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 Energy & Minerals Division  
 Geological Survey Branch

ASSESSMENT REPORT  
 TITLE PAGE AND SUMMARY

TITLE OF REPORT [type of survey(s)] TOTAL COST \$46,335.25  
 GEOLOGICAL ASSESSMENT OF PARTS OF THE GEORGIE RIVER PROPERTY, SKEENA MINING DIVISION B.C.

AUTHOR(S) P. METCALFE SIGNATURE(S) P Metcalfe

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) \_\_\_\_\_ YEAR OF WORK 2011

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) 5033827

PROPERTY NAME GEORGIE RIVER

CLAIM NAME(S) (on which work was done) 250723, 250725, 318194, 318196, 614843

COMMODITIES SOUGHT Au

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN \_\_\_\_\_

MINING DIVISION SKEENA NTS 1039/6 103P/13

LATITUDE 55° 47' 58" LONGITUDE 130° 0' 17.5" (at centre of work)

OWNER(S)

1) AURAMEX RESOURCE CORP. 2) \_\_\_\_\_

MAILING ADDRESS

750 GRAND BOULEVARD  
 NORTH VANCOUVER, B.C. V7L 3N4

OPERATOR(S) [who paid for the work]

1) AURAMEX RESOURCE CORP. 2) \_\_\_\_\_

MAILING ADDRESS

750 GRAND BOULEVARD  
 NORTH VANCOUVER, B.C. V7L 3N4

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

EARLY JURASSIC, TEXAS CREEK PLUTONIC SUITE, COLLING RIDGE PORPHYRY, STUHNI  
 GROUP, MYLONITES, LOWER HAZELTON, BETY CREEK FORMATION, WACKES,  
 VOLCANIC CONGLOMERATES, SHEAR-HOSTED VEINS, INTRUSION RELATED VEINS.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS 20653, 10300, 11082, 28662,

29656, 26552, 24704, 20697, 00522, 08547, 13350, 15107, 16405, 17705, 18933, 19983,  
 19049, 32000, 21790, 24100, 23217, 04820, 23689,

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)	614843		
Ground, mapping _____	250723, 250725, 318194, 318196		\$ 46,335.25
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 _____			
		TOTAL COST	\$ 46,335.25

**GEOLOGICAL ASSESSMENT OF PARTS OF THE GEORGIE  
RIVER PROPERTY, SKEENA MINING DIVISION, B.C.**

TENURE NOS. 250723, 250725, 318194, 318196, 614843, 614923

NTS MAPSHEETS: 103O/16, 103P/13

TRIM MAP SHEETS: 103O.080, 103P.071

Latitude: 55° 47' 5.8" N

Longitude: 130° 0' 17.5" W

436,982 m E 6,182,600 m N

(Universal Transverse Mercator Zone 9; 1983 North American Datum)

prepared for

**AURAMEX RESOURCE CORP.**

by

**P. Metcalfe, Ph.D. P.Geo.**

Palatine Geological Ltd.

P.O. Box 289, Gabriola, B.C. V0R 1X0

**BC Geological Survey  
Assessment Report  
32623**

6<sup>th</sup> January, 2012

Owner: Auramex Resource Corp.

## SUMMARY

The Georgia River Property covers a 10,050 hectare area located 18 km south of Stewart B.C., on the steep eastern shore of the Portland Canal. This area has been a focus of exploration and development for at least 100 years, centred around the veins of the past-producing Georgia River Gold Mine, and including the 1100 Zone stratiform mineral occurrence and the Glory Extension and Lydden vein-style mineral occurrences on the property, in addition to several occurrences immediately peripheral to the property boundary.

2011 fieldwork was severely curtailed by inclement weather. Slightly more than two days were spent mapping and geochemical sampling west of the 1100 Zone in the eastern part of the property. Mapping confirmed the presence of a thick, moderately to steeply east-northeast dipping, upright homoclinal sequence of coarse clastic volcanosedimentary rocks. Lithologies are inconsistent with the clinopyroxene-rich volcanosedimentary rocks on Colling Ridge and the rocks west of the 1100 Zone are tentatively identified as Lower Hazelton Group, historically referred to as the Betty Creek Formation.

Mineralization in the area traversed comprises exclusively shear-hosted quartz veins with locally abundant sulphide, dominantly pyrrhotite and arsenopyrite with pyrite. Veins are surrounded by envelopes of moderate pervasive K-feldspar + sericite alteration. No occurrences of stratiform mineralization similar to those reported further to the west were observed during fieldwork.

Geochemical samples are generally anomalous in Au, with correspondingly anomalous As, Sb and, less commonly Bi. Cu, Pb, Zn, Ag and Co values are, locally, elevated. The most encouraging values were returned from the Gamebreaker showing, discovered during the course of 2011 fieldwork. The showing is a west-southwest dipping, shear-hosted quartz+sulphide breccia exposed for 10 m along strike with a maximum true thickness of 1.45 m. The hanging wall and, to a lesser extent, the footwall are also mineralized. Samples taken over the outcrop returned values in excess of 3,900 ppb Au for a grab sample and a weighted average of 1592 ppb across 3.65 m. The projected down-dip extension of the showing is coincident with magnetic and conductivity anomalies returned from the 1994 airborne survey.

It is recommended that future exploration in the area of the Gamebreaker showing await a comprehensive compilation of all previous work in the area, with particular attention to reprocessing of data from both the induced polarization and airborne surveys. While initial Au grades are low, it is possible that significant exploration potential exists at depth on this structure.

Geochemical sampling in the Hume Creek mylonite zone on Colling Ridge returned generally lower results than near the Gamebreaker showing, but three samples returned values between 485 and 685 ppb. Each of these samples was of the Early Jurassic Colling Ridge Porphyry with finely disseminated pyrite and arsenopyrite mineralization, identifying the porphyry as the metallogene for the Colling Ridge mineralising system.

Construction and sampling of a test geochemical grid was curtailed by injury. Two test soil holes and White Mountain Heather (*Cassiope mertensiana*) around their localities were sampled comprehensively for soil horizon and Mobile Metal Ion (MMI) and the results were examined for response to Au. Neither hole was anomalous, but returned values above detection limit for all samples, with C-horizon in soil and ashed samples of vegetation providing the best response.

It is recommended that exploration on Colling Ridge also be preceded by a comprehensive compilation of all data, with particular emphasis on acquisition and reprocessing of data from past studies outside the immediate mine area. Following this, ground-truthing of the Hume Creek anomaly is recommended. Gridded surface lithochemistry and soil geochemistry of the C horizon should be used to test alteration and mineralization exposed at or near surface; biogeochemical analysis of heather should be used as a more deeply penetrating geochemical technique. Contingent on encouragement from these surveys, exploratory drilling should be carried out to test both southeast and north-northeast-striking structures. The drill program should be prepared to test either structure set to considerable depth.

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## INTRODUCTION

The purpose of this report is to describe geological fieldwork carried out by the author at two locations on the Georgie River property during a three-week period in August and 2011.

Units of measure in this report are metric. Monetary amounts are expressed in Canadian dollars unless otherwise stated. Maps are presented in Universal Transverse Mercator (UTM) projection, using the 1983 North American Datum (NAD'83); the tenures lie in Zone 9.

## PROPERTY LOCATION AND DESCRIPTION

### Location of property

The 10,050 ha Georgie River property is situated immediately east of the Portland Canal, 18 km south of Stewart in NW British Columbia (Figure 1), centred on latitude 55° 47' 5.8" N and longitude 130° 0' 17.5" W (436,982 m E 6,182,600 m N). The National Topographic System (NTS) map areas which include the mineral tenures are 103O/09, 103O/16, 103P/12 and 103P/13; similarly, the tenures lie at the junction of Terrain Resource Integrated Management (TRIM) map sheets 103O.080, 103O.090, 103P.071 and 103P.081.

### Mineral tenure

The Georgie River property comprises seven Crown Granted Mineral Claims (Table 1) and forty-one mineral tenures (Table 2). Five of the mineral tenures are legacy mineral tenures resulting from the conversion of previously Crown Granted land and five are legacy four-post tenures; the remainder are electronic mineral tenures acquired online.

Table 1. Description of Crown Granted Mineral Claims

<b>Cassiar District Lot No.</b>	<b>Name</b>	<b>Date of Issue</b>	<b>Owner</b>
4437	GEORGIA	20/Sep/1920	Auramex Resource Corp.
4438	GEORGIA NO. 1	20/Sep/1920	Auramex Resource Corp.
4439	GEORGIA NO. 2	20/Sep/1920	Auramex Resource Corp.
5150	GEM	01/Oct/1923	Auramex Resource Corp.
5151	GEM NO. 1	01/Oct/1923	Auramex Resource Corp.
5155	GOLDFIELDS NO. 3	03/Sep/1924	Auramex Resource Corp.
5164	TOP FRACTION	21/Sep/1928	Auramex Resource Corp.
5166	GOLD FRACTION	23/Sep/1928	Auramex Resource Corp.



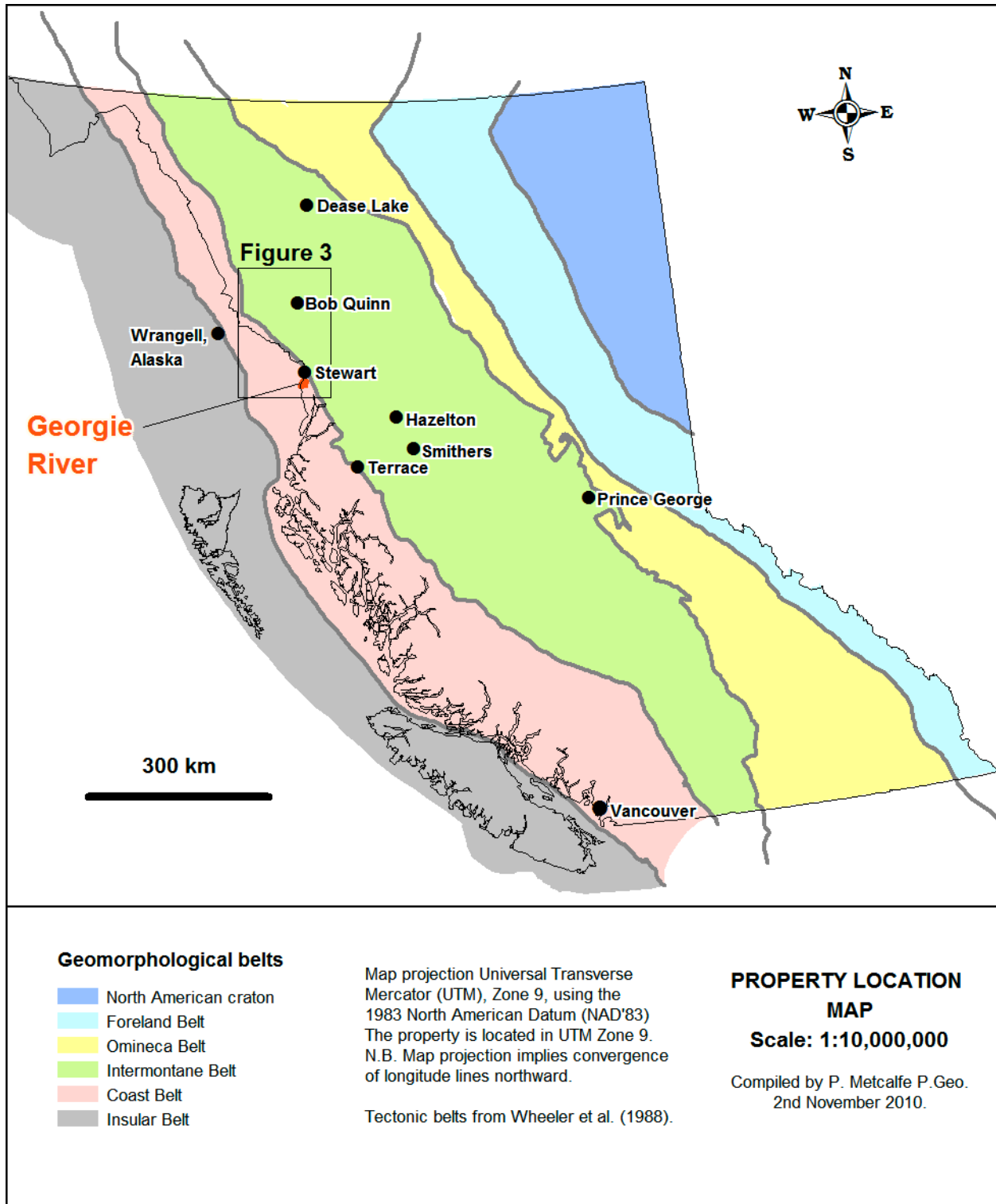


Figure 1. Location of mineral property, showing boundaries of Figure 3.

Table 2. Mineral tenure details

Tenure	Claim Name	Owner	Issue date	Expiry Date	Area (ha)
250721	Converted Crown Grant	Auramex Resource Corp.	02-Aug-1979	15-dec-2020	25
250723	Converted Crown Grant	Auramex Resource Corp.	02-Aug-1979	15-dec-2020	25
250725	Converted Crown Grant	Auramex Resource Corp.	02-Aug-1979	15-dec-2020	25
250736	Converted Crown Grant	Auramex Resource Corp.	02-Aug-1979	15-dec-2020	25
250737	Converted Crown Grant	Auramex Resource Corp.	02-Aug-1979	15-dec-2020	25
525948	GEORGIE GIRL 1	Auramex Resource Corp.	20-Jan-2006	15-dec-2014	455.583
525949	GEORGIE GIRL 2	Auramex Resource Corp.	20-Jan-2006	15-dec-2014	455.404
525950	GEORGIE GIRL 3	Auramex Resource Corp.	20-Jan-2006	15-dec-2014	345.951
614843		Auramex Resource Corp.	04-Aug-2009	15-dec-2014	400.226
614923	GEORGIA RIVER 1	Auramex Resource Corp.	04-Aug-2009	15-dec-2014	254.612
615123	COL 1	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	454.957
615144	COL 2	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	454.468
615163	COL 3	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	454.564
615183	COL 4	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	454.607
615203	COL 5	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	454.915
615223	COL 6	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	218.407
615243	COL 7	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	454.731
615263	COL 8	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	454.593
615283	COL 9	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	236.427
615303	COL 10	Auramex Resource Corp.	05-Aug-2009	15-dec-2014	308.907
641783	GEORGIE GIRL 4	Auramex Resource Corp.	27-Sep-2009	15-dec-2014	437.144
641784	GEORGIE GIRL 5	Auramex Resource Corp.	27-Sep-2009	15-dec-2014	455.322
758982		Auramex Resource Corp.	27-Apr-2010	15-dec-2014	18.1799
759002		Auramex Resource Corp.	27-Apr-2010	15-dec-2014	145.439
318194	BROWN #1	Auramex Resource Corp.	08-Jun-1993	30/jun/2014	500
318195	BROWN #2	Auramex Resource Corp.	08-Jun-1993	30/jun/2014	250
318196	BROWN #3	Auramex Resource Corp.	08-Jun-1993	30/jun/2014	500
320443	BROWN 4	Auramex Resource Corp.	10-Jun-1993	30/jun/2014	250
331396	ARK	Auramex Resource Corp.	23/Sep/1994	30/jun/2014	250
821702		Auramex Resource Corp.	20/Jul/2010	30/jun/2014	72.7559
834712	GEORGIA EAST	Auramex Resource Corp.	01/Oct/2010	30/jun/2014	109.155
834738	COL 11	Auramex Resource Corp.	01/Oct/2010	30/jun/2014	163.654
834755	COL 12	Auramex Resource Corp.	01/Oct/2010	30/jun/2014	72.7775
834765		Auramex Resource Corp.	01/Oct/2010	30/jun/2014	218.333
834772	GEORGIA SOUTH	Auramex Resource Corp.	01/Oct/2010	30/jun/2014	145.525
834776	GEORGIA SOUTH 2	Auramex Resource Corp.	01/Oct/2010	30/jun/2014	200.083
837043	COL 13	Auramex Resource Corp.	31/Oct/2010	30/jun/2014	455.534
837044	COL 14	Auramex Resource Corp.	31/Oct/2010	30/jun/2014	237.005
837045	COL 15	Auramex Resource Corp.	31/Oct/2010	30/jun/2014	309.401

## **Physiography, climate and vegetation**

The Georgie River Property covers an area in British Columbia's rugged Coast Mountains, an area characterised by steep slopes, and high rainfall. The property extends from sea level at its western boundary to as high as 1,800 m above sea level (a.s.l.) on its eastern boundary (Figure 2). Glaciation has incised the topography deeply, creating characteristic U-shaped valleys, with an alp, or break of 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. This overdeepening is well-illustrated by the valley of the main (north) fork of the Georgie River which drains to the south and west from Glory Lake, near the centre of the property. The river valley isolates the 1,360 m north-south height of land called Colling Ridge (Colling Range in older reports) from the main massif to the east. Both glaciated stream valleys and their fluvial successors often occupy zones of lithological weakness; this may be the case with Georgie River.

