# GEOPHYSICAL REPORT

# **HEM 1-88 CLAIMS**

GRANT # YC19966-YC19971
GRANT # YC20973-YC211050
GRANT # YC21135-YC21144

NTS # 116 G \ 1

LAT: 65' 04' N

LONG: 138' 12' W

# **DAWSON MINING DISTRICT**

AUTHOR OF REPORT SHAWN RYAN
WORK PERFORMED JULY 13 - AUGUST 6, 2002
DATE OF REPORT JANUARY 25, 2002

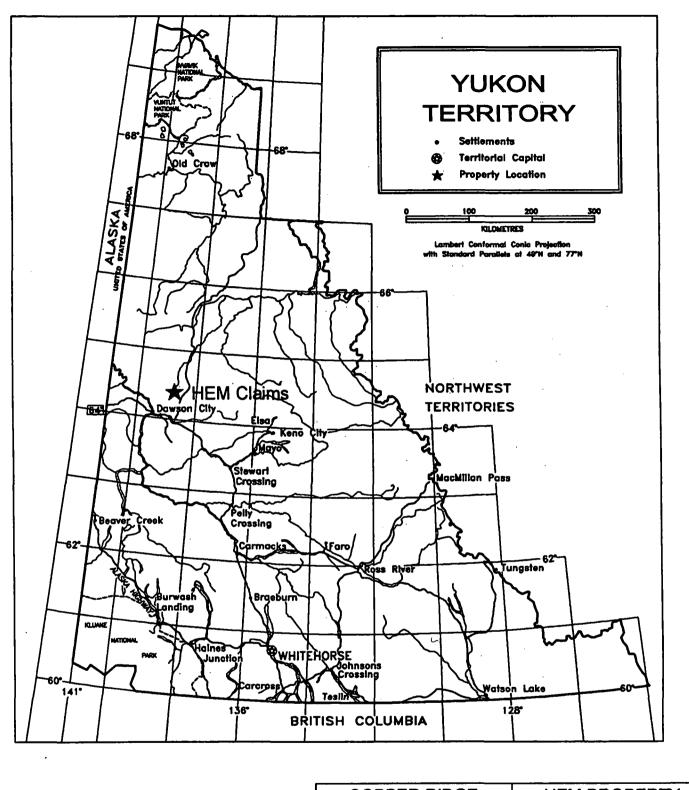


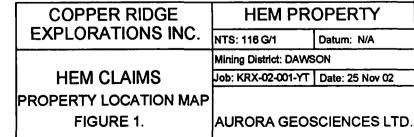
# TABLE OF CONTENT

SUMMARY		<b>p.3</b>
1.0	INTRODUCTION	p.4
2.0	LOCATION AND ACCESS	p.4
3.0	PROPERTY DESCRIPTION	<b>p.4</b>
4.0	PHYSIOGRAPHY	p.4
5.0	REGIONAL AND PROPERTY GEOLOGY	p.5
5.1	REGIONAL GEOLOGY	p.5
5.2	PROPERTY GEOLOGY	p.5
6.0	WORK PROGRAM / METHODS	p.5
6.1	GRID WORK	p.5
6.2	MAGNETIC SURVEY	p.6
7.0	INTERPRETATION	p.6
8.0	RECOMMENDATION	<b>p.6</b>
9.0	REFERENCES CITED	<b>p.7</b>
10.0	QUALIFICATION	p.7
11.0	COST	<b>p.8</b>
Мол	natic Man	Annandiy

