BRITISH COLUMBIA The Best Place on Earth	T T
Ministry of Energy, Mines & Petroleum Resources Mining & Minerals Division	Assessment Report
BC Geological Survey	Title Page and Summary
TYPE OF REPORT [type of survey(s)]: Technical, Geophysical: Rada	r Survey TOTAL COST : \$14,005.00
AUTHOR(S): Dr. Paul Metcalfe P.Geo. and David J. McLelland	SIGNATURE(S):
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):	YEAR OF WORK: 2015
STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):	5583696
PROPERTY NAME: Capital	
CLAIM NAME(S) (on which the work was done): 1039098 (London),56	9510, 569511, 537558 (Ruby 54) ,536758 (Ruby 50),
536762 (Lauren 8), 520659 (Ruby 28), 517343 (Ruby 23).	
COMMODITIES SOUGHT: Au, Ag, Cu	
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 104A 063, 10	4A 066 , 104A 162
MINING DIVISION: Skeena	NTS/BCGS: 104A/04
LATITUDE: <u>56</u> <u>°</u> <u>6</u> <u>'44.2</u> " LONGITUDE: <u>129</u>	^o <u>46</u> <u>'59.6</u> " (at centre of work)
OWNER(S): 1) Auramex Resource Corp.	_ 2)
MAILING ADDRESS: 750 Grand Boulevard	
North Vancouver, V7L 3W4	
OPERATOR(S) [who paid for the work]: 1) Auramex Resource Corp.	_ 2)
MAILING ADDRESS: 750 Grand Boulevard	
North Vancouver, V7L 3W4	
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure Jurassic, Hazelton, Bear River formation, volcanic, argillite, Unu	

7201, 23708, 31306, 28147, 12827.

ALSH COLUM

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			
		·	
Induced Polarization			
Radiometric			
Seismic		-	
Other		-	
Airborne Radar survey	2901	1039098 569510 569511 537558 536	
GEOCHEMICAL (number of samples analysed for) Soil			
Silt			
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	rail		
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	\$14,005.00



Assessment Report for a Satellite RADAR survey and analyses on the Capital Gold Property

Skeena Mining Division, British Columbia, Canada

Latitude: 56 %'44.2" N Longitude: 129 %46'59.6" W

451,300 m E, 6,218,850 m N

Universal Transverse Mercator Zone 9; 1983 North American Datum

Prepared For

Auramex Resource Corp. (owner)

by

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Date of Report: 29/04/2016



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3. Introduction

In August of 2015, Auracle Geospatial Science Inc. (Auracle) was asked by Wayne Crocker of Auramex Resource Corp. ("Auramex") to carry out processing of commercially available and public domain synthetic aperture radar (SAR) data for a designated area of interest (the AOI) covering the mineral tenures comprising the Client's Stewart project. The scope of these services included analysing archival remote sensing data provided by the Client, and acquiring and analysing radar data from both public databases and new acquisitions.

The objective of this project was to generate processed images from the acquired radar data for the purpose of detecting structural discontinuities and, where possible, lithological boundaries within the property as an exploration tool for structurally hosted, intrusion-related gold (Au) deposits.

3.1. Disclaimer

Auracle has assumed that all technical documents reviewed and listed in "References" are accurate and complete in all material aspects. Auracle reserves the right, but will not be obligated to, revise this report and conclusions if additional information becomes known subsequent to the date of this report.

The remote sensing work completed by Auracle on the Property was performed exclusively for the purposes of the Client. Should the data and/or report be made available in whole or part to any third party, and such party relies thereon, that party does so wholly at its own and sole risk and Auracle disclaims any liability to such party.

Where the remote sensing work has involved Auracle's use of any information provided by the Client or third parties, upon which Auracle was reasonably entitled to rely, then the remote sensing work is limited by the accuracy of such information. Auracle is not liable for any inaccuracies or incompleteness in said information, save as otherwise provided in the terms of the contract between Auramex and Auracle.



4. Property Location and Description

4.1. Property Location

The 1227 hectare (ha) Capital property is situated north and east of Stewart in NW British Columbia (Figure 1), centred on latitude 56°6'44.2" N and longitude 129°46'59.6" W (451,300 m E, 6,218,850 m N). The tenures lie in the 104A/04 National Topographic System (NTS) map area and in the British Columbia Terrain Resource Integrated Management (TRIM) map areas 104A.001, 104A.002, 104A.011 and 104A.012.

4.2. Mineral Tenure

The property comprises eight mineral tenures (Table 1). All are "electronic" mineral tenures acquired online. The tenures are listed in Table 1 and their dispositions shown in Figure 2.

Tenure	Claim Name	Owner	Issue date	Expiry Date	Area (ha)
517343	RUBY 23	Auramex Resource Corp. 100%	12-Jul-05	31-Dec-16	288.6780
520659	RUBY 28	Auramex Resource Corp. 100%	30-Sep-05	31-Dec-16	288.7410
536758	RUBY 50	Auramex Resource Corp. 100%	07-Jul-06	31-Dec-16	234.5830
536762	LAUREN 8	Auramex Resource Corp. 100%	07-Jul-06	31-Dec-16	36.0770
537558	RUBY 54	Auramex Resource Corp. 100%	21-Jul-06	31-Dec-16	306.7190
569510		Auramex Resource Corp. 100%	06-Nov-06	31-Dec-16	18.0388
569511		Auramex Resource Corp. 100%	06-Nov-06	31-Dec-16	36.0778
1039098	LONDON	Auramex Resource Corp. 100%	05-Oct-15	31-Dec-16	18.0424

Table 1: Summary of Mineral Tenure

4.3. Physiography, climate and vegetation

The property lies across the valley of the westerly flowing Bear River, above its confluence with American Creek in British Columbia's rugged Coast Mountains (Figure 2), an area characterised by steep slopes and high rainfall. The valley floor lies at an elevation of 300 m, between a northern boundary at an elevation of 1,700 m above sea level (a.s.l.) and a southern boundary at an elevation of 2,000 m a.s.l. The prominent Roosevelt Ridge, extending northwest from Mount Disraeli, dominates the main part of the property.



