

Ministry of Energy, Mines & Petroleum Resources Mining & Minerals Division BC Geological Survey

TYPE OF REPORT [type of survey(s)]: Airborne Geophysical

S.

**Assessment Report Title Page and Summary** 

**TOTAL COST:** \$8,415.00

AUTHOR(S): Alexander Walcott, Peter Walcott

SIGNATURE(S):

# STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5580014

PROPERTY NAME: Henry Lee Creek

CLAIM NAME(S) (on which the work was done): 1035123,1036765

COMMODITIES SOUGHT: Cu, Mo, Au

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Omineca	NTS/BCGS: <u>94D/01,93M/16</u>		
LATITUDE: <u>56</u> 0.462 "LONGITUDE: <u>129</u>	o 19.4 " (at centre of work)		
OWNER(S):			
1) Alexander Walcott	2)		
MAILING ADDRESS:			
38-181 Ravine Dr,			
Port Moody, BC, V3H 4T3			
OPERATOR(S) [who paid for the work]:			
1) Alexander Walcott	2)		

**MAILING ADDRESS:** 

As Above

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 27957

Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (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 81 kilometres		1035123,1036765	\$8,415.00
GEOCHEMICAL (number of samples analysed for) Soil			
Silt			
Rock			
Other			
DRILLING			
(total metres; number of holes, size) Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/ti	ail		
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	\$8,415.00
		TOTAL COST:	

BC Geological Survey Assessment Report 36025

#### EVENT # 5580014

#### AN ASSESSMENT REPORT

#### ON

#### **HELIBORNE MAGNETIC SURVEYING**

#### HENRY LEE CREEK PROPERTY KAZA LAKE AREA, BRITISH COLUMBIA

OMINECA M.D. 56° 0.462'N, 126° 19.4'W NTS 94D/01,93M/16

**Claims:** 

1035123,1036765

Work Dates: August 17th, 2015

#### FOR

#### ALEXANDER WALCOTT VANCOUVER, BRITISH COLUMBIA

#### BY

#### **ALEXANDER WALCOTT, B.Sc**

#### PETER E. WALCOTT, P.Eng.

PETER E. WALCOTT & ASSOCIATES LIMITED Coquitlam, British Columbia

#### **FEBRUARY 2016**

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# APPENDIX I

Cost of Project Personnel Employed on Project Certification References

# **ACCOMPANYING MAPS**

Claim and Flight Line Map	Scale 1:10,000
Contours of Total Field Intensity	Scale 1:10,000
Contours of Calculated Vertical Gradient	Scale 1:10,000
Contours of Total Field Intensity with Historic Copper Soil Values	Scale 1:10,000

# **INTRODUCTION.**

On August 17<sup>th</sup>, 2015, Peter E. Walcott & Associates Limited undertook a heli-borne magnetic survey over the Henry Lee property for Alexander Walcott.

The survey was designed to cover an area on Henry Lee creek, where a historic soil geochemical survey identified elevated levels of copper, molybdenum and gold potentially related to porphyry mineralization.

The survey consisted of some 81 line kilometers of airborne magnetics flown with a nominal line spacing of some 200 meters on east – west orientated lines, with north-south tie lines spaced with a nominal line spacing of some 1,000 meters.

# PROPERTY LOCATION AND ACCESS

The Henry Lee Property is located some 145 kilometres northeast of the community of Smithers, British Columbia within the Omineca Mining Division.

The property is located on the Nechako Plateau in relatively gentle terrain, with light to moderate tree cover.

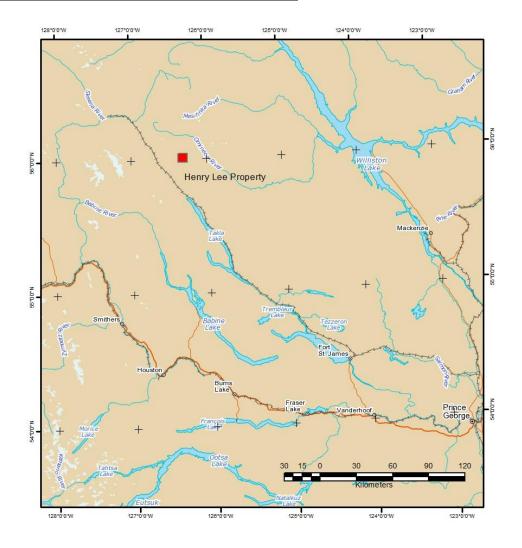
Access is obtained from Ft. St. James, via a network of resources roads to Silver Creek, and then by helicopter from Silver Creek, where the crew was housed for the duration of the survey.

