

# **MAMMOTH GEOLOGICAL LTD.**

2446 Bidston Road  
Mill Bay, British Columbia Canada V0R 2P4

Phone : 250.743.8228 Fax : 250.743.4430  
email : mammothgeo@shaw.ca

## 43-101 TECHNICAL REPORT

### TAHSIS PROPERTY

Located at Tahsis, British Columbia  
Nanaimo Mining Division  
TRIM Sheet 092E087, 092E097, 092L007  
UTM (NAD 83) ZONE 9 666200E 5533000N

FOR

### **CROSS RIVER VENTURES CORP.**

Suite 2300 - 550 Burrard Street  
Vancouver, British Columbia V6C 2B5

By: R. Tim Henneberry, P.Geo.  
February 5, 2018

Cross River Ventures Corp. can earn a 100% interest, subject to a 3.0% net smelter return (NSR) royalty in the Tahsis Property, a gold target on Northern Vancouver Island by making cash payments of \$20,000, issuing 800,000 shares and completing \$250,000 in exploration over the next two years. The road accessible Tahsis Property is located 105 kilometres northwest of Campbell River, British Columbia and consists of 5 claims totaling 4,866 hectares.

The Tahsis Property lies in an area of high geological potential. The property is underlain by Eocene Mt. Washington Intrusive Suite quartz diorites in the north and central portion. A thin band of Triassic Quatsino limestones runs through the length of property and is intruded by the quartz diorites in two locations on the property. Anomalous gold stream sediment geochemistry is associated with the intrusive contacts of the quartz diorite proximal to the limestone. Three mineralized occurrences are present on the property.

Three exploration programs have been completed on the Tahsis property on behalf of the property vendor since acquisition in 2011. A total of 903 and road soil samples, 691 grid soil samples, 60 stream sediment samples and 59 rocks samples were collected and the property was mapped. Three target areas have been identified, requiring follow up exploration:

- Target A is associated with the eastern contact area of the Mt. Washington Intrusive Suite quartz diorite. This is the intrusive that is associated with the gold veins of the Zeballos Gold Camp. Soil sampling along an abandoned and overgrown logging road at the north end of the target located a continuous 950 metre section of Au-in-soil values ranging from a minimum of 15 ppb to a maximum of 1672 ppb and Cu-in-soil values ranging from a minimum 119 ppm of to a maximum of 1651 ppm.
- Target B is associated with the contact between the Quatsino limestone and Karmutsen volcanics. Two cluster anomalies were clearly identifying during the 2013 grid soil sampling. Cluster 1 is approximately 450 metres north south by 500 metres east west and appears to lie on the lower slopes of a relatively gentle ridge. Cluster 2 is approximately 1300 metres east west by 250 metres north south and stretches down the west facing slope.
- Target E lies within the Quatsino limestones with some interbedded Karmutsen basalts. A 450 metre section of 50 metre spaced road soil sampling contains gold values ranging from a low of 6 ppb Au to a high of 146 ppb Au. Additional values of 9, 7, 6 and 14 ppb occur further to the south. Sampling in 2013 returned a 150 metre section with values of 7, 17, 23, and 27 ppb Au a kilometre to the southeast.

The three target areas need to be followed up with some ground geophysics and trenching with some additional soil sampling. Ground geophysics will consist of magnetics and VLF-EM surveys over Grid A and Grid B. Grid A will consist of 5 N-S 1000 metre lines at 200 metre line spacings and Grid B will also consist of 5 N-S 1000 metre lines at 200 metre line spacings. Excavator trenching and soil sampling will be directed at Grid E, with some of the trenching also directed at Grid A and Grid B. A total of 100 soil samples will be taken over for Grid E and 25 hours of excavator trenching are earmarked for each of the three grids. The Phase I budget is estimated at \$110,000.

TABLE OF CONTENTS

INTRODUCTION .....	4
RELIANCE ON OTHER EXPERTS .....	4
PROPERTY DESCRIPTION AND LOCATION .....	5
ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY .....	7
HISTORY .....	8
GEOLOGICAL SETTING .....	18
Tahsis Property Geology .....	23
Mineralization .....	27
DEPOSIT TYPES .....	28
EXPLORATION .....	30
DRILLING .....	31
SAMPLE PREPARATION, ANALYSES AND SECURITY .....	32
DATA VERIFICATION .....	32
MINERAL PROCESSING AND METALLURGICAL TESTING .....	32
MINERAL RESOURCES AND MINERAL RESERVE ESTIMATES .....	32
ADJACENT PROPERTIES .....	33
OTHER RELEVANT DATA AND INFORMATION .....	33
INTERPRETATION AND CONCLUSIONS .....	33
RECOMMENDATIONS .....	34
REFERENCES .....	35
CERTIFICATE .....	36

LIST OF FIGURES

Figure 1. Location Map .....	5
Figure 2. Claim Location Map .....	6
Figure 3. History .....	10
Figure 4a. Tahsis 2011 Exploration Program .....	11
Figure 4b. Tahsis 2013 Exploration Program .....	12
Figure 4c. Tahsis 2015 Exploration Program .....	13
Figure 5a. Grid A Gold In Soil .....	14
Figure 5b. Grid A Copper In Soil .....	14
Figure 6a. Grid B Gold In Soil .....	15
Figure 6b. Grid B Copper In Soil .....	16
Figure 7. Road Soil Gold In Soil .....	17
Figure 8a. Qualitas Rock Samples Cu .....	19
Figure 8b. Qualitas Rock Samples Au .....	19
Figure 9a. Qualitas Silt Samples Cu .....	20
Figure 9b. Qualitas Silt Samples Au .....	20
Figure 10. Regional Geology .....	21
Figure 11. Property Geology .....	24
Figure 12. Mineralization .....	27
Figure 13. 2017 Sample Locations .....	31

LIST OF TABLES

Table 1. Tahsis Property Exploration Expenditure History .....	4
Table 2. Agreement Terms .....	5
Table 3. List of Tenures .....	7
Table 4. Summary of Tahsis Property Programs .....	11
Table 5. Grid A Zone on Anomalous Road Soils .....	15
Table 6. Road Soil Area Anomalous Road Soils .....	18
Table 7. 2018 Budget Recommendations .....	35

LIST OF PLATES

Plate 1. Karmutsen Formation .....	22
Plate 2. Quatsino Formation .....	23
Plate 3. Parson Bay Formation .....	25
Plate 4. Bonanza Group .....	26

The purpose of this report is to compile the historical data on the Tahsis property to support its acquisition by Cross River Ventures Corp. as its Qualifying property for the Canadian Stock Exchange.

This report was commissioned by Mr. John Fraser, a Director of Cross River Ventures Corp.

The Tahsis property was acquired by staking by the property vendor, Qualitas Holdings Corp. in August 2010. Gold Ridge Exploration Corp. optioned the Tahsis property May 2011, completed a \$100K work program later in the year and acquired a listing on the TSX Venture Exchange through an Initial Public Offering. Gold Ridge returned the property to Qualitas, who subsequently optioned it to Sojourn Ventures Inc. for its Qualifying Transaction on the TSX Venture Exchange. Sojourn completed \$109K in exploration in the late summer and fall of 2013 and a further \$35K in exploration in the summer of 2015. They recently returned the property to the Qualitas when they moved in a different direction. Qualitas subsequently optioned the Tahsis property to Cross River Ventures Corp. Table 1 shows a summary of the Qualitas Tahsis historic work programs filed with the British Columbia Ministry of Energy and Mines through Statement of Work (SOW) filings.

**Table 1. Tahsis Property Exploration Expenditure History**

<b>Optionor</b>	<b>SOW</b>	<b>File Date</b>	<b>Owner</b>	<b>Program</b>	<b>Work period</b>
Gold Ridge Exploration Corp.	4961347	06-Aug-11	QHL	\$100,000.00	Jun to Aug 2011
Sojourn Ventures Inc.	5464470	23-Aug-13	QHL	\$62,850.00	Aug 2013
Sojourn Ventures Inc.	5471283	09-Oct-13	QHL	\$46,110.00	Aug to Oct 2013
Sojourn Ventures Inc.	5569422	08-Sep-15	QHL	\$35,364.23	Jun to Sep 2015
Qualitas Holdings Corp.	5618208	12-Sep-16	QHL	\$24,304.00	Sep 2016
Qualitas Holdings Corp.	5679365	31-Dec-17	QHL	\$20,110.00	Dec 2017

The author supervised or undertook all of the work programs undertaken on the Tahsis property. He visited the property on the following dates: August 5, 2011, August 3, 2013, August 22, 2013 and July 21 to August 1, 2015. He completed a current property on February 3, 2018.

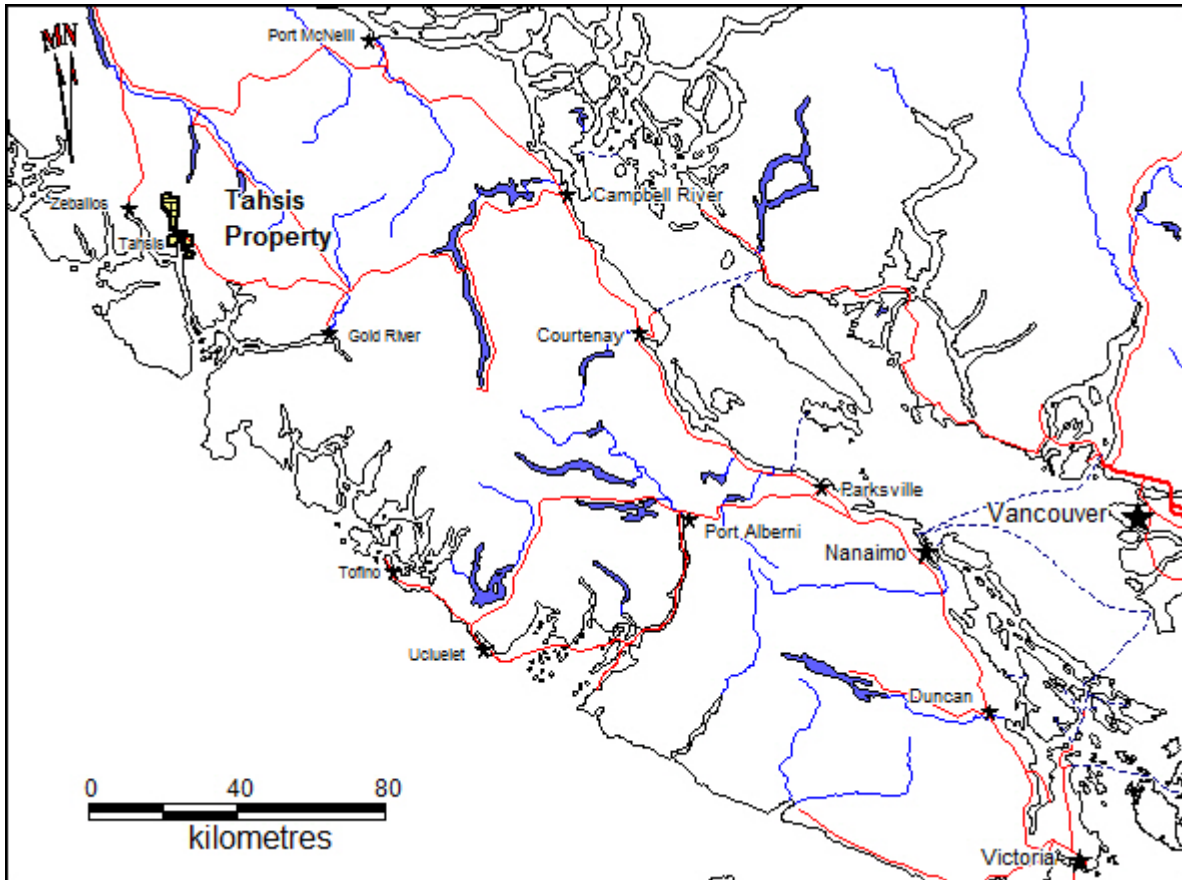
#### RELIANCE ON OTHER EXPERTS

The author is not relying on a report or opinion of any experts. The ownership of the claims comprising the property and the ownership of the surrounding claims has been taken from the Mineral Titles Online database maintained by the British Columbia Ministry of Energy and Mines on July 11, 2016. The data on this site is assumed to be correct.

The section on the History of the property area has been taken from the British Columbia Ministry of Energy and Mines Assessment Files. The geological assessment reports have been written by competent geologists and engineers according to the industry standards of the day. The rock, soil and silt analyses were completed by reputable Canadian assay labs, in accord with the industry standards of the day.

