

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

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Historical Analysis and Evaluation

TOTAL COST: \$ 6,500.00

AUTHOR(S): Laurence Sookochoff, PEng

SIGNATURE(S): Laurence Sookochoff

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): _____

YEAR OF WORK: 2017

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5649572, May 17, 2017

PROPERTY NAME: Bertha

CLAIM NAME(S) (on which the work was done): 679143

COMMODITIES SOUGHT: Copper, Gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092ISE012, 092ISE021, 092ISE147

MINING DIVISION: Nicola

NTS/BCGS: 0921.047

LATITUDE: 50 ° 27 ' 07 " **LONGITUDE:** 120 ° 42 ' 27 " (at centre of work)

OWNER(S):

1) Laurence Sookochoff 2) _____

MAILING ADDRESS:

120 125A-1030 Denman Street

Vancouver, BC V6G 2M6

OPERATOR(S) [who paid for the work]:

1) Laurence Sookochoff 2) _____

MAILING ADDRESS:

120 125A-1030 Denman Street

Vancouver, BC V6G 2M6

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

Triassic, Nicola Group, Western Volcanic Facies, Central Volcanic Facies

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 234, 266, 7268, 14959, 15060, 16189, 17337, 17489, 18048, 28671, 35735

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	_____		
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)/trail	_____		
Trench (metres)	_____		
Underground dev. (metres)	_____		
Other Historical Analysis and Evaluation			\$ 6,500.00
		TOTAL COST:	\$ 6,500.00

Laurence Sookochoff
(Owner & Operator)

Historical Analysis & Evaluation
Assessment Report
(Event 5649572)

on

Tenure 679143

of the 4 claim

Bertha 679143 Claim Group

Kamloops Mining Divisions

BCGS Map 0921.047

work done from

March 15, 2016 to May 17, 2016

Centre of Work

5,588,760N 650,997E
(Zone 10 NAD 83)

Author & Consultant

Laurence Sookochoff, PEng
Sookochoff Consultants Inc.

Submitted

March 19, 2018

Revision submitted

May 6, 2018

BC Geological Survey
Assessment Report
36958

TABLE OF CONTENTS	page
Summary -----	4.
Introduction -----	5.
Property Location & Description -----	5.
Accessibility, Climate, Local Resources, Infrastructure and Physiography -----	6.
Water and Power -----	8.
History: Ground of Tenure 679143 -----	8
1959: Vanex Minerals Ltd -----	8.
1970: Craigmont Mines Limited. -----	9.
1978: Thunderbolt Resources Ltd. -----	9.
1980: Thunderbolt Resources Ltd. -----	10.
1986: Western Resource Technologies Inc. -----	11.
1987: Interpretex Resources Ltd. -----	13.
1988: Western Resource Technologies Inc. -----	13.
2006: Auror Capital Inc. -----	16.
2008: Auror Capital Inc. -----	16.
2016: Guy and Christopher Delorme -----	19.
Geology: Regional -----	20.
Geology: Local -----	21.
Geology: Bertha 679143 Claim Group -----	22.
092ISE021 – RHYOLITE -----	22.
092ISE147 - JHC -----	22.
Mineralization: Bertha 679143 Claim Group -----	23.
092ISE021 – RHYOLITE -----	23.
092ISE147 - JHC -----	23.
Interpretation and Conclusions -----	25.
Selected References -----	28.
Statement of Costs -----	30.
Certificate -----	31.

Table of Contents (cont'd)**ILLUSTRATIONS**

Figure 1. Location Map -----	5.
Figure 2. Claims Location -----	7.
Figure 3. Claims Map -----	7.
Figure 4. 1959 Drill Hole Locations -----	8.
Figure 5. 1978 Magnetometer Survey -----	9.
Figure 6. 1978 VLF-EM Survey -----	9.
Figure 7. 1980 Copper in Soil -----	10.
Figure 8. 1986 Geochemical Survey Silt -----	11.
Figure 9. 1986 Rhyolite Grid Geophysical and Geochemical -----	12.
Figure 10. 1987 Geochemical Test Survey -----	13.
Figure 11. 1988 Rhyolite Grid Geology and Sample Plan -----	13.
Figure 12. 1988 Rhyolite Grid Gold and Silver Soil Geochem -----	14.
Figure 13. 1988 Rhyolite Grid Geology -----	14.
Figure 14. 1988 Soil Geochem on JHC Showing -----	15.
Figure 15. 2006 Lineament Array Analysis -----	16.
Figure 16. 2008 Index Map of Katrina Claim (Tenure 679143) -----	17.
Figure 17. 2008 Rhyolite 1 Sample Location and Assays -----	16.
Figure 18. 2008 VLF-EM Indicated Structures over Rhyolite and Rhyolite 1 Mineral Showings -----	18.
Figure 19. 2016 Localized Magnetometer Survey -----	19.
Figure 20. 2016 Magnetometer Survey Results -----	19.
Figure 21. Geology, Claim, Index, & Minfile -----	21.
Figure 22. Location of the JHC and Rhyolite Showings on a 1st Derivative Magnetometer Map -----	24.
Figure 23. Location of Copper Mountain on a 1st Derivative Magnetometer Map -----	24.
Figure 24. 1978 geophysical interpretation based on compilation of historical exploration results -----	25.

TABLES

Table I Tenures of Bertha 679143 Claim Group -----	6.
Table II Rhyolite Zone Sample Data -----	12.
Table III Rhyolite 1 Sample Data -----	15.
Table IV Rhyolite 1 Sample Data -----	18.

SUMMARY

The four claim, 720 hectare Bertha 679143 Claim Group is located 210 kilometres northeast of Vancouver in the Highland Valley of south central British Columbia. It is within 13 kilometres of the Highland Valley Copper mine, one of the largest copper mining and concentrating operations in the world.

The Highland Valley Copper deposit is one of a cluster of nine major porphyry copper deposits that lie within a 15 square kilometer zone in the center of the Late Jurassic Guichon Creek batholith. A central, steeply plunging root or feeder zone is inferred under Highland Valley, and the major deposits lie around the projection of the feeder zone to the surface. The most prominent structural features are the north trending Lornex fault and the west-northwesterly Highland Valley fault.

At the Bethlehem Copper-Spud Lake mineral showing (*Minfile 092ISE008*) intrusive contacts, north trending faults, and closely spaced fractures control the mineralization. At the Bethlehem past producer (*Minfile 092ISW001*) mineralization is concentrated in breccia bodies, faults and highly fractured areas. The Highland Valley Copper and the Lornex deposits were created from a favourable structural setting at the intersection of two regional faults.

The Bertha 679143 claim group is shown to be entirely underlain by two facies of the Upper Triassic Nicola Group in an unconformable, northwesterly trending contact. To the east is Western Volcanic Facies (*uTrNW*) of basaltic volcanic rocks with the Central Volcanic Facies of undivided volcanic rocks to the east (*uTrNC*). Eocene intrusives occur two kilometres west with Late Triassic intrusives within four kilometres east.

In the current program of the evaluation of historical exploration data on the ground presently covered by Tenure 679243, the claim warrants a continuing exploration program. This is primarily based on:

JHC

- the 1959 drill hole in which, "*The lower portion of the hole encountered a siliceous, altered grey-green rock with considerable pyrite. No assays were reported but the recommendation was made to extend the hole to 1000 feet.*";
- the 1988 soil geochem which revealed, "*A few scattered values of gold, silver and copper were anomalous. A large number of samples were anomalous for zinc.*";
- the reported mineralization of malachite and chalcopyrite at this showing with one sample taken in the area gave 14.2 ppm Ag, 17 ppb Au and 42752 ppm (4.2%) Cu. (AR 17337).
- the 1st derivative magnetometer expression indicates that the localized mineral showing area is within the transitional zone between a high and a low magnetometer which is the common location of porphyry resources such as at Copper Mountain (*Minfile 092HSE001*).

Rhyolite

- reported (AR 18048) pyrite concentrations of up to 20%, with minor chalcopyrite, azurite, malachite and sphalerite. Sampling indicated weakly anomalous gold (41 ppb), silver (4.1 ppm), copper (3770 ppm) and zinc (2183 ppm) values. The proximity of these showings to the flow-pyroclastic contact makes the area a target for stratabound massive sulphide mineralization.

INTRODUCTION

Between March 15, 2017 and May 17, 2017, a historical analysis and evaluation was completed on Tenure 679143 of the four claim Bertha 679143 claim group ("Property"). The purpose of the program was to evaluate the historical exploration on and peripheral to Tenure 679143 in order to determine the value of the claim as to warranting additional exploration to the location of a potential mineral resource.

Information for this report was obtained from sources as cited under Selected References.

*Figure 1. Location Map
(from MapPlace)*



PROPERTY LOCATION & DESCRIPTION

Location

The Bertha 679143 Claim Group is located within BCGS Map 092I.047 of the Kamloops Mining Division, 210 kilometres northeast of Vancouver, 36 kilometres north of Merritt, 45 kilometres southwest of Kamloops, and within 13 kilometres of the world-class Highland Valley Copper mine (Minfile 092ISW012).

Description

The Property is comprised of four contiguous claims covering an area of 720.2345 hectares. Particulars are as follows:

Table I. Tenures of Bertha 679143 Claim Group

Tenure Number	Type	Claim Name	Good Until*	Area (ha)
522351	Mineral	JHC	20171129	370.452
679143	Mineral		20180713	308.63
1045809	Mineral		20171129	20.5771
1045810	Mineral		20171129	20.5754

*Upon the approval of the assessment work filing, Event Number 5649572.

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

Access

From Logan Lake, the Bertha 526351 claim group can be accessed by traveling east from Logan Lake on Highway 97D for 16 kilometres to the junction with the Desmond Lake road thence southerly on the for four kilometres to junction with a road leading westerly and northerly for five kilometres to the southeastern corner of Tenure 522351 of the Bertha 679143 Claim Group.

Access on the Property is provided by numerous secondary roads.

Climate

The local climate is typical of south central British Columbia. Annual temperatures range from 35oC to -40oC. Negative temperatures can be typically expected between late October and late March. Annual precipitation ranges around an average of 30 cm.

Local Resources & Infrastructure

Merritt, or Kamloops, historic mining centres could be a source of experienced and reliable exploration and mining personnel and a supply for most mining related equipment. Kamloops is serviced daily by commercial airline and is a hub for road and rail transportation. Vancouver, a port city on the southwest corner of, and the largest city in the Province of British Columbia is four hours distant by road and less than one hour by air from Kamloops. Logan Lake, where many of the Highland Valley Copper Mine employees reside, has many facilities to accommodate any preliminary exploration crew.

Physiography

Tenure 679143 covers gentle to moderate forested slopes. Elevations range from 1,240 m along the northeast border to 1,460 m along the southwest border near the southwest corner. See the creeks and roads on Figure 3.