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  $-4^{\circ}\text{C}$  in January to  $15^{\circ}\text{C}$  (exceptionally  $30^{\circ}\text{C}$ ) 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, in years of heavy winter precipitation, 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 minor Devil's Club. Timber stands between the landslide and avalanche slopes comprise spruce, hemlock, and cedar. 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 heather; the eastern edge of the property is in tundra.

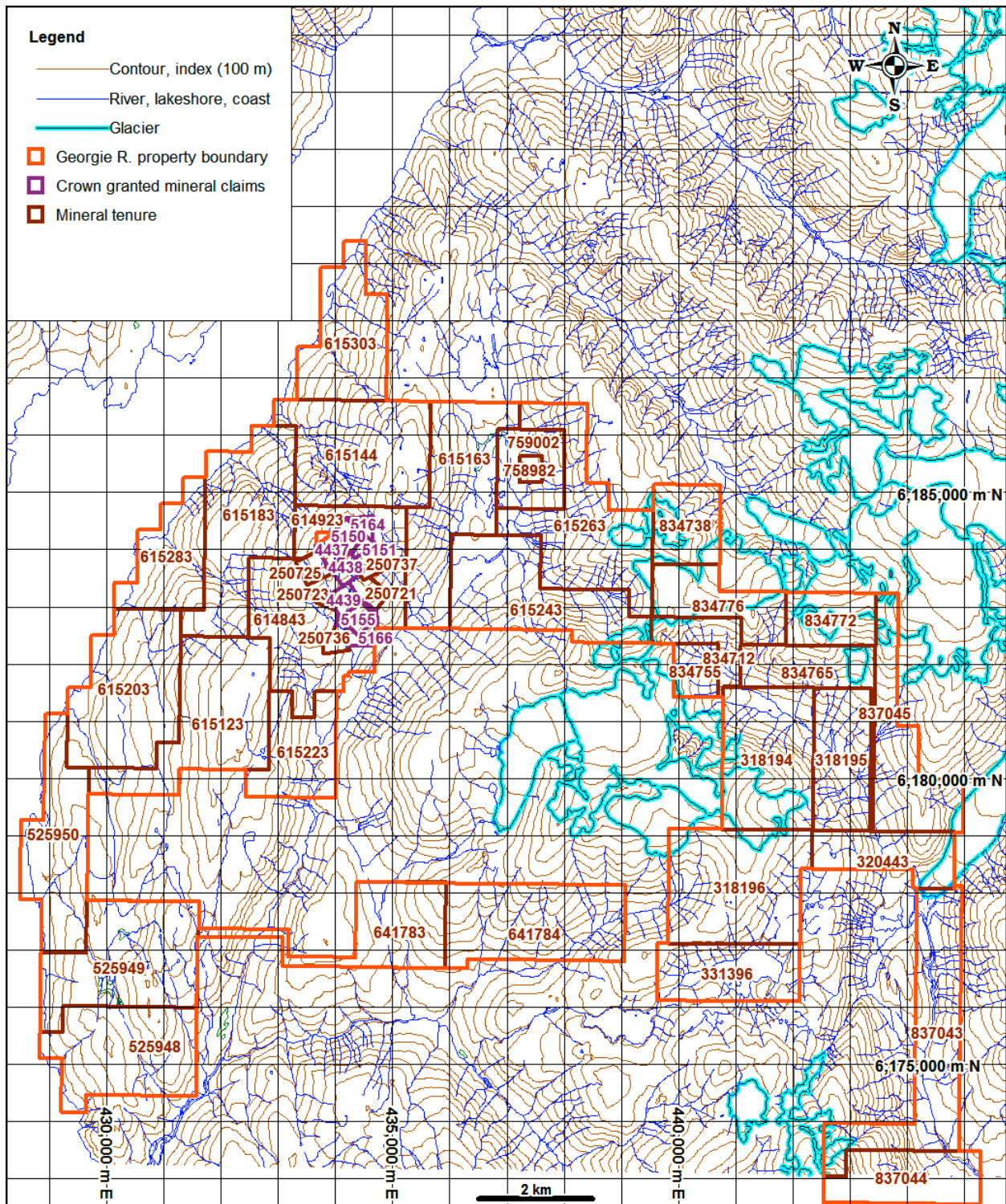


Figure 2. Topographic map of the mineral tenure, 1:100,000 scale. Terrain Resource Integrated Management (TRIM) database.

## Local resources and infrastructure

One hundred years before this report was written, Robertson, the Provincial Mineralogist, wrote of the Portland Canal:

*The importance of this arm, from a mining point of view, is that it gives deep seawater navigation to, and so renders easily accessible, a district in which the granites of the Coast Range came in contact with the sedimentary formations lying to the eastward and farther inland. This region of contact extends for the whole length of the Coast Range and, from its geological features, forms a zone of potential mineralization, as has been repeatedly pointed out in these reports and is here again emphasized.*

(Robertson 1911, p. K67)

Stewart and its counterpart of Hyder, Alaska in the United States of America are visible in clear weather from the top of Colling Ridge. Stewart has a history of mining well in excess of a hundred years and has celebrated both lean and “boom” years; presently, despite the recent financial bubble, the town is enjoying renewed prosperity directly related to the increase in mineral exploration. The town is accessible both from the sea and via a paved highway 333 km south to Smithers, therefore food, fuel and other supplies are either on hand or can be transported with minimal delay from the south.

As noted above, the Georgie River Property extends to tidewater. During and shortly after the Great War, a trail was constructed from the mouth of the Georgie River to the then-active Georgia<sup>1</sup> River Mine. The construction of the trail was assisted, in part, by the British Columbia Government (Clothier 1919). Few traces of this trail remain; present access to the property is by helicopter, Stewart airport being the nearest helicopter base at the time of writing, although parts of the shoreline on the property are accessible by boat. Communications in this area are made possible by satellite telephone and are limited by the steepness of valley sides; communications are excellent when above tree line. However, without a radio repeater, nearly all of the property is beyond the range of hand-held radio communication with Stewart.

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<sup>1</sup> The reader will note the discrepancy between the spellings of the mine and the river from which the mine takes its name. All reports prior to 1953 refer to the river as the Georgia River, but the geographic name: “Georgie River”, gazetted in that year, is now the formally assigned name of the river.

## **MINERAL OCCURRENCES AND HISTORY OF EXPLORATION**

Mineral exploration in the Stewart-Anyox area began before Confederation and discovery of vein mineralization in the area was made at around the turn of the last century. Mining operations date back to the opening of the Anyox and Silbak Premier mines in 1914 and 1918, respectively. The earliest record of exploration in the area of the Georgie River property (Flewin 1906, Carmichael 1907, Conway 1911) refer to the discovery of mineralization (MINFILE 1030 016) near the southern end of the present Auramex property and the acquisition of the Black Knight and Black Knight No. 1 claims.

Mineralization discovered on and around the Auramex property itself has been in four principal areas since the acquisition of the mineral tenures to the southeast. These will be described by mineral occurrence or area, followed by description of occurrences peripheral to the property. Notes on each mineral occurrence are based on the appropriate assessment reports and upon MINFILE (BC Geological Survey Branch 1991-2010).

Common to all the explored areas in the Georgie River watershed is a hiatus of data from exploration activity, beginning at the beginning of the Second World War and extending well into the second half of the last century. This may owe in part to the necessary reorganisation of the Ministry to prioritise production-based reporting, at the expense of exploration; in any case, the gap in data exists. The inception of the modern assessment reporting system in the late 1940s did not make incursion into the Georgie River area until the 1960s.

### **BLACK KNIGHT (BLUE POINT, VG); MINFILE 1030 016**

The discovery of the Black Knight has already been noted. The two claims (Black Prince Group) were located by Messrs. J. Stark and W. Flewin to cover “a showing of six feet of ore, four feet being galena and two feet zinc blende” and were later crown granted (as L3637 and L3656 to William Thomas Kergin, John Edmund Stark and George Rudge). Carmichael (1907) reported that a sample taken from the vein “appeared to be nearly solid galena and zinc blende, with little gangue matter and contained: lead, 43.0 % ; zinc, 28.0 %; silver, 16.4 oz. to the ton”.

Conway (1911) reported that, during 1910, development work resulted in 275 feet of underground work, comprising “a large number” of open-cuts and prospect-shafts, *etc.* Conway reported anecdotal information of the vein width as “52 inches wide” and that it carried galena,

blende, and iron-pyrite running from \$16 to \$50 per ton in silver and, lead. He further noted that: “In the lower tunnel the zinc-blende shows a tendency to disappear, being replaced by chalcopyrite”.

Despite such an encouraging start, the occurrence had no further work recorded in Ministry reports. Although the showing is noted by Kruchkowski (1985, 1986), the first record of fieldwork in the area is that of Kikauka (1990). Three areas were sampled, including the Lydden (see below), and a showing was found on a tributary draining the north bank of the Georgia River. Identified as the JJ, neither rock samples nor sediment samples returned high values. If this is indeed the Black Knight, it lies on Auramex ground; if in the published location (MINFILE 1991-2010), it is peripheral to the property.

#### **LYDDEN (M.J., JO, JJ, LUXOR, MONTROSE); MINFILE 1030 014**

Clothier (1927) examined the M.J. group, comprising the L.J. Nos. 1 and 2, M.J. Nos. 1 and 2, and Little Pat Nos. 1 and 2 (non-Crown Granted) claims owned by J. Lydden of Stewart, shortly after its discovery. The six claims were situated about 5.6 km (3½ miles) from the beach. The showings are noted as two or more quartz veins, mineralized with pyrrhotite and chalcopyrite, occurring in a quartz diorite or granodiorite. A sample of the mineralization returned only trace gold and 0.6 oz. silver to the ton, but 12 per cent copper.

The M.J. No. 1 claim covered all exposures of the mineralization. The lower exposures are at 640 m (2,100 feet), where two open-cuts were excavated about 30 m (100 feet) apart and the vein stripped between, showing its strike to be N. 60° W. and dip about 76° N.E. Clothier (*ibid.*) noted that “The lower of these cuts show 18 inches of nearly solid chalcopyrite . . . . The upper showings are at 2,350 feet (716 m), here exposing a foot or more (30 cm) well mineralized with chalcopyrite, standing perpendicularly along a ridge of granodiorite containing epidote striking N.30°W.; the mineralization is exposed for about 100 feet (30 m)”.

Mandy (1932) noted that a cabin was situated about 3,000 feet from the main Georgia River trail at about altitude 1,800 feet (550 m). The showings were noted as quartz veins 2 to 30 inches (5-76 cm) in width, mineralized with chalcopyrite and pyrrhotite and hosted by quartz diorite.

The history of exploration of the Lydden Showing is described in some detail by Dunn (2006) and Dunn and Davis (2007); much of the post-1960 assessment work described herein is taken

from these reports. In 1962 Newconex Explorations optioned claims covering the Lydden occurrence from a Mr. Alfred Teed of New Westminster, B.C. and carried out prospecting, geological mapping and a magnetometer survey (Sullivan 1962), outlining three zones of copper mineralization:

1. Disseminated copper to 0.46% on an andesite-mafic intrusive contact;
2. The Lydden showing, exposed for 27 m with elevated Cu values including a single value of 24 g/t gold and 10.27% copper over 0.6 metres and:
3. A 0.6 m wide zone on the west side of a feldspar porphyry dyke, located 150 m north and 60 m west of the Lydden showing, assaying 1.07% to 4.23% copper. In addition a magnetic anomaly 270 metres long and 80 metre wide was outlined north of the feldspar dyke.

In the area mapped, Sullivan noted three rock types: andesite, greenstone and diorite and suggested that the greenstone appeared to be the product of chloritic alteration of the andesite, further noting that: “The diorite intrudes both these units and like the andesite has undergone considerable chloritic alteration”. The geophysical work located a magnetic anomaly spatially associated with mineralization and extending north of the Lydden showing.

Knutson (1963) described geophysical, geological and geochemical work on the claims significantly to the north of the Lydden showing. At the south end of the 1963 grid a magnetic anomaly was located, extending to the south, possibly the other end of that located in 1962. However, geochemical results provided no encouragement.

From 1963 to 1973 Zodiac Mines Ltd. and C & P Mining Co. Ltd. held the claims but no record of work has been found. The property lapsed in 1973, was reacquired by Mr. Sullivan and optioned to Inland Copper Ltd. who conducted a work program consisting of sampling the two main copper showings (Tully 1973). Sampling returned economic values in Cu (trace-0.6 g/t Au, 0.03-5.6 g/t Ag and 0.21-4.75% Cu) over widths from 0.9 to 1.5 metres coincident with the magnetic anomaly. Geochemical and geophysical surveys with follow-up drilling were recommended but were not carried out. In 1979 and 1980 J. Berkosha held the area but there is no public record of work.

In 1983 Pacific National Explorations Limited carried out geological mapping and sampling at the Lydden Showing itself, over the course of two days (Kruckowski and Cremonese 1983).



Their results essentially confirmed those of Sullivan (*op. cit.*). Further geological and geochemical work was recommended, but not carried out. In 1990 Navarre Resource Corporation carried out geological and geochemical work north of the Lydden Showing, in the area of its published location (Kikauka 1990). Further geological, geochemical and geophysical surveys with follow-up diamond drilling were recommended. Again, the property lapsed.

The latest work on the occurrence is that on the present mineral tenures (Dunn 2006, Dunn and Davis 2007), comprising follow-up soil and rock sampling on the Lydden Showing and surrounding ground, confirming the results returned from previous studies. Dunn recommended a minimum of 500 metres of drilling to test the showing at depth.

### ***Note on the location of the Lydden Showing***

James (1929) reported that: “Owing to a misunderstanding as to the location of the (M.J.) property it was not examined . . . .” Time has not altered the nature of this problem; MINFILE occurrence 103O 014 is not at the location published. The original location (Sullivan 1962) is consistent with his claim location map and that reported by Dunn (2006, 2007). The published location is from subsequent exploration work elsewhere (Knutson 1963, Kikauka 1990, and from the location map in Kruchkowski and Cremonese (1983). The correct location of the main Lydden showing is 431,265 m E, 6,176,925 m N (UTM Zone 9, NAD83).

### **GEORGIA RIVER MINE; MINFILE 103O 013**

Mineralization on Colling Ridge was discovered at roughly the same time as that at the Lydden mineral occurrence; the subsequent acquisition of the John D., Guggenheim, J.P. Morgan, Danny, Lookout, Summit, Charlotte, and Hillside non-Crown granted mineral tenures by Danny Hume, Edward Fish and Clarence E. Jarvis of Stewart is recorded the following year (Conway 1912). These tenures became known as the Guggenheim Group.

An excellent summary of the early development of the Georgia River Mine (Alldrick *et al.* 1996), from Conway (*ibid.*, 1915), Beaton (1916) Jack (1917) and Clothier (1918, 1919, 1921, 1923) is adapted in Table 3. In the penultimate of his reports, Clothier notes that a little work had been carried out, but with nothing to report; by 1922, all but two of the original claims had been dropped by the Georgia River Mining Company.