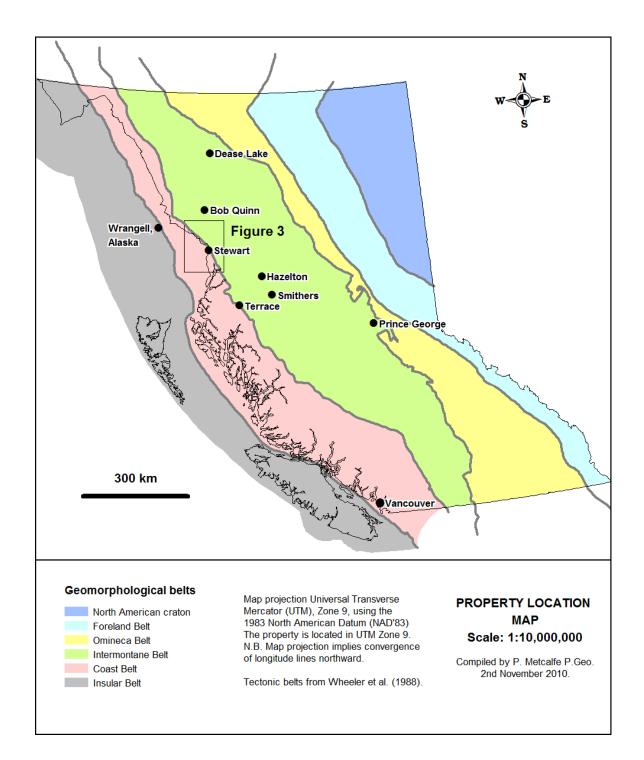


Figure 1: Property Location.



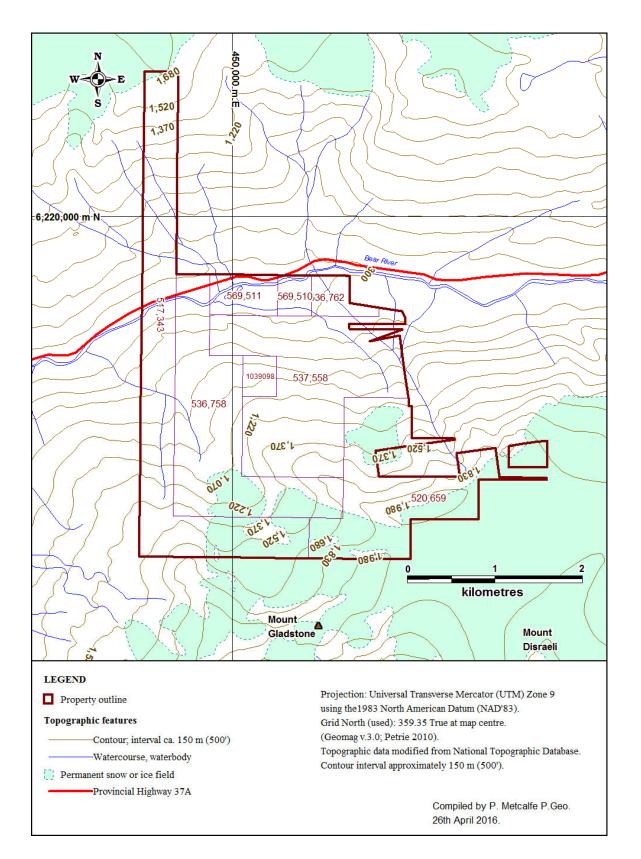


Figure 2. Property mineral tenure and physiography.



Glaciation has incised the topography deeply, creating characteristic U-shaped valleys, with one or more alps, or breaks in slope, at elevations between 1000 m and 1200 m elevation a.s.l. Uplift of the Coast Mountains during periods of isostatic rebound has enabled overdeepening of the existing glaciated valleys by rivers and streams, cutting steep-sided, V-shaped canyons in these valley floors. The glaciated valleys and their fluvial successors habitually occupy zones of lithological weakness; this may be the case with the drainages in the Bear River watershed.

The area's climate is typical of the northern Coast Mountains. A Pacific maritime influence ensures relatively warm and consistently wet winters. Average temperatures at Stewart vary from -4 °C in January to 15 °C (exceptionally 30 °C) in July. Annual rainfall in Stewart is 1,843 mm, at least two-thirds of which falls during the winter months from September to February; at higher elevations it falls as snow. Despite this, all major and many subsidiary drainages flow throughout the year, except at alpine elevations. Fieldwork at higher elevations is usually possible until October but snow is possible at any time of year at nearly any elevation and snow-pack from the previous year might hinder exploration at higher elevations until as late in the year as September.

Vegetation is typical of the Pacific coast rain forest. Tree line on the property varies between 1,000 and 1,200 m a.s.l.; included in the category of "trees" (*i.e.:* below tree line) are numerous landslide slopes hosting moderately thick landslide alder, interspersed with Devil's Club. Timber stands between the landslide and avalanche slopes comprise (in order of precedence) western hemlock, Sitka spruce, and minor cedar, these species yielding to mountain hemlock at higher elevations. Above tree line the vegetation follows the progression common to the alpine of northwestern British Columbia, passing upslope through a zone of perennial and annual alpine flowering plants and through a zone of white mountain heather to tundra. The Bear River valley floor hosts stands of cottonwood, interspersed with spruce, hemlock and alder.

4.4. Local resources, infrastructure and property access

The property lies along the Bear River valley 22 km northeast of Stewart, B.C. Stewart has an enviable location at the head of the Portland Canal, first remarked by Robertson (1911) and has a history of mining and mineral exploration well in excess of a hundred years. The town is accessible from the sea *via* a bulk loading facility and *via* a paved highway 333 km south to Smithers. Supplies are either on hand or can be transported with minimal delay from the south.

As noted above, part of the property is easily accessible from the road. However, the valley is extreme in its topography. During the early years of last century, a trail was constructed from the mouth of the Bear River up its valley, assisted in part



by the British Columbia Government. Stewart airport is the nearest helicopter base at the time of writing.

5. History of Exploration

Mineral exploration in the Stewart-Anyox area began before Confederation and prospectors began detailed exploration of the Stewart area in 1898, during the Klondike gold rush. No significant placer deposits were found (Conway 1913, 1914), but mineralized float led to the discovery of gold in quartz veins. In 1902, mineralization was discovered at American Creek. Continued prospecting led to the discovery of the Premier mineral occurrence in 1910. Mining operations date back to the opening of the Anyox and Silbak Premier mines in 1914 and 1918, respectively.

