

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Interpretation REPORT ON Airborne Geophysical data from quest east survey covering THE hot bath PROPERTY

TOTAL COST: \$5,194

AUTHOR(S): John Buckle, P.Geo.

John Buckel

SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): STATEMENT OF WORK EVENT NUMBER **5475881** /DATE: **2013/Nov/04**

YEAR OF WORK: 2013

PROPERTY NAME: Hot Bath

CLAIM NAME(S) (on which work was done):

HOTBATH 1, HOTBATH 2, HOTBATH 3, HOTBATH 4, HOTBATH 5, HOT BATH 6, HOTBATH PAT

COMMODITIES SOUGHT: Copper, Gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Laird NTS / BCGS: 104I LATITUDE: __58____° __10____' _04____" LONGITUDE: _129____° __33___' _32____" (at centre of work) UTM Zone: 9 EASTING: 467117 NORTHING: 6447527

OPERATOR(S) [who paid for the work]: DeCoors Mining Ltd.

MAILING ADDRESS: PO Box 31734 Whitehorse, Yukon Y1A 6L3

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**) Middle Jurassic Three Sisters, Pat West, Hotailuh batholith, QUEST-Northwest project, airborne magnetic survey, Aeroquest Airborne

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

MINFILE 104I 043, 104I 034 assessment reports 03963, 06323

TYPE OF WORK IN EXTENT OF WORK THIS REPORT (in metric units)		ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)	
GEOLOGICAL (scale, area)				
Ground, mapping				
Photo interpretation				
GEOPHYSICAL (line-kilometres)				
Ground				
Magnetic				
Electromagnetic				
Induced Polarization				
Radiometric				
Seismic				
Other				
Airborne Interpretation		1015381, 1019219, 1019509, 1019545, 1019613, <u>1021223,</u> 1023338	5,194	
GEOCHEMICAL (number of samp	les analysed for)			
Soil				
Silt				
Rock				
Other				
DRILLING (total metres, number o	f holes, size, storage location)			
Core				
Non-core				
RELATED TECHNICAL				
Sampling / Assaying				
Petrographic				
Mineralographic				
Metallurgic				
PROSPECTING (scale/area)				
PREPATORY / PHYSICAL				
Line/grid (km)				

Topo/Photogrammetric (scale, area)		
Legal Surveys (scale, area)		
Road, local access (km)/trail		
Trench (number/metres)		
Underground development (metres)		
Other		
	TOTAL COST	5,194

INTERPRETATION REPORT ON

AIRBORNE GEOPHYSICAL DATA FROM QUEST EAST SURVEY

COVERING THE

HOT BATH PROPERTY

DEASE LAKE AREA, NORTHWEST MINING DIVISION, BRITISH COLUMBIA

Location : Northwest British Columbia, Country : Canada Geographic Location of Center of Claim Block **Decimal Degrees** Latitude: 58.167792 Longitude: -129.558928 Degrees, Minutes, Seconds 58° 10' 04'' N Latitude: Longitude: 129° 33' 32'' W UTM Easting: 467117 m 6447527 m Northing: Zone: 9

WRITTEN FOR: DeCoors Mining Corp. PO Box 31734 Whitehorse, Yukon Y1A 6L3

WRITTEN BY: John Buckle, P.Geo. Geological Solutions 1116-1450 Chestnut St., Vancouver, BC V6J 3K3

DATED: November 2, 2013

BC Geological Survey Assessment Report 34288

CONTENTS

LIST OF TableS	
List of Figures	
SUMMARY	
CONCLUSIONS AND RECOMMENDATIONS	
INTRODUCTIONAND GENERAL REMARKS	
LOCATION AND ACCESS	5
PROPERTY AND OWNERSHIP	6
Weather and Vegetation	
Infrastructure	
Geology	9
Regional GEOLOGY	9
Middle Jurassic Three Sisters	9
plutonic suite	9
Three Sisters pluton	9
PROPERTY Geology	
MINERALIZATION	
Lithology	
Geophysical data	
SURVEY SPECIFICATIONS AND PROCEDURES	
AIRCRAFT AND EQUIPMENT	
MAGNETOMETER	
MAGNETIC BASE STATION Model:	
ALTIMETERS	
VIDEO TRACKING AND RECORDING SYSTEM	
GPS NAVIGATION SYSTEM	
DATA PROCESSING AND PRESENTATION	
BASE MAP	
MAGNETIC COMPENSATION TEST	
TOTAL FIELD MAGNETICS	
PREVIOUS WORK	
TRIASSIC OCCURRENCES	
Geophysical data processing PROCEDURE	
ANALYTICAL METHODS	
DISCUSSION AND CONCLUSIONS	

Bibliography	33
AUTHOR'S CERTIFICATE	34
APPENDIX: STATEMENT OF EXPENDITURES	35

LIST OF TABLES

Table 1 Hot Bath claims	6
Table 2 Flight line specifications	
Table 3 Geoscience bc sample results	

LIST OF FIGURES

Figure 1 Hot Bath Location Map	6
Figure 2 Hot Bath Claim Map	7
Figure 3 Quest Survey Blocks	
Figure 4 Quest East Survey Block	
Figure 5 Hot bath claim block outline on windowed tmi magnetic map	
Figure 6 Analytical Signal of TMI Magnetic Data, Quest East	
Figure 7 Total magnetic intensity with interpreted geology	
Figure 8 TMI MAGNETIC DATA DRAPED ON TOPOGRAPHY LOOKING NORTH-WEST	
Figure 9 Hot Bath Claims on topography	
Figure 10 Total magnetic intensity of hot bath area	
Figure 11 Magnetic derivative dx horizontal vector	
Figure 12 Magnetic derivative dy horizontal vector	
Figure 13 Magnetic derivative dz vertical vector	
Figure 14 Shadowed total magnetic intensity map	
Figure 15 Total magnetic intensity of hot bath area	
Figure 16 Hot bath area geology	
Figure 17 simpfied drawing of geology and interpreted ring structure from magnetics	

SUMMARY

The Hot Bath claim block covers just over 1,600 hectares near the centre of the East sheet of the recently studied Quest Northwest project of Geoscience BC. The property was selected based on results from rock geochemistry and geological mapping completed as part of the Quest study. An airborne magnetic geophysical survey of the area supports the interpretation of mid-Jurassic calc-alkaline intrusives that are known to be favourable host rocks for copper-gold mineralization. This report is an interpretation of the compilation of data from the airborne geophysical survey and geological data processing software by Petross Eikon, Geosoft and MapInfo for quality control and for the creation of enhanced interpretation maps. The correlation between the geophysical data and the interpreted geological information is excellent. The data indicated a ringed intrusive with anomalous samples of copper and gold on the structure. The property has the potential to host a mineralized porphyry intrusive similar to the nearby Gnat and Red Chris deposits.

