# YEIP 04-023 2004

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# SUMMARY REPORT ON THE HART RIVER – WORM LAKE EXPLORATION PROGRAM July 2 to July 8, 2004 YUKON

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Located in the Hart River – Worm Lake Area Mayo Mining District NTS 116A/9, 10, 15, 16

> Centred at 63° 45' North Latitude 136° 30' West Longitude

> > -Prepared by-

Gerald G. Carlson, Ph.D., P.Eng. Copper Ridge Explorations Inc. January 21, 2005

In support of YMIP Project No. 04-023

### SUMMARY

Copper Ridge Explorations Inc. received YMIP support in 2004 to carry out reconnaissance exploration in search of Wernecke Breccia or IOCG style mineralization within Proterozoic rocks in the Hart River – Worm Lake area, central Yukon. The program was carried out in July, 2004, in conjunction with Copper Ridge's geological, geochemical and geophysical program on the nearby Hart River IOCG property, including a helicopter supported gravity survey.

The similarities between the breccias of the Wernecke and Ogilvie Mountains have been known for many years (Thorkelson, 2000). Similar breccias are known in windows of Proterozoic rocks that occur between these two areas, such as Copper Ridge's Yukon Olympic property on the Dempster Highway and Hart River, north of the Hart River mine site. However, this intermediate area does not appear to have been prospected heavily for IOCG mineralization.

The field program was carried out with helicopter support, based at a camp at the old Hart River Mines camp site, just to the south of the air strip. The camp was mobilized using a turbo Otter aircraft from Whitehorse, utilizing the Callison Lake airstrip on the Dempster Highway.

The program was carried out over six days, during the period July 2 to July 8, 2004, inclusive, utilizing two crews of two persons each.

Crews focused on following streams to their source areas, collecting stream sediment samples at regular intervals, prospecting and examining the geological environment along talus exposures or outcrops wherever available.

Target area A-1, in the vicinity of the previously identified Anaconda breccia, showed a broad area of moderate to strongly anomalous copper in stream sediments, with associated cobalt, lead, zinc and weak gold values. No significant alteration or mineralization was noted that would explain this anomaly. Further exploration is recommended to search for the source of this anomaly. Lower order targets were identified in target areas A-3 and B-1 that are also recommended for further follow-up.

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Hart River – Worm Lake Report

#### Page 1

## INTRODUCTION

In 1978 and 1979, Anaconda Canada Exploration Ltd. conducted a reconnaissance exploration program for copper in Proterozoic rocks through the Ogilvie Mountains and eastward towards the Mayo area. During the program, a number of Proterozoic breccia bodies were observed and mapped, but their significance was not appreciated. One of the most intriguing of these bodies was observed in the Hart River area, north of Worm Lake. This dike-like breccia body, containing both pyrite and magnetite, was noted to have copper and cobalt staining. The breccia was observed to trend towards a rusty face on a mountainside over 1 km away.

This preliminary examination of the breccia body was cursory in nature and the full extent of the body was not determined. It is in an area of anomalous Cu, Ag, U, Pb and Zn in stream geochemistry. Maps showing the precise location of this breccia are not currently available.

In 2003, Copper Ridge optioned the AA property from Bernie Kreft, in the same general vicinity of the Worm Lake occurrence. This property includes brand new occurrences with excellent copper and gold grades and what appears to be a strong and large hematitic breccia system.

It is possible that the windows of Proterozoic rocks between the AA property and the Worm Lake occurrence contain other undiscovered breccia bodies. Regional geochemistry indicates local enrichment in copper, gold and uranium. This is an area that has apparently not been heavily prospected for this style of mineralization.

During the period July 2 to July 8, Copper Ridge completed a helicopter supported reconnaissance exploration program in the Hart River – Worm Lake area, including mapping, prospecting and geochemical sampling. One strongly anomalous target area was identified as well as two lower priority target areas. However, claims have not yet been staked nor has any follow-up exploration completed due to inclement weather when the crew returned to the area.

# PROJECT AREA DESCRIPTION, LOCATION AND ACCESSIBILITY

The project area is located approximately 170 km northeast of Dawson City, Dawson Mining District, NTS 116A/09, -10, -15, -16, centred at  $64^{\circ}$  45' N latitude and 136  $^{\circ}$  30' W longitude. Access to the area is by helicopter from Dawson or Mayo, but, for the current program, access was by helicopter from a base camp near the Hart River air strip ( $64^{\circ}$  38' N; 136  $^{\circ}$  50' W) and at Copper Ridge's Hart River (AA) project ( $64^{\circ}$  51' N; 136  $^{\circ}$  40' W).

## HISTORY

The Hart River – Worm Lake are does not have many Minfile Occurrences and the area does not appear to have been heavily prospected. The most advanced prospect in the area is Hart River, a Zn-Cu-Pb-Au-Ag massive sulphide deposit of Proterozoic age. The deposit was discovered in the 1930's and extensively explored in the 1960's with drilling and underground workings. In 1969, a "proven reserve" of 523,849 tonnes grading 3.65% Zn, 1.45% Cu, 0.87% Pb, 49.7 gpt Ag and 1.41 gpt Au was announced by Hart River Mines Ltd., with a "probable tonnage" of comparable grade and size. A number of companies have subsequently evaluated the deposit, but it has never been developed.

In 1975 and 1976, the Blackstone Project (Union Miniere and Shell Oil Ltd.) discovered and

staked a copper occurrence that they explored with a small soil grid. In 2002 and 2003, prospector Bernie Kreft identified this area as having potential for Olympic Dam style IOCG mineralization. His prospecting work lead to the discovery of additional copper mineralization associated with Proterozoic hematite breccias and the staking of the AA claim group, a project that was partially funded by the YMIP program. Kreft optioned the AA claims to Copper Ridge Explorations Inc. who, in 2004, completed a program of mapping, prospecting, soil and rock sampling and a helicopter supported gravity survey.

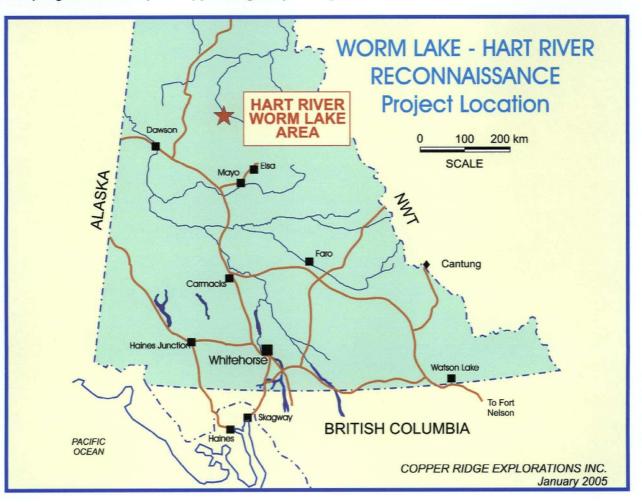


Figure 1. Hart River - Worm Lake location sketch.

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### **Regional Geology**

The regional geological setting in north central Yukon (Hart River Project Area) includes two main geological subdivisions of the northern Cordilleran miogeocline: 1) the Selwyn Basin; and 2) the Yukon Block. These are sharply separated by the east-southeast trending Dawson Fault. In this report, the Hart River Inlier and surrounding rocks within the Yukon Block, are of particular interest, although similar Proterozoic geology extends from the Wernecke Mountains in the east to the Coal Creel Inlier and on into Alaska in the west.

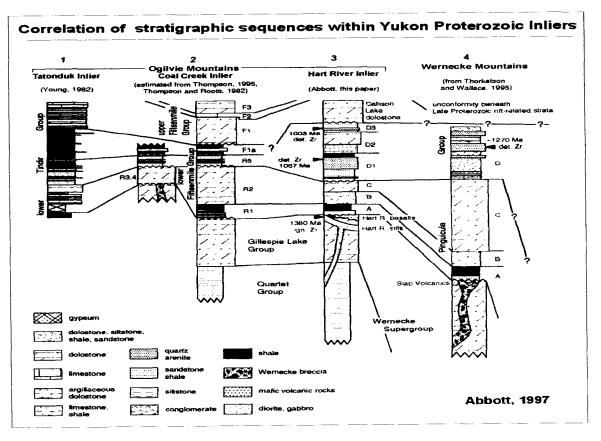


Figure 2. Regional stratigraphic correlation.

The Selwyn Basin (south of the Dawson Fault), comprises outer deeper water or basinal siliclastic rocks, shale, chert, limestone, and volcanic rocks; ranging in age from Late Proterozoic to Devonian (Abbott, 1997).

The Yukon Block (north of the Dawson Fault), comprises a six kilometre thick, complex assemblage of shallow marine clastic, carbonate and minor volcanic rocks. This isostatically stable crustal block has persistently remained high standing since Late Proterozoic time. Paleozoic and Mesozoic strata within the Yukon Block define several troughs and platforms; Proterozoic strata occur as several inliers. The inliers are cores of anticlinoria which developed during the Late Cretaceous-Paleogene (Laramide) orogenesis (Norris, 1984; Abbott, 1997). The inliers include (from west to east): Tatonduk, Coal Creek, Hart River, and Wernecke. The Hart River Inlier and smaller un-named inliers to the north lie in the area of interest. Several

episodes of dated intrusives are noted within the Yukon Block and are exposed in the inliers; they include:

- Bear River Dykes (ca. 1270 Ma U-Pb zircon, baddeleyite)
- Hart River Sills (ca. 1380 Ma U-Pb zircon), 30-250m thick
- Wernecke Breccia (ca. 1595 Ma U-Pb titanite)\*
- Early Proterozoic Lamprophyre
- Bonnet Plume River Intrusions (ca. 1710-1725 Ma U-Pb zircon)

#### Thorkelson, 2000

\* The Wernecke Breccias cut Wernecke Supergroup sedimentary rocks and are associated with Cu, Co, Au, Ag, U and locally Mo mineralization - IOCG (iron-oxide-copper-gold) type model. This mineralization occurs within breccia zones and in adjacent metasomatized country rock. Several authors (cf. Bell, 1989; Gandi and Bell, 1990; Hitzman et al., 1992; Thorkelson et al., 2001) have drawn a connection with breccias in Australia based on similar age, physical and mineralogical characteristics.