The early history of the Stewart Camp and, in particular, the development of the Bear River valley is well described by a succession of remarkable mining recorders (Flewin 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, Carmichael 1907, Manson 1908, 1909, Robertson 1910, 1911, Conway 1911, 1912, 1913, 1914, 1915, Jack 1916, 1917, Clothier, G.A., 1918a, 1918b, 1919a, 1919b, 1920a, 1920b, 1921, 1922, 1923, 1924, 1925, 1926, 1927, James 1928, 1929 and Mandy 1930a, 1930b, 1931, 1932, 1933a, 1933b, 1934a, 1934b, 1934c, 1935, 1936, 1937, 1938, 1939). Sadly, these comprehensive accounts of mineral exploration were casualties of the Second World War.

The first record of discovered mineralization on ground covered by the Auramex property is by Manson (1909), describing the 1908 discovery and staking of the London and New York mineral claims (MINFILE 104A 063) in the upper Bear River area, by Ericksen and McNeill. The property was located in relatively inaccessible ground by following extensive and, in places, high-grade chalcopyrite float derived from that mineral occurrence. Manson further noted that numerous claims had been staked in the immediate vicinity and these are shown in a map published two years later (Conway 1911).

Neither Conway (1915) nor Robertson (1915a, 1915b, 1916, 1917) nor Jack (1916, 1917) reported any work on the present property. However, reference is made (Jack 1917, p.515) to a quantity of silver lead ore shipped from the (newly discovered) Grey Copper mineral occurrence (MINFILE 104A 066) in 1916. Given its elevation, roughly 1,000 m above the valley floor, the actual discovery must have predated the shipment by a year or two at least. Subsequently Clothier (1918b) described work at Grey Copper as consisting of an open drift along the vein for 38.1 m (125 feet), giving the maximum depth of 3 m (10 feet).

The system of Assessment reporting began in 1947. The first such work on the property (Heddle 1967) was a comprehensive geological study of the New York – London Crown Grants. Heddle noted the presence of a favourable "tuffaceous"



horizon, traceable along strike, whose base carries pyrrhotite mineralization elsewhere in the area. A prospective breccia zone with locally significant amounts of oxidized sulphide was discovered on the more southerly claims. In 1971, Keith Copper Mines Ltd. carried out a small flux-gate magnetometer survey north of the London-New York Crown Grants. Notwithstanding some encouraging results (Venkataramani 1972), the work was never followed up.

Tournigan carried out exploration in 1978, comprising geological mapping, trenching and sampling (Keyte 1978), the majority of this activity including the present property. Tournigan followed this up with a program of geological mapping (Smitheringale 1984). Smitheringale's recommendations comprised more detailed geological mapping, including searches for a felsic volcanic centre and a sulphide stringer zone in the footwall rocks, detailed stratigraphic and lithochemical studies of the mineralized zone and footwall sequence, a soil geochemistry survey and shallow diamond drilling with a portable drill over the large area where the mineralized zone is shallowly buried. Two small prospecting programs were carried out in 1991, on the Shul 1-6 mineral claims (Bray 1991) and on a large area comprising Tournigan's Bear Pass property (Cavey and Raven 1991).

An exemplary study of Tournigan's New York-London property was carried out in 1994 by Westmin Resources Ltd. (Pawliuk and Bath 1994). The work comprised grid and reconnaissance geological mapping, lithogeochemical sampling, geochemical soil sampling and hipchain-and-compass grid surveying, augmented by an airborne geophysical survey. The work was followed up in 1996 by drilling of eleven holes to test the New York/London mineral occurrence (Gunning *et al.* 1996). 1,362 m (4,470 feet) were drilled. The best intersection was in hole 7 (6.4 m or 21 feet grading 0.15% Cu and 0.27gm/t Au). Following these activities, the tenures were allowed to lapse.

The only work carried out on the property under the existing tenure comprised minor geochemical sampling (Smith and Dunn 2005, Dunn 2006, Dunn and Davis 2007) and an airborne geophysical survey (Prikhodko *et al.* 2009).

6. Geological Setting and Mineralization

6.1. Regional Geology

The property is located within the Intermontane Belt of the Canadian Cordillera on the western margin of the Stikine terrane (Stikinia). More specifically, it lies within an area extending north and northwest from a southern apex at the old mining camp of Anyox and which hosts more than 1000 mineral occurrences of dominantly precious metal vein type, with related skarn, porphyry and massive sulphide occurrences. Seventy-eight of these occurrences are past-producing mines, fifty-seven of which produced predominantly precious metals. The area encompasses metamorphic and plutonic rocks of the Coast Plutonic Complex on



the west, is dominated by Stikinia and includes part of the western margin of the Bowser Basin (Evenchick 1991a, 1991b) to the east (Figure 3). Named the Stewart Complex (Grove 1986), the area has enjoyed decreasing complexity with time and research (*e.g.:* Anderson 1993, Alldrick 1993, Alldrick *et al.* 1996, Anderson *et al.* 2003) and is commonly referred to as British Columbia's Golden Triangle, although Golden Arch (precluded by copyright), or Golden Crescent (Kikauka 1989) were better descriptors.

Northwestern Stikinia is underlain by rocks of at least five Palæozoic to Cenozoic tectonostratigraphic packages (Anderson *et al.* 2003). The three lower assemblages comprise multiple, overlapping Late Palæozoic and Early Mesozoic arc assemblages, of which the Late Triassic Stuhini Group is the latest product. These assemblages form a base for the Jurassic arc and basinal assemblages; the Jurassic and older rocks are intruded by the Palæogene post-kinematic granitoid intrusions of the Coast Plutonic Complex.

Metalliferous deposits discovered to date in northwestern Stikinia are associated mainly with Mesozoic arc assemblages and predominantly those of Jurassic age. Formation of the Jurassic island arcs and their associated mineralization occurred during four magmatic episodes, each from 5-10 Ma in duration and bracketed by Triassic-Jurassic, Early Jurassic, Middle Jurassic, and Cretaceous-Eocene deformations (Anderson *et al.* 2003).