CONCLUSIONS AND RECOMMENDATIONS

The Hot Bath property has the potential to host a copper and/or copper-gold porphyry. The geology as identified by Geoscience BC indicates a mid-Jurassic assemblage of calc-alkaline plutonic rocks of favourable composition to be mineralized. This coupled with high copper values from samples acquired within the claim block and the circular magnetic structure support the premise for a mineralized intrusive.

The Quest study area included a more detailed study of the area of the Hot Bath claims. The study identified a new mineralized zone named Pat West. Two samples were taken during the study one of which reported over 0.7% copper. The other sample was reported to have been taken from a pyrite zone. These samples, along with the mapped geology and geophysical circular structure suggest a mineralized differentiated intrusive. This is a reasonable interpretation further supported by the fact the structure is located along a geological contact and within a few kilometers of a major fault structure striking northwesterly.

A stream sediment geochemical sampling program would be helpful to identify potential porphyry mineralization in the project area. As a phase one follow-up of the Quest Northwest study a soil geochemical survey coincident with detailed geological mapping and rock sampling is recommended.

INTRODUCTION AND GENERAL REMARKS

Aeroquest Airborne conducted a helicopter-borne magnetic survey in the Dease Lake area of northwest British Columbia, called the QUEST-Northwest project area for Geoscience BC (GBC). The Quest Northwest project contains two blocks named as East and West located approximately 10km south of Dease Lake, BC. The base of survey operations was Dease Lake, BC.

This report discusses the results a helicopter-borne geophysical survey carried out on behalf of Geoscience BC that covered DeCoors Mining Ltd.'s, Hot Bath property in British Columbia, Canada. The data used was taken from Block 1: between the communities of Dease Lake and Iskut, BC in the summer and fall of 2011. This airborne magnetic survey was flown by Aeroquest Airborne with a line spacing of 250 m, and the total survey coverage is 27,012 line-km.

The Quest East database was downloaded from: http://www.empr.gov.bc.ca/Mining/Geoscience/MapPlace/thematicmaps/Pages/QUEST-Northwest.aspx . This report was written by John Buckle of Geological Solutions at the request of Mr. PETER MICHAEL BURJOSKI, of DeCoors Mining Ltd., during the period of October 27 to November 2, 2013. The main purpose of the exploration program on this property is the search for copper/gold porphyry mineralization.

The principal geophysical sensor was a helicopter stinger mounted cesium vapor magnetometer. Ancillary equipment included a GPS navigation system, radar altimeter, digital video acquisition system, and a base station magnetometer. A survey coverage of approximately 150 line-km fell within the defined Hot Bath project area, approximately 50 of which were within the claim block. Survey flying described in this report took place on August 13th to October 28th, 2011. This report interprets the data and describes the survey logistics, the data processing, presentation, and provides the specifications of the survey.

The Hot Bath claims lies entirely within the East survey block. In this report the data covering only the Hot Bath claims was cut-out from the East block dataset, re-processed, re-gridded and interpreted.

LOCATION AND ACCESS

The Hot-Bath Tenures are situated in the Three Sisters Range, just East of the headwaters of the Tanzilla River and 38 km South-East of the community of Dease Lake and 42 km North-East of Iskut, B.C. Access would be by helicopter from Dease Lake and there is a staging area just off Highway 37 - 15 km west of the claims. Highway 37 (Commonly called the "Stewart-Cassiar HGW") There is a bulldozer trail leading up the Tanzilla valley from the vicinity of the B.C. Rail right of way to within about 4km of the claims and would be passable to tracked vehicles.

Geographic Location of Center of Claim Block.

Decimal Degrees

Latitude:	58.167792					
Longitude:	-129.558928					
Degrees, Minutes, Seconds						
Latitude:	58° 10' 04'' N					
Longitude:	129° 33' 32'' W					
UTM						
Easting:	467117 m					
Northing:	6447527 m					
Zone:	9					

Hot Bath Location Map



FIGURE 1 HOT BATH LOCATION MAP

PROPERTY AND OWNERSHIP

The Project is comprised of seven mineral claims covering a total area of 1,621.7407 hectares in area 104I.013, described as follows and as shown on table 1. These claims are 100% owned by DeCoors Mining Ltd.

TABLE 1 HOT BATH CLAIMS

<u>Type</u>	Claim Name	<u>Good Until</u>	<u>Area</u> (ha)
Mineral	HOTBATH 1	20131218	34.1429
Mineral	HOTBATH 2	20140503	102.4191
Mineral	НОТВАТН 3	20140514	34.1429
Mineral	HOTBATH 4	20140516	136.5838
Mineral	НОТВАТН 5	20140519	563.4355
Mineral	HOT BATH 6	20140726	136.524
Mineral	НОТВАТН РАТ	20141026	614.4925
	<u>Type</u> Mineral Mineral Mineral Mineral Mineral Mineral	TypeClaim NameMineralHOTBATH 1MineralHOTBATH 2MineralHOTBATH 3MineralHOTBATH 4MineralHOTBATH 5MineralHOT BATH 6MineralHOTBATH PAT	TypeClaim NameGood UntilMineralHOTBATH 120131218MineralHOTBATH 220140503MineralHOTBATH 320140514MineralHOTBATH 420140516MineralHOTBATH 520140519MineralHOTBATH 620140726MineralHOTBATH PAT20141026

Total Area: 1621.7407 ha



FIGURE 2 HOT BATH CLAIM MAP

WEATHER AND VEGETATION

The topography is gently sloping to moderately steep glacier eroded terrain. There are steep sided cirque valleys and some small cirque lakes The streams sampled were generally confined to these cirque valleys Steep razor back ridges and talus slope often occur at the upper slopes of the cirque valleys The vegetation is primarily alpine meadows and minor alpine fir spruce and shrubs On some of the lower elevations sub alpine fir and spruce are common.

The claim group lies almost all above tree line (1500m to 2000m) with several lakes – five connected in the central part of the claim and one in the southeast corner. As most of the property is above tree line numerous helicopter landing spots will occur throughout the claims. Approximately 6 kilometers Northwest of the current property an old abandoned airstrip is noted in the headwaters of the Tanzilla River valley. The Tanzilla River headwaters 350 m west of the claim block flows northwest year round and is a tributary of the Stikine River. River drainage flows to the Pacific Ocean and the Continental Divide between the Pacific and Arctic Oceans lies a short distance to the North. The region has a relatively dry climate, and snow cover in winter is generally moderate. The climate in the area is semi-arid with moderately warm summers and cold dry winters. Typical temperature ranges are from mid to upper 20's C in summer and -20 to -30 C in winter. Precipitation averages about 100 cm. per year.