#### **SUMMARY**

A grid and magnetic survey was conducted on the Hem Property between July 13 and August 6, 2002. The survey was conducted to locate iron oxide copper gold mineralization similar to the Olympic Dam Model located in Australia. In total there was 110 kilometers of grid laid out and 95 kilometers of magnetic survey covering the entire claim package. The magnetic survey was run in conjunction with a Gravity survey performed by Aurora Geosciencies Ltd. The idea of the program was to use both survey to define a magnetic target that coincide with a gravity anomaly. Both surveys where successful in outlining a large gravity anomaly in the western part of the grid that measure 8 kilometer by 2.5 kilometers with an associated magnetic anomaly 2.5 kilometer by 1.5 kilometer. The magnetic signature is off set from the gravity anomaly and this is exactly what the Olympic Dam Model signature is. So the geophysical data raise allot of attention and help option the property off to two junior mining companies, Copper Ridge Exploration and Canadian Umpire which is back by Teck \ Cominco. The Property was drilled this fall with 2500 feet with result to follow. The companies are planning to drill the main gravity and magnetic anomaly next summer. So a very successful program with lots of potential in 2003.





#### 1.0 INTRODUCTION

This report describes the grid work and magnetic survey conducted on the Hem claims in the Dawson Mining District, Yukon Territory. The Hem Property host hematite-chalcopyrite breccias similar in style to those hosting economic mineralization at the Olympic Dam Deposit in Australia. The purpose of the survey was to locate a large magnetic anomaly that coincides with a large gravity high anomaly similar to Olympic Dam. The grid was laid out with a three-man crew and the magnetic survey was run by myself. One Aurora Geoscience employees performed the gravity work and a helper provide by Copper Ridge Exploration. All work was performed between July 13 and August 6, 2002.

#### 2.0 LOCATION AND ACCESS

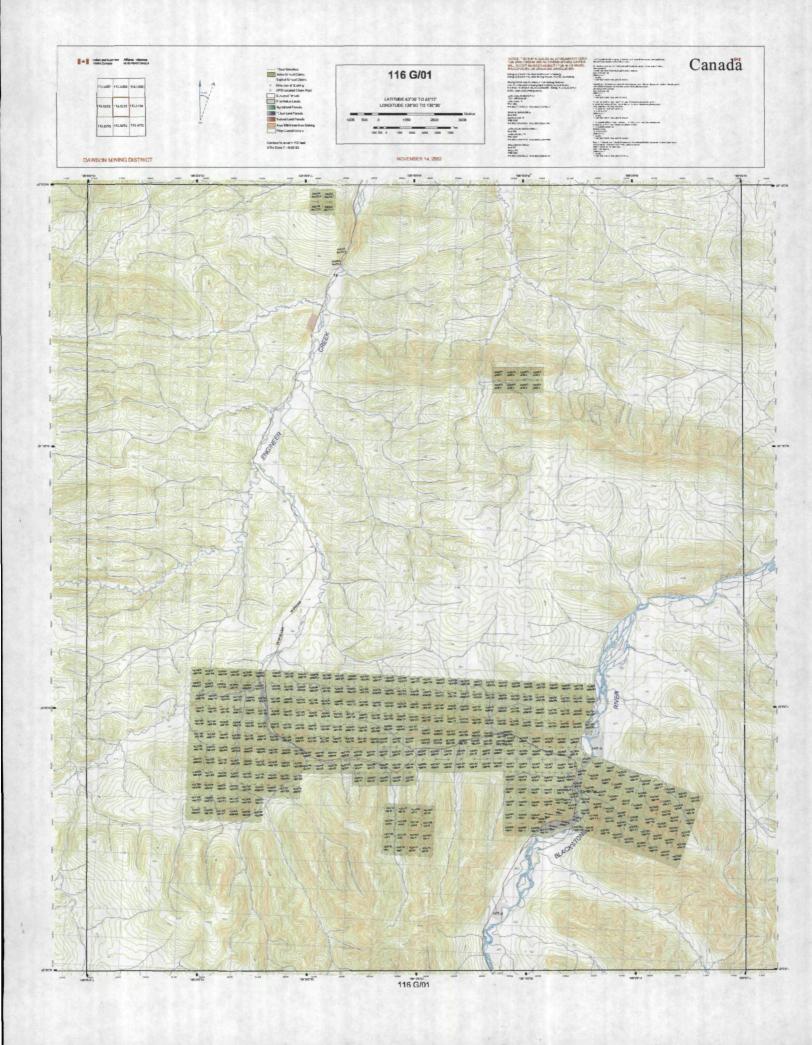
The Hem Property is centered at 65'04'N, 138'12W in central Yukon. The property is 130 Km NNE of Dawson City. The property can be reached via the Dempster Highway. The property cross and follows the Highway from around kilometer mark 146 to 159.

