

**ASSESSMENT REPORT**

**for the**

**EXPLORATION WORK**

**on the**

**PROTECTOR 1-4  
QUARTZ MINING  
CLAIMS**

**(YB58180-YB58183)**

**093898**

**WHITEHORSE,  
YUKON TERRITORY**

**NTS 105 D/11**

**ZONE 8**

**LATITUDE 60-42 N**

**LONGITUDE 135-16W**

**between**

**JUNE, 1996**

**JUNE, 1997**

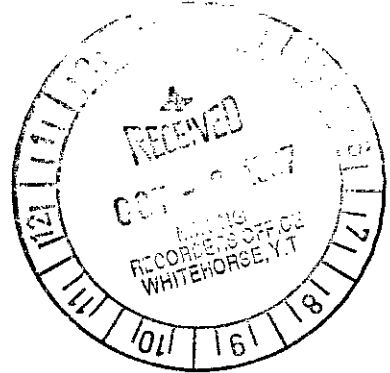
**WHITEHORSE MINING DISTRICT  
YUKON TERRITORY**

**by**

**JOSEPH A. J. CLARKE**

**for**

**SID McKEOWN  
WHITEHORSE, YUKON  
JUNE, 1997**



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## **INTRODUCTION**

This report describes the exploration work carried out on the Protector 1-4 claims, located 5 km west of the City of Whitehorse, Yukon, between June, 1996 and June, 1997. The claims cover an area of Upper Triassic Lewes River Group limestone, intruded by mid-Cretaceous quartz monzonite and granodiorite of the Jackson Creek Pluton. Mineralization is typical of skarns of the Whitehorse Copper Belt. The work consisted of one day of mechanical trenching, one day of road building and rehabilitation, one day of running flagged lines, and one day of prospecting. The total value of exploration expenditures for 1996 is \$2500.00

## **LOCATION, AND ACCESS**

The Protector 1-4 claims are located five km west of the City of Whitehorse, Yukon Territory, and 3km west of Jackson Lakes. Access is by a five km four-wheel drive road from kilometer 12 on the Fish Lake road.

## **TOPOGRAPHY, CLIMATE**

The Protector 1-4 claims occupy the valley and the north side Jackson Creek. Elevation ranges from 4150' to 5000'. Outcrop exposure is approximately 25%.

The climate of the area varies from a high of +30C in the summer to lows of -40C during the winter. Typical are long hot summers (May to September) with up to 18 hours of daylight and moderate to harsh winters (October to April) with less than 7 hours of daylight.

Black spruce is the most common tree species in the area. These favor the NE side of valleys and are a common indicator of local permafrost. More exposed areas have a mixture of white and black spruce with occasional pine. In the most exposed areas aspen colonies are well established. Willows are abundant in the valleys and low areas.

## **EXPLORATION HISTORY**

Copper mineralization was reported in the Whitehorse area by miners traveling to the Klondike in 1897. Mr. Jack McIntyre staked the Copper King claim in 1898. Ore was first shipped from the Copper King in 1900. Prospecting in the area generated many

mines including the; Arctic Chief, the Pueblo Mine, the Little Chief, War Eagle and others. Mining, milling, the shipping of copper ore continued till the 1980's. Total production from 1898 to 1982 was 10,130,000 tonnes grading 1.5% Cu.

Property history is taken from Yukon Minfile 105D #076. The Protector 1-4 claims occupy the ground formally staked as the Ruth and Roy claims.

*"Staked as Grouse, etc cl (Y63484) in Jul/70 by S. Takacs and E. Kreft, who added small blocks of fringe claims annually, including Gear cl (Y91133) in Sep/74. Explored with hand trenching and bulldozer trenching in 1970-72; with mapping, mag survey and 6 holes (445 m) by New Jersey Zinc (Grouse #4 and Ray #2 claims) under a brief option in 1972; and with more mapping, geochem surveys and bulldozer trenching in 1974, a magnetic survey and 6 holes (427 m) on the Gear claims in 1975 and 4 holes (472.4 m) in 1976 by Whitehorse Copper ML. under option. Takacs drilled one hole (34.7 m) in 1979, 6 holes (36.0 m) in 1981, trenched in 1982, drilled 3 holes (92.4 m) in 1983, trenched and drilled 3 holes (35 m) in 1984 and added the Raven cl (YA93376) to the south in Sep/85. Kreft tied on the Ruth (YA94118) and Beaver cl (YA93146) in Aug/85 and Jan/86, respectively, and together with Takacs performed geological mapping, bulldozer trenching and 4 drill holes (455 m) on the Ruth cl. A. Olsson staked Dianne cl (YB27625) in Jul/90 and trenched in 1991. S.J. Takacs restaked the occurrence as Marie 1-4 cl (YB37478) in Sep/92. The Falcon 1-10 cl (YB46474) were staked nearby by R. Voisine in Oct/93."*

