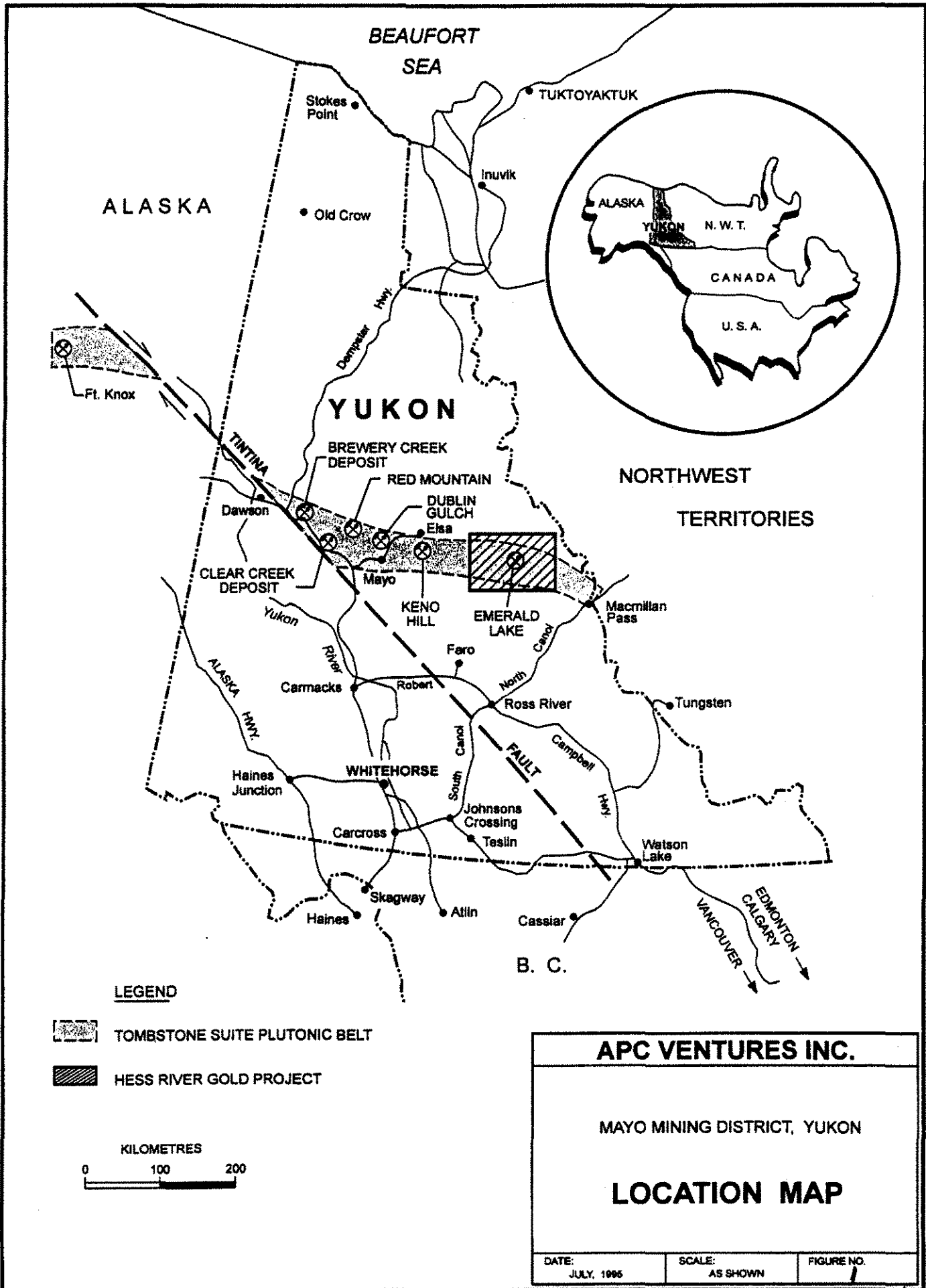
## **INTRODUCTION**

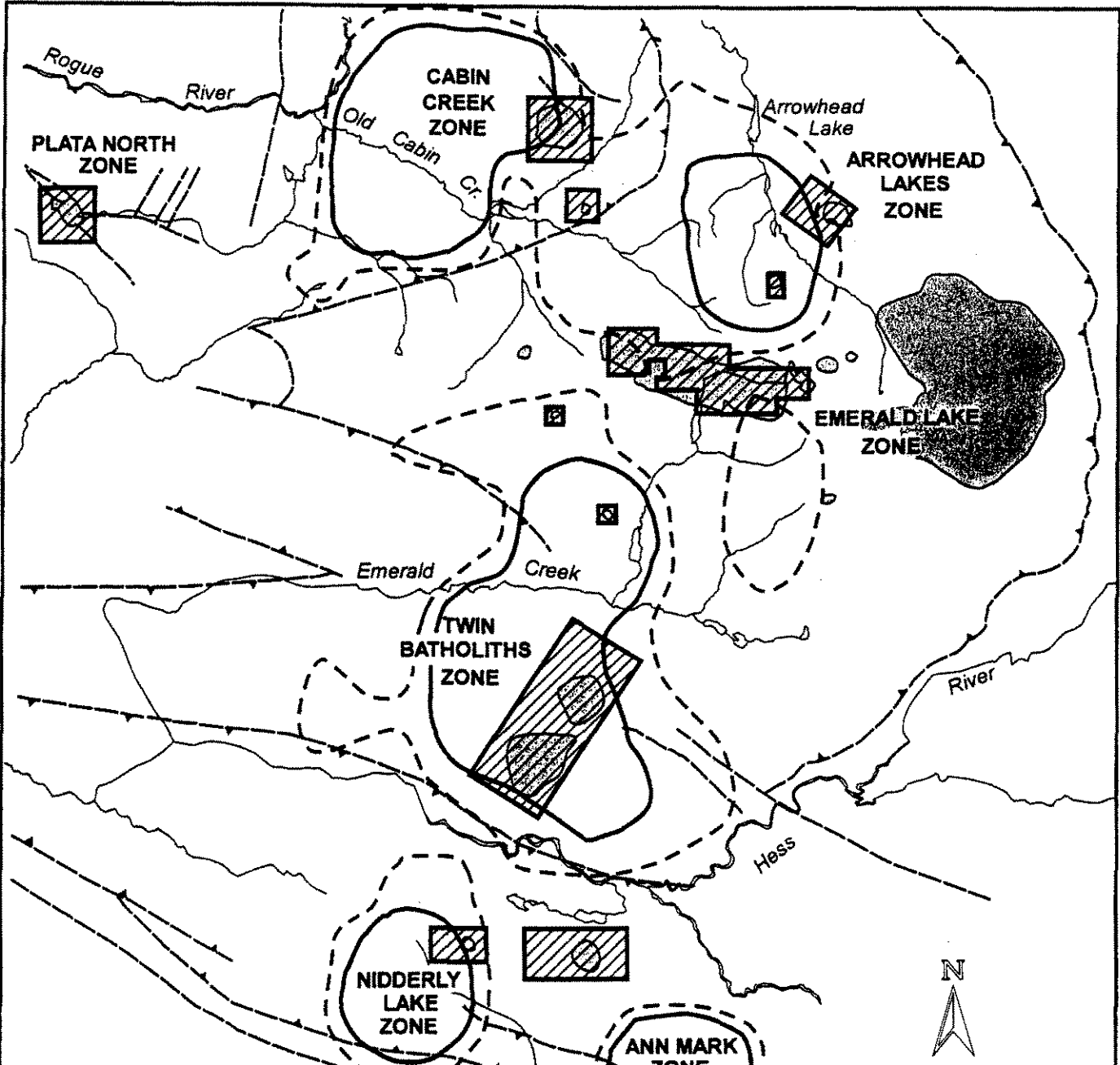
The HR 1-64 Claims, record numbers YB44117 TO YB44180; and the ET 1-16 claims record numbers YB 44189 to YB44204 are located in the Mayo Mining Division of the Yukon Territory, on map sheet 105 O-3. The claim groups are situated in mountainous terrain approximately 12.5 kilometres east of the confluence of Old Cabin Creek and Rogue River. The claims are owned by Brian Lueck (50%) and Ann Mark (50%) and are optioned to Yukon Gold Corp. for the entire 100% interest..

Previous geological mapping in the area indicates a Cretaceous granodiorite which is intrusive into a sequence comprising predominantly Hadrynian and Cambrian green and red shales with dark green and brown basic volcanic and volcanic-clastic rocks (see Open File 205, June 1974, G.S.C. Ottawa). The granodiorite is cut by pyrite-pyrrhotite-molybdenite quartz veins with a thin (1-2 mm) K-feldspar alteration envelope. These veins are 1 cm wide. Larger veins have quartz crystal lined vugs (implying open space filling) with individual molybdenite flakes up to 1cm in size. Another generation of quartz-pyrite-molybdenite veins is surrounded by a prominent rusty weathering zone of sericitic alteration up to 2cm wide on either side of the veins






## **SUMMARY**

Geologic mapping on the Cabin Creek claim blocks has established the presence of a medium-grained granitic intrusive stocks which are cut by pyrite-pyrrhotite-





**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>

molybdenite quartz veins. This geochemically anomalous region hosts significant potential for a major gold deposit of the 'Fort Knox Type' associated with Tombstone Suite Intrusives. A relationship exists between the Cabin Creek granodiorites and nearby gold-localities in the Yukon (i.e. Dublin Gulch) in that the genesis of gold-bearing arsenopyrite veins is attributed to nearby Cretaceous plutons. (D. Templeman - Kluit, Yukon - Geology and Exploration 1979-80, Dept. of Indian and Northern Affairs, Whitehorse - pg 23). All of the pluton is covered by the HR 1-64 claims. A further 16 ET claims were staked to cover a smaller stock to the southwest of the HR claimblock (see location map).