PROPERTY DESCRIPTION AND LOCATION

The Tahsis Property is located on TRIM claim sheets 092E087, 092E097, 092L007, which lie on portions of National Topographic System map sheets 092E and 092L in the Nanaimo Mining Division (Figures 1 and 2). The property consists of 5 claims totaling 4,866 hectares as shown in Table 3. The claims were originally staked in August 2010 and were amalgamated from 13 claims to 5 claims on August 29, 2016 to reduce the assessment requirements from \$15 per hectare to \$5 per hectare. The geographic center of the property has map coordinates 666200E 5533000N in UTM ZONE 9 in map datum NAD 83.



Projection NAD 83 Zone 9

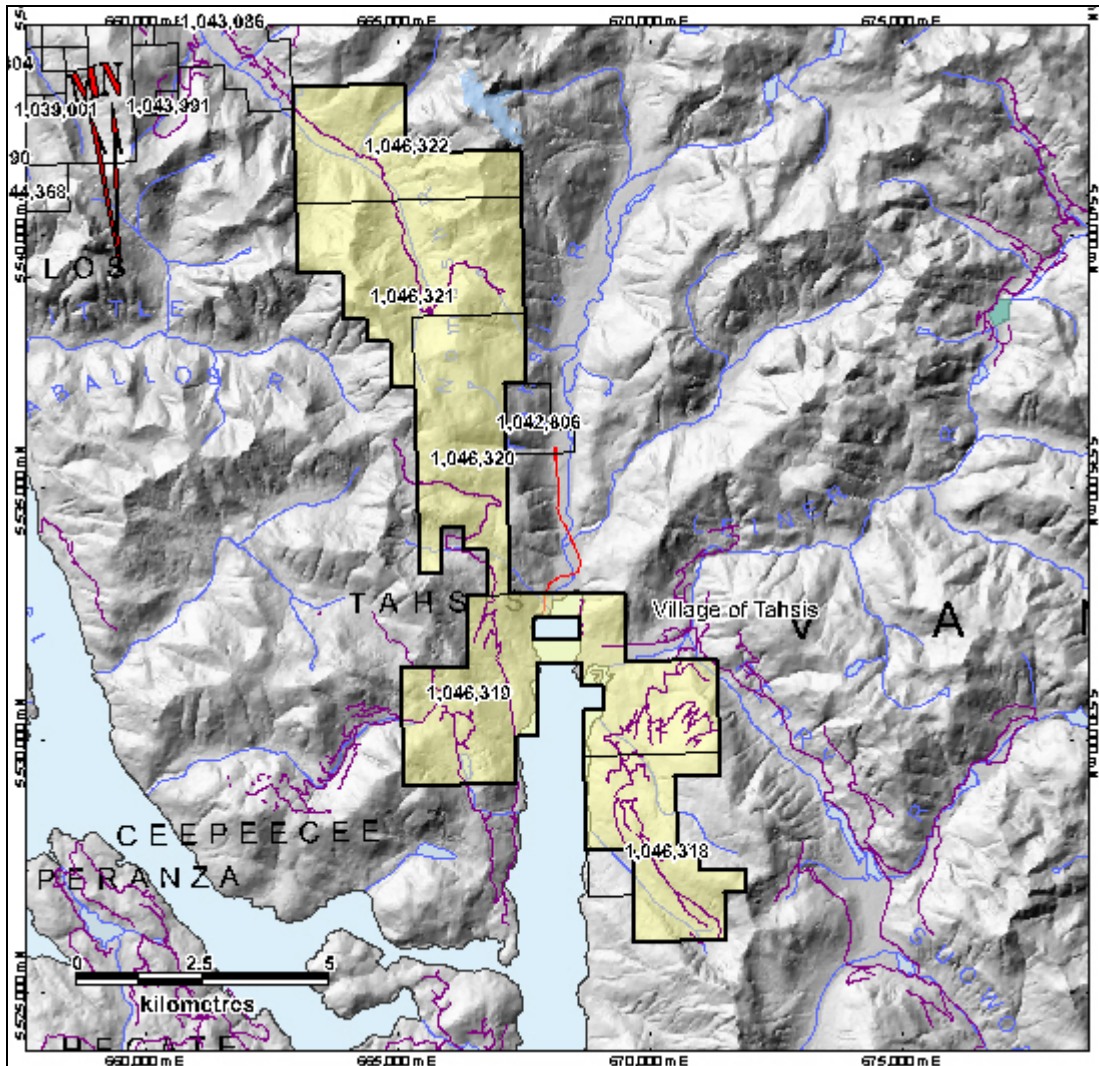
Figure 1. Location

The claims were originally acquired by map staking by Qualitas Holdings Corp. in 2011. Qualitas optioned the Tahsis claims (Table 2 and Figure 2) to Cross River Ventures Corp. on December 6, 2017 under the following terms:

Table 2. Agreement Terms

Payments			Work Commitments	
Date	Cash	Shares	Expenditures of	Completed by
Signing	\$20,000			
On CSE approval		300,000		
1 <sup>st</sup> anniversary of CSE approval		250,000	\$100,000	1 <sup>st</sup> anniversary
2 <sup>nd</sup> anniversary of CSE approval		250,000	\$150,000	2 <sup>nd</sup> anniversary y
<b>Totals</b>	<b>\$20,000</b>	<b>800,000</b>	<b>\$250,000</b>	

Upon completion of the terms, Cross River Ventures Corp. will hold a 100% interest in the Tahsis claims, subject to a 3% NSR. Cross River Ventures Corp. can purchase up to 2% for \$1,000,000 per 1% prior to commercial production.



UTM NAD 83 Zone 9

Figure 2. Claim Location (092E087, E097; 092L007)

The author is not aware of any environmental liabilities associated with the Tahsis property. The recommended work program will be airborne geophysics which does not require a permit. In the event the airborne geophysics program is successful, a diamond drilling program will be the next step. This program will require a permit that according to the British Columbia Ministry of Energy, Mines and Petroleum Resources should take 6 months or less.

The author is not aware of any other significant factors or risks that may affect access, title or the right or ability to perform work on the Tahsis property.

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND  
PHYSIOGRAPHY

The Tahsis property lies proximal to the village of Tahsis, which lies 105 kilometres west of Campbell River, British Columbia. Road access to the south block is via Highway 28 west from Campbell River to the village of Gold River a distance of approximately 89 kilometres and then by the Head Bay Forest Service Road from Gold River to Tahsis a distance of approximately 62 kilometres. This road skirts the edge of Tenure 1046319. Logging roads branching to the south and the north of Tahsis provide access to the much of the southern section of the claim block up to Tenure 1046320. The village of Tahsis is located on tidewater at the head of Tahsis Inlet.

**Table 3. List of Tenures**

Tenure Number	Claim Name	Owner	Map Number	Issue Date	Good To Date	Area (ha)
1046318	TAS 1	247642 (100%)	092E	2016/aug/29	2018/dec/01	707.87
1046319	TAS 2	247642 (100%)	092E	2016/aug/29	2018/dec/01	1456.57
1046320	TAS 3	247642 (100%)	092E	2016/aug/29	2018/dec/01	935.47
1046321	TAS 4	247642 (100%)	092E	2016/aug/29	2018/dec/01	1038.75
1046322	TAS 5	247642 (100%)	092E	2016/aug/29	2018/dec/01	726.86
	5	claims				4865.53

Access to the northern section of the north claim block is via Nomash Mainline from the Zeballos road. The Zeballos road leaves Highway 19 approximately 151 kilometres north of Campbell River or 78 kilometres south of Port Hardy. Nomash Mainline logging road leaves the Zeballos road approximately 30 kilometres south from Highway 19 or 12 kilometres north of Zeballos. The north claim block lies at kilometre 7 along Nomash Mainline. The spur roads are deactivated and movement through this section of the north block is extremely difficult.

The topography relief on the Tahsis property is extremely rugged, ranging from sea level at Tahsis Inlet to 1400 metres in the northern portion of the claim block. The vegetation is thick and dense and consists of cedar, hemlock and spruce, with alder, willow and salal underbrush. The area is actively being logged, so there are numerous cut blocks in various stages of regrowth.

In this part of the province the climate is typical of coastal British Columbia. Summers are generally warm and dry, though fog can present issues with air transport. Winters are mild and very wet. The snow line is generally in the area of 400-700 metres during the period December through February so work in those months must be confined to the lower slopes.

The claims appear to lie largely on crown land except in the immediate area of the village of Tahsis. At this stage of the exploration of the Tahsis property Cross River has not commenced a search of the British Columbia Land Titles Office to determine surface ownership of these individual surface parcels. In the event surface exploration is successful, power is available via the lines to Zeballos and Tahsis. Water is available from the numerous creeks transecting the property. Mining personnel would be available in Campbell River or Port Hardy, two to three hours away. At this stage of the exploration program, Sojourn has not commenced surveys to determine potential tailings storage areas, potential waste disposal areas, heap leach pad areas or potential processing plant sites.

The Tahsis area has a long exploration history due to its proximity to the Zeballos Gold Camp, approximately 25 kilometres to the northwest. In the Zeballos Gold Camp, 13 deposits produced a total of 287,811 ounces of gold and 124,700 ounces of silver from as early as 1930 until 1948 (Hoadley, 1953). One producer, Privateer, accounted for 154,381 ounces of gold and 60,878 ounces of silver. A total of 285,771 tons of ore was mined from Privateer's five main veins, of which 158,332 tons was milled. Twelve other producers accounted for the balance of production with total outputs ranging from 54,000 ounces of gold to 5 ounces of gold. The British Columbia Ministry of Energy Mines and Petroleum Resources MINFILE database lists 33 lode gold deposits and occurrences in the Zeballos Gold Camp, all of which are associated with quartz veining. Along with free gold, other associated minerals included pyrite, arsenopyrite, calcite and chalcopyrite with occasional galena and sphalerite. The geology of the Tahsis area is similar to the Zeballos camp, making it a favourable exploration target.

Exploration has spilled southeast from Zeballos into the Tahsis River Valley and further to the southeast following the Eocene Mt. Washington intrusive plugs, the host rocks of much of the Zeballos mineralization. There are several mineral occurrences on old crown granted mineral claims in the area of the Tahsis claims, though none of them lie within the present Tahsis property boundary. These include the Star of the West and Independence claims located within the small block of claims northwest of Tahsis excluded from the current Tahsis property and immediately to the east of the Tahsis property, respectively. The Independence is auriferous quartz veins while the Star of the West is a gold-copper skarn in Quatsino limestone.

The area around the old Independence workings, immediately east of the north central portion of the present Tahsis property, has been explored at regular intervals since the early 1980's. The first program was completed by property owner Peter Peto in 1983. A total of 15 rock samples, 4 silt samples and 9 soil samples were collected by various company geologists during the summer of 1983, divided between the Star of the West and the Independence claims (Peto, 1983).

North American Ventures Ltd. explored the Independence claim in 1987. They flagged a grid, collected 290 soil samples at 100 metre intervals along north-south lines paced 50 metres apart and then ran magnetometer and VLF-EM surveys over the grid lines. A subsequent review of the data showed the grid lines stopped well short of the projected location of the Independence veins. (Stephenson, 1987).



Landon Resources Ltd. completed a two year exploration program on the Star of the West workings and surrounding area in the early 1990's. This includes the small block of ground entirely surrounded by the present Tahsis property in the west central portion of the claim block. The initial 1990 program (Nelles, 1990) consisted of 12.6 line kilometres of magnetometer surveying, 6.2 line kilometres of Induced Polarization surveying, 32 rock samples, 8 heavy mineral samples, 7 petrographic analyses, geological mapping and two NQ diamond drill holes totaling 243 metres. The follow up 1991 program (Coombes, 1992) consisted of reconnaissance geological mapping at a scale of 1:5,000 (approximately 550 hectares); detailed geological mapping at a scale of 1:1,000 (approximately 60 hectares); grid construction (9,010 metres with 10m station intervals); soil (253 samples, of which, 213 were analyzed) and rock (22 samples) geochemical sampling; ground magnetometer geophysical surveys (14,910 metres at 10 metre intervals); and very low frequency electromagnetics (VLF-EM) geophysical surveys (11,280 metres at 10 metre intervals).