For the most part vegetation is limited and consists primarily of alpine grasses, flowers and lichen on the plateau with occasional shrubs in wind protected areas. Fieldwork can normally start at lower elevations in early June and at the upper elevations by July. Cold weather, winds and snow squalls make field work difficult at the upper elevations past September although drilling programs have continued well into November at the nearby Red Chris deposit. Colorado's ROK and Teck's GJ where weather conditions are similar.

INFRASTRUCTURE

Dease Lake has locally based helicopter and aircraft with scheduled Air service from Smithers. Smithers and Terrace locally supply this region and travel south on Highway 37 to them is @ 7 hours.

The region has had an active history in mining operations, and has been permitted for mineral exploration with heavy equipment and operators available. Smithers, Terrace, BC and Watson Lake, Yukon, are population centres with over 30,000 people that are within a three- to seven-hour drive, and Dease Lake is 38 kilometers northwest of the Hot-Bath Claims. All these centers have been intimately involved with mineral exploration and mining operations and are able to provide all amenities including police, hospitals, groceries, fuel, helicopter services, hardware and other necessary items. Drilling companies are present in communities nearby while assay facilities are located in Prince George, Smithers, and Vancouver, British Columbia.

The nearest communities are Telegraph Creek and Dease Lake both are resource (mining, logging, and ranching) based communities with an experienced labour force. The communities are supply and service points for fuel, groceries, accommodation and heavy construction equipment. Both also have regular scheduled air and road service.

GEOLOGY

The Dease Lake area is situated within the Stikine terrane, an extensive subduction-generated island arc magmatic system responsible for recurring calcalkaline and/or alkaline plutonic events and associated Cu-Au mineralization, mainly during Late Triassic and Early Jurassic time. Prospective Mesozoic volcanic rocks exposed around the margins of the Bowser Basin form an arcuate belt containing porphyry deposits that include KSM (MINFILE 104B 103), Galore Creek (MINFILE 104G 090) and Shaft Creek (MINFILE 104G 015) deposits to the west, and the Kemess deposits (MINFILE 094E 094) to the east. The Dease Lake study area is located at the apex of this arcuate belt, immediately north of the Red Chris Cu-Au porphyry deposit (MINFILE 104H 005) and adjacent to the Hotailuh batholith, a large composite intrusive complex similar in age to the intrusions hosting porphyry mineralization at the Galore and Shaft Creek deposits. Numerous small plutons intrude mainly Late Triassic arc stratigraphy in the Dease Lake area. Neither the plutons nor the volcano-sedimentary rocks have undergone a thorough regional geological re-evaluation for mineral potential since being mapped by the Geological Survey of Canada in the late 1970s and early 1980s (Gabrielse et al., 1980; Anderson 1983, 1984). Modern detailed bedrock mapping is essential to characterize time-space relationships of this arc segment, which will allow an improved assessment of the potential for mineralization, comparison with mineralized arc segments elsewhere, and integration with the airborne magnetic program. In addition, the project will provide supplementary databases including rock geochemical classification, magnetic susceptibility and geochronology. These data will integrate with regional stream geochemical survey data and airborne geophysics to ensure cost effective exploration targeting for porphyry- style mineralization.

REGIONAL GEOLOGY

In the Middle Jurassic is characterized mainly by sedimentary rocks of Mesozoic basal clastic assemblage and overlie higher grade basement metamorphic rocks. The village of Likely sits along the northeastern margin of the volcanic assemblage and along back arc-continental margin, volcanic-sedimentary facies change.

At least two discrete magmatic events have a strong calc-alkaline affinity and are responsible for at least two episodes of mineralization found in the area.

- 1. The intrusion-related magmatic-hydrothermal mineralization comprises predominantly copper, gold, silver, molybdenum and/or tungsten occurrences.
- 2. Mineral occurrences occur peripheral to the main batholith and along contact zones with mineral occurrences of porphyry copper.

MIDDLE JURASSIC THREE SISTERS

PLUTONIC SUITE

THREE SISTERS PLUTON

a) Tees Creek intrusive: MJ TC Altered Hbl-Fsp-porphyritic hypabyssal intrusive

- b) Three Sisters potassic phase: MJ TSp Bt-bearing granite, Qtz-syenite and Qtz-monzonite with Kfs>Plag. Equigranular 1 mm to 4 mm; often 5-20 mm Kfs porphyritic. Includes pink Bt porphyritic dikes
- c) Three Sisters central felsic phase: MJ TSc Bt and Hbl-Bt (rare Bt-Hbl) Qtz-monzonite and Qtzmonzodiorite with Plag>Kfs. Equigranular, 2-3mm; 4-5 mm Kfs porphyritic in places; dioritic xenoliths locally present
- d) Three Sisters mafic phase: MJ TSm Hbl-rich (minor Bt-Cpx Hbl-rich) Qtz-diorite. Acicular Hbl 0.5-4 mm to 2-7mm; equant Hbl 1-2mm to 4-10 mm
- e) Three Sisters finegrained mafic-interm. Phase: MJ TSf Hbl-Bt Qtz-diorite. Equigranular, 1-1.5 mm, often 10 vol.% 1.5-3 mm Plag porphyritic

PROPERTY GEOLOGY

Over 95% of the Property is covered by a thick mantle of overburden. Rock units in the area include:

LTCH: Cake Hill Pluton Qtz monzonite

MJTSm: Mafic Phase hornblende rich diorite

MJSp/MJTSm Potassic Phase Qtz syenite/Qtz monzonite

MJTSc Felsic Phase Qtz monzonite about 2.0 kilometres west of a batholith of coarse-grained biotitehornblende quartz monzonite, and is probably a satellite intrusion related to the batholith.

Three Sisters potassic phase is defined as (Bt-bearing) granite, Qtz syenite and Qtz monzonite with potassium feldspar. It is equigranular (1 mm to 4 mm_); often 5-20 mm potassium feldspar porphyritic. Includes pink porphyritic dikes. Three Sisters central felsic phase (middle Jurassic) may include rare Biotite-Hornblende, Quartz monzonite and Quartz monzodiorite with potassium feldspar. Equigranular, 2-3 mm; 4-5 mm porphyritic in places; dioritic xenoliths locally present. Three Sisters mafic phase MJ TSM hornblende-rich diorite (to Qtz diorite?). Acicular hornblende 0.5-4 mm to 2-7 mm; equant hornblende 1-2 mm to 4-10 mm. Three Sisters fine- grained mafic phase MJ TSF hornblende diorite (to Quartz diorite?). Equigranular, 1-1.5 mm, often 10 vol.% 1.5-3 mm Pl porphyritic.

