

**GEOLOGICAL and GEOCHEMICAL  
ASSESSMENT REPORT  
on the  
STU PROPERTY**

(STU 1-72: YC37770-95, YC40249-76, YC 40201-18)  
(STU 73-132: YC65256-315)

**NTS: 115I/7**

**Latitude 62°25'N      Longitude 136°50'W**

**Whitehorse Mining District**

Work performed between June 23 and 26, 2010

For :

Mr. Bill Harris  
Box 31293  
Whitehorse, YT  
Y1A 4Z2

By:  
Jean Pautler, P.Geo.  
JP Exploration Services Inc.  
#103-108 Elliott Street  
Whitehorse, Yukon  
Y1A 6C4

January 5, 2010

**SUMMARY:**

The 2760 hectare STU property, NTS map sheet 115I/7, lies within the Carmacks Copper (-Gold) Belt and is located approximately 60 km by road northwest of Carmacks, which is 177 km by road from Whitehorse, Yukon Territory. The property is situated in the Whitehorse Mining District with a latitude and longitude of 62°25'N, 136°50'W. Mr. Bill Harris of Whitehorse, Yukon is the owner and funded the current program.

The Carmacks Copper (-Gold) Belt includes the Carmacks Copper deposit (Williams Creek) of Western Silver Corporation, containing a resource of 12.0 million tonnes of copper oxide ore grading 1.01% Cu (0.86% oxide Cu), and 0.5 g/t Au and 4.6 g/t Ag, using a cutoff grade of 0.25% Cu, and the Minto deposit of Capstone Mining Corporation, currently under production, with 19.3 million tonnes of sulphide ore grading 1.42% Cu, 0.5 g/t Au and 5.4 g/t Ag using a cutoff grade of 0.5% Cu.

The STU property is primarily underlain by Early Jurassic intrusive rocks of the Granite Mountain Batholith intruding the Paleozoic metamorphic basement rocks of the Yukon Tanana Terrane and overlain by younger volcanic rocks of the Late Cretaceous Carmacks Group. Exploration on the STU property has been hampered by lack of exposure, thick overburden cover, variable but generally poor soil profiles, and unavailability of results from previous programs.

Mineralization consists of chalcopyrite and bornite with minor pyrite and locally abundant magnetite as disseminations, irregular grains and aggregates, associated with more foliated to gneissic zones within the Granite Mountain Batholith trending 130° with magnetite-silica and biotite alteration. The highest gold and silver values are associated with bornite-rich sections. The host rocks, structures, mineralization and alteration at STU are similar to the Minto and Carmacks Copper deposits, which have been described as metamorphosed porphyry copper-gold deposits.

Previous results from the STU property include 3.51% Cu, 2.5 g/t Au and 18.4 g/t Ag across 13.5m from DDH 80-14 in the A Zone, with three of the 1980 diamond drill holes returning intersections exceeding 2.5% Cu. The rotary drill program returned maximum results of 0.71% Cu over 1.5m in hole SB-6 in the B Zone.

The 2010 program consisted of mapping and geochemical sampling in the northwest property area (where two old trenches were reported during staking), between the A and C Zones, north of the C Zone, and to the west of the B Zone. Four trenches were uncovered in the northwest property area, primarily exposing glacial till with one exposure of altered granodiorite in Trench 3. Minor elevated copper values in soil were obtained from Trenches 3 and 4, and from the northern strike extension of the C Zone. Minor foliated granodiorite was encountered approximately 1 km northwest, 1 km southwest and 2 km west of the B Zone.

In 2006 and 2008 mineralization was found to have a direct relationship with the presence of secondary biotite, the presence of magnetite and hematite, and the development of a foliated to gneissic texture, which trends 130° (commonly with 70°NE dips). Secondary

copper minerals such as malachite and azurite are relatively uncommon and sulphide minerals predominate within the mineralized zones. Possible gold was detected in the 2008 petrographic study from the B and C Zones.

The A Zone appears to be the main zone of interest on the property with results of >0.1% Cu to 0.67% Cu and a maximum of 470 ppb Au obtained in 2005 to 2008 from samples over a 400m strike extent and up to 95m width. Malachite has been noted an additional 400m to the southeast. This probably corresponds to the zone 914m long and up to 91m wide that was delineated by United Keno Hill Mines Limited in 1977-79. The zone does not appear to have been completely delineated. The zone was explored by 24 diamond drill holes in 1980 so results from the 1980 diamond drill program are critical in the evaluation of this area.

Mineralization in the B Zone is often high grade over narrow widths suggesting a distal signature. Potential exists at depth in the area between Trench B3 to B6, which returned the best copper-gold-silver results (maximum 2.86% Cu and 2.56 g/t Au), and along strike to the northwest (northeast of the trenches to the north) and to the southeast, where little work has been completed. Diamond drilling may be necessary to trace the mineralization if it lies at depth. Rotary air blast drilling may be useful in tracing mineralization along strike in previously untested areas.

Similar mineralization to the A and B Zones is exposed in the C Zone. Mineralization was traced over a 110m strike and 25-30m width in 2005 to 2008 with significant maximum results of 1.59% Cu and 3.7 g/t Au associated with 130°/NE trending mineralized fractures. Elevated copper in soils from 2010 suggests that some mineralization may extend 140m further north. Little work has been done in this area but results from DDH 80-1 would be beneficial in the evaluation of this zone. Rotary air blast drilling may be useful in tracing mineralization in Trenches 11+50E and 14+50E along strike under basaltic cover rocks and overburden to the northwest and overburden to the southeast.

Results from the 1980 United Keno Hill Mines Limited drill program are not in the public record but the core is stored on the property and the collar locations were located and surveyed by GPS in 2006. The first priority in a Phase 1 program is to label, unstack and systematically sample the core on the STU property so that results can be correlated and interpreted. Magnetic susceptibility measurements over the entire core can be collected at this time and additional unsplit mineralized intervals assayed.

Systematic MMI soil and IP geophysics surveys may be useful in tracing mineralization along strike within the three zones, particularly where the drill results from the above core sampling program are inconclusive due to poor condition of the core, and if the zone is shown to remain open or the drill hole did not adequately test the target. The surveys should be tested over several trenches with mineralization to determine their usefulness and if positive completed along strike of the zones.

Phase 1 should be followed by diamond drilling to systematically test continuity and grade and possibly by shallow rotary air blast drilling to test lower priority areas. This latter type of drilling is relatively fast and less expensive and can be used to determine the strike and dip of structures and mineralized zones prior to diamond drilling.

# TABLE OF CONTENTS

	<b>Page</b>
SUMMARY.....	i
1.0 LOCATION AND ACCESS.....	1
2.0 LEGAL DESCRIPTION.....	2
3.0 PHYSIOGRAPHY .....	3
4.0 HISTORY .....	3
5.0 2010 WORK PROGRAM.....	4
6.0 GEOLOGY .....	5
6.1 Regional.....	5
6.2 Property.....	6
6.3 Mineralization and Alteration.....	7
7.0 DEPOSIT MODEL .....	9
8.0 PREVIOUS WORK.....	10
9.0 GEOCHEMISTRY.....	17
9.1 Procedure.....	17
9.2 Results .....	17
10.0 DRILLING.....	18
11.0 INTERPRETATION .....	20
12.0 CONCLUSIONS AND RECOMMENDATIONS .....	21

## LIST OF FIGURES

	<b>Page</b>
Figure 1	Location Map .....1
Figure 2	Claim Map.....2
Figure 3	Regional Geology Map.....6
Figure 4	Property Geology Map .....8
Figure 5	A and C Zone Compilation .....back pocket
Figure 6	B Zone Compilation.....back pocket
Figure 7	NW Zone, Geology and 2010 Sample Locations..... 14
Figure 8	A and C Zone Area, Geology and 2010 Sample Locations..... 15
Figure 9	West B Zone, Geology and 2010 Sample Locations..... 16

## TABLES

Table 1:	Claim data.....2
Table 2:	NW Trench Locations .....4
Table 3:	A Zone sample results..... 10
Table 4:	B Zone sample results..... 12
Table 5:	C Zone sample results ..... 13
Table 6:	Diamond drill hole locations ..... 19
Table 7:	Rotary drill hole locations ..... 20

## APPENDICES

Appendix I	Selected References
Appendix II	Statement of Claims
Appendix III	Sample Descriptions
Appendix IV	Geochemical Procedure and Results
Appendix V	Statement of Expenditures
Appendix VI	Statement of Qualifications

## 1.0 LOCATION AND ACCESS (Figure 1)

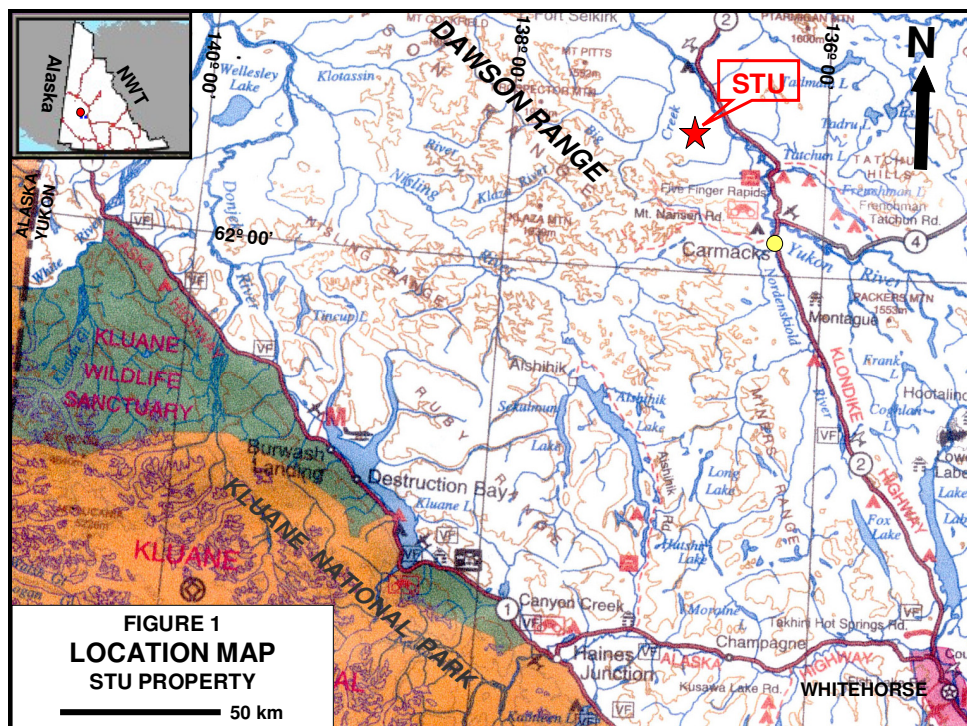
The STU property, NTS map sheet 115I/7, lies just northwest of Hoochekoo Creek approximately 60 km by road, northwest of Carmacks, approximately 200 km northwest of Whitehorse, Yukon Territory (Figure 1). The property is centered at a latitude of 62°25'N and a longitude of 136°50'W.

The property is accessible from Carmacks via the Freegold Road, a year round government maintained gravel road, which is followed for 35 km. At this point, the access road to the Carmacks Copper property (Williams Creek Copper) of Western Silver Corporation is followed for approximately 18 km northerly past Carmacks Copper. The last 7.5 km to the STU camp, in the central property area, are by ATV along an overgrown road. Several cat trails on the claims, variably overgrown, provide access to trenches and drill sites.

The claims can also be accessed by helicopter from Carmacks with a suitable landing site at the STU camp situated in the central property area at UTM coordinates 6921240m N, 0405015m E, Nad 83, Zone 8 projection. The entire property can be accessed from the STU camp and provides the best access to Zone A. Central Zone B can be accessed from a helipad at 6919288mN, 406124mE along Trench 74+00E and Zone C from a potential landing site at DDH 80-27 at UTM coordinates 692250mN, 406091mE.

The STU camp, utilized in the 2010 program, refers to the former United Keno Hill Mines Limited drill camp, consisting of a trailer suitable for accommodation for up to 4 people.

Carmacks is the closest town, with a population of approximately 450. Facilities include a grocery store, nursing station, two service stations, a restaurant and a café. Complete services are available in Whitehorse, less than two hours by road from Carmacks.



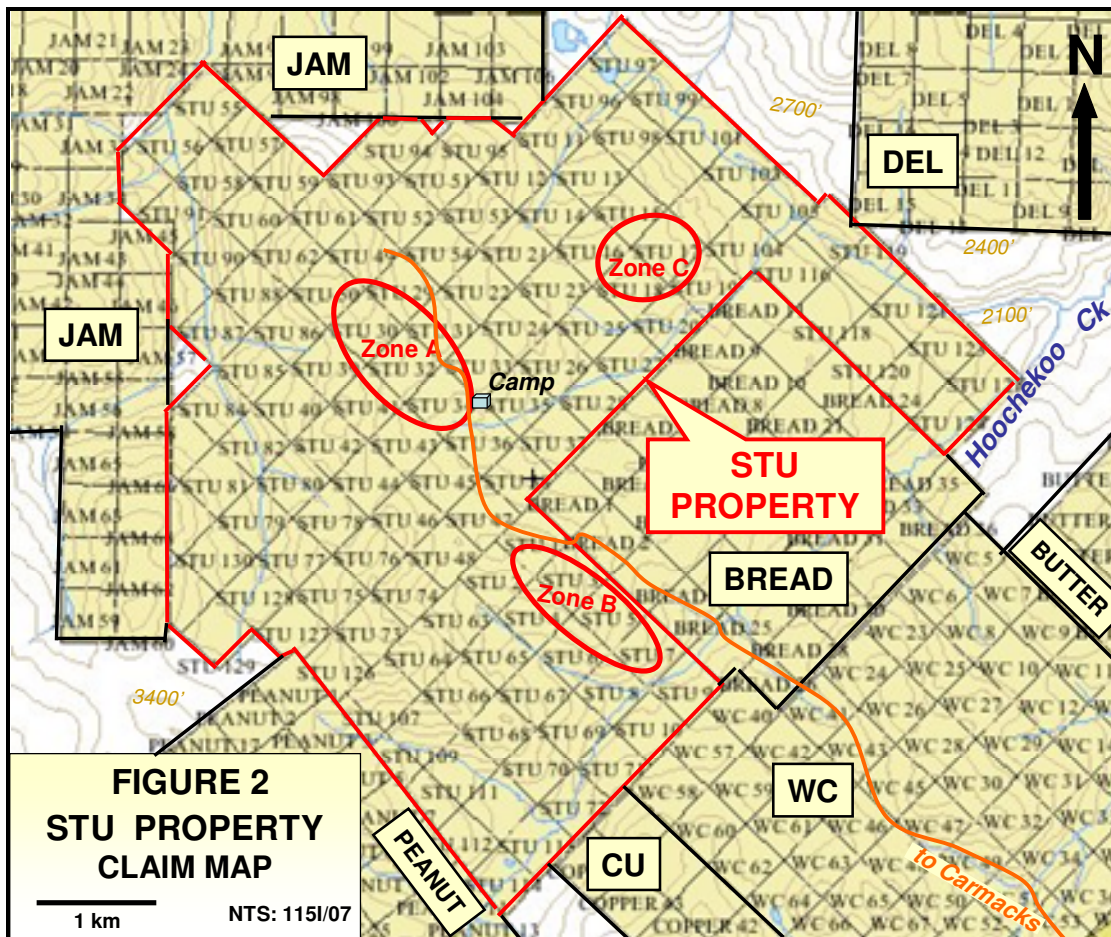
**2.0 LEGAL DESCRIPTION** (Figure 2)