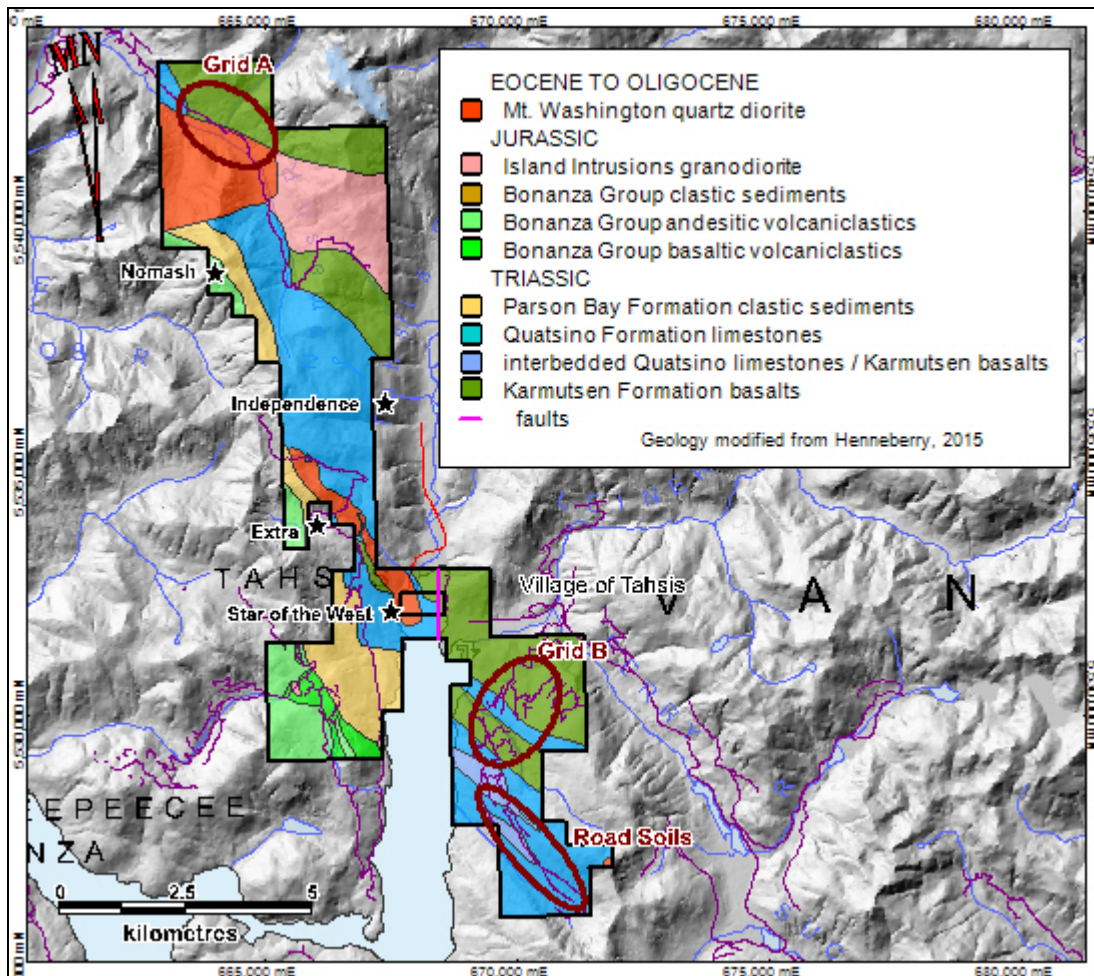
These programs found three showings: the Poole Creek skarn area, where pyrite usually occurs as disseminations and fracture fillings associated with quartz, calcite, epidote and chlorite veining, and pyrrhotite and chalcopyrite predominantly occur as disseminations and fracture fillings; the Open Cut Zone, where semi-massive mineralization, including fracture-related chalcopyrite, is hosted by open tensional fractures between two north-northwesterly striking and steeply dipping strike-slip faults along the diorite-limestone contact; and the Adit Zone, where semi-massive pyrite and chalcopyrite mineralization at the intrusive contact of a northerly striking andesite dyke. (Coombes, 1992).

Diakow (1996a) staked the Extra claim to cover the Star of the West showings in 1996. He also staked a second block, the Geo claim, on the western side of Tahsis Inlet, now covered by the southwest portion of the present Tahsis property (Diakow, 1996b). Rock sampling programs, consisting of 7 rock samples from the Extra claim and a further 7 samples from the Geo claim, were conducted on each property.

Colin Beach explored his Water claim on 1981, taking one rock sample and flagging a grid. Nothing of significance was noted, Beach (1981). Minfile reports that a sample collected from this property assayed 0.061% Cu, 0.8 grams per tonne silver and 0.035 grams per tonne gold. Neither Beach nor anyone else has been able to duplicate this sample or result. The ground comprising the long expired Water claim underlies some of the northwest section of the current Tahsis property including the old Nomash showing.

Four exploration programs were completed on the bulk of the present Tahsis property. The 2007 program was completed by Grand Portage Resources Ltd. The claims subsequently expired and were acquired by Qualitas Holdings Corp., the property vendor, in 2011. They optioned the claims to Gold Ridge Resources Ltd., who subsequently completed a 2011 program. Gold Ridge later returned the claims and Qualitas next optioned them to Sojourn Ventures Inc. in 2013. Sojourn completed a program in 2013 and a second program in 2015 before returning the claims to vendor when they decided to move in a different direction. Three target areas were identified: Grid A, Grid B and the Road Soils Area (Figure 3).

Grande Portage completed a 2007 exploration program of airborne geophysics, property wide stream sediment sampling, supplemental soil sampling and limited rock sampling (Raven and Nelson, 2008). The airborne time domain electromagnetic and caesium vapour magnetometer survey ran into a month of poor weather and only 162.7 of the planned 1443 line kilometres were actually flown. No maps were produced due to lack of data. The stream sediment sampling program was confined to accessible areas of the property and consisted of 14 moss-mat silt and 236 conventional silt samples, identifying four areas for follow-up: Targets A through D. A total of 78 soil samples were taken in areas where stream drainages were minimal. The sampling assisted in confirming Targets A and D and suggested Target B could be larger in scope than suggested by the silt sampling. While a total of 26 rock samples were reported as taken by Raven and Nelson (2008) assay results were only provided for 15 samples. Descriptions of the rock individual rock samples were not provided in the 2008 report, so it is unknown if the samples were float, grabs or chips.

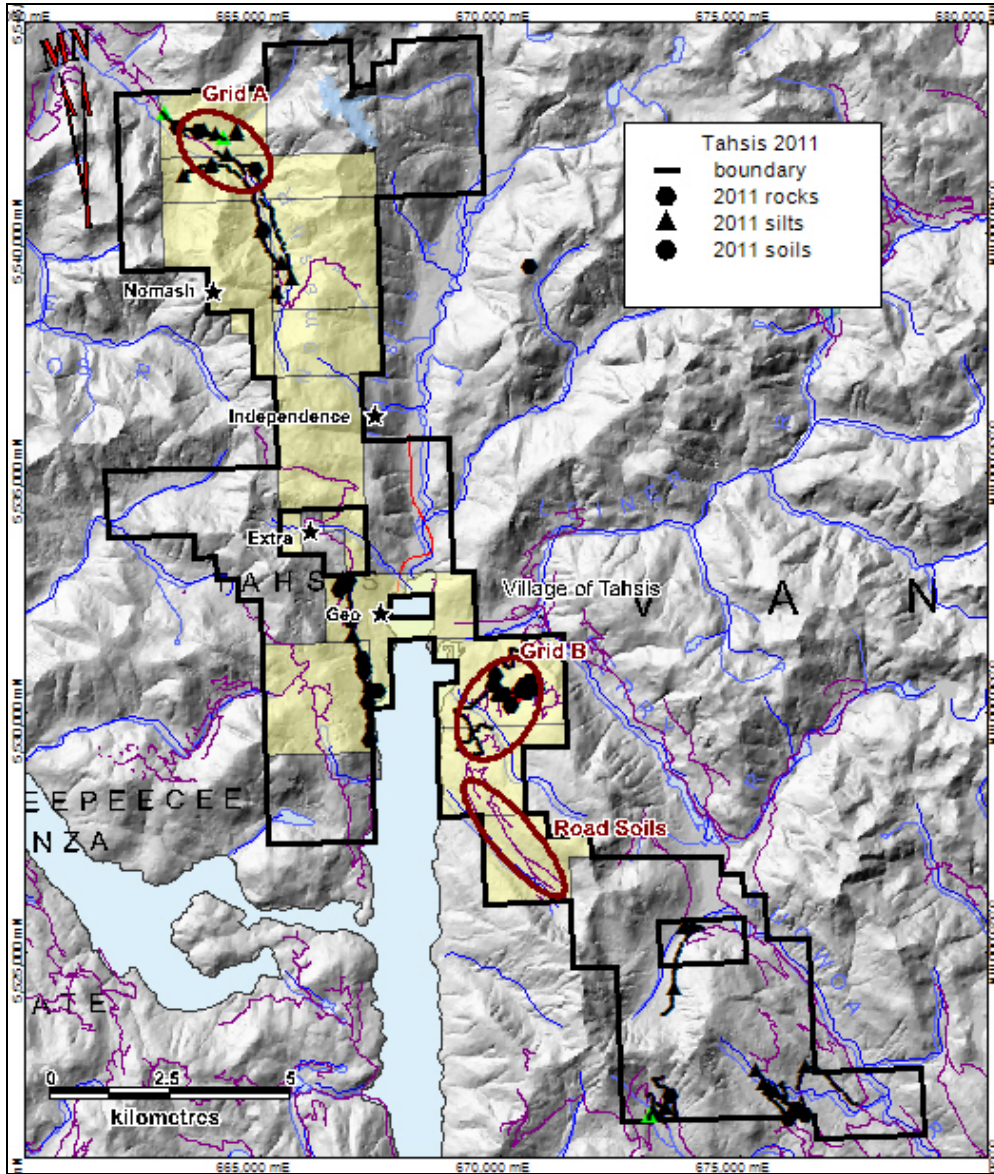


UTM NAD 83 Zone 9

Figure 3. History

**Table 4. Summary of Tahsis Property Programs**

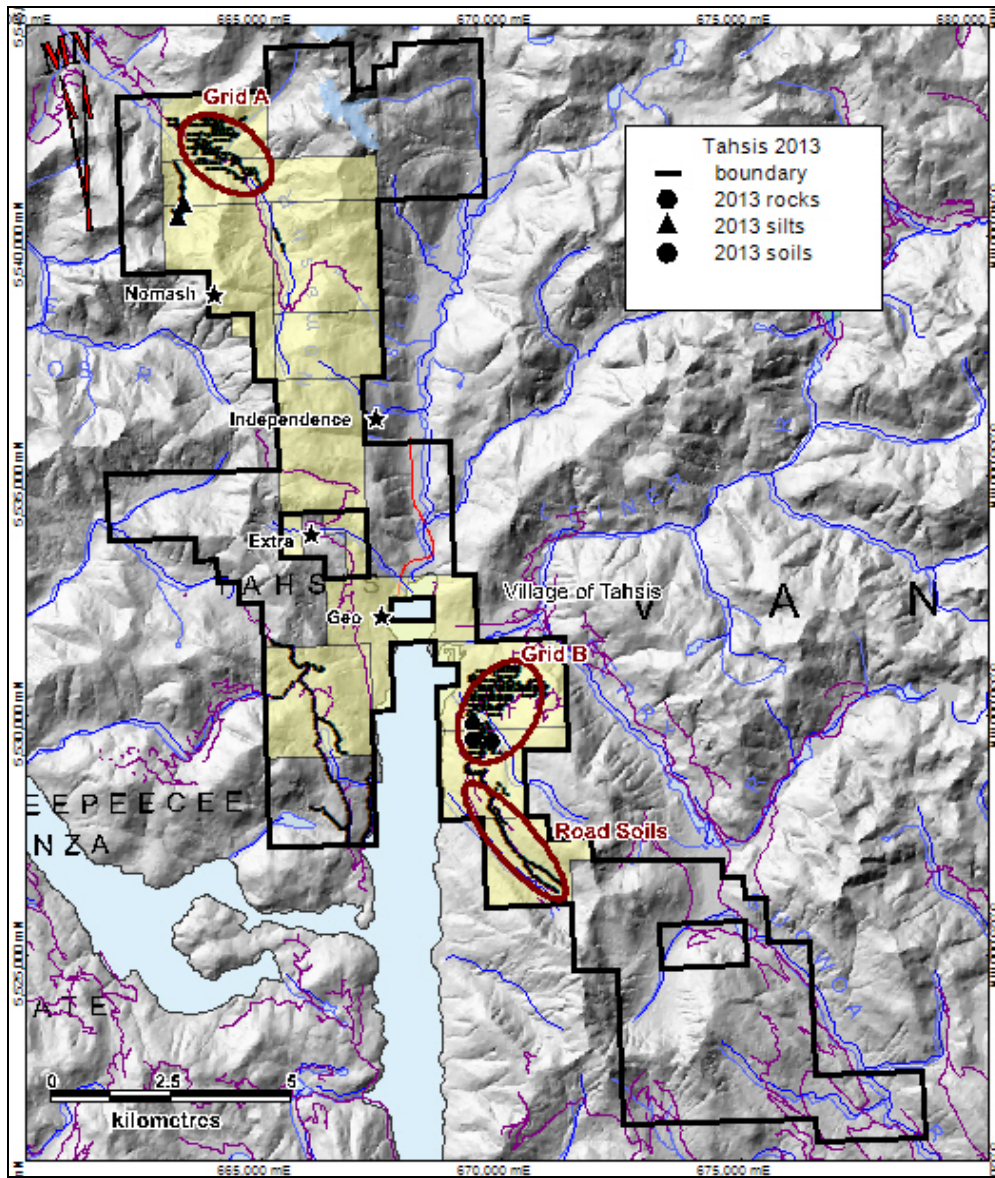
Company	Year	Road Soils	Grid soils	Silts	Rocks
Gold Ridge	2011	619		34	42
Sojourn	2013	176	691	2	3
Sojourn	2015	108		24	14



Gold Ridge Exploration Corp. explored the present Tahsis claim block in the spring of 2011, completing a preliminary exploration program consisting of: 619 road soil samples, 42 rock samples and 34 silt samples testing 4 target areas identified by earlier operators (Figure 4a). They had exploration success at Target A, located on both sides of Nomash Creek valley on the north claim block, returning elevated gold and copper values from soils and silts and at Target B, located to the east of the head of Tahsis Inlet, returning elevated gold and copper values from rocks and soils. Gold Ridge completed very limited sampling at Target C and Target D (Robb, 2011).