The nature of the Beggerlay Creek – Cake Hill contact was reinterpreted, and now includes all hornblende-rich diorite and gabbro up to an abrupt change (over a 10 m covered interval) to titanitebearing, hornblende quartz monzonite of the Cake Hill pluton. Hornblende-rich diorite and gabbro closest to the contact, now assigned to the Beggerlay Creek pluton, are intensely foliated roughly parallel to the trace of the contact. Minor coarse K-feldspar±epidote dikes (unit LT BCP) crosscut the northwestern Beggerlay Creek pluton, and may be related to a 5 by 1 km biotite metasyenite phase of the Beggerlay Creek pluton mapped about 7 km to the east (Read and Psutka, 1990). Coarse K-feldspar dikes, similar to those within the Beggerlay Creek pluton, also crosscut the augite-phyric coherent rocks of the Stuhini Group near the contact with the mafic phases of the Beggerlay Creek intrusion. Intrusive relationships between the Beggerlay Creek and Cake Hill plutons were not observed, however Anderson (1983, pages 84-85, Appendix 2.3c) reports that in two locations a gabbro dike of suspected Beggerlay Creek affinity intrudes quartz monzodiorite of the Cake Hill.

MINERALIZATION

Mineralization hosted in Late Triassic rocks varies widely in host rock, metal tenor and mineralization style and comprises:

- Cu only at the Gnat Pass porphyry-style prospect;
- Au+As±Sb (Cu, Ag reported) hosted in a shear/fault zone at the Dalvenie prospect;
- Au+Cu+Ag massive sulphide vein in felsic plutonic rocks at the newly discovered "Upper Gnat Creek" mineral occurrence;
- Cu±Mo pyritic fault zones in Stuhini volcanics at "Three Sisters south";
- Cu with trace Ag as small bodies within the Cake Hill pluton at "Mat north";
- Cu+Pb+Zn (reported) within stratiform to irregular bodies at the Mat showing; and Cu (and Mo reported) at the vein-hosted Pat showing, found within the Late Triassic Cake Hill pluton, but closely associated with the Three Sisters pluton. Mineralization hosted in the Three Sisters pluton appears less variable, and comprises:
- Cu only at the "Pat west" and "Three Sisters" mineral occurrences;
- Cu±W at the "Three Sisters north" mineral occurrence; and
- Cu+Zn+Pb+Mo reported at the BCR showing.

Geological Fieldwork 2011, Paper 2012-1 117

Possible metal zonation is present in both the "Pat west" and "Three Sisters" occurrences, with relatively large, gossanous, pyrite-dominated zones trending towards smaller quartz vein-hosted, pyrite+copper sulphide occurrences. Assay samples indicate 0.3-0.7% Cu in the copper sulphide-bearing zones, and Cu±W in the possibly related "Three Sisters north" occurrence. The presence of mineralization in both the Late Triassic rocks and the Three Sisters Middle Jurassic (- Early Cretaceous?) pluton is suggestive of at least two mineralizing events within the Hotailuh batholith. Known intrusion-related mineral deposits in the northern Stikine tectonic terrane are predominantly of Late Triassic to Early Jurassic age (e.g. Red Chris, Galore, Shaft, GJ, KSM), and little to no Middle Jurassic to Early Cretaceous deposits have been recognized. Importantly, the presence of mineral showings and occurrences hosted in the Three Sisters pluton suggests that these younger intrusions might deserve more attention than previously received.

LITHOLOGY

The composite Late Triassic to Middle Jurassic Hotailuh batholith occupies 2275 km2 at the centre of the Stikine arch, close to the northern margin of the Stikine terrane in northwestern BC. We present the preliminary results of detailed mapping, geochemical and geochonological sampling aimed at refining the temporal magmatic evolution of the batholith, and building a metallogenic framework that relates mineralization to magmatic events. The project is part of the Geoscience BC funded QUEST-Northwest program developed to stimulate mineral exploration in the northwestern part of the province.

This study confirms that the Hotailuh batholith is prospective for intrusion-related mineral deposits that formed during at least two mineralizing events – an older event at ca. 220 Ma and a younger event at ca. 170 Ma. The Late Triassic calc-alkaline metallogenic event produced the Gnat Pass porphyry Cu and several other Cu and Cu-Au occurrences on the edges of the Hotailuh batholith, and may be temporally

related with Cu mineralization at Schaft Creek further to the southwest. Newly discovered mineral occurrences in Middle Jurassic calc-alkaline plutonic rocks represent a relatively unrecognized metallogenic event that deserves more attention.

GEOPHYSICAL DATA

Aeroquest Airborne conducted a helicopter-borne magnetic survey on Block 1; and Geo Data Solutions GDS Inc. conducted helicopter-borne magnetic surveys on Blocks 2 and 3 of the QUEST-Northwest project area for Geoscience BC (GBC). This report discusses the results a helicopter-borne geophysical survey carried out on behalf of Geoscience BC on their property in British Columbia, Canada. The data used was taken from Block 1: between the communities of Dease Lake and Iskut, BC in the summer and fall of 2011. This airborne magnetic survey was flown by Aeroquest Airborne with a line spacing of 250 m, and the total survey coverage is 27,012 line-km.

The Quest East database downloaded from: http://www.empr.gov.bc.ca/Mining/Geoscience/MapPlace/thematicmaps/Pages/QUEST-Northwest.aspx .



FIGURE 3 QUEST SURVEY BLOCKS



FIGURE 4 QUEST EAST SURVEY BLOCK



FIGURE 5 HOT BATH CLAIM BLOCK OUTLINE ON WINDOWED TMI MAGNETIC MAP

SURVEY SPECIFICATIONS AND PROCEDURES

The survey specifications are summarized in the following table:

Block	Line	Line	Tie Line	Line	Survey	Dates flown
name	Spacing	Direction	Spacing	Direction	Coverage	
	(metres)		(metres)		(line Km)	
East	250	90°/270°	2500	180°/360°	10991.74	Aug13th to Oct28th, 2011
West	250	90°/270°	2500	180°/360°	16020.48	Aug13th to Oct28th, 2011

TABLE 2 FLIGHT LINE SPECIFICATIONS

The survey coverage was calculated by adding up the survey and control (tie) line lengths as presented in the final Geosoft database. The nominal helicopter stinger terrain clearance was 80 m but was periodically higher or lower over due to the rugged terrain and the capability of the aircraft. The scan rate of the helicopter stinger data acquisition was 0.10 seconds.

AIRCRAFT AND EQUIPMENT

This section provides a brief description of the geophysical and auxiliary instruments used to acquire the survey data:

AIRCRAFT An A-star 350B2 helicopter – registration C-FIYM was used as survey platform. The helicopter was owned and operated by Hi-Wood Helicopters Ltd. of Okotoks, Alberta, Canada. The helicopter flew at an average airspeed of 70 knots per hour.