Alternatively, access can be gained via truck by the Leo creek and Driftwood FSR road respectively, and then by a network of spur roads to Kaza Lake.

Title Number	Issue	Good	New Good	Area	Owner
	Data	to Date	to Date	(Ha)	FMC
1035123	2015/03/31	2016/03/31	2018/08/15	398	129969
1036765	2015/06/17	2016/06/17	2018/08/15	253	129969

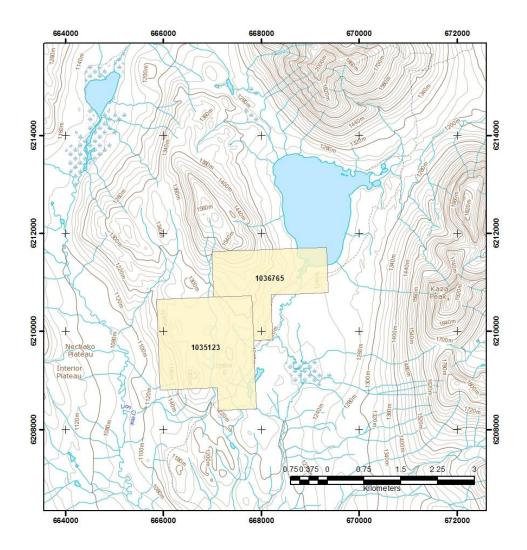
**Claim Information Summary** 

## PROPERTY LOCATION AND ACCESS con't



Property Location Map

# PROPERTY LOCATION AND ACCESS con't



Claim Location Map With Current Tenures

# PROPERTY LOCATION AND ACCESS con't



Flight Line Location Map

## PREVIOUS WORK

The Henry Creek property has only seen minimal recorded exploration work over the years.

While the property was included in the land holding of various companies over the years, the majority of the work in the area was focused on the Northstar, and Kaza Copper occurrences some 7 kilometers northeast and two kilometers to the south respectively.

The earliest recorded work within the survey area dates to 1969 when Bayfield Mines Ltd., conducted geological and geochemical sampling on the west side of Kaza Lake following up on a reconnaissance silt and soil sampling program conducted in 1967.

No other recorded work over the Henry Creek project can be located until 2004 when Northern Hemisphere Development Corporation under took reconnaissance silt and soil geochemistry and geological mapping over the core of the Henry Creek Property which returned encouraging results.

Subsequently in 2005 a detailed soil geochemistry program was then conducted over the core of the property which return anomalous values in copper, molybdenum and gold soil geochemistry, along with geological mapping. While geochemical signatures where that of porphyry style mineralization, alteration and rock textures did not support this thus no further work was carried out by Northern Hemisphere over the survey area.

In 2012, Blind Creek carried out a MMI soil geochemistry program immediately to the south of the property, and defined a number of weak geochemistry anomalies.

For further information the reader is referred to the Government of British Columbia Aris website.

# **GEOLOGY AND MINERALIZATION**

The Henry Lee Creek property is situated within the Intermontane Belt of the Canadian Cordillera. The property and area is underlain by Stikine Terrain consisting of the following geological units.

Takla Group, Savage Mountain Formation – Triassic aged volcanic rocks

Hazelton Group, Telkwa Formation – Jurassic aged volcanic rocks.