The intrusions are remarkably similar despite their diverse ages and often can't be told apart unless dated (J. Hunt, pers. comm., 2004). Outside the inliers there are additional pyroxenite-monzogabbro Cambrian sills up to 150m thick, and late Paleozoic diabase sills up to 60m thick.

Stratigraphy of the Hart River Inlier comprises: rocks of the Wernecke Supergroup (Lower Proterozoic); Hart River volcanics/intrusives (Lower-Middle Proterozoic); Pinguicula Group sedimentary rocks (Middle Proterozoic); Callison Lake dolostone (Upper Proterozoic); and Mt. Harper Group (Upper Proterozoic) clastic and mafic volcanic rocks. Refer to Figure 2.

Rocks of the Wernecke Supergroup are the oldest rocks in the Ogilvie and Wernecke mountains and include: Fairchild Lake, Quartet, and Gillespie groups. Only the Quartet and Gillespie lake groups are exposed in the Hart River Inlier. The Quartet Group, estimated minimum thickness of 2000m, is a clastic to carbonate package (oldest to youngest). It is structurally complex with three phases of deformation (J. Hunt, pers. comm., 2004) and no marker horizons. The Gillespie Lake Group is characterized by shallow orange weathering stromatolitic dolostone. The Hart River basalts are about 75 m thick and have dioritic-gabbroic sill and dyke equivalents. The Pinguicula Group comprises clastic and some carbonate rocks and is observed to have an angular unconformable contact with the Hart River volcanic rocks. The Callison Lake dolostones, estimated to be 500m thick, is a distinctive light grey weathering, well bedded dolostone with well preserved sedimentary structures that include stromatolites, pisoliths, and intra-formational breccias. The Callison Lake rocks are seen primarily along the southwest side of the Hart River Inlier and are unconformable on both upper and lower contacts. The Harper Group, sandwiched unconformably between the older Callison Lake dolostone and younger Paleozoic carbonates, comprises diamictite, shale, siltstones and volcanic rocks. The diamictites form a useful marker horizon separating similar carbonate rocks of the Callison from the Paleozoic carbonates. (Abbott, 1997).

Moving to the outside contacts of the Hart River Inlier (within the Yukon Block) is the unconformable Lower Cambrian Slats Creek marine and alluvial deposits. In addition, numerous Paleozoic shallow water facies rocks include: Bouvette, Taiga, Marmot, Road River, Gossage, Earn, Tsichu, and Jungle Creek group rocks. Volumetrically carbonates and shales predominate in the Yukon Block.

A chronology of events of Proterozoic rocks in the Yukon covers at least 1.2 billion years.

These events include crustal extension, mountain building, mafic magnetism, and hydrothermal brecciation. Figure 3 documents these geological events.

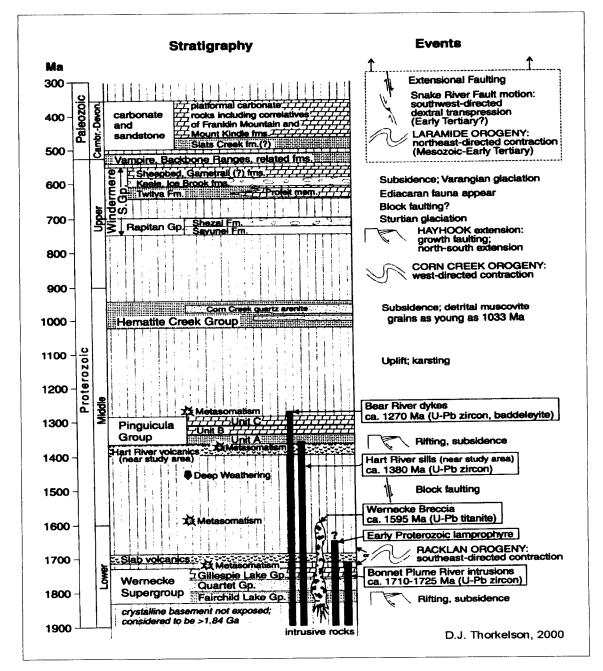


Figure 3. Wernecke stratigraphic section.

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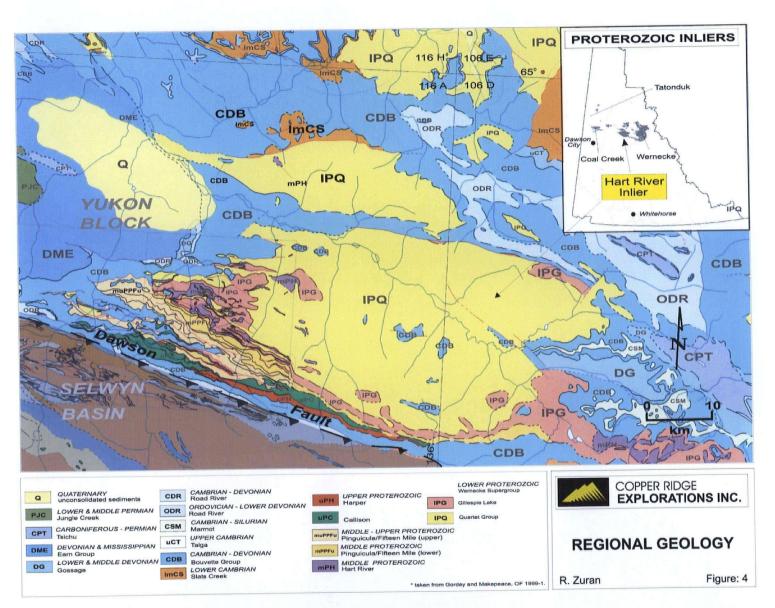


Figure 4. Regional geology.

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## EXPLORATION PROGRAM

#### **Exploration Target**

The target for the Worm Lake reconnaissance exploration program is an iron oxide copper-gold ("IOCG") deposit in Proterozoic rocks similar to the giant Olympic Dam deposit in Australia (3.8 billion tonnes at 1.1% copper, 0.4 kg/t uranium ( $U_3O_8$ ) and 0.5 g/t gold). Mineralization from the Wernecke Mountains to the east to the Ogilvie Mountains to the west is of a similar age and style to that observed at Olympic Dam. In fact, during the time of formation of these iron-rich breccias, the Stuart Shelf area of Australia was believed to have been attached to the Yukon forming the ancient continent of Rodinia (ref), juxtaposing Olympic Dam and the Yukon IOCG districts.

The Worm Lake area occurs in a window of Proterozoic rocks that contains a number of minor copper occurrences but no known IOCG mineralization. However, the occurrence of a number of isolated magnetic highs and the presence of a number of stream sediment anomalies with elevated copper plus cobalt, gold and uranium suggests the possibility for IOCG style mineralization. The reconnaissance area is to the east of a new IOCG occurrence known as Hart River (AA) being explored by Copper Ridge.

### Target Areas

Target areas for exploration were selected based on the exposure of Wernecke Supergroup sedimentary strata, anomalous RGS geochemistry, particularly copper, uranium, cobalt and gold and aeromagnetic anomalies. Although previous iron-rich breccias have been reported from the area, it has not been heavily prospected for IOCG occurrences. The staking of the Hart River IOCG occurrence by Bernie Kreft and subsequent staking by Copper Ridge confirmed the potential for this type of deposit to occur in this area. Of course, numerous IOCG occurrences are known in the Wernecke Mountains to the east and a number of occurrences are also known in the Ogilvie Mountains to the west, within the same stratigraphic sequence.

Two target areas, A and B were selected based on the criteria mentioned above. Within these two general areas five specific areas, labelled A-1, A-2, A-3, B-1 and B-2 were investigated in detail with one to two day traverses, as shown on Figure 5, below:

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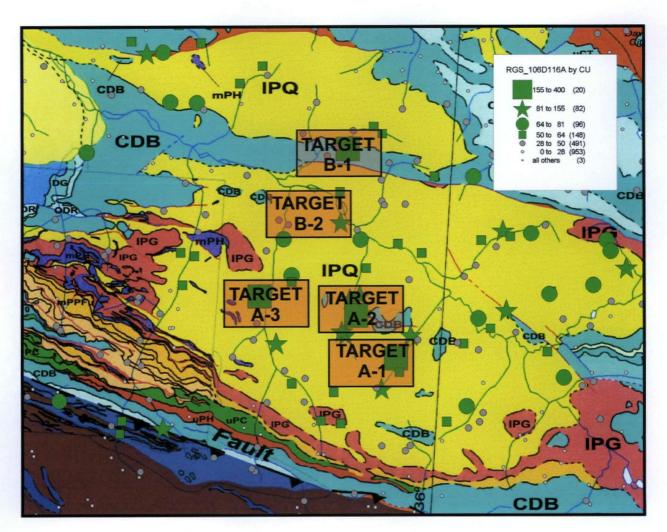


Figure 5. Worm Lake - Hart River target areas.