UTM NAD83 Zone 9

**Figure 4a. Tahsis 2011 Exploration Program**



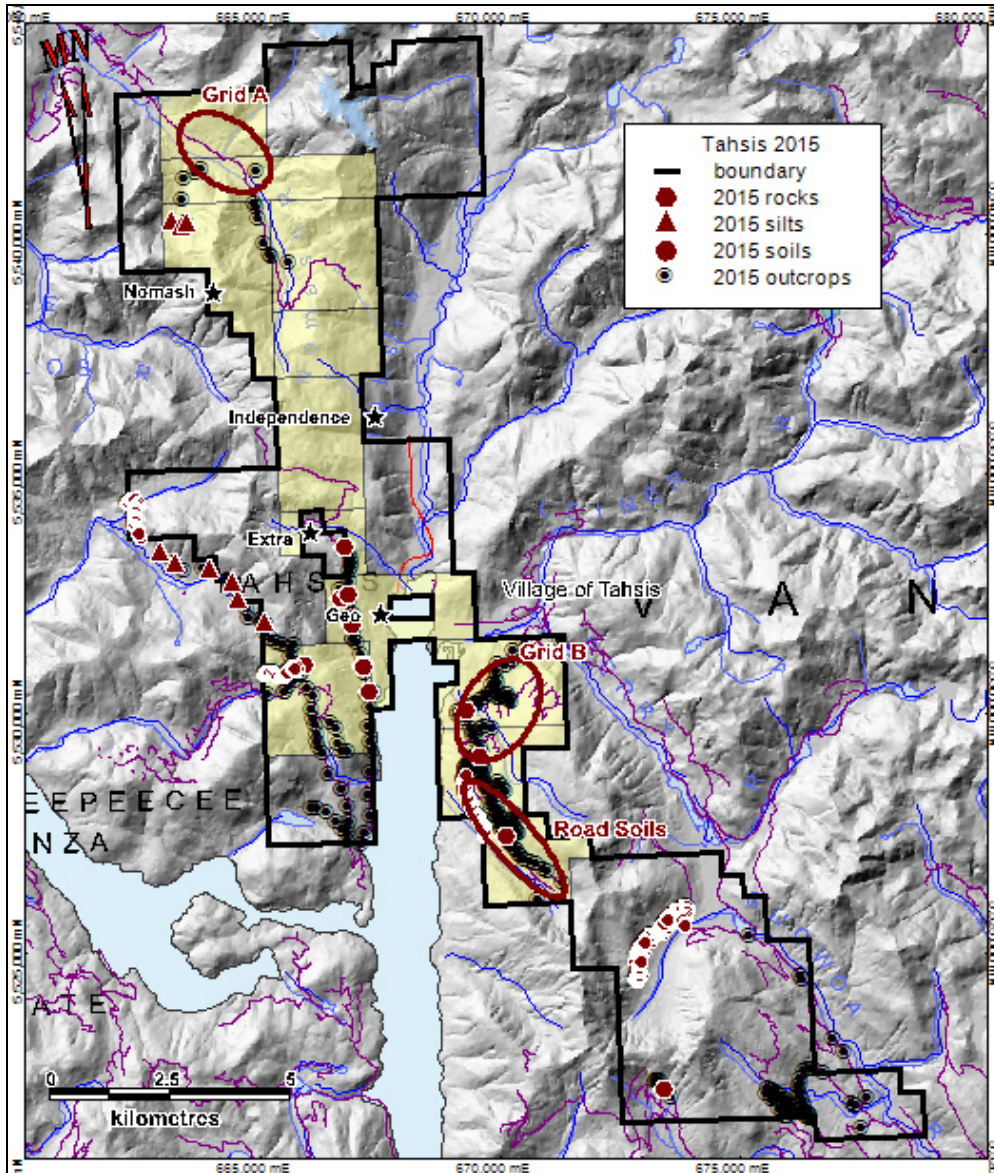
UTM NAD83 Zone 9

Figure 4b. Tahsis 2013 Exploration Program

Sojourn Ventures Inc. undertook grid soil sampling programs at Target A and Target B in the summer of 2013 (Figure 4b). Extremely difficult ground conditions significantly curtailed the size of the proposed soil grids and led to a program of road soil sampling to meet the exploration expenditures required under the option agreement. Grid and road soil sampling in the Target A area located a continuously anomalous 950 metre section of road at the top end of the grid, with gold-in-soil ranging from a minimum of 15 ppb to a maximum of 1672 ppb and copper-in-soil values ranging from a minimum 119 ppm to a maximum of 1651 ppm.

Grid and road soil sampling in the Target B area located two clusters of anomalous gold and copper in soil: cluster 1 – approximately 450 metres north south by 500 metres east west and cluster 2 – approximately 1300 metres east west by 250 metres north south. Road soil sampling in the southwestern end of the claim block located anomalous gold and copper in soil values as the south end of Target D was approached at the extremity of the sampling program.

Program statistics were 691 grid soils, 176 road soils, 2 moss mat stream sediment samples and 3 rock samples. (Henneberry, 2013).



UTM NAD83 Zone 9

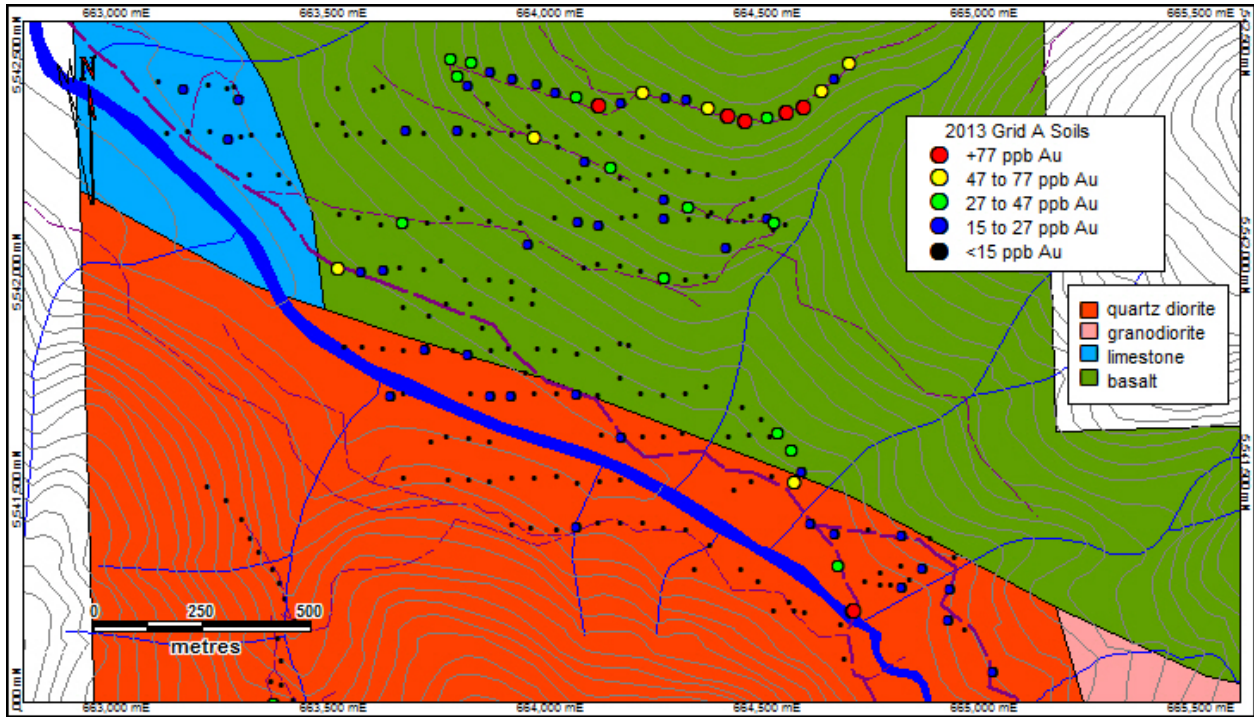
Figure 4c. Tahsis 2015 Exploration Program

Sojourn completed a second program of local road soil sampling, stream sediment sampling, rock sampling and preliminary geological mapping in 2015. A total of 108 road soil samples, 1 moss mat stream sediment sample, 23 conventional stream sediment samples and 14 rock samples were taken and 352 outcrop locations were logged during the July 2015 exploration program (Figure 4c).

This exploration allowed downsizing of the property by allowing some of the peripheral area claims to expire. (Henneberry, 2015).

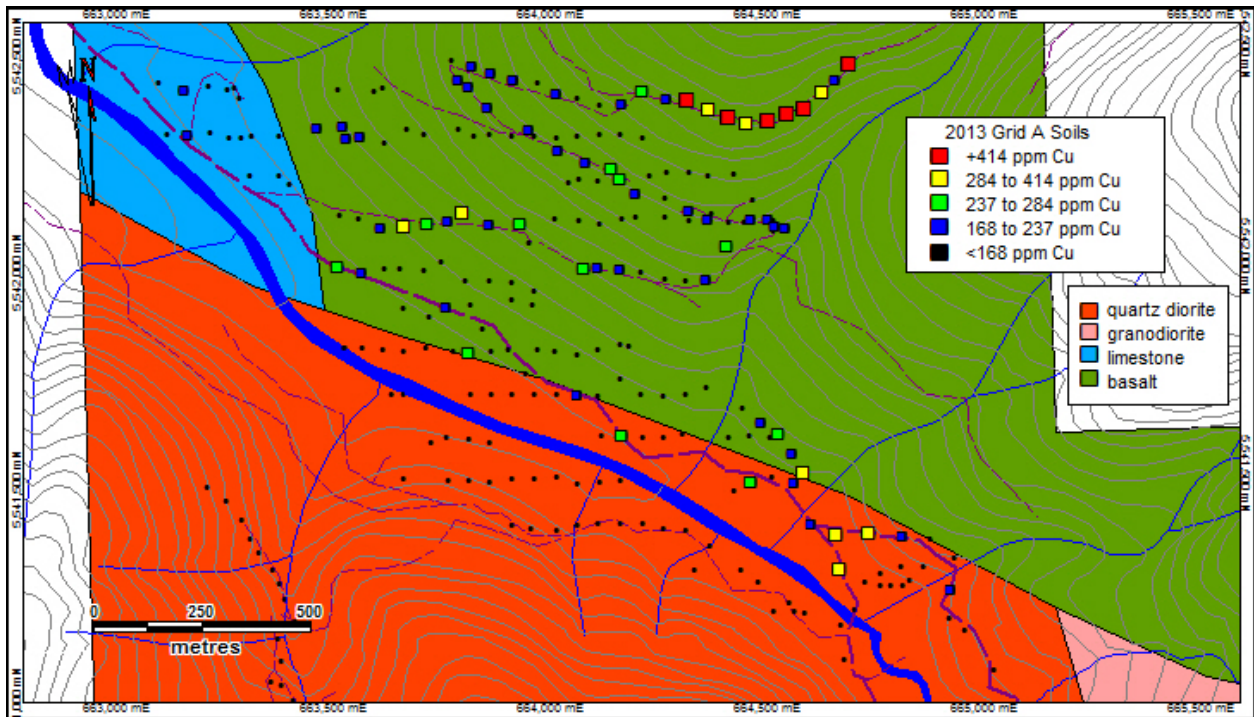
The Grid A soil sampling concentrated in the area of the 2011 road Au-in-soil and Cu-in-soil anomalies in the northern claim block. The bush conditions were extremely difficult so the planned 200 metre by 50 metre sample grid was not possible. The sampling concentrated on the severely overgrown roads cutting through the grid and lines along the proposed grid wherever possible. The results are plotted as Figures 5a and 5b.

