

ASSESSMENT REPORT

GEOPHYSICAL SURVEY REPORT

HEIDI PROPERTY

HEIDI 1-20 CLAIMS

MAYO MINING DISTRICT, YUKON

NTS 116 A / 5

LAT: 64°23 ' N

LONG: 137°38 ' W

AUTHOR OF REPORT SHAWN RYAN

WORKED AUGUST 15-30, 2003

REPORTED COMPLETED JANUARY 22,2004

1.1 LOCATION AND ACCESS

The Heidi claims are located approximately 90 km northeast of Dawson City, Yukon are bordered to the north by Lake Creek and to the south by the headwaters of Hamilton Creek. The claim block straddles the boundary of the Mayo and Dawson mining districts on NTS mapsheet 116A/5.

The property can only be accessed by helicopter. Flying time from Dawson City is approximately 0.6 hours but a Dempster Highway maintenance yard, located 70 km from the Dempster Highway turnoff, is within 25 km of the property and can be used as a staging point to airlift equipment into the Heidi claims.

1.2 PHYSIOGRAPHY, VEGETATION AND CLIMATE

The property is located within the Ogilvie Mountains physiographic region. East-west trending ridges are typically very steep on the north facing slopes and moderately steep (20-30 degrees) on the south facing slopes. Valley bottoms are at an elevation of approximately 4300 feet while most peaks are in the range of 6000-6500 feet.

Vegetation within the claim block consists entirely of alpine grasses, sedges and lichen, which makes for very easy walking. The situation changes dramatically in the lowlands of the Hamilton Creek and Lake Creek watersheds, where very thick buck brush dominates the landscape.

The climate in the area is quite erratic during the exploration season. Typically, mornings are clear and sunny while showers are common in the afternoon. Temperatures tend to fluctuate but the days are generally warm from mid June to mid-August.

1.3 PROPERTY HISTORY

Prior to 1995, no known mineral exploration appears to have been conducted in the immediate vicinity of the Heidi claims. The nearest active quartz claims are the Lorrie Property and the Hami Claims located respectively 17 km southwest and 10 km southeast of the Heidi claims. Antimony Mountain, located 20 km west of the property, has also been the focus of much exploration activity. Brewery Creek owned by Viceroy Resources is located 40 km southwest of the Heidi property. This property is scheduled to go into production in the fall of 1996, with a significant reserve of low grade, mainly intrusive-hosted gold mineralization.

On August 5, 1995, the Heidi 1-24 claims were staked by Aurum Geological Consultants, for Homestake Canada Inc., to cover a new gold showing discovered while investigating an elevated arsenic/antimony stream silt anomaly and a coincident magnetic anomaly. Mineralization, consisting of massive to disseminated arsenopyrite, pyrite and stibnite, was found on a steep slope overlooking Lake Creek and gold values up to 6460 ppb were obtained from grab and chip samples. The staking activity by Homestake Canada resulted in a small staking rush with Mar West

Resources and several independent stakers staking in the immediate area. As a result, Homestake decided to immediately increase its land position to cover a second magnetic anomaly 3 km southeast of the Heidi showing. During the months of September and October 1995, Homestake staked an additional 55 full claims and fractions. Competitor staking activity also increased and the Heidi block was eventually completely enclosed by competitor claims. These include the Clare Ho and Hi series of claims.

The gold market drop and the Heidi claims eventually lapse with no one paying any attention to the area. Klondike Exploration realized the opportunity and staked the Heidi 1-20 claims December 22, 2002. Gold price rose dramatically during the winter months of 2003 and the claims were optioned to Logan Resource Ltd. of Vancouver B.C.. A five man camp was mobilized in the August 2003. A 25 kilometer flagged grid was established with magnetic survey complete over the entire grid. The next phase of exploration was a I.P. survey complete over 9 kilometers.

3.0 GEOLOGY

3.1 REGIONAL GEOLOGY

The Heidi property is situated within the eastern Selwyn Basin, southwest of the Mackenzie Platform and within the Omineca Belt of the Canadian Cordillera. The regional geology has been described and mapped at 1:250,000 scale by Green(1972) and Tempelman-Kluit(1980). The Mackenzie Platform consist of a sequence of Middle Proterozoic to Middle Paleozoic carbonate and clastic sedimentary and volcanic rocks which were deposited on a subsiding continental shelf. The Selwyn Basin comprises a package of Late Proterozoic to Jurassic sedimentary rocks deposited in a deeper basin off the western margin of the platform. The area is bounded to the south by the northwest striking, steeply dipping Tintina Fault which separates the Selwyn Basin rocks from highly sheared and metamorphosed rocks of the Yukon-Tanana Terrane. Selwyn Basin rocks northeast of the Tintina Trench were displaced by three regionally extensive thrust sheets known as the Robert Service, Tombstone and Dawson thrusts. The northerly to northwesterly directed thrusting occurred during the Jura-Cretaceous compressional tectonic event and resulted in Proterozoic aged rocks being imbricated onto Devonian to late Jurassic strata. The sub-parallel thrust faults have been mapped on surface and extend in a northwesterly arc from the Keno Hill area to Dawson City.