# EXPLORATION RESULTS

## Target A-1

This target was selected on the basis of its proximity to the suspected location of the Anaconda breccia occurrence and anomalous RGS stream geochemistry. The dominant rock types along the traverse line are argillite to phyllite locally grading to thin bedded phyllitic siltstone. A large gabbro sill occurs mainly along the ridge to the north of the traverse line, while silty limestone boulders appear to be derived from the high ridge to the south.

All of the silts from this traverse area are anomalous in copper, but the highest values come from the western part of the traverse area, up to 1,412 ppm Cu. The area is also anomalous in Co (to 193 ppm), Pb (to 127 ppm), Zn (to826 ppm and, weakly, Au (to 10.9 ppb).

The source of the anomaly is uncertain. It could be the gabbro, but, aside from magnetite, no mineralization was noted in this unit. A small but strong gossan with pyritic mineralization and rusty quartz veining was observed just upstream from the southernmost sample (898.8 ppm Cu), but this feature is too small to explain the anomaly.

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**Recommendations:** The source area of this anomaly is reasonably well constrained by the sampling as being to the east of the small lake at the headwaters of the northwest draining creek. Reconnaissance mapping and prospecting is required over approximately two square kilometres between this lake and the ridge to the east.

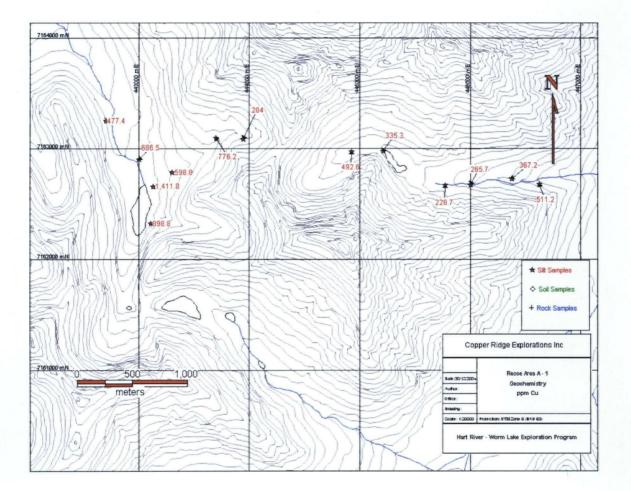


Figure 6. Copper geochemistry - Target A-1.

## Target A-2

Target area A-2 was investigated to follow-up on a RGS RGS Co-Fe stream sediment anomaly.

Geology in the immediate area comprises dark grey weathering, locally deformed, phyllite/meta-siltstone/meta-volcanic/meta greywacke (+/- chlorite) rock, rare rusty weathering quartz-chert pebble conglomerate rocks and rare breccia. Also, light grey weathering, locally dark grey shaly, locally fossiliferous, limestones of the Cambrian to Devonian Bouvette Group are volumetrically abundant towards the east. Float boulders of dark green-brown weathering diorite/gabbro were found along the drainage but not located in outcrop.

Structure (foliation) in the area follows drainage striking northwest with moderate dips to the northeast and southwest. The clastic rocks are poly-deformed. An undetermined strong structural fabric separates the light grey weathering carbonates in the southeast from the dark weathering clastic rocks in the rest of the area.

Alteration and mineralization include dark weathering, melanocratic diorite/gabbro with trace to 1% chalcopyrite and bornite and covellite on planar joint surfaces of a piece of float (25x10x10 cm float - 136551). A 30x30 metre intense orange weathering gossan comprised of oxidized and bleached chert-pebble conglomerate with 10% disseminated pyrite was found at UTM coordinates (NAD 83) 444191E and 7168008N. Up to 15% pervasive fine grained euhedral magnetite (octahedrons) was sampled from a chlorite (+/-silicification) altered meta-volcanic rock and related breccias at sample locations 136555-561. Minor scorodite staining was noted in altered float with bright coloured moss (sample 136559). A quartz vein-stockwork system was sampled at site 136557 containing rare disseminated pyrite and chalcopyrite.

Sample 136559 containing 235.9 ppm Co and numerous iron rich samples including the gossan confirms the RGS anomaly. A high of 1.122% Cu was assayed from siliceous siltstone float (20x10x10cm) with a comb-textured open spaced quartz veinlet containing 5% bleby cpy (136552).

**Recommendations:** The source of the RGS anomaly in this area is likely explained by the observed mineralization. While this mineralization is interesting, it is not volumetrically significant and no further work is recommended at the A-2 target area.

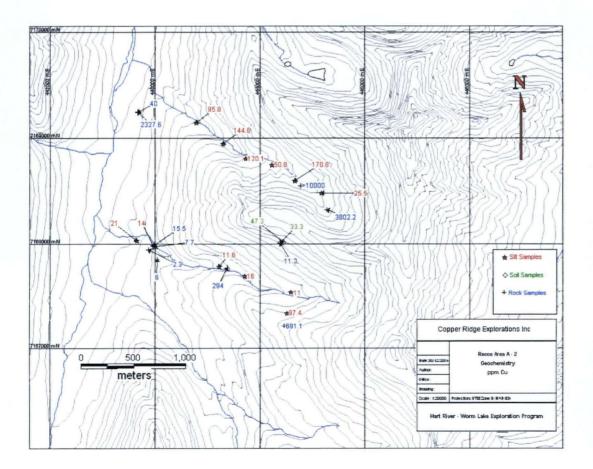


Figure 7. Copper geochemistry – Target area A-2.

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### Target A-3

The most prominent feature of Area A - 3 is a 300 by 50 m east west trending gossan that occurs at the headwaters of an east-west trending creek. The gossan occurs along an east – west trending fault that separates mafic igneous rocks (basalt or fine grained gabbro) to the north from fine grained banded sediments to the south. The gossan appears to result from the oxidation of pyrite rich mafic igneous rocks. Fault parallel irregular quartz veins vary from a few centimetres to locally 3 m wide. The quartz veins locally contain up to 40 % massive pale pyrite.

Five rock samples and two sediment samples where collected from the area (Figure 8). Sample 136805 was from a boulder of mafic volcanic float with patchy chalcopyrite and malachite in quartz carbonate veins. This sample contained 5294 ppm copper. Sample 136809 was of a 1 by 2 m angular boulder of mafic volcanic taken near the top of the ridge. The sample was mineralized with 1 to 2 % disseminated pyrite and patchy chalcopyrite on fractures. This sample contained 2817 ppm copper, 256 ppb gold and 532 ppm cobalt. Sample 136806 was of a strongly silicified piece of float with bladed white quartz veining. It contained 560 ppm copper and 453 ppm cobalt.

The two silt samples were anomalous in copper.

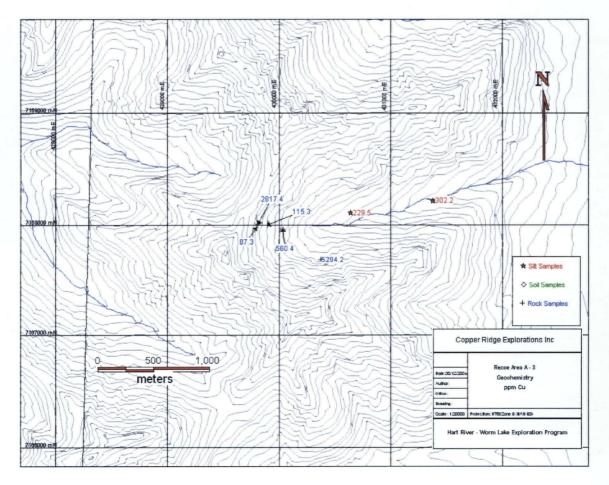


Figure 8. Copper geochemistry - Target area A-3.

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**Recommendations**: Follow-up prospecting is recommended for this area to find the source of the copper – cobalt – gold mineralized boulders. These boulders were angular in nature and were found close to the top of the ridge. They therefore must not be very far from source.

#### Target B-1

Area B - 1 is underlain dominantly by Palaeozoic limestone at the higher elevations and Proterozoic fine grained sediments and phyllite at the lower elevations. Four rock samples, 7 silt samples and 1 soil sample were collected from the area. The only sign of mineralization was a small gossan very locally developed in the phyllites. The gossan was likely the product of oxidation of minor disseminated pyrite. Sample 136811 was taken of this material.

The most prominent feature of Area B - 1 is a strong orange brown colour anomaly in the creek that starts quite abruptly about halfway down the valley and continues for about 2 kilometres. Silt samples taken from the creek are highly anomalous in zinc and molybdenum and moderately anomalous in copper.

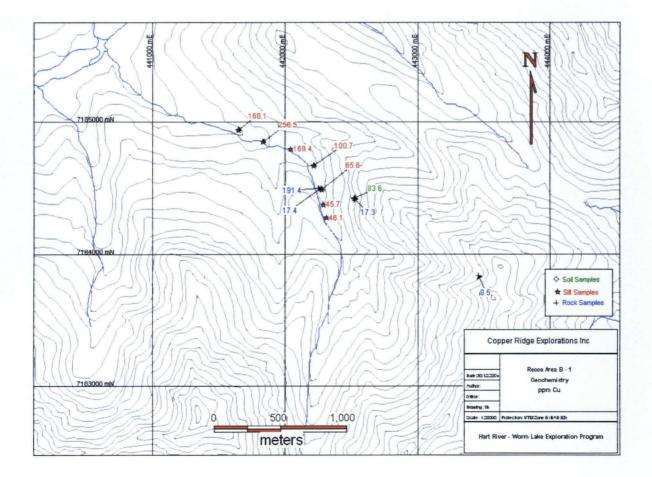


Figure 9. Copper geochemistry – Target area B-1.

