

**ASSESSMENT REPORT**

for

**EXPLORATION**

on the

**UCHI 1 to UCHI 4  
QUARTZ MINING  
CLAIMS**

**MARSH LAKE,  
YUKON TERRITORY**

**NTS 105 D/8  
UTM ZONE 8  
6704100N, 542450E**

**LATITUDE 60-29 N  
LONGITUDE 134-17W**

**094357**

**WHITEHORSE MINING DISTRICT  
YUKON TERRITORY**

by

**JOSEPH A. J. CLARKE  
MARSH LAKE, YUKON  
NOVEMBER, 2002**



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 \$ 400.00.

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

Costs associated with this report have been  
approved in the amount of \$ 400.00  
for assessment credit under Certificate of  
Work No. QW27571

*A. Sauter*

Mining Recorder  
Whitehorse Mining District

<b>INTRODUCTION</b>	<b>2</b>
<b>LOCATION, AND ACCESS</b>	<b>2</b>
<b>TOPOGRAPHY AND CLIMATE</b>	<b>2</b>
<b>EXPLORATION HISTORY</b>	<b>3</b>
<b>REGIONAL GEOLOGY</b>	<b>3</b>
<b>PROPERTY GEOLOGY AND EXPLORATION WORK</b>	<b>3</b>
<b>CONCLUSIONS AND RECOMMENDATIONS</b>	<b>5</b>
<b>APPENDIX I STATEMENT OF QUALIFICATIONS</b>	<b>6</b>
<b>APPENDIX II ACKNOWLEDGMENTS</b>	<b>7</b>
<b>APPENDIX III LIST OF FIGURES</b>	<b>8</b>

## **INTRODUCTION**

This report describes the exploration work carried out on the Uchi 1 to 4 claims between in 2001 and 2002. The Uchi Claim Group is located 65 km south of the City of Whitehorse in the Yukon Territory. The exploration work performed consisted of four days of prospecting, hand trenching and GPS mapping. The prospector found geological evidence suggesting NW-SE trending EM conductors revealed by the 1995 Jakes Corner Helicopter EM survey are located in shear zones oblique to the Marsh Lake fault zone. Intense shearing, favorable geological units, and pervasive listwanite alteration in outcroppings justifies further work on these claims as well the staking of further claims. Exploration targets include the following deposit models; mesothermal listwanite Au veins, hydrothermal Au vein, gabbroic Ni-Cu-PGE, and podiform chromite.

## **LOCATION, AND ACCESS**

The Uchi 1-4 claims are reached by a 2 km footpath located across from the north end of New Constabulary Subdivision, 65km south of Whitehorse along the Alaska Highway. The geographical center of the claim group is located at 60-29N and 134-17W. Access is possible by 4-wheeler or snowmachine. The existing footpath is also of sufficient width to allow access for a small track excavator or light diamond drill.

## **TOPOGRAPHY AND CLIMATE**

The topography of the immediate area consists of small 50m-100m hills and valleys running parallel to Marsh Lake. The terrain rises gently from Marsh Lake (elev 2200') for an average of 4 km NE of the Alaska Highway then rises somewhat steeply reaching 5800 ft at the peak of Mt. Mitchie. Several periods of glaciation have rounded the hills and have resulted in moderate to deep deposits of till, clay, and ancient raised beaches. Outcrop exposure is 10% on the property.

The climate of the area varies from a highs of +30C in the summer to lows of -40C during the winter. Typical are long hot and semi-arid 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. The winter climate is periodically tempered by warm Pacific winds with Chinook like effects.

Black spruce is the most common tree species on the property. 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. Rare white birch may be found in areas with permafrost and limited exposure to the sun.

Wildlife inhabiting the area is typical of the Southern Yukon and include moose, fox, coyote, wolves, and various small birds and mammals. Some groups of the Southern Lakes Caribou herd traverses the area for several weeks in the late spring. One of the small lakes on the property was unsuccessfully stocked with arctic char fry in the summer of 1997.