The magmatic episodes, together with examples of their derivative mineral deposits, are:

1. Latest Triassic to earliest Jurassic (ca. 205-196 Ma) alkaline porphyryrelated, deformed mesothermal Ag-Au veins (*e.g.:* Red Mountain); also Triassic Besshi-style volcanogenic massive sulphide (VMS, *e.g.:* Granduc deposit);

2. Early Jurassic Texas Creek Plutonic Suite (ca. 196-187 Ma) alkaline porphyry and porphyry-related epithermal, transitional and mesothermal Ag-Au veins and base and precious metal deposits (*e.g.:* Premier, Bronson Creek, Kerr, Sulphurets, Mitchell and Snowfield deposits);

3. Latest Early Jurassic (ca. 185-183 Ma) small, poorly mineralized porphyry intrusions; and:

4. Middle Jurassic (ca. 175-172 Ma) calc-alkaline arc and tholeiitic back-arc magmatism and syn- and epigenetic, stratabound base and precious metal deposits (*e.g.:* Eskay Creek deposit) related to the back-arc basin formation.

Arc activity ended with deposition of the Middle and Upper Jurassic Bowser Lake Group sedimentary rocks. As noted above, the southwestern margin of Stikinia is bounded by the Palæogene post-kinematic Coast Plutonic Complex.



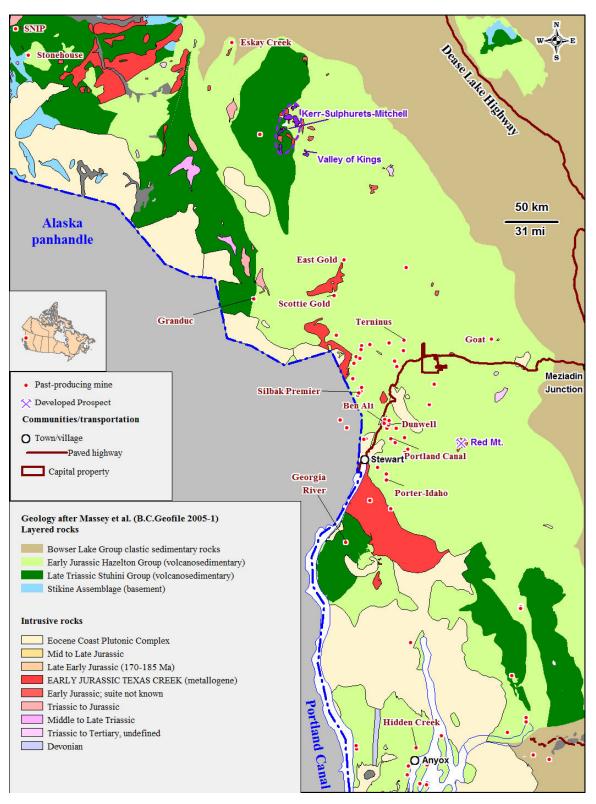


Figure 3: Generalised regional geology.



6.2. Property Geology

The area was initially described by McConnell (1913). McConnell identified two informally designated formations: a dominantly argillite lithology called the Bitter Creek formation, exposed to the west of the Bear River Valley, striking southeast and dipping moderately to the southwest. Apparently overlying this sequence was the dominantly greenstone lithology designated as the Bear River formation. Hanson (1935) reinterpreted both formations as roughly contemporaneous and assigned the sequence to the Hazelton Group.

Grove (1971, 1986) reworked the stratigraphic column of the area and identified and mapped the Mesozoic rocks in the Bear River Valley and the adjacent Salmon River valley to the west. Grove proposed an older, predominantly volcanic assemblage as the Unuk River Formation, based on a type section in that watershed and with a proposed age from Upper Triassic to Lower Jurassic. Grove also proposed a later, predominantly clastic assemblage called the Betty Creek formation, grading conformably or paraconformably upsection into the Bowser Lake assemblage. Alldrick (1993)¹ identified the rocks the lower Bear River valley as Unuk River formation, assigned to the Upper Triassic to Lower Jurassic.

Most recently Greig *et al.* (1994) published the results of mapping in the Cambria Icefield. This work was the first in the area to make a determined effort to collect palæochronological information. Unfortunately, little information was returned from the immediate area of the property. A total of two isotopic age measurements, both Eocene are available for the entire Bear River valley, mute testimony to the abysmal dearth of public funding for scientific research along a paved highway to a deepwater port at the core of a major mining camp.

A geological map of the property area is shown in Figure 4. Of necessity, it is a compromise between more recent, regional work of Greig *et al.* (1994) in the Cambria Icefield and the eastern area of Grove's (1971, 1986) and Alldrick's (1993) regional studies. The property itself is underlain by two sequences of intermediate volcanic rocks separated by an argillite unit (Pawliuk and Bath 1994). The argillite unit is not shown on the 1994 regional map.

6.3. Significant Mineralized Zones

The property encloses the Grey Copper prospect and the New York and Shul 4 showings (Figure 4). Summaries of these mineral occurrences, taken from MINFILE, are presented in Appendix 1.

¹ The reader will note that Alldrick's 1982-1983 fieldwork predates that of Greig *et al.* (1994) by ten years, although publication was contemporaneous.



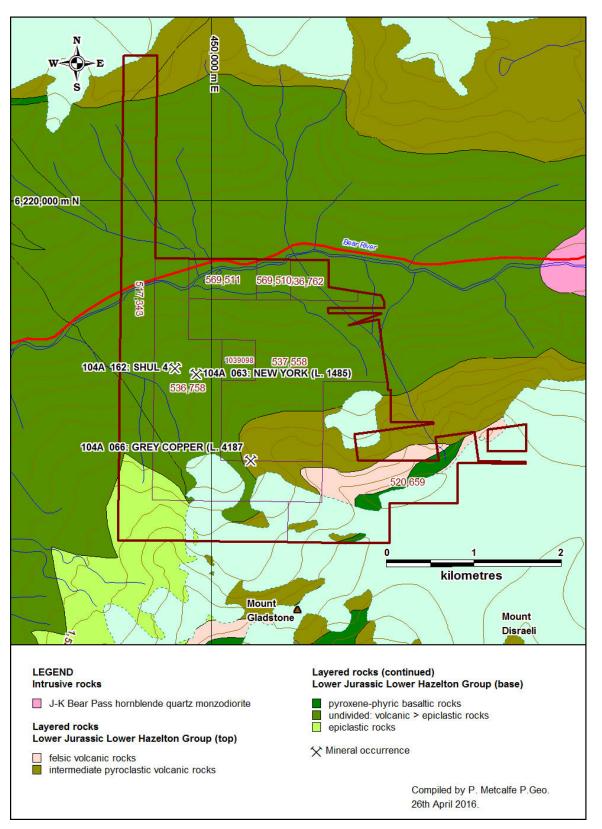


Figure 4. Property geology, adapted from Greig et al. (1994).