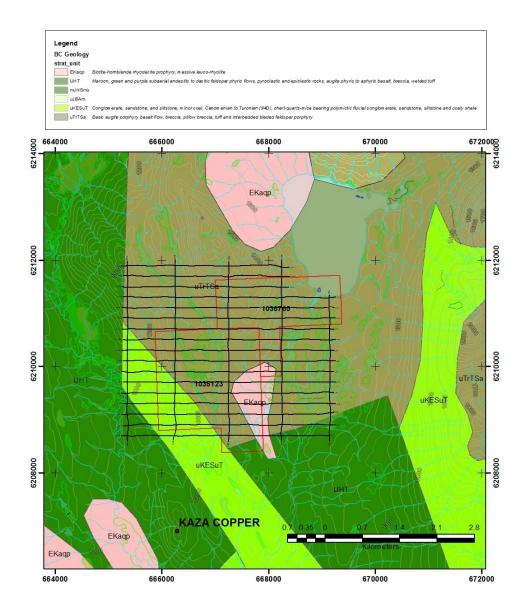
Sustut Group, Tango Creek Formation – Upper Cretatceous to Eocene ages sedimentary rocks.

Kastberg Plutonic group – Eocene aged intrusive rocks.

The property is centered on a large Kastberg Suite, quartz monzodioritic stock, hosted by Lower Jurassic Hazelton Group, Telkwa Formation calcareous basalts and feldspar porphyritic basalts. (Schulze, 2005)

Within the property boundary, two types of mineralization were previously observed; intrusive hosted chalcopyrite-molydbenite enriched quartz veining and copper-gold-molybdenite skarn mineralization within volcanic country (Schulze, 2005)

## GEOLOGY AND MINERALIZATION cont'd.





#### **PURPOSE**

The heli-borne magnetic survey conducted over the Henry Lee Creek property was designed to generate property wide magnetic coverage, along with attempt to map discrete magnetic features and/or structures potentially associated with a historic copper, gold, and molybdenum soil geochemistry anomaly in the central portion of the property.

# SURVEY SPECIFICATIONS.

## The Airborne Magnetic Survey.

The airborne magnetic survey was conducted using a bird type system towed on a 65 foot line by a Bell Jet Ranger 206B CF-JOR operated by Fireweed Helicopter Ltd. of Whitehorse, Yukon.

The bird unit consists of three main components – C-824 Cesium Magnetometer manufactured by Geometrics San Jose, California, AR3000 Laser Range Finder manufactured by Acuity of Portland, Oregon and a 19x GPS manufactured by Garmin International Inc. of Kansas City, Kansas.

The C-824 Cesium Magnetometer is a highly sensitive magnetic sensor capable of providing sensitivity up to 0.01 nT and sampling rates up to 1000 Hz. On this survey a sampling rate of 50 Hz was employed.

The respective components were in turn connected to the helicopter via a shielded multiconductor cable within the tow line for power and data transmission to the logging units on the helicopter.

Flight line navigation data was obtained using Hemisphere R330 GNSS receiver with a 10 Hz update rate.

Data logging and navigation were carried out utilizing Geometrics MagLogPro software on a Panasonic CF-19 Toughbook computer with a secondary 7" daylight viewable pilot navigation monitor.

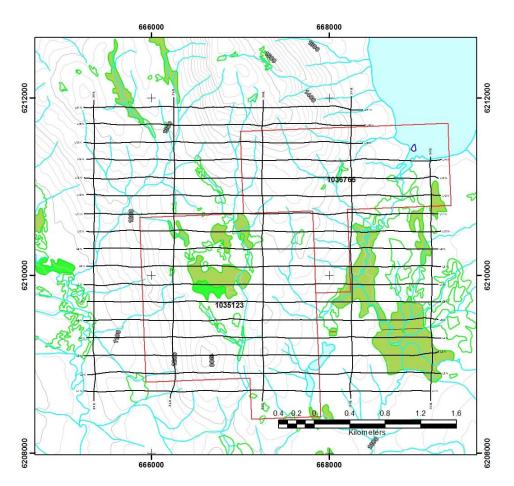
In addition to the airborne unit the survey also utilized two GSM 19 proton precession magnetometer manufactured by GEM Instruments of Richmond Hill, Ontario as base magnetometers. These instruments measure variations in the total intensity of the earth's magnetic field to an accuracy of plus or minus one nanotesla.

## **SURVEY SPECIFICATIONS cont'd**

The survey coverage consisted of some 17 flight lines orientated at 0/090 and 5 orthogonal tie lines orientated at 000/180 azimuths over the respective area as seen below.

The survey was carried out with a mean bird height of some 44 meters.