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

The claims are located in the Mayo Mining Division of the Yukon Territory, NTS 105 O-3. The claim groups are situated in mountainous terrain approximately 12.5 kilometres east of the confluence of Old Cabin Creek and Rogue River. The nearest road is the Canol Road passing through MacMillan Pass about 87 km to the southeast.

Access to the property is hampered by extremely rugged terrain. Fixed-wing float planes can land either at Arrowhead Lake (16 km to the east) or Emerald Lake (20 km to the south east). From these lakes access is by helicopter. Contract helicopters are also available from Ross River.

The property lies within the Hess Mountains, just north of the Rogue Range. Topographic relief is spectacular and varies between 1,000 m and 2,100 m AMSL. The

northeastern half of the property is dominated by a series of steep sided ridges surrounding a number of cirques. Most slopes are largely talus covered while cirque floors consist of scattered rubble piles and boulder fields. Rock slides occur frequently during the summer months. Most of the property is situated above the tree line.

## **REGIONAL GEOLOGY and MINERALIZATION**

The Cabin Creek claim blocks are located within the Selwyn Basin and together cover two Cretaceous granodiorite stocks which intrude Lower Cambrian to Silurian sedimentary rocks. These sedimentary rocks consist of maroon and green argillite, grey and white quartzites, quartz pebble conglomerates, black shales and cherts.

The Selwyn basin hosts the Fort Knox deposit, an intrusive hosted gold deposit of large tonnage and low grade. This deposit occurs in Alaska within a region of the Selwyn Basin that has been offset to the northwest by the Tintina Trench. Intrusive bodies occur throughout the Selwyn Basin in the Yukon, and stocks are often associated with gold mineralization. The Brewery Creek deposit, 25 miles to the northwest, is largely intrusive hosted and hosts in excess of 17 million tons of .056 opt Au. This deposit is currently being expanded and is slated for production in 1996. Another significant intrusive hosted deposit occurs at Dublin Gulch, some 25 miles to the northeast, where a geological reserve of 100,000,000 tonnes of >.032 OPT Au has been delineated (>3 million ounces gold).

## LOCAL GEOLOGY

The claim block covers a Cretaceous granodiorite which is intrusive into a sequence consisting of green and red shales with dark green and brown basic volcanic and volcano-clastic rocks. The following is a description of these lithologic units.

Hadrynian to Lower Cambrian sediments consists mostly maroon shales with minor interbedded green shales, brown-weathering shales and argillites and occasional coarse-grained feldspathic quartzites, grit and conglomerate. Shales of this unit invariably occupy the lower debris filled valleys or underlie gentle grass-covered slopes. Overlying this sequence is the Lower Cambrian succession which contains rusty red-brown weathering argillites with interbedded quartzite and shales. Shale interbeds are more common lower down in the sequence which grades upwards into quartzites and argillites. An Ordovician to 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. Mid-Ordovician to Silurian Volcanic Assemblage contains a variety of rock types ranging from volcanic breccia, lithic and lapilli tuffs and lava flows.

The granodiorite is mid-Cretaceous in 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. In places it contains well rounded mafic xenoliths and subangular xenoliths of thermally metamorphosed



sediments. The thermal contact aureole of the granodiorite is a narrow zone several meters wide. Fine-grained clastics surrounding the pluton have been metamorphosed to a dark fine-grained, magnetite-bearing hornfels. The eastern contact has been displaced by younger north-south faulting. The southern contact is not exposed. The granodiorite is cut by 1 cm wide pyrite-pyrrhotite-molybdenite quartz veins with a thin (1-2 mm) K-feldspar alteration envelope. Veins wider than 1 cm also occur and have quartz crystal lined vugs (implying open space filling) with individual molybdenite flakes up to 1cm in size. Another generation of quartz-pyrite-molybdenite veins is surrounded by a prominent rusty weathering zone of sericitic alteration up to 2cm wide on either side of the veins.

## **PREVIOUS WORK**

In the winter of 1981 stream silt and concentrate samples collected in previous exploration programs by Union Carbide Exploration Corp.in the Niddery Lake Area (NTS 105 0) were analyzed for gold, silver, copper and molybdenum. A number of sites anomalous in precious metals were detected with the highest anomalous stream geochemistry originating from the vicinity of the Cabin Creek granodiorite.