The first three Crown Granted mineral claims on Colling Ridge, Georgia, Georgia No.1 and Georgia No.2, were located on 20<sup>th</sup> September 1920; documents dating to 13<sup>th</sup> March 1924 show these claims registered in the names of the Georgia River Mining Company Limited (43.75% interest), Clarence E. Jarvis (25%), Edward Fish (25%) and Daniel Hume (6.25%). These preceded the acquisition of at least nineteen Crown Grants, acquired between 1923 and 1928 and registered in the name of Georgia River Gold Mines Limited; its successor company was Helena Gold Mines Limited. Little exploration activity was reported in the years immediately following these activities, other than upgrading and completion of the Georgia River trail to the mine site (Clothier 1926). Three years later, it was noted that: “Operations on the property have been at a standstill for a number of years, apparently because of a lack of funds . . . .” James (1929). A similar observation was made the following year (Mandy 1930).

Documentation of subsequent development and mining activity at the Georgia River Mine are described by Mandy (1931, 1933, 1937); the latest of these accounts presents a detailed account of development, including a mine plan and section. A total of 500 short tons (454 t) was mined in 1937, yielding 329 oz (10.2 kg) Au, 410 oz (12.75 kg) Ag and 7,301 lb. (3312 kg) Pb at an average grade of 0.658 oz/ton (22.56 gm/t) Au, 0.82 oz/ton (28.11 gm/t) Ag and 0.73 % Pb. Despite the renewed activity, Graham (1938) noted that there were no reserves of broken ore and subsequently that operations were suspended in 1937 and had not been resumed (Graham 1939).

Renewal of interest in the Georgia River Mine was probably triggered by the abrupt rise in gold prices in 1978. In 1980, E & B Explorations carried out an extensive exploration program including claim staking, grid layout, geological mapping, prospecting, trenching, underground mapping and sampling and diamond drilling (Kruckowski 1980). The results of this exploration indicated an excellent exploration potential for the Georgia River Mine.

Diamond drilling at the mine was recommended and subsequently carried out, as permitted by the availability of funds, over the next 15 years (Kruckowski 1981, Kruckowski and Konkin 1989, Kruckowski 1990, Bray and Rainsford 1990, Schatten 1995, Gruenwald 1996). Two of the exploration programs (Bray and Rainsford 1990, Schatten 1995) incorporated surface geophysical and geochemical surveys, combined with geological mapping.

Table 3. Summary of early exploration history at Georgia River (Alldrick *et al.* 1996).

<b>Year</b>	<b>Activity</b>
1912	Surface sampling and 17 ft (5.18 m) test shaft.
1913	16.76 m drift along Bullion vein.
1915	Bullion Vein drift advanced to 74.68 m; 10.67 m raise completed.
1916	Bullion Vein drift advanced to 362 ft (110.34 m); 35 ft (10.67 m) test winze on ore shoot.
1917	Bullion Vein drift advanced to 390 ft (118.87 m) &, raise breakthrough to surface. Bonanza ore assayed at 80.53 gm/t Au.
1918	Bullion Vein drift advanced to the 124.97 m; cross-cut driven west for 35 ft (10.67 m); winze deepened to 42 ft (12.80 m).
1920	Location of Georgia, Georgia #1 and Georgia #2 Crown Granted Mineral Claims
1922	Packhorse trail along Georgia River completed.
1923	Location of Gem and Gem #1 and Georgia #2 Crown Granted Mineral Claims
1924	Location of Goldfields, Goldfields #1, Goldfields #2, Goldfields #3, Sovereign, Sovereign #1 and Sovereign #2 Crown Granted Mineral Claims
1925	Georgia River Gold Mines incorporated; location of "June" group of Crown Granted Mineral Claims
1928	Wagon trail along Georgia River completed; location of Sovereign Fraction, Danny Fraction and Gem Fraction Crown Granted Mineral Claims
1929	Permanent camp completed; No.3 level advanced 520 ft (158.50 m) toward Southwest Vein.
1932	Cross-cut from Bullion vein intersects Southwest vein; drifted for 310 ft (94.48 m).
1933	9 holes totalling 929.64 m; no grade encouragement.
1936	Mill with 11 short tons (10 tonne) per day capacity completed.
1937	500 short tons (454 t) of stockpiled material processed at grades of 22.56 gm/t Au, 28.11 gm/t Ag and 0.73%Pb.
1939- 1979	Hiatus
1979	6 BQ holes totalling 342.91 m test Southwest Vein near intersections with Main and Georgia veins.
1981	15 BQ holes (904.46 m) test Southwest and Georgia veins. 137 trenches completed. No2 level sampled.
1980	14 BQ holes (1105.17 m) test Southwest. Main and Georgia veins. Inferred (non-43-101 compliant) reserves calculated from results.
1988	15 BQ holes (2628.77 m) test Southwest. Main and Georgia veins. Inferred (non-43-101 compliant) reserves recalculated.
1989	8 BQ holes (1528.40 m) ten Southwest and Georgia veins. Inferred (non-43-101 compliant) reserves calculated for two ore shoots within Southwest Vein.
1990	15 BQTW holes (1556.66 m) test 8 geophysical targets, 3 minor veins and ore shoots within Southwest Vein.
1995	19 NQ holes on 15 m centres totalling 1840 m defined drill-indicated (non-43-101 compliant but probably correct) reserves in the two ore shoots within Southwest Vein; geophysical and geochemical exploration to the west, along Colling Ridge

On the basis of the work carried out to 1989, total combined (measured, indicated, inferred) reserves at Georgia River reported in 1989 were stated as 290,272 tonnes grading 28.7 grams per tonne gold (George Cross News Letter May 11, 1989). Drill indicated reserves reported in 1995 were 272,130 tonnes grading 27.7 grams per tonne gold (George Cross News Letter No.118 (June 20, 1995)). Neither of these estimates complies with National Instrument 43-101.

In 2003, Mountain Boy Minerals Ltd. acquired an option on the Georgia River gold property from Exchequer Resource Corp. and drilled 20 holes for a total of 1010 m. (Wojdak 2004). Twelve other holes tested the northeast trending Southwest and Bullion veins, where the Gem Vein intersects them. These holes cut altered and silicified rocks but no significant gold values. An indicated resource of 130,000 tonnes grading 19.2 gm/t Au and an inferred resource, non-compliant with National Instrument 43-101, of 53,700 tonnes grading 16.9 gm/t Au was based on this latest drilling.

In 2010, the author carried out 1:5,000 mapping along Colling Ridge (Metcalf 2011), identifying the sequence as Upper Triassic Stuhini Group clinopyroxene-phyric mafic volcanogenic rocks, intruded by the Early Jurassic Colling Ridge Porphyry, part of the metallogenic Texas Creek Plutonic Suite. The area south and west of the Georgia River Mine is a zone of southwest-dipping mylonite, involving Colling Ridge Porphyry and associated with a conductivity anomaly identified by an airborne geophysical survey (*ibid.*).

### **GLORY EXTENSION (CARDOZO, WOOD 5); MINFILE 103P 184**

One other mineral occurrence, the Glory Extension, lies on the property itself. This occurrence is one of a series including the Glory (103P 011), Glory Extension 2 (103O 006), B.C. Verde (103O 012) and Big Mike (103O 011), which compose a group of quartz sulphide vein occurrences peripheral to the Jurassic Bulldog Creek Pluton (see below). Discovery of the Glory showings was made in 1922 (Clothier 1923) and these occurrences were subsequently explored for low-grade, bulk tonnage potential (Clothier 1924, 1925), a radical concept at that time. Despite these activities, James (1928) was not encouraged by the grades encountered in the Glory Group and Mandy (1931) remarked: “Nothing of commercial importance is exposed in the twenty-four different showings and workings examined on this property.”

No further work was carried out on these occurrences until, in 1981, mineral tenures were acquired covering the Glory Extension and showings peripheral to it. Some at least of the old

adits were located and two programs of geochemical sampling were carried out on the ground (Cremonese 1982, 1983). No further work is recorded for this area.

### **1100, RIDGE, N AND DICKIE ZONES; MINFILE 103P 248**

The ground covering the 103P 248 mineral occurrence was acquired by Auramex in 2010. Exploration of this area began in 1990, when prospecting located the 500 m x 50 m "N" showing (Visagie 1990a,b). Two styles of mineralization are present at this showing. The first consists of massive sulphide lenses as large as 3 m x 5 m comprising pyrrhotite, pyrite, sphalerite and subordinate galena and chalcopyrite, apparently conformable with bedding and, in part, crudely banded. The second comprises quartz veins and weak stockworks as wide as 30 cm containing 1-10% disseminated pyrite and galena; the veins have strike lengths of as much as 30 m. The N occurrence is hosted by interbedded volcanic and sedimentary rocks of the undifferentiated Upper Triassic-Middle Jurassic Hazelton and Stuhini groups, intruded by intermediate to felsic dykes. The volcanic rocks comprise feldspar phyric flows, tuff, lapilli tuff and agglomerate, locally with volcanic conglomerate and breccia. Sedimentary rocks comprise argillite and siliceous siltstone. A grab sample returned values of 0.17% Cu, 4.13% Zn, 0.29 gm/t Au and 6.2 gm/t Ag (Todoruk and Weekes 1993).

Work in 1993 and 1994 outlined the Dickie, 1100 and Ridge zones, 350 m west, 750 m west-southwest and 1,250 metres west-southwest. The Ridge Zone is a large, gossanous area approximately 150 by 150 m, apparently hosted by intermediate tuffs, flows and flow breccia, intensely fractured to a shatter zone of randomly oriented fractures in an area of numerous 030 degree trending brittle faults. The faults tend to be very narrow (less than 2 m) but wider zones of closely-spaced fractures are associated with the faulting. Mineralization is concentrated along fractures and is composed of pyrite, pyrrhotite, arsenopyrite and minor sphalerite and galena. Massive sulphide 'lenses' within the fractures have been mapped and appear to have very limited strike length (less than 5 m) and are typically very narrow (less than 20 cm). Rock samples yielded as much as 1.87 gm/t Au and 104 gm/t Ag over narrow widths.

The 1100 Zone mineralization is noted in MINFILE as "possibly similar to that at the Ridge Zone". Drillholes intersected sections of strong alteration with pyrite and pyrrhotite, which returned as much as 0.4 gm/t Au over 1.52 m (Weekes 1994). The Dickie Zone is characterised by massive to semi-massive, bedding-parallel lenses and ribbons of pyrite within intermediate

tuffs and tuff breccia. The sulphide lenses are typically very small (10 centimetres by 1 metre) and can be traced for over 200 metres. Surface grab samples yielded as much as 0.22 gm/t Au.

Pezzot (1995) provided a comprehensive summary of exploration to that date. In 1994, a large field program was carried out, consisting of an airborne geophysical survey, soil and rock geochemical surveys, geological surveys and 7 diamond drill holes totalling 1,024 metres of BQ core. A total of 569 core samples, 71 soil samples and 102 rock chip samples were analysed.

The airborne survey covered an area of about 18 square kilometres and a total of 150 line kilometres. Strong conductive zones were detected northeast of the “N” and “Tat” zones (the latter southeast of the present property) in fine clastic sedimentary rocks in the basal part of the Salmon River Formation. Diamond drill hole Ash-4 tested one of these strong electromagnetic anomalies and intersected a thick section of graphitic argillite.

A second hole tested the Dickie Zone, intersecting low-grade epithermal-style mineralization, which assayed 1.2 gm/t Au across 0.72 metres. Five holes were directed to test the 1100 Zone gold-in-soil geochemical anomaly, but intersected no mineralization of economic significance.

In 1995, a 3.6 km grid was established over the 1100 Zone, with a single line extending southeast to the Hammer Lake area. A total of 126 soil samples were collected from the grid and 1,425 metres of induced polarization (IP) surveying were completed. Twenty-three lithochemical samples were collected from the 1100 Zone as well as the Hammer, Camp and Outram Lake areas. The work defined the 1100 Zone gold-in-soil anomaly in more detail and suggested that the anomaly may have been transported downslope from a source located southwest of the area tested by the 1994 drill program. An induced polarization survey (Pezzot 1995) was also carried out and survey identified four combined chargeability and resistivity anomalies and a single chargeability-only anomaly. Further work was recommended, but no detailed work has been carried out since. Geochemical surveys and reconnaissance mapping (Lewis 2006a, 2006b, Lehtinen and Lewis 2007) were carried out in the area, but, although geochemical samples were collected, the focus of the exploration lay to the south of the N, 1100, Ridge and Dickie zones.

### **Occurrences peripheral to the property**

Eight claims of the BC Verde group (103O 012) were staked at the north end of Colling Ridge (Clothier 1922). James (1928) noted the excavation of “several trenches and open-cuts” there; the trenches are still evident, but no further work is described on this occurrence.

At the Big Mike mineral occurrence (103O 011), Clothier (1927) described a short adit driven on a 0.3 m-wide quartz vein with pyrite, minor galena and sphalerite and traces of visible gold. No further work is reported until 1986, when a program of geological, geophysical, and geochemical surveying was carried out (Di Spirito *et al.* 1986). The mineral occurrence is hosted by the Early Jurassic Bulldog Creek intrusion (see below) and comprises a gold- and silver-bearing quartz vein. Rock samples from the main adit and open cut returned variable gold values, the highest value being 1.554 oz./ton (53.28 gm/t) Au across 40 cm. An airborne magnetic high exists in the area of the main adit, coincident with a weak, broad VLF-EM conductor extending about one kilometre from the main adit area.

The Pedro Georgia showing (103O 015) was the latest-described (James 1929) of the discoveries; however, exploration work in 1928 was carried out apparently on an existing adit. Subsequent exploration (Mandy 1932, 1934) identified a vein with structural similarity to and along strike from the workings of the Georgia River Mine. For this reason, the Pedro Georgia occurrence is the most interesting of those peripheral to the property. A total of four adits were worked during the early exploration.

An excellent summary of the exploration history is given by Robins (1991). From 1936 to 1983 the property remained dormant until Lonetree Resources acquired the ground. Stream sediment geochemistry, prospecting, sampling and mapping was carried out on the Pedro Georgia mineral occurrence from 1984 onwards (Kruckowski 1985, Ostensoe 1985, Kruckowski 1986, 1987, 1988a 1988b). Three of the four adits were discovered, reopened and sampled. The samples returned erratic grades as high as 4.088 ounces per ton (144.25 gm/t) Au in shear-hosted quartz veins with a gangue of quartz, calcite and chlorite.

## GEOLOGICAL SETTING

### Regional geology

The Georgie River 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 200 mineral occurrences of dominantly precious metal vein type, with related skarn, porphyry and massive sulphide occurrences. 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), this area has enjoyed decreasing complexity with time and research (*e.g.*: Alldrick 1993, Alldrick *et al.* 1996, Anderson *et al.* 2003).