7. Data Acquisition

Table 2: Data Provided by the Client

Data Type	Data Source	Date Received
Geological map	Alldrick 1993	17 th August, 2015
Geological map	Greig <i>et al.</i> 1994	17 th August, 2015
Geochemical	Smith and Dunn 2005	17 th August, 2015
Geochemical	Dunn and Davis 2006a, b	17 th August, 2015
Geochemical	Dunn and Davis 2007a, b	17 th August, 2015
Geophysical data	Prikhodko <i>et al</i> . 2009	17 th August, 2015
Geophysical data	Prikhodko <i>et al.</i> 2010	17 th August, 2015
Geophysical inversion	Kowalczyk <i>et al</i> . 2010	17 th August, 2015
MINFILE	http://minfile.gov.bc.ca	17 th August, 2015
BC mineral tenure	https://www.mtonline.gov.bc.ca	17 th August, 2015
Vector topography	Canadian National Topographic Database	17 th August, 2015

Table 3: Archived Data Collected from Various Sources

Data Type	Data Source	Date Downloaded				
BC mineral tenure	https://www.mtonline.gov.bc.ca/	5th October, 2015				

Table 4: Newly Collected Data

Data Type	Data Source	Date Collected		
RadarSat 1 Synthetic Aperture Radar (descending)	MacDonald Dettwiler and Associates (MDA)	17 th August, 2015		
RadarSat 1 Synthetic Aperture Radar (descending) MDA	MDA	17 th August, 2015		
Sentinel 1 Synthetic Aperture Radar (3 tiles)	European Space Agency	17 th August, 2015		



8. Data Description

8.1. Radar Data

Two RadarSat-1 Fine 6.25m Synthetic Aperture c-band microwave Radar data sets were purchased from MDA Corporation Richmond, BC. These were used to form an Epipolar pair. This pair covers the entire watershed of the Bear River valley and was used in preference to three datasets acquired from the European Space Agency's Sentinel 1 satellite by reason of the former's finer resolution and pairing. The latter were processed and examined as a backup for the former and as a check on the veracity of images processed from the RadarSat data.

Historic archived data for the AOI that had spatial reference were ingested in raster, vector, tabular and grid formats. Conversions to a common datum (WGS 84) and common projection (UTM 09N) were carried out.

Raster data, in the form of scanned maps, were resampled (Warped) to fit using coordinates or identifiable geographic features. In some cases the raster data was then converted into vector data using 'heads-up' digitizing or raster feature extraction. Grid data was ingested using interoperability software to preserve the original content.

8.2. Data Pre-Processing

8.2.1. Radar Data (Figure 5)

RadarSat-1 Fine CEOS data were converted to .tif format and corrected for:

- Antenna pattern
- Slant Range
- Radiometry
- Topographic distortion (Layover and Foreshortening)
- Masking
- Histographic matching
- Concatenation and 3D image development

The ortho-corrected 6.25 m data were then filtered for speckle reduction with a Robert's asymmetric box type filter. This pre-processed radar data was checked for alignment against the higher resolution optical data and fine position corrected.



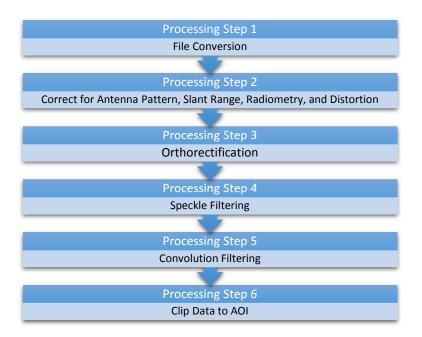


Figure 5: Radar Data Pre-Processing Workflow

9. Data Processing

9.1. Methodologies

The methodologies used in this work are consistent with scientific standards conventionally used in these types of individual processes and analyses (Jensen 1996, Harris *et al.* 2010).

9.2. Radar Data Processing (Figure 6)

The noise-reduced and pre-processed Radar data were re-processed using a series of protocols including: Directional filters: 120° and 90°; Laplace Transforms; and several mathematic convolutions including co-occurrence and occurrence sets. Results from these Mathematical Convolution images included Co-Occurrence: Mean; Variance; Homogeneity; Contrast; Dissimilarity; Entropy; Second Moment; and Correlation image sets. In addition, Occurrence: Data Range; Mean; Variance; Entropy; and Skewness image sets.

These several data were projected using both nearest neighbour and cubic convolution resampling to improve and discriminate their varied linearity, density, texture or arcuate pattern. Results were projected using custom histogram displays for improved visual discrimination.



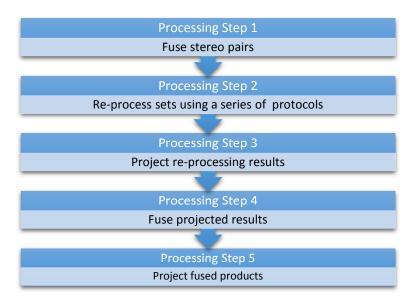


Figure 6: Radar Processing Flow Chart

10. Remote Sensing Software

Software used in this work included:

- ITT VIS ENVI 5.0 plus IDL with atmospheric and DEM extraction modules.
- ESRI ArcGIS10.1 with spatial analyst, and image analyst extensions
- ESRI ArcGIS 9.3
- Mapinfo Professional v.8.0
- Global Mapper v.11.02
- X-Tools Pro
- PCI Geomatica Ortho Suite and Radar Orthoengine
- ASF



11. Results

The conjoined images from processed RadarSat data which cover the property are shown in Figure 7. The diagram is a blue/red image which can provide a threedimensional (3D) image, if viewed through the appropriate eyewear. For clarity, this 3D visualization is **not** directly representative of topography. It is a visual representation of the interaction of an active² geophysical technique (in this case electromagnetic radiation in the radio bands) with the dielectric properties of the bedrock, whether at or beneath the land surface.