A follow-up prospecting and sampling program was initiated in the 1981 summer field season. Exploration at Cabin Creek located a number of arsenopyrite veins with gold values of up to 0.654 oz/ton. On the basis of these results and competitor activity

(Agip, Cominco, Archer Cathro) in the area, 185 claims were staked in late July and mid-August of 1981.

### **THE 1995 EXPLORATION PROGRAM**

In 1995, the exploration program consisted of geological mapping, prospecting, rock chip and soil sampling of the Cabin Creek claim blocks. Only part of the intrusion was prospected and many geochemically anomalous areas have not yet 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 assays are reported in the appendix.

No drill target has been outlined on the Cabin Creek zones although a large coincident gold and arsenic anomaly is present on them.

### **DISCUSSION**

The Cabin Creek claim blocks 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 HR and ET claims indicates the potential for the discovery of bulk tonnage gold mineralization on these claims.

## **CONCLUSIONS and RECOMMENDATIONS**

The 1995 exploration program on the HR and ET claims has delineated a strong gold and arsenic in soil anomaly associated with the intrusive stocks. The 1995 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. Helicopter support is required for this program.

**PROPOSED EXPENDITURES (STATEMENT OF COSTS)**

**Cabin Creek Project, Yukon Territory**

<b>DESCRIPTION</b>	<b>EXPENSE</b>	<b>BALANCE</b>
<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>- 20 days at \$300.00/day</b>	<b>\$6000.00</b>
<b>Crew Foreman</b>	<b>- 20 days at \$250.00/day</b>	<b>\$5000.00</b>
<b>Prospector</b>	<b>- 20 days at \$200.00/day</b>	<b>\$4000.00</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>- 36 samples @ \$20/sample</b>	<b>\$720.00</b>
<b>Total</b>		<b>\$50,420.00</b>

***Personnel:***

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

Dave Sufady, General Delivery, Whitehorse, Yukon

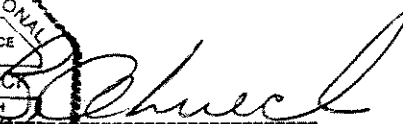
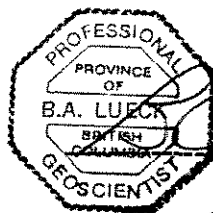
Tom Morgan, General Delivery, Dawson City, Yukon

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.



Brian A. Lueck

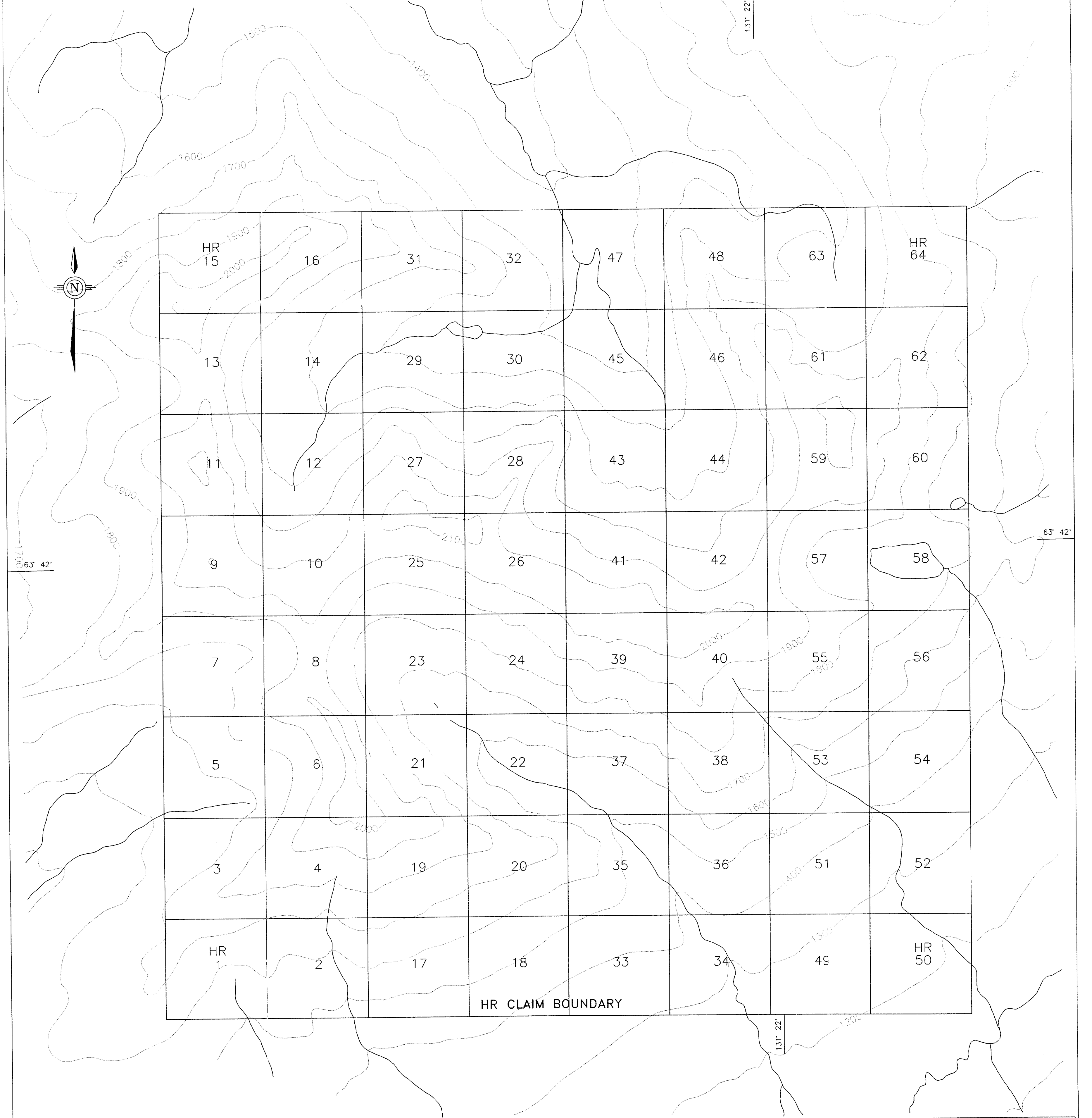
P. Geo.