The STU property consists of 132 contiguous claims covering an area of approximately 2760 hectares in the Whitehorse Mining District. The property is owned and the current program operated by Mr. Bill Harris of Whitehorse, Yukon. Some of the claims are still registered in the name of the stakers and will be transferred to Mr. Bill Harris. Work was completed between June 22 and 26, 2010. A table summarizing pertinent claim data follows and complete details are shown in Appendix II:

**TABLE 1: Claim data**

Claim Name	Grant No.	No. of Claims	Registered Owner	Staking Date	New Expiry Date
STU 1-6	YC37770-75	6	Ron Stack	2004-12-11	2010-12-13
STU 7-10	YC37776-79	4	Calvin Delwisch	2004-12-11	2010-12-13
STU 11-20	YC40249-58	10	Bill Harris	2005-09-06	2011-09-19 *
STU 21-28	YC37788-95	8	Andrew Robinson	2004-12-11	2010-12-21
STU 29-30	YC40259-60	2	Bill Harris	2004-12-11	2011-09-19 *
STU 31-38	YC37780-87	8	Mike Power	2004-12-11	2010-12-13
STU 39-54	YC40261-76	16	Bill Harris	2005-09-06	2011-09-19 *
STU 55-62	YC40201-08	8	Bill Harris	2005-07-30	2011-08-29 *
STU 63-72	YC40209-18	10	Bill Harris	2005-07-30	2011-08-29
STU 73-84, 93-105	YC65256-67, 76-88	25	Bill Harris	2007-07-06	2011-07-9 *
STU 85-92, 106-132	YC65268-75, 289-315	35	Bill Harris	2007-07-06	2011-07-9 *
<b>TOTAL</b>		<b>132</b>			

\* new expiry date based on acceptance of this report



First Nations have settled their land claims in the area with First Nations surveyed lands occurring 3 km south of the STU property and 15 km to the north (*see Figure 3*).

### 3.0 PHYSIOGRAPHY AND CLIMATE (Figures 1 and 2)

The property covers an area northwest of Hoochekoo Creek (*Figure 2*) within the northeastern edge of the unglaciated Dawson Range (*Figure 1*) of the Yukon Plateau.

Elevations range from a low of 640m in the eastern property area up to 1075m in the western portion of the claim block, a maximum relief of 435m. Most slopes are gentle except along the north bank of Hoochekoo Creek. North-facing slopes are heavily timbered with black spruce and generally have a thick moss cover. Some north facing slopes and low lying wet areas are covered by dense alder and willow. South facing slopes are better drained and have a cover of poplar or pine. Areas in the northwest portion of the claim block, including part of the A Zone, were burned in the 2004 and 1995 seasons.

Several small streams are present on the property that occupy broad swampy valleys between 400 and 800m wide and drain to the northeast and southeast into Hoochekoo Creek and a southeast flowing tributary of Hoochekoo Creek. Northerly flowing tributaries of Big Creek drain the northwestern property area.

Outcrop exposure on the property is <1% with float covering approximately 8%. Large areas of the property are covered by thick overburden and all of the known showings occur on hill tops or along ridge slopes where the overburden is thin or absent (*Ouellette, 1990*).

The Carmacks area has a northern interior climate with warm summers (+20° C), long cold winters (-20° C) and moderate precipitation (25 cm), most of which is snow. The exploration season lasts from May until October.

### 4.0 HISTORY (Figure 3)

The STU property covers the STU Minfile occurrence, a drilled prospect, as documented by the Yukon Geological Survey (*Deklerk and Traynor, 2005*). A summary of the work completed by various operators is tabulated below:

- |         |   |
|---------|---|
| 1971-74 | Program of grid soil sampling, magnetic and electromagnetic surveys in 1971 and an induced polarization survey in 1974, outlining four northwest trending anomalies, two with a strong EM response coincident with a weak IP and geochemical expression, by Hudson's Bay Oil & Gas Company Ltd. |
| 1976-89 | Programs of prospecting (1976), mapping, deep (0.9m average) soil sampling, magnetic and VLF electromagnetic surveys (1977), an induced   |

polarization survey (1978), 16 bulldozer trenches (1978 or 79), 4504m of diamond drilling in 28 holes and soil sampling (1980), mapping and geochemical surveys and an airborne magnetic and electromagnetic survey (1981), 13 bulldozer trenches (1982) and 1823m in 30 rotary air blast drill holes, primarily in Zone B (1989) by United Keno Hill Mines Ltd.

The programs outlined three zones (A-C) up to 914m long and 91m wide with patchy malachite staining in foliated granodiorite, from which selected grab samples assayed up to 0.58% Cu. Three of the 1980 drill holes returned intersections exceeding 2.5% Cu, including 3.51% Cu, 2.5 g/t Au and 18.4 g/t Ag across 13.5m in DDH 80-14. The rotary drill program returned a maximum of 0.71% Cu over 1.5m in hole SB-6.

- 2005      Prospecting, reconnaissance rock and soil sampling, examination and select rock sampling of most trenches (*Robertson, 2005*).
- 2006      Program of limited magnetic susceptibility testing of drill core samples (suggesting the alteration zones associated with mineralization would be detected as a magnetic low), GPS surveying of old trenches and drill sites, an evaluation of showings and geochemical sampling (*Pautler, 2007*).
- 2008      Program of mapping, geochemical sampling and a petrographic study of mineralization from the three known showings on the property (*Pautler, 2009*).

## 5.0 2010 WORK PROGRAM

A total of 5 man-days were spent on the STU property, between June 22 and 26, 2010. The 2010 work program consisted of mapping and geochemical sampling in the northwest property area (where two old trenches were reported during staking), between the A and C Zones, north of the C Zone and to the west of the B Zone. Control was provided by property scale topographic maps, hipchain, compass and GPS. The mapping program is discussed under sections 6.2 "Property Geology" and 6.3 "Mineralization and Alteration" and the geochemistry under section 9.0 "Geochemistry". Mapping is shown in Figures 4 and 7 to 9, sample locations and traverses are shown in Figures 7 to 9, and sample descriptions in Appendix III.

Four old trenches were located in the northwest property area in 2010 and surveyed by GPS in the field using UTM coordinates, Nad 83 datum, Zone 8 projection. All of the United Keno Hill Mines Ltd. trenches appear to have been located. The trenches are shown in Figure 7 and are documented below.

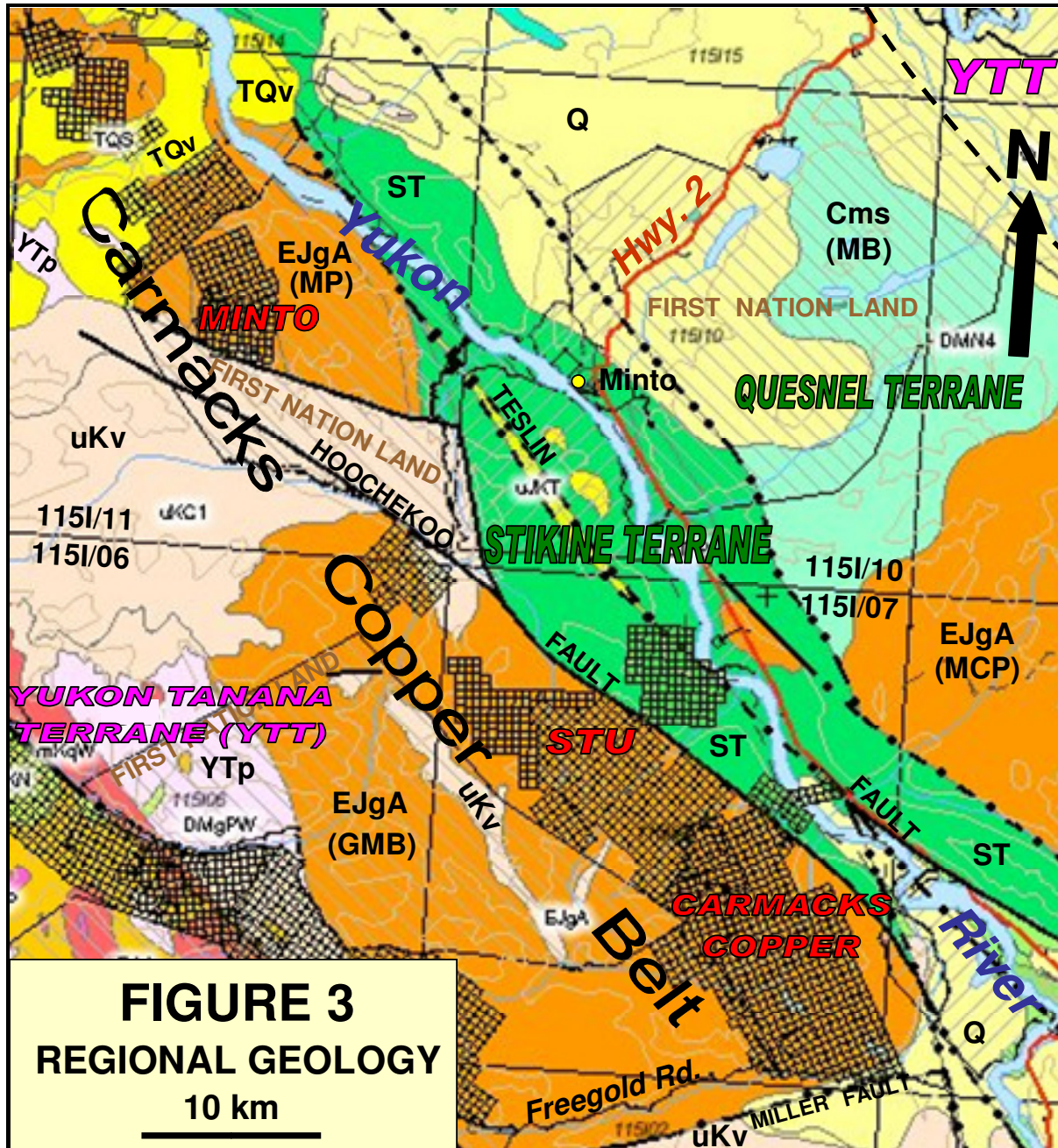
**Table 2: NW trench locations**

Name	Northin	Easting	Elev. (ft)
TR-1	6923394	402593	2703
TR-1End	6923382	402562	2684
TR-2	6923382	402562	2684
TR-2End	6923377	402568	2687
TR-3	6923445	402515	2623
TR-4	6923385	402551	2676
TR-4End	6923401	402507	2645

## 6.0 GEOLOGY

### 6.1 Regional (Figure 3)

The regional geology of the area is primarily summarized from Gordey and Makepeace (2000), Mortensen and Tafti (2003) and Robertson (2005).



The STU property occurs within the Carmacks Copper Belt between the Carmacks Copper deposit (formerly Williams Creek Copper) of Western Silver Corporation, containing a resource of 12.0 million tonnes of copper oxide ore grading 1.07% Cu (0.86% oxide Cu), 0.5 g/t Au and 4.6 g/t Ag, using a cutoff grade of 0.25% Cu, and the Minto deposit of Capstone Mining Corporation (formerly Sherwood Copper Corp.), with

19.3 million tonnes of sulphide ore grading 1.42% Cu, 0.5 g/t Au and 5.4 g/t Ag using a cutoff grade of 0.5% Cu (based on drilling to end of 2006). The Minto deposit started production in October, 2007 and has greatly increased its resource. The Carmacks Copper deposit is currently in the permitting process.

The regional area of the Carmacks Copper Belt is underlain by intermediate to felsic intrusive and meta-intrusive rocks of the Early Jurassic Aishihik/Long Lake plutonic suite (**EJgA**) intruding Paleozoic metaplutonic rocks (**YTp**) and locally metavolcanic rocks (not in map area) of the Yukon Tanana Terrane, near the boundary with upper Triassic and/or older mafic volcanic rocks of the Stikine Terrane (**ST**) to the east. The above lithologies are overlain by younger basaltic volcanic rock units of the Late Cretaceous Carmacks Group (**uKv**) and the Quaternary Selkirk Group (**TQv**).

The northwest trending Hoochekoo Fault, which lies just to the northeast of the STU and Carmacks Copper properties, transects the Carmacks Copper Belt separating the Minto deposit, hosted by the Minto Pluton (**MP**), from the Carmacks Copper deposit and the STU property, both hosted by the Granite Mountain Batholith (**GMB**).

The area has been glaciated with overall northwesterly ice directions and local southeast ice directions, particularly in the west.

## 6.2 Property (Figure 4)

The STU property is primarily underlain by Early Jurassic intrusive rocks of the Granite Mountain Batholith (**GMB**). The intrusive rocks consist of several different phases that include potassium feldspar megacrystic granodiorite that grades to foliated biotite granodiorite, biotite gneiss and locally biotite schist, quartz-phyric granodiorite to quartz monzonite, and minor diorite to quartz diorite. Foliation of the granodiorite, where present, trends northwest, dipping steeply and varies from very weak to moderate to locally strong to gneissic, particularly in mineralized zones.

Apart from the three main mineralized zones, gneissic granodiorite occurs on the eastern and western margins of the C Zone. Minor foliated granodiorite was also encountered approximately 1 km northwest ( $325^{\circ}/75^{\circ}\text{E}$ ), 1 km southwest ( $350^{\circ}/75^{\circ}\text{E}$ ) and 2 km west ( $320^{\circ}/80^{\circ}\text{E}$ ) of the B Zone. A narrow (1m) zone of foliated biotite granodiorite, trending  $300^{\circ}/70^{\circ}\text{NE}$ , occurs in the northwest property area on STU 59 or 61.