**Recommendations:** The colour anomaly and the anomalous metal values are likely reflecting a change in underlying geology from the Palaeozoic limestones to the Proterozoic sediments and are not the result of a mineralized system. Due to the very high values of molybdenum and zinc from the silt samples, however, some further prospecting is warranted to confirm this hypothesis.

### Target B-2

Target area B-2 was investigated to follow-up an RGS Cu-Co RGS stream sediment anomaly.

Geology in the immediate area along the drainage comprises buff orange weathering thick to medium bedded dolostone of the Lower Proterozoic Quartet Gp (IPQ) in fault contact with grey siltstones (IPQ) in the west - and grey slaty weathering laminated siltstone (IPQ) intruded by dark green grey weathering diorite/gabbro, arguably from the Middle Proterozoic Hart River intrusions, on the east end of the drainage. A small canyon in this area reveals good exposures.

Alteration and mineralization in the area is restricted to 3-5% disseminated pyrite in dolostone adjacent to siltstone contacts. Also, quartz pods with limonite and chlorite were sampled in a contact zone within gabbro.

No significant sulphide mineralization was described along drainage.

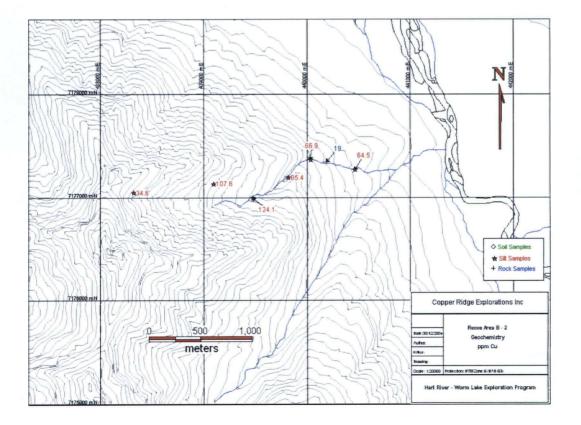


Figure 10. Copper geochemistry – Target area B-2.

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**Recommendations:** No significant mineralization was found at the B-2 target area and no further work is recommended in the immediate area.

# CONCLUSIONS AND RECOMMENDATIONS

Although no mineralized breccias were discovered during the program, geochemical results, particularly from silt sampling, have identified one high priority area (A-1) and two lower priority areas (A-3 and B-1) for follow-up. Each area should be examined with a two person, two or three day fly camp utilizing a combination of prospecting, mapping and geochemical sampling, including stream sediments, soils and rocks. If a mineralized source area is identified, it should be acquired by staking.

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#### **APPENDIX A**

#### **REFERENCES**

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GORDEY, S.P. and MAKEPEACE, A.J., 1999. Yukon Digital Geology (CD). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-1(D).

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THORKELSON, D.J. et al.,2004. Early and Middle evolution of Yukon, Canada. GSC contribution no. 2004074, 75p.

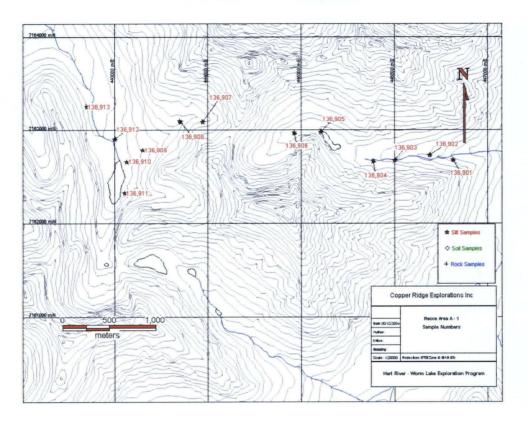
## **APPENDIX B**

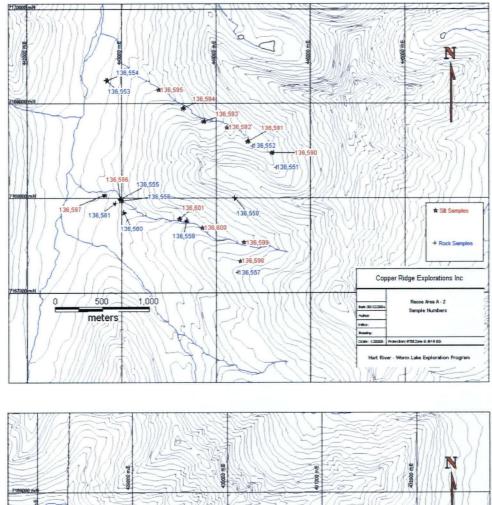
# STATEMENT OF EXPENDITURES

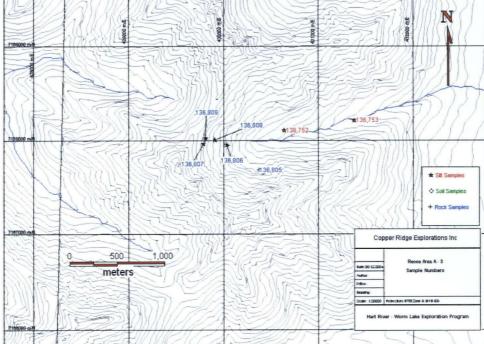
Item	Unit	 Cost
Air Charter		
Helicopter		\$ 11,587.04
Fixed Wing		\$ 3,515.57
Sub-Total		\$ 15,102.61
Analytical		
Rock Samples	25 @16.90/sample	\$ 422.50
Soil Samples	10 @ 14.00/sample	\$ 140.00
Silt Samples	58 @ 14.00/sample	\$ 812.00
Sub-Total		\$ 1,374.50
Wages		
Supervision	2 days @\$450/day	\$ 900.00
Geologist	8 days @\$420/day	\$ 3,440.00
Geologist	1 day @ 450/day	\$ 450.00
Geologist	8 days @\$280/day	\$ 2,240.00
Assistant	5 days @\$270/day	\$ 1,350.00
Cook / First Aid	4 days @\$350/day	\$ 1,400.00
Sub-Total		\$ 9,780.00
Camp, logistical support and supplies		\$ 6,751.11
Report Preparation		\$ 2,500.00
Sub-Total		\$ 9,251.11
Grand Total		\$ 35,508.22