Figure 2. Claims Location
(Base Map from MapPlace & Google Earth)

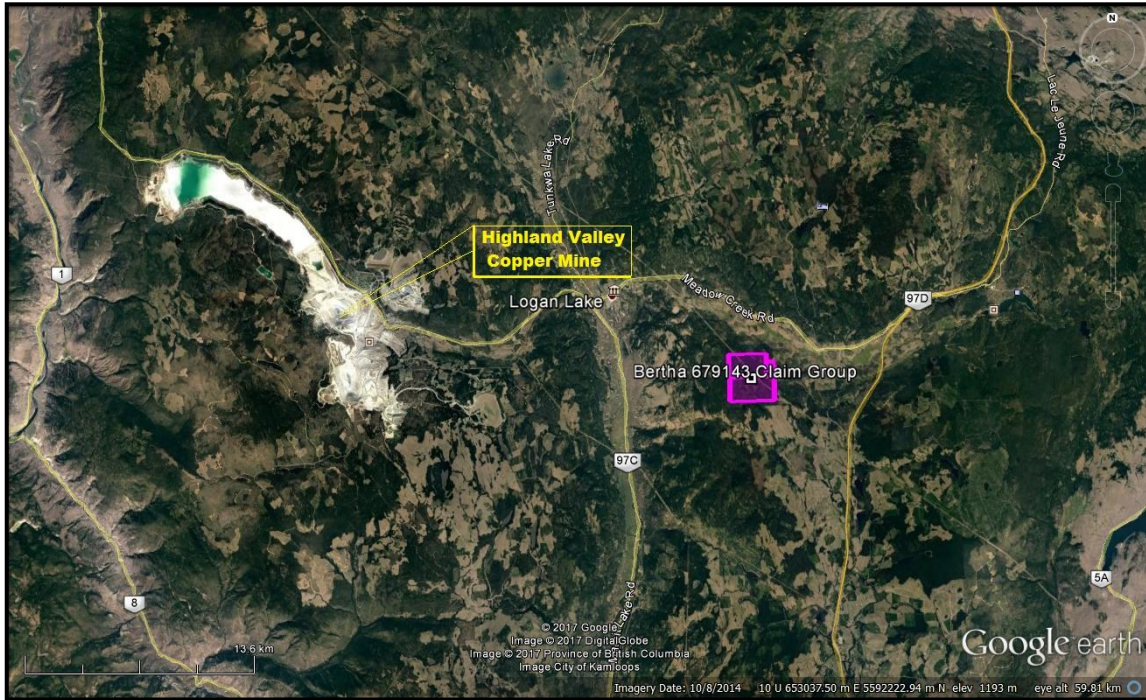
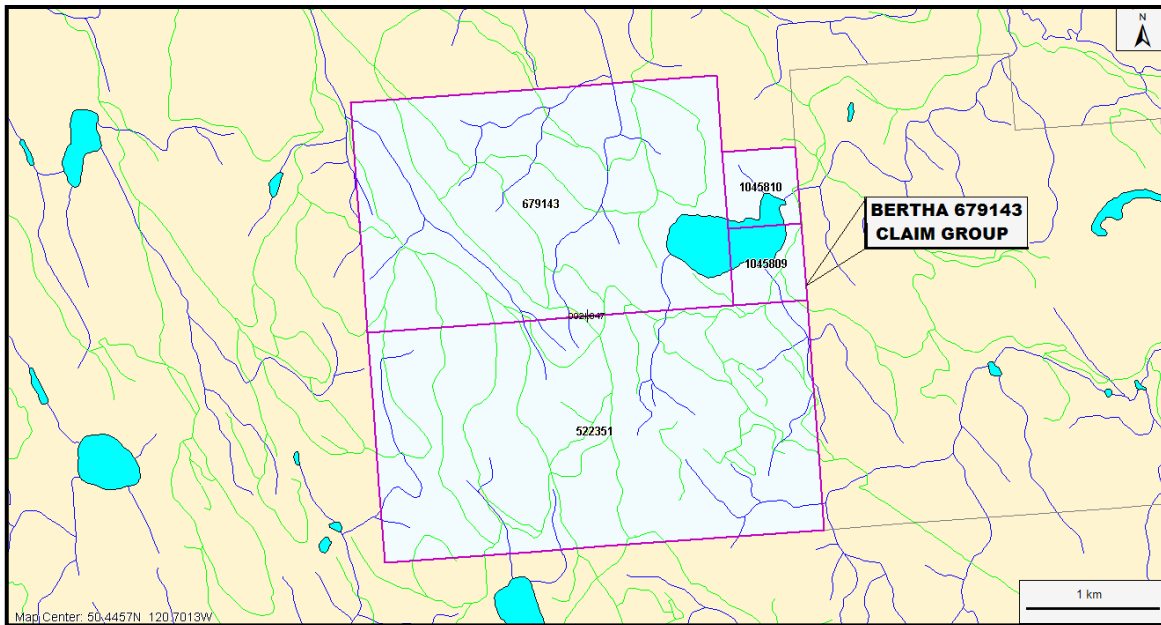


Figure 3. Claims Map
(from MapPlace)



WATER & POWER

There would be an ample water supply for the needs of any exploration program from the many lakes, rivers, or streams within the confines of the Property.

A power line crosses the Property.

HISTORY: Ground Covered by Tenure 679143

The history of exploration within ground covered by the current Tenure 679143 is reported as follows. The information is taken from the designated Assessment Reports.

AR 18048 p5. (Crooker, 1988)

1959: Vanex Minerals Ltd. drilled two holes in the JHC showing area.

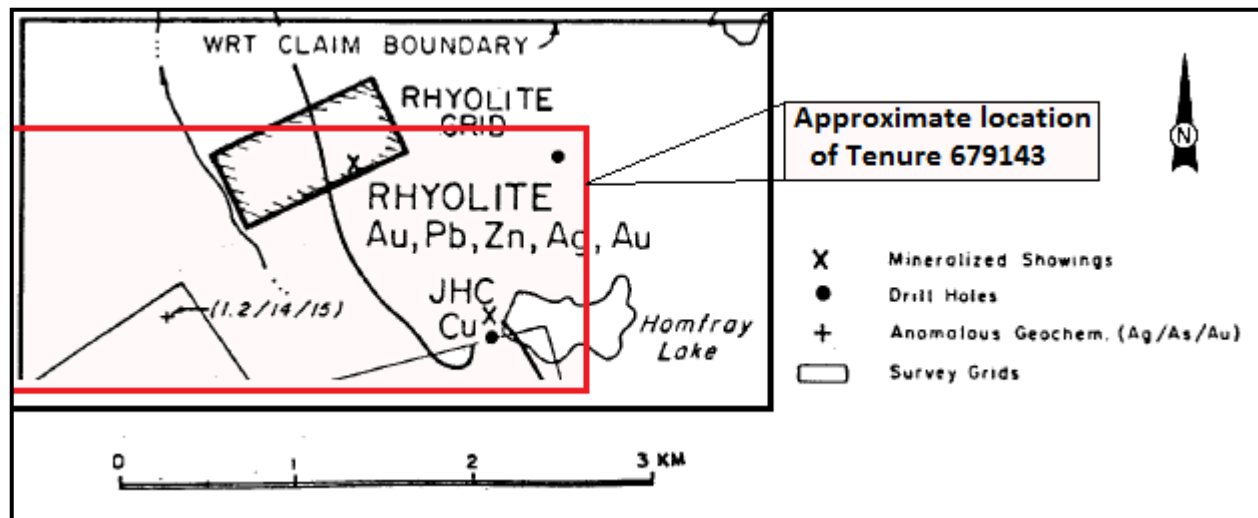
Hole No. 1

This hole was located approximately 3000 feet north of Homfray Lake and was drilled vertically to a depth of 358 feet to test a magnetic high. The lower portion of the hole encountered a siliceous, altered grey-green rock with considerable pyrite. No assays were reported but the recommendation was made to extend the hole to 1000 feet.

Hole No. 2

This hole was located on the west shore of Homfray Lake and was drilled at minus 45 degrees to a depth of at least 293 feet. Altered volcanics were noted but no mineralization was reported and no reason was given for drilling the hole.

*Figure 4. Map showing the 1959 Drill Hole Locations
(Map from AR 18048 Crooker, 1988 Figure 3 p13)*



History: Bertha 679143 Claim Group (cont'd)

1970: Craigmont Mines Limited staked claims in the area of the JHC showing.

A small survey consisting of geological mapping, geochemical sampling and magnetic and IP surveying was conducted. Two holes totalling 800 feet were drilled but the location and results of the drilling are unknown.

1978: Thunderbolt Resources Ltd. completed VLF-EM and magnetometer surveys on the Homfray Lake Property.

AR 7268. (Sookochoff, 1979)

Figure 5. 1978 Magnetometer Survey Results over current Tenure 679143
(Pertinent base sections from Sookochoff, 1979)

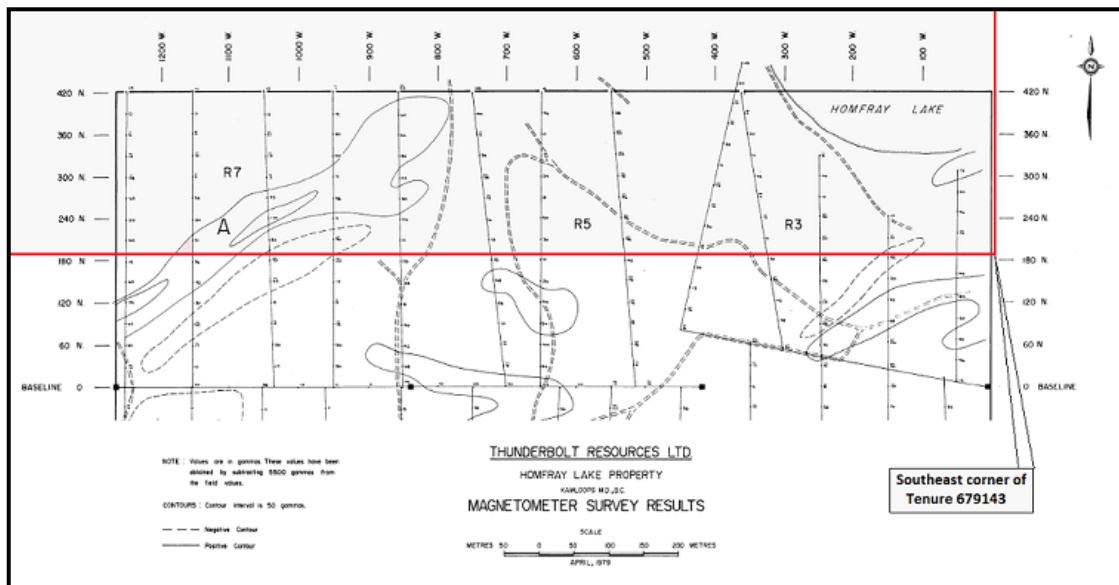
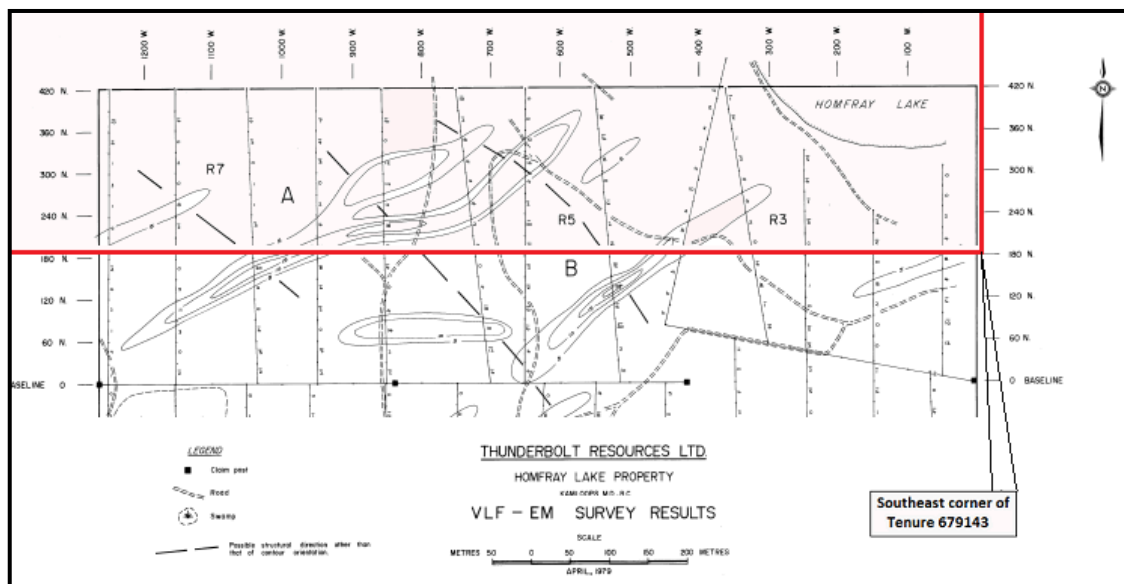