RADARSAT data acquired in a previous study of a similarly mountainous area (McLelland and Metcalfe in review) enabled differentiation of lithologies on steep terrain. This was not the case on the present property. This may owe to either or both of the following:

- 1. The lithological units in the Stewart area are close in physical properties and/or:
- 2. Steep and variable slopes contribute more to radar reflectance than do lithological differences.

Nevertheless, the processed images from the RadarSat data exhibit linear irregularities (Figures 7 and 8) clearly visible even in the areas of the valley floor where thick colluvium cloaks bedrock. In some areas, sinusoidal discontinuities are also visible, although these occur along the forest-covered valley sides.

The linear discontinuities can be grouped into four or five main sets. The two sets most plainly visible trend east-northeast and northeast across the property and onto adjacent ground. These are interpreted as structural discontinuities, either faults or narrow shear zones and their visibility and lateral persistence suggests that they are younger in age. The set trending east-northeast appears to be the youngest set of all those examined.

Less apparent are structures of linear presentation with azimuths from northwest to north-northeast. Their linearity suggests steep inclination, but they are, apparently, disrupted by the northeasterly and east-northeasterly striking discontinuities and are interpreted as being older.

² An active geophysical technique is herein defined as a technique which effects an anthropogenic change to the target volume (equivalent to a sonar "ping") and which then measures and analyses a resultant (the sonar echo). This may be compared to a passive sonar array, which listens without broadcasting. Widely used examples of the former are seismic reflection and refraction surveys, induced polarisation surveys and airborne electromagnetic surveys. Example of passive geophysical techniques are magnetic field surveys and radiometric gamma ray surveys.



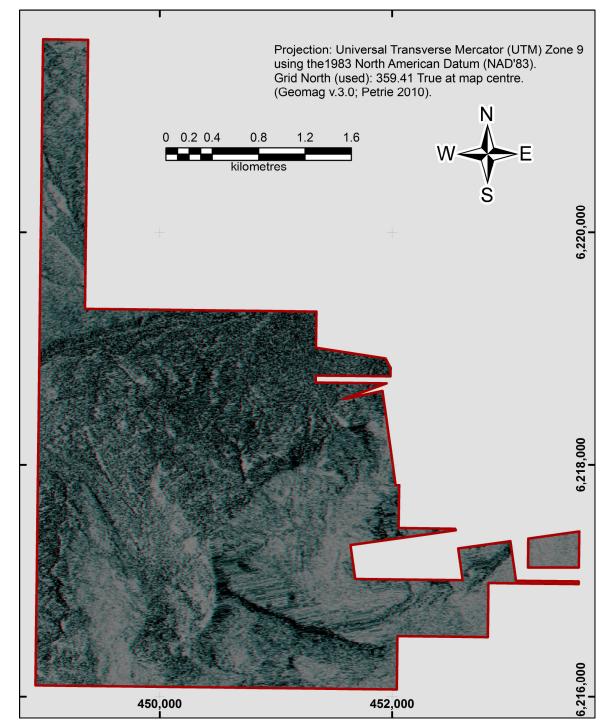
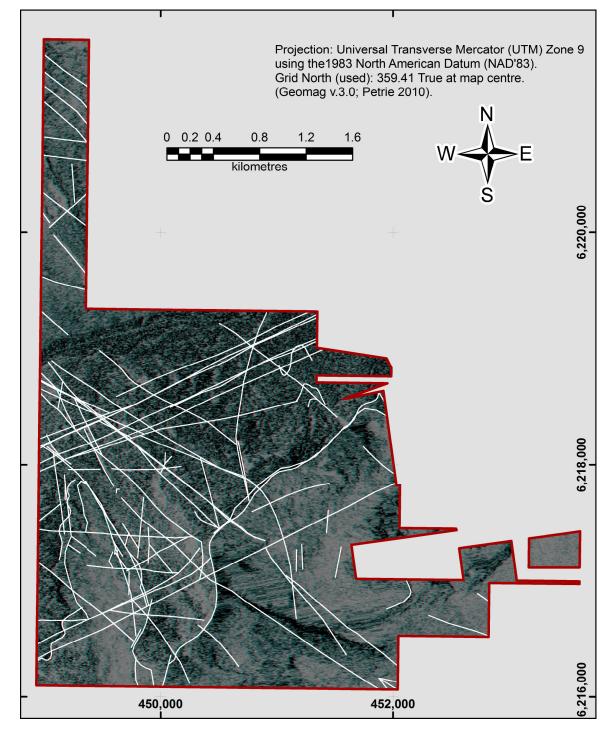


Figure 7. Processed image of RadarSat Synthetic Aperture Radar data.







These discontinuities, interpreted as structural discontinuities in bedrock, must be groundtruthed at the earliest opportunity.



Least apparent but still commonly observed are curvilinear features, interpreted as structures with apparent northwesterly strike and southwest dip. Their relationship to the oldest subvertical set is not clear, but ground-truthing of the Georgia River property to the south of Stewart (Metcalfe 2011) indicated that the subvertical northerly fractures are conjugate with dextral shearing on southwest dipping structures (Metcalfe and Nelson 2014).

12. Conclusions

This preliminary test of the applicability of Synthetic Aperture Radar to analysis of the mountainous terrain north and east of Stewart was an unqualified success. Discontinuities in the images coincide with structures observed during fieldwork by previous authors on the property and on neighbouring ground. Moreover, these discontinuities are visible both downslope under heavy vegetative cover and at higher elevations beneath snow and limited thicknesses of glacial ice, permitting a preliminary structural analysis of the property.

The images processed from the RadarSat data present a clear pattern of features transecting the property, a pattern consistent with regionally observed major structures. The latest-formed set are interpreted as near-vertical with east-northeast strike. This set apparently disrupts a subvertical, northeasterly striking set, which is less apparent on this property than on others in the area (Metcalfe and McLelland, in review).

A third, less easily identified set of discontinuities is steeply dipping with southeasterly to south-southwesterly strikes. A fourth set has apparent southeast strike and generally southwesterly dip. It is also, apparently, disrupted by the latest two sets but its relationship with the third set is unclear.