The gold plot (Figure 5a) shows scattered spot anomalies throughout the portion of the grid that was established. More importantly, it strongly suggests a significant zone of continuous of Au-in-soil values along an overgrown road on the northern end of the grid. The continuous 950 metre section of road contained Au-in-soil values ranging from a minimum of 15 ppb to a maximum of 1672 ppb and Cu-in-soil values ranging from a minimum 119 ppm of to a maximum of 1651 ppm. (Table 5).



UTM NAD 83 Zone 9

Figure 5a. Grid A Gold In Soil



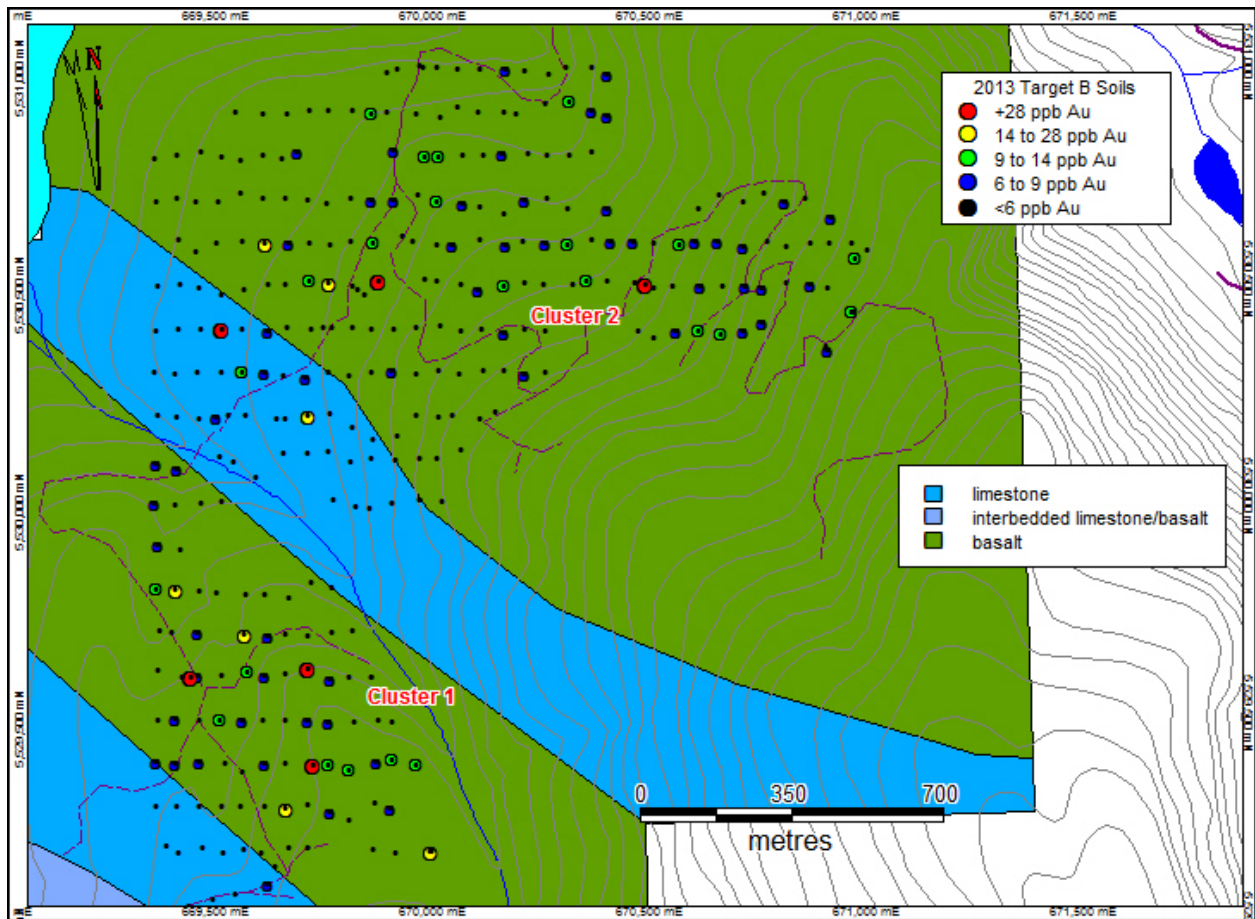
UTM NAD 83 Zone 9

Figure 5b. Grid A Copper In Soil

The Target A Cu-in-soil plot (Figure 5b) again shows considerable scatter through the part of the grid that was established. The overgrown road at the north end of the grid also appears to be strongly anomalous in copper over the same 950 metre section that is anomalous in gold. This area is a highly attractive target. This area of the property appears to be underlain by Karmutsen volcanics.

**Table 5. Grid A Zone on Anomalous Road Soils**

Sample No	ppm Cu	ppb Au	Sample No	ppm Cu	ppb Au	Sample No	ppm Cu	ppb Au
KW 009	179	16	KW 005	120	38	JT 067	756	1672
WR 020	236	35	KW 006	134	78	JT 068	392	323
WR 019	129	38	KW 007	208	19	JT 069	563	46
WR 018	207	28	KW 008	258	53	JT 070	1651	268
WR 017	236	20	JT 064	173	15	JT 071	473	84
KW 002	215	20	JT 065	433	23	JT 072	350	50
KW 003	149	19	JT 066	306	55	JT 073	227	18
KW 004	207	23				JT 074	749	77



UTM NAD 83 Zone 9

**Figure 6a. Grid B Gold In Soil**

The Target B soil sampling concentrated in the area of the 2011 road Au-in-soil and Cu-in-soil anomalies in the southern claim block. The bush conditions were extremely difficult so the planned 200 metre by 50 metre sample grid was not possible. The sampling concentrated for the most part on the lower slopes which proved to be somewhat more accessible. The results are plotted as Figures 6a and 6b.

The initial observation from the sampling in this area is the gold and copper values are half of what they were in the Target A area. The geology in this area is Karmutsen volcanics and Quatsino limestones, in comparison to the Karmutsen volcanics and Mt. Washington suite intrusives at Grid A.

Grid B is associated with the contact between the Quatsino limestone and Karmutsen volcanics. Two cluster anomalies were clearly identifying during the 2013 grid soil sampling. Cluster 1 is approximately 450 metres north south by 500 metres east west and appears to lie on the lower slopes of a relatively gentle ridge. Cluster 2 is approximately 1300 metres east west by 250 metres north south and stretches down the west facing slope.

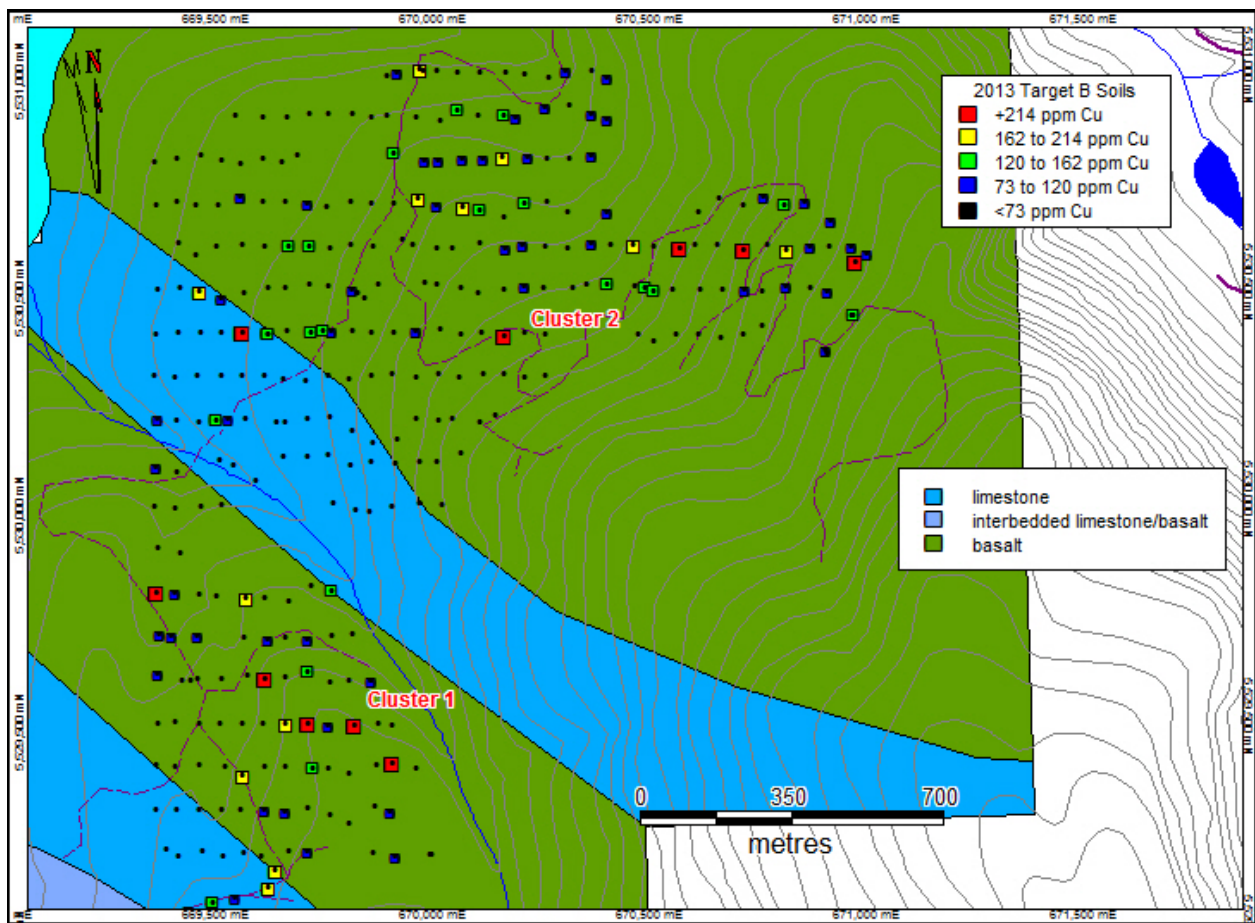


Figure 6b. Grid B Copper In Soil

The gold plot (Figure 6a) show scatter throughout the grid, but also seems to have identified two anomalous clusters. Cluster 1 is in the southwest portion of the grid within the limestones and Cluster 2 appears to be a loosely defined zone trending through the centre of the grid.



The copper plot (Figure 6b) appears to replicate the gold plot in that both Cluster 1 and Cluster 2 are clearly identifiable. Cluster 1 is approximately 450 metres north south by 500 metres east west and appears to lie on the lower slopes of a relatively gentle ridge. Cluster 2 is approximately 1300 metres east west by 250 metres north south and stretches down the west facing slope.