## **EXPLORATION HISTORY**

Hard rock exploration in the Marsh Lake area dates from 1895 on the nearby Rossbank and Bug properties. Historic blast pits, and old claim posts were found by the prospector to the north of the property and may date from the 1950's or earlier. Only scattered prospecting was performed until 1988 when exploration activity increased with discovery of the Diamond zone by Bill LeBarge, a geologist with DIAND. This zone is now covered by the Mike 1-8 Claims 1.5 km to the south. Further activity was seen on the Bug, Tog, and Rossbank properties. The 1994 Jakes Corner Helicopter EM survey revealed several strong EM conductors resulting in the prospector staking the Uchi 1-2 claims. Further ground exploration gave sufficient justification to stake the Uchi 3 and Uchi 12 claims. During the summer of 1997 while under a YMIP grassroots prospecting grant the prospector stake further Uchi claims on the NE side of Uchi 1-12. These claims were then allowed to lapse but were restaked in 2000/2001 as Uchi 1-4.

## **REGIONAL GEOLOGY**

The geology of the NE side of Marsh Lake consist of a tectonic assemblage of island arc mafic volcanics, cherts, and up-thrusted and altered ultramafic bodies known collectively as the Cache Creek Group. Intruding these are various Cretaceous felsic to mafic bodies. The NW-SE trending Marsh Lake fault is the prominent feature and includes many oblique splay faults forming drainage basins into the lake. These splay fault features are observable at outcrop scale. Latter fresh gabbros, lamprophyre, and diabase dikes are common.

## **PROPERTY GEOLOGY and EXPLORATION WORK**

Prospecting of the property has shown that the Cache Creek Group ribbon cherts are the most abundant unit followed by Cache Creek Group andesite flows and related mafic intrusions. As well an occasionally limey arkosic sedimentary unit occurs in the low lying areas. Several lamprophyre and diabase dikes occur intruding both the chert and volcanic units. These dikes may be of Cretaceous or earlier age. Prospecting during the 1998 season has shown that the Cretaceous syenite pegmatite located to the NE of the claim group may be a greater influence on potential mineralized targets than previously believed.

Hand trenching was performed along a chert outcrop on the Uchi 2 claim to expose a fault with weak sulfide mineralization. Blasting will be required to further expose the shearing which intensifies to the NW but is covered by a greater amount of overburden. Fine grained disseminated pyrite up to 2% occurs in moderately sheared ribbon chert. A 200m long and 25m spaced baseline was cut and picketed on the area for future geophysical surveys.