Northwestern Stikinia is underlain by rocks of at least five Palaeozoic to Cenozoic tectonostratigraphic packages (Anderson *et al.* 2003). The three lower assemblages comprise multiple, overlapping Late Palaeozoic 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 Palaeogene 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 as follows:

1. Latest Triassic to earliest Jurassic (*ca.* 205-196 Ma) alkaline porphyry-related, deformed mesothermal Ag-Au veins (*e.g.*: Red Mountain);
2. Early Jurassic Texas Creek Plutonic Suite (*ca.* 196-187 Ma) alkaline porphyry-related epithermal, transitional and mesothermal Ag-Au veins and base and precious metal deposits (*e.g.*: Premier, Sulphurets, and Bronson Creek);



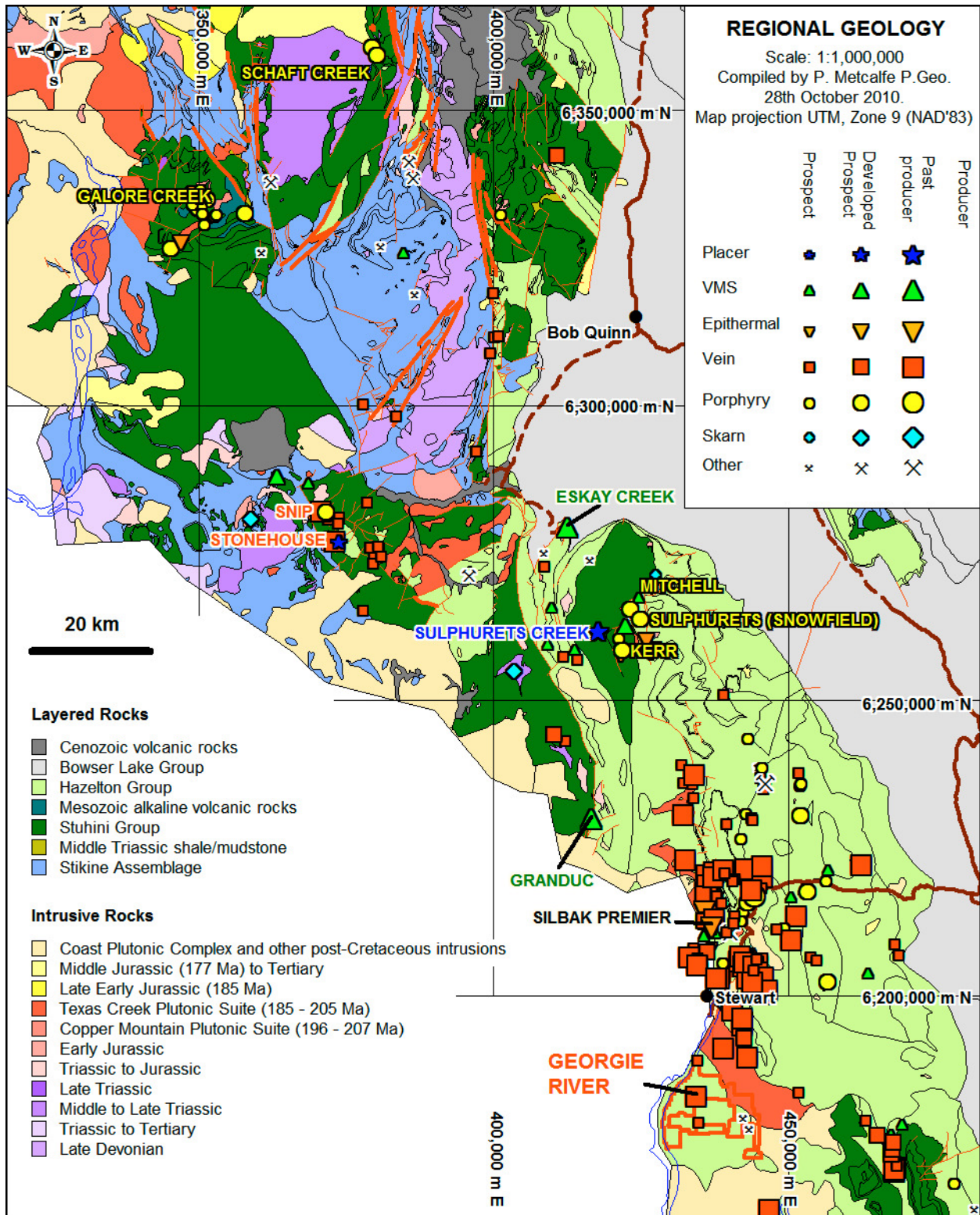


Figure 3. Generalised regional geology after Massey *et al.* (2005).

The red polygon near the south edge of the map is the property boundary. The Anyox mining camp (not shown) is 45 km south of the map's southern edge.

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.

### **Property geology**

The area was initially mapped by McConnell (1913); subsequent work (Grove 1986) identified the Mesozoic rocks underlying the property as part of a pendant in the Coast Plutonic Complex. The latest work (Evenchick *et al.* 1999, 2004) determined that the Jurassic (Texas Creek) isotopic age of the Bulldog Creek Stock, immediately north of the Georgie River property implied that the Mesozoic strata are connected to and therefore lie on the eastern margin of Stikinia, rather than within the Coast Plutonic Complex. A geological compilation of the property area, adapted from Evenchick *et al.* (*ibid.*) is shown in Figure 5. Most recently, mapping on Colling Ridge (Metcalf 2011) confirmed the presence of pyroxene-phyric volcanic and volcanogenic rocks and assigned these tentatively to the uppermost Triassic (Stuhini Group).

The strata are metamorphosed to lower greenschist facies and biotite hornfels is locally present, particularly on Colling Ridge. The layered rocks are often foliated and tight folds about southeast-trending axes deform both foliation and bedding. Lack of stratigraphic data has precluded assessment of the timing of deformation. The layered rocks are intruded by the Early Jurassic Bulldog Creek Stock, the Early Jurassic Colling Ridge Porphyry and dykes of the Eocene Hyder Plutonic Suite.

The stratified rocks also exhibit pre-Tertiary high-strain zones characterised by foliation or cataclastic deformation, bounded by unfoliated rocks. One such zone, with moderate southwest dip, strikes across Colling Ridge and has a true width in excess of a kilometre. Its proximity to and inclusion of Early Jurassic intrusions identifies it as an important exploration target.



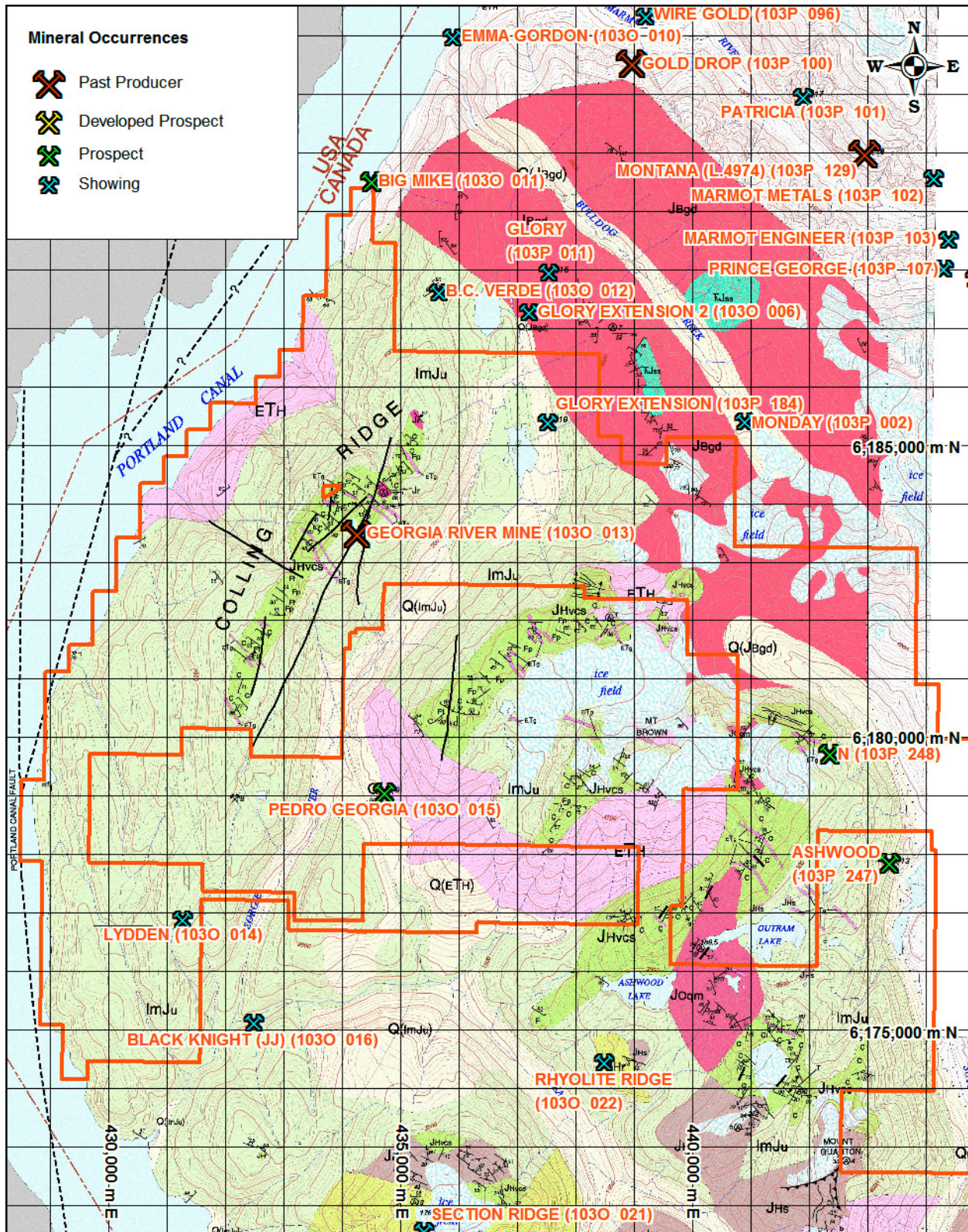


Figure 4. Geological map of the western part of the property (after Evenchick *et al.* 1999).

Scale: 1:100,000. Geological legend in Figures 5 and 6. *N.B.*: The location of the Lydden mineral occurrence is shown here in its true position, 2 km south-southeast from its recorded location.



## QUATERNARY

Q	<i>Glacial till, alluvium, colluvium; unit designators in parenthesis are assumed to underlie Quaternary sediments</i>
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## TERTIARY

### PALEOCENE TO EOCENE

ETg	<i>Granitic dykes: equigranular to porphyritic, biotite, hornblende, or biotite-hornblende granite, granodiorite, quartz monzonite and monzodiorite dykes; quartz K-feldspar porphyritic rhyolite dykes; leucocratic plagioclase-hornblende dykes similar to the Larcom dyke swarm; latter dykes and all older units are cut by mafic dykes too thin and numerous to show</i>
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ETH	<i>HYDER PLUTON: biotite-hornblende granite, locally K-feldspar megacrystic; may include minor granodiorite and quartz monzonite; minor areas may have only biotite or hornblende; sphene is common; b - biotite, h - hornblende, K - K-feldspar megacrystic</i>
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## JURASSIC

### LOWER AND/OR MIDDLE JURASSIC

#### HAZELTON GROUP

#### AND RELATED EARLY TO MIDDLE JURASSIC INTRUSIVE ROCKS

ImJu	<i>Undivided volcanic, clastic and intrusive rock of the Georgie River area. Most is probably Jurassic volcanic, clastic, and lesser intrusive rock but minor outcrops of Tertiary granitic rock may be present, as may minor Triassic rocks</i>
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JHr	<i>Rhyolite flow rock; massive, flow layered, spherulitic, or brecciated; white and rusty weathering; aphyric to weakly porphyritic; ca. 176 Ma</i>
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JHs	<i>Rusty weathering siltstone and fine grained sandstone; minor medium grained feldspathic sandstone beds up to 1 m thick (turbidites) and rare felsic lithic pebble conglomerate</i>
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JBgd	<i>BULLDOG CREEK PLUTON: hornblende-biotite granodiorite to quartz monzonite; epidote veins and chlorite and K-feldspar alteration; pink and green weathering; common fault breccia (181 +/- 8 K-Ar on hb)</i>
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JOqm	<i>OUTRAM LAKE PORPHYRY: plagioclase, amphibole, and quartz porphyritic quartz monzonite to monzodiorite; plagioclase porphyritic, locally K-feldspar megacrystic; found as dykes within a few km of the large body near Outram Lake; dykes have intrusive contacts with JHvcs; ca. 189.5 Ma</i>
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JHvcs	<i>Undivided volcanic conglomerate, volcanic sandstone, and intermediate to mafic aphyric to porphyritic flows: volcaniclastic rocks are unbedded, poorly sorted, matrix supported, heterolithic and monolithic volcanic conglomerate interbedded with immature, massive or poorly bedded sandstone and rare, thin sandstone/siltstone turbidite units; C - dominantly volcanic conglomerate and sandstone; F - dominantly intermediate and mafic flows; Ff - feldspar-phyric flows; Fp - pyroxene-pyric flows; T - tuff</i>
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## TRIASSIC OR EARLY OR MIDDLE JURASSIC

TJss	<i>Siliceous (tuffaceous?) siltstone and sandstone (Pendant in Bulldog Creek pluton)</i>
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Figure 5. Geological legend for Figure 4 (Evenchick et al. 1999).

Geological contact (defined, approximate, assumed) . . . . .	-----
Lineaments . . . . .	-----
Bedding traces . . . . .	=====
Faults (defined, assumed) . . . . .	-----
Limit of mapping . . . . .	.....
Bedding (inclined and top unknown, upright, overturned) . . . . .	5/ 10/ 15/
Volcanic layering . . . . .	5/
Foliation (undivided, transposition, mylonitic) . . . . .	5/ 10/ 15/
Fracture (inclined) . . . . .	5/
Fault (displacement sense unknown, dextral, sinistral, contractional, extensional) . . . . .	5/ 10/ 15/ 20/ 25/
Shear zone (hanging wall up) . . . . .	5/
Axial surface of fold (generation unknown, second generation) . . . . .	5/ 10/
Fold axis (generation unknown, 's' fold generation unknown, 'z' fold generation unknown, first generation, second generation, third generation, crenulation) . . . . .	5 10 15 20 25 30 35 5 10
Lineations (stretching, slicken line) . . . . .	5 10
Dyke (inclined) . . . . .	5
Joint (inclined) . . . . .	5
Geochronology sample site number . . . . .	Ⓐ

Figure 6. Geological symbols used in Figure 4 (Evenchick *et al.* 1999).

### ***Property mineralization***

Mineralization encountered on the property by previous workers (see above) has been confined to vein and/or shear-hosted styles at documented occurrences, until the property acquisition of 2010. The timing of the mineralization at the Georgia River Mine was inferred to be of Tertiary age (Alldrick *et al.* 1996). Metcalfe (2011) proposed that the presence of hydrothermal biotite within and proximal to the Early Jurassic Colling Ridge Porphyry and the almost complete lack of alteration in the Eocene dykes indicate that the mineralization is, at least in part, Early Jurassic and that the Eocene isotopic age obtained (Alldrick *et al.* 1996) represents thermal resetting of the isotopic systems used.

The rocks hosting the N, 1100, Dickie and Ridge zones in the southeast of the property range in age from Early Jurassic volcanosedimentary rocks to Early to Middle Jurassic sedimentary rocks. Recorded mineral occurrences appear to be of two types: transgressive, shear or fracture hosted veins and stratabound, probably stratiform mineralization in the younger rocks.

## **2011 FIELDWORK**

### **Introduction**

The original purpose of fieldwork carried out in 2011 was to examine and evaluate the newly acquired ground in the southeast of the property. Three weeks' fieldwork was planned to comprise mapping and geological sampling in the area of the 1100 Zone (Weekes 1994).

August 2011 was typical of the year in general, being the worst in living memory for exploration in the Stewart area; consequently, 2011 fieldwork was severely curtailed. In particular, the eastern part of the expanded Georgie River property is vulnerable to low cloud, which accumulates over the 1100 zone with any precipitation. The area of the 1100 Zone was accessible for three days only.

The remainder of the period was spent on standby and in investigation of the Hume Creek geophysical anomaly on Colling Ridge, located during 2010 exploration (Metcalfe 2011). Activity in this area comprised geochemical sampling of rock, mapping and test sampling of soil and vegetation. Field procedures, barring sample media were the same for both localities and are described below. Results for the two areas are described independently of each other (below).

## **Field procedures**

### ***Topographic base***

2011 fieldwork used a field topographic base consisting of TRIM vector topographic information superposed on digital orthophotos, both products purchased from the Government of British Columbia for each of the map areas 103O.080, 103O.090, 103P.071 and 103P.081. Maps produced with these data are by permission of the Government of British Columbia.

Orthogonal (vertical) views and maps were generated using MapInfo® v.8.0, incorporating the TRIM and orthophoto data. Oblique views of the terrain were generated using Global Mapper® v.11.01 to produce computer graphics images (CGIs), incorporating the DEM, orthophoto and several elements of the TRIM data.

### ***Geological mapping***

Access to the property was by helicopter from Stewart airport. Fieldwork was carried out by a team of two, comprising the author and Mr. S. Conley and took place from 12<sup>th</sup> August to 27<sup>th</sup> August, 2011. Mr. Conley examined the area in the immediate vicinity of the mapping traverse and took most of the geochemical samples.

Field stations were located using Garmin global positioning units. The stations were numbered alphanumerically and the quoted error of the global positioning unit, number of satellites sampled and signal strength were all recorded at each station, together with lithological and structural data.