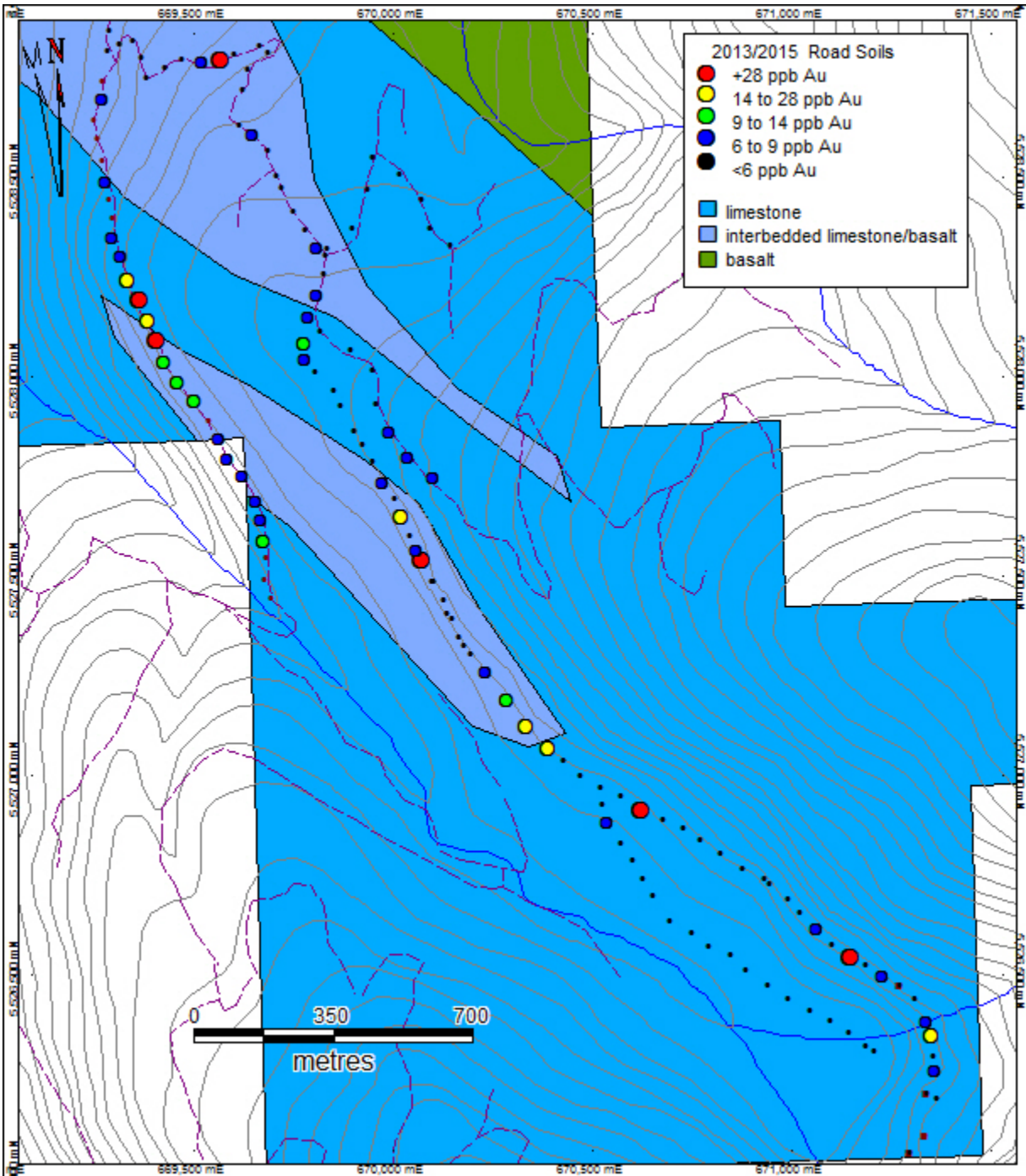


Figure 7. Road Soil Gold In Soil

A third area of interest lies to the south of Grid B in the road soil area, where a zone of anomalous gold in soil was located in 2015 in the same area where anomalous values were found in 2013. The plot is shown in Figure 7. A 450 metre section of 50 metre spaced road soil sampling contains gold values ranging from a low of 6 ppb Au to a high of 146 ppb Au. Additional values of 9, 7, 6 and 14 ppb occur further to the south. Sampling in 2013 returned a 150 metre section with values of 7, 17, 23, and 27 ppb Au a kilometre to the southeast. The gold values look to be associated with an area of interbedded Quatsino limestone and Karmutsen basalt. There were no anomalous zones in the copper in soil so a copper plot was not done.

**Table 6. Road Soil Area Anomalous Road Soils**

Sample No	ppm Cu	ppb Au	Sample No	ppm Cu	ppb Au	Sample No	ppm Cu	ppb Au
26357	41	14	26362	45	9	26368	44	18
26358	85	7	26363	9	2	26369	122	146
26359	62	10	26364	89	12	26370	52	24
26360	50	6	26365	26	12	26371	15	8
26361	80	7	26366	88	11	26372	31	6
			26367	82	90			

The rock and silt samples taken from the 2011, 2013 and 2015 programs have been compiled and are presented as Figure 8a through 9b. A total of 59 rocks were taken over the three programs. Two samples stood out. A vuggy quartz pod showing copper oxides was located in the Karmutsen basalts in the area of Grid B. A grad sample of the zone returned as value of 1.075% copper. A rusty shear zone in the general area of the Extra showing returned a value of 3375 ppm copper. (Figure 8a). A brecciated, 1 to 15 centimetre wide quartz carbonate vein with traces of disseminated fine grained pyrite returned a value of 738 ppb Au and a brecciated quartz stockwork zone in the same area returned a value of 393 ppb Au. Both samples lie within the Grid B area. (Figure 8b).

A total of 61 stream sediment samples were taking over the three programs (Figure 9a and Figure 9b). One area of anomalous copper values was located in the northwest corner of the property along the eastern contact of the Zeballos pluton. This area was also anomalous in gold and led to the establishment of the soil grid at the Grid A target. Other spot or cluster gold anomalies were located in areas of the originally southern claims that were abandoned when the property was downsized.

#### GEOLOGICAL SETTING

(Muller et al, 1974; Muller et al, 1981)

The geology of northeast Vancouver Island has been described by Muller et al (1974) and Muller et al (1981). The area is located within the Insular Belt of the Canadian Cordillera. The map area is chiefly underlain by the middle to upper Triassic Vancouver Group, overlain by the lower Jurassic Bonanza Group. The Vancouver Group is intruded by large and small bodies of middle Jurassic Island Intrusions. The region may be divided into several large structural blocks, separated mainly by important near-vertical faults and themselves fractured into many small fault segments (Figure 10).

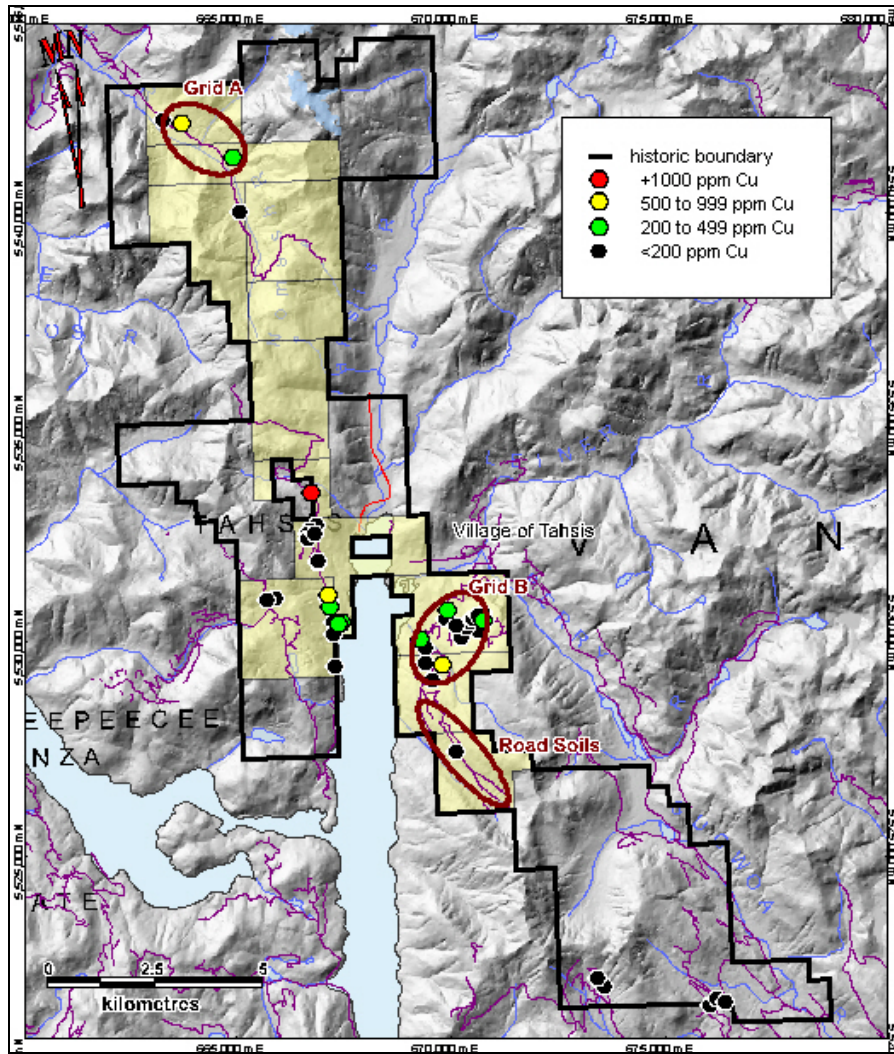


Figure 8a. Qualitas Rock Samples Cu

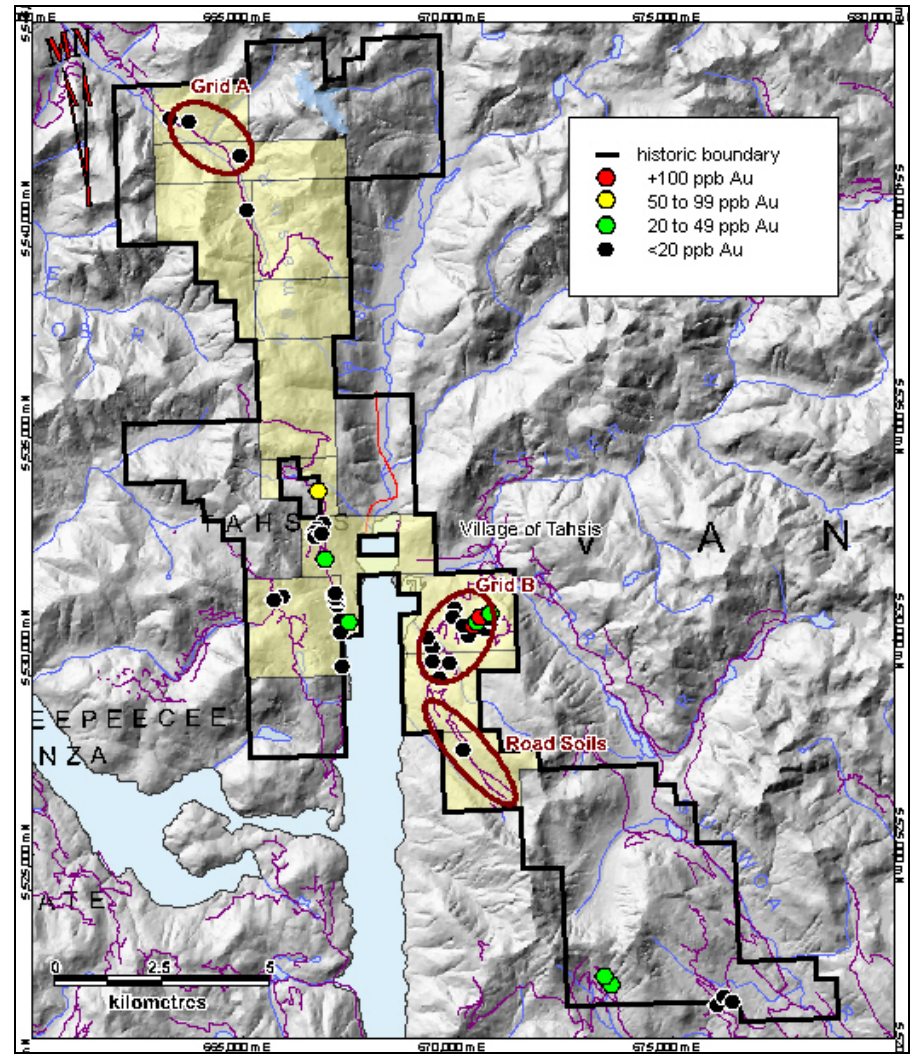
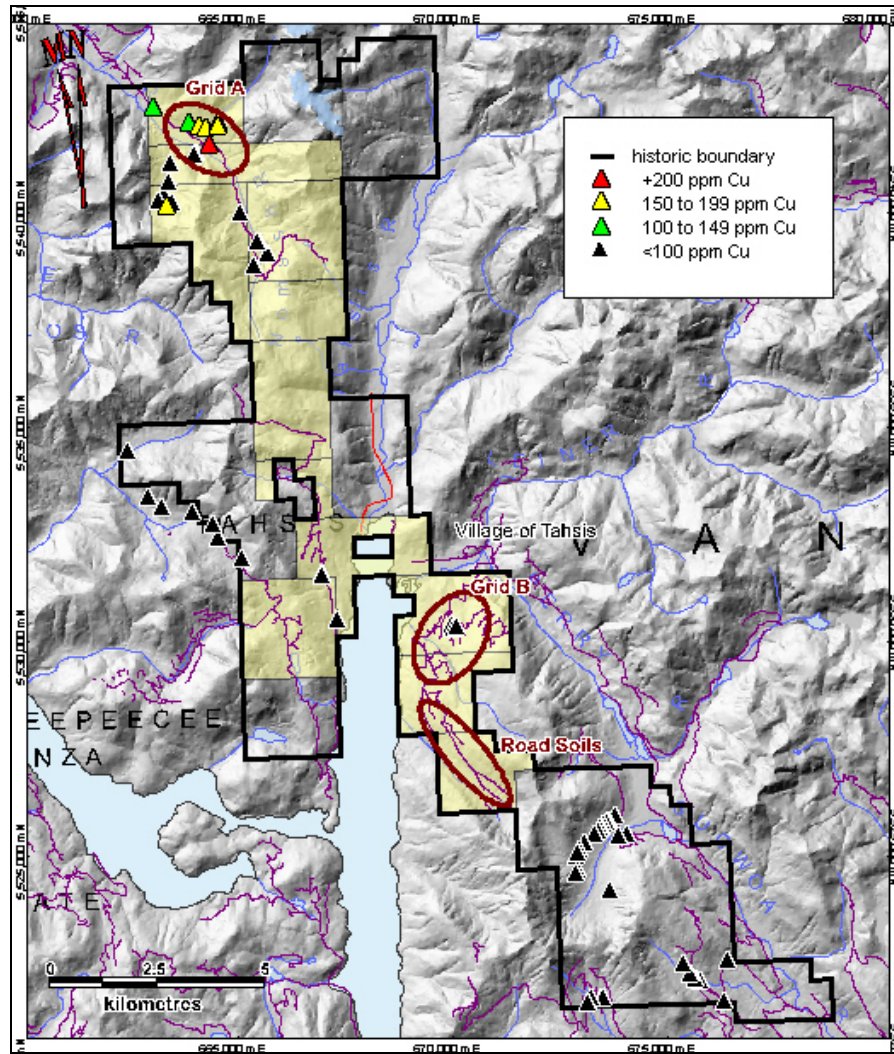
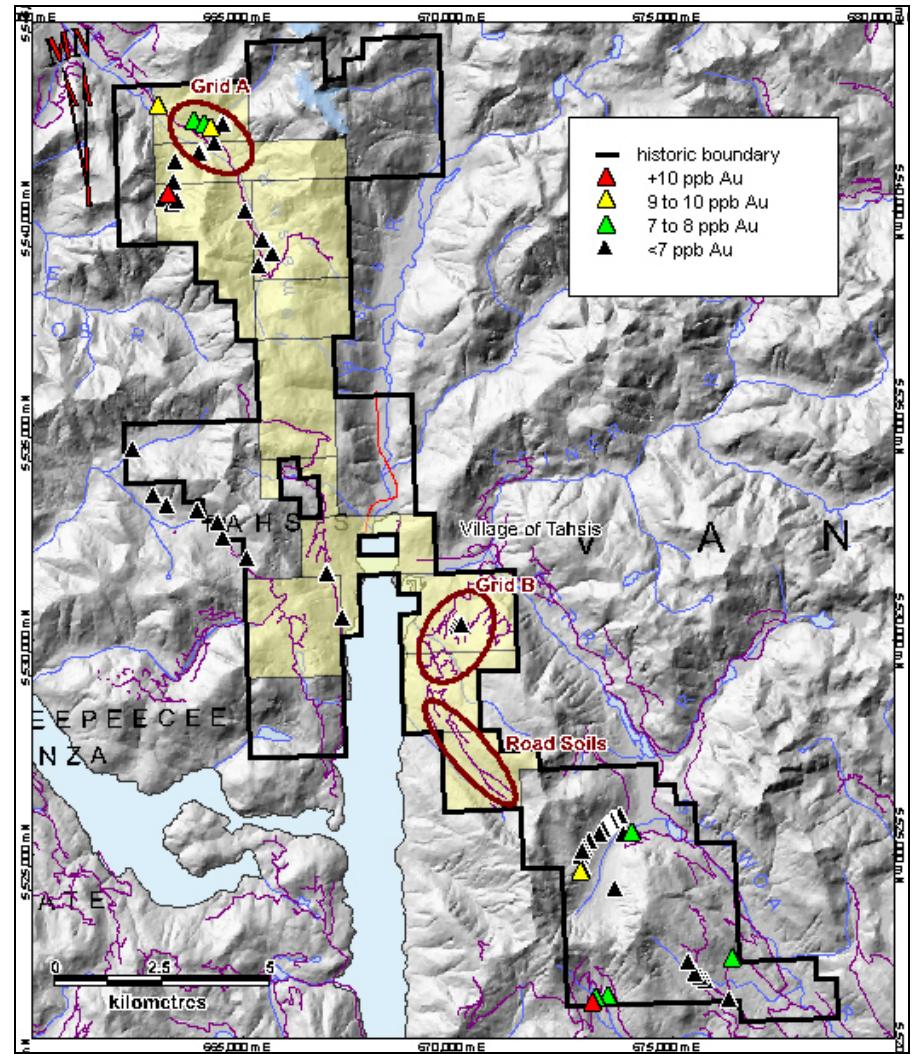