## APPENDIX D

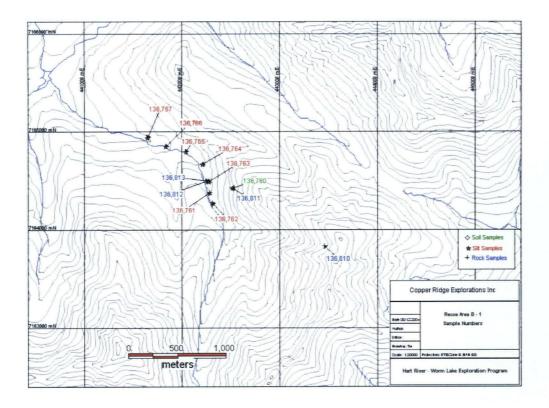
# Geochem Maps – Sample Numbers

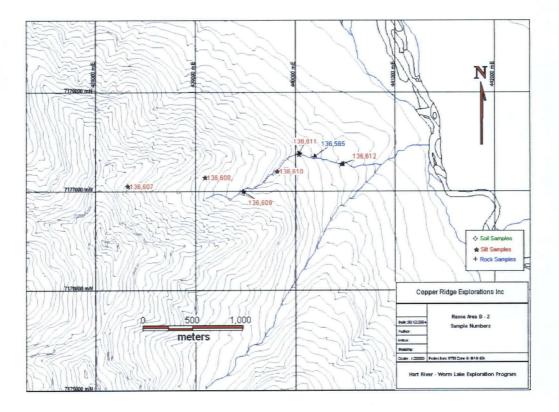






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## **APPENDIX E**

# Acme Labs Assay Certificates

		IPTIONS - HART			=	
MPLE No.	DATE	AREA	MAP SHEET	EASTING	NORTHING	SAMPLE
136590	3-Jul-04	Recce A-2	116 A/9	444587	7168478	RT & RZ
136591	3-Jul-04	Recce A-2	116 A/9	444330	7168595	RT & RZ
136592	3-Jul-04	Recce A-2	116 A/9	444116	7168744	RT & RZ
136593	3-Jul-04	Recce A-2	116 A/9	443863	7168807	RT & RZ
136594	3-Jul-04	Recce A-2	116 A/9	443646	7168945	RT & RZ
136595	3-Jul-04	Recce A-2	116 A/9	443395	7169149	RT & RZ
136596	3-Jul-04	Recce A-2	116 A/9	442989	7167969	RT & RZ
136597	3-Jul-04	Recce A-2	116 A/9	442824	7168031	RT & RZ
136598	4-Jul-04	Recce A-2	116 A/9	444257	7167337	GC & RZ
136599	4-Jul-04	Recce A-2	116 A/9	444296	7167535	GC & RZ
136600	4-Jul-04	Recce A-2	116 A/9	443852	7167688	GC & RZ
136601	4-Jul-04	Recce A-2	116 A/9	443609	7167780	GC & RZ
136602	5-Jul-04	AA-south recce	116 A/15	422239	7190832	GC & RZ
136603	5-Jul-04	AA-south recce	116 A/15	422317	7190512	GC & RZ
136604	5-Jul-04	AA-south recce	116 A/15	422239	7190294	GC & RZ
136605	5-Jul-04	AA-south recce	116 A/15	422002	7189980	GC & RZ
136606	5-Jul-04	AA-south recce	116 A/15	422132	7189681	GC & RZ
136607	6-Jul-04	Recce B-2	116 A/9	438324	7177051	RT & RZ
136608	6-Jul-04	Recce B-2	116 A/9	439095	7177136	RT & RZ
136609	6-Jul-04	Recce B-2	116 A/9	439478	7177002	RT & RZ
136610	6-Jul-04	Recce B-2	116 A/9	439818	7177201	RT & RZ
136611	6-Jul-04	Recce B-2	116 A/9	440031	7177369	RT & RZ
136612	6-Jul-04	Recce B-2	116 A/9	440463	7177277	RT & RZ
136752	4-Jul-04	Recce A-3	116 A/9	430636	7168110	GD & RT
136753	4-Jul-04	Recce A-3	116 A/9	431374	7168217	GD & RT
136754	5-Jul-04	Recce A-3	116 A/9	424998	7191289	GD & RT
136755	5-Jul-04	Recce A-3	116 A/9	425013	7191283	GD & RT
136756	5-Jul-04	Recce A-3	116 A/9	424908	7190887	GD & RT
136757	5-Jul-04	Recce A-3	116 A/9	424940	7190700	GD & RT
136758	5-Jul-04	Recce A-3	116 A/9	425044	7190223	GD & RT
136759	5-Jul-04	Recce A-3	116 A/9	425072	7189888	GD & RT
136760	6-Jul-04	Recce B-1	116 A/16	442519	7184424	GD & GC
136761	6-Jul-04	Recce B-1	116 A/16	442285	7184379	GD & GC
136762	6-Jul-04	Recce B-1	116 A/16	442312	7184278	GD & GC
136763	6-Jul-04	Recce B-1	116 A/16	442273	7184489	GD & GC
136764	6-Jul-04	Recce B-1	116 A/16	442212	7184670	GD & GC
136765	6-Jul-04 6-Jul-04	Recce B-1	116 A/16	442040	7184796	GD & GC
136765		Recce B-1	116 A/16	441832	7184851	GD & GC GD & GC
	6-Jul-04			441648	7184940	GD & GC GD & GC
136767	6-Jul-04	Recce B-1	116 A/16			
136901	3-Jul-04	Recce A-1	116 A/9	446627	7162679	GC & GC
136902	3-Jul-04	Recce A-1	116 A/9	446373	7162726	GC & GC
136903	3-Jul-04	Recce A-1	116 A/9	446000	7162673	GC & GC
136904	3-Jul-04	Recce A-1	116 A/9	445771	7162672	GC & GC
136905	3-Jul-04	Recce A-1	116 A/9	445210	7162979	GC & GC
136906	3-Jul-04	Recce A	116 A/9	444923	7162973	GC & GC
136907	3-Jul-04	Recce A	116 A/9	443946	7163089	GC & GC
136908	3-Jul-04	Recce A	116 A/9	443699	7163099	GC & GC
136909	3-Jul-04	Recce A	116 A/9	443302	7162788	GC & GC
136910	3-Jul-04	Recce A	116 A/9	443131	7162657	GC & GC
136911	3-Jul-04	Recce A	116 A/9	443111	7162325	GC & GC
136912	3-Jul-04	Recce A	116 A/9	443004	7162903	GC & GC
	3-Jul-04	Recce A	116 A/9	442700	7163251	GC & GC

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SILT SAMPI								
SAMPLE No.	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm
136590	2.2	25.5	154.2	257	0.2	16.4		1182
136591	3.7	170.8	491.8	563	0.7	46.7	53.9	6020
136592	3	50.8	235.7	372	0.3	25	20.5	1930
136593	4.2	120.1	356.4	606	0.6	45.6	39.4	3547
136594	4.4	144.6	390.2	576	0.6	49.8	48	3910
136595	2	95.8	132.4	184	0.3	28.6	29.1	1786
136596	5.3	14	110	306	0.2	17.2	5.2	679
136597	5.9	21	114.7	338	0.2	18.3	6.7	721
136598	29.2	97.4	195	709	0.7	64.9	16.1	1362
136599	6.7	11	104.5	290	0.2	15.3	2.7	431
136600	5.4	16	122.2	336	0.2	18.5	6.1	754
136601	4.5	11.6	98.2	274	0.2	14.9	4.3	619
136602	1.3	56.5	13.9	71	0.1	37.9	30.4	412
136603	1.3	101.2	13.9	65	0.2	106.4	33.5	418
136604	1.4	86.5	19.8	85	0.1	76.2	44.3	649
136605	1.2	47.2	27.6	85	0.1	48.3	20.4	653
136606	1.8	70.1	17.3	69	0.1	68.6	40	573
136607	4.4	34.6	76.8	229	0.1	47.9	14.6	1442
136608	1.7	107.6	62.3	164	0.2	44.6	46.1	1581
136609	1.6	124.1	62.1	142	0.2	36.2	41.5	1814
136610	1.3	85.4	35	121	0.2	30.8	23.8	838
136611	1.1	66.9	26.8	96	0.1	26.4	18.1	528
136612	1.1	64.5	23.3	101	0.1	26.2	17.8	786
136752	1.2	229.5	116.2	135	0.2	46.2	51.4	1494
136753 136754	1.4	302.2	105.1	213	0.3	52.5	75.9	1889
136755	1.5 1.2	116.6 115.2	29.5 24	91 76	0.2	58.3	36	1079
136756	1.2	130.6	24 27	103	0.2 0.2	72.8	30.6	832
136757	2.8	65.2	43.9	103	0.2	88.1 55.6	33.7 26.8	1003
136758	1.7	91.6	43. <del>9</del> 30.7	144	0.2	55.6 67.2	20.0 30.1	1238
136759	1.7	66.8	27.3	109	0.2	58.7	26.7	822 857
136760	176.7	83.6	22.6	69	0.5	26.7	4.9	139
136761	11.3	45.7	47.6	358	0.3	64.2	4.9	823
136762	13.3	46.1	48.9	366	0.4	65.7	14.2	848
136763	9.7	65.6	47.2	389	0.3	85.2	17.8	865
136764	10.8	100.7	44.8	500	0.3	98.8	21.7	825
136765	13.6	169.4	38.9	849	0.3	184.8	39.2	893
136766	16.3	256.5	34.6	1089	0.3	166.5	32.1	692
136767	13	168.1	37.5	975	0.3	236	51	1122
136901	1.7	511.2	38.6	94	0.2	35.8	59.6	896
136902	1.3	367.2	58.1	118	0.3	42.1	73.1	852
136903	1.6	265.7	83.5	136	0.2	51.8	74.6	2619
136904	1.3	228.7	64.1	113	0.1	42.6	39.5	1111
136905	1.2	335.3	76.1	137	0.2	44.8	66.8	1768
136906	1.5	492.6	89	172	0.2	63.5	112.3	2468
136907	0.8	284	84.5	155	0.1	44.7	34.5	1396
136908	1	776.2	82.4	207	0.2	30.9	40.1	1931
136909	1.2	598.8	74.9	210	0.3	28.6	42.2	1312
136910	1.5	1411.8	112	826	0.3	40.2	192.9	1100
136911	1.8	898.8	127.5	216	0.3	38.5	89.2	2137
136912	3.4	686.5	71.8	371	0.3	59	104.9	1180
136913	1.9	477.4	55.4	379	0.4	36.8	38	1181

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SILT SAMPI								
SAMPLE No.	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm
136590	1.52	17.6	1.1	0.9	1.2	91	0.6	0.6
136591	5.77	63.7	2.7	2.9	3.3	43	1.6	3.3
136592	2.55	29.5	1.4	0.7	2	79	0.8	1
136593	4.74	49.6	2.6	2.5	3.2	36	1.5	1.6
136594	5.76	55.4	3.8	3.3	3.9	20	1.0	2.1
136595	3.63	32.1	2.8	2.9	3.8	15	0.6	1.1
136596	0.89	10.6	1.1	1.1	0.9	99	1	1
136597	1.11	10.0	1.2	0.9	1.1	99	1	1.2
136598	2.88	31.2	3.4	10.3	5.5	57	3.1	4.7
136599	0.66	7.9	1.4	0.9	0.8	90	1.2	1.1
136600	0.96	11.6	1.1	0.5	0.9	103	1.1	1
136601	0.81	9.3	1	0.5	0.8	92	0.9	0.8
136602	2.23	11.5	29.3	2.3	10	17	0.3	0.5
136603	3.19	21.3	66.9	2.2	6.9	35	0.2	0.5
136604	3.01	17	48.2	2.7	9.2	19	0.5	0.6
136605	2.61	13.8	2.6	1.6	3.8	24	0.3	0.7
136606	3.19	15.5	32.3	2.4	11.1	17	0.4	0.5
136607	2.21	13.7	1	1.4	1.9	67	0.7	1.7
136608	4.03	14.4	3	1.6	5.9	11	0.5	1.3
136609	4.11	16.6	2.8	1.5	3.6	7	0.4	1.2
136610	3.21	13	2.5	0	4.6	14	0.6	1
136611	2.73	10.9	1.9	2	4.4	14	0.2	0.8
136612	2.79	10.9	2	1.8	5.1	15	0.4	1
136752	5.02	52.5	3	3.9	8.5	20	0.5	0.8
136753	4.95	92.1	8.3	3.7	8.3	18	0.9	1
136754	3.01	33.9	18.8	5.1	7.4	21	0.4	0.8
136755	3.28	33.8	19.9	4.1	5.1	31	0.2	0.7
136756	3.47	30.3	17.4	2	7	30	0.4	0.8
136757	4.06	29	10.1	4.5	5.6	25	0.6	1
136758	3.8	22.3	13	2.1	5.6	29	0.5	0.8
136759	3.37	18.5	13.1	2.4	5.5	24	0.5	0.7
136760	16.14	234.8	7.2	2	9.1	2	0	13.4
136761	2.71	15	3.4	0.9	4.3	65	1.7	2.9
136762	2.62	15.9	4.1	0	4.4	75	1.7	2.9
136763	3.04	13.4	9.5	0.7	4.5	52	2.4	2.9
136764	4.01	14.2	15.6	0	4.6	58	3.1	2.8
136765	6.58	12.6	35.1	0	4.4	48	6.2	2.9
136766	10.15	12.3	95.2	0	3.8	65	9.4	3
136767	6.47	12.6	48.9	0	4	52	8.2	2.9
136901	3.67	43.8	2.8	3.8	3.7	14	0.4	0.9
136902	4.3	42.9	3.7	2.6	3.4	16	0.5	0.9
136903	5.36	35.9	3.7	4.4	4.8	12	1	1
136904	4.86	28.9	2.4	2.5	3.5	12	0.3	0.8
136905	5.04	38.7	3.2	5.3	6.4	18	0.6	0.8
136906	7.42	57.7	3.6	6.9	6.7	21	0.8	0.9
136907	5.15	14	0.9	3.7	2.7	31	0.7	0.5
136908	6.36	26.2	1.4	7.1	3.6	26	1.1	0.8
136909	4.88	30.2	1.8	5.1	4.3	21	1.1	0.9
136910	4.3	61.2	3.2	8.5	4.7	17	3.2	1.1
136911	5.1	66.5	2.2	7.7	4.4	17	1.1	1.5
136912	4.53	102.1	10.9	10.9	5.9	14	2	1.7
136913	4.16	68.5	7.6	9.5	4	15	1.6	1.2