The stratigraphic sequence in the area is dominated by rocks of the Hyland, Road River and Earn Groups. (Figure 3.1) The Late Proterozoic-Early Cambrian Hyland Group is a thick sequence of maroon and green shale, calcareous sandstone, grit and quartz pebble conglomerate(Abbot 1992, Gordey 1993) The Ordovician to Lower Devonian Road River Group consist primarily of interbedded black chert and argillite, with minor quartzite. The lithology of the Earn Group (Devonian-Mississippian) is a variable mix of black shale, greywacke and chert pebble conglomerate. A narrow northwesterly trending belt of Keno Hill Quartzite (Mississippian) and Jurassic Schist is also exposed in the base plate of the Robert Service Thrust.

Numerous granitic to syenitic stocks, dykes and sills are distributed across the southern portion of the Selwyn Basin. The intrusions occur in a belt parallel to, and approximately 45 kilometers east of the Tintina Fault. The intrusions are known as the Tombstone Suite (92 Ma) and were emplaced during the late stages of the Jura-Cretaceous compressional tectonic event. Typically, they are rimmed by a contact metamorphic aureole up to 1 km wide. The biotite hornfels alteration, which display a strong positive magnetic signature, is enriched with iron and, locally, with base and precious metals.

A gabbroic suite of intrusions, Triassic in age,(Mortenson and Thompson, 1990) has also been mapped in the area. The intrusions are typically sill-like and are predominantly concentrated in the Keno Hill Quartzite unit which forms the base plate of the Robert Service Thrust.

3.2 REGIONAL MINERALIZATION

The Omineca Belt displays the greatest diversity of metal occurrences in the Canadian Cordillera. Deposit type and distribution is quite variable but includes vein, porphyry, skarn, stratiform and volcanogenic massive sulphide deposits. Metals that characterize the belt include Pb, Ag, Zn and Au (Sinclair et al. 1978)

The Selwyn Basin is host to a variety of deposits. Large stratiform, shale-hosted, sedimentary-exhalative Zn-Pb deposits are contained within the Anvil and Howards Pass districts. The districts occupy linear belts on opposite sides of the basin and include the Faro, Grum, Vangorda, XY, Anniv and OP deposits. Skarn and replacement deposits are most commonly localized where mid-Cretaceous granitic plutons of the Selwyn, Cassiar and Tombstone suites intrude carbonate sequences or calcareous units within the Selwyn Basin. The intrusions themselves are known to host low-grade, Fort Knox style mineralization. The belt of Tombstone intrusions, which extends from Dawson City down through the Keno Hill district, is related to several active exploration targets in the area including Dublin Gulch, Clear Creek, Red Mountain, Scheelite Dome and Brewery Creek. Mineralization usually consists of gold-bismuth-arsenopyrite in sheeted veins and disseminations within the intrusions or in a fault-controlled setting spatially related to the intrusion. Other styles of mineralization include tungsten and gold skarns, silver-lead-zinc veins, and silver-lead-antimony veins. A strong Au, As, Bi, Sb, Hg, and Pb geochemical signature characterizes the intrusions and their alteration aureoles.

3.3 PROPERTY GEOLOGY AND MINERALIZATION

The Heidi claim block is underlain by sedimentary rocks of the Upper Proterozoic- Lower Paleozoic Hyland Group. Two distinct formations within the Hyland Group, the Yusezyu Formation and the Narchilla Formation, outcrop on the property.

The Yusezyu Formation consists of rusty weathering gritty quartzite, sandstone, and quartz pebble conglomerate with up to 80 or 90 rounded quartz grains. Minor interbeds of limestone, calcareous sandstone and shale are common. The Narchilla Formation consists of black, maroon and green shales and slates. This unit is quite distinct and is usually identifiable from a distance.

The Heidi showing consists of 5%-50% massive to disseminated arsenopyrite, pyrite and stibnite/jamesonite replacing limestone and calcareous grit units. Irregular, narrow quartz/arsenopyrite veins intersect the mineralized beds and probably channeled the mineralizing fluids into the favourable horizons. The mineralization is quite poddy but is mainly localized within the recumbently folded south limb of the Heidi anticline, near the Yusezyu/Narchilla contact. The mineralization is contained within an area measuring approximately 300m long and 100m high.