Petrography on a suite of six samples collected from the three known mineralized zones on the STU property in 2008 indicated a granodiorite composition for the host rock with 25-30% quartz, 35% plagioclase, 10% potassium feldspar, 15% biotite and 5% hornblende, with accessory epidote, apatite, sphene and zircon (*Fonseca, 2008*).

The intrusive rocks are cut by locally numerous aplite and pegmatite dykes of variable widths and overlain and cut by mafic flow and tuff breccia volcanic rocks and related dykes of the Carmacks Group (**uKv**). Carmacks basalt flows are exposed in the northwestern C Zone and between the A and C Zones. A basalt hornblende feldspar porphyry flow is exposed as subcrop east of (above) the trenches in the northwest property area.

The northwest trending Hoochekoo Fault lies just to the northeast of the STU property and 130° trending, steeply dipping fractures and structural zones are evident across the property that appear to have a relationship to mineralization.

Metamorphism is of upper greenschist facies biotite zone as indicated by petrography and locally hornblende is partly converted to metamorphic prograde biotite (*Fonseca, 2008*).

Several trenches, two of which were reported during staking along the claim line at the northwest end of the property on the STU 55-58 claims, were examined in 2010 but only minor bedrock, consisting of clay altered granodiorite with limonite fractures and Mn staining, was exposed in Trench 3. The remaining trenches exposed till with ash horizons (*see Figure 7*).

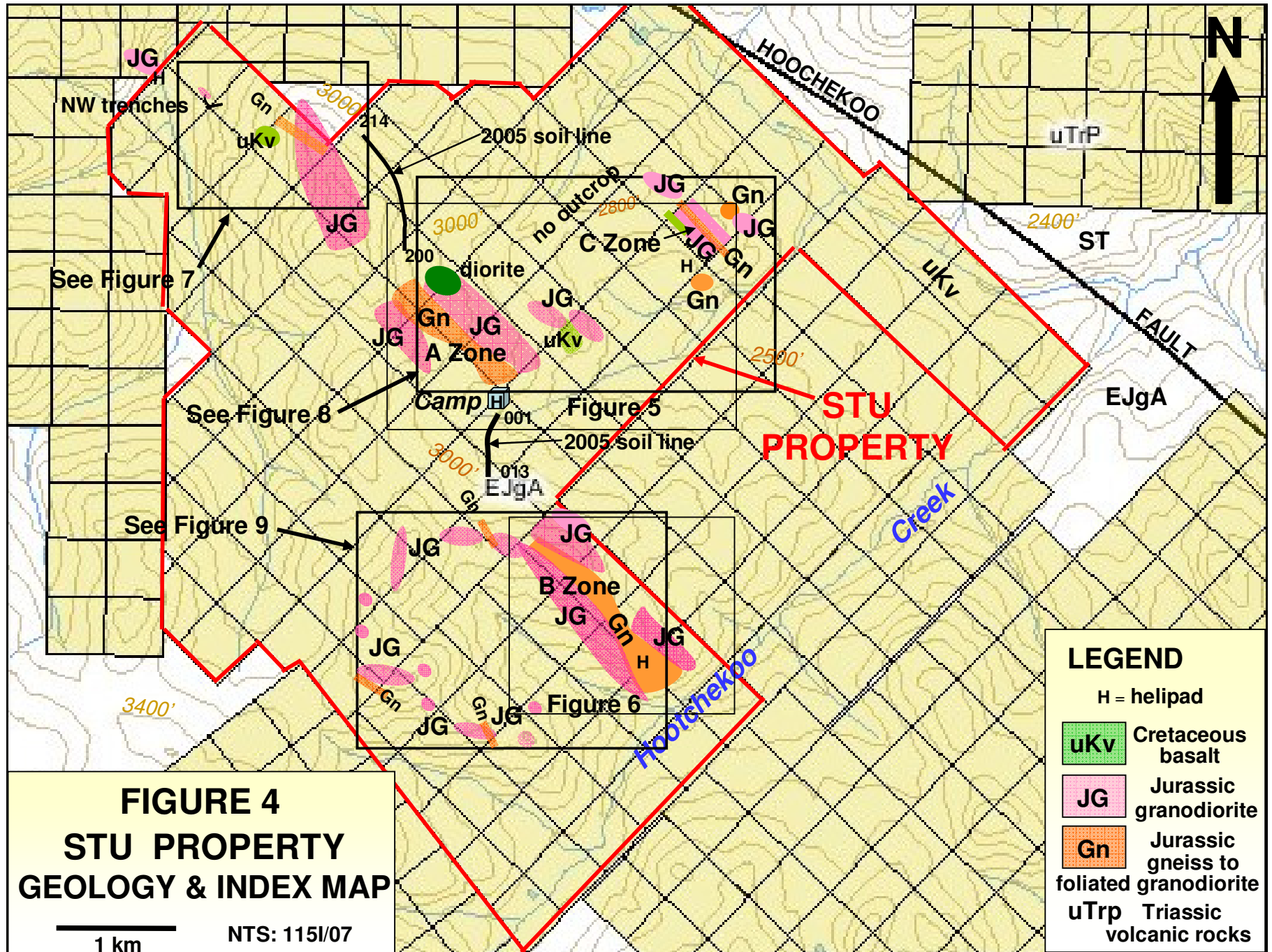
### 6.3 Mineralization and Alteration

The property covers the STU Minfile drilled prospect as documented by the Yukon Geological Survey as Minfile Number 115I 011 (*Deklerk and Traynor, 2005*).

Mineralization consists of chalcopyrite and bornite with minor pyrite and locally abundant magnetite. It occurs as disseminations, irregular grains and aggregates hosted by weak to well foliated biotite granodiorite to gneiss. Chalcocite and digenite often rim bornite grains and tenorite occurs in fractures. Minor malachite and azurite, with lesser chrysocolla and possible brochantite (*Fonseca, 2008*), occur in fractures, veinlets and occasionally rim chalcocite. The copper minerals appear to replace the mafic minerals within the granodiorite. Hematite replaces magnetite and also occurs as minor fracture and open space fillings. Possible gold grains were observed in samples PTS-3 from Trench 1450E in the C Zone and PTS-5 from Trench 74+00E in the B Zone (*Fonseca, 2008*).

Mineralization appears to be associated with more foliated sections trending 130° with magnetite-silica alteration (observed as silicification with fine disseminated magnetite along foliation) and the presence of biotite, interpreted as potassic alteration. Small veinlets sometimes cut the mineralization. Alteration minerals include quartz, mica, carbonate, epidote and chlorite. The highest gold and silver values are associated with bornite-rich sections. A crude vertical zonation has been previously noted, from pyrite at the bottom of the zone to bornite and chalcocite at the top (*Deklerk and Traynor, 2005*).

The petrographic analysis of the granodiorite host from the three known mineralized zones on the property (*Fonseca, 2008*) shows a penetrative foliation defined by melanocratic domains of biotite, with lesser hornblende-epidote-sphene-apatite-magnetite, and leucocratic domains of quartz and feldspars. Hydrothermal alteration minerals include fine grained clays and white mica partly replacing feldspars, and chlorite partly replacing biotite. Clay alteration was found to be most intense in the vicinity of intense supergene copper mineral deposition (*Fonseca, 2008*).



## 7.0 DEPOSIT MODEL

Mineralization on the STU property, located between the Minto and Carmacks Copper deposits within the Carmacks Copper (-Gold) Belt, appears to fit the metamorphosed copper-gold porphyry deposit model proposed by Tafti and Mortensen (2004) for the two deposits.

The STU property has strong similarities to both deposits, hosted by the same rock units with similar alteration (secondary biotite, magnetite-silica) and mineralization (gold-bornite association). It has been documented that the Minto and Carmacks Copper deposits are hosted by variably deformed plutonic rocks that occur as pendants and schlieren within slightly younger less deformed intermediate intrusive rocks of the Granite Mountain Batholith (*Tafti and Mortensen, 2004*). Petrographic and field studies of the more gneissic host rocks from Minto and Carmacks Copper show that they represent strongly deformed and metamorphosed intrusive rocks (orthogneiss), with the excess amount of biotite representing secondary (hydrothermal) biotite associated with strong hypogene potassic alteration (*Tafti and Mortensen, 2004*).

Hornblende geochemical studies of plutonic and meta-plutonic host rocks at Minto and Carmacks Copper indicate that they formed in a continental magmatic arc setting (*Tafti and Mortensen, 2004*). The setting, timing of mineralization and petrographic and field observations of the host rocks, mineralization and alteration led Tafti and Mortensen (2004) to conclude that the two deposits represent variations on typical copper (-gold) porphyry deposits.

It should be noted that schlieren are fragile, usually elongate concentrations of mafic material within some intrusions. Genesis may be due to shearing of heterogeneities (enclaves or xenoliths), crystal sorting during convective or magmatic flow, or crystal settling.

Recent work at the Carmacks Copper deposit has suggested that the highly foliated rocks controlling economic mineralization are rafts and lenses (xenoliths) of augite-phyric volcanic rocks of the Povoas Formation within the Granite Mountain Batholith. The Povoas Formation occurs at the base of the Triassic aged Lewes River Group, part of Stikinia, and is exposed to the northeast of the Granite Mountain Batholith (see *Figure 3*). Similarly mineralization at the Minto deposit has been described as being hosted by zones of strongly developed penetrative foliation, interpreted as shears or as rafts of volcanic rock within the granodiorite host.

Calc-alkaline porphyry copper-gold mineralization at the Kemess Mine (Kemess South deposit) and the Kemess North deposit in central British Columbia is hosted by Jurassic granodiorite intrusions and adjacent Upper Triassic augite-phyric flows of the Takla Group, indicating similar chemistry, age and deposit characteristics to mineralization within the Carmacks Copper (-Gold) Belt. The main difference is the lack of foliated rocks associated with the mineralization.

The STU petrographic analysis completed in the 2008 program confirmed similarities between the STU and the Minto and Carmacks Copper deposits and recognized similarities

to the recently discovered Tropicana gold deposit of AngloGold Ashanti Australia Ltd. in Western Australia which contains 62.8 million tonnes of 2.01 g/t Au, with no mineable copper reported (*see Fonseca, 2008*). Tropicana has been described as a metamorphosed intrusion related gold deposit. Current work is focussing on whether the deposit is in fact a metamorphosed Archean deposit or formed during metamorphism in the Proterozoic.

Tropicana is hosted within high grade metamorphic gneissic rocks and associated with late biotite and pyrite alteration (*AngloGold Ashanti website*). STU is hosted within upper greenschist metamorphosed gneissic rocks, associated with late biotite alteration and pyrite alteration is documented at the bottom of the zone. Metamorphic prograde biotite was recognized in polished thin sections from the STU property (*Fonseca, 2008*).

The STU petrographic analysis also indicated the presence of ubiquitous magmatic epidote, also reported at Minto, suggesting depths of formation of 18 to 20 km, which far exceeds typical depths of deposition for porphyry style deposits (*Fonseca, 2008*).

Based on the above discussion, the author believes that mineralization within the Carmacks Copper (-Gold) Belt is hosted by schlieren zones (including some volcanic xenoliths) within Jurassic granodiorite and is consistent with a calc-alkaline porphyry copper-gold model (with similarities to the Kemess Mine and Kemess North deposit) which formed at a deep crustal level.

## 8.0 PREVIOUS WORK (Figures 5 and 6)

Historical work in the A Zone includes eight bulldozer trenches excavated in 1979 and 25 diamond drill holes completed in 1980. All recent sampling from the A Zone (2005-2008) is tabulated below, listed from north to south, in order to correlate anomalous results and attempt to delineate the mineralized zone (*Figure 5*).

**TABLE 3: A Zone sample results**

Sample Number	Year	Trench Number	Width (m)	Cu (ppm)	Au (ppb)	Ag (g/t)
22342	2006	11+50W	grab	6722	265	5.5
22343	2006	11+50W	grab	4016	285	1.9
82531	2005	cross 8+00W	grab	2470	95	
526142	2008	8+00W	15m *	6381	470	4.8
526143	2008	8+00W	20m *	2685	120	1.7
82532	2005	8+00W	10m *	5606	270	
22341	2006	6+00W	grab	3183	55	0.7
82533	2005	6+00W	grab	4040	85	
22344	2006	4+00W	grab	1243	30	0.3
22345	2006	0+00W	1.0m	1715	40	1.3
82534	2005	0+00W	0.15m	2246	55	
22346	2006	12+00E	grab	237	10	<0.2

\* denotes composite samples collected from rubble along floor of trench

Trench 11+50W is heavily overgrown with only minor rubble consisting of medium grained leuco-granodiorite and well foliated biotite granodiorite with weak to moderate malachite staining and some chalcocite and chalcopyrite noted. Rubble of malachite stained well foliated strongly biotite rich granodiorite was noted at the north end of the cross trench from Trench 8+00W. Rubble of well foliated biotite granodiorite is exposed in the west end of Trench 8+00W.

A composite grab of malachite stained foliated granodiorite rubble from the floor of Trench 8+00W from the cross trench intersection to the east returned 0.27% Cu, 120 ppb Au over a 20m width (Sample 526143). This is followed to the east by a 20m unsampled interval, a 15m interval of 0.64% Cu, 470 ppb Au of malachite stained magnetite-silica altered foliated granodiorite (Sample 526142) and 10m of malachite stained rubble between the collars of DDH 80-6 and 80-7 containing 0.56% Cu, 270 ppb Au (Sample 82532), with no exposure further to the east. This is suggestive of a 65m wide mineralized zone that may be open in both directions.

A 50m wide zone of moderate malachite stained foliated biotite granodiorite is exposed as subcrop and lesser outcrop in the centre of Trench 6+00W. Previous samples 22341 and 82533 were collected from this zone carrying 0.32 and 0.40% Cu, respectively. Weak malachite stained rubble extends another 45m to the west, with no exposure in the remaining 30m of the trench and no exposure for 20m east of the mineralized zone. This is suggestive of a 95m wide mineralized zone, open to the west and open 20m to the east.

Minor malachite staining was noted in biotite granodiorite in the centre of Trench 12+00E, but no significant results were obtained from a sample collected in 2006. The trench is deeply weathered and requires deepening.

Mineralization in the A Zone was traced for 800m along strike in the 2005 to 2008 programs from Trench 11+50W at the north end to Trench 12+00E at the south end over a width of up to approximately 95m in Trench 6+00W. This probably corresponds to the zone 914m long and up to 91m wide that was delineated by United Keno Hill Mines Limited. The zone appears open to the northwest and may dissipate to the southwest in Trench 12+00E or may extend to the east of Trenches 12+00E and 14+00E. The best mineralization is exposed for 400m from Trench 11+50W to Trench 0+00W.