Figure 8b. Qualitas Rock Samples Au



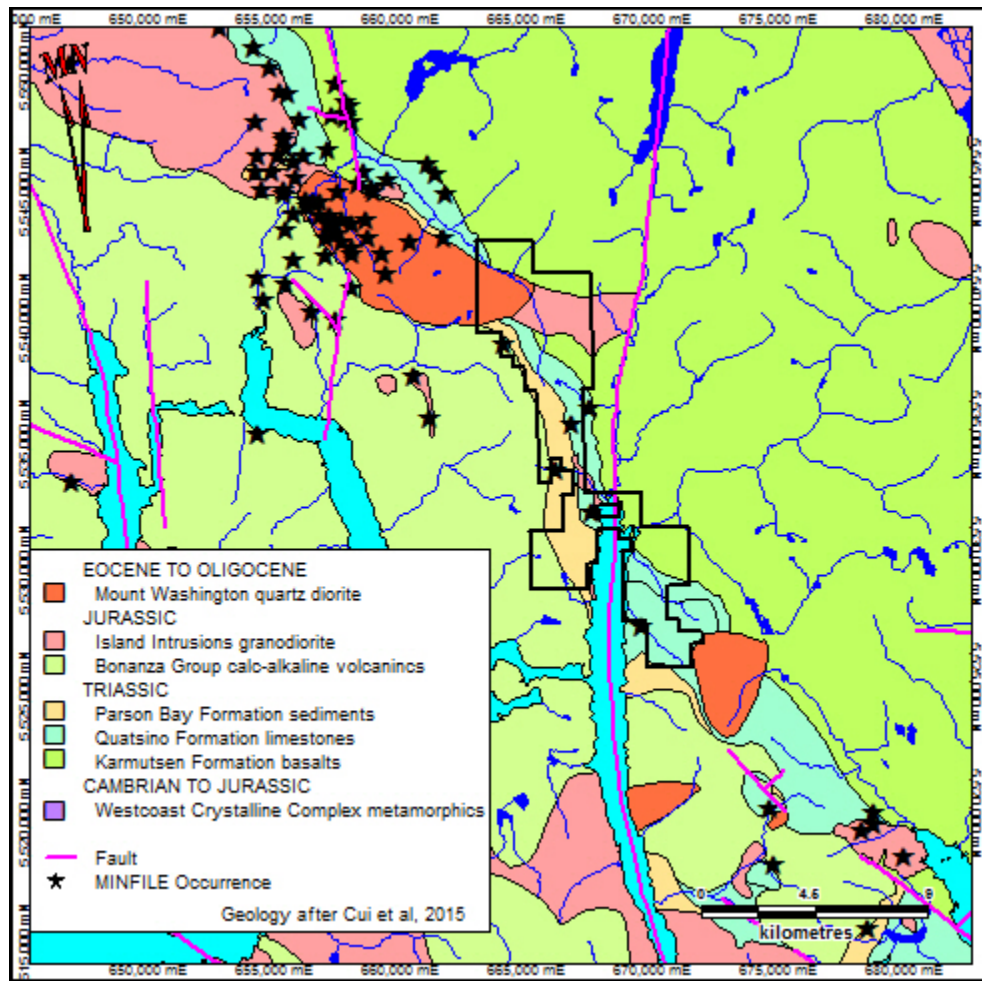
UTM NAD83 Zone 9 **Figure 9a. Qualitas Silt Samples Cu**



UTM NAD83 Zone 9 **Figure 9b. Qualitas Silt Samples Au**

The Vancouver Group is comprised of the lower Karmutsen Formation, middle Quatsino Formation and upper Parson Bay Formation. The Karmutsen Formation, the thickest and most widespread of the Vancouver Group formations, consists of basaltic pillow lavas, pillow breccias and lava flows with minor interbedded limestones, primarily in the upper part of the formation. Karmutsen rocks outcrop throughout northeastern Vancouver Island.

The Quatsino Formation overlies the basalts. The lower part of the Quatsino Formation consists of thick bedded to massive, brown-grey to light grey, grey to white weathering, fine to microcrystalline, commonly stylolitic limestone. The upper part is thin to thick bedded, darker brown and grey limestone, with fairly common layers of shell debris. The formation is in gradational contact with the overlying Parson Bay Formation by an increase in layers of calcareous pelites. Quatsino limestone outcrops as three narrow belts in the northern part of Vancouver Island.



Projection NAD 83 Zone 9

Figure 10. Regional Geology

The Parson Bay Formation consists of a series of interbedded silty limestones and calcareous shales and sandstones, and occasional beds of pure limestone. Parson Bay rocks outcrop sporadically overlying the Quatsino limestone.

The Bonanza Group overlies the Vancouver Group. Bonanza Group rocks are primarily a Jurassic assemblage of interbedded lava, breccia and tuff with compositions ranging from basalt through andesite and dacite to rhyolite, deposited in a volcanic island arc environment. The Bonanza Group outcrops throughout the map area.

Granitoid batholiths and stocks of the Island Intrusions underlie the central core of Vancouver Island from one end to the other. These intrusions range in composition from quartz diorite and tonalite to granodiorite and granite. Island Intrusions outcrop throughout the map area.

There are local Eocene quartz diorite intrusions of the Mount Washington Intrusive Suite that are more prominent on the western side of Vancouver Island.

The network of faults displayed at the north end of Vancouver Island appear to be the superposition of two or more fracture patterns, each with characteristic directions but of different age and origin.

**Plate 1. Karmutsen Formation**



1a. pillow basalts



1b. amygdaloidal basalt



1c. fracture epidote



1d. fine basalt

## Tahsis Property Geology

The Tahsis property was mapped during the 2015 field program (Henneberry, 2015), concentrated on numerous logging roads in within the claim block with coverage ranging from excellent through to non-existent. In inaccessible areas, the British Columbia Geological Survey 2015 Digital Geology (Cui et al, 2015) was integrated into the mapping. In addition, Nelles (1990) mapping in the area northwest of the head of Tahsis Inlet was integrated into the mapping.

Outcrop is generally abundant as soon as the logging roads leave the valley bottoms, with long stretches of more or less semi-continuous to continuous outcrop common along several of the logging roads. A total of 352 distinct outcrop locations were documented (Figure 11).

The Tahsis property is underlain by Triassic Vancouver Group rocks, Jurassic Bonanza Group rocks and intrusions and Eocene Intrusions, with the Vancouver and Bonanza Group rocks trending in a southeast-northwest direction. The geology is more complicated than shown on the 1:250,000 scale maps of sheets 092E and 092L accompanying Muller et al's (1974) and Muller et al's (1981) reports.

The Triassic Vancouver Group rocks cover 3/5 of the claim block. Moving northeast to southwest the Karmutsen Formation basalts abut the eastern boundary of the property. The rock is generally grey black to black on weathered surface and dark grey black to black on fresh surface. These rocks range from fine grained (Plate 1d) to fragmental, with exposures of pillow basalts noted locally (Plate 1a). They are locally amygdaloidal (Plate 1b). Alteration ranges from fresh to weakly to moderately hematitic. Abundant fracture epidote was noted in several outcrops on the northeast side of Tahsis Inlet (Plate 1c). Disseminated pyrite in in concentrations ranging from traces to 1% to 2% was noted locally. Copper was noted and sampled at one location.

Two specimens were sent for petrographic analysis, one from the east centre of the claim block (WP904) and one from the southeast end of the claim block (WP1035). Both samples were described as likely hypabyssal intrusives, with 904 a plagioclase phyric andesite or basaltic andesite and 1035 a plagioclase-mafic (rare olivine?) phyric andesite or basaltic andesite porphyry.

**Plate 2. Quatsino Formation**



2a. interbedded limestone / basalt



2b. steeply dipping limestone

The Quatsino Formation forms a narrow belt, 1000 to 1500 metres wide trending southeast-northwest through the centre of the property (Plate 2b). The northeastern side is actually comprised more of interbedded limestone and basalt ranging in thickness from 10's of centimetres to a few metres (Plate 2a). There is no alteration or skarnification at the limestone basalt contacts which suggest deposition on top of the limestone as opposed to dyke intrusion.