### ***Soil and vegetation sampling (Colling Ridge)***

Curtailed fieldwork by weather and injury and the time-intensive nature of vegetation sampling in the alpine precluded sampling of a test soil/vegetation line into the Hume Creek anomaly. Two test holes were excavated to bedrock, at depths of 30 cm to 40 cm, near the interpreted centre of the Hume Creek anomaly. Vegetation, comprising fresh leaf-bearing stems of white mountain heather (*Cassiope mertensiana*) was sampled within a 3 m radius of the holes. One sample of the soil was taken from 15-25 cm depth in each hole for analysis for mobile metal ions (MMI). In addition, the organic (A), B1, B2 and C soil horizons were sampled and samples of loose bedrock at the bottom of each hole were also taken.

## **Map compilation**

Waypoint locations were downloaded and plotted on the topographic database, then examined for error. Outcrop extents were plotted accurately using the downloaded GPS track. Structural information was plotted using standard geological symbols adapted from the Geological Survey of Canada. The single exception to established procedure was that structural symbols were plotted along strike from the field station to avoid obscuring any data point, or small outcrops. Locations of rock samples are listed in Table 4.

## **Analytical procedures**

All samples from the field program were shipped to Acme Analytical Laboratories for analysis. Rock samples were crushed to 80% passing -10 mesh. A 250 gm split was then pulverised to 85% passing -200 mesh. A 30 gm aliquot was leached in hot (95°C) *aqua regia*. The resulting solution was then analysed using inductively coupled plasma mass spectrometry (ICP-MS).

Soil samples from Colling Ridge were dried at 60°C, sieved to -80 mesh, a 30 gm aliquot was leached in hot (95°C) *aqua regia* and the solution was analysed by ICP-MS using Acme's ultratrace package.

Vegetation samples from Colling Ridge were analysed both by drying and pulverising an aliquot and by ashing of dry vegetation at 475°C. Samples were then digested and analysed by *aqua regia* leach and ICP-MS.



Table 4. Sample locations from 2011 fieldwork

Sample	Easting	Northing	Area	Type	Width (m)	Lithology	Alteration	Mineralization
211801	441362	6178915	Ashwood	O	G	Wacke		
211802	441476	6178953	Ashwood	O	G	Wacke	Quartz+carbonate	Weakly sheared, pyrite and pyrrhotite
211803	441475	6178951	Ashwood	O	G	Wacke	Quartz+carbonate	Pyrite and galena present
211804	441547	6179088	Ashwood	O	G	Wacke		Weakly sheared, pyrite and pyrrhotite disseminated through matrix
211805	441550	6179119	Ashwood	O	0.2	Quartz sulphide vein	K-feldspar	Quartz+pyrrhotite+ arsenopyrite vein
211806	441589	6179099	Ashwood	O	G	Wacke	K-feldspar	
211807	441610	6179116	Ashwood	O	G	Wacke	K-feldspar, quartz+carbonate	Sheared vein, pyrrhotite, minor arsenopyrite and pyrite
211808	441679	6179038	Ashwood	O	G	Wacke	K-feldspar, quartz+carbonate	Gamebreaker showing
211809	441679	6179043	Ashwood	O	0.7	Wacke	K-feldspar, quartz+carbonate	Gamebreaker showing
211810	441678	6179043	Ashwood	O	0.75	Wacke	K-feldspar, quartz+carbonate	Gamebreaker showing
211811	441677	6179042	Ashwood	O	1.1	Wacke	K-feldspar, quartz+carbonate	Gamebreaker showing
211812	441676	6179042	Ashwood	O	1.1	Wacke	K-feldspar, quartz+carbonate	Gamebreaker showing
211813	441680	6179043	Ashwood	O	1	Wacke	K-feldspar, quartz	Gamebreaker showing
211814	441678	6179045	Ashwood	O	0.75	Wacke	K-feldspar, quartz+carbonate	Gamebreaker showing
211815	441678	6179045	Ashwood	O	0.7	Wacke	K-feldspar	Gamebreaker showing
211816	441677	6179047	Ashwood	O	0.75	Wacke	K-feldspar	Gamebreaker showing
211817	433593	6183542	Colling R.	O	G	Chlorite mylonite	Quartz+carbonate, quartz	
211818	433594	6183544	Colling R.	O	G	Chlorite mylonite	Quartz+carbonate, quartz	
211819	433602	618353	Colling R.	O	G	Feldspar porphyry	Quartz+carbonate, quartz	Quartz+carbonate as veinlets and stringers
211820	433602	6183525	Colling R.	O	G	Feldspar porphyry	Quartz+carbonate, quartz	Pyrite, possibly arsenopyrite
211821	433603	6183504	Colling R.	F	G	Feldspar porphyry	Silica, quartz+carbonate	Very fine grained disseminated sulphides through groundmass, trace arsenopyrite and pyrite
211822	433635	6183485	Colling R.	O	G	Feldspar porphyry	Quartz+carbonate, sericite	
211823	433500	6183500	Colling R.	O	G	Feldspar porphyry	Weak quartz, sericite	Bottom of soil hole L1 3500N, unmineralized
211828	433580	6183534	Colling R.	O	G	Chlorite mylonite		Bottom of soil hole A1 3534N, unmineralized

## RESULTS OF 2011 FIELDWORK

### **Southeast area (Brown claims)**

Fieldwork in the southeast of the area confirmed and somewhat augmented a previous study by Weekes (1994). A geological map is shown in Figure 7. The ground between the Ridge Zone and the Dickie, 1100 and N zones lies at elevations between 1,150 and 1,550 m and is underlain by a succession of feldspar-rich lithic siliciclastic rocks, with a predominance of clasts and feldspar crystal fragments derived from volcanic rocks. The units are massive to medium bedded, with very rare graded bedding to siltstone tops, indicating a homoclinal, upright, moderately to steeply east-northeast-dipping section. The thickness of this unit is not known but is in excess of 500 m. No volcanic units were observed in the section examined.

### ***Mineralization, analytical results and Gamebreaker Showing***

The volcanoclastic sequence hosts several small veins hosted by shear zones or fractures and associated with zones of weak to moderate pervasive K-feldspar, quartz carbonate or sericite alteration in wallrock. Mineralization comprises pyrite and/or pyrrhotite with or without quartz, rarely with galena and commonly with arsenopyrite. Veins are irregular and strike in a number of directions; insufficient structural data were collected for a comprehensive analysis. Seven samples were taken of these smaller occurrences; analyses are presented in Appendix III. Two returned trace to very weakly anomalous values of Au, two returned anomalous (300+ ppb) values and three returned values in excess of 7,000 ppb Au. It should be noted that all analyses are geochemical, using *aqua regia* dissolution and inductively coupled plasma spectrometry and are unconfirmed by formal assay techniques at the time of writing.

A larger scale mineral occurrence was discovered during the second day of fieldwork. The new Gamebreaker showing comprises a quartz sulphide breccia hosted by structure striking 168 and dipping 61° to the west-southwest. This structure and its vein are exposed for a strike length of roughly 10 m in the middle of a permanent snowfield (Figure 8). The thickness of the vein varies from 0.75 m to a maximum of 1.45 m in the centre of outcrop, but mineralization extends at least a metre into the hanging wall and, to a lesser extent, into the footwall. Both walls have undergone moderate pervasive K-feldspar + sericite alteration.

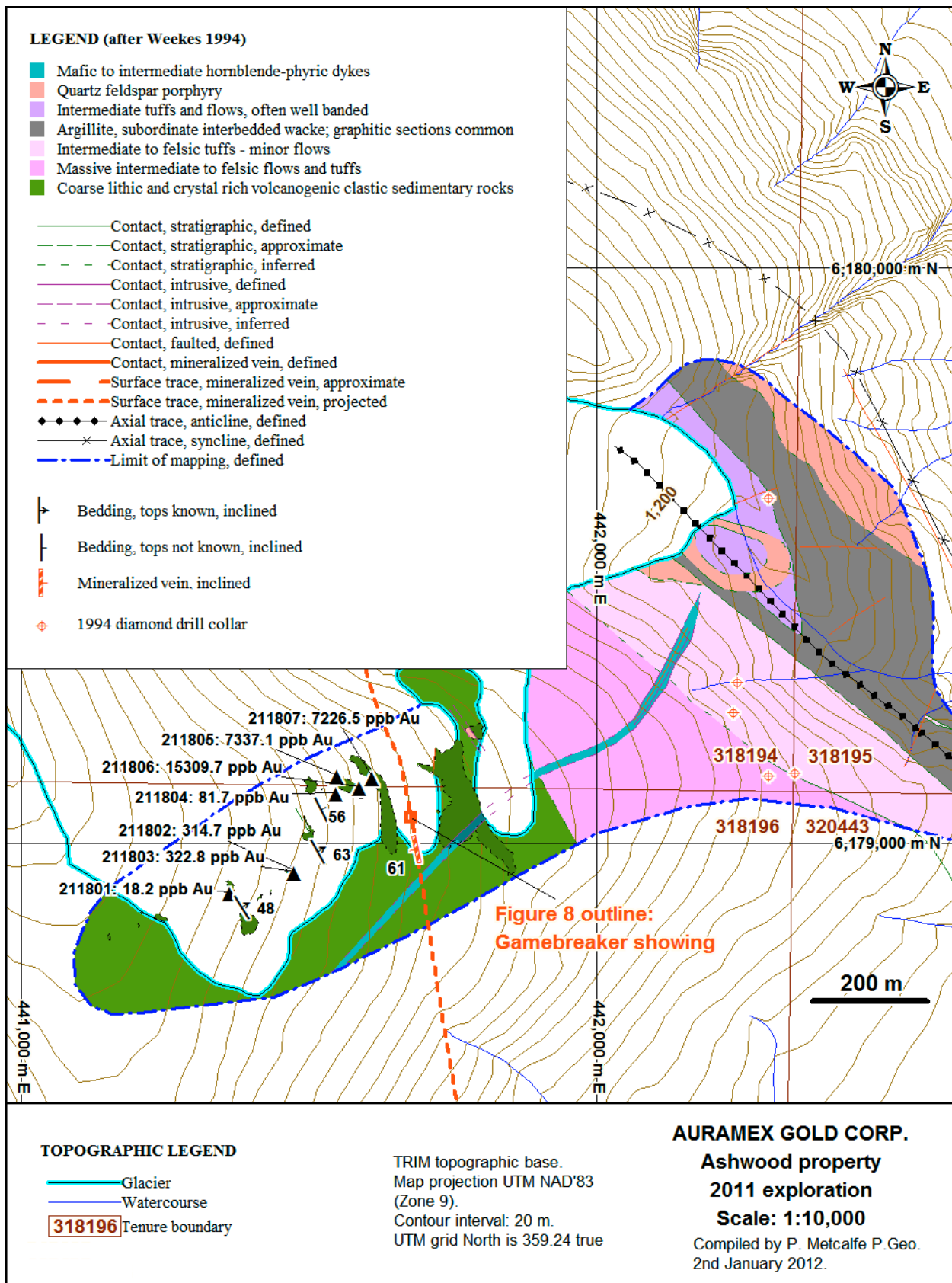


Figure 7. Geological map of the area west of the N Zone, after Weekes (1994).  
 The outline of Figure 8 is shown in red.

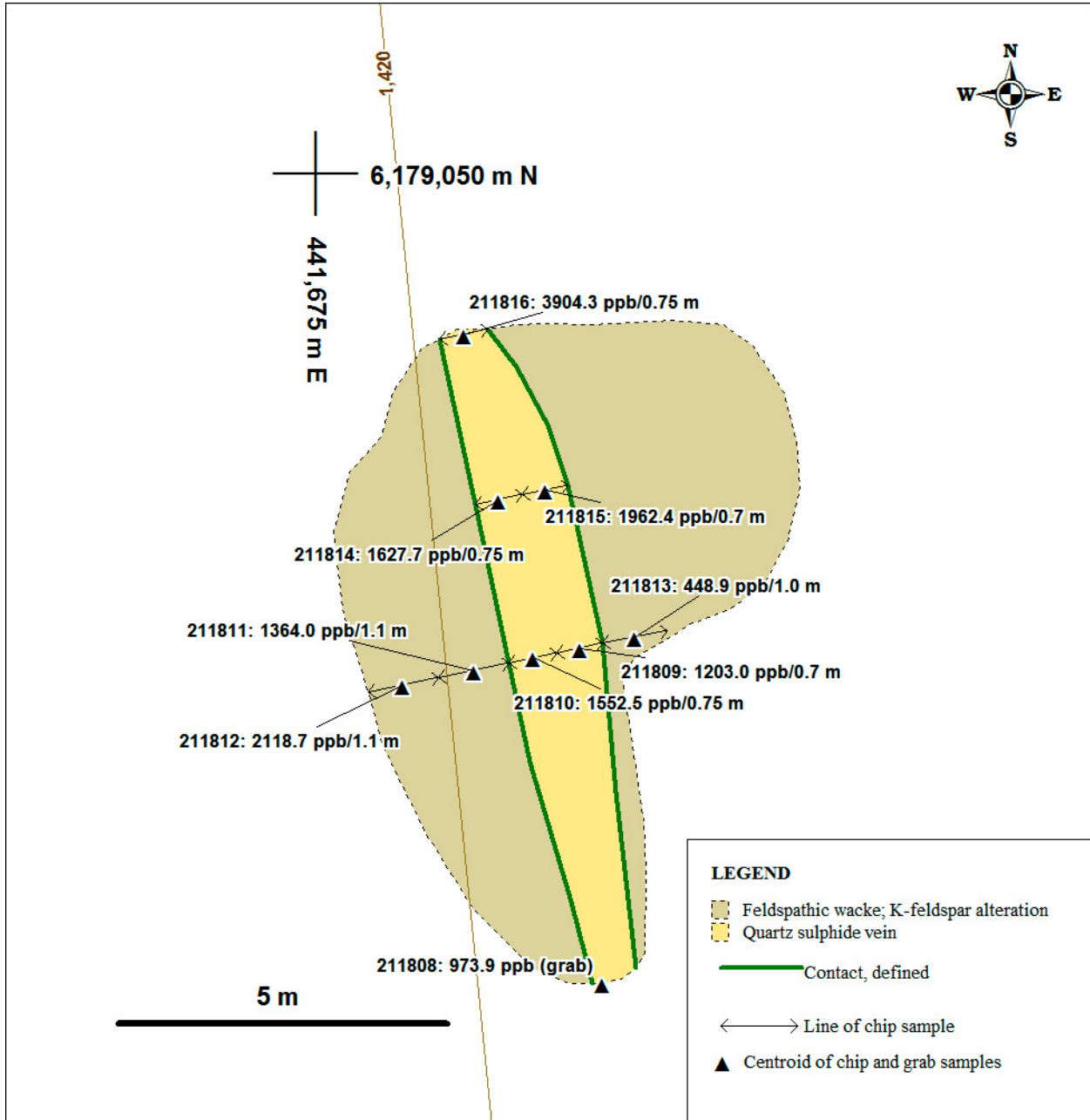


Figure 8. Gamebreaker showing (1:100 scale plan) showing sample thicknesses and values.

Geochemical analyses returned from the Gamebreaker showing are lower than the strongly anomalous samples returned from smaller veins in the surrounding area, but the consistency of the gold concentrations in the showing itself is remarkable. Only a single sample (the only grab sample) from the vein itself returned less than 1,000 ppb and one sample exceeded 3,000 ppb. Moreover, an attempt to bracket anomalous values in the centre of the showing failed entirely; the altered rock in the hanging wall of the vein returned concentrations in excess of 1,000 ppb, to the limit of outcrop (Figure 8). Values from 1,000 to 3,000 ppb are probably subeconomic for a narrow vein environment here, but their consistency merits further exploration.

### **Colling Ridge (Hume Creek anomaly)**

A single day of mapping and geochemical sampling was carried out in the vicinity of the Hume Creek geophysical anomaly detected during 2010 exploration (Metcalf 2011). A part of the revised geological map is shown in Figure 9. Exposures of the Colling Ridge Porphyry (Evenchick *et al.* 1999) and its protomylonitic equivalent (Metcalf *op. cit.*) are more common than previously inferred in the high-strain zone. The mapping also eliminated an inferred fault and confirmed the general southwest dip to the primary foliation in the rock.

### ***Grid line construction***

Two test lines were planned across the Hume Creek anomaly, with a line spacing of 80 m and a station spacing of 50 m. The two grid lines were laid out on an azimuth of 037, to intersect both southwest and west-dipping structures and to allow for ease of sample location (3-4-5 triangulation) by GPS. Construction of the grid was interrupted by injury on the second day.