Soils collected in 2008 from the east end of Trench 4+00W returned high to moderately anomalous values of 217 ppm, 2935 ppm and 73 ppm Cu (Samples S-09, S-07, S-08). The highest value was collected above a foliated zone in the granodiorite with minor malachite just east of 2006 sample 22344 which ran 0.12% Cu from fresh looking granodiorite with minor malachite. The anomaly covers a 45m width and remains open in all directions.

The above anomalous zone appears to continue to the southeast to the east end of Trench 0+00W where moderately anomalous values of 97 ppm, 93 ppm and 47 ppm Cu were obtained in 2008 from east to west (Samples S-06, S-01, S-02). S-01 was collected above a reddish zone of malachite stained granodiorite that returned 0.22% Cu over 0.15m in 2005 (82534) adjacent to a foliated zone to the east that returned 0.17% Cu over 1.0m in

2006 (22345). The soil anomaly covers a 40m width and remains open to the east and southeast along strike. It may continue to the eastern portions of Trenches 12+00E and 14+00E, just north of the STU camp, where malachite was observed in Trench 12+00E and well foliated granodiorite in Trench 14+00E. A grab sample of malachite stained granodiorite collected from Trench 12+00E in 2006 did not contain anomalous values.

Two lines of reconnaissance soils which were collected in 2005 to the north and south of Zone A, but not along trend, did not return anomalous values (*shown on Figure 4*).

Fourteen historical bulldozer trenches from 1979 and 1982 have been located in the B Zone area, nine of which directly explore the B Zone. All recent sampling from the B Zone is tabulated below, listed from north to south (*Figure 6*).

**TABLE 4: B Zone sample results**

Sample Number	Year	Trench Number	Width (m)	Cu (ppm)	Au (ppb)	Ag (g/t)
22340	2006	TR B-9	grab	245	5	<0.2
22329	2006	TR B-3	grab	1.57%	1.86 g/t	9.8
82529	2005	TR B-3	grab	2.86%	2.56 g/t	
22330	2006	TR B-3	grab	2518	15	7.0
22331	2006	TR B-1	grab	62	5	0.3
22332	2006	TR B-1	grab	117	15	2.1
22333	2006	TR B-1	grab	161	10	<0.2
82530	2005	@ SB-7 in B1	grab	2.78%	1.07 g/t	444
22334	2006	@ SB-7 in B1	1.0m	5561	110	5.8
22335	2006	TR B-1	1.0m	168	5	0.3
22336	2006	TR B-0	grab	57	5	<0.2
22337	2006	TR B-0	grab	41	5	<0.2
22338	2006	TR B-6	grab	7247	320	4.3
22339	2006	TR B-8	grab	411	15	0.2

Mineralization in the B Zone was traced for 400m along strike in the 2005 and 2006 programs from Trench B3 to Trench B6 with a maximum 2.86% Cu and 2.56 g/t Au. To the northwest the mineralization may trend to the east of Trenches B4 and B5.

Two of the four reconnaissance soil samples collected from rusty zones in the B Zone area in 2006 (Samples S22328, 25) yielded moderately anomalous results of 78 ppm Cu from Trench B5 and 41 ppm Cu from Trench B11.

The C Zone has seen limited historical exploration with only four short bulldozer trenches in 1979 and three diamond drill holes in 1980. All recent sampling (2005-2008) from the C Zone is tabulated below, listed from north to south (*Figure 5*).

**TABLE 5: C Zone sample results**

Sample Number	Year	Trench Number	Width (m)	Cu (ppm)	Au (ppb)	Ag (g/t)
526140	2008	11+50E E	1.0m	2613	3.7 g/t	1.6
22347	2006	11+50E W	grab	1.59%	165	7.5
526141	2008	below 11+50E	grab	9108	100	5.0
526136	2008	14+50E	5m	5064	80	7.9
526137	2008	14+50E	1.5m	3672	40	0.9
526138	2008	14+50E	grab	2327	30	1.8
526139	2008	14+50E	grab	1.57%	60	12.6
82526	2005	14+50E	≈1.25	2993	20	
82528	2005	14+50E	grab	4396	5	
82527	2005	below 14+50E	grab	1.07%	105	

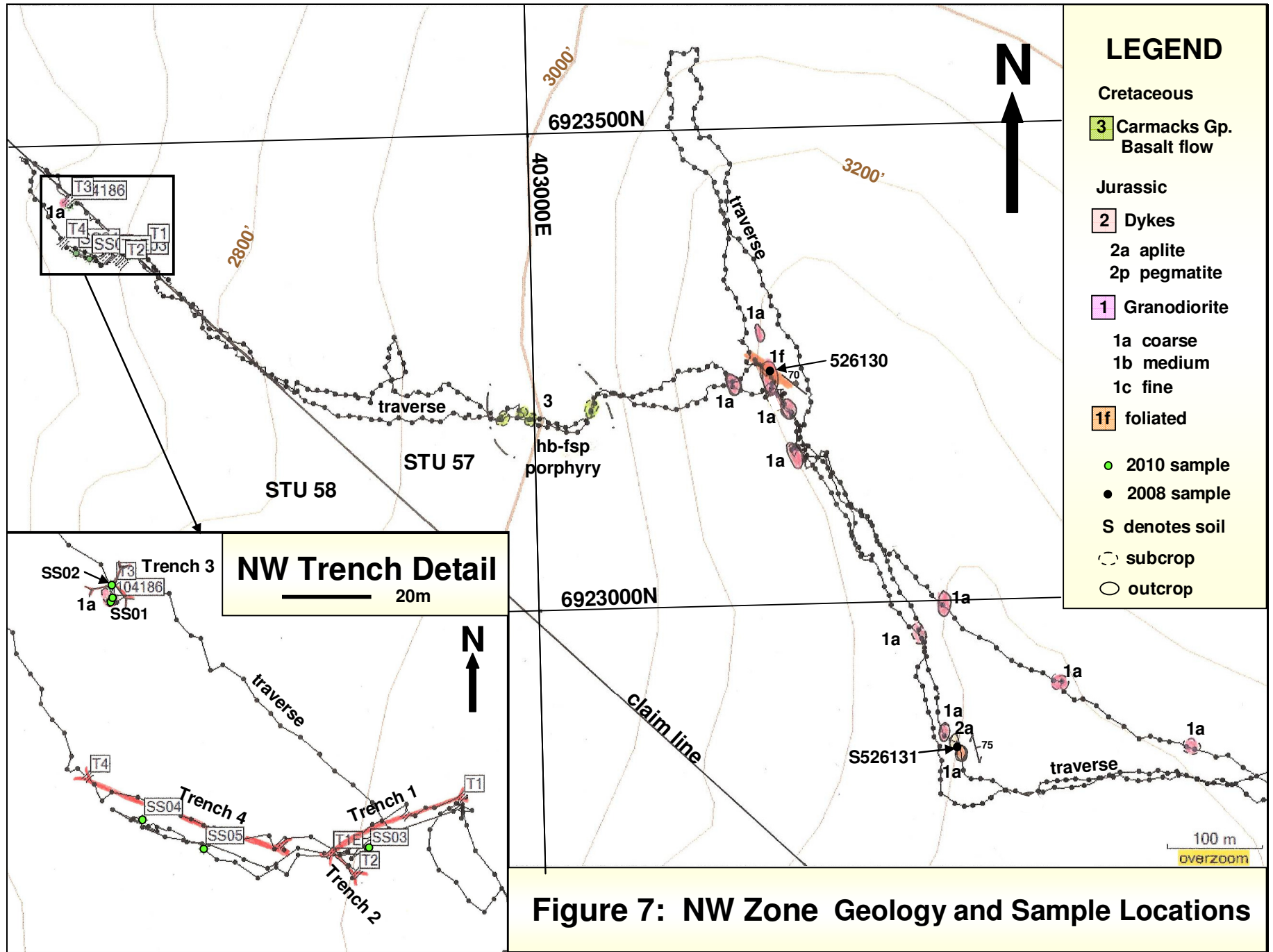
Two zones of poorly exposed malachite staining occur in Trench 11+50E; the western one more biotite rich and foliated. The western zone returned 1.59% Cu and 165 ppb Au collected from rubble exposed over a 1-2m width in 2006 (Sample 22347) and the eastern zone 0.26 % Cu and 3.7 g/t Au over 1.0m of outcrop in 2008 (Sample 526140) from within a 5m wide malachite stained zone of rubble. A sample for a polished thin section (PTS) was not collected from this latter locality, but possible visible gold was noted in PTS-3, 65m along trend to the southeast of 526140 in Trench 14+50E.

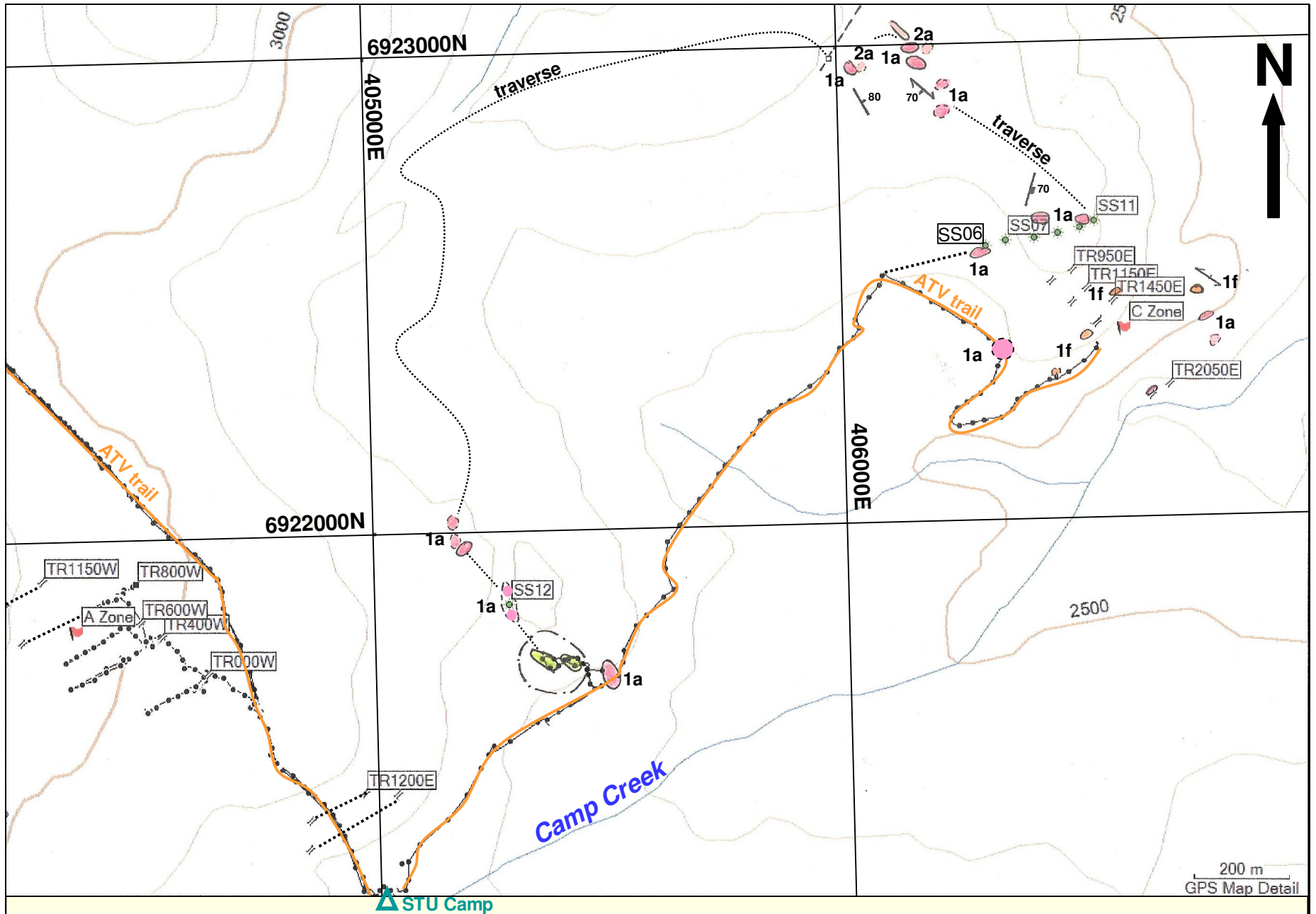
Rubble exposed on the east side of a cat trail between Trenches 11+50E and 14+50E appears to be in place and along trend of the western zone exposed in Trench 11+50E. A grab sample collected in 2008 returned 0.91% Cu and 100 ppb Au (Sample 526141).

A 25-30m wide zone of malachite stained foliated biotite granodiorite rubble with some outcrop is exposed in the central portion of Trench 14+50E, which has now been fairly systematically sampled and appears to trend 130°. Starting from the trench trail cutting through the centre of the trench and heading to the east, a series of samples were collected in 2008 which returned 0.51% Cu and 80 ppb Au over 5m, 0.37% Cu and 40 ppb Au over 1.5m, a grab with 0.23% Cu and 30 ppb Au and 1.57% Cu and 60 ppb Au (Samples 526136-49). Sample 82526 collected in 2005 appears to correlate with Sample 526137, returning similar values of 0.30% Cu and 20 ppb Au over 1.25m. On the west side of a cat trail below Trench 14+50E results of 1.07% Cu and 105 ppb Au were obtained in 2005 from what appears to be local rubble.