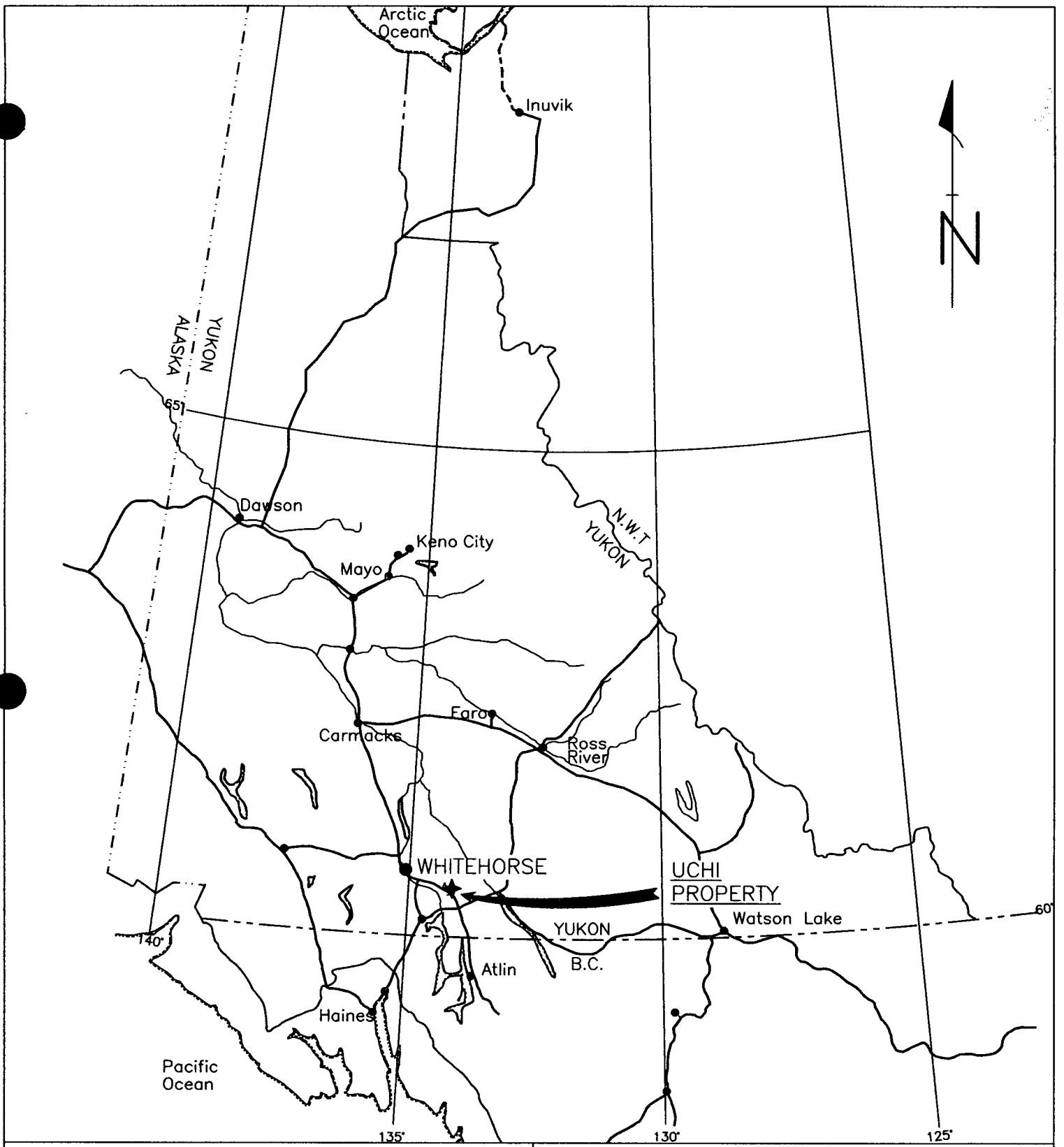
Trenching was performed on small outcrop of intensely sheared sediments on Uchi 1 claim. 100m to the east on another chert outcrop. This outcrop appears to be on a nose of a fold and shows 1% pyrite and small quartz stringers. A grab sample assayed under another program returned <5ppb Au from fire assay analyses. Further trenching should continue in this area.

Trenching was performed on the Uchi 3 and 4 claims along a NE striking unit of mafic volcanics located adjacent to a NE striking gully containing a weak airborne EM conductor. The mafic volcanics show signs of deformation and a very weak migmatization. Strong migmatites occur ~500m NE in closer proximity to the syenite pegmatite. Quartz veining and pyrite seemed to increase towards the gully. Increase overburden limited the extent of trenching necessitating mechanical or blasting.

Total trenching was approximately 10 linear meters averaging 1-2 meters in width and up to 1.5 meters depth.

Prospecting was performed on all areas of the claim block with small "grubhoe" trenches being dug in many places. A hand held soil auger was also used to test bedrock depth and soil types with limited success. Continued attempts were made to locate the trace of the airborne EM conductors in the field. Most of the conductors lie within narrow, overburden filled recessive gullies or linears. In lieu of ground geophysical surveys, blasting may be the most cost effective method of exposing bedrock in these areas.