### ***Geochemical sampling***

Geochemical sampling of the soil grid was precluded by injury. A final day was spent on the Hume Creek anomaly sampling soil profiles in two holes near the centre of the geophysical anomaly (Figure 9) and sampling White Mountain Heather (*Cassiope mertensiana*) in the immediate area surrounding the soil sample pits. Five geochemical rock samples were taken from mineralized outcrop and one from float, over the centre of the geophysical anomaly.

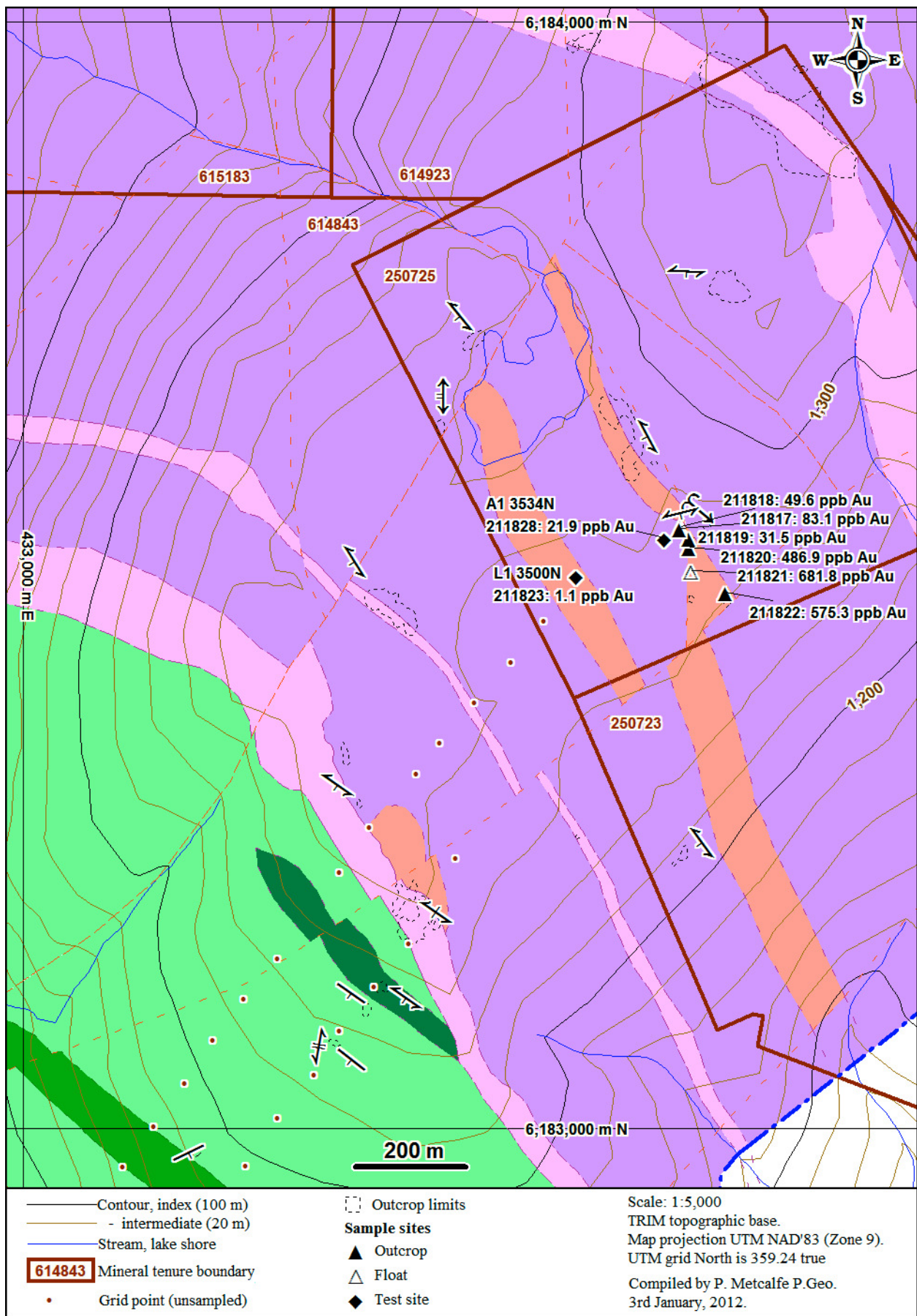


Figure 9. Geological map of the Hume Creek anomaly, showing sample locations.



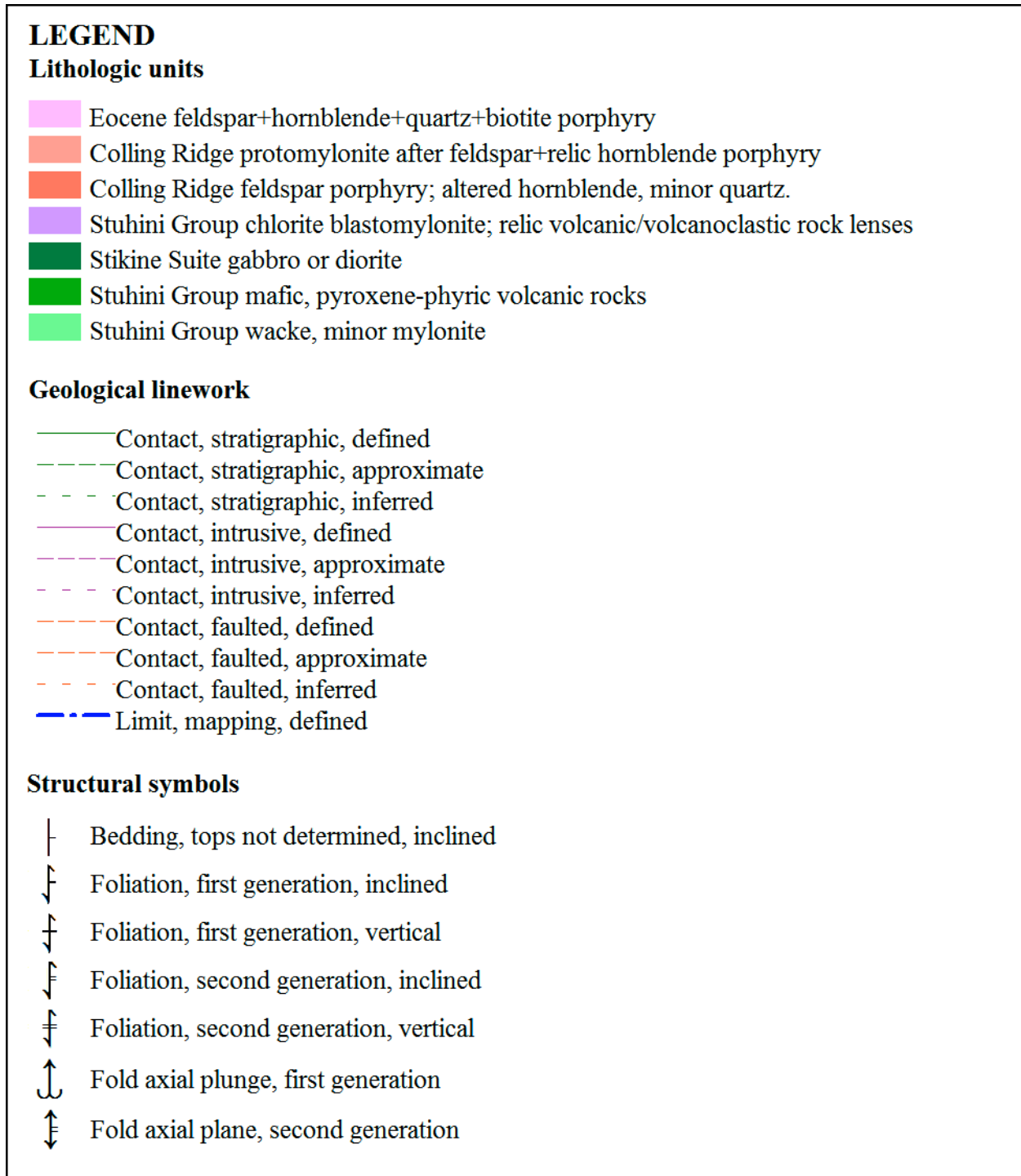


Figure 10. Geological legend for Figure 9.

Results for the geochemical sampling are presented in Appendix III. Values returned for samples of vegetation and from all soil horizons at each of the soil holes are uniformly non-anomalous. Rock samples taken from loose rock at the bottom of each hole are similarly non-anomalous. However, of the five rock samples taken in the general vicinity, three are moderately anomalous (485-682 ppb) in Au. Each of the anomalous rock samples is from the protomylonitic Colling Ridge porphyry with disseminated pyrite and traces of disseminated arsenopyrite. There is no linear covariance of Au with As, Bi or Sb in this small a population, but these metals are generally elevated in samples with anomalous Au. Cu too is elevated. These anomalies strongly suggest that the deformed Colling Ridge Porphyry is the metallogene at least for the Hume Creek Au mineralization and probably for the Georgia River Mine also.

The background concentrations of elements in rock, soil and vegetation at the two sites permit a preliminary evaluation of efficacy of technique. Of the soil samples, those from the C horizon returned the best and most consistent response in Au and base metals with a positive correlation in Au with both MMI and vegetation samples. However, MMI samples returned non-detectable levels of As, Sb and Bi, probably the three most effective pathfinder elements. All four elements were barely above detection limit in fresh vegetation, but all were significantly enhanced by the ashing procedure. The reader will note that circumstances precluded a more comprehensive evaluation of the techniques.

## **CONCLUSIONS AND RECOMMENDATIONS**

The small amount of fieldwork carried out in 2011 resulted in the discovery of shear-hosted Au-As mineralization between the Ridge and 1100 zones on the southeast part of the Georgia River property, hosted by a sequence of coarse clastic sedimentary rocks including feldspathic wacke and lithic arkose and interpreted as Lower Jurassic in age. The veins are surrounded by envelopes of moderate pervasive K-feldspar + sericite alteration, which also returned strongly anomalous values of Au and As.

Fieldwork on Colling Ridge located mineralized samples of deformed Early Jurassic Colling Ridge Porphyry in the 1 km wide Hume Creek mylonite zone with disseminated pyrite and arsenopyrite mineralization anomalous in Au and As. This mineralization is coincident with a major structural zone and with a weak conductivity anomaly interpreted from a previous airborne geophysical survey, west of the past-producing Georgia River Mine.



A complete compilation of previously acquired data, with special emphasis placed on geophysical and geochemical data is recommended for both areas. It is essential that this be carried out prior to further exploration, which should comprise biogeochemical, soil geochemical and lithochemical exploration, with some emphasis placed on penetrative geochemical techniques such as biogeochemistry. Contingent on favourable results from geochemical sampling, the areas examined in 2011 might then be drill tested.

Owing to severe curtailment of fieldwork in 2011, it is strongly recommended that future fieldwork operate from camps accessible on foot from the target areas. The camps will be supplied by helicopter, but need not require the presence of a helicopter on-site, so long as the appropriate first aid is available and other preparations are made. An air ambulance will, of course, be necessary as the camp expands, or if drilling is contemplated.

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## APPENDIX I: STATEMENT OF QUALIFICATIONS

I, PAUL METCALFE, do hereby state:

1. That I am a resident of British Columbia, with a business address at P.O. Box 289, Gabriola, B.C. V0R 1X0;
2. That 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. That I am a member, in good standing, of the Association of Professional Engineers and Geoscientists of the Province of British Columbia;
4. That I have worked as a geologist for a total of 34 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;
5. That 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 and;
6. That have several years' experience working in northwestern Stikinia.

DATED at Vancouver, British Columbia this 6<sup>th</sup> day of January, 2012.

“P. Metcalfe”

Dr. Paul Metcalfe P.Geol.



## APPENDIX II: STATEMENT OF COSTS

Item	Total Days	Rate	Total
P Metcalfe	17	675.00	\$11,475.00
S Conley	17	375.00	6,375.00
W Crocker	1	600.00	600.00
Mob/Demob.			5,192.86
Room & Board			6,458.45
Helicopter			10,592.88
Expendables and small tools			396.99
Analyses			244.07
Reporting			5,000.00
<b>Total</b>			<b>\$46,335.25</b>

## APPENDIX III: ANALYTICAL REPORTS



1020 Cordova St. East Vancouver BC V6A 4A3 Canada

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**Client:** Auramex Resources Corporation

750 Grand Blvd.  
North Vancouver BC V7L 3W4 Canada

Submitted By: Wayne Crocker

Receiving Lab: Canada-Vancouver

Received: September 02, 2011

Report Date: October 03, 2011

Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN11004421.1

### CLIENT JOB INFORMATION

Project: Georgie River  
Shipment ID:  
P.O. Number  
Number of Samples: 24

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	24	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1DX3	24	1:1:1 Aqua Regia digestion ICP-MS analysis	30	Completed	VAN

### SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage  
STOR-RJT Store After 90 days Invoice for Storage

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Auramex Resources Corporation  
750 Grand Blvd.  
North Vancouver BC V7L 3W4  
Canada

CC: Bob Plummer  
Paul Metcalfe



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Project: Georgie River  
 Report Date: October 03, 2011

Page: 2 of 2 Part 1

CERTIFICATE OF ANALYSIS

VAN11004421.1

Method	WGHT	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
211801	Rock	0.86	0.1	21.7	3.5	73	0.2	1.7	9.5	976	3.57	30.4	18.2	0.7	70	<0.1	0.3	0.1	94	3.19	0.112
211802	Rock	1.35	0.3	142.4	225.9	74	3.7	1.7	39.5	1456	6.68	1805	314.7	0.1	52	3.2	6.7	0.4	6	3.91	0.011
211803	Rock	1.78	0.2	150.4	4483	629	30.6	2.1	14.6	1242	6.74	296.0	322.8	0.1	39	47.9	27.2	1.8	6	2.94	0.008
211804	Rock	0.88	0.2	119.1	9.6	99	0.8	1.8	11.3	1659	5.45	9.9	81.7	0.5	13	1.1	0.7	0.2	34	0.88	0.075
211805	Rock	4.05	1.4	777.5	128.9	67	16.6	1.1	201.0	281	19.88	>10000	7337	<0.1	3	0.5	31.7	25.7	9	0.12	0.010
211806	Rock	1.13	2.4	156.9	199.9	39	24.6	1.6	77.0	455	11.17	>10000	15542	0.2	16	0.5	77.1	49.2	22	0.43	0.035
211807	Rock	0.89	0.9	348.8	120.4	19	21.9	0.9	29.6	150	12.08	>10000	7226	<0.1	3	0.3	40.5	55.2	5	0.11	0.013
211808	Rock	1.22	1.8	20.5	18.0	47	5.9	0.6	2.4	187	4.25	2460	973.9	1.4	26	0.3	34.0	0.2	17	0.20	0.118
211809	Rock	2.00	1.3	12.8	15.4	26	6.5	0.9	4.3	40	2.58	4502	1203	0.3	20	0.2	38.6	0.1	4	0.10	0.038
211810	Rock	2.17	2.7	15.8	10.3	37	6.0	1.0	3.4	102	3.72	7382	1553	0.7	33	0.2	54.1	<0.1	6	0.10	0.082
211811	Rock	1.50	0.8	19.8	12.7	34	4.5	1.3	4.9	83	4.03	4789	1364	0.9	127	0.3	47.2	<0.1	12	0.22	0.095
211812	Rock	2.20	0.3	4.9	11.6	8	4.3	<0.1	2.2	52	1.28	1931	2119	0.6	35	<0.1	42.5	<0.1	6	0.16	0.023
211813	Rock	2.48	1.9	44.2	13.0	47	5.4	2.2	10.5	296	2.54	782.6	448.9	0.6	33	0.2	11.1	<0.1	18	0.69	0.099
211814	Rock	2.07	0.5	10.0	14.6	19	5.4	0.9	3.5	22	2.43	4444	1628	0.6	14	0.2	46.8	<0.1	4	0.05	0.018
211815	Rock	2.78	1.3	20.2	15.5	65	7.5	1.5	5.6	85	2.86	6452	1962	0.4	25	0.7	55.5	<0.1	5	0.15	0.048
211816	Rock	1.20	2.3	13.3	18.6	42	5.8	0.9	3.2	59	3.28	>10000	3904	0.4	17	0.5	80.0	<0.1	4	0.09	0.044
211817	Rock	1.41	9.0	56.1	23.6	26	1.9	8.2	7.1	400	3.19	2505	83.1	1.3	51	0.3	3.7	0.4	136	0.67	0.103
211818	Rock	1.22	0.7	25.2	2.2	28	0.5	1.2	2.1	529	3.79	32.1	49.6	1.8	9	<0.1	2.2	<0.1	67	0.20	0.076
211819	Rock	1.22	1.7	10.1	22.5	45	1.6	8.8	12.7	408	3.21	75.7	31.5	1.2	14	0.3	3.6	0.5	28	0.27	0.081
211820	Rock	1.20	2.1	16.0	752.1	44	5.2	4.2	11.1	72	2.01	>10000	486.9	1.0	6	4.4	11.5	2.1	13	0.09	0.045
211821	Rock	1.50	0.4	75.7	33.8	68	1.2	101.3	28.1	210	2.64	194.9	681.8	0.2	28	2.0	0.6	<0.1	86	0.44	0.106
211822	Rock	1.60	5.2	28.5	170.0	16	9.6	1.5	1.6	440	4.04	1475	575.3	2.1	15	0.1	3.5	0.3	15	0.05	0.046
211823	Rock	1.31	0.5	15.7	2.1	86	<0.1	7.9	12.9	510	3.90	23.2	1.1	0.4	37	<0.1	0.3	<0.1	48	0.63	0.202
211828	Rock	1.52	0.2	7.2	2.5	84	0.1	3.1	14.3	1377	5.26	4.7	21.9	1.5	13	<0.1	0.8	<0.1	125	0.47	0.201