Figure 6. 1978 VLF-EM Survey Results over current Tenure 679143
(Pertinent base sections from Sookochoff, 1979)



History: Bertha 679143 Claim Group (cont'd)

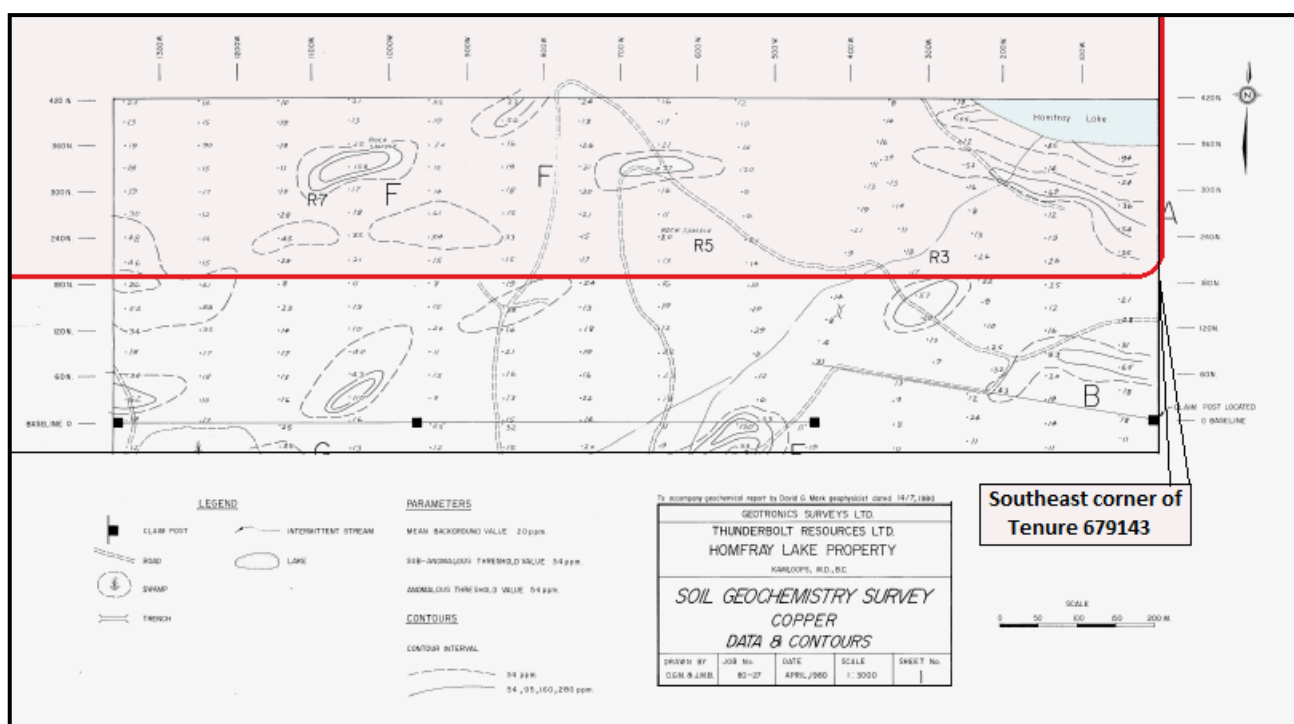
Sookochoff (1979) reports on the results of the geophysical surveys that:

In correlating the magnetic with the VLF-EM survey, the magnetic low associated with Anomaly A generally correlates with the VLF-EM Anomaly A. This could reflect a strong fault, shear zone or hydrothermal alteration in which the magnetite associated with the original volcanic flow has been altered to a nonmagnetic mineral. Similar correlation is reflected in the magnetic low of Anomaly C and VLF-EM Anomaly D in addition to the magnetic low of Anomaly B and VLF-EM Anomaly C.

1980: Thunderbolt Resources Ltd. completed a soil geochemical survey on the Homfray Lake Property.

AR 8397 (Mark, 1980)

Figure 7. 1980 Copper in Soil Geochem Results within current Tenure 679143
(Pertinent base sections from Mark, 1980 AR 8397 p21 Sheet 1)



Mark, 1980 reports on the results of the soil geochem survey that:

Anomaly A is an interesting zone because of the number of anomalous values in copper and zinc. There is a minor amount of molybdenum as well. There are no rock outcrops correlating with the zone but it probably is underlain by red volcanics.

A shows economic potential because of the number of anomalous values in copper, zinc and molybdenum. It therefore has length, on top of which it is open to the east. It occurs adjacent to Homfray Lake, and therefore the possibility exists that the anomalous values are due to the metal ions migrating and concentrating near the lake.

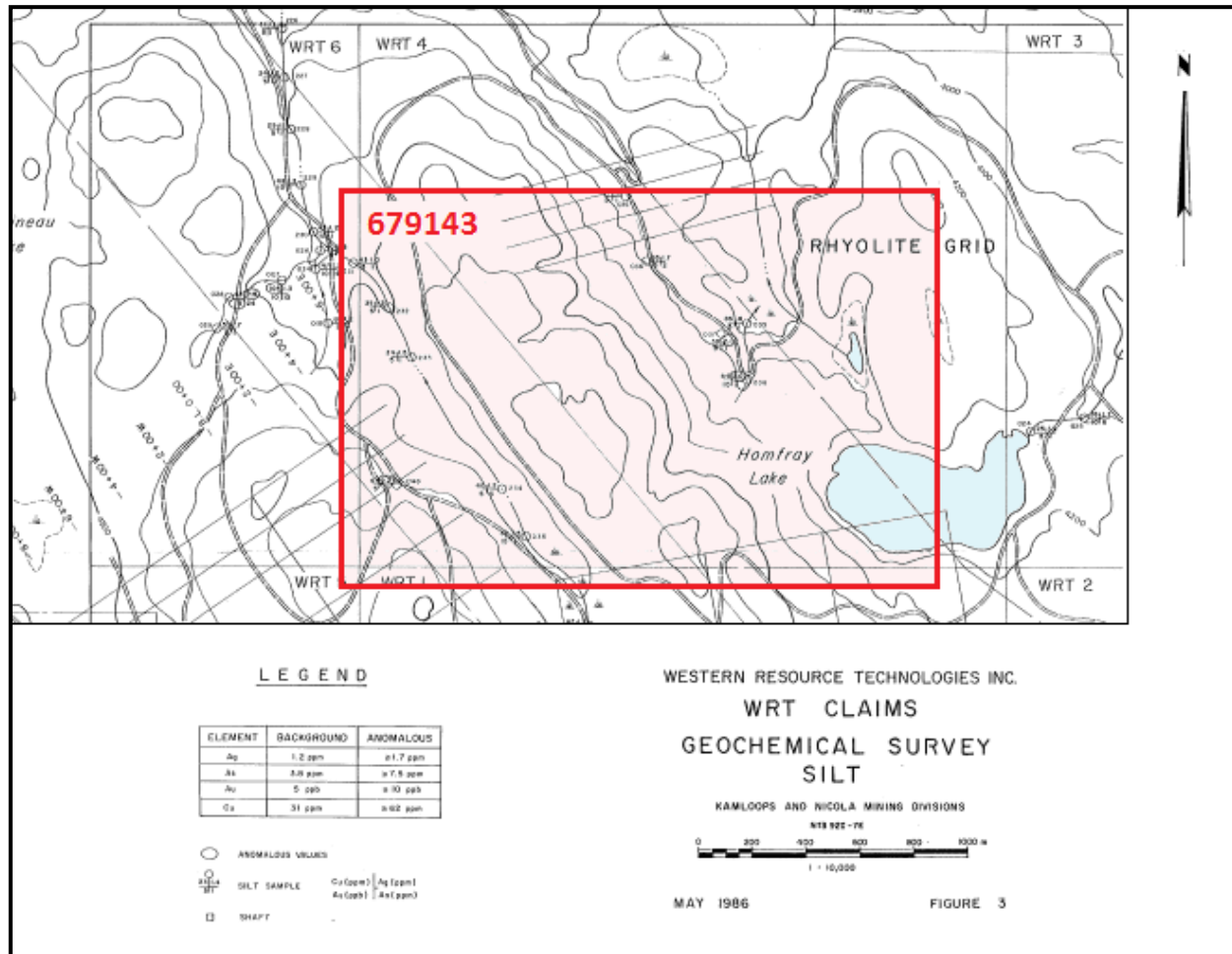
F could be termed more as an anomalous zone. It consists of a broad zinc anomaly of relatively low values that correlate with spotty copper anomalies. It occurs across the red volcanic/grey volcanic contact and has fair correlation with VLF-EM and magnetic anomaly A as labelled by Sookochoff.

History: Bertha 679143 Claim Group (cont'd)

1986: Western Resource Technologies Inc. completed geochemical and geophysical surveys on the WRT Claims.