Geologist

Assays for CABIN CREEK									
SAMPLE #	DESCRIPTION	WIDTH	Au-ppb	Ag-ppm	Cu-ppm	As-ppm	Bi-ppm	Sb-ppm	Mo-ppm
CCMRF95001	Siliceous argillite float within a bleached zone trending 172. Leached, limonitic.	Float.	15	0.4	24	70	<1	<2	30
CCMRC95002	Limonite-ankerite altered argillite in fault zone.	3.0	9	<0.1	50	851	<1	8	4
CCMRF95003	Alteration zone similar to -002. Large felsensmere gossan. Abundant calcareous breccia.	Float.	<5	<0.1	153	90	<1	3	3
CCMS95004	Yellow-brown soil.	Soil.							
CCMS95004-10	cabin zone	Soil							
CCMS95005	Yellow-brown soil.	Soil.							
CCMS95006	Soil.	Soil.							
CCMS95007	Soil.	Soil.							
CCMS95008	Soil.	Soil.							
CCMS95010	Soil.	Soil.							
CCMRF95011	Small pieces of quartz vein with trace of arsenopy. in soil on fault trace.	Float.	>6667	>50.0	83	>10000	<1	>10000	3
CCMRC95012	Fine grained granodiorite with 2% fine disseminated pyrite. Foliated @ 157/90. Limonitic.	5.0	30	0.6	27	269	<1	18	6
CCMRC95013	Medium grained granodiorite with 2% quartz veins and minor pyrite at contact with sedimentary rocks.	9.0	57	1.1	9	404	<1	14	5
CCMRC95014	Fine grained sandstone with minor pyrite. Limonitic.	10.0	14	<0.1	33	440	<1	<2	4
CCMRC95015	As -014.	11.0	9	<0.1	29	66	<1	<2	5
CCMRC95016	As -014 with a few quartz stringers.	10.0	11	<0.1	29	72	<1	3	4
CCMRC95017	As -014 with abundant limonite.	10.0	10	<0.1	16	107	<1	<2	5
CCMRG95018	Hornfelsed sedimentary rock with 2% very fine py.	Grab.	6	<0.1	25	29	<1	<2	5
CCMRG95019	As -018.	Grab.	14	<0.1	27	33	<1	<2	3
CCS95001	Soil.	Soil.							
CCS95002	Soil.	Soil.							
CCS95003	Soil.	Soil.							
CCS95004	Soil.	Soil.							
CCS95005	Soil.	Soil.							
CCS95006	Soil.	Soil.							
CCS95007	Soil.	Soil.							
CCS95008	Soil.	Soil.	47						
CCS95009	Soil.	Soil.	14						

	ET-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>
ETST 95-01	14	0.2	42	199	<1	<2	6
ETST95-02	38	1.1	236	790	1	<2	9
ETST 95-03	11	0.2	37	345	<1	15	1
ETRCT 95-01	20	0.4	100	2720	3	8	9
ETRCT 95-02	<5	<0.1	6	17	<1	<2	3
ETRCT 95-03	5	0.6	129	795	<1	3	3
ETRCT 95-04	24	0.5	64	301	<1	<2	11
ETRCT 95-05	<5	0.4	31	2001	<1	11	3