## 3.0 PROPERTY DESCRIPTION

The Hem Property consists of 352 Claims (HEM 1-335 / with duplicates) staked under the Yukon Quartz Mining Act in the Dawson Mining District. Figure 2 shows the location of the Claims.

#### 4.0 PHYSIOGRAPHY

The Hem property is located in the Olgilvie Mountains on the height of land between the Blackstone and Olgilvie Rivers. Elevation on the property range from 900 to 1600 m. The property covers a steep walled plateau dissected by steep and narrow ravines. The climate in the area is subarctic with long cold winters from October through May and a short, cool summer. Precipitation in the area is reportedly light to moderate.



# 5.0 REGIONAL AND PROPERTY GEOLOGY

## 5.1 REGIONAL GEOLOGY

The regional geology base on the GSC Map 1526A of the Ogilvie River by D.K. Norris the Hem claims lie in three different rock units. The oldest to youngest begins with Proterozoic, Aphebian Quartet Group: argillite, red, green and grey, slaty; quartzite, fine grained, light grey; marine? The next unit is Upper Cambrian to lower Devonian (CDb) Limestone and dolomite, grey and brown; shale, dark grey to black; marine; may include equivalents of Gossage and Ogilvie Formation. The third Unit is Upper Cambrian to lower Devonian (CDr) Road River Formation: shale, black, graptolitic; limestone, medium crystalline, dark grey; marine; includes lateral equivalents of the Michelle Formation.

#### 5.2 PROPERTY GEOLOGY

The Hem Property economic mineralization consists of hematite - chalcopyrite-bearing breccias which outcrop along the Dempster Highway along the Blackstone River. There is also a large 2 KL by 1 KL hematite - chalcopyrite bearing breccia that outcrop east of the Blackstone River along a small creek draw.

#### 6.0 WORK PROGRAM / METHODS

## 6.1 GRID WORK

The grid was established with a three-man crew. There were two individual grids put in. One grid covered west of the Blackstone River and a second smaller one covered east of the Blackstone River. We started with the large grid by putting in the Base Line from line 000 to 9750 east. With a Garmin Etrex GPS. The Base Line went exactly east west and line where established every 250 meters. The start of each line was established using lathes with four orange flagging tapes running down to the ground creating a very visible target site that could be seen for over a kilometer away. The line ran north and south of base line. Station spacing on the lines where every 25 meters and where marked with either pickets or orange flagging with grid location marked with permanent black marker. The main large grid was extended to the west and to the north. A new base line was established with the GPS at 1200 N and the grid was extended to Line 2000 west.

A second grid was established east of the Blackstone River. This grid was established by running a base line put in again with GPS. Line where put in every 250 meter with station every 25 meters. All station where marked with orange flagging and wrote out with black permanent marker.

In total there was 110 kilometers of grid put in with 4,400 station established.

#### 6.2 MAGNETIC SURVEY

A magnetic survey was conducted across the whole grid area. Two Scintrex Proton magnetometers where used during the survey. One operator ran the whole survey during July 13 and August 6, 2002. A base station was established close to camp and a magnetometer was set up at this location every day. This base mag would take reading every 30 seconds a map out the daily magnetic drift. This data was used for to correct the field mag for the daily drift.

The magnetic survey was run on the grid lines on station separation of 25 meters with some detail section of 12.5 meters. The survey ran fairly smooth with only one day lost due to base mag failure.