AR 14959 (Crooker 1986)

Figure 8. 1986 Geochemical Survey Silt Results within current Tenure 679143
 (Pertinent base sections from Crooker 1986 AR 14959 p147 Figure 3)

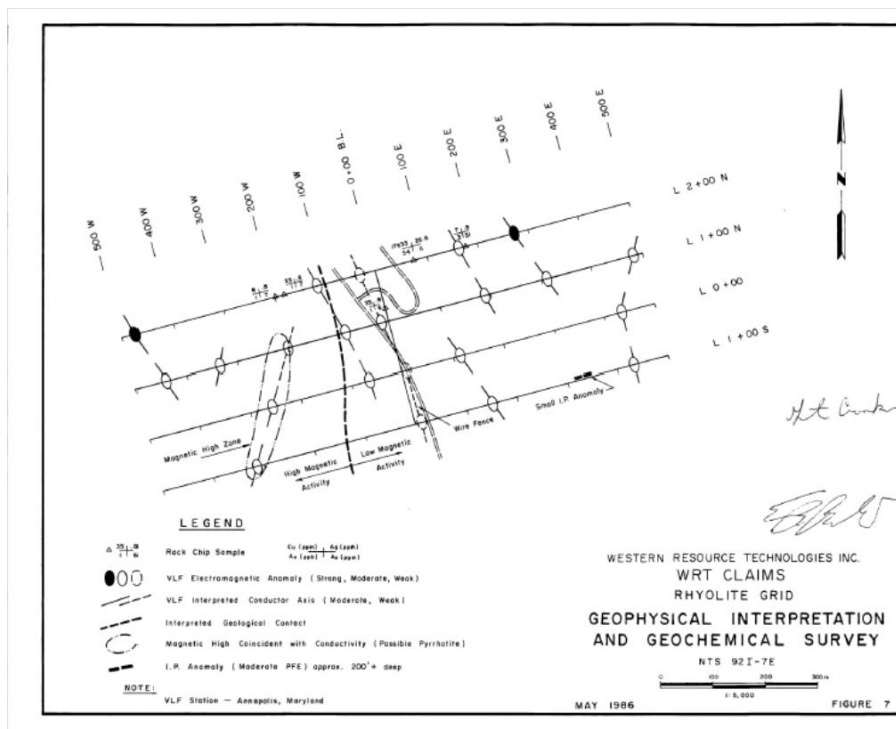


Crooker (1988) reports on all the soil and silt sample results from the WRT claims that:

The presence in soils and silts of gold, silver and arsenic in excess of background values indicate that a new direction to exploration be taken. Thus, rather than look only for a copper deposit as in the past, future exploration should be concentrated on the precious metals.

History: Bertha 679143 Claim Group (cont'd)

Figure 9. 1986 Rhyolite Grid Geophysical Interpretation and Geochemical Survey
 (from Crooker, 1986 AR 14959 p22 Figure 7)



Crooker (1986) reports on the geophysical results and the rock geochem that:

Magnetic data suggests a geological contact in the vicinity of 100W trending approximately north-south. The contact is believed to be between less magnetic rock such as rhyolite and more magnetic rock such as basic volcanics. VLF-EM conductors show mostly moderate to low conductance. One conductor trend, at 200W to 300W on lines 1+00N, 0+00 and 1+00S appears to be coincident with a magnetic high and thus may be due to the presence of magnetic pyrrhotite. Other conductors possibly reflect bedding within the volcanic rocks. One small I.P. anomaly located on line 1+00S may indicate a small amount of buried disseminated sulphides within the less magnetic rock types

As previously noted, rhyolite (field term) was found during the staking of WRT 4 Claim. The rock is very siliceous and contains sparse disseminated pyrite. One sample of float taken during gridding returned:

Table II : Rhyolite Zone Sample Data

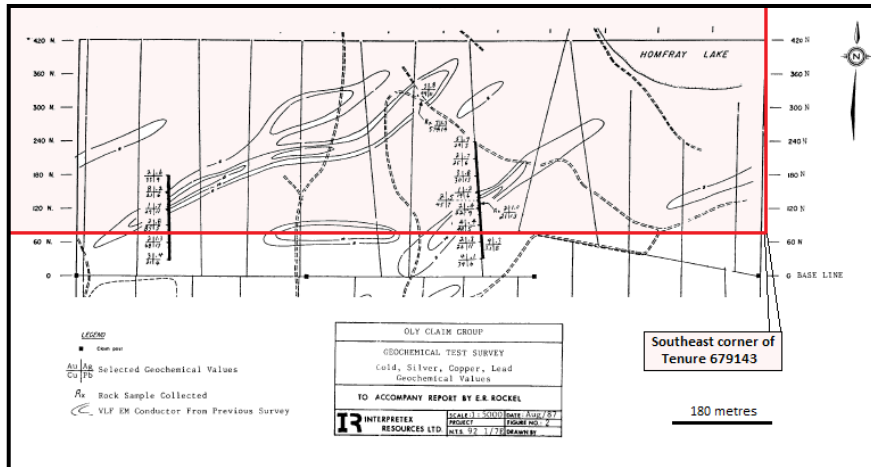
Cu	17,633 ppm	(1.76%)
Ag	26.8 ppm	(0.79 oz/ton)
Au	54 ppb	
As	11 ppm	
Pb	122 ppm	
Zn	15,188 ppm	(1.53%)

History: Bertha 679143 Claim Group (cont'd)

1987: Interpretex Resources Ltd. completed a geochemical test survey in the Homfray Lake area.

AR 16189 Rockel, 1987

Figure 10. 1987 Geochemical Test Survey
(Pertinent base sections from AR 16189 Rockel, 1987 Figure 2 p8)



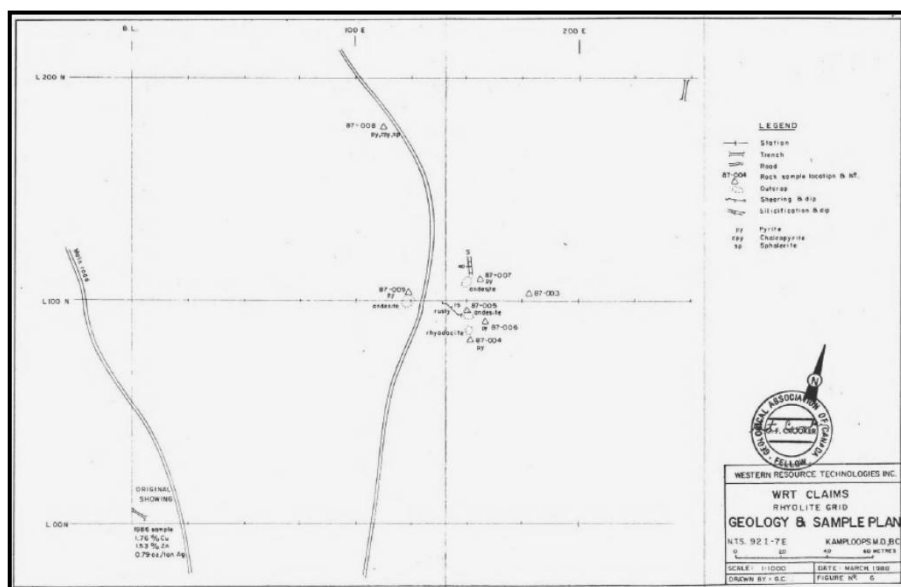
Rockel (1987) reports on the results of the Geochemical Test Survey that:

Assay results from soil and rock geochemical samples show no significant gold and silver anomalies over the two VLF EM conductors tested. Slight increases in copper values suggest that some copper mineralization may be present. Copper sulphide mineralization present within conductors would suggest that the conductors are bona fide bedrock features and worthy of more detailed examination for economic mineralization.

1988: Western Resource Technologies Inc. completed geological, geochemical and geophysical surveys on the WRT Claims.

AR 17337

Figure 11. 1988 Rhyolite Grid Geology and Sample Plan Within Tenure 679143
(from AR 17337 Crocker 1988 Figure 6 p21)



History: Bertha 679143 Claim Group (cont'd)

Figure 12. 1988 Rhyolite Grid Gold and Silver Soil Geochem Results within Tenure 679143 (from AR 17337 Crooker 1988 Figure 9 p120)

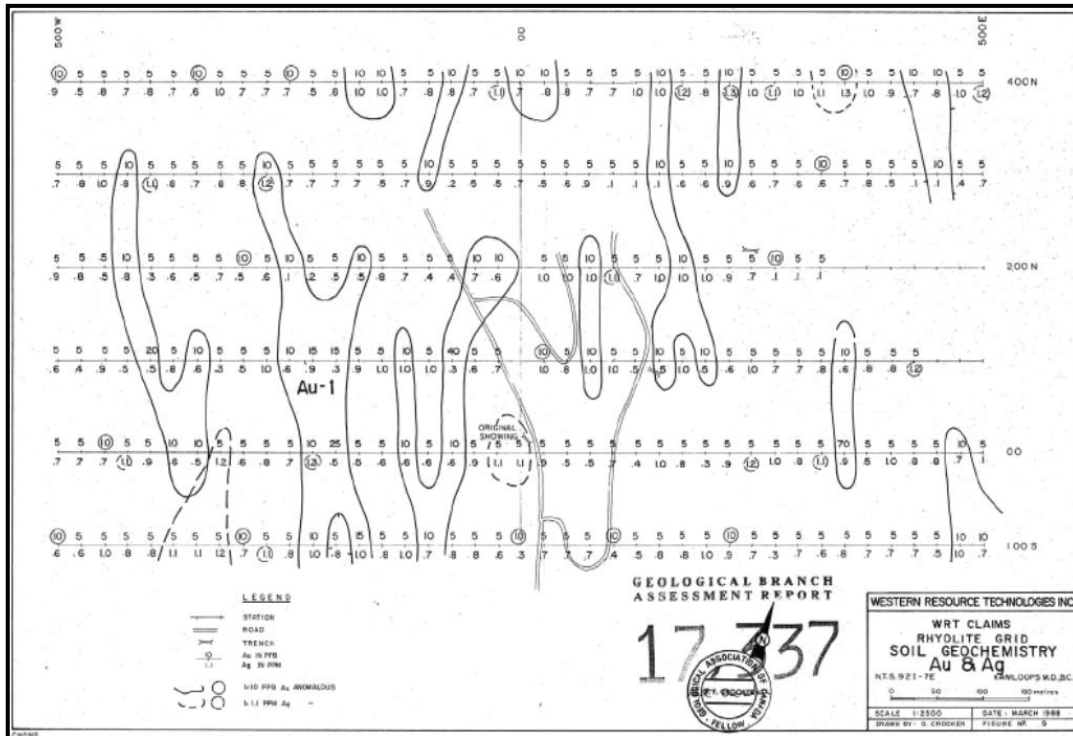
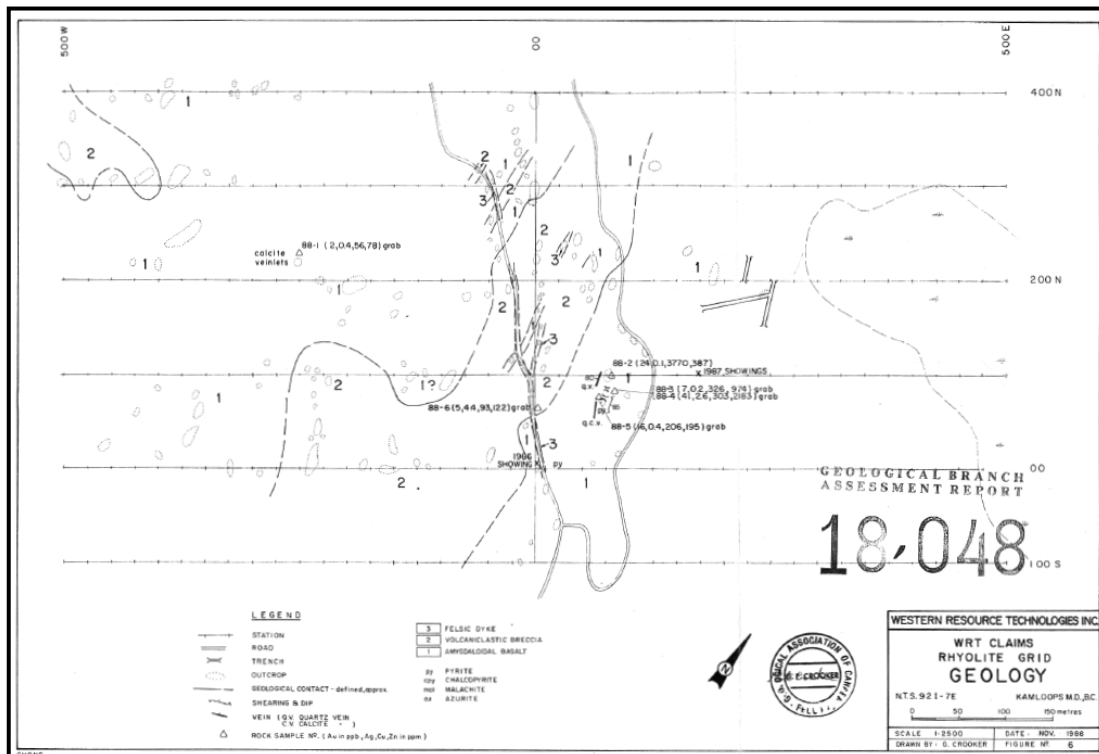