The above observations are consistent with those made on the ground at Georgia River (Metcalfe 2011), with previous airborne geophysical studies made over that ground (Prikhodko *et al.* 2010) and with the disposition of structural features interpreted from a satellite radar survey of the same property (Metcalfe and Mclelland in review). They are also consistent with observations made at the northwestern end of Stikinia's Golden Crescent (Atkinson *et al.* 1990, Metcalfe, unpubl. data), indicating a common tectonostratigraphic history of Lower Mesozoic rocks in northwestern Stikinia (Metcalfe and Nelson 2014).



13. Recommendations

The following are recommended for the property:

- A comprehensive review of all geological and geophysical data both on and peripheral to the property, with particular attention to geological mapping, specifically structural mapping in areas of historic production or exploration, with a view to creating a precise, accurate and comprehensive database for future exploration;
- 2. Fusion of the resulting database with the RadarSat data, to identify areas of interest for ground-truthing;
- 3. Ground-truthing of the entire property outside the river valley by geological mapping and prospecting;
- 4. Sample collection from every intrusive phase exposed on the property for the purpose of lithochemical analysis and isotopic age measurement;
- 5. Sample collection of any biochemical sedimentary rock for the purpose of age determination and:
- 6. Preliminary evaluation of the area for an exogenic geochemical survey.

These recommendations are independent of one another. Future activities would be contingent on results from this first stage of exploration.

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16. Statement of Costs

g Sky	Auramex Project Area:	Mineral Exploration:	Remote Sensing			
		RS Area	Cost /km			
ea	2015 Budget	2901	\$100			\$290,100.00
nures		191.8				
pital	Property:					
be	Personnel	Units	Rate	#	Qty	Total
	Project Manager	\$/Day(8hr.)	\$600.00	0		\$0.00
	QP	\$/Day(8hr.)	\$1,050.00	1	3.5	\$3,675.00
	Field Assistants	\$/Day(8hr.)	\$500.00	0		\$0.00
	GIStech	\$/Day(8hr.)	\$640.00	1	2	\$1,280.00
	Geospatial Analyst	\$/Day(8hr.)	\$600.00	0		\$0.00
	Remote Sensing Analyst	\$/Day(8hr.)	\$850.00	1	2	\$1,700.00
	Mapping and					
	Reporting Mapping					\$0.00
	Reporting		\$1,050.00	1	7	\$7,350.00
	Printing and copying					\$0.00
	LS Printing					\$0.00
	Total					\$14,005.00
	Total					



17. Statements of Qualifications



Statement of Qualifications

- I, Paul Metcalfe, do hereby certify that:
- 1. I am a resident of British Columbia and the Principal of Palatine Geological Ltd., with a business address at P.O. Box 289, Gabriola, B.C. VOR 1X0;
- I am a graduate of the University of Durham (B.Sc. Hons. *Dunelm*. 1977), a graduate of the University of Manitoba (M.Sc. 1981) and a graduate of the University of Alberta (Ph.D. 1987);
- 3. I am a member, in good standing, of the Association of Professional Engineers and Geoscientists of the Province of British Columbia;
- 4. I have worked as a geologist for a total of 39 years since my graduation from the University of Durham, including employment as a postdoctoral research fellow by the Mineral Deposits Research Unit at the University of British Columbia and at the Geological Survey of Canada;
- My experience since graduation from Durham has been mainly within the western cordillera of North, Central and South America and has given me considerable knowledge of Cordilleran geology, and of geological and geochemical exploration techniques;
- 6. I have several years' experience working in northwestern Stikinia;
- 7. This report was prepared on behalf of Auracle Geospatial Science Inc. who has been engaged by Auramex Resource Corp., to complete a geophysical program on this property and:
- 8. The work in this report has been carried out in accordance with generally accepted scientific principles and is based upon the best information available at the time of preparation.

DATED at Gabriola Island, British Columbia this 29th day of February, 2016.

"P. Metcalfe"

Dr. Paul Metcalfe P.Geo.



Statement of Qualifications

- I, David J. McLelland, do hereby certify that:
- 1. I am a Principal in:

Auracle Remote Sensing Inc.,

325 Dorset Road Qualicum Beach,

British Columbia, Canada V9K 1H5

- I have received a Master of Science with Distinction in Remote Sensing and Geospatial Science from Manchester Metropolitan University's faculty of Earth and Environmental Science, and have received a postgraduate diploma in applied and theoretical GI Science from Simon Fraser University.
- 3. I have completed the B.C.I.T. B.C.Y.C.M. Mineral Exploration program, and completed the B.C.I.T. B.C.Y.C.M. Advanced field School.
- 4. I have 12 years of experience in Remote Sensing, and I am the Remote Sensing Project Manager and responsible for the acquisition and management of data and execution of analyses.
- 5. This report was prepared on behalf of Auracle Geospatial Science Inc. who has been engaged by Auramex Resource Corp. to complete a remote sensing program, on this property.
- 6. I have no material or financial interest in the subject properties or the companies that own them.
- This report has been prepared in accordance with generally accepted Scientific Principles and is based upon the best information available at the time of preparation.
- 8. I am not aware of any material fact or material change with respect to the subject matter of the report that is not reflected in the report and therefore the omission of fact.

David] McLelland MSc, PGdip, (FRGS, MCRSS)

(David J. McLelland)

Dated in Qualicum Beach, British Columbia, Canada this 29th day of February, 2016



Appendix 1: MINFILE occurrences on the property

104A 063 NEW YORK (L. 1485), LONDON (L. 1480)

Status: Showing

Commodities: Copper, Silver, Gold Deposit Type: G04: Besshi massive sulphide Cu-Zn

UTM: 9 6218028 N 449827 E NTS: 104A04W

The New York showing is located about 1,150 metres south of the Stewart highway and approximately 5 kilometres east-northeast of the confluence of American Creek with the Bear River.