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Project: Georgie River  
 Report Date: October 03, 2011

Page: 2 of 2 Part 2

CERTIFICATE OF ANALYSIS

VAN11004421.1

Method	Analyte	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
Unit		ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	
211801	Rock	7	3	0.88	216	0.142	<1	2.53	0.265	0.92	0.1	<0.01	3.3	0.7	0.41	6	0.7	<0.2
211802	Rock	<1	<1	0.14	25	0.003	<1	0.27	0.004	0.05	<0.1	0.01	0.7	<0.1	3.96	<1	0.9	0.3
211803	Rock	<1	1	0.15	33	0.005	<1	0.27	0.006	0.06	0.1	0.05	0.8	<0.1	4.08	<1	0.9	<0.2
211804	Rock	2	2	0.89	76	0.059	<1	1.97	0.007	0.19	0.6	<0.01	2.1	<0.1	1.81	5	0.7	<0.2
211805	Rock	<1	<1	0.16	16	0.007	<1	0.45	0.011	0.04	0.1	0.01	0.5	0.2	8.89	2	3.8	9.8
211806	Rock	<1	<1	0.32	37	0.027	<1	1.00	0.043	0.24	0.3	0.02	1.2	0.3	4.73	3	4.5	22.8
211807	Rock	<1	<1	0.10	19	0.006	<1	0.32	0.002	0.04	0.2	0.02	0.4	0.2	7.86	<1	2.9	8.3
211808	Rock	4	2	0.23	84	0.052	2	0.85	0.019	0.20	0.2	0.02	1.3	0.1	0.06	2	3.4	<0.2
211809	Rock	2	<1	0.03	43	0.005	2	0.28	0.007	0.11	<0.1	<0.01	0.5	<0.1	1.95	<1	3.5	<0.2
211810	Rock	2	1	0.03	75	0.010	1	0.29	0.012	0.14	0.4	0.01	0.8	<0.1	0.62	1	2.7	<0.2
211811	Rock	5	<1	0.08	96	0.011	<1	0.55	0.028	0.20	0.2	<0.01	1.1	0.2	1.73	2	4.3	<0.2
211812	Rock	4	<1	0.04	77	0.010	1	0.39	0.013	0.18	0.2	0.02	1.2	0.3	0.64	1	4.8	<0.2
211813	Rock	4	1	0.39	80	0.024	3	1.74	0.057	0.41	0.3	0.02	4.9	0.2	1.27	3	2.1	<0.2
211814	Rock	2	<1	0.02	41	0.006	<1	0.26	0.007	0.18	0.1	0.03	0.8	0.1	1.83	<1	5.8	<0.2
211815	Rock	2	1	0.06	55	0.010	1	0.41	0.006	0.12	0.2	0.02	0.9	0.1	1.26	<1	5.2	<0.2
211816	Rock	3	<1	0.02	124	0.008	<1	0.25	0.004	0.13	0.2	0.02	0.6	0.1	1.25	<1	7.6	<0.2
211817	Rock	2	22	0.76	50	0.066	<1	2.26	0.210	0.39	0.7	<0.01	7.3	0.3	0.29	9	7.6	<0.2
211818	Rock	4	10	0.79	81	0.193	<1	1.53	0.008	0.32	0.2	<0.01	5.6	0.2	<0.05	6	4.7	<0.2
211819	Rock	3	10	0.85	146	0.077	<1	1.40	0.061	0.75	0.2	<0.01	4.8	0.5	0.84	5	1.4	<0.2
211820	Rock	2	3	0.12	12	0.011	<1	0.25	0.048	0.05	0.2	<0.01	2.0	<0.1	0.62	1	8.5	0.4
211821	Rock	<1	131	0.65	77	0.069	<1	1.36	0.035	0.62	1.2	<0.01	7.9	0.1	1.05	4	0.8	<0.2
211822	Rock	5	2	0.55	20	0.032	<1	0.85	0.039	0.09	0.5	<0.01	3.6	<0.1	0.11	3	4.2	0.3
211823	Rock	9	13	1.41	76	0.119	<1	2.06	0.137	0.14	0.1	<0.01	3.7	<0.1	<0.05	11	<0.5	<0.2
211828	Rock	4	5	2.34	629	0.168	<1	4.34	0.115	2.64	0.2	<0.01	12.4	0.6	0.08	9	<0.5	<0.2



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Project: Georgie River

Report Date: October 03, 2011

Page: 1 of 1 Part 1

QUALITY CONTROL REPORT

VAN11004421.1

Method	WGHT	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
Pulp Duplicates																					
211806	Rock	1.13	2.4	156.9	199.9	39	24.6	1.6	77.0	455	11.17	>10000	15542	0.2	16	0.5	77.1	49.2	22	0.43	0.035
REP 211806	QC		2.4	162.5	194.8	40	24.1	1.6	76.1	476	11.39	>10000	15078	0.1	15	0.4	76.0	47.4	22	0.45	0.034
211810	Rock	2.17	2.7	15.8	10.3	37	6.0	1.0	3.4	102	3.72	7382	1553	0.7	33	0.2	54.1	<0.1	6	0.10	0.082
REP 211810	QC		2.8	15.2	10.9	37	5.9	1.1	3.4	99	3.66	7280	1484	0.7	34	0.3	53.4	<0.1	7	0.11	0.084
Reference Materials																					
STD DS8	Standard		12.1	107.3	120.9	324	2.0	38.2	7.5	610	2.50	24.6	125.1	5.5	55	2.3	4.7	5.9	42	0.70	0.082
STD DS8	Standard		13.5	122.2	124.0	341	2.0	40.1	7.9	657	2.64	28.1	132.1	6.6	62	2.8	5.5	6.8	45	0.77	0.087
STD DS8 Expected			13.44	110	123	312	1.69	38.1	7.5	615	2.46	26	107	6.89	67.7	2.38	5.7	6.67	41.1	0.7	0.08
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
Prep Wash																					
G1	Prep Blank	<0.01	<0.1	2.3	2.9	43	<0.1	2.4	3.7	524	1.81	0.8	<0.5	5.0	48	<0.1	<0.1	<0.1	35	0.45	0.074
G1	Prep Blank	<0.01	0.1	2.1	2.8	41	<0.1	3.2	3.8	527	1.85	1.0	<0.5	4.8	54	<0.1	<0.1	<0.1	36	0.57	0.075



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 North Vancouver BC V7L 3W4 Canada

**Project:** Georgie River  
**Report Date:** October 03, 2011

**Page:** 1 of 1 Part 2

QUALITY CONTROL REPORT

VAN11004421.1

Method		1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30
Analyte		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
MDL		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Pulp Duplicates																		
211806	Rock	<1	<1	0.32	37	0.027	<1	1.00	0.043	0.24	0.3	0.02	1.2	0.3	4.73	3	4.5	22.8
REP 211806	QC	<1	<1	0.32	38	0.026	<1	1.00	0.042	0.24	0.3	0.02	1.2	0.3	4.80	3	5.3	21.6
211810	Rock	2	1	0.03	75	0.010	1	0.29	0.012	0.14	0.4	0.01	0.8	<0.1	0.62	1	2.7	<0.2
REP 211810	QC	2	1	0.03	75	0.010	1	0.30	0.012	0.14	0.3	0.02	0.8	0.1	0.61	1	2.6	<0.2
Reference Materials																		
STD DS8	Standard	13	115	0.61	280	0.111	3	0.92	0.087	0.42	3.2	0.22	2.5	5.7	0.17	5	6.4	5.7
STD DS8	Standard	16	123	0.66	300	0.119	3	0.98	0.092	0.44	3.3	0.23	2.3	5.6	0.18	5	5.2	5.2
STD DS8 Expected		14.6	115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	0.192	2.3	5.4	0.1679	4.7	5.23	5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
Prep Wash																		
G1	Prep Blank	11	4	0.48	161	0.108	<1	0.84	0.073	0.44	<0.1	<0.01	2.0	0.3	<0.05	4	<0.5	<0.2
G1	Prep Blank	12	6	0.53	165	0.112	<1	0.89	0.082	0.44	<0.1	<0.01	2.0	0.3	<0.05	4	<0.5	<0.2





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Submitted By: Wayne Crocker

Receiving Lab: Canada-Vancouver

Received: September 02, 2011

Report Date: October 14, 2011

Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN11004423.1

### CLIENT JOB INFORMATION

Project: Georgie River  
Shipment ID:  
P.O. Number  
Number of Samples: 8

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
S230	8	Sieve soil to 230 mesh			VAN
1F03	8	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	30	Completed	VAN

### SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage  
DISP-RJT-SOIL Immediate Disposal of Soil Reject

### ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Auramex Resources Corporation  
750 Grand Blvd.  
North Vancouver BC V7L 3W4  
Canada

CC: J. Whitby  
Bob Plummer  
Paul Metcalfe



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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**Project:** Georgie River  
**Report Date:** October 14, 2011

**Page:** 2 of 2 **Part** 1

**CERTIFICATE OF ANALYSIS**

**VAN11004423.1**

Method	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001	
A1-3534N-A	Soil	1.82	66.07	15.42	90.4	632	10.5	10.3	594	4.18	15.9	0.4	13.5	0.2	8.1	0.15	0.57	0.23	150	0.09	0.099
A1-3534N-B1	Soil	2.06	88.12	9.95	122.8	385	10.4	16.2	864	6.78	23.7	0.7	7.0	1.2	9.0	0.09	0.56	0.20	245	0.19	0.139
A1-3534N-B2	Soil	6.09	57.82	13.28	156.4	143	14.8	13.4	1053	6.88	34.4	1.8	*	3.8	6.9	0.12	0.82	0.32	162	0.12	0.122
A1-3534N-C	Soil	2.20	89.36	16.06	175.3	243	64.5	19.7	958	5.08	80.7	1.2	21.7	2.5	23.3	0.26	1.13	0.31	141	0.34	0.163
L1-3500N-A	Soil	1.64	15.78	15.67	70.4	200	14.2	8.1	356	3.16	21.1	0.6	10.1	0.4	12.9	0.11	0.38	0.30	70	0.06	0.061
L1-3500N-B1	Soil	2.52	13.52	22.47	69.1	102	16.9	7.9	353	4.58	21.1	0.7	10.7	0.9	10.0	0.08	0.37	0.46	130	0.05	0.049
L1-3500N-B2	Soil	5.36	15.17	16.69	51.4	27	5.5	4.1	275	6.59	23.1	2.0	8.8	4.0	6.1	0.09	0.51	0.49	81	0.05	0.094
L1-3500N-C	Soil	1.00	63.74	12.62	116.0	104	32.8	18.4	861	6.06	45.2	1.4	33.2	2.7	22.5	0.15	0.56	0.24	173	0.30	0.164



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**Project:** Georgie River  
**Report Date:** October 14, 2011

**Page:** 2 of 2 Part 2

**CERTIFICATE OF ANALYSIS**

**VAN11004423.1**

Method	Analyte	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
Unit		ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
MDL		0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	5	0.1	0.02	0.1	
A1-3534N-A	Soil	5.7	28.2	1.77	108.3	0.076	<1	3.55	0.021	0.37	0.2	8.6	0.22	0.06	102	1.1	<0.02	13.0
A1-3534N-B1	Soil	7.6	31.1	2.60	153.1	0.146	<1	5.37	0.018	0.45	0.2	20.3	0.23	0.03	52	1.3	<0.02	18.9
A1-3534N-B2	Soil	15.9	46.8	1.74	89.9	0.140	<1	4.67	0.021	0.27	0.4	12.4	0.21	0.05	67	1.5	0.04	21.7
A1-3534N-C	Soil	6.7	161.5	2.30	133.4	0.169	<1	4.54	0.024	0.40	0.7	9.7	0.31	0.02	50	0.9	0.05	13.0
L1-3500N-A	Soil	10.0	44.1	1.20	49.0	0.102	1	2.79	0.014	0.09	0.3	4.5	0.14	0.06	62	1.1	<0.02	18.3
L1-3500N-B1	Soil	13.9	59.3	1.28	44.7	0.192	2	3.22	0.011	0.08	0.3	5.4	0.19	0.04	51	1.3	<0.02	26.5
L1-3500N-B2	Soil	22.0	32.0	0.64	43.6	0.116	2	3.36	0.020	0.13	0.7	4.1	0.14	0.06	94	3.5	0.03	29.1
L1-3500N-C	Soil	7.5	90.1	2.42	120.8	0.201	1	4.78	0.009	0.26	0.8	11.5	0.20	0.02	62	1.3	0.02	13.4



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Project: Georgie River

Report Date: October 14, 2011

Page: 1 of 1 Part 1

QUALITY CONTROL REPORT

VAN11004423.1

Method		1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	
Analyte		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit		ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL		0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001	
Pulp Duplicates																						
L1-3500N-B1	Soil	2.52	13.52	22.47	69.1	102	16.9	7.9	353	4.58	21.1	0.7	10.7	0.9	10.0	0.08	0.37	0.46	130	0.05	0.049	
REP L1-3500N-B1	QC	2.72	12.68	22.09	73.4	107	17.6	8.0	379	4.82	24.4	0.8	6.9	1.0	10.9	0.05	0.36	0.45	130	0.05	0.057	
Reference Materials																						
STD DS8	Standard	12.42	113.1	126.2	320.0	1757	37.2	7.5	611	2.50	24.6	3.0	110.7	6.5	60.5	2.30	5.50	6.84	34	0.69	0.083	
STD DS8	Standard	12.97	106.8	122.2	299.4	1765	37.6	7.1	595	2.55	23.6	2.6	119.2	6.1	63.4	2.20	5.19	6.24	40	0.71	0.077	
STD DS8 Expected		13.44	110	123	312	1690	38.1	7.5	615	2.46	26	2.8	107	6.89	67.7	2.38	5.7	6.67	41.1	0.7	0.08	
BLK	Blank	<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01	<0.001	
BLK	Blank	<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01	<0.001	



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Project: Georgie River

Report Date: October 14, 2011

Page: 1 of 1 Part 2

QUALITY CONTROL REPORT

VAN11004423.1

Method		1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	1F30	
Analyte		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	
MDL		0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	
Pulp Duplicates																			
L1-3500N-B1	Soil	13.9	59.3	1.28	44.7	0.192	2	3.22	0.011	0.08	0.3	5.4	0.19	0.04	51	1.3	<0.02	26.5	
REP L1-3500N-B1	QC	15.5	61.4	1.28	47.2	0.239	3	3.17	0.012	0.08	0.4	5.5	0.22	0.04	52	1.6	<0.02	27.7	
Reference Materials																			
STD DS8	Standard	13.7	117.2	0.61	248.4	0.103	3	0.89	0.083	0.42	2.8	2.0	5.44	0.13	229	5.2	5.07	4.6	
STD DS8	Standard	13.9	121.1	0.61	266.2	0.107	3	0.93	0.089	0.41	2.9	2.2	5.45	0.16	206	5.5	4.99	4.7	
STD DS8 Expected		14.6	115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	2.3	5.4	0.1679	192	5.23	5	4.7	
BLK	Blank	<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1	
BLK	Blank	<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1	