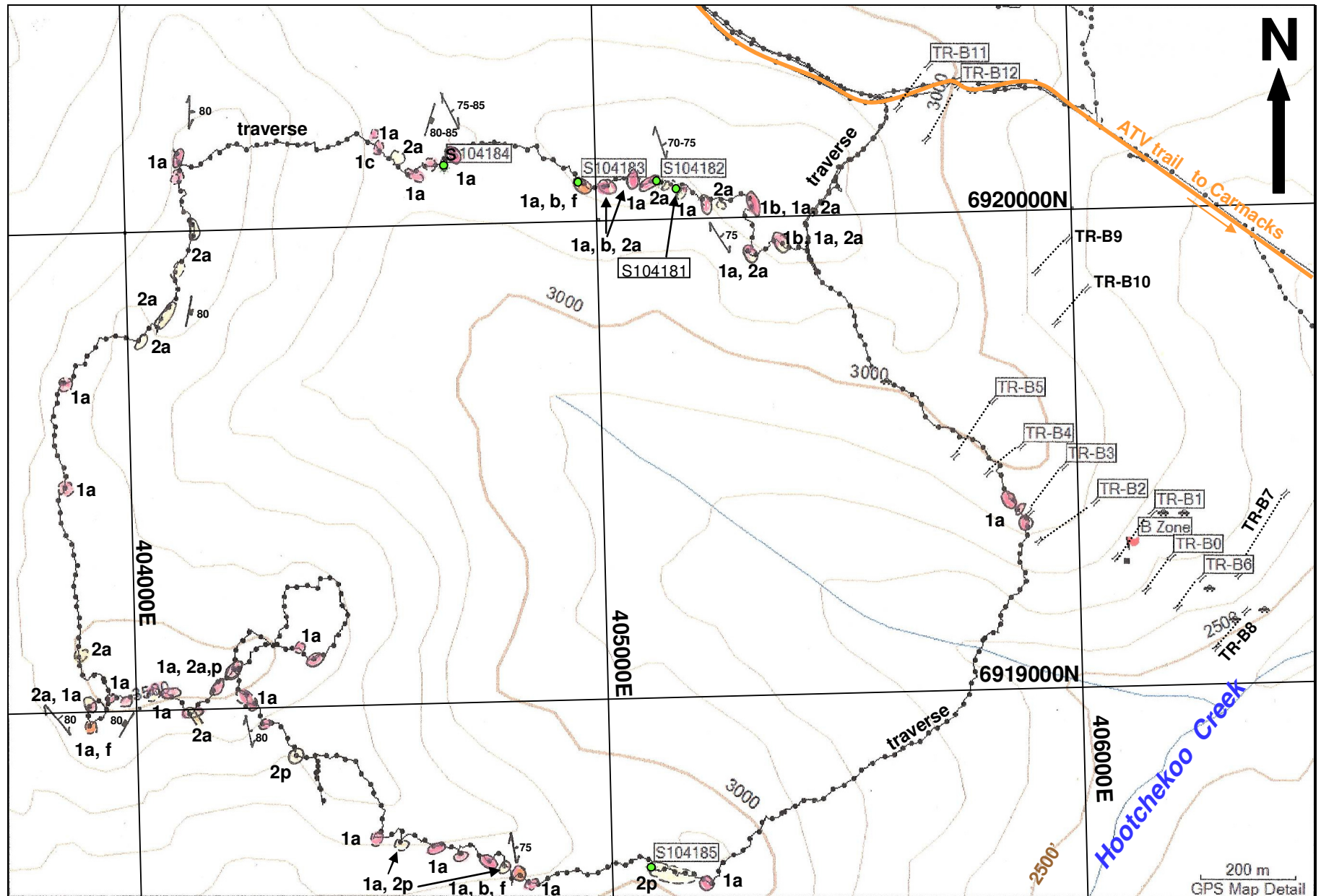
Malachite stained outcrops also occur between Trenches 11+50E and 9+50E, resulting in a 110m strike extent for the zone with a 25-30m width in Trench 14+50E, open in both directions along strike.

Soil samples collected from Trench 20+50E in 2008 did not return anomalous results, although half of the samples were of poor quality due to the poor development of the soil profile (Samples S526132-135). The low results are consistent with the fresh coarse grained Kspar megacrystic granodiorite observed in the western end of the trench and orientation of the mineralized zone in Trench 14+50E which trends off to the east of Trench 20+50E.





**Figure 8: A and C Zone Area Geology and Sample Locations See Figure 7 for Legend**



**Figure 9: West B Zone Geology and 2010 Sample Locations** See Figure 7 for Legend

## **9.0 GEOCHEMISTRY** (Figures 7 to 9)

### **9.1 Procedure**

A total of 1 rock and seventeen soil samples were collected from the property during the 2010 program for geochemical analysis. All samples were located and recorded by GPS in the field using UTM coordinates, Nad 83 datum, Zone 8 projection. Sample descriptions, locations and select results (Cu, Au and Ag) are documented in Appendix III and locations are plotted on Figures 7 to 9. Complete results are outlined in Appendix IV.

The rock sample consisted of a grab of clay altered granodiorite with limonite fractures and Mn staining, exposed as subcrop in Trench 3 in the northwest property area. The sample was placed in a clear plastic sample bag, numbered and secured in the field.

Due to lack of exposure soil samples (denoted with an "S") were collected from the old trenches (possibly dating from 1979 to 1982) in the northwest property area (Samples SS1 to SS5) and on trend to the north of the C Zone to delineate the extent of mineralization (Samples SS6 to SS11). One reconnaissance soil sample was collected above rusty pods in coarse grained Kspar biotite granodiorite outcrop/subcrop to the east of the A Zone (Sample SS12).

The trench soil samples were generally collected from the walls, and occasionally from the floor, of the trenches. The trench wall samples were collected from the B-C horizon or basal till, below the ash layer from pits dug in the banks of the trenches. The remaining soils were collected with a 1m soil auger. All samples were placed in numbered waterproof kraft bags.

Samples were delivered by the author to the sample preparation laboratory of Eco Tech Laboratory Ltd. (Stewart Group) in Whitehorse for preparation and then internally sent directly to their facility in Kamloops, British Columbia for analysis. Samples were analyzed for Al, Sb, As, Ba, Bi, Cd, Ca, Cr, Co, Cu, Fe, La, Pb, Mg, Mn, Mo, Na, Ni, P, Ag, Sr, Ti, Sn, W, U, V, Y and Zn using a 28 element ICP package which involves a nitric-aqua regia digestion. Gold was analyzed by fire assay with an atomic absorption finish. Laboratory sample preparation and analysis procedures are outlined in Appendix III. Eco Tech is an ISO 9001 accredited facility, registration number CDN 52172-07.

Quality control procedures were implemented at the laboratory, involving the regular insertion of blanks and standards and repeat analyses of at least 25% of the samples, with re-analyses being performed for one sample in each batch on the original sample prior to splitting (resplit).

### **9.2 Results**

The reconnaissance rock sample from Trench 3 in the northwest trench area was not anomalous but the area is primarily underlain by glacial till (Sample 104186). Basal till from the bank of the trench returned a low anomalous value of 24 ppm Cu (Sample SS-01).

Basal till from the bank of Trench 4 also returned a low anomalous copper value of 26 ppm Cu (Sample SS-05). Overall the samples in the area are of poor quality due to thick till cover. The samples from the basal till would have a lower threshold for anomalous values.

No significant soil anomalies were obtained from the area explored to the west of the B Zone but sampling was limited (Samples S104181-104185). The one reconnaissance soil sample from east of the A Zone returned a low anomalous copper value of 24 ppm Cu (Sample SS-12).

The six soil samples (Samples SS-6 to SS-11) collected from the northern projection of the C Zone returned elevated copper values of 24, 32 and 28 ppm Cu at the central and eastern end of the line (Samples SS-8, -9, -11), suggesting that the mineralized zone may trend through this area.

## 10.0 DRILLING (Figures 5 and 6)

No drilling was conducted in the current program but a total of approximately 4505m of diamond drilling in 28 holes and 1823m of rotary air blast drilling in 30 holes has been completed on the property by United Keno Hill Mines Ltd in 1980 and 1989, respectively. The BQ size core is stored on site in two racks in poor condition at UTM coordinates 6921220mN, 404960mE, Nad 83 datum, Zone 8 projection, just west of the United Keno Hill camp. One rack, leaning badly, holds approximately 1900m of core from holes DDH 80-17 to DDH 80-28. Only a few boxes appear to be missing, although many boxes are deteriorating. The second rack holds approximately 2600m of core from holes DDH 80-01 to DDH 80-17, but is largely collapsed with many overturned boxes and missing core.

The results of the 1980 drill program are not in the public record except for four holes (DDH 80-17, -25, -27 to -28) filed for assessment. It is reported that the program returned significant results with three of the 1980 drill holes returning intersections exceeding 2.5% Cu, including 3.51% Cu, 2.5 g/t Au and 18.4 g/t Ag across 13.5m in DDH 80-14 (*Deklerk and Traynor, 2005*). Results for DDH 80-17, which appears to be a step out from DDH 80-14, are reported as 0.15% Cu, 0.18 oz/t Ag, trace Au over 25.4m (*see Fisher and Watson, 1981*).

From observations made in 2006 and 2008, it appears that the core in both core racks can be salvaged with some care and the core contains significant mineralized intervals, particularly tenorite bearing sections, which have not been sampled.

Diamond drill hole collars, trenches and significant reference locations were surveyed by GPS in the field in 2006 using UTM coordinates, Nad 83 datum, Zone 8 projection. Nineteen of the twenty-five drill holes from the A Zone and three drill holes from the C Zone were located. The additional sites from the A Zone are approximated from grid coordinates. The data is plotted in Figures 5 and 6 and drill hole collars are documented in Table 6 below.

**Table 6: Diamond drill hole locations**

<b>Drill Hole</b>	<b>Zone No.</b>	<b>UTM Northing</b>	<b>NAD83 Easting</b>	<b>Elev. (m)</b>	<b>Az. (°)</b>	<b>Dip (°)</b>	<b>Depth (m)</b>
80-01	C	6922365.921	406541.015	785.144	026	-50	104.5
80-02 **	A	6921350	405500	863	220	-50	69.5
80-03 *	A	6921446	405022	863	218	-50	167.6
80-04	A	6921753.16	404474.297	909.176	240	-50	121.9
80-05 *	A	6921782	404525	911	240	-50	156.4
80-06	A	6921846.072	404392.073	912.891	240	-50	93.9
80-07	A	6921878.822	404447.686	912.34	240	-50	111.5
80-08 *	A	6921890	404381	910.502	240	-50	120.1
80-09	A	6921967.651	404356.099	915.353	240	-50	135.3
80-10	A	6921921.256	404267.452	921.995	208	-50	137.8
80-11	A	6921997.104	404410.764	910.648	240	-50	204.8
80-12 *	A	6922030	404350	912	240	-50	160.3
80-13	A	6922003.209	404285.099	918.304	240	-50	152.4
80-14	A	6921939.428	404369.969	914.801	240	-50	154.5
80-15	A	6921921.048	404432.934	910.502	240	-50	190.8
80-16	A	6921965.953	404418.051	910.27	240	-50	232.6
80-17	A	6921965.953	404418.051	910.27	242	-72	426.1
80-18	A	6922091.469	404329.235	911.475	240	-48	183.5
80-19	A	6922091.469	404329.235	911.475	240	-57	92.7
80-20	A	6922059.415	404266.536	917.87	-	-89	122.5
80-21	A	6922028.637	404212.854	924.374	-	-90	91.4
80-22 *	A	6922122	404404	912	240	-50	210?
80-23	A	6922208.599	404290.905	911.298	240?	-50	185.9
80-24	A	6922172.78	404223.412	918.483	240?	-50	153.0
80-25	A	6922409.49	404101.31	921.875	220	-50	161.8
80-26	A	6921515.716	404662.036	884.614	240	-50	195.7
80-27	C	6922513.116	406093.277	792.134	030	-50	187.8
80-28	C	6922363.293	406338.785	793.875	028	-50	183.5
<b>TOTAL</b>							<b>4507.8</b>

\* approximate location, site not located      \*\*location very approximate

The rotary drill sites from 1989, primarily drilled in the B Zone with no rotary holes in the A and C Zones, were identified by the presence of a mound of drill cuttings and a metal tag on the ground. Only a few of the tags could be read. The approximate hole collars were recorded by GPS in the field in 2006 using UTM coordinates, Nad 83 datum, Zone 8 projection in 2006 and are shown below in Table 6. The best hole from the rotary drill program was hole SB-6 from Trench 74+00E in the B Zone which returned 0.71% Cu over 5 feet.

**Table 7: Rotary drill hole locations**

<b>Drill Hole</b>	<b>UTM Northing</b>	<b>NAD83 Easting</b>
A	6920049	405494
B	6919561	405803
C	6919505	405895
D	6919507	405871
E	6919469	405980
F	6919463	405976
G	6919395	406050
H	6919386	406051
I	6919205	406334
J	6919125	406246
SB-7	6919314	406127
SB-10	6919332	406142
SC-1	6919202	406363
SC-2	6919251	406242

## 11.0 INTERPRETATION

The 2010 program consisted of mapping and geochemical sampling in the northwest property area (where two old trenches were reported during staking) between the A and C Zones, north of the C Zone, and to the west of the B Zone. Four trenches were uncovered in the northwest property area, primarily exposing glacial till with one exposure of altered granodiorite in Trench 3. Minor elevated copper values in soil were obtained from Trenches 3 and 4, and from the northern strike extension of the C Zone. Minor foliated granodiorite was encountered approximately 1 km northwest, 1 km southwest, and 2 km west of the B Zone.

The A Zone constitutes the Main Zone on the STU property and was the focus of the 1980 diamond drill program. Results from this program are not in the public record. There is extremely poor exposure even in the trenches here but a few chip samples were collected from the trenches in 2005 to 2008. Most of the samples from the area of drilling returned anomalous results. Samples collected from the vicinity of the best drill intersection on the property, which was in the A Zone (3.51% Cu, 2.5 g/t Au and 18.4 g/t Ag over 13.5m in DDH 80-14), returned maximum values of 0.67% Cu and 470 ppb Au. Historical selected grab samples reportedly returned up to 0.58% Cu.

In general the area between Trenches B3 to B6 returned the best copper-gold-silver results within the B Zone in 2006 to 2008, based on limited exposure. The mineralization, alteration, degree of fracturing and development of foliation suggest a distal signature to this zone and may indicate potential for mineralization at depth or further along strike, possibly to the northwest. In general mineralization in the B Zone is often high grade, but alteration occurs over narrow widths and fracture density and degree of foliation is low. The best hole from the rotary drill program in 1989 was hole SB-6 from Trench 74+00E (B1) in the B Zone which returned 0.71% Cu over 5 feet.

In 2006 high copper-gold grades in the B Zone were found to be due to the presence of fine grained chalcocite and chalcopyrite replacing biotite with maximum values of 2.86% Cu and 2.56 g/t Au. Limonite, malachite, chalcocite, and silicification occur along 130°/70°NE fractures hosted by biotite rich granodiorite.

There is very little exposure in the C Zone. Four trenches were previously excavated, exposing a 25-30m wide zone of mineralized biotite gneiss trending 130° in Trench 14+50E. To the southeast the mineralization appears to trend to the east of Trench 20+50E and to the northwest through the centre of Trench 11+50E and possibly under the basalt cover in the west end of Trench 9+50E. Elevated copper in soils from 2010 suggests that some mineralization may extend 140m north from Trench 11+50E past the east end of Trench 9+50E.

The only foliation measured in the C Zone, due to limited exposure, was found to dip 60°NE with all three drill holes within the zone located to the southwest of the mineralized horizon. The closest drill hole is DDH 80-1, located 45m southwest of the zone, so would not adequately test the zone unless the zone steepened. Results from DDH 80-1 are unknown but the core is stored on site, though in poor condition.