The New York and London claims were held by Erickson and McNeill in 1908. The Bear River Mining Co. Limited was formed to explore the property and, in 1910, held 8 claims in the area, including the New York and London. Work reported in 1910 comprised a 32 metre long tunnel and several opencuts. The claims were Crown granted to the company in 1913. In 1929, Atlas Gold Copper Mining Company carried out drilling on the nearby Bear Valley claim; the drilling was designed to test the extension of the George Gold-Copper Lower (104A 029) zone on the Elgin claim, immediately east of the London claim. Drilling failed to intersect anything of significance. Some drilling may have also been done near the workings on the New York claim; results are not available. In 1955, New Rufus-Argenta Mines Limited acquired the New York-London property and reported a limited amount of work in 1956 and 1964. In 1966, the company name was changed to Crest Ventures Limited. That year a subsidiary, Crest Copper Company Ltd. was incorporated and took over the property. In 1967, Cominco optioned the property and carried out geological mapping, a magnetometer survey and drilling (11 holes, totalling 117 metres); the option was subsequently dropped. In 1971, Keith Copper Mines Ltd. performed a magnetometer survey, trenching and drilling (4 holes, totalling 244 metres) on part of the property and adjacent Mina claim group; no work was reported on the showing. In 1978, Tournigan Mining Explorations Ltd. acquired the New York-London property of 5 claims and carried out geological mapping and trenching. In 1984, Tournigan conducted further geological work on the property.

The area is underlain by Hazelton Group rocks comprising the Upper Triassic to Lower Jurassic Unuk River Formation (Bulletin 63). These rocks consist predominantly of subhorizontal to gently north- dipping andesitic flows and pyroclastics. A prominent reddish-brown weathering argillite-tuff unit occurs in the extreme southeastern corner of the New York claim. It can be traced east through the London, Kensington Fr. and Elgin claims and is probably the same unit that hosts the George Gold-Copper Lower showing (104A 029). Similarly, it can be



traced to the southwest, and then southeast through the Grey Copper claims (104A 066).

Mineralization occurs mainly in sheared andesitic rocks, immediately below(?) the argillite-tuff unit. Alteration minerals include chlorite, actinolite and epidote. The altered rocks contain up to 50% pyrrhotite and pyrite with minor chalcopyrite over a 5 to 10-metre thickness. Grab samples from the showing assayed from 0.05 to 0.57% Cu, 2.7 to 3.4 gm/t Ag and trace to 0.2 gm/t Au (Assessment Report 7201).

EMPR AR 1908-56; 1910-62; 1917-67; 1928-112; 1929-99; 1967-35

EMPR ASS RPT *1109, 3603, 6382, *7201, *12827, 20379, 22172

EMPR BULL 63

EMPR GEM 1972-512

EMPR MAP 8

EMPR OF 1998-9

EMR MP CORPFILE (Bear River Mining Company; Atlas Gold and Copper Mining Company, Limited; Crest Ventures Limited; Keith Copper Mines Ltd.; Tournigan Mining Explorations Ltd.)

GSC MAP 28A; 216A; 217A; 307A; *315A; 9-1957; 1418A

GSC MEM 32, p. 54; 175, pp. 106, 107

GSC OF 2582



104A 066 GREY COPPER (L. 4187), GREY COPPER 1-2

Status: Prospect

Commodities: Silver, Copper, Lead, Gold

Deposit Type: G04:Besshi massive sulphide Cu-Zn, I05:Polymetallic veins Ag-Pb-Zn+/-Au

UTM: 9 6217031 N 450455 E NTS: 104A04W

The Grey Copper occurrence is located about 2.2 kilometres south of the Stewart highway and approximately 5.7 kilometres east of the confluence of American Creek and the Bear River.

The occurrence, on the Grey Copper claim(?), was first reported in 1916. Some open cutting was done that year and 1 tonne of ore was shipped from the property; 1 gram of gold, 11,235 grams of silver and 185 kilograms of lead were recovered. The Grey Copper, and contiguous Grey Copper 1 and 2 claims, were Crown-granted in 1922. Stewart High Grades Limited optioned the property in 1925; no work was reported. In 1967, Cominco carried out detailed geological mapping over a large group of claims south of the Bear River, including the Grey Copper and Grey Copper 2 claims. No further work has been reported.

The area is underlain by east to east-southeast striking, gently north-dipping andesitic tuffs and flows of the Upper Triassic to Lower Jurassic Unuk River Formation (Hazelton Group) (Bulletin 63). A prominent, reddish-brown weathering, argillite-tuff unit can be traced southeast across the centre of the Grey Copper claim. Pyrrhotite, with minor chalcopyrite and pyrite, commonly occurs near the top of the unit. A brecciated zone strikes 060 degrees and dips about 60 degrees south. It is about 1.8 metres wide and occurs in argillite. The zone is cemented with calcite and contains a 15 centimetre wide(?) streak of tetrahedrite in the hangingwall.

EMPR AR 1916-515; 1917-68; 1922-353; 1925-94

EMPR ASS RPT 1109, 20379

EMPR BULL 63

EMPR MAP 8

GSC MAP 28A; 216A; 217A; 307A; 315A; 9-1957; 1418A

GSC MEM 175, p. 120; GSC OF 2582



104A 162 SHUL 4, SHUL 1-6, DUG 1-2

Status: Showing

Commodities: Silver, Gold, Copper

Deposit Type: L01:Subvolcanic Cu-Ag-Au (As-Sb), G04:Besshi massive sulphide Cu-Zn

UTM: 9 6218093 N 449586 E NTS: 104A04W

The Shul 4 showing is located 19 kilometres northeast of Stewart, just west of the Grey Copper (104A 066) showing.

In 1990, Bond Gold conducted geophysical surveys on the property. This program identified 3 targets, 1 was tested by drilling with no significant gold values encountered. In 1991, Bond Gold conducted mapping and lithogeochemical and stream sediment sampling. Twenty surface samples were taken from a green pyroclastic unit at the southeast corner of the Shul 4 claim. The area is underlain by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Hazelton Group. These consist of andesitic pyroclastics and flows intercalated with wackes and tuffs. An intermediate to felsic Pluton of unknown age outcrops in the area.

Mineralization consists of disseminated and fine to coarse-grained small pods of pyrite, pyrrhotite and chalcopyrite hosted in andesitic pyroclastics and flows. The pyrite content averages 4 to 5% but is up to 50% where it is massive. Pyrite and chalcopyrite occur in pods; pyrrhotite occurs with pyrite and averages 1 to 2% in content. A sample (45909B), taken from a massive pyrite pod in andesite containing 3 to 5% pyrite, assayed 3.8 gm/t Ag, 0.118 gram per tonne gold and 0.03% Cu (Assessment Report 22002).

EMPR ASS RPT 20200, 21260, *22002

EMPR BULL 63

EMPR MAP 8

GSC MAP 28A; 216A; 217A; 307A; 315A; 9-1957; 1418A

GSC MEM 175

GSC OF 2582