Survey Area	# of Lines (EW)	# of TieLines (NS)	Total Distance
Henry Lee Creek	17	5	81 km



Henry Creek - Flight Lines

Peter E. Walcott & Associates Limited Geophysical Services 2015 Heliborne Magnetics Survey Henry Lee Property, B.C.

## DATA PROCESSING AND PRESENTATION.

The data was first exported from MagLogPro, where the various sensor inputs were merged into Geosoft compatible ASCII files. This merged dataset was then loaded into Geosoft Oasis Montaj for data reduction and processing.

The data was first corrected for diurnal magnetic drift, utilizing the magnetic base stations. The data was then lag corrected to account for positioning errors due to instrument delay and other positional errors. Tie line levelling was then undertaken prior to gridding.

Gridding was then undertaken on the levelled line data utilizing Geosoft's rangrid algorithm using a 33 meter cell size.

The reduced and leveled data set was then subjected to a number of filtering techniques using the Geosoft MagMap module for evaluation and presentation.

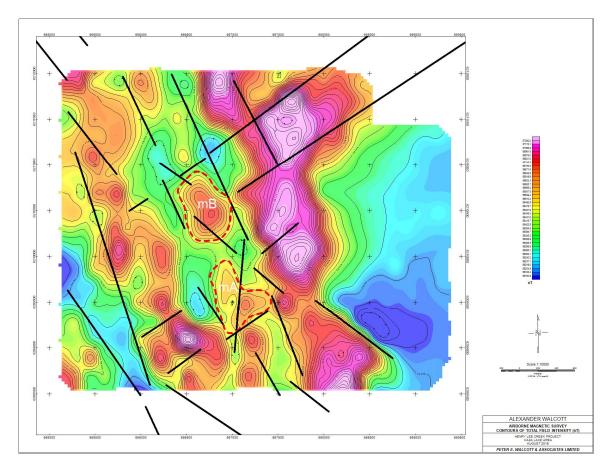
The magnetic data is presented in this report is Contours of Total Field Intensity, and Contours of the Calculated First Vertical Derivative at a scale of 1:10,000.

#### **DISCUSSION OF RESULTS.**

The 2015 airborne magnetic survey carried out over the Henry Lee Creek property shows a number of features and potential structures of interest, however given the limited dataset and geological understanding of the area only limited insight can be gained.

The eastern portion of the survey block shows a large magnetic low, likely associated with sedimentary cover.

Immediately to the west of this area, a northerly trending features of moderate to high magnetics can be readily observed likely associated with a large Kastberg Group intrusive unit, partially mapped on by government mapping.



Contours of Total Magnetic Intensity (nT) Henry Lee Creek Property

2015 Heliborne Magnetics Survey Henry Lee Property, B.C.

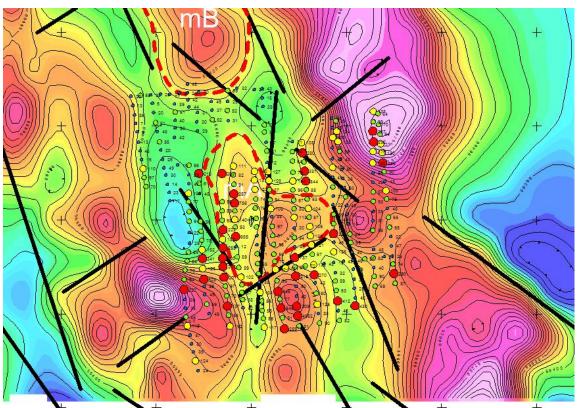
## **DISCUSSION OF RESULTS cont'd.**

This feature is cross cut by a number of both northeasterly and northwesterly trending structures creating a number of offsets within the unit.

Flanking the western edge of the aforementioned feature a northerly trending corridor area of lower to moderate magnetic response (volcanics) intruded by a number of small discreet magnetic features of moderate intensity.

Two of these features are a potential interest, anomalies mA, and mB.

Anomaly mA, is situated proximal to a historic soil geochemistry grid which yielded elevated copper, gold, and molybdenum soil geochemistry. The anomaly lies within a slightly depressed topography, and is cross cut by a number of structures.