MAGNETOMETER

The following magnetometer was installed inside the stinger: Model: Geometrics G823A Type: Airborne cesium-vapor magnetometer Sensitivity: 0.01 nT Sample rate: 10Hz Magnetic Compensator: The compensator employed was a RMS Data Acquisition & Adaptive Aeromagnetic Real- TIme Compensator (DAARC500). Compensation is achieved by combining the frequency measurement from any continuous reading sensor (Cs, K, He) with the measurements of analog outputs of a tri-axial fluxgate magnetometer. A proprietary algorithm combines these measurements and eliminates most of the influence caused by airframe movement through the magnetic field – pitch, roll yaw and aircraft heading.

MAGNETIC BASE STATION MODEL:

Geometrics G823A Type: portable Cesium magnetometer Sensitivity: 0.01nT Sample rate: 1Hz A digital recorder is operated in conjunction with the base station magnetometer to record the diurnal variations of the earth's magnetic field. The clock of the base station is synchronized with that of the airborne system using GPS data to permit subsequent removal of diurnal drift.

ALTIMETERS

Radar altimeter Manufacturer: Terra Type: TRA 3000 Radar Altimeter and TRI 40 Indicator Sensitivity: 5% @200ft

Barometric altimeter Manufacturer: Honeywell Type: PPT High Accuracy: Achieves +/0.05 Full-Scale, Including Temperature Effects over -40 to +85°C

VIDEO TRACKING AND RECORDING SYSTEM

A wide angle Sanyo video camera was connected to Archos video recorder to provide the image. Using a video overlay board (Overland Technology Inc.) the GPS time is recorded continuously and is displayed on the margin of each image. This procedure ensures accurate correlation of digital data with respect to visible features on the ground.

GPS NAVIGATION SYSTEM

Navigation is carried out using a GPS receiver, an AGNAV GUIA system for navigation control, and AeroDAS data acquisition system which records the GPS coordinates. The x-y-z position of the aircraft, as reported by the GPS, is recorded at 0.2 second intervals. The system has a published accuracy of less than 3 metres. A recent static ground test of the Mid- Tech WAAS GPS yielded a standard deviation in x and y of less than 0.6 metres and for z less than 1.5 metres over a two-hour period.

DATA PROCESSING AND PRESENTATION

BASE MAP

The geophysical maps accompanying this report are based on positioning in the NAD83 datum. The survey geodetic GPS positions have been projected using the Universal Transverse Mercator projection in Zone 09 North. A summary of the map datum and projection specifications is given following:

- Ellipse: Clarke 1866
- Ellipse major axis: 6378206.4
- Inverse Flattening: 294.9787
- Datum: NAD83
- Map Projection: Universal Transverse Mercator Zone 09 North
- Central Scale Factor: 0.9996
- False Easting, Northing: 500,000m, 0m For reference, the latitude and longitude in WGS84 are noted on the maps.

MAGNETIC COMPENSATION TEST

Test lines were flown to check the real time magnetic compensation, in four cardinal directions corresponding to the survey line direction. The compensation test was carried out near Dease Lake, BC and flown approximately 10,000 ft AGL to ensure the sensor was completely removed of ground effect.

TOTAL FIELD MAGNETICS

The total field aeromagnetic data are corrected for the diurnal variation, by subtracting the base station magnetic data (low pass filtered to remove spikes due to cultural interference). Then the line data was corrected for any remaining small levelling errors. The geophysical data are interpolated onto a regular grid using bi-directional interpolation technique. The gridded data was micro-levelled to remove small amplitude, in between flight line, levelling errors. The resulting grid is suitable for generating contour maps of excellent quality.

Magnetic databases: Column Units Description X m UTM Easting (NAD83, Zone 07N/08N) Y m UTM Northing (NAD83, Zone07N/ 08N) Ralt m Radar Altitude Galt m a.s.l. GPS Elevation DTM m a.s.l. Digital Terrain Model using radar altimeter data Lalt m Laser Altitude Long_wgs84 Longitude WGS84 (decimals degree) Lat_wgs84 Latitude WGS84 (decimals degree) UTCTime HH:MM:SS.ss UTC Time BASEMAG nT Basemag value Mag_raw nT Raw uncompensated mag Mag_cmp nT Compensated mag Mag nT Diurnal Corrected compensated Magnetic data TMI nT Levelled Magnetic data Fid Fiducial Flight Survey flight number Line Line number Vx pT Magnetic vector x component Vy pT Magnetic vector y component Vz pT Magnetic vector z component

PREVIOUS WORK

Although several assessment reports (e.g. ARIS 104I 034,104I 043) have reported work in the area no previous work has been done on the immediate area of the Hot Bath claims.

Other reported work in the area include:

PAT (MINFILE 104I 043) The Pat copper-molybdenum showing is centred around a drift covered valley north of peak 2196 m. In addition to copper ± molybdenum soil anomalies, several small mineralized outcrops have been described to the south and southeast of the valley (Sadlier-Brown and Chisholm, 1971; Sadlier-Brown and Nevin, 1977). The mineralization reported by these authors comprises disseminations and siliceous veins carrying chalcopyrite and/or molybdenite. In one outcrop, mineralization is characterized by 1-10 mm pyrite±copper sulphide veins with silicified haloes. An assay sample from this location returned 0.3% Cu and slightly elevated Au and Ag (11BVA13-74 in Table 2). The veins are hosted by biotite-hornblende quartz monzonite and quartz monzodiorite, most likely related to the Cake Hill pluton. Biotite quartz monzonite and quartz monzodiorite, interpreted as the central felsic phase of the Three Sisters pluton, is exposed 100 m to the northeast of this mineral occurrence. The Pat occurrence is located east of the main Hot Bath claim block. MAT (MINFILE 104I 034) The Mat copper-lead-zinc showings are located in a deeply incised forested valley system on the southern margin of the Cake Hill pluton, several kilometres north of the Stikine River. The area south and southwest of the showing is part of the Stikine River Provincial Park. Poorly exposed fine grained, stratified sedimentary rocks are found in the valleys and are overlain by more competent augite-phyric coherent rocks exposed at topographically higher levels (Figure 3f). Both the sedimentary and volcanic rocks, as well as surrounding foliated hornblende diorites and gabbros, ultramafic rocks and hornblende quartz monzonites, have been reported to host copper, lead and/or zinc sulphide occurrences (McAusland, 1971). In addition, a soil survey (McAusland, 1971) indicated moderately elevated values of nickel (>300 ppm) over part of the survey area, likely related to occurrences of ultramafic rocks. We identified several sulphide occurrences in the fine grained sedimentary rocks, and one within the Cake Hill pluton (see "Mat north" new mineral occurrence). The mineralization within the sedimentary rocks occurs in laminated to very thinly bedded siltstones to medium- grained sandstones, and forms stratiform and more irregular-shaped bodies up to 20 m wide. The sulphides occur as fine to very fine grained disseminations, stratiform horizons and/or within veinlets. Silicification and/or quartz-pyrite veins occur locally. No copper oxides, copper sulphides, galena or sphalerite were observed, possibly due to their very fine grain size.