Figure 13. 1988 Rhyolite Grid Geology within Tenure 679143 (from AR 18048 Crooker, 1988 Figure 6 p74)

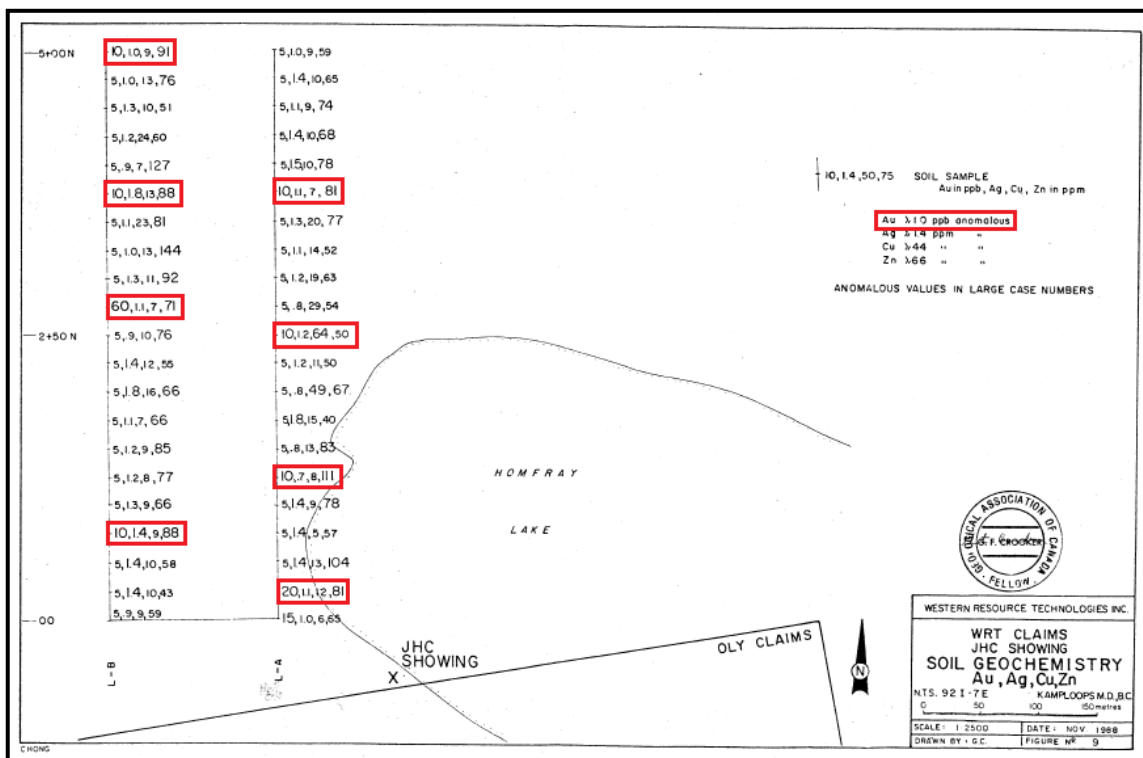


History: Bertha 679143 Claim Group (cont'd)

Table III : Rhyolite 1 Sample Data

ROCK SAMPLE DESCRIPTIONS		
Sample No.	Grid Coord.	Description
88-01	Rhyolite	-grab, carbonate alteration, rusty ankerite, calcite veinlets, 2 ppb Au, .4 ppm Ag
88-02	Rhyolite	-grab, 5 cm quartz veinlet within basalt, py, cpy, mal, az, 24 ppb Au, 4.1 ppm Ag, 3770 ppm Cu, 387 ppm Zn
88-03	Rhyolite	-grab, 5-10 cm wide calcite veinlets within basalt, 10% py, sp, 7 ppb Au, .2 ppm Ag, 326 ppm Cu, 974 ppm Zn
88-04	Rhyolite	-grab, quartz-carbonate veinlets within basalt, py, 41 ppb Au, 2.6 ppm Ag, 303 ppm Cu, 2183 ppm Zn
88-05	Rhyolite	-grab, rusty fracturing & shearing, 10% py, 16 ppb Au, .4 ppm Ag, 206 ppm Cu, 1951 ppm Zn
88-06	Rhyolite	-grab, felsic dyke, 1% py, 5 ppm Au, 4.4 ppm Ag, 93 ppm Cu, 122 ppm Zn

Figure 14. 1988 Soil Geochem on JHC Showing Within Tenure 679143
 (from AR 18048 Crooker, 1988 Figure 9 p23)
 (Red highlights by Author)



Crooker (1988) reports on the soil geochem that:

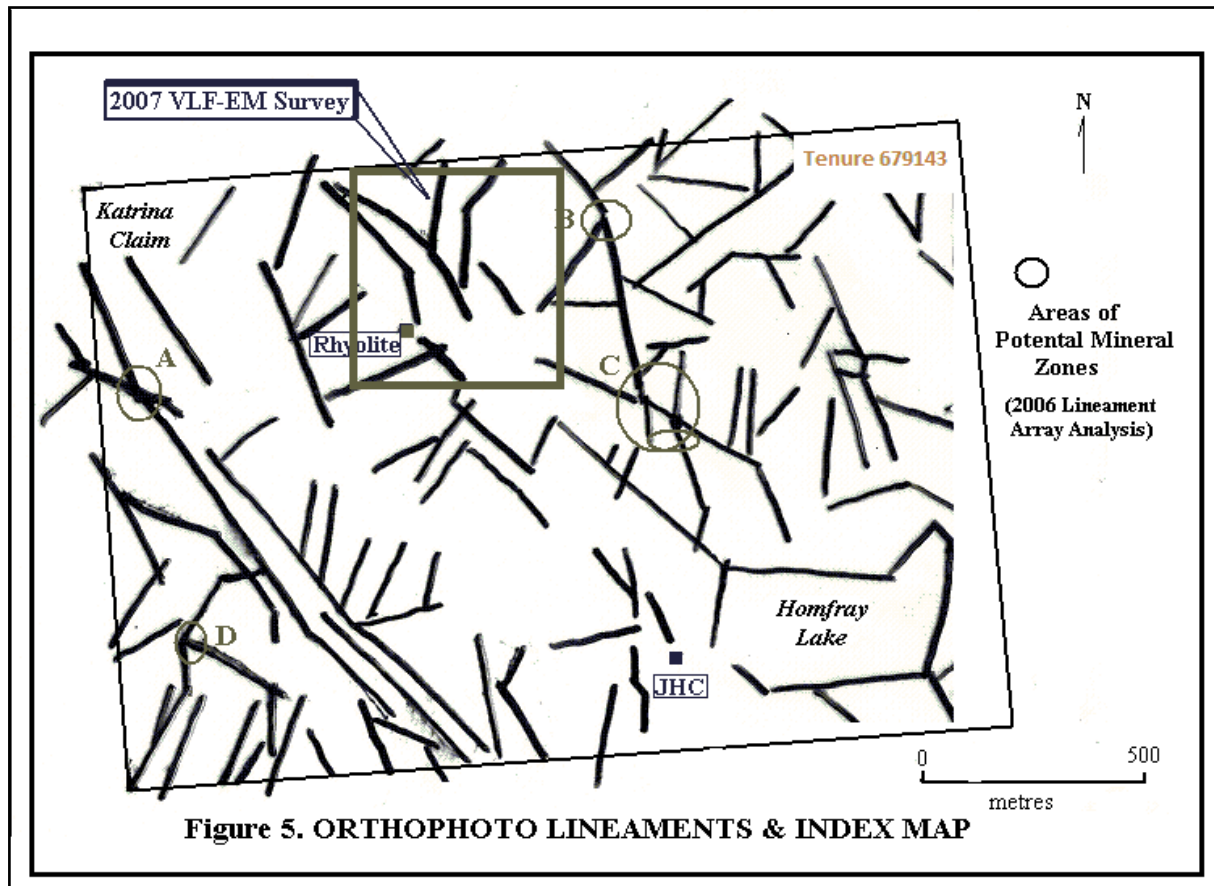
Two short lines of soil samples were taken west of Homfray Lake in the vicinity of the JHC Showing. A few scattered values of gold, silver and copper were anomalous. A large number of samples were anomalous for zinc.

History: Bertha 679143 Claim Group (cont'd)**2006:** Auror Capital Corp.

A lineament array analysis was completed on the Katrina mineral claim.

AR 28671

Figure 15. 2006 Lineament Array Analysis on the Katrina Claim
 (Current Tenure 679143)
 (from AR 28671 Sookochoff, 2006 Figure 4 p16)



Sookochoff (2006) reports that:

The Lineament Array Analysis has indicated that the Rhyolite mineral showing of the Katrina property may be an indication of mineral seepage along the favorable structural zone of three intersecting structures from deep seated mineral zones.

2008: Auror Capital Corp.

Geological mapping and sampling were completed on the Katrina mineral claim.