## **12.0 CONCLUSIONS AND RECOMMENDATIONS**

There is excellent exploration potential on the STU property to host copper-gold mineralization similar to that of the Minto and Carmacks Copper deposits, all located within the Carmacks Copper (-Gold) Belt. The host rocks, structures, mineralization and alteration at STU are similar to the Minto and Carmacks Copper deposits, which have been described as metamorphosed porphyry copper-gold deposits.

Exploration on the STU property has been hampered by lack of exposure, thick overburden cover, variable but generally poor soil profiles, local cover by magnetic Carmacks basaltic rocks and unavailability of results from previous programs.

Mineralization was found to have a direct relationship with the presence of secondary biotite, the presence of magnetite and hematite, and the development of a foliated to gneissic texture, which trends 130° (commonly with 70°NE dips). Secondary copper minerals such as malachite and azurite are relatively uncommon and sulphide minerals predominate within the mineralized zones. Malachite is more abundant in areas of more recent disturbance. Possible gold was detected in the petrographic study from the B and C Zones.

The A Zone appears to be the main zone of interest on the property with results of >0.1% Cu to 0.67% Cu and a maximum of 470 ppb Au obtained in 2005 to 2008 from samples over a 400m strike extent and up to 95m width. Malachite has been noted an additional 400m to the southeast. This probably corresponds to the zone 914m long and up to 91m wide that was delineated by United Keno Hill Mines Limited in 1977-79. The zone does not appear to have been completely delineated. It is known that the 1980 program returned

significant results with three of the 1980 diamond drill holes returning intersections exceeding 2.5% Cu, including 3.51% Cu, 2.5 g/t Au and 18.4 g/t Ag across 13.5m in DDH 80-14. Results for DDH 80-17, which appears to be a step out from DDH 80-14, are reported as 0.15% Cu, 0.18 oz/t Ag, trace Au over 25.4m. The results from the 1980 diamond drill program are critical in the evaluation of this area.

Mineralization in the B Zone is often high grade over narrow widths suggesting a distal signature. Potential exists at depth in the area between Trenches B3 to B6, which returned the best copper-gold-silver results (maximum 2.86% Cu and 2.56 g/t Au), and along strike to the northwest (northeast of the trenches to the north) and to the southeast, where little work has been completed. Diamond drilling may be necessary to trace the mineralization if it lies at depth. Rotary air blast drilling may be useful in tracing mineralization along strike in previously untested areas.

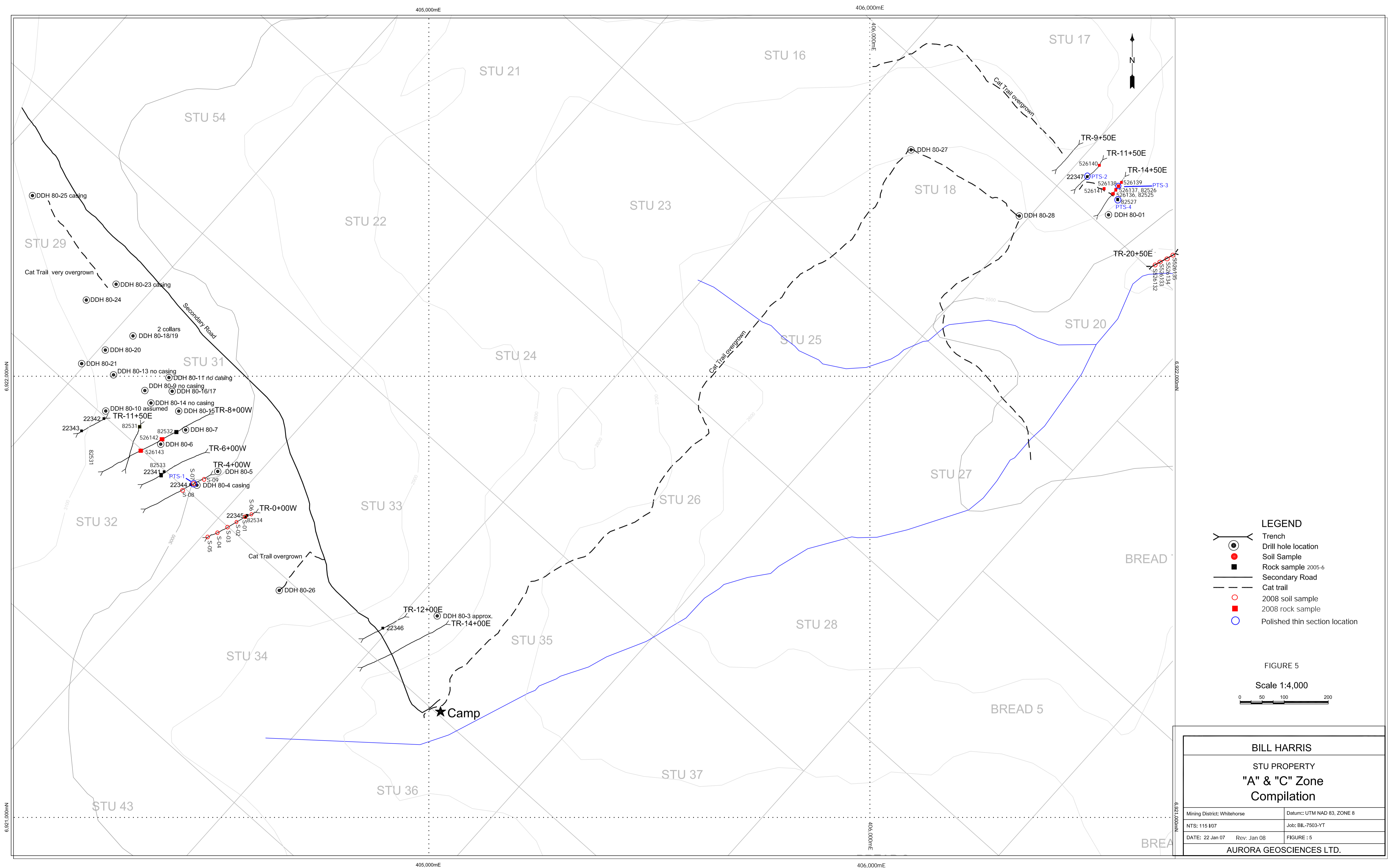
Similar mineralization to the A and B Zones is exposed in the C Zone. Mineralization was traced over a 110m strike and 25-30m width in 2005 to 2008 with significant maximum results of 1.59% Cu and 3.7 g/t Au associated with 130°/NE trending mineralized fractures. Elevated copper in soils from 2010 suggests that some mineralization may extend 140m further north. Little work has been done in this area but results from DDH 80-1 would be beneficial in the evaluation of this zone. Rotary air blast drilling may be useful in tracing mineralization in Trenches 11+50E and 14+50E along strike under basaltic cover rocks and overburden to the northwest and overburden to the southeast.

Overall, the 2006 magnetic susceptibility survey suggested that a magnetic survey over the property should pick up the alteration zones associated with mineralization as a magnetic low.

If results from the 1980 diamond drill program cannot be obtained from United Keno Hill Mines Limited, the core racks on the STU property should be labelled, unstacked and systematically sampled. Magnetic susceptibility measurements over the entire core can be collected at this time. Even if assay results are obtained the existing core should be salvaged and magnetic susceptibility readings can be collected and additional unsplit mineralized intervals assayed. The collar locations are known and results can then be correlated and interpreted.

Systematic MMI soil and IP geophysics surveys may also be useful in tracing mineralization along strike within the three zones, particularly where the drill results are inconclusive due to poor condition of the core, and if the zone is shown to remain open or the drill hole did not adequately test the target. The surveys should be tested over several trenches with mineralization to determine their usefulness and if positive completed along strike of the zones.

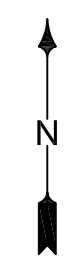
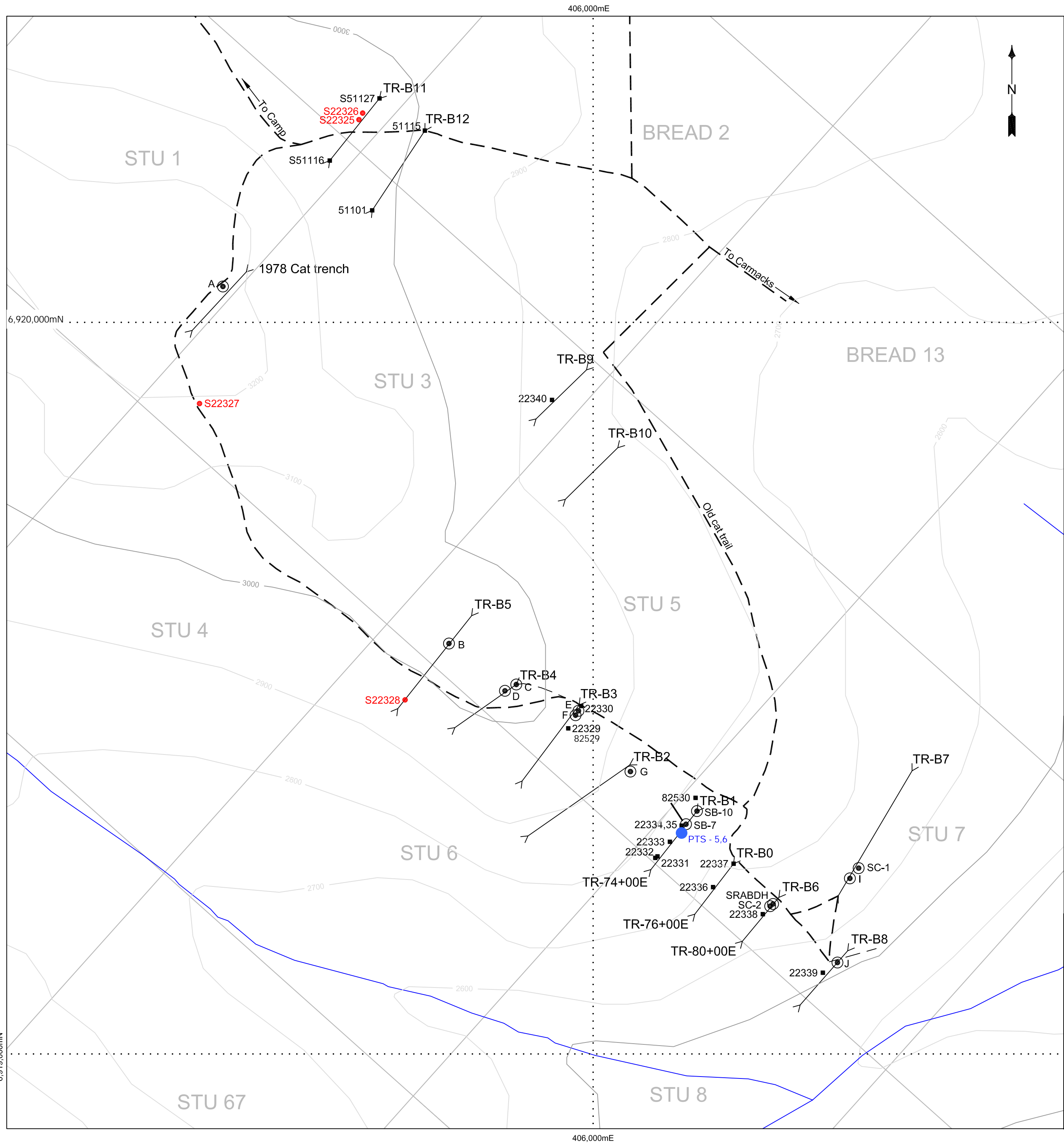
This phase should be followed by diamond drilling to systematically test continuity and grade and possibly by shallow rotary air blast drilling to test lower priority areas. This latter type of drilling is relatively fast and less expensive and can be used to determine the strike and dip of structures and mineralized zones prior to diamond drilling.



- LEGEND**
- Trench
  - Drill hole location
  - Soil Sample
  - Rock sample 2005-6
  - Secondary Road
  - Cat trail
  - 2008 soil sample
  - 2008 rock sample
  - Polished thin section location

FIGURE 5  
Scale 1:4,000

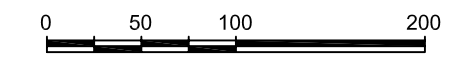
<b>BILL HARRIS</b>	
STU PROPERTY "A" & "C" Zone Compilation	
Mining District: Whitehorse	Datum: UTM NAD 83, ZONE 8
NTS: 115 I/07	Job: BIL-7503-YT
DATE: 22 Jan 07 Rev: Jan 08	FIGURE : 5
AURORA GEOSCIENCES LTD.	



- LEGEND**
- Trench
  - Drill hole location
  - Soil Sample 2006
  - Rock sample 2006, 2005
  - Secondary Road
  - Cat trail
  - PTS 5,6 Polished thin section location

Figure 6

Scale 1:4,000



<b>BILL HARRIS</b>	
<b>STU PROPERTY</b>	
<b>"B" Zone</b>	
<b>Compilation</b>	
Mining District: Whitehorse	Datum: UTM NAD 83, ZONE 8
NTS: 115 I/07	Job: BIL-7503-YT
DATE: 22 Jan 07    Rev: 6 Jan 08	FIGURE : 6

6,919,000mN

6,918,000mN

406,000mE

406,000mE

6,920,000mN

## APPENDIX I: Selected References

Anglogold Ashanti at website [www.anglogold.com](http://www.anglogold.com) .

Capstone Mining Corp. website at [www.capstonemining.com](http://www.capstonemining.com) .

Deklerk, R. and Traynor, S. (compilers), 2005. Yukon MINFILE 2005 - A database of mineral occurrences. Yukon Geological Survey, CD-ROM.

Fisher, J, 1981: United Keno Hill Mines Ltd., Hoochekoo Creek area, Yukon. Assessment report # 090729 on diamond drilling.

Fonseca, A., 2008. Petrographic survey of the STU Cu-Au project, Carmacks Copper - Gold Belt, Yukon, Canada. In house report prepared for BCGold Corp. In Pautler, 2009, Appendix V.

Gordey, S.P. and Makepeace, A.J., (compilers), 2000. Yukon Digital Geology; Exploration and Geological Services Division (EGSD), Yukon Region, Indian and Northern Affairs Canada (DIAND) EGSD Open File 1999-1(D).

Hart, C. J. R., 2002. The Geological Framework of the Yukon Territory. Yukon Geological Survey website.

Johnston, S.T. and Hachey, N., 1993. Preliminary results of 1:50,000 scale mapping in Wolverine Creek map area (115I/12), Dawson Range, southwest Yukon. In Yukon Exploration and Geology, 1992, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p 49-60.