New mineral occurrences

Eight new mineralized and/or alteration zones were discovered within the Hotailuh batholith. Mineralized samples were collected and submitted for base and precious metal assay analysis. Pending further petrographic work, the locations have been described as 'mineral occurrences' rather than 'showings'.

TRIASSIC OCCURRENCES

Four of the new zones are hosted in probable Late Triassic rocks, and include the "Upper Gnat Creek", "Mat north", "Gnat Lakes ultramafite" and "Three Sisters south" mineral occurrences. The "Upper Gnat Creek" occurrence is located 1.5 km south of Upper Gnat Lake, on a brush and forest- covered ridge about 750 m east of the British Columbia railroad grade. The occurrence comprises a 1-10 cm wide vein of massive sulphides (locally widening to a 20 by 20 cm pod) with associated copper oxide staining, within well-foliated Cake Hill plutonic rocks. The wider mineralized zone is associated with brecciated wallrocks. An assay sample of the massive sulphide breccia returned significant results of 1.7 g/t Au, 82 g/t Ag, >1 % Cu and 483 ppm Bi. An outcrop containing copper sulphide-bearing veinlets was found in the same hostrock about 140 m further southeast along the ridge. The "Mat north" mineral occurrence is found on the east face of an alpine ridge, a couple of kilometres north of the Mat showing. It is hosted by the Late Triassic Cake Hill pluton, and comprises decimetre-size pods containing about 5% disseminated sulphides (pyrite, possible bornite; chrysocolla and malachite staining common). One assay sample returned >1% Cu and slightly elevated Ag, Au and Bi. Abundant coarse grained euhedral biotite immediately surrounds the mineralized pods, but is absent further away in the plutonic rocks. The occurrence might be similar to one described by McAusland (1971) where bornite is found in epidote stringers within the Cake Hill pluton. The "Gnat Lakes ultramafite" occurrences occur within, or immediately surrounding, the Gnat Lakes ultramafite. They are spatially associated with significant topographic lineaments, interpreted as faults, and might be genetically linked to the Dalvenie prospect. Subcrop of intensely silicified and sericite (?) altered, fine grained Stuhini sedimentary rocks contains several percent disseminated pyrite and occurs along strike of a topographic lineament. Several ultramafic outcrops contain disseminated pyrite, either directly within ultramafic rocks or associated with later crosscutting felsic dikes. Only one of three samples assayed returned slightly elevated copper

values. In addition, the easternmost exposures of the ultramafic body contain several percent sulphides and are associated with another north trending topographic

Mineralization at "Upper Gnat Creek". Intensely pink- orange altered and brecciated plutonic rock clasts within massive sulphide matrix.

The "Three Sisters south" mineral occurrence is hosted in a kilometre size Stuhini inclusion within the leucocratic Cake Hill pluton. Mineralization consists of several zones with 1-5% pyrite disseminated and in veinlets, locally associated with green actinolite. The linear and recessive nature of the gullies suggests that the ≤20 m-wide pyritic zones represent north-northwest to northeast striking subvertical faults cutting the Stuhini succession. One of two assay samples returned 0.3% Cu, 0.03% Mo and slightly elevated W.

THREE SISTERS OCCURRENCES

The remaining four new zones, the "Pat west", "Three Sisters", "Three Sisters north", and "BCR north" mineral occurrences, are hosted in Middle Jurassic (and/or Early Cretaceous?) intrusive rocks of the Three Sisters pluton. The "Pat west" occurrences are subvertical, roughly east to northeast-trending zones hosted in the Three Sisters pluton, and are spread over the entire local map area. A one metre wide zone exposed on the easternmost ridge contains quartz+pyrite±copper sulphide veins hosted in biotite guartz monzonite and guartz monzodiorite of the central felsic phase, and returned assay values of 0.7% Cu (11BVA14-82). The mineralized central and western gossanous exposures are larger in aerial extent (30-50 m wide, \geq 200-300 m long), contain disseminated pyrite and/or quartz + pyrite veins, and lack copper sulphides. An assay from the latter location did not return any anomalous values. The "Three Sisters" occurrences are named after the group of peaks on which the fine grained mafic phase of the Three Sisters pluton is exposed. They are found within the northern margin of the fine grained mafic phase, and within the adjacent central felsic phase and leucocratic Cake Hill pluton. A brownorange weathering zone, up to 200 m wide and 2 km long, is exposed within the Three Sisters central felsic phase close to contact with the fine grained mafic phase. The zone contains abundant westnorthwest striking and steeply north dipping goethite-coated fractures after pyrite, and pyrite is also disseminated throughout the hostrock. Three small exposures with quartz+pyrite±chalcopyrite±epidote veins, locally associated with in situ brecciation, are found several hundred metres to the south and southwest of this zone and are hosted in the fine grained mafic phase. One assay sample from the latter location returned 0.35% Cu and slightly elevated Au. An assay sample from the gossanous pyrite zone returned no anomalous values. The "Three Sisters north" occurrence is hosted within the Three Sisters central felsic phase. The rocks are intensely veined (roughly 5% veins by volume in a several metre wide interval), with one 10 cm wide east- southeast oriented, steeply north dipping, epidote+actinolite+sulphide vein. The assay results for this vein indicate 0.36% Cu, >200 ppm W and slightly elevated U. The "BCR north" occurrence is situated on the British Columbia railroad grade 7 km south of Upper Gnat Lake. It is associated with irregular bodies of (potassic?) altered hornblendefeldspar porphyry (Tees Creek intrusive) intruding the Three Sisters potassic phase. Minor pyrite is evident in this location, disseminated in both the fringes of the Tees Creek and adjacent potassic phase

intrusive.

TABLE 3 GEOSCIENCE BC SAMPLE RESULTS

				Units	ppb	ppm	ppm	ppm
				Detection				
				Limit	2	0.1	0.1	0.1
Station no.	UTM E	UTM N	Unit	geol	Au	Ag	Cu	Мо
Pat								
11BVA13-74	470681	6449148	LT	CH?	32	1.1	2962	2.2
11BVA14-82	467697	6447881	MJ	TSc	21	0.7	7079	0.1
11BVA15-90	466323	6447968	MJ	ТЅр	<2	<0.1	131	2

The "Pat west" occurrences are subvertical, roughly east to northeast-trending zones hosted in the Three Sisters pluton, and are spread over the entire local map area (Figure 3b). A one metre wide zone exposed on the easternmost ridge contains quartz+pyrite±copper sulphide veins hosted in biotite quartz monzonite and quartz monzodiorite of the central felsic phase, and returned assay values of 0.7% Cu (11BVA14-82). The mineralized central and western gossanous exposures are larger in aerial extent (30-50 m wide, ≥200-300 m long), contain disseminated pyrite and/or quartz + pyrite veins, and lack copper sulphides. An assay from the latter location (11BVA15-90) did not return any anomalous values.