(Sookochoff-Auror Resources Phase IIIa)

History: Bertha 679143 Claim Group (cont'd)

Figure 16. Index Map of Katrina Claim 2008 and 2008 Exploration
 (Current Tenure 679143)
 (from Auror Phase IIIa May 2008 p18)

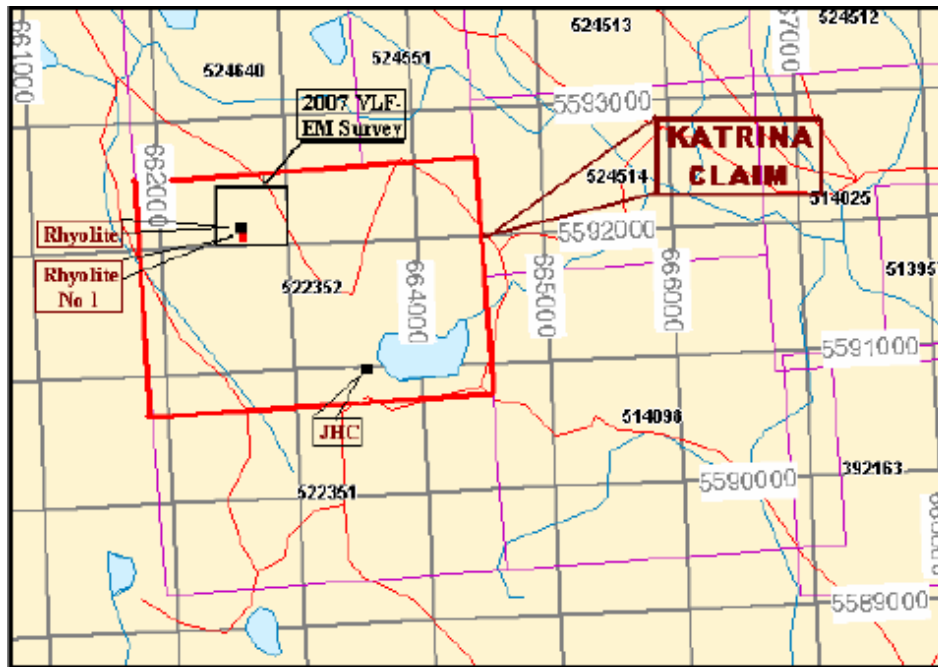
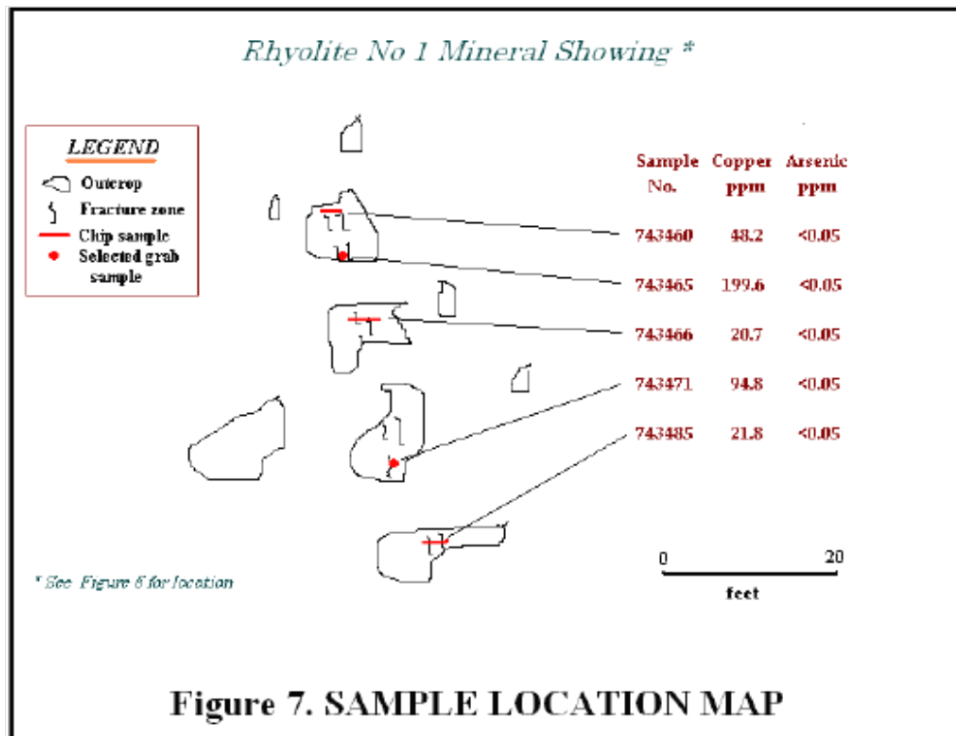


Figure 17. 2008 Sample Location Map and Assays of Rock Samples from Rhyolite 1 Mineral Showing
 (from Auror Phase IIIa May 2008 Figure 7 p19),

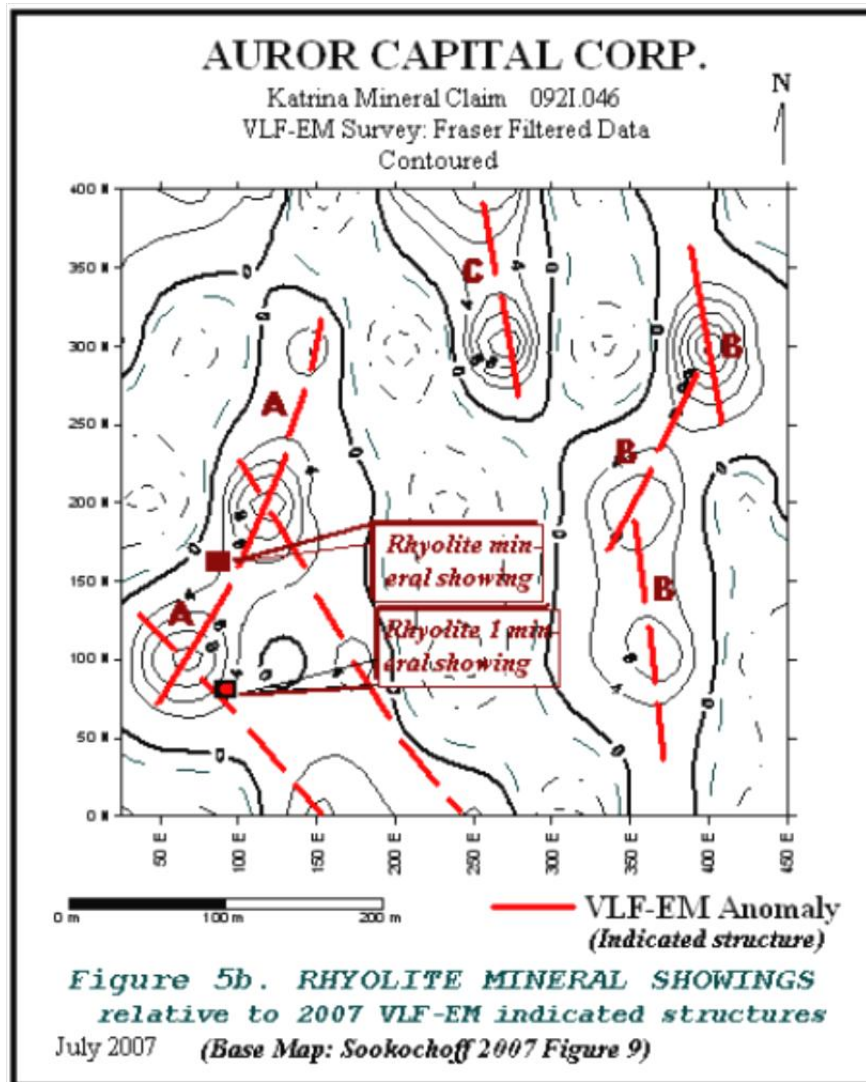


History: Bertha 679143 Claim Group (cont'd)

Table IV: Rhyolite 1 Sample Data
(from Auror Phase IIIa May 2008 p16),

Sample No	Sample Type	Description	Copper (Cu) ppm	Arsenic (As) ppm
743460	Chip: 2.0 feet	Andesite: altered	48.2	<0.05
743465	Selected grab	Andesite (altered) with carbonate stringers & light pyrite	199.6	<0.05
743466	Chip: 2.0 feet	Andesite: altered	20.7	<0.05
743471	Selected grab	Andesite (altered) with carbonate stringers & light pyrite	94.8	<0.05
743485	Chip: 2.0 feet	Andesite: altered	21.8	<0.05

Figure 18. 2008 VLF-EM Indicated Structures over Rhyolite and Rhyolite 1 Mineral Showing
(from Auror Phase IIIa May 2008 p17),



History: Bertha 679143 Claim Group (cont'd)

Sookochoff (2008) reports on the VLF-EM survey and the rock sampling that:

The results of the Phase IIIa exploration results on the Katrina claim were successful in that a new zone of potential mineralization (Rhyolite 1) was discovered which is indicated to occur within a structural zone correlating with an indicated VLF-EM structure.

2016. Guy and Christopher Delorme

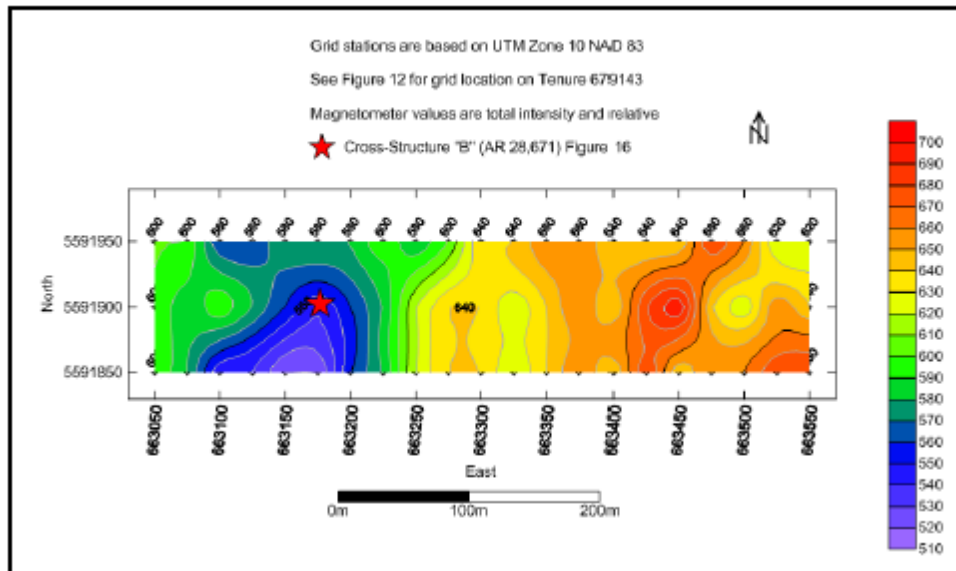
A localized magnetometer survey was completed within the northeastern sector of Tenure 679143.

AR 35735 Sookochoff, 2016

Figure 19. 2016 Magnetometer Survey Location on Tenure 679143
(from AR 35735 Sookochoff, 2016 Figure 12 p25)



Figure 20 : 2016 Magnetometer Survey Results on Tenure 679143
(from AR 35735 Sookochoff, 2016 Figure 15 p26)



History: Bertha 679143 Claim Group (cont'd)

Sookochoff (2016) reports on the results of the magnetometer survey on Tenure 679143 that:

The anomalous mag LO at 663150E, open to the south,. may indicate the cross-structural location with the maximum zone of structural deformation and/or brecciation possibly as a hydrothermally produced breccia pipe, where any geological signatures of depth related porphyritic mineralization may be etched at surface.