## **REGIONAL GEOLOGY**

The Whitehorse Copper Belt is located in the Whitehorse Trough a subdivision of the Intermontane Belt. The Whitehorse Trough is a NW trending Island Arc Complex containing clastic and carbonate rocks ranging from upper Paleozoic to Jurassic. Rocks of the Triassic Lewes River Group and lower Jurassic Laberge group are found in the Whitehorse Copper Belt. A Cretaceous quartz monzonite to granodiorite batholith intrudes to the west resulting in the significant copper skarn mineralization of the Whitehorse Copper Belt.

## **PROPERTY GEOLOGY AND EXPLORATION**

Rocks of three units are exposed on the property (see fig 3). Intrusive granodiorite of the Jackson Creek Pluton intrudes Lewes River Group conglomerate, siltstone, and arkose rocks. Later Mesozoic felsic dykes cut both of the above rock types. Later normal faults striking EW resulted in movement along the intrusive/sediment contacts.

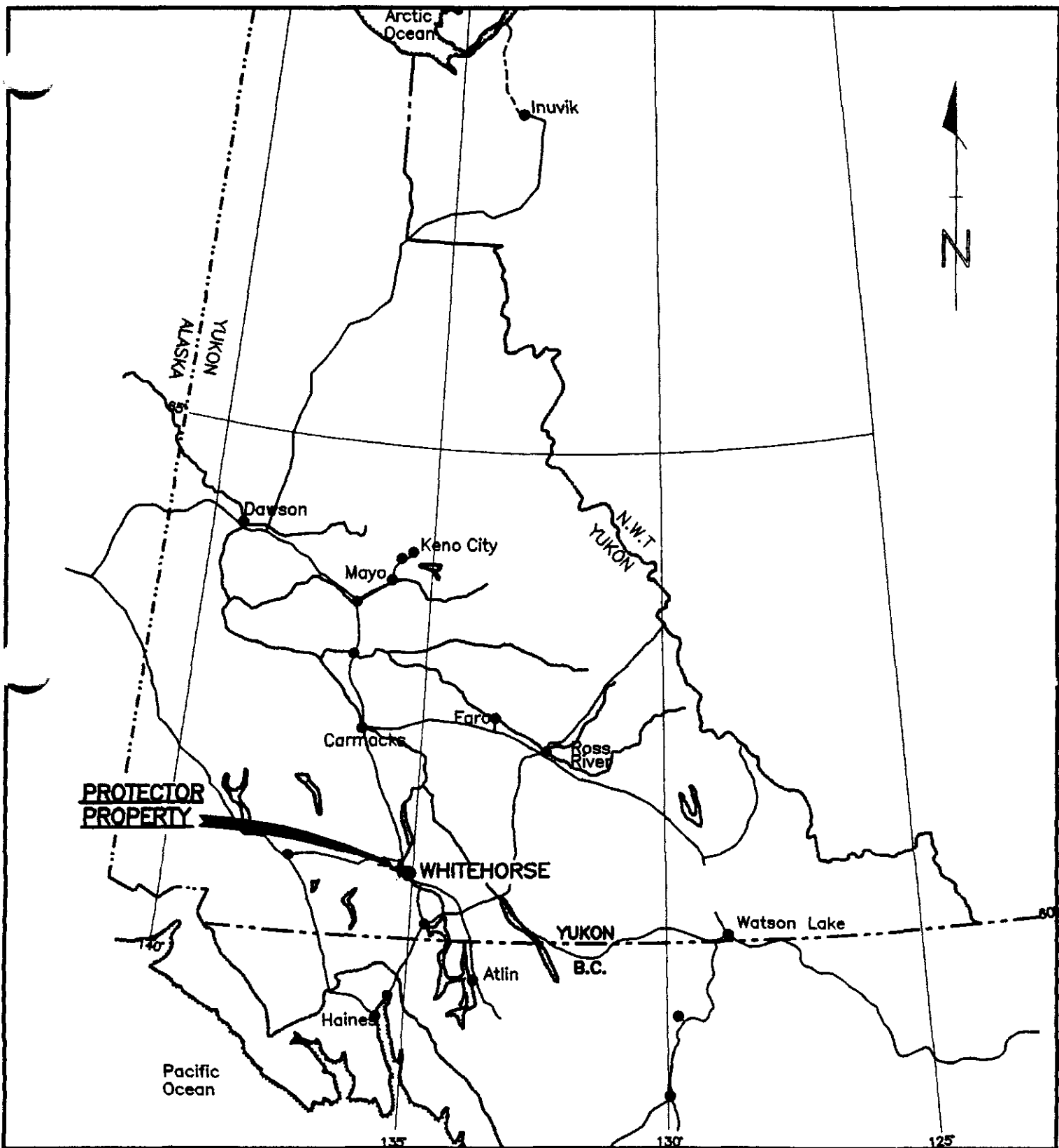
## **CONCLUSIONS and RECOMMENDATIONS**

A flagged picketed should be laid out followed by detailed geological mapping and a magnetic/VLF survey. Any significant areas of mineralization should be trenched by hand or mechanical means then sampled.

A significant number of chip samples should be taken to give an indication of grade. A light reverse circulation or diamond drill should then be brought in to test the depth of mineralization.