Geological units The Hotailuh batholith comprises a number of different plutons and plutonic phases. It can be subdivided into three plutonic suites, the Late Triassic (ca. 222-226 Ma), Early Jurassic (ca. 184-190 Ma) and a Middle Jurassic–Early Cretaceous suite (ca. 165-171 Ma and ca. 117 Ma, respectively). The Late Triassic plutonic suite comprises, in decreasing age, the Gnat Lake ultramafic to mafic bodies, Cake Hill felsic pluton and Beggerlay Creek ultramafic to mafic pluton. Similar mineralogy, texture, compositional variation and magnetic susceptibility may indicate a genetic link between the Gnat Lake and Beggerlay Creek plutons. Limited evidence of crosscutting relationships suggest that the Gnat Lake ultramafite is older than the Cake Hill pluton, and earlier studies by Anderson (1983) suggest that the Beggerlay Creek pluton is younger than the Cake Hill pluton. However, demonstrable crosscutting relationships are rare, and perhaps all Late Triassic mafic-ultramafic plutonic rocks are roughly age equivalent. The Late Triassic plutonic suite is spatially associated with, and in places intrudes, poorly exposed and poorly dated, intermediate-mafic volcanic and the Three Sisters fine grained mafic phase, showing orange-brown altered zone of the "Three Sisters" mineral occurrence. Zone is intensely goethite-stained, contains abundant disseminated pyrite and pyrite in steeply dipping, west-northwest striking fractures. The Three Sisters central felsic phase (TSC) is exposed along the ridge in the foreground; the Three Sisters fine grained mafic phase (TSF) is exposed on the right-hand peak. Lightcoloured scree below this peak may be an inclusion of the Cake Hill leucocratic phase (CHL) sedimentary rocks of the Triassic Stuhini Group. The Early Jurassic plutonic suite comprises the McBride River felsic pluton exposed on the easternmost edge of the batholith. An area within the eastern part of the batholith has been reinterpreted as a large apophysis of the McBride River pluton. The pluton has contact metamorphosed Lower Jurassic, fine grained, stratified sedimentary rocks. The Three Sisters pluton comprises at least four phases, namely the early fine grained mafic phase, a subsequent mafic phase, central felsic phase, and a crosscutting potassic phase. Preliminary U-Pb zircon crystallization ages confirm the Middle Jurassic age for the coarse grained Three Sisters potassic phase. However, an Early Cretaceous age for the Three Sisters central felsic phase raises the possibility that part or all of this pluton is much younger than previously recognized. Northwest of Lower Gnat Lake, a granitoid clastbearing conglomerate nonconformably overlies the Cake Hill pluton, and is correlated with Lower(-Middle) Jurassic, quartz-bearing, coarse grained sedimentary rocks reported within the immediate area. The latter are overlain by rocks previously assigned to the Triassic Stuhini Group (Anderson, 1983; Gabrielse, 1998) that in light of new U-Pb detrital zircon data are reinterpreted here as Middle Jurassic sedimentary and volcanic rocks (Iverson et al.,).

GEOPHYSICAL DATA PROCESSING PROCEDURE

The data were downloaded into a new Geosoft database and exported to Petros Eikon's QC Tools geophysical data processing software for quality control, IGRF correction and derivative calculation. The immediate area of the Hot Bath claims was windowed out of the original Quest East magnetic data and a subset database was created. The subset data was re-gridded and grids for TMI, and horizontal derivatives dx (line direction), dy (north-south) and dz (vertical) components were gridded. The regional geology map was geographically registered to NAD 83 in MapInfo and imported as an overlay onto the subset grids.

ANALYTICAL METHODS

An Analytical Signal grid (figure 6) was calculated from the Quest East magnetic data. Derivative vectors were also calculated using FFT and entered into the database as TMI_dx, TMI_dy and TMI_dz channels. The DTM topographic channel was gridded and a 3D surface was created of the topography of the windowed area. The magnetic data were draped on the topographic grid to create a 3D image of the magnetic data on topography. The 3D image of topography (figure 8) with magnetic data was interactively rotated as an aid to interpretation of the magnetic signal. The data were interpreted in conjunction with the geological information available from Geoscience B



FIGURE 6 ANALYTICAL SIGNAL OF TMI MAGNETIC DATA, QUEST EAST

DISCUSSION AND CONCLUSIONS

The magnetic data show a very good correlation with the mapped geology of the area. However, the mapping indicates an east-west contact between the A circular structure is evident in the total magnetic intensity data. A major fault lies to the west of the Hot Bath study area.



FIGURE 7 TOTAL MAGNETIC INTENSITY WITH INTERPRETED GEOLOGY



FIGURE 8 TMI MAGNETIC DATA DRAPED ON TOPOGRAPHY LOOKING NORTH-WEST



FIGURE 9 HOT BATH CLAIMS ON TOPOGRAPHY

The three dimensional topographic image (figure 8 and 9) looking northwest has been draped with the total magnetic intensity data. This image clearly show the fault striking northwest on the west of the study area. In the centre of the claim block is a circular depression that may reflect a rock type difference. The topographic and magnetic ridge that surrounds this depression matches the

mapped geology. This image supports the interpretation of a ringed intrusive in the centre of the Hot Bath claim block.

The circular rim of magnetic high is matched in the by the topography. This feature is possibly enhanced by the faults the most prominent of which is the north-north-west trending structure on the west border of the claim block. A north-east topographic depression curves to the north-west creating a triangular island of topographic high. Drainage follows these depressions that are interpreted to be fault related.

The topographic support aside the magnetic data clearly indicated a separate unit of high magnetic rocks surrounding a magnetic low with an elevated magnetic centre. This is a characteristic signature of zoned intrusive where the magnetic high rocks are related to the mafic phase and the magnetic trough related either to a felsic phase or magnetite destruction due to hydrothermal alteration. It is this magnetic low that accentuates the circular feature more than the magnetic high.



FIGURE 10 TOTAL MAGNETIC INTENSITY OF HOT BATH AREA

The total magnetic intensity data has been windowed from the Quest East dataset and re-gridded, contoured and shadowed (figure 10). This image shows the tertiary Cake Hill rocks across the

northern quarter of the map as relatively low magnetic relief. The heart-shaped magnetic depression in the centre of the map is the area of interpreted intrusive rocks surrounding a magnetic plug in the centre.



FIGURE 11 MAGNETIC DERIVATIVE DX HORIZONTAL VECTOR

The magnetic derivative dx map (figure 11) was calculated from the windowed data for the Hot Bath project area. The x direction horizontal magnetic vector is in the x-direction parallel to the



flight line direction. This presentation is most sensitive to magnetic features with a north-south strike.