## 7.0 INTERPRETATION

The magnetic survey revealed two major anomalies, Anomaly A and Anomaly B.

Area A is located on the east part of the grid. This anomaly covers an area of 5 kilometer by 3 kilometer and is center on line 9750 E and station 300-500 N. This anomaly covers known Hematite Breccia with minor copper mineralization outcropping on the eastern grid.

Anomaly B is located in the western part of the grid. The anomaly covers an area of 2 kilometer by 1.5 kilometer. The center of the anomaly is located on line 2000 E around station 1200 N. This anomaly is covering CDb limestone unit. It should not be magnetic. This anomaly is what got everybody excited because it is associated with a large gravity anomaly. The magnetic signature parallels the gravity anomaly with the magnetic peak being 500 meter south of the gravity high. This signature is exactly the same geophysical signature as the Olympic Dam Deposit and the new Minotaur Resources Ltd showing found in Australia. Both are Proterozoic Hematite - Breccia hosting copper - gold mineralization.

#### 8.0 RECOMMENDATION

I would recommend more detail gravity work to better define the eastern gravity and magnetic anomaly. I would also recommended more geology work to get a better idea on the geological structure. This would help with better understanding the nature of this large gravity anomaly. I would follow all this up with a 5000-foot drill program. The first drill target area should be just north of eastern magnetic anomaly and south of the gravity anomaly. The second drill area would be east of the Blackstone River. This area is lower priority because the magnetic anomaly covers the gravity anomaly. Neverless this target area has known copper mineralization and may turn up something interesting.

## 9.0 REFERENCES CITED

Norris, D.K. Geological Survey of Canada geology map number 1526A. Title "Ogilvie River" from 1979.

Minotaur Resources Ltd. Annual report (2001) and web site www.minotaurresources.com.au

Roberts, D.E. and Hudson, R.T. The Olympic Dam Copper-Uranium-Gold Deposit, Roxby Downs, South Australia.

# 10.0 QUALIFICATION

I Shawn Ryan located in Dawson City, Yukon work as a professional prospector. I run a small exploration company located in Dawson city.

I have worked in the exploration business for the last 20 years. I worked the first 12 years as a contractor working on numerous projects in the NWT, Ontario, Quebec and the Yukon. I have worked for the last 8 years as a local prospector for myself.

I have being trained to run various geophysical instruments and surveys such as magnetic surveys, max-min surveys, induce polarity surveys and VIf surveys.

I have overseen the whole Hem Project and was the party chief in charge.

I own 100 % of the Hem claims and have now option the claims to Copper Ridge exploration.

Dated this 25 of January 2003 in Dawson City, Yukon.

Respectfully submitted

Shawn Ryan

## 11.0 COST

## **GRID WORK**

Base line 15 kilometers @ \$200.00 \$3,000.00

Grid Lines 70 kilometers @ \$200.00 \$14,000.00

Grid Extension 25 kilometers @ \$200.00 \$5,000.00

# **MAGNETIC SURVEY**

Grid Lines 70 kilometers @ \$250.00 \$17,500.00

Grid Extension 25 kilometers @ \$250.00 \$6,250.00

# **GRAVITY SURVEY**

Target Area 69 stations @ \$66.78 per station \$4,607.00

Regional Focus Area 192 stations @ \$66.78 per station \$12,821.00

#### **STAKING COST**

(I exclude receipts of \$9000.00 due to over budget) \$9,000.00

Target Area Expanded claim block by 283 claims

Klondike Exploration \$1,000.00

## **HELICOPTER COST** (I exclude receipts due to over budget)

Target Area 4 hours @ \$1,066.00 \$4,264.00

Regional Focus 12 hours @ \$1,066.00 \$12,792.00

# **REPORT WRITTING / MAPS**

Report for Programs \$750.00

Regional Focus Total \$36,863.00

Target Program Total \$54,121.00