Mortensen, J. K. and Tafti, R., 2003. Nature and origin of copper-gold mineralization at the Minto and Williams Creek deposits, west-central Yukon: Preliminary investigations. In Yukon Exploration and Geology 2002, D. S. Emond and L. L. Lewis (eds.), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 165-174.

Ouellette, D., 1989. Report on the 1989 percussion drilling of the STU property. Assessment report # 0902854.

Pautler, J.M., 2009. Geological, geochemical, petrographic and compilation assessment report on the STU property. Assessment report for Mr. Bill Harris.

2007. Geological, geochemical and geophysical assessment report on the STU property. Assessment report for Mr. Bill Harris.

Pearson, W. N. and Clark, A. H., 1979. The Minto copper deposit, Yukon Territory: a metamorphosed orebody in the Yukon Crystalline Terrane. Economic Geology, vol. 74, p.1577-1599.

Robertson, R.C.R., 2006. 2005 assessment report on the STU property. Assessment report for Midnight Mines Ltd.

Sherwood Copper Corp. at [www.sherwoodcopper.com](http://www.sherwoodcopper.com) .

Tafti, R. and Mortensen, J. K. 2004. Early Jurassic porphyry (?) copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon. In Yukon Exploration and Geology 2003, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 289-303.

Tempelman-Kluit, D. J., 1984. Geology of the Laberge and Carmacks map sheets. Geological Survey of Canada Open File 1101.

Watson, K.W. and Joy, R.J., 1977. 1977 Geological, geochemical and geophysical report on the STU claim group, Hoochekoo Creek area, Whitehorse Mining District. Assessment report # 090248.

Western Silver Corp website at [www.westerncoppercorp.com](http://www.westerncoppercorp.com) .

## Appendix II: Statement of Claims

Grant	Claim	Claim	Claim	Record	Expiry
Number	Name	No.	Owner	Date	Date
YC37770	STU	1	Ron Stack - 100%.	12/13/2004	13/12/2010
YC37771	STU	2	Ron Stack - 100%.	12/13/2004	13/12/2010
YC37772	STU	3	Ron Stack - 100%.	12/13/2004	13/12/2010
YC37773	STU	4	Ron Stack - 100%.	12/13/2004	13/12/2010
YC37774	STU	5	Ron Stack - 100%.	12/13/2004	13/12/2010
YC37775	STU	6	Ron Stack - 100%.	12/13/2004	13/12/2010
YC37776	STU	7	Calvin Delwisch - 100%.	12/13/2004	13/12/2010
YC37777	STU	8	Calvin Delwisch - 100%.	12/13/2004	13/12/2010
YC37778	STU	9	Calvin Delwisch - 100%.	12/13/2004	13/12/2010
YC37779	STU	10	Calvin Delwisch - 100%.	12/13/2004	13/12/2010
YC40249	STU	11	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40250	STU	12	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40251	STU	13	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40252	STU	14	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40253	STU	15	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40254	STU	16	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40255	STU	17	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40256	STU	18	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40257	STU	19	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40258	STU	20	Bill Harris - 100%.	9/19/2005	19/09/2011
YC37788	STU	21	Andrew Robinson - 100%.	12/21/2004	21/12/2010
YC37789	STU	22	Andrew Robinson - 100%.	12/21/2004	21/12/2010
YC37790	STU	23	Andrew Robinson - 100%.	12/21/2004	21/12/2010
YC37791	STU	24	Andrew Robinson - 100%.	12/21/2004	21/12/2010
YC37792	STU	25	Andrew Robinson - 100%.	12/21/2004	21/12/2010
YC37793	STU	26	Andrew Robinson - 100%.	12/21/2004	21/12/2010
YC37794	STU	27	Andrew Robinson - 100%.	12/21/2004	21/12/2010
YC37795	STU	28	Andrew Robinson - 100%.	12/21/2004	21/12/2010
YC40259	STU	29	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40260	STU	30	Bill Harris - 100%.	9/19/2005	19/09/2011
YC37780	STU	31	Mike Power - 100%.	12/13/2004	13/12/2010
YC37781	STU	32	Mike Power - 100%.	12/13/2004	13/12/2010
YC37782	STU	33	Mike Power - 100%.	12/13/2004	13/12/2010
YC37783	STU	34	Mike Power - 100%.	12/13/2004	13/12/2010
YC37784	STU	35	Mike Power - 100%.	12/13/2004	13/12/2010
YC37785	STU	36	Mike Power - 100%.	12/13/2004	13/12/2010
YC37786	STU	37	Mike Power - 100%.	12/13/2004	13/12/2010
YC37787	STU	38	Mike Power - 100%.	12/13/2004	13/12/2010
YC40261	STU	39	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40262	STU	40	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40263	STU	41	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40264	STU	42	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40265	STU	43	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40266	STU	44	Bill Harris - 100%.	9/19/2005	19/09/2011

<b>Grant</b>	<b>Claim</b>	<b>Claim</b>	<b>Claim</b>	<b>Record</b>	<b>Expiry</b>
<b>Number</b>	<b>Name</b>	<b>No.</b>	<b>Owner</b>	<b>Date</b>	<b>Date</b>
YC40267	STU	45	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40268	STU	46	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40269	STU	47	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40270	STU	48	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40271	STU	49	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40272	STU	50	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40273	STU	51	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40274	STU	52	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40275	STU	53	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40276	STU	54	Bill Harris - 100%.	9/19/2005	19/09/2011
YC40201	STU	55	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40202	STU	56	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40203	STU	57	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40204	STU	58	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40205	STU	59	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40206	STU	60	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40207	STU	61	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40208	STU	62	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40209	STU	63	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40210	STU	64	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40211	STU	65	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40212	STU	66	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40213	STU	67	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40214	STU	68	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40215	STU	69	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40216	STU	70	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40217	STU	71	Bill Harris - 100%.	8/29/2005	29/08/2011
YC40218	STU	72	Bill Harris - 100%.	8/29/2005	29/08/2011
YC65256	STU	73	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65257	STU	74	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65258	STU	75	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65259	STU	76	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65260	STU	77	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65261	STU	78	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65262	STU	79	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65263	STU	80	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65264	STU	81	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65265	STU	82	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65266	STU	83	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65267	STU	84	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65268	STU	85	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65269	STU	86	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65270	STU	87	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65271	STU	88	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65272	STU	89	Bill Harris - 100%.	7/9/2007	09/07/2011

Grant	Claim	Claim	Claim	Record	Expiry
Number	Name	No.	Owner	Date	Date
YC65273	STU	90	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65274	STU	91	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65275	STU	92	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65276	STU	93	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65277	STU	94	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65278	STU	95	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65279	STU	96	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65280	STU	97	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65281	STU	98	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65282	STU	99	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65283	STU	100	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65284	STU	101	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65285	STU	102	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65286	STU	103	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65287	STU	104	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65288	STU	105	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65289	STU	106	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65290	STU	107	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65291	STU	108	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65292	STU	109	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65293	STU	110	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65294	STU	111	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65295	STU	112	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65296	STU	113	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65297	STU	114	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65298	STU	115	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65299	STU	116	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65300	STU	117	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65301	STU	118	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65302	STU	119	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65303	STU	120	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65304	STU	121	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65305	STU	122	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65306	STU	123	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65307	STU	124	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65308	STU	125	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65309	STU	126	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65310	STU	127	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65311	STU	128	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65312	STU	129	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65313	STU	130	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65314	STU	131	Bill Harris - 100%.	7/9/2007	09/07/2011
YC65315	STU	132	Bill Harris - 100%.	7/9/2007	09/07/2011
<b>TOTAL</b>	<b>132</b>	<b>Claims</b>			

## APPENDIX III: Sample Descriptions

<b>STU PROJECT, Yukon Territory</b>										
<b>2010 SAMPLE DESCRIPTIONS AND RESULTS</b>										
<b>SAMPLE</b>		<b>NAD 83</b>	<b>ZONE 8</b>	<b>ELEV.</b>				<b>Cu</b>	<b>Au</b>	<b>Ag</b>
<b>No.</b>	<b>LOCATION</b>	<b>EASTING</b>	<b>NORTHING</b>	<b>(ft)</b>	<b>TYPE</b>	<b>GEOLOGY</b>		<b>ppm</b>	<b>ppb</b>	<b>ppm</b>
S104181	W of B Zone	405169	6920059	3154	soil	rusty, medium brown B, 10 cm depth, sandy, above rusty zone in outcrop of coarse grained Kspar biotite granodiorite		14	<5	<0.2
S104182	W of B Zone	405129	6920077	3160	soil	rusty, medium brown B, 15 cm depth, sandy, above rusty zone in aplite		12	<5	<0.2
S104183	W of B Zone	404961	6920081	3224	soil	rusty, medium brown B, 20 cm depth, sandy, above rusty zone in outcrop of fine grained granodiorite cutting coarse grained Kspar biotite granodiorite, some aplite		14	<5	<0.2
S104184	W of B Zone	404676	6920120	3157	soil	rusty, medium brown B, 15 cm depth, gentle slope, above medium to coarse grained Kspar biotite granodiorite, some aplite		12	<5	<0.2
S104185	W of B Zone	405075	6918636	3030	soil	light to medium brown B, weak rusty aplite subcrop		14	<5	<0.2
104186	NW STU T3	402514	6923441	2617	rock	grab of clay altered granodiorite with limonite fractures and Mn staining		6	<5	<0.2
SS-01	NW STU T3	402513	6923441	2617	soil	medium to dark brown compact basal till, 40 cm depth, bank of Trench 3		24	<5	<0.2
SS-02	NW STU T3	402514	6923445	2618	soil	medium to dark brown compact basal till, floor of Trench 3		10	<5	<0.2
SS-03	NW STU T1	402571	6923382	2680	soil	medium brown B-C, 55 cm depth, below several ash horizons		20	<5	<0.2
SS-04	NW STU T4	402519	6923391	2643	soil	medium brown C, gritty clayey sand, 60 cm depth, below several ash horizons, mixed with A		16	<5	<0.2
SS-05	NW STU T4	402533	6923384	2654	soil	medium to dark brown compact basal till, 40 cm depth, beneath ash, bank of Trench 4		26	<5	<0.2
SS-06	N of C Zone	406307	6922575	2699	soil	medium brown C, pebbly sand, 15-20 cm depth, below ash horizon, gentle slope, coarse grained Kspar biotite granodiorite subcrop in area		12	<5	<0.2
SS-07	N of C Zone	406351	6922586	2714	soil	medium brown C, sandy, 45 cm depth, below thick ash horizon, flat slope		16	<5	<0.2
SS-08	N of C Zone	406409	6922589	2751	soil	medium brown C, sandy, 45 cm depth, below thick ash horizon, gentle slope, minor ash contamination		24	<5	<0.2
SS-09	N of C Zone	406460	6922598	2767	soil	medium brown C, pebbly sand, 50 cm depth, below thick ash horizon, gentle slope, minor ash contamination		32	<5	<0.2
SS-10	N of C Zone	406507	6922609	2736	soil	medium brown C, pebbly sand, 15 cm depth, gentle slope, above coarse grained Kspar biotite granodiorite outcrop		12	<5	<0.2
SS-11	N of C Zone	406537	6922623	2704	soil	medium brown C, sandy, 20 cm depth, moderate slope, area of coarse grained Kspar biotite granodiorite subcrop		28	<5	<0.2
SS-12	E of A Zone	405279	6921846	2788	soil	medium brown C, pebbly sand, 10 cm depth, gentle slope, above rusty pods in coarse grained Kspar biotite granodiorite outcrop/subcrop		24	<5	<0.2

**STU PROJECT, Yukon Territory**  
**2008 SAMPLE DESCRIPTIONS AND RESULTS**

Cu in red in %

Au in red in g/t

SAMPLE No.	LOCATION	NAD 83 EASTING	ZONE 8 NORTHING	TYPE	GEOLOGY	Cu ppm	Au ppb	Ag ppm
526130	North end	403245	6923223	0.3m chip	30 cm wide more foliated and biotite rich zone at 130/70E within rusty outcrop of biotite granodiorite	5	<5	<0.2
S526131	North end	403440	6922844	soil	weak rusty, medium orange-brown B, from outcrop area of biotite granodiorite and aplite	20	<5	<0.2
S526132	C Zone	406658	6922256	soil	rusty B-C with decomposed granodiorite, below ash horizon, from Trench 2050E	13	<5	<0.2
S526133	C Zone	406670	6922262	soil	medium brown B, weak orange, below ash, good soil profile, Trench 2050E	22	<5	<0.2
S526134	C Zone	406680	6922270	soil	medium brown B, weak orange, below ash, Trench 2050E	10	10	<0.2
S526135	C Zone	406689	6922275	soil	medium brown B, poor soil development, below ash, east end of Trench 2050E	14	<5	<0.2
526136	C Zone	406551	6922421	5m chip	rough chip of foliated, silicified granodiorite with magnetite and malachite from Trench 1450E	5064	80	7.9
526137	C Zone	406563	6922433	1.5m chip	rough chip of foliated, silicified granodiorite with magnetite and malachite from Trench 1450E	3672	40	0.9
526138	C Zone	406563	6922434	grab	granodiorite with dark rusty Cu? mineral on fractures and minor malachite from Trench 1450E	2327	30	1.8
526139	C Zone	406563	6922436	grab	foliated granodiorite, variably silicified with magnetite, strong malachite, chalcocite, tenorite? on fractures from Trench 1450E	1.57	60	12.6
526140	C Zone	406511	6922472	1.0m chip	granodiorite, some epidote, minor malachite, from north wall, more biotite rich pieces along floor of Trench 1150E	2613	3.70	1.6
526141	C Zone	406522	6922423	grab	foliated granodiorite, silicified with secondary biotite, magnetite, strong malachite, chalcocite, below Trench 1150E	9108	100	5.0
526142	A Zone	404445	6921884	15m comp	composite grab of pieces in floor of Trench 8W exposed over 15m of moderately foliated biotite granodiorite, silicified with secondary magnetite, moderate malachite, rusty soils at west end	6381	470	4.8
526143	A Zone	404398	6921873	20m comp	composite grab of pieces in floor of Trench 8W exposed over 20m of weak to moderately foliated biotite rich granodiorite, moderate malachite	2685	120	1.7
S-01	A Zone	404596	6921686	soil	reddish brown B, above red zone in granodiorite containing 0.17%Cu/1m (22345), south wall of Trench 0+00W	93	<5	<0.2
S-02	A Zone	404574	6921676	soil	medium brown clayey B, 25m to west, Trench 0+00W	47	<5	<0.2
S-03	A Zone	404555	6921664	soil	medium brown B, 25m to west, Trench 0+00W	28	<5	<0.2
S-04	A Zone	404531	6921648	soil	medium brown B, 25m to west, Trench 0+00W	37	<5	<0.2
S-05	A Zone	404507	6921640	soil	medium brown sandy B, 25m to west, Trench 0+00W	30	<5	<0.2
S-06	A Zone	404608	6921690	soil	thin reddish brown B, below 1m of ash, above granodiorite outcrop, 15m to east of S-01, Trench 0+00W	97	<5	<0.2
S-07	A Zone	404464	6921752	soil	sandy medium brown B, above foliated zone in granodiorite with minor malachite just east of 22344, containing 0.12% Cu, north wall of Trench 4+00W, below ash layer	2935	<5	<0.2
S-08	A Zone	404446	6921741	soil	medium brown B, 25m to west of S-07, north wall of Trench 4+00W, below ash layer	73	<5	<0.2
S-09	A Zone	404489	6921765	soil	weak rusty medium brown B, 20m to east of S-07, north wall of Trench 4+00W, below ash layer	217	<5	<0.2