The northerly trending 50 metre wide sub-anomalous to anomalous mag HI at 663475E may indicate a mafic volcanic unit within the volcanic pile. This mafic volcanic unit may be comparable to the Rhyolite mineral showing (Minfile 092ISE012) where porphyry mineralization related to a basalt host is reported.

GEOLOGY: REGIONAL

The Bertha 679143 Claim Group is located within the Nicola Group of volcanic rocks that form part of a 30km to 60km wide northwest-trending belt extending from southern B.C. into the southern Yukon. This belt is enclosed by older rocks and intruded by batholiths and smaller intrusive rocks.

Major batholiths in the area include the Guichon Creek Batholith to the west, the Wild Horse Batholith to the east, and the Iron Mask Batholith to the north northeast (see Figure 6 for regional geology).

The Guichon Creek batholith is a large, composite intrusion with a surface area of about 1,000 square kilometers. A cluster of nine major porphyry copper deposits lie within a 15 square kilometer zone in the center of the batholith.

The batholith is a semi-concordant composite intrusive that is elliptical and elongated slightly west of north. A central, steeply plunging root or feeder zone is inferred under Highland Valley, and the major deposits lie around the projection of the feeder zone to the surface. The batholith has intruded and metamorphosed island-arc volcanic and associated sedimentary rocks of the Nicola Group, and a metamorphic halo up to 500 meters wide is developed adjacent to the contact. Rocks along the edge of the batholith are older and more mafic, and successive phases moving inward toward the core are younger and more felsic.

Although contacts can be sharp, they are generally gradational and chilled contacts are not common.

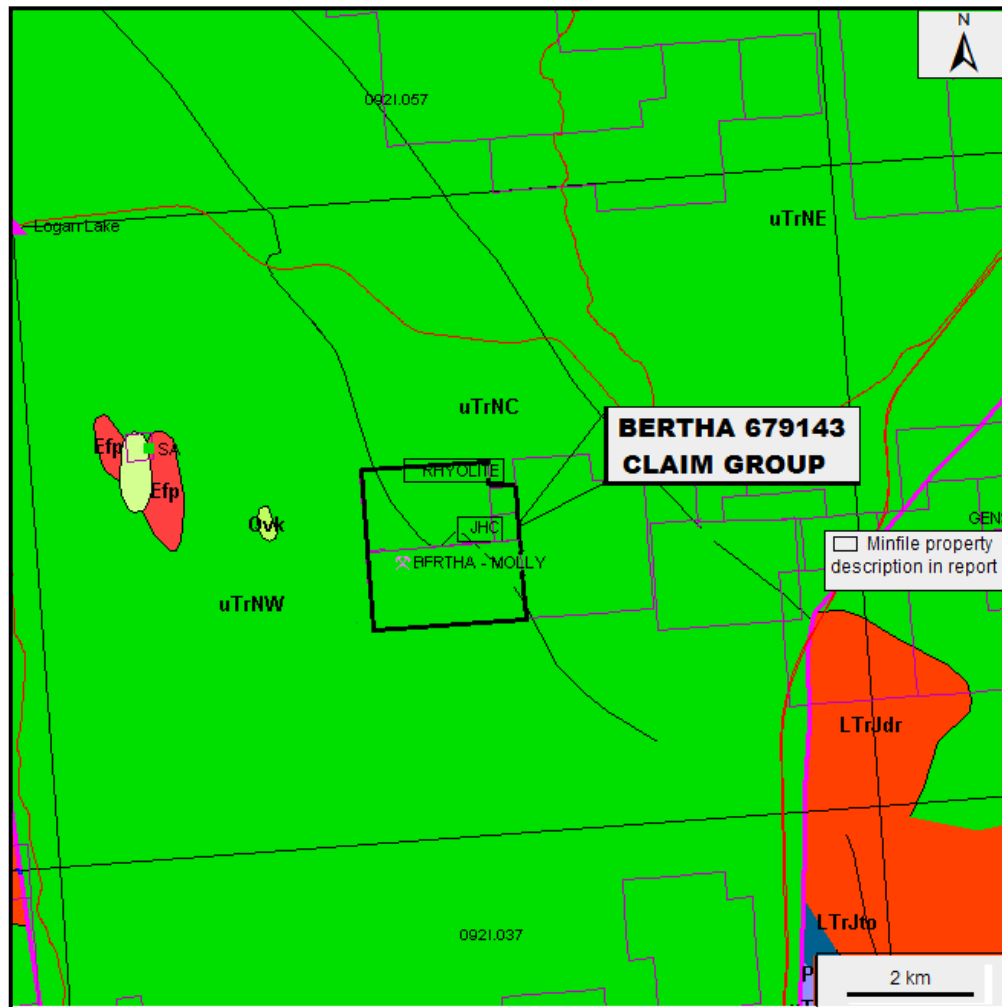
Variations in the batholiths geochemistry indicate local areas of assimilated country rock in the border zone and roof pendants in the intrusion. Outcrop areas have inclusions of amphibolite and "granitized" metamorphic rocks and compositional variations.

Two younger volcanic-dominated successions are important in the area. First, a northwest trending belt of Cretaceous continental volcanic and sedimentary rocks of the Spences Bridge Group unconformably overlie both the Nicola Group country rock and intrusive rocks along the southwest flank of the batholith. Distribution of the Spences Bridge Group rocks was locally controlled by reactivation of older faults that were important mineralization conduits in the batholith, such as the Lornex fault. Second, continental volcanic and sedimentary rocks of the Tertiary Kamloops Group cover extensive areas of the batholith and also overlie Triassic and Jurassic rocks from north of Highland Valley to the Thompson River. These also form isolated outliers and local intrusive centers south of the Highland Valley.

LOCAL GEOLOGY

Crooker (1988) reports that the Rhyolite Showing occurs near a flow-pyroclastic contact within Nicola volcanic rocks and that the Rhyolite Showing area is mainly underlain by a grey, green or black amygdaloidal basalt (unit 1). Varicoloured calcite amygdules ranging from 1 to 6 mm in diameter occur within an aphanitic groundmass. Several beds of maroon to green volcanoclastic breccia (unit 2) occur within the basalt. Maroon, subrounded to subangular clasts ranging up to 30 cm long by 15 cm wide occur within an aphanitic groundmass. Two northwest trending felsic dykes (unit 3) occur along the main road. The dykes appear to be 3 to 4 meters wide, and are light grey-green, aphanitic and siliceous. Pyrite content varying from 1/2 to 5% occurs within the felsic dyke.

Figure 21. **Geology, Claim, Index & Minfile**
(Base Map from MapPlace)



GEOLOGY MAP LEGEND

Eocene

EPrb

-Penticton Group

Andesitic volcanic rocks

Late Triassic to Early Jurassic

LTrJgd

unnamed granodiorite intrusive rocks

LTrJdr

dioritic to gabbroic intrusive rocks

Upper Triassic-Nicola Group

uTrNW

Western Volcanic Facies

undivided volcanic rocks

uTrNC

Central Volcanic Facies

undivided volcanic rocks

uTrNE

Eastern Volcanic Facies

basaltic volcanic rocks

GEOLOGY: Bertha 679143 CLAIM GROUP

The Bertha 679143 claim group is shown to be entirely underlain by two facies of the Upper Triassic Nicola Group in an unconformable, northwesterly trending contact. To the east is Western Volcanic Facies of basaltic volcanic rocks with the Central Volcanic Facies of undivided volcanic rocks to the east.

RHYOLITE showing (Porphyry Cu +/- Mo +/- Au)

MINFILE 092ISE021

Within Tenure 679143

The area straddles a northwest trending contact between two volcanic sequences of the Upper Triassic Nicola Group. To the west are plagioclase, plagioclase-augite intermediate pyroclastic and epiclastic breccia, conglomerate, tuff, sandstone, local shale and augite porphyry bodies. The central portion to the east is underlain by aphanitic pillowed mafic flows. The contact between these two sequences hosts the Rhyolite occurrence.

The Rhyolite showing is underlain by grey, green or black amygdaloidal basalt of the Upper Triassic Nicola Group. Varicoloured calcite amygdules occur within an aphanitic groundmass. Several beds of maroon to green volcanoclastic breccia occur within the basalt and contain maroon, subrounded to subangular clasts ranging up to 30 by 15 centimetres

JHC showing (Volcanic redbed Cu)

MINFILE 092ISE147

Within Tenure 679143

The property lies west of Homfray Lake and is underlain by volcanic rocks of the Upper Triassic Nicola Group. The area straddles a northwest trending contact between two volcanic sequences. East of the contact zone are very fine-grained red flows with occasional feldspar (plagioclase?) phenocrysts. The matrix contains moderate amounts of hematite disseminations. To the west are grey volcanics with an aphanitic to fine-grained matrix and associated feldspar and/or augite phenocrysts. Alteration consists of epidote, chlorite and carbonate. The contact zone parallels the main northwest structural trend. Northeast and north trends are also evident. Drilling (1971) intersected disseminated chalcocite in porphyritic and amygdaloidal basalt.

MINERALIZATION: Bertha 679143 CLAIM GROUP

The mineralization on the mineral MINFILE reported showings within Tenure 679143 is reported as follows

RHYOLITE showing (Porphyry Cu +/- Mo +/- Au)

MINFILE 092ISE021

Within Tenure 679143

Mineralization occurs in amygdaloidal basalt near the flow-volcaniclastic contact and is related to narrow quartz-carbonate veinlets within shears. Several old trenches indicate the shear zone strikes approximately 335 to 345 degrees and dips steeply west

Pyrite is present with minor chalcopyrite, azurite, malachite and sphalerite. Rock samples from this zone assayed up to 0.377 per cent copper, 0.218 per cent zinc and are weakly anomalous in gold and silver values.