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SILT SAMPI								
SAMPLE No.	Bi ppm	V ppm	Ca %	Р%	La ppm	Cr ppm	Mg %	Ba ppm
136590	0.3	9	18.56	0.022	6	14.9	9.9	41
136591	2	25	7.14	0.068	13	26.4	4.25	157
136592	0.6	15	16.63	0.038	8	21.3	8.82	75
136593	1.1	30	5.93	0.073	14	28.8	3.44	192
136594	1.3	42	1	0.098	19	36.3	0.98	227
136595	0.7	38	0.31	0.081	16	25.6	0.5	236
136596	0.3	32	17.26	0.03	5	8.8	9.39	56
136597	0.3	34	17.02	0.035	· 6	9.8	9.07	62
136598	3.3	146	9.16	0.098	16	22.1	5.12	265
136599	0.1	39	15.28	0.031	5	6.2	7.92	52
136600	0.2	29	18.22	0.028	5	9.7	9.1	56
136601	0.2	25	16.11	0.024	4	7.8	8.21	47
136602	0.2	35	0.29	0.078	21	48.2	0.66	122
136603	0.4	55	0.52	0.082	21	193.4	1.45	108
136604	0.3	43	0.34	0.08	20	109.1	1.04	166
136605	0.3	37	0.69	0.086	17	57.5	0.81	172
136606	0.4	38	0.29	0.065	20	93.9	1.02	201
136607	0.6	28	13.41	0.048	10	14.7	6.99	77
136608	1	26	0.2	0.075	16	23.7	0.54	127
136609	1.5	33	0.1	0.068	15	31.9	0.64	190
136610	0.8	31	0.25	0.073	14	24.9	0.51	166
136611	0.7	30	0.24	0.064	14	25	0.49	147
136612 136752	0.7 1.6	33 73	0.28	0.072	15	24.5	0.49	169
136752	2	69	0.38 0.35	0.06 0.067	24	41.1 41.8	1.68	136
136754	0.4	41	0.35	0.087	24 23	41.0 74.4	1.31 0.8	185
136755	0.4	51	0.31	0.089	23	111.8	0.8 1.17	131
136756	0.4	54	0.42	0.095	20 25	136.9	1.17	173 152
136757	0.5	42	0.54	0.092	23 34	53	1.13	132
136758	0.5	45	0.5	0.101	29	91.6	1.23	157
136759	0.4	42	0.43	0.087	25	85.6	0.99	133
136760	0.5	169	0.02	0.143	11	35.3	0.29	80
136761	0.6	76	8.26	0.091	11	18.6	3.35	127
136762	0.6	76	9.33	0.094	9	17.8	3.58	121
136763	0.6	54	7.13	0.089	10	16.9	3.24	109
136764	0.6	63	7.51	0.096	10	17.5	3.46	115
136765	0.5	58	5.56	0.096	10	17.8	2.63	99
136766	0.5	64	5.08	0.097	18	22	2.29	153
136767	0.5	64	6.6	0.098	10	19.4	3.22	127
136901	1.3	60	0.27	0.088	19	37.5	0.93	167
136902	1.3	80	0.39	0.09	17	46.3	1.48	211
136903	1.5	105	0.23	0.087	19	51.9	1.97	208
136904	1.2	101	0.26	0.077	16	50.5	1.89	149
136905	1.9	112	0.29	0.085	19	35.4	1.83	155
136906	2.8	175	0.38	0.078	14	45.6	2.91	105
136907	0.7	151	0.47	0.09	11	39.3	2.15	110
136908	1.8	123	0.45	0.092	12	24.8	1.79	122
136909	1.9	82	0.39	0.093	16	25.7	1.19	138
136910	2.9	73	0.3	0.091	22	27	1.09	123
136911	5.2	59	0.34	0.106	19	29.3	1.15	134
136912	2.1	56	0.24	0.088	27	33	1.15	113
136913	1.8	46	0.49	0.092	20	33.8	1.07	114

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	SILT SAMPI								
J i	SAMPLE No.	Ti %	B ppm	AI %	Na %	Κ%	W ppm	Hg ppm	Sc ppm
	136590	0.003	1	0.2	0.008	0.02	0	0.02	2.2
	136591	0.013	2	1.08	0.009	0.06	0.1	0.09	4.8
	136592	0.007	3	0.39	0.008	0.04	0	0.03	3.1
-	136593	0.014	2	0.91	0.008	0.06	0.1	0.06	5.1
	136594	0.023	2	1.41	0.01	0.07	0.2	0.07	5.4
i	136595	0.024	2	1.39	0.007	0.05	0.2	0.05	4
•	136596	0.009	2	0.24	0.008	0.03	0.1	0.03	1.3
	136597	0.01	2	0.29	0.01	0.04	0.1	0.03	1.3
	136598	0.035	2	0.74	0.012	0.09	0.9	0.12	2.2
	136599	0.009	2	0.22	0.008	0.04	0.1	0.03	0.9
	136600	0.008	1	0.22	0.008	0.03	0	0.03	1.4
	136601	0.008	2	0.19	0.008	0.03	0.1	0.02	1.2
Í.	136602	0.036	1	1.11	0.009	0.06	0.1	0.03	2.5
	136603	0.046	1	2.07	0.012	0.1	0.2	0.09	2.4
*	136604	0.035	1	1.68	0.009	0.09	0.1	0.05	2.8
1	136605	0.031	1	1.26	0.011	0.08	0.1	0.05	2.6
-	136606	0.031	1	1.94	0.015	0.09	0.1	0.04	2.8
	136607	0.004	1	0.21	0.007	0.03	0.1	0.05	3.2
j.	136608	0.015	1	1.26	0.006	0.05	0.1	0.04	3.8
	136609	0.011	1	1.76	0.005	0.06	0.1	0.07	3.9
	136610	0.02	1	1.31	0.007	0.06	0.1	0.04	3.2
á.	136611	0.021	1	1.17	0.007	0.05	0.1	0.04	2.8
I	136612	0.027	1	1.19	0.006	0.06	0.2	0.03	2.9
	136752	0.025	1	2.44	0.011	0.06	0.1	0.03	5.6
1	136753	0.025	2	2.24	0.009	0.08	0.1	0.05	5.2
	136754	0.037	2	1.54	0.011	0.08	0.2	0.05	2.5
	136755	0.045	2	1.72	0.01	0.11	0.2	0.06	2.4
4	136756	0.052	1	1.68	0.01	0.1	0.2	0.05	2.9
	136757	0.051	2	1.76	0.013	0.14	0.1	0.08	3.7
_	136758	0.043	1	1.86	0.012	0.12	0.2	0.07	3.2
4	136759	0.035	1	1.63	0.009	0.1	0.1	0.06	2.5
	136760	0.042	2	0.63	0.003	0.08	0.2	0.18	2.6
	136761	0.009	2	0.61	0.007	0.12	0.1	0.09	2.5
	136762	0.008	1	0.59	0.007	0.11	0.1	0.08	2.4
	136763	0.009	2	0.68	0.008	0.09	0.1	0.07	2.4
	136764	0.009	2	0.85	0.009	0.09	0.1	0.07	2.3
	136765	0.008	3	1.37 2.13	0.006	0.08	0.1	0.08	2.4
1	136766	0.008 0.008	3	2.13 1.45	0.006 0.007	0.07 0.09	0.1 0	0.09 0.08	2.7 2.6
	136767	0.008	3 2	1.45	0.007	0.09	0.2	0.08	3.8
	136901 136902	0.033		2.33	0.007	0.07	0.2	0.08	3.8 5.4
	136902	0.028	1	2.33 2.78	0.009	0.08	0.2	0.08	5.4 6.9
i i	136904	0.033	1 2	2.42	0.007	0.07	0.1	0.03	6.7
	136905	0.055	2	2.42	0.009	0.07	0.1	0.04	6.9
vaj	136906	0.055	2	2.44 3.37	0.012	0.07	0.2	0.00	10.7
	136906	0.063	2	3.37 2.7	0.013	0.07	0.1	0.05	8.3
	136908	0.076	2	2.49	0.014	0.00	0.1	0.05	9.6
ná	136909	0.078	3	2.49 1.95	0.013	0.07	0.2	0.05	9.0 6.9
	136910	0.039	2	2.13	0.011	0.07	0.2	0.05	5.3
	136911	0.042	2	1.95	0.009	0.07	0.2	0.06	5.8
	136912	0.043	2	2.66	0.003	0.00	0.2	0.00	6.2
	136913	0.039	2	2.00	0.007	0.11	0.1	0.07	4.7
	100010	0.04	4	2.07	0.000	U. 12	0.2	0.01	