**STU PROJECT, Yukon Territory**  
**2006 SAMPLE DESCRIPTIONS AND RESULTS**

Au in red in g/t

Cu, Pb, Zn in red in %

Anomalous results in blue

SAMPLE No.	LOCATION	NAD 83 EASTING	ZONE 8 NORTHING	TYPE	GEOLOGY	Cu ppm	Au ppb	Ag ppm
S22325	B Zone	405680	6920277	soil	red-brown C, above rusty fractures in Ksp megacrystic biotite granodiorite outcrop in Trench B-11	41	5	<0.2
S22326	B Zone	405685	6920286	soil	red-brown C, above rusty fractures in Ksp megacrystic biotite granodiorite outcrop in Trench B-11	18	5	<0.2
S22327	B Zone	405462	6919889	soil	rusty B, above rusty outcrop of Ksp megacrystic biotite granodiorite with dykes up to 40 cm of finer granodiorite trending 123-130/steep W	27	5	<0.2
S22328	B Zone	405743	6919484	soil	rusty B, above outcrop of Ksp megacrystic biotite granodiorite local pegmatite phases; Trench B-5	78	25	<0.2
22329	B Zone, TR B-3	405966	6919445	grab	fine grained biotite rich biotite granodiorite, weakly foliated, malachite with very fine specks of chalcopyrite and aggregates of chalcocite, replacing biotite Trench B-3; resample of 82529	1.57%	1.86g/t	9.8
82529	B Zone, TR B-3	405966	6919445	grab	2005 sample	2.86%	2.56 g/t	
22330	B Zone, TR B-3	405966	6919445	grab	strong limonite, moderate clay altered medium grained biotite granodiorite, rusty fractures with limonite, Mn, strong silicified envelopes, minor chalcocite? near start Trench B-3	2518	15	7.0
22331	B Zone, TR B-1	406085	6919268	grab	rusty medium grained biotite granodiorite, rusty fractures with limonite, near W end Trench B-1	62	5	0.3
22332	B Zone, TR B-2	406088	6919270	grab	medium grained biotite granodiorite, fractures with limonite, malachite, variably brecciated, fracture trend 130/, near 22331	117	15	2.1
22333	B Zone, TR B-3	406105	6919290	grab	moderate limonitic, weak clay-sericite altered medium grained biotite granodiorite, trace fine malachite staining	161	10	<0.2
22334	B Zone, @ SB-7	406121	6919312	1.0m chip	medium grained biotite granodiorite, with chalcopyrite, bornite, chalcocite in fractures and in weakly foliated magnetic biotite rich envelopes; fractures trend 130/70NE, malachite on fractures trending 010/85W	5561	110	5.8
22335	B Zone, TR B-1	406121	6919312	1.0m chip	hanging wall of 22334 with 010/85W fractures, trace malachite	168	5	0.3
22336	B Zone, TR B-0	406164	6919228	grab	limonitic subcrop with limonitic fractures, some with Mn, some brecciated across rusty 10m zone in centre of trench	57	5	<0.2
22337	B Zone, TR B-0	406164	6919228	grab	chlorite-epidote altered fractures in biotite coarse grained granodiorite; fractures at 010/85W and 130/70NE	41	5	<0.2
22338	B Zone, TR B-6	406232	6919191	grab	strong malachite stained biotite rich zone with chalcocite in biotite granodiorite with 130 fractures	7247	320	4.3
22339	B Zone, TR B-8	406314	6919111	grab	pegmatitic phase with trace malachite associated with more biotite rich zones associated with 130 fractures	411	15	0.2
22340	B Zone, TR B-9	405944	6919894	grab	foliated magnetic coarse grained-medium grained biotite granodiorite; foliation at 130: 1471 Zn	245	5	<0.2
22341	A Zone, TR 600W	404310	6921692	grab	foliated magnetic medium grained biotite granodiorite; with aplite veinlet; MR	3183	55	0.7
22342	A Zone, TR 1150W	404286	6921913	grab	weak-moderate clay altered, weak Mn coated medium grained biotite granodiorite-granodiorite, heavy with moderate malachite, moderate chalcocite, from E end of Trench; 2645 Zn	6722	265	5.5
22343	A Zone, TR 1150W	404265	6921906	grab	medium grained biotite granodiorite with weak malachite, trace disseminated chalcopyrite, Trench floor	4016	285	1.9
22344	A Zone, TR 400W	404458	6921754	grab	fresh looking medium grained biotite granodiorite-granodiorite, minor malachite	1243	30	0.3
22345	A Zone, TR 000W	404593	6921690	1.0m chip	5 cm rusty sheared zone in centre of decomposed biotite granodiorite, trending 165/80E, East of 82534	1715	40	1.3
22346	A Zone, TR 1200E	404912	6921426	grab	malachite stained medium grained biotite granodiorite, with malachite in fractures and some limonite	237	10	<0.2
22347	C Zone, TR 1150E	406494	6922457	grab	moderate malachite stained weak-moderately foliated medium grained biotite granodiorite, with malachite in fractures and some limonite, secondary biotite, magnetite JB	1.59%	165	7.5

## **APPENDIX IV**

### **Geochemical Procedure and Results**

# **ECO TECH LABORATORY (STEWART GROUP)**

## **Analytical Procedure**

### ***GEOCHEMICAL GOLD ANALYSIS***

Samples are catalogued and dried. Soils are prepared by sieving through an 80 mesh screen to obtain a minus 80 mesh fraction. Samples unable to produce adequate minus 80 mesh material are screened at a coarser fraction. These samples are flagged with the relevant mesh. Rock samples are 2 stage crushed to minus 10 mesh and a 250 gram subsample is pulverized on a ring mill pulverizer to -140 mesh. The subsample is rolled, homogenized and bagged in a pre-numbered bag.

The sample is weighed to 10/15/30 grams and fused along with proper fluxing materials. The bead is digested in aqua regia and analyzed on an atomic absorption instrument. Over-range values for rocks are re-analyzed using gold assay methods.

Appropriate reference materials accompany the samples through the process allowing for quality control assessment. Results are entered and printed along with quality control data (repeats and standards). The data is faxed and/or mailed to the client.

### ***GOLD ASSAY***

Samples are sorted and dried (if necessary). The samples are crushed through a jaw crusher and cone or rolls crusher to -10 mesh. The sample is split through a Jones riffle until a -250 gram subsample is achieved. The subsample is pulverized in a ring & puck pulverizer to 95% - 140 mesh. The sample is rolled to homogenize.

A 1/2 or 1.0 A.T. sample size is fire assayed using appropriate fluxes. The resultant dore bead is parted and then digested with aqua regia and then analyzed on a Perkin Elmer AA instrument.

Appropriate standards and repeat sample (Quality Control components) accompany the samples on the data sheet.

### ***METALLIC GOLD ASSAY***

Samples are catalogued and dried. Rock samples are two stage crushed to minus 10 mesh, then split to achieve a 250 gram (approximate) sub sample. The sample is pulverized to 95% - 140 mesh. The sample is weighed, then rolled and homogenized and screened at 140 mesh.

The -140 mesh fraction is homogenized and 2 samples are fire assayed for Au. The +140 mesh material is assayed entirely. The resultant fire assay bead is digested with acid and after parting is analyzed on a Perkin Elmer atomic absorption machine using air-acetylene flame to .03 grams/t detection limit.

The entire set of samples is redone if the quality control standard is outside 2 standard deviations or if the blank is greater than .015 g/t.

The values are calculated back to the original sample weight providing a net gold value as well as 2-140 values and a single +140 mesh value.

### ***MULTI ELEMENT ICP ANALYSIS***

Samples are catalogued and dried. Soil samples are screened to obtain a -80 mesh sample. Samples unable to produce adequate -80 mesh material are screened at a coarser fraction. These samples are flagged with the relevant mesh. Rock samples are 2 stage crushed to minus 10 mesh and pulverized on a ring mill pulverizer to minus 140 mesh, rolled and homogenized.

A 0.5 gram sample is digested with aqua regia which contains beryllium which acts as an internal standard. The sample is analyzed on a Jarrell Ash ICP unit.

Results are collated by computer and are printed along with accompanying quality control data (repeats and standards). Results are printed on a laser printer and are faxed and/or mailed to the client.

### ***BASE METAL ASSAYS (Ag, Cu, Pb, Zn)***

Samples are catalogued and dried. Rock samples are 2 stage crushed followed by pulverizing a 250 gram subsample. The subsample is rolled and homogenized and bagged in a pre-numbered bag.

A suitable sample weight is digested with aqua regia. The sample is allowed to cool, bulked up to a suitable volume and analyzed by an atomic absorption instrument, to .01 % detection limit.

Appropriate certified reference materials accompany the samples through the process providing accurate quality control.

Result data is entered along with standards and repeat values and are faxed and/or mailed to the client.

*K:Methods/methicp K:methods/methauas*

07-Jul-10

**Stewart Group**

**ECO TECH LABORATORY LTD.**

10041 Dallas Drive

**KAMLOOPS, B.C.**

V2C 6T4

[www.stewartgroupglobal.com](http://www.stewartgroupglobal.com)

Phone: 250-573-5700

Fax : 250-573-4557

**ICP CERTIFICATE OF ANALYSIS AW 2010- 8031**

**Bill Harris**

C/O Jo Dee

27 MacDonald Rd

**Whitehorse, YT**

Y1A 4L2

*No. of samples received: 1*

*Sample Type: Rock*

**Project: STU**

**Shipment #: 1**

*Submitted by: Jean Pautler*

**Values in ppm unless otherwise reported**

Et #.	Tag #	Au ppb	Ag	Al%	As	Ba	Be	Bi	Ca%	Cd	Co	Cr	Cu	Fe%	Hg	K%	La	Li	Mg%	Mn	Mo	Na%	Ni	P	Pb	S%	Sb	Sc	Se	Sn	Sr	Ti%	U	V	W	Y	Zn
1	104186	<5	<0.2	0.51	<5	132	<1	<5	0.17	<1	6	88	6	2.03	<5	0.04	6	<2	0.04	660	1	0.03	10	380	27	<0.01	<5	4	<10	<5	14	<0.01	<5	56	<5	5	30
<b>QC DATA:</b>																																					
<b>Repeat:</b>																																					
1	104186	<5	<0.2	0.50	<5	130	<1	<5	0.17	<1	6	88	6	2.02	<5	0.04	6	<2	0.04	660	1	0.03	10	380	27	<0.01	<5	4	<10	<5	14	<0.01	<5	54	<5	5	30
<b>Resplit:</b>																																					
1	104186	<5	0.2	0.48	<5	128	<1	<5	0.16	<1	6	98	8	2.05	<5	0.04	6	<2	0.04	655	1	0.03	11	370	12	<0.01	<5	4	<10	<5	14	<0.01	<5	54	<5	5	28
<b>Standard:</b>																																					
Pb129a			11.9	0.82	5	66	<1	<5	0.44	56	6	12	1454	1.56	<5	0.10	4	<2	0.67	345	2	0.03	5	420	6210	0.83	15	<1	<10	<5	28	0.03	<5	20	<5	2	>10000

**ICP: Aqua Regia Digest / ICP- AES Finish.**

**Ag : Aqua Regia Digest / AA Finish.**

NM/nw

df/2\_8031S

XLS/10

**ECO TECH LABORATORY LTD.**

Norman Monteith

B.C. Certified Assayer



**APPENDIX V**  
**Statement of Expenditures**

<b>Wages:</b>	J. Pautler	5 days @ 800.00/day	<b>\$4,000.00</b>
<b>Geochemistry:</b>	1 rock sample @ 35 ea.	Au, ICP	35.00
	17 soil samples @ 30 ea.	Au, ICP	<u>510.00</u>
		<b>Total:</b>	<b>545.00</b>
<b>Equipment Rental:</b>	Truck:	5 days @ 100./day	500.00
	ATV:	5 days @ 75./day	375.00
	Satellite Phone:	5 days @ 30/day	<u>150.00</u>
		<b>Total:</b>	<b>1,025.00</b>
<b>Fuel:</b>			<b>305.00</b>
<b>Camp cost:</b>	(propane, supplies)		
	5 days @ 20./md		<b>100.00</b>
<b>Groceries:</b>	5 man-days @ 35./md		<b>175.00</b>
<b>Field Supplies:</b>	(flagging tape, batteries, sample bags)		
	5 man-days @ 15./md		<b>75.00</b>
<b>Copying, Printing:</b>			<b>50.00</b>
<b>Report &amp; Drafting:</b>			<b><u>3,205.00</u></b>
<b>GRAND TOTAL:</b>			<b>\$9,400.00</b>
<b>Total Applied for Assessment</b>			<b>\$9,400.00</b>

**APPENDIX VI**  
**STATEMENT OF QUALIFICATION**

I, Jean Marie Pautler, do hereby certify that:

- 1) I, Jean Marie Pautler of 103-108 Elliott Street, Whitehorse, Yukon Territory am self-employed as a consultant geologist and authored this report.
- 2) I am a graduate of Laurentian University, Sudbury, Ontario with an Honours B.Sc. degree in geology (May, 1980).
- 3) I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia, Registration Number 19804.
- 4) I am a geologist with more than thirty years of experience in the Canadian Cordillera.
- 5) I planned and implemented the 2010 program on the STU property between June 22 and 26, 2010.
- 6) I have no direct or indirect interest in the STU property, which is the subject of this report.

---

Jean Pautler, P.Geo.  
JP Exploration Services Inc.  
#103-108 Elliott St  
Whitehorse, Yukon  
Y1A 6C4