4.0 RESULTS

4.1 MAPPING PROGRAM

Grid mapping on the northern portion of the property, along the Heidi ridge, identified a lower package of coarse grained, thick bedded Yusezyu sandstone interbedded with phyllitic shale, coarse pebbly sandstone and thin limestone beds. An upper package of green micaceous sandstone interbedded with maroon and green shales probably represents a transition into the Narchilla shales. Structural deformation along the ridge is quite intense and the ridge itself appears to be a large scale anticline.. Tightly folded beds with axial planes at 100/30 south plunge 40 degrees at azimuth 240.

The geology of the southern portion of the Heidi property consists primarily of Yusezyu Formation sandstone with numerous shale partings. Bedding measurements are typical for the region, with strikes in the 90-120 range and dip measurements in the 30-50 range. A 50-100m interval of Narchilla shale was mapped on the ridge southwest of Heidi Lake. The shale unit appears to lie unconformably on a thick package of sandstone and coarse grit and is intensely deformed along a low angle fault which dips to the south. A second interval of Narchilla shales was mapped further south, on the panhandle of the claim block. This repetition of the stratigraphic sequence . moving north to south , can only be explained by east-west striking, property scale faulting or thrusting.

Several dykes of coarse biotite-feldspar porphyry were mapped on the Heidi ridge and near Heidi Lake Their presence hints that a larger granitic stock may exist at depth beneath the claims, as suggested by the magnetic anomaly centered on Heidi Lake. Extensive hornfelsing, typically associated with Cretaceous granitic stocks, was not observed on the Heidi claims, implying that a buried stock would be at least 100m below surface.

Igneous rocks were notably absent over the southern magnetic anomaly with the exception of minor dioritic float found at UTM 7139500N/375500E.

Quartz veining is common on the property, particularly in areas of interbedded shale and sandstone. The veins are typically 1-10 centimeters thick with the exception of a B1-2 metre thick vein mapped on the southern claim block at UTM 7139100N/375750E. Extensive quartz float with strong copper values(up to 3386 ppb) was also mapped and sampled near UTM7138500N/374000E

5.0 2003 WORK PROGRAM

5.1 Grid Work

A flag grid was established using hip chains and GPS Garmin instrument. A orange flag was position every 25 meters and marked with permanent black marker with the line and station position. In total there was 35 kilomters of grid established.

5.2 Magnetic Survey

A magnetic survey was conducted across the entire grid. Magnetic reading where taken every 10 meters. In total there was 3500 reading taken of the entire grid. A base station was established to take reading every 30 seconds. Field data was corrected nightly by plugging both magnetometer together and using a internal program to correct the daily magnetic drift.

5.3 Induce Polarity Survey

There was 7 kilometers of induce polarity survey run across part of the grid.

5.4 Max-Min

A few line of max-min survey was run to cover the magnetic anomaly and I.P. anomaly. In total there was four kilometers surveyed,

A complete report for the geophysical work is appended to this report.

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PROSPECTOR
RANGE

O G I L V I E

O B R I E N

R A N G E

S T E W A R T
(YUKON)

SYENITE RANGE

64°00'
138°00'

560000m.E.

45'