FIGURE 12 MAGNETIC DERIVATIVE DY HORIZONTAL VECTOR

The magnetic derivative dy map (figure 12) was calculated from the windowed data for the Hot Bath project area. The y direction horizontal magnetic vector is in the y-direction perpendicular to the flight line direction. This presentation is most sensitive to magnetic features with an east-west strike. Tie line leveling differences can be seen in the data however this does not seriously affect the interpretability of the data. The geological contacts between the tertiary Cake Hill and the Jurassic Three Sisters rocks as interpreted on the geological maps is supported by the magnetic data.



FIGURE 13 MAGNETIC DERIVATIVE DZ VERTICAL VECTOR

The dz or vertical magnetic vector calculated from the windowed data give the clearest picture of the magnetic features at depth (figure 13). It is from this presentation that the assumed intrusive structure in the centre of the claim block is seen most clearly. This data was not shadowed in this



image as it was in figure 11 and other images of the TMI shadowed data included in this report (figure 14). In this figure, the geological units have been superimposed and show an excellent correlation to the magnetic data.

FIGURE 14 SHADOWED TOTAL MAGNETIC INTENSITY MAP

The total magnetic intensity data from the windowed database is presented here as shadowed image (figure 14).

The geological map of the Hot Bath study show a ring or outcrops with an inner ring defined by magnetic low zone, topographic depression and drainages. The mapping show at the centre of these rings is an outcrop of Late Tertiary Cake Hill. In the magnetic data the late Tertiary Cake Hill rocks are generally of low magnetic relief. This outlier has a distinctly different magnetic characteristic to extensive area of late Tertiary rock mapped to the north of the study area.

The magnetic data supports the general evidence for a geological contact roughly east-west across the study area. However, the magnetic data show a continuation of magnetic high data through the interpreted middle Jurassic Three Sisters mafic unit. This unit can be seen most clearly in the dy derivative magnetic data. However, in the central area of the ring structure it is discontinuous. This suggests that it may be intruded by a pluton of different age and magnetic characteristics. The Quest Northwest program samples outcrops from the outer ring of a circular structure defined by the magnetics.



FIGURE 15 TOTAL MAGNETIC INTENSITY OF HOT BATH AREA

The total magnetic intensity map (figure 15) show magnetic high ridge surrounding a relative magnetic low with a central magnetic high. The magnetic low and surrounding magnetic high ring interrupts the dominant east-west orientation of the geology.



Figure 16 is a detailed geological interpretation from the Quest Northwest study. The sample locations correspond with the interpreted ring of intrusive coincident with the circular magnetic and topographic high.

FIGURE 16 HOT BATH AREA GEOLOGY



FIGURE 17 SIMPFIED DRAWING OF GEOLOGY AND INTERPRETED RING STRUCTURE FROM MAGNETICS

Figure 17 is a simplified drawing of the interpreted ringed intrusives surrounding an intrusive centre indicative of a mineralized porphyry. This interpretation is supported by geological mapping, rock geochemistry that showed high values of copper and the magnetic data that suggests an intrusive underlying the Three Sisters volcanic rocks.

BIBLIOGRAPHY

- 1. Geological Fieldwork 2011, Paper 2012-1 115
- Logan, J.M., Diakow, L.J., van Straaten, B.I., Moynihan, D.P. and Iverson, O. (2012): QUEST-Northwest mapping: BC Geological Survey Dease Lake Geoscience Project, northern British Columbia (NTS 104I, J); in Geoscience BC Summary of Activities 2011, Geoscience BC, Report 2012-1, p. 5–14.
- QUEST-Northwest mapping, Geoscience, Dease Lake Geoscience Project, Part I: Geology and Mineralization of the Dease Lake (NTS 104J/08) and East-Half of the Little Tuya River (NTS 104J/07E) Map Sheets, Northern British Columbia by J.M. Logan1, D.P. Moynihan2 and L.J. Diakow1
- 4. QUEST-Northwest mapping, Geoscience, Dease Lake Geoscience Project, Part IV: Tsaybahe Group: Lithological and Geochemical Characterization of Middle Triassic Volcanism in the Stikine Arch, North-Central British Columbia by O. Iverson1, J.B. Mahoney1 and J.M. Logan2
- 5. van Straaten, B.I., Logan, J.M., and Diakow, L.J, Geological mapping, Dease Lake, Dease Lake Geoscience Project, Part II: Preliminary Report on the Mesozoic Magmatic History and Metallogeny of the Hotailuh Batholith and Surrounding Volcanic and Sedimentary Rocks
- 6. van Straaten, B.I., Logan, J.M., and Diakow, L.J., MESOZOIC MAGMATISM AND METALLOGENY OF THE HOTAILUH BATHOLITH, NORTHWESTERN BRITISH COLUMBIA Ministy of Energy, Mines and Natural Gas, British Columbia Geological Survey, Victoria, B.C., Canada

AUTHOR'S CERTIFICATE

I, JOHN BUCKLE, of the city of Vancouver, in the Province of British Columbia, do hereby certify that:

I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (Geophysics) and with the Association of Professional Geoscientists of Ontario.

I am a Consulting Geoscientist of Geological Solutions, with offices at

I am the author of this report, titled: Interpretation REPORT ON Airborne Geophysical Data from Quest East Survey Covering the Hot Bath Property.

I further certify that:

1. I am a graduate of York University of Toronto (1980) and hold a B.Sc. degree.

2. I have been practicing my profession for the past 35 years, and have been active in the mining industry for the past 40 years.

3. This report is compiled from data obtained from Geoscience BC.

John Buckle, P.Geo. Geophysicist

November 2, 2013

Geological Solutions 1116-1450 Chestnut St., Vancouver, BC V6J 3K3



APPENDIX: STATEMENT OF EXPENDITURES

DeCoors Mining Corp.

STATEMENT OF EXPENDITURES

GEOLOGICAL SOLUTIONS

Geophysical Consulting for DeCoors Mining Corp. October 27 to November 2, 2013:

- Download data, images and reports
- Research of regional and local geology
- Georeference the images and UTM register them for Geosoft
- Import data maps TMI and VD
- The First Vertical Derivative of Total Field Magnetic map at 1:100,000 Block 2 of Quest Northwest Project in NTS sheet 104.
- Data processing, data download, analysis and database creation
- Data quality review and correction
- Windowing of data to Hot Bath claim block
- Regrid windowed data
- Calculate derivatives dx, dy and dz from total intensity magnetic data
- Create interpretation maps and images
- Interpretation of geophysical data
- Correlation of geophysical and geological data
- Co-interpret geophysical, geochemical and geological data
- Report on data and recommendations

Days 7 days @ \$700 per day \$4,900

GST 294

\$5,194

Geophysicist: Geological Solutions John Buckle, P. Geo, P. Geoph.