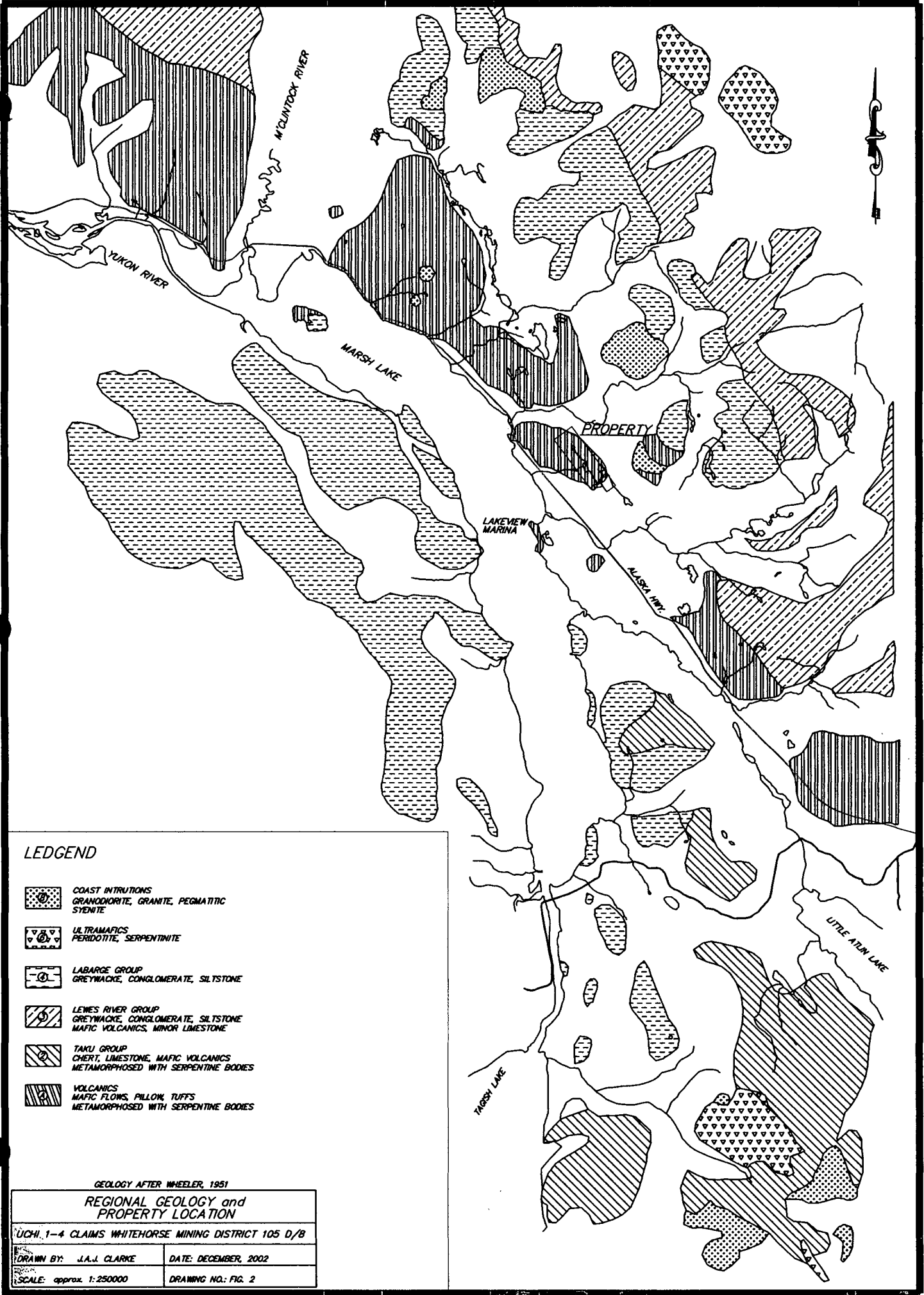
A total of 9 samples from Uchi 2 claim were mixed together, screened to -20 mesh and ran through a 'Gold Wheel' concentrator. Concentrate included several specks of -60 mesh gold, an 'average' amount of magnetite, minor sulphides including several grains of galena. Olivine was very common reflecting the occurrence of ultra-mafics in the area.









UCHI 1-4 CLAIMS  
 WHITEHORSE MINING DISTRICT, YUKON TERRITORY

**PROPERTY  
 LOCATION  
 MAP**

J. CLARKE, MARSH LAKE, YUKON | DATE: December, 2002  
 NTS 105 D/8 | DRAWN BY:JC | SCALE: 1:6,000,000 | FIGURE 1



**LEDGEND**

- 
 COAST INTRUSIONS  
 GRANODIORITE, GRANITE, PEGMATITIC  
 SYENITE
- 
 ULTRAMAFICS  
 PERIDOTITE, SERPENTINITE
- 
 LABARGE GROUP  
 GREYWACKE, CONGLOMERATE, SILTSTONE
- 
 LEWES RIVER GROUP  
 GREYWACKE, CONGLOMERATE, SILTSTONE  
 MAFIC VOLCANICS, MINOR LIMESTONE
- 
 TAKU GROUP  
 CHERT, LIMESTONE, MAFIC VOLCANICS  
 METAMORPHOSED WITH SERPENTINE BODIES
- 
 VOLCANICS  
 MAFIC FLOWS, PILLOW TUFFS  
 METAMORPHOSED WITH SERPENTINE BODIES