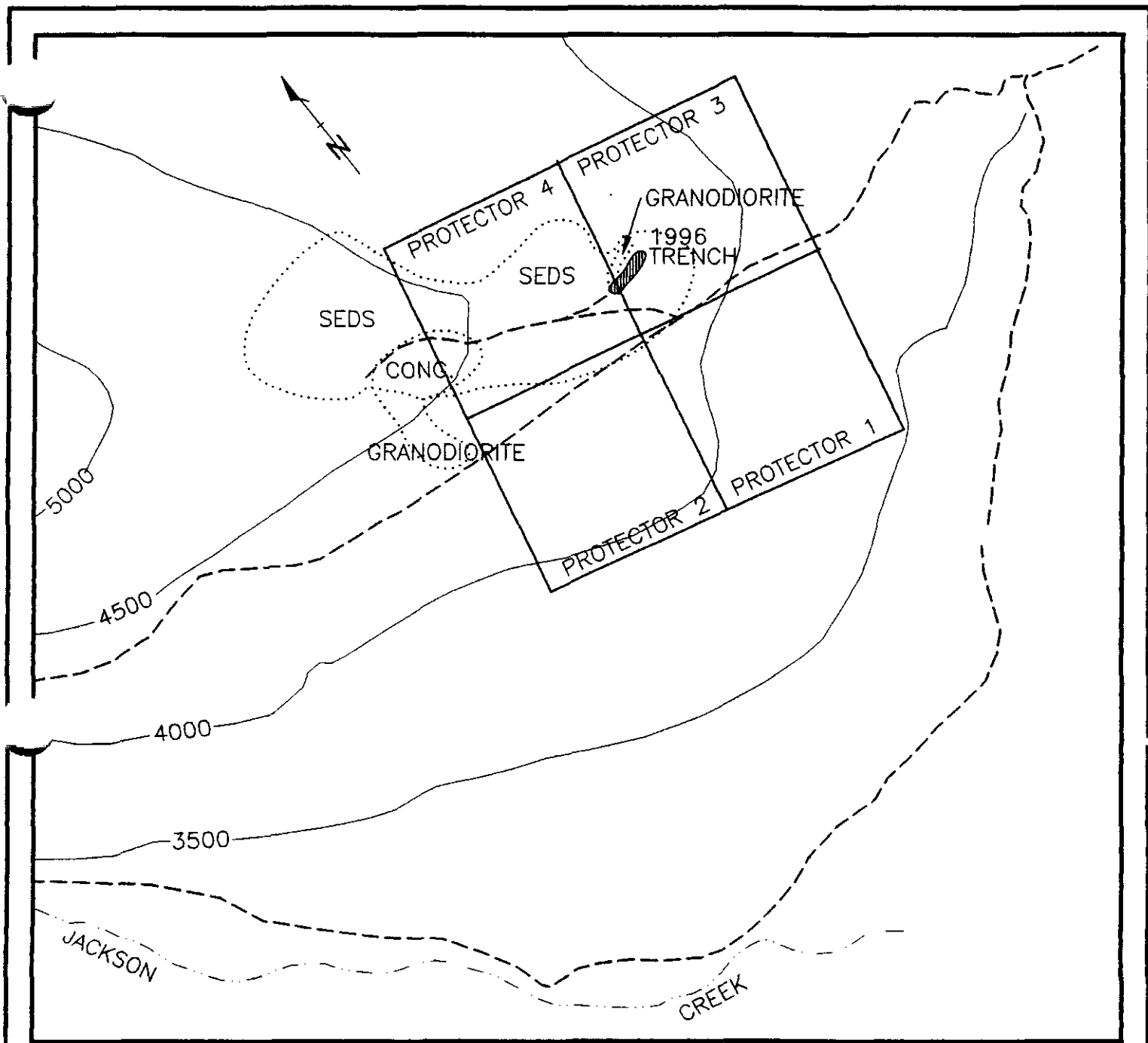
## **APPENDIX I**

### **LIST OF FIGURES**



**SIDROCK EXPLORATIONS**  
**PROTECTOR 1-4**  
 WHITEHORSE MINING DISTRICT, YUKON TERRITORY

LOCATION MAP



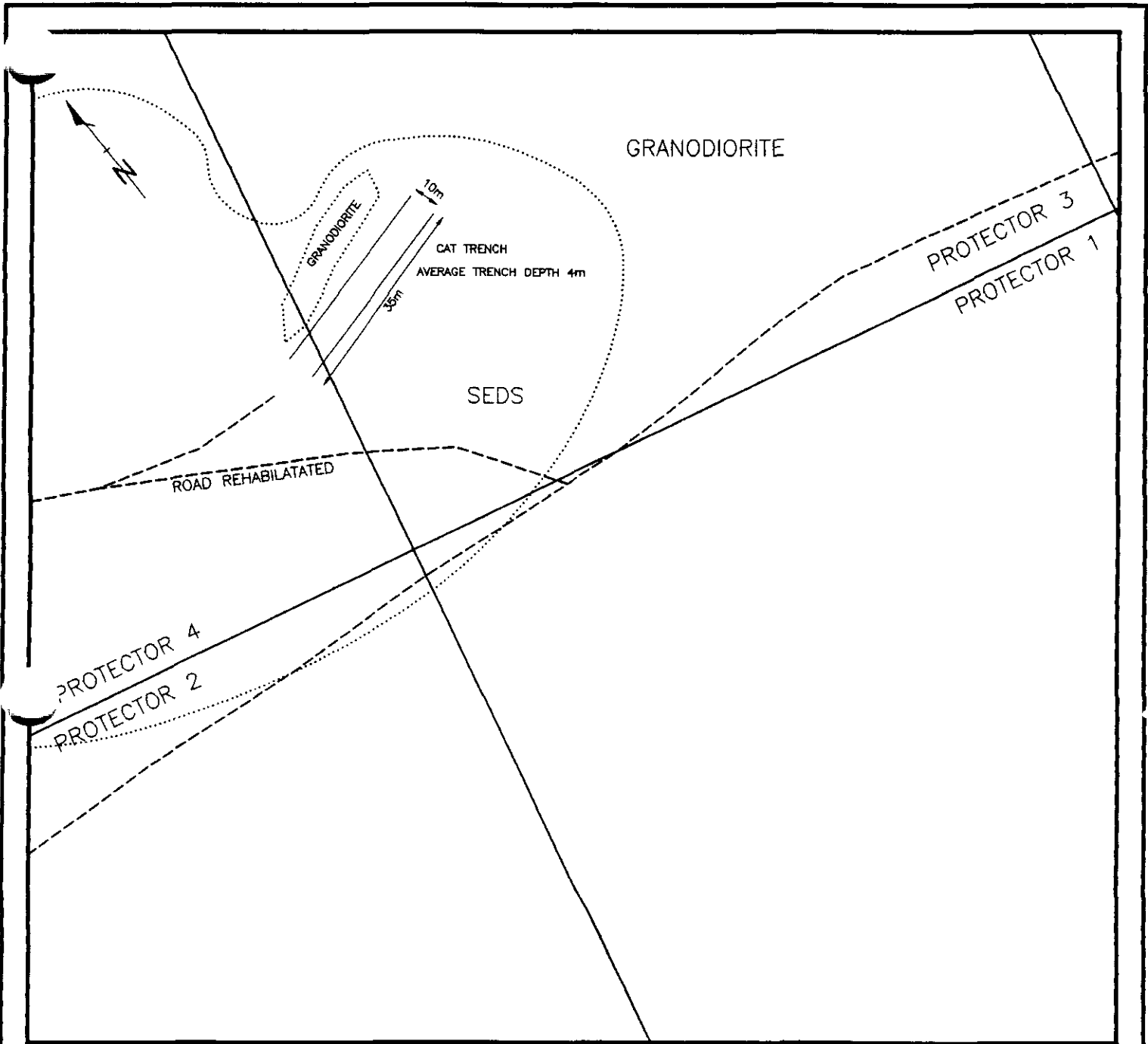
## LEGEND

- ELEVATION CONTOUR (FEET)
- - - CREEK
- ..... GEOLOGICAL CONTACT (APPROXIMATE)
- - - ROAD/TRAIL

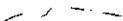




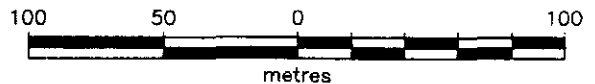
<b>SIDROCK EXPLORATIONS</b>	
<b>PROTECTOR 1-4</b>	
WHITEHORSE MINING DISTRICT, YUKON TERRITORY	
<b>PROPERTY GEOLOGY AND EXPLORATION WORK</b>	
<i>Aurum Geological Consultants Inc.</i>	Date: JUNE, 1997
NTS: 105 D/11 Drawn: JC	Scale: 1:30000 Figure: 3