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SILT SAMPI					
SAMPLE No.	TI ppm	S %	Ga ppm	Se ppm	
136590	0.2	0.13	0	0.5	30
136591	0.4	0.11	3	0.7	30
136592	0.3	0.13	1	0	30
136593	0.5	0.1	3	0.8	30
136594	0.4	0.09	4	1	30
136595	0.2	0	4	0.7	30
136596	0.2	0.1	1	0	30
136597	0.2	0.09	1	0.5	30
136598	0.5	0	2	1.5	30
136599	0.1	0.07	1	0.5	30
136600	0.3	0.09	1	0	30
136601	0.2	0.07	1	0	30
136602	0.1	0	4	0.7	30
136603	0.2	0.11	6	1.8	15
136604	0.2	0	5	1.3	30
136605	0.1	0	3	1.2	30
136606	0.2	0	6	1.1	30
136607	0.3	0.07	1	0	30
136608	0.2	0	3	0	30
136609	0.1	0	5	0.6	30
136610	0.1	0	4	0.7	30
136611	0.1	0	4	0.5	30
136612	0.1	0	3	0.6	30
136752	0.1	0	7	0.8	30
136753	0.2	0	7	0.8	30
136754	0.2	0	4	1	30
136755	0.2	0	5	1.6	30
136756	0.2	0	6	1.1	30
136757	0.3	0	5	1.9	30
136758	0.2	0	6	1.7	30
136759	0.2	0	5	1.4	30
136760	3.3	0	7	17.5	30
136761	0.3	0.07	2	1.1	30
136762	0.3	0.07	2	1.1	30
136763	0.3	0.08	2	0.9	30
136764	0.4	0.08	2 2	1.1	30
136765	0.5	0.1		1.2	30
136766	0.5	0.16	1	1.5	30
136767	0.5	0.11	2	1.3	30
136901	0.1	0	6	1.1	30
136902	0.1	0	7	1.5	30
136903	0.2	0	9	1	30
136904	0.2	0	8	1.3	30
136905	0.1	0	8	0.9	30
136906 136907	0.2 0.1	0 0	12 9	1.2	30 20
136907	0.1	0	9 11	0.9 1.2	30 30
136909	0.2	0	8	1.2	30 30
136910	0.2	0	8 7	1.1	30 30
136911	0.2	0	7	1.1	30 30
136912	0.2	0.12	7	0.8	30 30
136912	0.2	0.12	6	2.5	30 15
100010	0.1	0.12	U	2.0	10

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AMPLE No.	DATE	AREA	MAP SHEET	EASTING	NORTHING	SAMPLER
136551	3-Jul-04	Recce A-2	116 A/9	444637	7168323	RZ
136552	3-Jul-04	Recce A-2	116 A/9	444390	7168550	RZ
136553	3-Jul-04	Recce A-2	116 A/9	442836	7169248	RZ
136554	3-Jul-04	Recce A-2	116 A/9	442834	7169244	RZ
136555	3-Jul-04	Recce A-2	116 A/9	442983	7167981	RZ
136556	3-Jul-04	Recce A-2	116 A/9	442994	7167971	RZ
136557	4-Jul-04	Recce A-2	116 A/9	444233	7167214	RZ
136558	4-Jul-04	Recce A-2	116 A/9	444195	7168003	RZ
136559	4-Jul-04	Recce A-2	116 A/9	443692	7167772	RZ
136560	4-Jul-04	Recce A-2	116 A/9	443024	7167857	RZ
136561	4-Jul-04	Recce A-2	116 A/9	442937	7167944	RZ
136562	5-Jul-04	AA-south recce	116 A/15	421531	7191394	RZ
136563	5-Jul-04	AA-south recce	116 A/15	422026	7190836	RZ
136564	5-Jul-04	AA-south recce	116 A/15	422118	7189707	RZ
136565	6-Jul-04	Recce B-2	116 A/9	440187	7177349	RZ
136805	4-Jul-04	Recce A-3	116 A/9	430372	7167684	GD & RT
136806	4-Jul-04	Recce A-3	116 A/9	430035	7167959	GD & RT
136807	4-Jul-04	Recce A-3	116 A/9	429792	7167970	GD & RT
136808	4-Jul-04	Recce A-3	116 A/9	429895	7168000	GD & RT
136809	4-Jul-04	Recce A-3	116 A/9	429808	7168010	GD & RT
136810	6-Jul-04	Recce B-1	116 A/16	443456	7183837	GD & GC
136811	6-Jul-04	Recce B-1	116 A/16	442519	7184424	GD & GC
136812	6-Jul-04	Recce B-1	116 A/16	442269	7184498	GD & GC
136813	6-Jul-04	Recce B-1	116 A/16	442269	7184498	GD & GC

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AMPLE No.	DESCRIPTION	Mo ppr
136551	Gabbro - float (25X10X10cm); dk gn-bn allotriomorphic meg melanocratic w tr-1% cpy, bor, cov on planar joint surfaces.	0.
136552	Siltstone - float (20x10x10cm); siliceous w comb-tex ops qtz vnlet; 5% bleby cpy.	0.
136553	Quartz Vein - float (50x40x40cm); mas crackled w lim stn & 2% dis sx along fractures; py/cpy.	
136554	Altered Siltstone - float (25x25x15cm); siliceous ble, v gossanous lim stn + MnO2 + eu py (2-10mm) pyritohedrons	0.
136555	Breccia - float (60x30x50cm); gn-bn paled siliceous ble w fig pervasive eu octahedral mag in chl matrix; rare dis py/cpy. Mag has bluish irredescense. siliceous matrix.	1
136556	Siliceous Breccia - float (Ig boulder); strong or weathering, up to 20% dis subeu py, chl rich.	2
136557	Quartz Vein Stockwork- float pieces (up to 100cm); mas qtz w rare chl + py/cpy along fractures.	0
136558	Gossanous Chert-Pebble Conglomerate - 5m grab; o/c 30x30m, intense lim-MnO2 stn, ble FS w up to 10% py, S1 120/45.	0.
136559	Altered Siliceous Rock - float (50cm); unidentifyable dk glassy mineral. Bright coloured moss on rock.	0.
1.30000	Meta-Greywacke? - float (30x10x30cm); v gossanous rusty or-rd-bk surface, siliceous clasts, gy foliated sheared matrix.	1
136561	Meta-Volcanic - float (100x75cm); andesite?basalt?? Local bxa, chl alteration w pervasive 15% fig dis octahedral mag.	0.
136562	Siliceous Siltstone - float (20x15x10cm); or-bn gossanous, py/cpy in small 3mm vnit, 7% pervasive v fig eu mag.	1.
136563	Silicified Yellow Rock - float (35x40x20cm); intense bright yw jarosite? Stn. Severe silicification w 5-7% dis py.	0
136564	Silicified Rock - float (40x30x20cm); mas off wh v hard siliceous rock w tr py.	0
136565	Quartz Pod in Gabbro - grab (40cm); qtz comb textured w chl and lim, no sx.	0
136805	Andesite (??) - float; with qtz-carb veins with patchy cpy and malachite stain	0
136806	Strongly Silicified Rock - float; with bladed white qz veining; stained with soft black mineral that yields a faint Cu plating with acid. Tr to 2 percent Cpy.	0
136807	30 cm Quartz Veln - grab; with banded chloritic wall rock fragments on margins, no visable sx	0
136808	irregular Quartz VeIn - grab; to 20 cm in gulley locally up to 40 percent massive pale py	0
- a ka ka na - a	1 by 2 m angular of stongly sericite - Quartz Altered Volcanic (??) - grab; with 1 to 2 % disseminated py and trace patchy cpy on fractures.	0
136810	Fault Breccla - grab; with fragments of slightly calcareous siltstone in CaCO3 matrix	6
136811	Graphitic Slate - grab; with strong orange brown wx on foliation, trace finely disseminated py	21
136812	float in creek, <b>Breccla</b> - float; with epidotized and sericitized angular clasts in fine grained grey matrix. Trace to 1 % finely disseminated py	0
136813	rusty brown incompetent Ferrecrete - grab in creek	4