GEOLOGY AFTER WHEELER, 1951

**REGIONAL GEOLOGY and  
PROPERTY LOCATION**

UCHI, 1-4 CLAIMS WHITEHORSE MINING DISTRICT 105 D/B

DRAWN BY: J.A.J. CLARKE	DATE: DECEMBER, 2002
SCALE: approx. 1:250000	DRAWING NO.: FIG. 2



# LEDGEND

## CRETACEOUS

**mKg** GABBRO; MEDIUM TO COARSE GRAINED WITH FRESH APPEARANCE.

## PERMIAN TO TRIASSIC

**TJts** CHERT; LIGHT COLORED RIBBON CHERT LOCALLY BRECCIATED AT FAULT CONTACTS.

**CPv** MAFIC VOLCANICS; LIGHT TO HEAVY CHLORITE ALTERED. REMNANT FLOW BANDING AND WEAK PILLOW MARGINS.

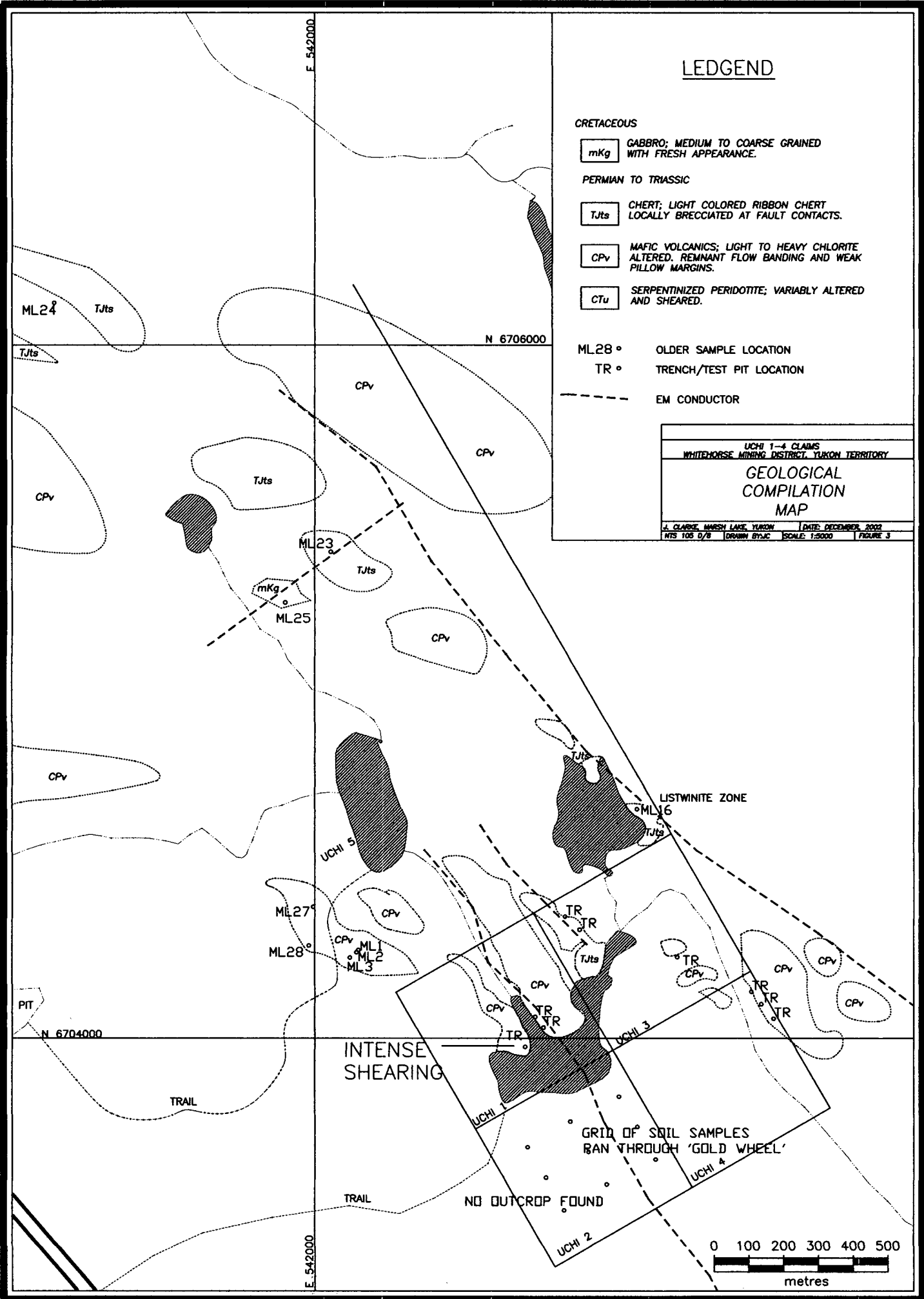
**CTu** SERPENTINIZED PERIDOTITE; VARIABLY ALTERED AND SHEARED.