**YUKON GOLD CORP**

**CABIN CREEK**  
**HR 1-64 CLAIMS**  
 CABIN CREEK AREA, YUKON  
 N.T.S.: 105-0/11

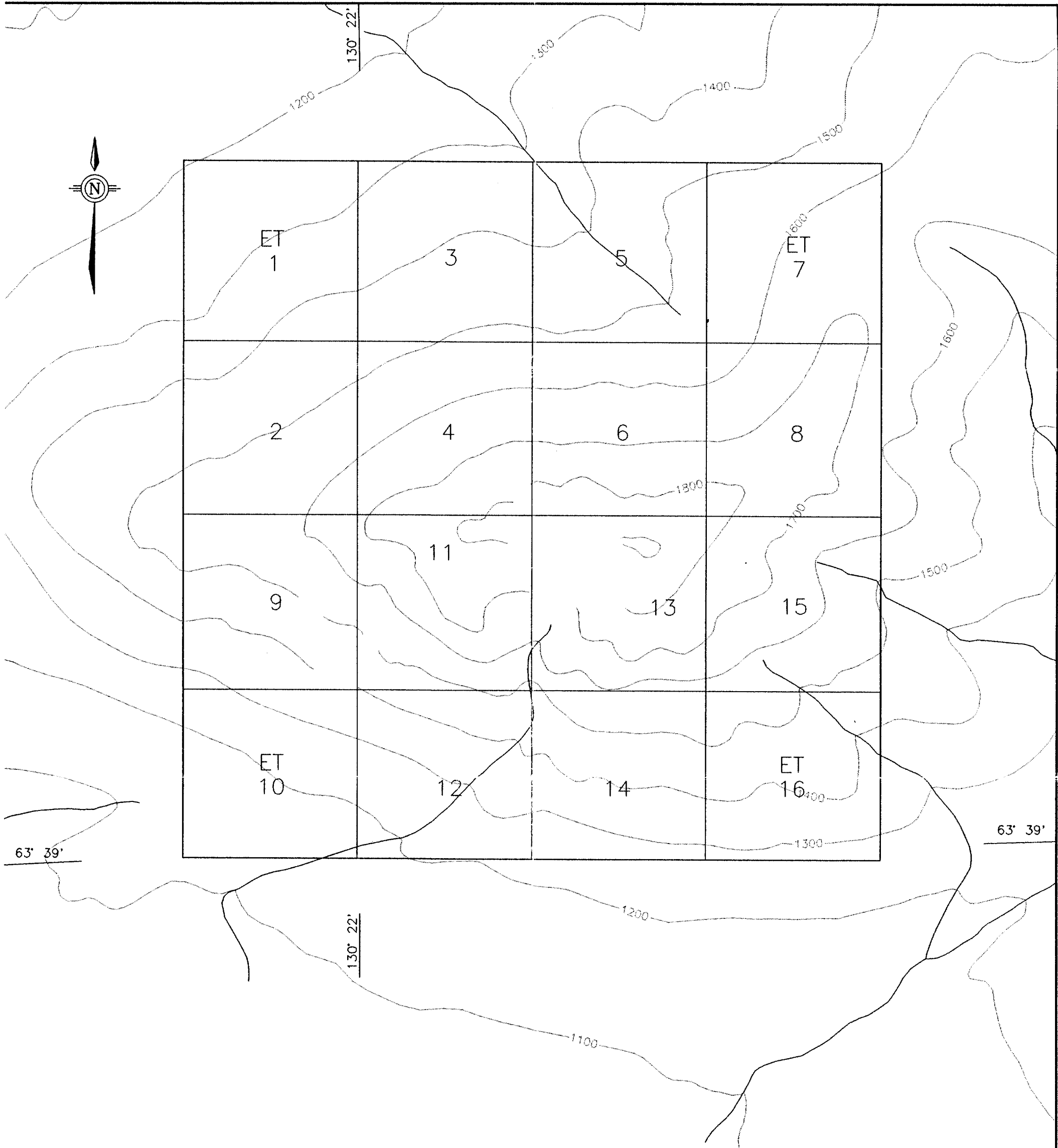
**CLAIM MAP**

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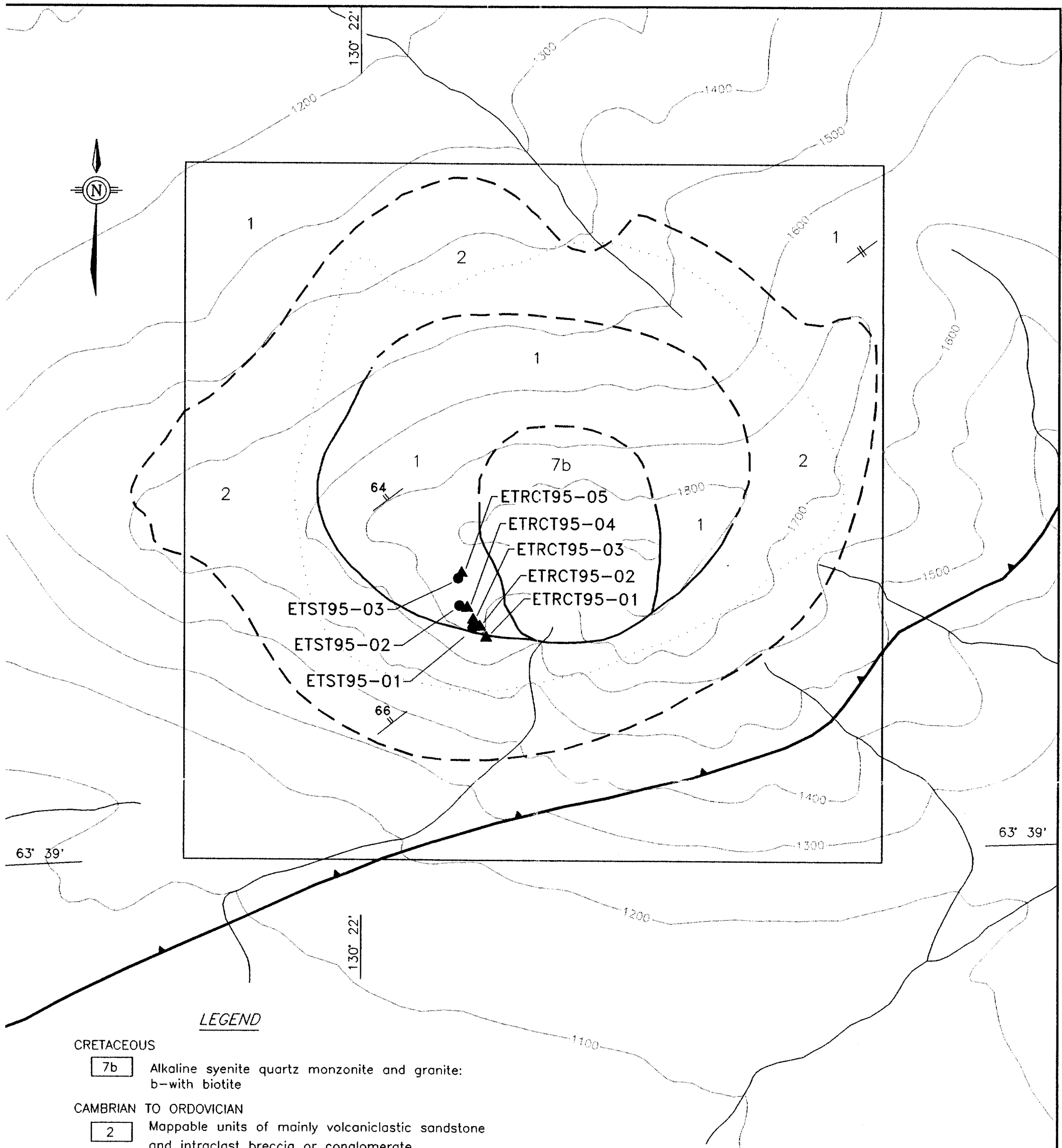
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<b>YUKON GOLD CORP</b>	
<b>CABIN CREEK ET 1-16 CLAIMS</b>	
CABIN CREEK AREA, YUKON N.T.S.: 105-0/11	
<b>CLAIM MAP</b>	
SCALE: 1:10,000	DATE: APRIL, 1996
DRAWN BY: B. LUECK	FIGURE NO.:



**LEGEND**

**CRETACEOUS**

**7b** Alkaline syenite quartz monzonite and granite:  
b-with biotite

**CAMBRIAN TO ORDOVICIAN**

**2** Mappable units of mainly volcanoclastic sandstone  
and intraclast breccia or conglomerate

**1** Maroon and pale green Argillite, minor grey-white quartzite  
and quartz-pebble conglomerate

30 Bedding

60 Schistosity

25 Vein

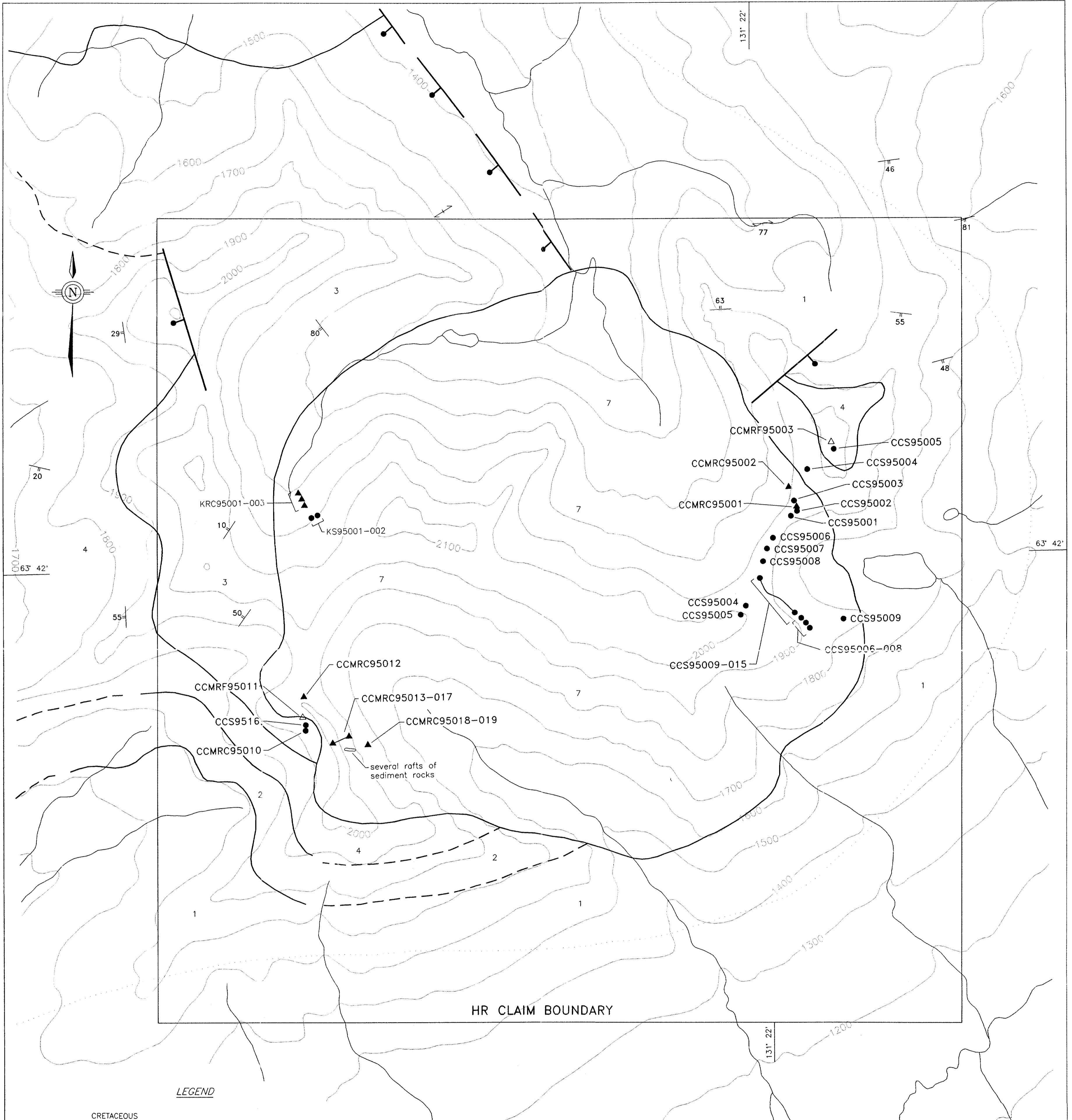
~ Fault

— Geological Contact (assumed)

▲ ROCK CHIP SAMPLE WITH NUMBER

● SOIL SAMPLE WITH NUMBER

<b>YUKON GOLD CORP</b>	
<b>CABIN CREEK ET 1-16 CLAIMS</b>	
CABIN CREEK AREA, YUKON N.T.S.: 105-0/11	
<b>GEOLOGY AND SAMPLE LOCATIONS MAP</b>	
SCALE: 1:10,000	DATE: APRIL, 1996
DRAWN BY: B. LUECK	FIGURE NO.:



**LEGEND**

- CRETACEOUS**  
 7b Alkaline syenite quartz monzonite and granite:
- CAMBRIAN TO ORDOVICIAN**  
 5 White, dark grey chert  
 4 Sandstone, volcanoclastic  
 3 Green argillite, thick succession of black shale, siliceous argillite and chert  
 2 Mappable units of mainly volcanoclastic sandstone and intraclast breccia or conglomerate  
 1 Maroon and pale green Argillite, minor grey-white quartzite and quartz pebble conglomerate

- 30 Bedding  
 60 Schistosity  
 25 Vein  
 Fault  
 Geological Contact (assumed)

- ▲ ROCK CHIP SAMPLE WITH NUMBER  
 △ FLOAT SAMPLE WITH NUMBER  
 ● SOIL SAMPLE WITH NUMBER

**YUKON GOLD CORP**  
**CABIN CREEK**  
**HR 1-64 CLAIMS**  
 CABIN CREEK AREA, YUKON  
 N.T.S.: 105-0/11  
**GEOLOGY AND**  
**SAMPLE LOCATIONS MAP**

M 0 100 200 300 400 500 M

SCALE: 1:10,000      DATE: APRIL, 1996  
 DRAWN BY: B. LUECK      FIGURE NO.:

093500 #4