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ROCK SAI	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm
MITLE NO.	Cu ppm	- phu	Zirppin			Co ppin		16 /0	
136551	3,802	7.8	66	1	87	70.1	1339	12.69	46.1
136552	11,220	64.2	19	5.2	27.9	27.7	1535	3.95	37.1
136553	2,328	6.7	6	1.9	8.2	9.4	155	1.28	202.9
136554	40	2.3	22	0.1	6.5	84.2	396	11.12	31.6
136555	16	2.4	51	0	12.3	10.4	1025	12.49	4.3
136556	8	1.5	42	0	14.6	95.1	490	13.86	16.5
136557	691	4.7	17	0.2	8.8	57	120	1.7	149.5
136558	11	19.7	1	0.3	3	1.5	51	2.93	7.3
136559	294	2.8	19	0	22.1	235.9	366	1.54	286.1
136560	6	2.5	17	o	9.8	199.4	1067	9.92	43.9
136561	2	1.5	46	0	6.2	10.3	678	13.05	2
136562	11	0.8	31	О	88.6	78.6	359	8.66	1.1
136563	9	1.5	1	o	131.4	605.2	30	4.4	224.2
136564	468	9.7	22	0.3	8	14.5	539	0.49	14
136565	19	16.7	78	0.1	34.4	18.8	1745	5.92	1.2
136805	5,294	28.9	82	1.9	80.4	35.3	1670	8.97	0.7
136806	560	27	21	0.5	40.8	453.3	831	2.8	873.2
136807	87	12.2	11	0.2	3.3	4.9	74	0.73	18
136808	115	35.3	8	0.7	30.3	117.5	24	5.92	337.9
136809	2,817	24.1	23	2.4	60.3	531.8	134	4.43	4919.4
136810	9	6.8	40	0	8.5	1.6	285	0.22	9.6
136811	17	7	6	0.2	3.8	0.8	9	0.89	16.8
136812	17	4	91	0	279.6	65.3	1270	7.28	1
136813	191	20.7	170	0.2	34.5	8.5	304	15.88	7.2

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ROCK SAI									
AMPLE No.	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca 🤋
136551	0.1	7.3	0.2	3	0.1	0.2	0.5	351	0.6
136552	0.4	31	5.1	4	1	1.2	24.1	5	0.3
136553	0	22.9	0.1	2	0	1.5	46.1	6	0.0
136554	1.4	4.3	11.1	3	o	0.2	2	83	0.0
136555	4.6	0	11.3	3	0.1	0.1	0.3	91	1.
136556	5.3	2.4	8.6	1	0	0.1	1.3	110	0.1
136557	0.5	5.8	0.9	4	0	0.6	2.4	3	
136558	0.2	0	3.9	3	0	0.8	0.6	7	
136559	0.4	0.6	1.1	2	0.1	0.3	0.7	13	0.0
136560	4.2	7.4	11.3	4	0	0.1	3.4	52	1.1
136561	1.8	0	10.9	2	0	0.1	0.1	71	0.2
136562	0.7	1.6	4.7	3	0	0.1	1.1	35	0.0
136563	0.7	14.7	5.4	1	о	0.2	2	8	
136564	0.8	2.2	5.8	24	0.1	0.3	0.1	1	1.3
136565	0.2	0	1.9	19	0	0.2	0.4	122	1.6
136805	0.6	8.7	0.1	4	0.5	0.2	0.2	204	1.2
136806	0.2	33	0.9	4	0.1	1.8	8.7	8	0.0
136807	0.3	1.4	4.4	3	0.1	0.3	0.2	4	0.0
136808	0	50.4	0.1	2	0	6	14.3	5	
136809	0.3	255.8	0.4	4	о	11.6	57.8	23	0.0
136810	1.1	0	0.4	174	0.1	0.8	0.1	5	23.5
136811	4.2	0.5	2.5	12	0	1.3	0.3	43	0.0
136812	0.1	0	1.1	131	0.1	0.5	0.1	151	8.6
136813	13.5	0.8	4.9	11	0.4	0.9	0.4	27	0.7

ROCK SAI									
AMPLE No.	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	AI %	Na %
136551	0.055	2	106.1	3.84	12	0.012	0	5.15	0.01 <sup>.</sup>
136552	0.016	5	9.1	0.57	143	0.001	1	0.98	0.009
136553	0.002	0	6.2	0.16	18	0.001	2	0.18	0.009
136554	0.072	9	63.9	2.57	43	0.01	0	3.78	0.02
136555	0.067	12	38.2	2.71	34	0.011	1	3.87	0.0
136556	0.074	4	47.4	3.43	17	0.012	1	5.38	0.00
136557	0.002	8	4.7	0.28	65	0.001	0	0.51	0.007
136558	0.008	17	5.5	0.02	37	0.002	1	0.27	0.006
136559	0.011	16	9.2	0.28	28	0.001	0	0.59	0.005
136560	0.093	2	47.6	2.01	24	0.008	0	2.55	0.027
136561	0.061	3	52.8	3.37	45	0.012	0	4.39	0.01
136562	0.04	6	37.8	1.94	80	0.006	1	3.16	0.00
136563	0.031	13	4.3	0.04	29	0.008	1	0.31	0.019
136564	0.14	8	4.2	0.07	12	0.001	0	0.12	0.0
136565	0.051	6	30.2	1.69	32	0.017	0	2.45	0.01
136805	0.018	1	129.3	3.62	10	0.103	0	4.39	0.018
136806	0.004	10	17.3	0.35	16	0.001	o	0.5	0.004
136807	0.006	13	10.4	0.1	20	0.001	1	0.32	0.009
136808	0.001	2	17.8	0.05	8	0	0	0.09	0.006
136809	0.006	3	40.2	0.26	19	0.001	1	0.61	0.005
136810	0.05	3	3	9.7	1152	0.001	1	0.12	0.008
136811	0.015	9	6.2	0.06	237	0.005	6	0.31	0.007
136812	0.134	8	557.2	5.75	16	0.005	0	2.78	0.003
136813	0.05	7	17	0.53	90	0.003	1	1.3	0.005

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ROCK SAI	1/ 0/	10/ 200-			Timme	0.0/		Co. 000
AMPLE No.	К%	W ppm	Hg ppm	Sc ppm	TI ppm	S %	Ga ppm	Se ppr
136551	0.02	0.1	0.09	23.6	О	0.26	16	1.6
136552	0.16	0.6	0.1	1.4	0	0.67	2	2.4
136553	0.01	1.4	0.01	0.9	0	0.21	2	1.7
136554	0.02	0.3	0	9.3	0	1.74	15	(
136555	0	0.5	0	17.6	0	o	14	(
136556	0.01	0.6	0.01	9.9	0	1.53	16	0.8
136557	0.01	0	0.01	0.7	0	0.14	2	0.8
136558	0.23	о	0.02	0.6	0.1	1.8	1	(
136559	0.09	0	0	1.7	0	0.07	2	(
136560	0	0.2	0	10.9	0	3.05	9	0.9
136561	0	0	0	9.5	0	0	14	(
136562	0.08	ο	0	3.1	0	0.23	12	1.9
136563	0.27	о	0.01	0.9	0	3.65	1	4.7
136564	0.01	0	0	1.1	0	0.08	0	(
136565	0.07	0	0.01	7.6	0	0	8	
136805	0	0	0.03	15.2	0	0.22	13	3.
136806	0.04	1.5	o	1.3	0	1.27	2	2.3
136807	0.08	0	0	0.6	0	0	1	(
136808	0.01	2.4	0.01	0.4	0	5.54	0	1.6
136809	0.08	0	0.01	1.8	0	2.43	3	3.6
136810	0.05	0.1	0.01	0.4	0.1	0.1	0	(
136811	0.21	0.1	0.13	0.9	0.6	0.26	1	2.6
136812	0.01	0	0	19.8	0	0.23	11	(
136813	0.18	0	0.02	2.1	0.2	0.62	2	1.2

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SOIL SAMP	SOIL SAMPLE DESCRIPTIONS - HART RIVER AREA Yukon Territory (NAD 83)										
SAMPLE No.	DATE	AREA	MAP SHEET	EASTING	NORTHING	SAMPLER					
136940	4-Jul-04	Recce A-2	116 A/9	444194	7168008	GC & RZ					
136941	4-Jul-04	Recce A-2	116 A/9	444223	7168016	GC & RZ					
136942	5-Jul-04	AA-south recce	116 A/15	421516	7191326	GC & RZ					
136943	5-Jul-04	AA-south recce	116 A/15	421803	7191026	GC & RZ					
136944	5-Jul-04	AA-south recce	116 A/15	422029	7190838	GC & RZ					

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SOIL SAMP				_			_	
SAMPLE No.	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm
136940	1.7	33.3	120.8	28	2	8.3	5.4	374
136941	1.5	47.3	87.2	27	0.9	11.5	5.9	296
136942	1.9	44.4	53.3	81	0.1	47.1	73	560
136943	1.2	30.5	26.2	62	0.1	31.3	30	363
136944	1.6	38	30.7	63	0.1	39.3	34.1	421

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SOIL SAMP								
SAMPLE No.	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm
136940	9.45	30.3	0.9	3.9	8.4	10	0.1	4.6
136941	9.89	35	0.7	3.2	6.6	6	0.1	4.3
136942	3.15	34.6	4.4	3.3	7.9	5	0.2	0.7
136943	2.68	18	2.8	4.7	4.9	8	0.3	0.5
136944	2.83	16.6	7.2	2	5.2	11	0.3	0.5

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SOIL SAMP	Bi ppm	V ppm	Ca %	Р%	La ppm	Cr ppm	Mg %	Ba ppm
136940	7.7	24	0.04	0.08	8	17.9	0.11	87
136941	4.3	31	0.04	0.083	6	28.9	0.04	36
136942	0.5	32	0.1	0.069	21	24.7	0.65	86
136943	0.3	30	0.14	0.078	23	23.9	0.58	94
136944	0.4	30	0.19	0.078	25	24.5	0.61	128

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SOIL SAMP								
SAMPLE No.	Ti %	B ppm	AI %	Na %	Κ%	W ppm	Hg ppm	Sc ppm
136940	0.019 <′	1	0.37	0.01	0.51	0.1	0.04	2.4
136941	0.019 <	1	0.24	0.004	0.2	0	0.06	1.8
136942	0.016 <′	1	1.26	0.013	0.08	0.1	0.02	2
136943	0.017 <1	l	1.31	0.009	0.04	0.2	0.04	1.6
136944	0.016 <1	1	1.51	0.009	0.05	0.2	0.03	1.8