7 1-250 000

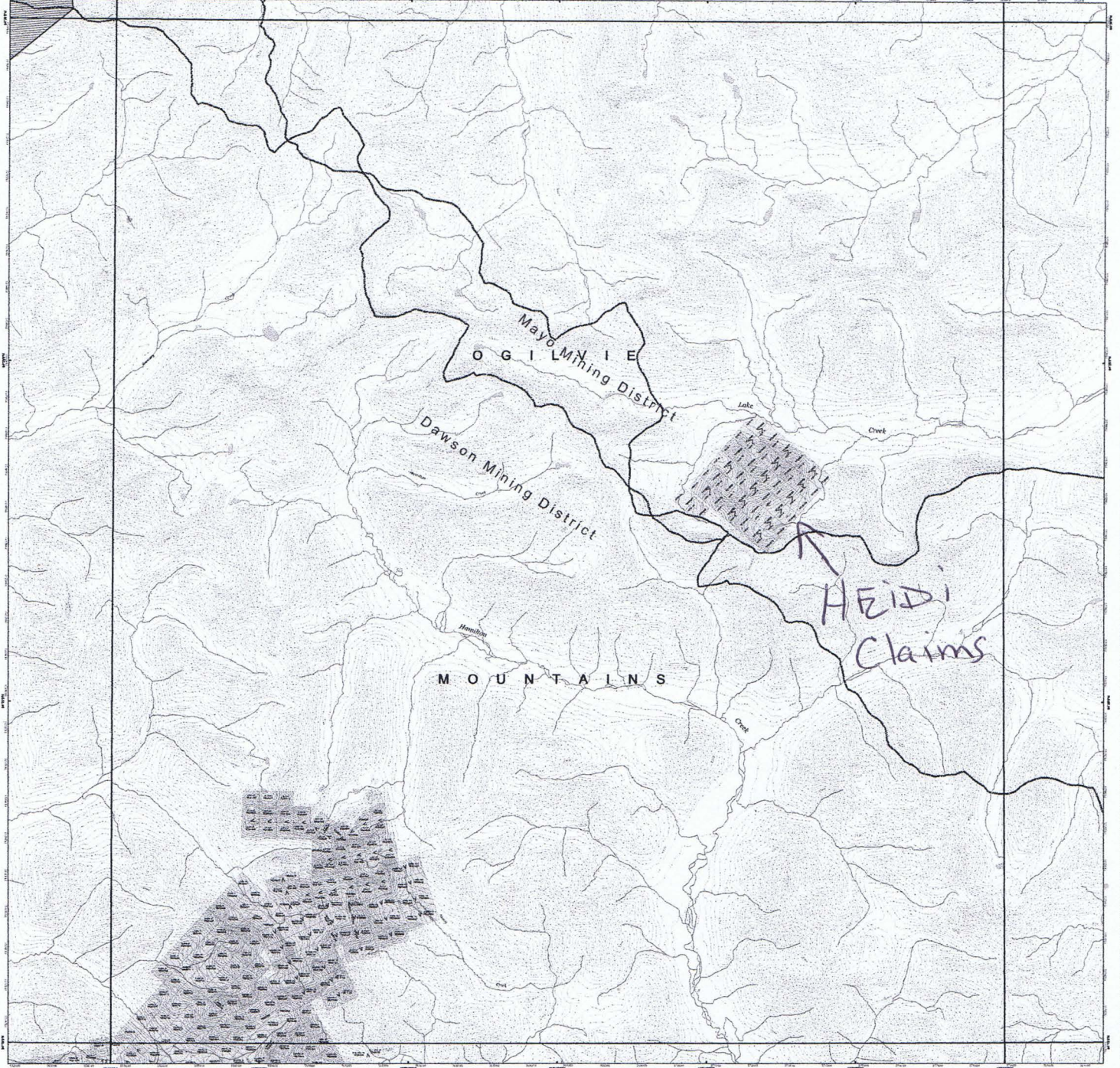
30'

8 NTS 116 A

15'

North ↑

137



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Other Resources:

Geological Resources:

Topographic Resources:

Administrative Resources:

Public Resources:

Professional Resources:

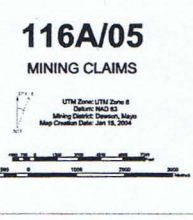
Other Resources:

Geological Resources:

116A/05

MINING CLAIMS

UTM Zone: UTM Zone 8
 Mining District: Dawson, Mayo
 May Creation Date: Jan 18, 2004



116A00	116A01	116A02	116A03
116A04	116A05	116A06	116A07
116A08	116A09	116A10	116A11

Mining

- Barren District
- Claim Status
- Registered Claim
- Unregistered Claim
- Admitted Claim
- Expired Claim
- Claim Owner
- Claim Number
- Claim Date
- Claim Area
- Claim Shape
- Claim Type
- Claim Status
- Claim Number
- Claim Date
- Claim Area
- Claim Shape
- Claim Type
- Claim Status
- Claim Number
- Claim Date
- Claim Area
- Claim Shape
- Claim Type

Final Status Settlement Land

- Land Disposition
- Ownership
- Settlement
- Settlement Date
- Settlement Amount
- Settlement Status
- Settlement Type
- Settlement Category
- Settlement Subcategory
- Settlement Subcategory Description
- Settlement Subcategory Code
- Settlement Subcategory Name
- Settlement Subcategory Date
- Settlement Subcategory Area
- Settlement Subcategory Shape
- Settlement Subcategory Type
- Settlement Subcategory Status
- Settlement Subcategory Number
- Settlement Subcategory Date
- Settlement Subcategory Area
- Settlement Subcategory Shape
- Settlement Subcategory Type

TM25 Land

- Land Disposition
- Ownership
- Settlement
- Settlement Date
- Settlement Amount
- Settlement Status
- Settlement Type
- Settlement Category
- Settlement Subcategory
- Settlement Subcategory Description
- Settlement Subcategory Code
- Settlement Subcategory Name
- Settlement Subcategory Date
- Settlement Subcategory Area
- Settlement Subcategory Shape
- Settlement Subcategory Type
- Settlement Subcategory Status
- Settlement Subcategory Number
- Settlement Subcategory Date
- Settlement Subcategory Area
- Settlement Subcategory Shape
- Settlement Subcategory Type