Anomaly mA, With Historic Copper Soil Geochemistry (ppm)

Peter E. Walcott & Associates Limited Geophysical Services 2015 Heliborne Magnetics Survey Henry Lee Property, B.C.

## **DISCUSSION OF RESULTS cont'd.**

Situated one kilometer to the north-northeast another plug like anomaly (mB) is also readily apparent, showing similar characteristics to anomaly mA.

The western most magnetic trend shows a moderate magnetic intensity trend enveloping a number of discrete magnetic highs within it. The largest magnetic high, which is situated in the southern extents may be of interest given is proximity to elevated soil geochemistry.

## SUMMARY, CONCLUSIONS & RECOMMENDATIONS

In mid-August 2015, Peter E. Walcott & Associates Limited conducted a heli-borne magnetic survey over Alexander Walcott's Henry Lee Creek Property.

The survey consisted of some 81 line kilometres of airborne magnetics carried out on east-west flight lines.

The survey identified a number of targets of interest in a relatively unexplored area. Two features were identified for follow up anomalies mA and mB.

Anomaly mA is surrounded by elevated copper, gold and molybdenum historic soil geochemistry anomaly, along with mapped chalcopyrite mineralization.

Ground geophysical follow up is recommended over both targets mA and mB. Induced polarization should be undertaken across both targets utilizing a 100 meter a-spacing measuring at least the first to sixth separations.

Should anomalous responses be detected a survey grid should be established, utilizing 200 - 400 metre line spacing on east west orientated lines. A soil geochemistry grid should also be expanded to the north.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LTD.

Alexander Walcott, B.Sc. Geophysicist Peter E. Walcott, P.Eng. Geophysicist

Coquitlam, B.C.

February 2015

# APPENDIX I

## COST OF PROJECT.

Peter E. Walcott & Associates Limited undertook the survey on a per kilometer rate of \$60.00. A total of some 81 kilometers was flown for a cost of \$4,860.00.

A mobilization cost of \$2,255.00, and compilation and reporting costs of \$1,300.00, thus the total cost of the project was \$8,415.00

# PERSONNEL EMPLOYED ON PROJECT.

Name	Occupation	Address	Dates
Peter E. Walcott	Geophysicist	Unit 111- 17, Fawcett Rd. Coquitlam, B.C. V3K 6V2	August 25 <sup>th</sup> , 2015
Alexander Walcott	"	'n	August 17 <sup>th</sup> , 25 <sup>th</sup> " 2015
West Luck	Pilot Fireweed Helicopter Ltd.		August 17 <sup>th</sup> , 2015

## **CERTIFICATION.**

I, Peter E. Walcott, of 605 Rutland Court, Coquitlam, British Columbia, hereby certify that:

- 1. I am a graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physics, Geophysics Option.
- 2. I have been practicing my profession for the last fifty two years.
- 3. I am a member of the Association of Professional Engineers of British Columbia and Ontario.

Peter E.Walcott, P.Eng.

Coquitlam, B.C. February 2016

## **CERTIFICATION.**

I, Alexander Walcott, of 38-181 Ravine Dr., Port Moody, British Columbia, hereby certify that:

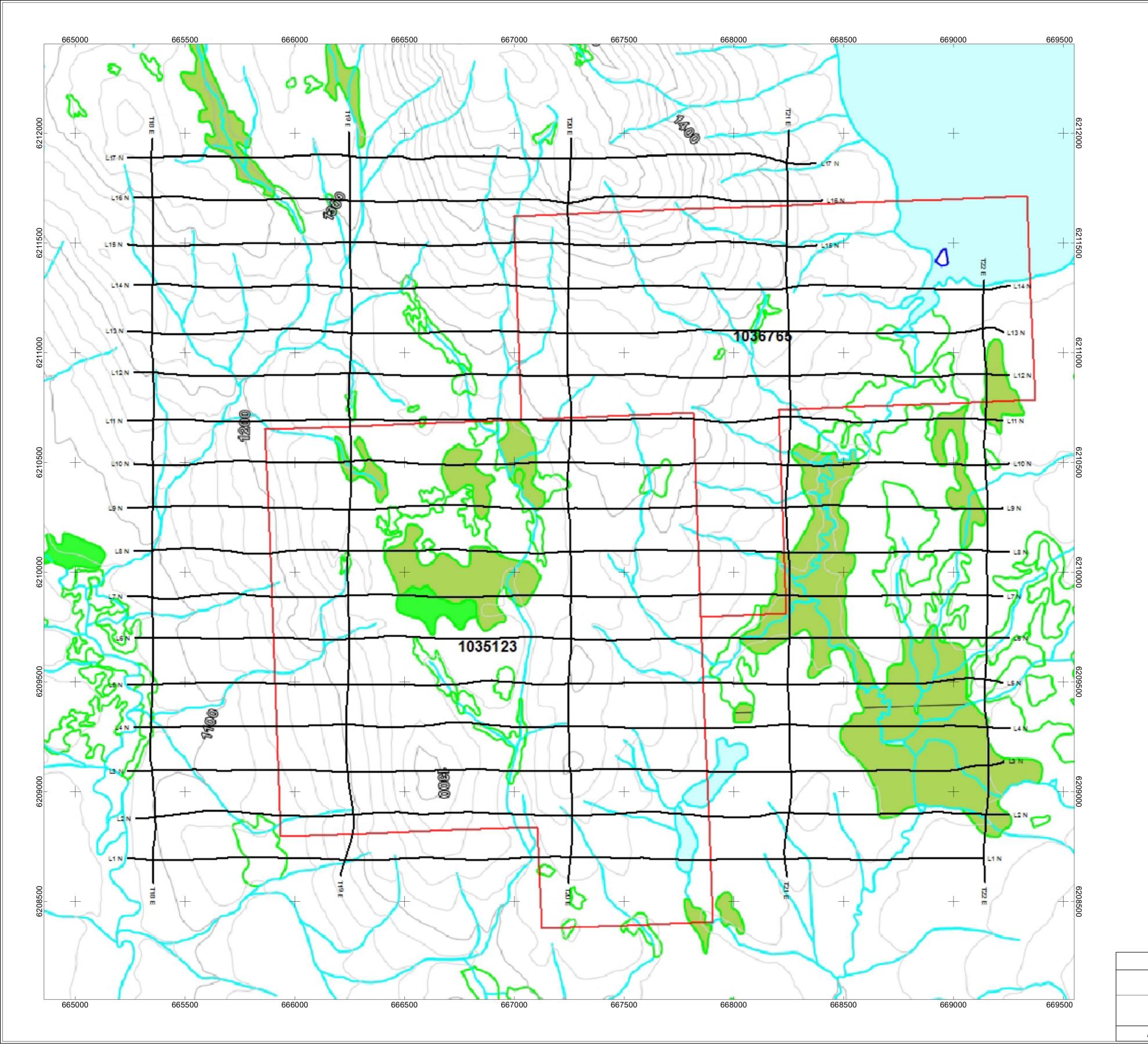
- 1. I am a graduate of the University of Alberta with a B.Sc. Earth Sciences Major, with a Physics Minor.
- 2. I have been active in mineral exploration for the past 20 years.
- 3. I am currently employed by Peter E. Walcott & Associated Limited.

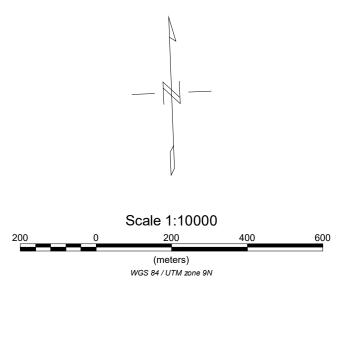
Alexander Walcott, B.Sc.

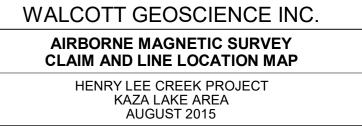
Coquitlam, B.C. February 2016

#### **REFERENCES.**

Schulze, C., Northern Hemisphere Development Corporation – Year-2005 Results from Diamond Drilling and Surface Exploration On the Northstar and Henry Lee Creek Project Areas, Omineca Mining Division, British Columbia, Assessment Report 27957







PETER E. WALCOTT & ASSOCIATES LIMITED