Crooker (AR 18048) describes the mineralization at the Rhyolite showing as follows:

Rhyolite Showing

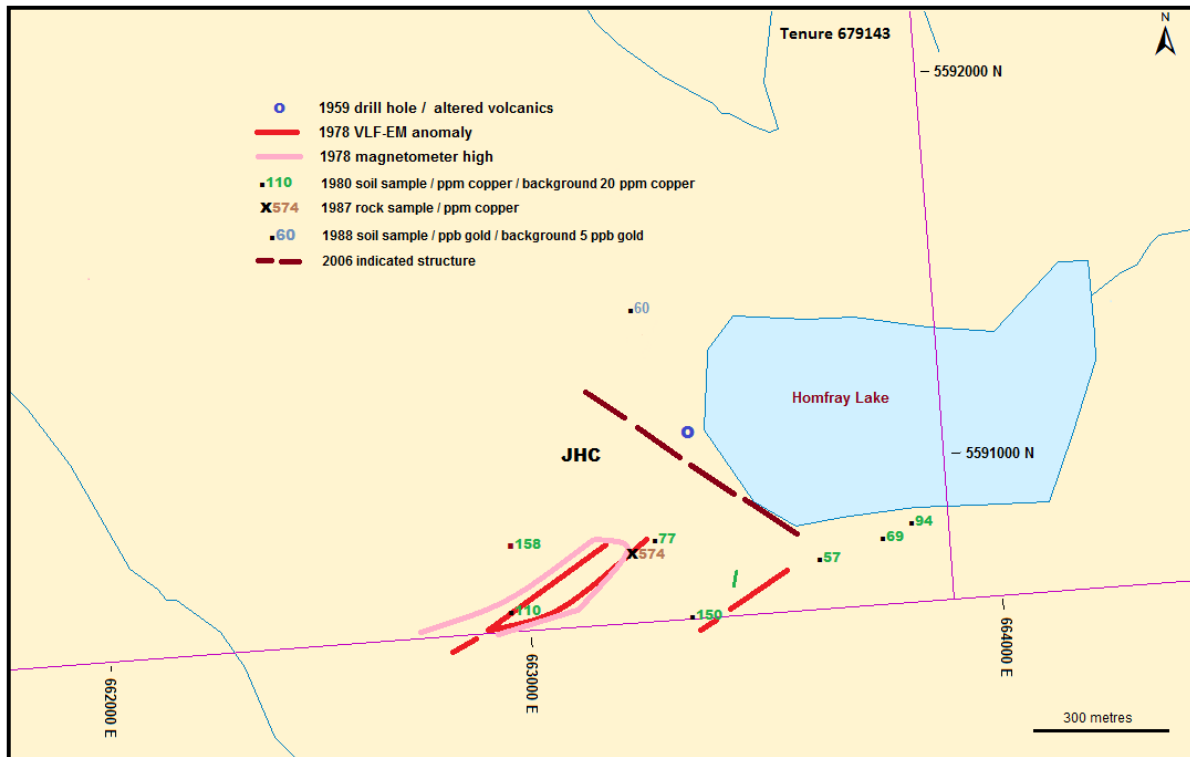
Mineralization at the Rhyolite Grid (Figure 6) occurs near a flow-pyroclastic contact within Nicola volcanic rocks. A copper-zinc geochemical anomaly was outlined by the 1987 program. Mineralization at 100N and 075E is related to narrow quartz-carbonate veinlets and shearing within basalt. Several old trenches indicate the zone strikes approximately 335-345 and dips steeply west. The zone is poorly exposed and of unknown dimensions. Pyrite is present locally in concentrations of up to 20%, with minor chalcopyrite, azurite, malachite and sphalerite. . Sampling indicated weakly anomalous gold (41 ppb), silver (4.1 ppm), copper (3770 ppm) and zinc (2183 ppm) values. The proximity of these showings to the flow-pyroclastic contact makes the area a target for stratabound massive sulphide mineralization

Crooker (AR 17337) describes the mineralization at the JHC showing as follows:

JHC Showing

Mineralization at this showing consists of amygdaloidal andesite with fracturing and narrow shears containing epidote, carbonate, quartz, malachite and chalcopyrite. Several samples were taken in the area of this showing and 87-001 gave 14.2 ppm Ag, 17 ppb Au and 42752 ppm Cu.

Figure 24. 1978 geophysical interpretation based on summary compilation of historical exploration results



INTERPRETATION and CONCLUSIONS

Based on the results of the historical exploration data on the ground presently covered by Tenure 679243, the claim warrants a continuing exploration program. The exploration should be centred on the JHC and the Rhyolite mineral showings where there is sufficient positive geological, geophysical, and geochemical information to target a specific area for advanced exploration on each showing.

The most positive exploration results on each showing are:

JHC

- the 1959 drill hole in which, "*The lower portion of the hole encountered a siliceous, altered grey-green rock with considerable pyrite. No assays were reported but the recommendation was made to extend the hole to 1000 feet.*";
- the 1988 soil geochem which revealed, "*A few scattered values of gold, silver and copper were anomalous. A large number of samples were anomalous for zinc.*";
- the reported mineralization of malachite and chalcopyrite at this showing with one sample taken in the area gave 14.2 ppm Ag, 17 ppb Au and 42752 ppm (4.2%) Cu. (AR 17337).
- the 1st derivative magnetometer expression indicates that the localized mineral showing area is within the transitional zone between a high and a low magnetometer which is the common location of porphyry resources such as at Copper Mountain (*Minfile 092HSE001*).

Interpretation and Conclusions (cont'd)**Rhyolite**

- reported (AR 18048) pyrite concentrations of up to 20%, with minor chalcopyrite, azurite, malachite and sphalerite. Sampling indicated weakly anomalous gold (41 ppb), silver (4.1 ppm), copper (3770 ppm) and zinc (2183 ppm) values. The proximity of these showings to the flow-pyroclastic contact makes the area a target for stratabound massive sulphide mineralization;

Thus, an Induced Potential survey on the JHC showing should delineate the pyrite zone at depth; which zone may be associated with a pyritic alteration halo to a copper-gold bearing porphyry. A strategically placed diamond-drill hole to test the maximum anomalous portion of the IP survey should determine the scope of the pyritic zone. A second drill-hole may be required to test the zone of moderate to weak chargeability as this may indicate a lower sulphide content but of disseminated copper minerals within an intrusive.

At the Rhyolite showing, a comparable exploration program should be completed. However, only one drill hole may be required to test for stratabound massive sulphide mineralization.

The historical exploration results (*Figure 24.*), based on the original 1978 geophysical survey, in addition to the positive exploration results mentioned above, substantiates the potential of the JHC showing area for a potential concealed porphyry resource. The evidence for this is shown in the report in the Figures and summary contained therein in addition to the compilation of significant results relevant to the 1978 geophysical survey and the potential concealed porphyry resource. All the summary information below pertains to the JHC showing. The Rhyolite mineral zone has equal or greater potential as it is designated by Minfile as a porphyry Cu +/- Mo +/- Au type showing.

The author's interpretation on the progressive positive exploration results (*Figure 24.*) based on the 1978 VLF-EM/magnetometer survey are:

1978 VLF-EM/magnetometer survey: anomalies could indicate a strong fault, shear zone, or hydrothermal alteration.

1980 soil geochemical survey: the anomalous copper correlate with the 1978 indicated structures indicating volatile mineral bearing fluids escaping from a concealed source. Porphyry? One anomalous soil sample 100 metres from an indicated structure may indicate an en-echelon structure.

1987 rock sample assay: highly anomalous rock sample in the indicated structure is another indication of concealed volatile mineral bearing fluids. A 1987 sample from the JHC showing reportedly returned 42752 ppm copper.

1988 anomalous soil sample 400 metres north of the indicated structures could be another structural zone.

2006 indicated structure could be a structure that terminates the western 1978 indicated structures and possibly right laterally offsets the structure with the structure possibly continuing northeastward and including the 1988 anomalous soil sample.

Interpretation and Conclusions (cont'd)

Thus, the interpretation of the 1978 geophysical survey is that the anomalous VLF-EM northwesterly trends do indicate a structural/shear zone that was the conduit for volatile mineral bearing fluids to reach the level of the present surface.

Other indications of a concealed porphyry are the results from the 1959 drill hole on the west shore of Homfray Lake. The altered volcanics and considerable pyrite in the lower portion of is an indication of a propylitic alteration zone peripheral to a porphyry.

Respectfully submitted

Sookochoff Consultants Inc.



Laurence Sookochoff, PEng

SELECTED REFERENCES

Carr, J.M. et al - Afton: A Supergene Copper Deposit, in Porphyry Deposits of the Western Cordillera, Special Volume 15, CIM, pp376-387.1976.

Crooker, G.F., Rockel, E.R. - Geochemical and Geophysical Report on the WRT 1 to 15 Claims for Western Resource Technologies Inc. June 1986. AR 14959.

Crooker, G.F. - Geological, Geochemical and Geophysical Report on the WRT 1 15 Claims for Western Resource Technologies Inc. June, 1986. AR 15,060.

Crooker, G.F., Rockel, E.R. - Geological, Geochemical and Geophysical Report on the WRT 1 to 15 Claims for Western Resource Technologies Inc. March 1988. AR 17337.

Crooker, G.F., Rockel, E.R. - Geological, Geochemical and Geophysical Report on the WRT 1 to 15 Claims for Western Resource Technologies Inc. November 1988. AR 18048.

Geology, Exploration and Mining in British Columbia - 1972 - pgs 165,183,209-220.

Hill, H. – Magnetometer Survey on the Sunshine Claims for Vanex Minerals Ltd. November, 1958 AR 234.

- Report covering Geophysical and Physical Work done on 71 Claims of Vanex Minerals Ltd. August 1958. AR 266.

Hollister, V.F. - Geology of the Porphyry Copper Deposits of the Western Hemisphere. Society of Mining Engineers of The American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc. New York, New York. 1978.

John, D.A. - Porphyry Copper Deposit Model. Scientific Investigations Report 2010-5070-B. U.S. Department of the Interior. U.S. Geological Survey, Reston, Virginia: 2010.

MapPlace – Map Data downloads

Rockel, E.R. - Geochemistry Test Survey on the Oly #1 to Oly #6 for Interpretex Resources Ltd. August, 1987. AR 16189.

Rockel, E.R. - Geochemical Survey on the Oly #1 to Oly #6 for Interpretex Resources Ltd. September, 1988. AR 17849.

Sookochoff, L. – VLF-EM and Magnetometer Report on the Homfray Property for Thunderbolt Resources Ltd. May 4, 1979. AR 07268.

Sookochoff, L. – Geological Evaluation Report on the Katrina Mineral Claim for Auror Capital Corp. dated April 24, 2006.

Sookochoff, L. – Report on the Phase I Program on the Katrina Mineral Claim for Auror Capital Corp. dated September 8, 2006.

Sookochoff, L. – Geological Assessment Report (Lineament Array Analysis) on the Katrina Mineral Claim for Auror Capital Corp. dated December 1, 2006. AR 28671.

Sookochoff, L. – Report on the Phase IIa Program on the Katrina Mineral Claim for Auror Capital Corp. dated December 4, 2006.

Selected References (cont'd)

Sookochoff, L. – Report on the Phase IIb Program on the Katrina Mineral Claim for Auror Capital Corp. dated August 7, 2007.

Sookochoff, L. – Report on the Phase IIIa Exploration Program on the Katrina Mineral Claim for Auror Capital Corp.. May 3, 2008.

Sookochoff, L. – Assessment Report on Geological and Geophysical Surveys on Tenures 58105 & 679243 for Guy and Christopher Delorme. January 13, 2016. AR 35735

STATEMENT OF COSTS

Work on Tenure 679143 was done from March 15, 2017 to May 17, 2017 to the value as follows:

Laurence Sookochoff, P Eng. 4 days @ \$ 1,000.00/day -----	\$ 4,000.00
Report -----	<u>2,500.00</u>
	\$ 6,500.00
	=====

CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and principal of Sookochoff Consultants Inc. with an address at 120 125A-1030 Denman Street, Vancouver, BC V6G 2M6.

I, Laurence Sookochoff, further certify that:

- 1) I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
- 2) I have been practicing my profession for the past fifty-one years.
- 3) I am registered and in good standing with the Professional Engineers and Geoscientists British Columbia.
- 4) The information for this report is based on information as itemized in the Selected Reference section of this report and from work the author has performed periodically in the Bertha Property area and on ground covered by Tenure 679143 since 1979.
- 5) I am the title holder of Tenure 679143.



Laurence Sookochoff, P. Eng.