ML28 ° OLDER SAMPLE LOCATION

TR ° TRENCH/TEST PIT LOCATION

--- EM CONDUCTOR

UCHI 1-4 CLAIMS	
WHITEHORSE MINING DISTRICT, YUKON TERRITORY	
<b>GEOLOGICAL COMPILATION MAP</b>	
J. CLARKE, MARSH LAKE, YUKON	DATE: DECEMBER, 2002
NTS 105 D/8	DRAWN BY: J.C. SCALE: 1:5000
	FIGURE 3



## CONCLUSIONS and RECOMMENDATIONS

The geology, structure, and airborne EM conductors on the Uchi 1-4 claims indicate the potential for mesothermal gold/silver targets. Faulting, shearing, and mineralization tend to increase adjacent to overburden covered EM conductors. Gridding should be preformed to allow for a ground Mag/VLF/HEM survey to better define the airborne EM conductors and provide control for geological mapping. Use of a small Kubota backhoe, blasting and outcrop washing should be preformed to expose the source of the EM conductors. The program outlined below is recommended.

Line cutting	\$10,000
Geophysics	\$10,000
Geological mapping and supervision	\$10,000
Equipment Rental and Assays	\$10,000
<b>Total</b>	<b><u>\$40,000</u></b>

In lieu of sufficient funding for the above project the mineral potential of the Uchi 1-4 claims warrants continued grassroots prospecting, hand trenching, gridding and geological mapping in order to keep the claims in good standing. Such work may in itself may lead to the discovery of mineralization generating increased funding. It should be noted that the geology, terrain and target require exploration methods more commonly used in the Precambrian Shield.

**APPENDIX I STATEMENT OF QUALIFICATIONS**

I, Joseph A. J. Clarke, of Marsh Lake in the Yukon Territory and with mailing address of Box 2012, Marsh Lake, Yukon hereby certify:

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 17 years elsewhere in Canada;

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

Signed at Whitehorse, Yukon Territory on the 7 day of February, 200~~2~~<sup>3</sup>.

Joseph A. J. Clarke



## APPENDIX II ACKNOWLEDGMENTS

Assessment Report 092965 by Gary Reynolds

The Liswanite-Lode Gold Association of British Columbia  
Ash and Arksey  
Geological Fieldwork 1989, paper 1990-1

Airborne EM and MAG Survey  
Jakes Corner Project  
DIAND Open File 1994 - 10 (G)  
by Dighem I Power

Notes to Prospectors - Jakes Corner  
Dighem Survey Interpretation  
DIAND Open File 1995 - 12 (G)  
by M.A. Power Msc, Amerok Geophysics

Special thanks for geological discussions with the staff of the MDA and DIAND in Whitehorse, Aurum Geological, Amerok Geophysics, and many prospectors.

**APPENDIX III LIST OF FIGURES**

**FIGURE 1; LOCATION MAP (1:6,000,000**

**FIGURE 2; REGIONAL GEOLOGY (1:250,000)**

**FIGURE 3; PROPERTY GEOLOGY (1:5000)**

**APPENDIX I : STATEMENT OF EXPENDITURES**

**Prospecting, Hand Trenching**

Personnel:	J. Clarke	Prospecting 2 days/\$200/day	\$175.00
	J. Clarke	Hand Trenching 2 day/\$200/day	\$175.00

Miscellaneous: Food, gas, drafting, saw, quad; \$100.00

**TOTAL COST**

450.00  
~~\$800.00~~

(For Two (2) year of assessment work on 4 claims)

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