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Submitted By: Wayne Crocker  
Receiving Lab: Canada-Vancouver  
Received: September 02, 2011  
Report Date: November 18, 2011  
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN11004424.1

CLIENT JOB INFORMATION

Project: Tide North  
Shipment ID:  
P.O. Number  
Number of Samples: 3

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage  
STOR-RJT Store After 90 days Invoice for Storage

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Auramex Resources Corporation  
750 Grand Blvd.  
North Vancouver BC V7L 3W4  
Canada

CC: J. Whitby  
Bob Plummer  
Paul Metcalfe

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PM1	2	Plant Maceration to 1mm			VAN
VA475	2	Vegetation Ashing at 475	15	Completed	VAN
Split Ash from VA475	2	Analysis sample split/packet			VAN
1VE1	2	Aqua Regia digestion ICP-MS analysis	1	Completed	VAN
1VE4	2	Ashed 475 Deg. C., digest by AR, analyze by ICP-MS	15	Completed	VAN

ADDITIONAL COMMENTS



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Client: **Auramex Resources Corporation**  
 750 Grand Blvd.  
 North Vancouver BC V7L 3W4 Canada

Project: Tide North  
 Report Date: November 18, 2011

Page: 2 of 2 Part 1

CERTIFICATE OF ANALYSIS

VAN11004424.1

Method	WGHT	VA475	VA475	VA475	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE
Analyte	Wgt Rec.	Wt Pre	Ash	Ashed	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb
Unit	g	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm
MDL	0.01	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.01	1	0.001	0.1	0.01	0.2	0.01	0.5	0.01	0.02
A1-3534N-V	Vegetation		43.92	1.153	0.19	3.56	0.20	15.9	2	0.4	0.07	15	0.026	0.3	<0.01	0.3	<0.01	10.2	0.01	0.04
A1-3500N-V	Vegetation		25.70	0.648	0.10	4.43	0.24	15.3	3	0.8	0.04	15	0.015	0.2	<0.01	0.3	<0.01	15.3	<0.01	0.02
BLANK	Vegetation	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.



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Project: Tide North  
 Report Date: November 18, 2011

Page: 2 of 2 Part 2

CERTIFICATE OF ANALYSIS

VAN11004424.1

Method	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	
Analyte	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	
Unit	ppm	ppm	%	%	ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	
MDL	0.02	2	0.01	0.001	0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.02	0.01	1	0.1	0.02	
A1-3534N-V	Vegetation	<0.02	<2	0.37	0.167	0.05	1.1	0.152	30.0	19	5	0.04	0.002	0.64	<0.1	0.1	<0.02	0.07	12	0.1	<0.02
A1-3500N-V	Vegetation	<0.02	<2	0.32	0.141	0.03	1.0	0.109	25.8	14	5	0.03	0.002	0.74	<0.1	0.2	<0.02	0.07	13	0.2	<0.02
BLANK	Vegetation	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.





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**Project:** Tide North  
**Report Date:** November 18, 2011

**Page:** 2 of 2 Part 3

**CERTIFICATE OF ANALYSIS**

**VAN11004424.1**

Method	1VE	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	
Analyte	Ga	As	U	Au	Th	Sb	Bi	V	W	Tl	Se	Te	Ga	Ge	In	Re	Be	Pd	Pt	
Unit	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppb	ppb	
MDL	0.1	0.02	0.002	0.05	0.002	0.005	0.005	0.5	0.02	0.005	0.02	0.005	0.02	0.002	0.005	0.2	0.1	0.5	0.5	
A1-3534N-V	Vegetation	<0.1	0.24	0.004	0.07	0.015	0.034	<0.005	0.7	<0.02	<0.005	0.03	<0.005	0.08	0.008	<0.005	<0.2	<0.1	<0.5	<0.5
A1-3500N-V	Vegetation	<0.1	0.24	0.002	0.27	0.007	0.020	0.008	<0.5	<0.02	<0.005	0.04	<0.005	0.04	0.011	<0.005	<0.2	<0.1	<0.5	<0.5
BLANK	Vegetation	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.



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**Project:** Tide North  
**Report Date:** November 18, 2011

**Page:** 1 of 1 **Part** 1

QUALITY CONTROL REPORT

VAN11004424.1

Method	WGHT	VA475	VA475	VA475	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	
Analyte	Wgt	Rec. Wt	Pre Ash	Ashed	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	
Unit	g	g	g	g	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	
MDL	0.01	0.01	0.001	0.001	0.01	0.01	0.01	0.1	2	0.1	0.01	1	0.001	0.1	0.01	0.2	0.01	0.5	0.01	0.02	
Pulp Duplicates																					
A1-3500N-V	Vegetation		25.70	0.648	0.10	4.43	0.24	15.3	3	0.8	0.04	15	0.015	0.2	<0.01	0.3	<0.01	15.3	<0.01	0.02	
REP A1-3500N-V	QC				0.10	4.50	0.25	15.2	3	0.5	0.06	14	0.017	0.2	<0.01	0.3	<0.01	15.8	<0.01	0.02	
Reference Materials																					
STD V14	Standard				0.06	4.87	0.96	14.7	21	1.5	0.91	2273	0.020	12.6	<0.01	10.5	<0.01	7.0	0.21	0.09	
STD V14	Standard																				
STD V14	Standard																				
STD V16	Standard				1.51	6.42	3.13	41.2	27	5.7	1.08	780	0.367	1.8	<0.01	0.3	<0.01	12.5	0.11	0.09	
STD V16 Expected					1.6	6.92	3.11	39.2	32	7.8	1.17	732	0.4367	1.6		1.1		11.6	0.093	0.07	
STD V14 Expected					0.06	4.8	0.881	14.5	24	1.4	0.75	2094	0.016	11.038		8		6.668	0.21	0.06	
FLOUR	Blank				0.60	3.94	0.14	27.7	<2	0.1	0.01	39	0.005	<0.1	<0.01	<0.2	<0.01	1.3	0.03	<0.02	
BLK	Blank				<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.01	<1	<0.001	<0.1	<0.01	<0.2	<0.01	<0.5	<0.01	<0.02	
FLOUR	Blank																				
BLK	Blank																				
Prep Wash																					
RICE	Prep Blank		N.A.	N.A.	N.A.	0.53	1.89	0.05	13.6	<2	<0.1	<0.01	11	<0.001	<0.1	<0.01	<0.2	<0.01	<0.5	0.01	<0.02



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 750 Grand Blvd.  
 North Vancouver BC V7L 3W4 Canada

**Project:** Tide North  
**Report Date:** November 18, 2011

**Page:** 1 of 1 Part 2

QUALITY CONTROL REPORT

VAN11004424.1

Method	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	1VE	
Analyte	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	
Unit	ppm	ppm	%	%	ppm	ppm	%	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	
MDL	0.02	2	0.01	0.001	0.01	0.1	0.001	0.1	1	1	0.01	0.001	0.01	0.1	0.1	0.02	0.01	1	0.1	0.02	
Pulp Duplicates																					
A1-3500N-V	Vegetation	<0.02	<2	0.32	0.141	0.03	1.0	0.109	25.8	14	5	0.03	0.002	0.74	<0.1	0.2	<0.02	0.07	13	0.2	<0.02
REP A1-3500N-V	QC	<0.02	<2	0.32	0.143	0.02	1.1	0.111	26.7	15	4	0.03	0.002	0.76	<0.1	0.1	<0.02	0.08	19	0.3	<0.02
Reference Materials																					
STD V14	Standard	0.10	<2	0.65	0.095	0.03	1.1	0.082	1.5	10	12	0.15	<0.001	0.51	<0.1	0.1	0.04	0.06	53	0.2	<0.02
STD V14	Standard																				
STD V14	Standard																				
STD V16	Standard	<0.02	<2	0.32	0.053	0.05	272.3	0.060	2.4	14	6	0.05	0.002	0.24	<0.1	0.1	<0.02	0.03	49	<0.1	0.02
STD V16 Expected				0.302	0.0498	0.05	345.2	0.0543	1.9	12	5	0.0498	0.0015	0.231			0.0174	41			
STD V14 Expected		0.089		0.6082	0.087	0.03	1.2	0.079	1.3	6.699	10.7	0.147		0.509		0.117	0.038	0.064	52	0.15	
FLOUR	Blank	<0.02	<2	0.03	0.411	<0.01	1.0	0.152	3.4	29	<1	<0.01	0.001	0.36	<0.1	0.1	<0.02	0.16	<1	0.8	<0.02
BLK	Blank	<0.02	<2	<0.01	<0.001	<0.01	<0.1	<0.001	<0.1	<1	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.01	<1	<0.1	<0.02
FLOUR	Blank																				
BLK	Blank																				
Prep Wash																					
RICE	Prep Blank	<0.02	<2	<0.01	0.085	<0.01	1.0	0.013	<0.1	6	<1	<0.01	<0.001	0.06	<0.1	<0.1	<0.02	0.07	2	0.8	<0.02



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**Project:** Tide North  
**Report Date:** November 18, 2011

**Page:** 1 of 1 **Part** 3

QUALITY CONTROL REPORT

VAN11004424.1

Method	Analyte	Unit	MDL	1VE	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV	1AV		
				Ga	As	U	Au	Th	Sb	Bi	V	W	Tl	Se	Te	Ga	Ge	In	Re	Be	Pd	Pt
				ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppb	ppb	ppb
Pulp Duplicates																						
A1-3500N-V	Vegetation			<0.1	0.24	0.002	0.27	0.007	0.020	0.008	<0.5	<0.02	<0.005	0.04	<0.005	0.04	0.011	<0.005	<0.2	<0.1	<0.5	<0.5
REP A1-3500N-V	QC			<0.1																		
Reference Materials																						
STD V14	Standard			0.2																		
STD V14	Standard				12.74	<0.002	4.30	<0.002	0.064	0.105	1.1	<0.02	0.040	0.26	<0.005	0.88	<0.002	<0.005	0.3	<0.1	1.0	<0.5
STD V14	Standard				13.22	<0.002	3.43	<0.002	0.031	0.096	<0.5	<0.02	0.037	0.26	<0.005	0.59	0.015	<0.005	<0.2	<0.1	<0.5	<0.5
STD V16	Standard			0.2																		
STD V16 Expected				0.2																		
STD V14 Expected					11.038		8.6		0.06	0.089			0.038	0.15		0.1						
FLOUR	Blank			<0.1																		
BLK	Blank			<0.1																		
FLOUR	Blank				0.07	<0.002	0.21	0.003	0.049	0.061	<0.5	<0.02	<0.005	0.99	<0.005	<0.02	0.021	<0.005	3.6	<0.1	<0.5	<0.5
BLK	Blank				<0.02	<0.002	<0.05	<0.002	<0.005	<0.005	<0.5	<0.02	<0.005	<0.02	<0.005	<0.02	<0.002	<0.005	<0.2	<0.1	<0.5	<0.5
Prep Wash																						
RICE	Prep Blank			<0.1	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.



## Certificate of Analysis

Work Order: TO116514

To: **Wayne Crocker**  
**Auromex N.Vancouver**  
750 Grand Blvd.  
N.VANCOUVER  
BC/CANADA/V7L 3W4 V7L 3W4

Date: Sep 22, 2011

P.O. No. : -  
Project No. : -  
No. Of Samples : 4  
Date Submitted : Sep 12, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Discard after 90 days:

Certified By :

Lawrence Ng  
Regional Business Manager (GEOCHEM)

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Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Final : TO116514 Order:

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Element	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb
A1-3534N-MA	32	130	<10	0.5	20	<1	<10	6	35	<5
A1-3534N-MB	31	125	<10	0.6	20	<1	<10	5	31	<5
L1-3500N-MA	12	194	<10	0.9	100	<1	<10	2	50	<5
L1-3500N-MB	11	189	<10	0.8	130	<1	<10	2	55	<5
*Rep A1-3534N-MB	31	128	<10	0.5	20	<1	<10	6	33	<5
*Std MMISRM16	17	40	20	23.9	50	<1	200	4	15	60
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Hg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	100	0.5	10	1	0.5	0.5	1	1	1	1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb
A1-3534N-MA	<100	8.7	990	57	41.0	3.9	16	15	26	<1
A1-3534N-MB	<100	8.4	980	55	41.1	3.7	15	14	25	<1
L1-3500N-MA	<100	20.1	310	54	32.1	5.1	37	15	31	<1
L1-3500N-MB	<100	19.8	300	61	34.1	6.1	37	15	37	<1
*Rep A1-3534N-MB	<100	8.5	1000	56	40.8	3.8	16	15	26	<1
*Std MMISRM16	<100	11.9	670	2	0.9	1.1	<1	<1	4	15
*Bik BLANK	<100	<0.5	<10	<1	<0.5	<0.5	<1	<1	<1	<1

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Element	In	K	La	Li	Mg	Mn	Mo	Nb	Nd	Ni
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	0.5	0.1	1	5	1	10	5	0.5	1	5
Units	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb
A1-3534N-MA	<0.5	3.1	6	<5	<1	190	<5	6.6	43	7
A1-3534N-MB	<0.5	3.4	5	<5	<1	190	<5	5.7	38	6
L1-3500N-MA	<0.5	2.5	15	<5	<1	50	<5	8.1	50	<5
L1-3500N-MB	<0.5	2.8	16	<5	<1	60	<5	8.4	61	<5
*Rep A1-3534N-MB	<0.5	3.2	6	<5	<1	200	<5	6.3	40	7
*Std MMISRM16	<0.5	35.5	3	<5	26	80	50	<0.5	13	252
*Bik BLANK	<0.5	<0.1	<1	<5	<1	<10	<5	<0.5	<1	<5

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Element	P	Pb	Pd	Pr	Pt	Rb	Sb	Sc	Sm	Sn
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	0.1	10	1	1	1	5	1	5	1	1
Units	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
A1-3534N-MA	0.7	240	<1	7	<1	58	<1	43	17	<1
A1-3534N-MB	0.7	230	<1	6	<1	58	<1	43	15	<1
L1-3500N-MA	0.9	340	<1	9	<1	60	<1	47	21	<1
L1-3500N-MB	1.0	370	<1	10	<1	60	<1	46	26	<1
*Rep A1-3534N-MB	0.7	240	<1	7	<1	56	<1	43	17	<1
*Std MMISRM16	0.3	80	26	2	<1	297	<1	7	4	<1
*Bik BLANK	<0.1	<10	<1	<1	<1	<5	<1	<5	<1	<1

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Element	Sr	Ta	Tb	Te	Th	Ti	Tl	U	W	Y
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	10	1	1	10	0.5	3	0.5	1	1	5
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
A1-3534N-MA	<10	<1	7	<10	8.8	103	0.7	16	<1	212
A1-3534N-MB	<10	<1	6	<10	8.1	89	0.6	15	<1	207
L1-3500N-MA	<10	<1	7	<10	23.3	199	0.5	29	<1	183
L1-3500N-MB	<10	<1	9	<10	23.9	212	<0.5	29	<1	193
*Rep A1-3534N-MB	<10	<1	7	<10	8.8	101	0.7	15	<1	209
*Std MMISRM16	380	<1	<1	<10	18.6	<3	<0.5	53	<1	9
*Bik BLANK	<10	<1	<1	<10	<0.5	<3	<0.5	<1	<1	<5

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Final : TO116514 Order:

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Element	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	20	5
Units	ppb	ppb	ppb
A1-3534N-MA	40	60	352
A1-3534N-MB	39	50	317
L1-3500N-MA	28	50	689
L1-3500N-MB	28	50	682
*Rep A1-3534N-MB	39	60	346
*Std MMISRM16	<1	300	18
*Bik BLANK	<1	<20	<5

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