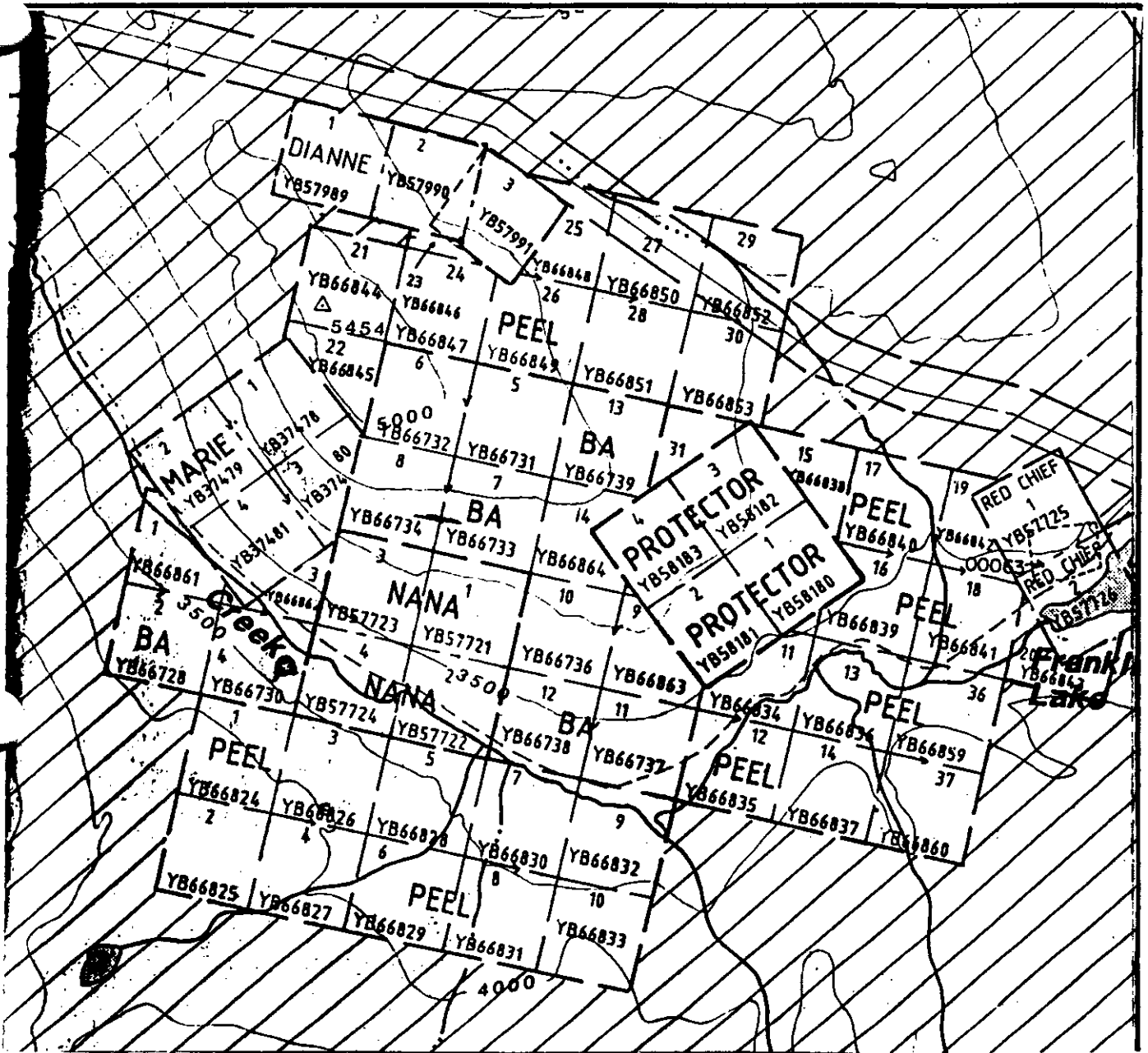


### LEGEND

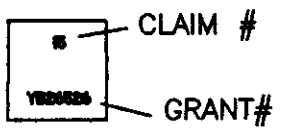
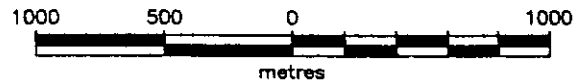
-  CREEK
-  GEOLOGICAL CONTACT (APPROXIMATE)
-  ROAD/TRAIL



SIDROCK EXPLORTATIONS	
PROTECTOR 1-4	
WHITEHORSE MINING DISTRICT, YUKON TERRITORY	
<b>TRENCH MAP</b>	



Legend



<b>SIDROCK EXPLORATIONS</b>	
<b>PROTECTOR 1-4</b>	
WHITEHORSE MINING DISTRICT, YUKON TERRITORY	
 <b>CLAIM MAP</b>  	
Aurum Geological Consultants Inc.	Date: JUNE, 1997
NTS: 105 D/11 Drawn: J.C.	Scale: 1:30000 Figure: 2

### APPENDIX III

#### STATEMENT OF EXPENDITURES

##### Prospecting and Sampling Summer 1995

Cat Rental (road building)	10 hr @ \$100/hr	\$1000.00
(trenching)	10 hr @ \$100/hr	\$1000.00
Gridding	1 day @ \$150/day	\$150.00
Prospecting	1 day @\$150/day	\$150.00
Report Costs		\$200.00
<b>TOTAL COST</b>		<b><u>\$2500.00</u></b>

## APPENDIX IV

### STATEMENT OF QUALIFICATIONS

I, Joseph A. J. Clarke, of Marsh Lake Yukon Territory with mailing address of General Delivery, Whitehorse, Yukon hereby certify:

I am writing this report at the request of Mr. Sid McKeown of Whitehorse, Yukon and have no direct or indirect interest in the Protector 1-4 claims;

That I have graduated from the Haileybury School of Mines in 1985 with a diploma in Mining Engineering Technology;

That I have been engaged in prospecting in the Yukon on a full time basis since May of 1993 and have been engaged in prospecting and in the mineral industry for 12 years elsewhere in Canada;

That I have a commitment to prospect in a gentlemanly manner with respect for others who use the land.

Signed at Whitehorse, Yukon Territory on the 8 day of Oct, 1997.



Joseph A. J. Clarke

## **APPENDIX V**

### **ACKNOWLEDGMENTS**

The Whitehorse Copper Belt: Mining, Exploration, and Geology (1967-1980)  
by D. Tenny  
DIAND Bulletin 1

The Whitehorse Copper Belt - A Compilation  
Exploration and Geological Services Division-Yukon,  
Indian and Northern Affairs, Canada,  
Open File, 1:25000 scale map with marginal notes

Yukon Territory  
Selected Field Reports of the GSC 1898 to 1933  
Compiled and Annotated by H.S. Bostock  
GSC Memoir 284

Thanks also to conversations with the staff of Aurum Geological Consultants Inc., the staff of the Whitehorse MDA office, and many local prospectors.