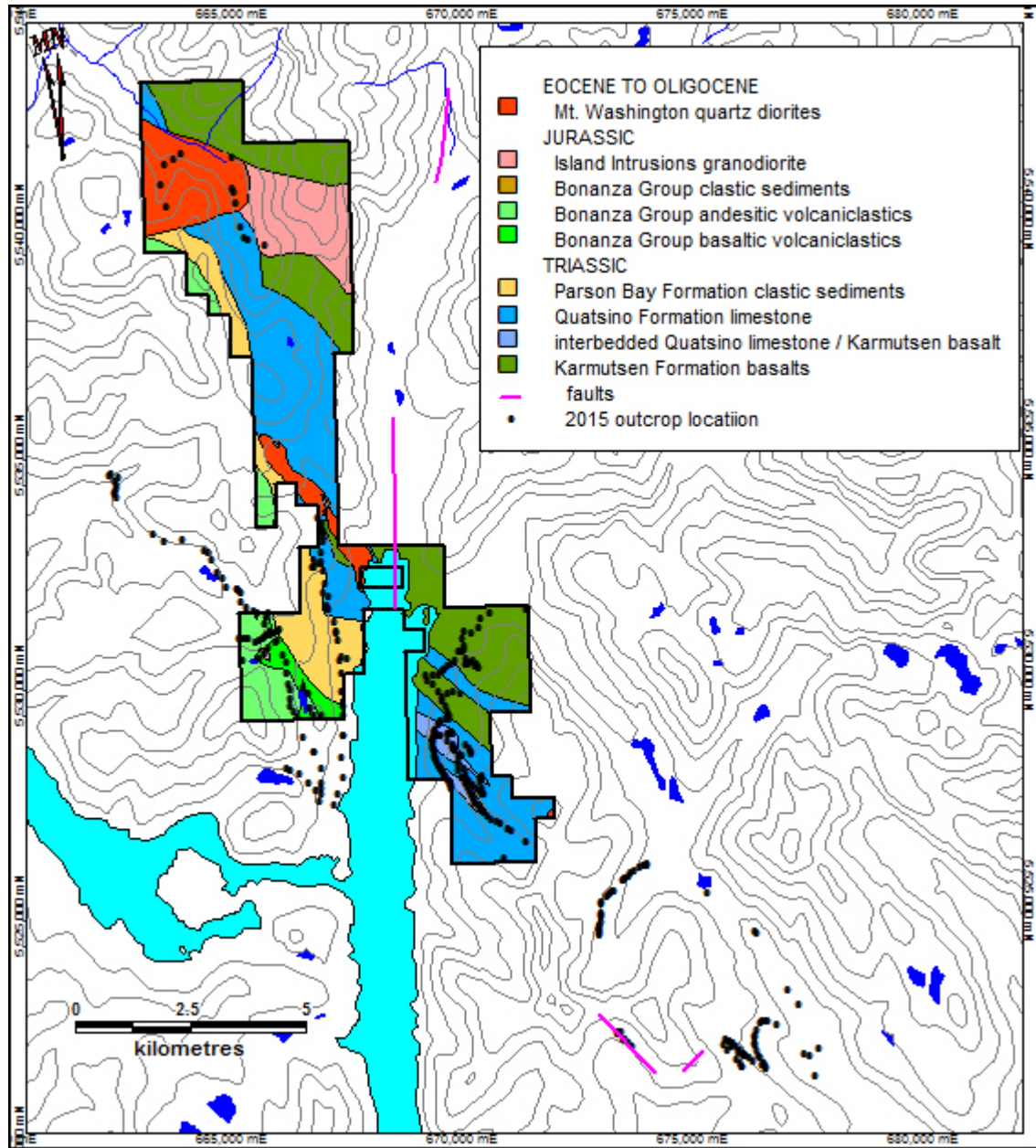


Figure 11. Property Geology



The limestone varies greatly in color and appearance throughout its exposure. The dominant stones are fine grained and dove grey to grey black in color. A larger exposure of white coarser grained marbled limestone was noted proximal to the southern contact of the Mt. Washington intrusion at the northern end of the claim block. As would be expected, there is considerable variation in the strike and dip of the limestone beds with strikes and dips ranging from 030°/30°SE to 170°/40°E and 175°/42°W. Generally, the limestone was unmineralized, though locally 1% to 2% disseminated pyrite was noted.

The Parson Bay calcareous clastic sediments outcrop along the southwestern edge of the limestone in the western side of the claim block. These rocks range from light brown to grey black in color with beds ranging in thickness from centimetres to 1 to 2 metres (Plate 3a). They show varying amounts of disseminated pyrite, ranging from trace to 5%. They are for the most part altered with varying amounts of silica, clay, sericite and FeOx. A series of sub-parallel andesite dykes crosscutting the sediments were noted in one exposure (Plate 3b).

**Plate 3. Parson Bay Formation**



3a. interbedded siltstones



3b. dykes crosscutting sediments

The Bonanza Group rocks are confined to the western extremities of the claim block, overlying the Parson Bay sediments. The dominant units mapped were a dark grey black more basaltic volcanoclastics and a lighter grey green andesitic volcanoclastic along with local fine clastics. The volcanoclastics appear to gradually change from basaltic to andesitic towards the north.

The basaltic volcanoclastic ranges from fine grained to fragmental in texture and is grey black in color. Outcrops are generally massive to blocky. Alteration consists of weak to moderate carbonate as clots or stringers and local epidote, manganese and chlorite. Mineralization was rare and consisted of traces to ¼% disseminated pyrite. A peculiar circular lichen was quite common on the basaltic outcrops as shown in Plate 4a. This lichen was also regularly noted, though not as commonly, on the Karmutsen basalts.

The andesitic volcanoclastic is a lighter grey green in color and ranges from fine grained through fragmental to agglomerate (Plate 4b). Outcrops are generally massive to blocky as well. Alteration consists of weak to moderate carbonate as clots or stringers and local epidote, manganese, chlorite and sericite, along with local fracture limonite and FeOx. Mineralization was rare and consisted of occasional traces of pyrite.

The clastic sediments were localized to small areas in the central western claim block. They consisted of thinly bedded siltstones to shales generally colored shades of brown or grey brown (Plate 4c, 4d). The units found in the west central region were interbedded with volcanics. Alteration consisted on carbonate clots and stringers in the north and limonite, with local sericite and silica in the south. No mineralization was noted.

**Plate 4. Bonanza Group**



4a. basaltic volcaniclastic



4b. andesitic agglomeratic volcaniclastic



4c. fine sediments cut by dykes

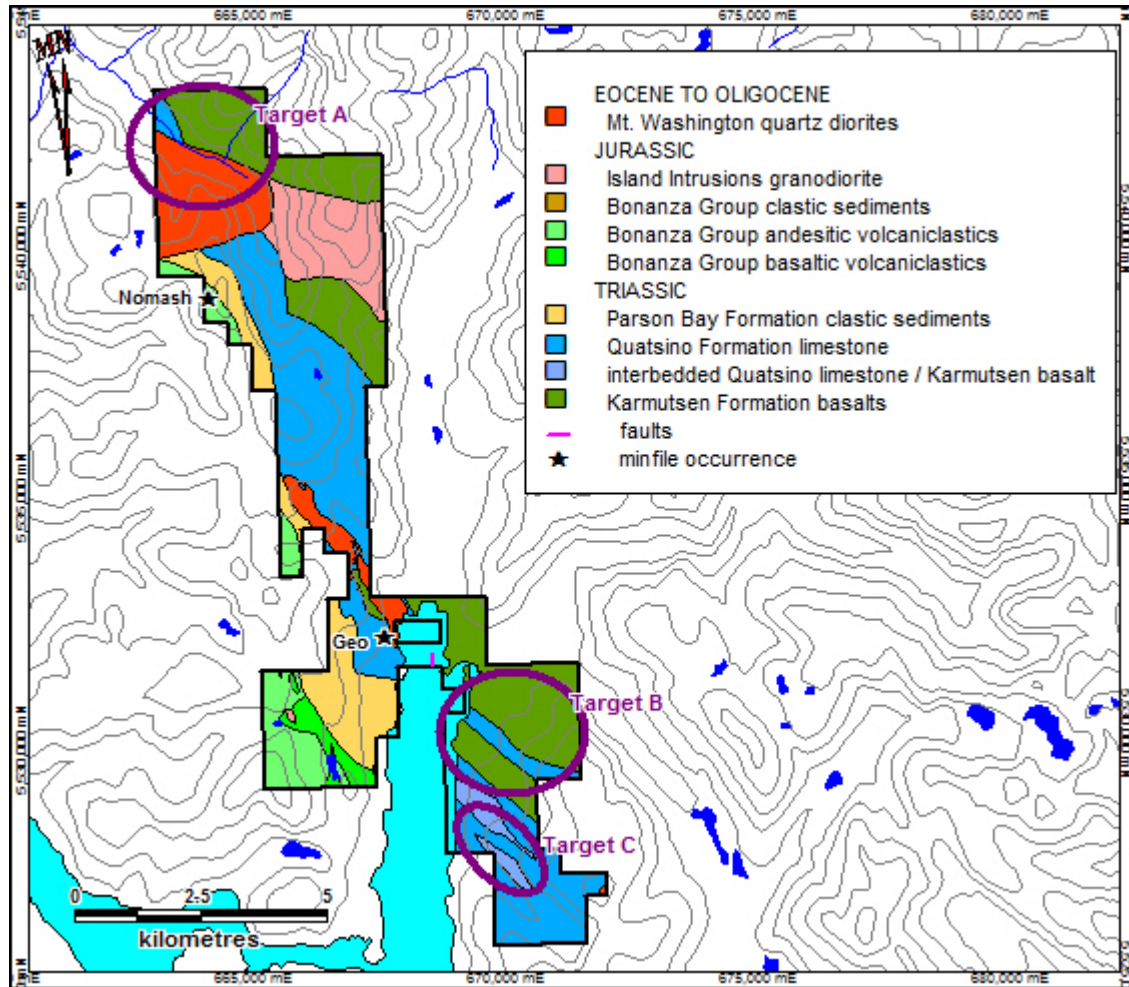


4d. fine siltstone

Three specimens of Bonanza volcaniclastics were submitted for petrographic analysis: WP 722 and WP 735 from the more andesitic volcaniclastics in the west centre of the claim group and WP 719 from the basaltic volcaniclastics in the centre of the claim block. WP 719 and WP 722 were both described as an intermediate volcaniclastics. WP 735 was described as a plagioclase-clinopyroxene phyrlic andesite or basaltic andesite porphyry, a likely hypabyssal intrusive.

One exposure of granodiorite of the Jurassic Island Intrusions was mapped in the northern part of the claim block. The massive cliff was composed of a medium grained grey rock. Weak sericite, epidote and FeOx were noted in the unmineralized rock.

Parts of three small stocks lie on the claim block. Exposures on in the northernmost stock and the southernmost stock were examined. The northern stock is a blocky to sheeted medium grained, grey white diorite containing hornblende, biotite, plagioclase and quartz. No mineralization was noted and no alteration was noted. The blocky to sheeted southern stock is of similar composition and appearance. Again, no mineralization or alteration was noted.



Projection NAD 83 Zone 9

Figure 12. Mineralization

### Mineralization

The Tahsis Property is being explored for auriferous quartz vein and gold skarn mineralization. There presently are two known areas of bedrock mineralization on the property. These are the NOMASH (Minfile number: 092E 024) and the GEO property (Minfile number: 092E 010). The Nomash showing consists of scattered chalcopyrite in a skarn reported to occur over an area measuring 3.0 by 5.0 metres a short distance away from an intrusive contact. A sample collected from this area assayed 0.061% Cu, 0.8 g/t Ag and 0.035 g/t Au. Subsequent work has not been able to verify the presence of this mineralization. The Geo showing consists of lenses of chalcopyrite, magnetite, pyrite, pyrrhotite and minor arsenopyrite in garnet-epidote altered limestone of the Quatsino Formation. One sample assayed 8.2grams per tonne gold, 34.3 grams per tonne silver, 9.0% copper and 14.0 % zinc. The locations of these samples are uncertain and these locations have not been located or examined to date.

Three of the five target areas identified on the property have proven to have potential to host mineralization, Target A, Target B and Target E. These zones are shown on Figure 12:

- Target A is associated with the eastern contact area of the Mt. Washington Intrusive Suite quartz diorite. This is the intrusive that is associated with the gold veins of the Zeballos Gold Camp. Soil sampling along an abandoned and overgrown logging road at the north end of the target located a continuous 950 metre section of Au-in-soil values ranging from a minimum of 15 ppb to a maximum of 1672 ppb and Cu-in-soil values ranging from a minimum 119 ppm of to a maximum of 1651 ppm.
- Target B is associated with the contact between the Quatsino limestone and Karmutsen volcanics. Two cluster anomalies were clearly identifying during the 2013 grid soil sampling. Cluster 1 is approximately 450 metres north south by 500 metres east west and appears to lie on the lower slopes of a relatively gentle ridge. Cluster 2 is approximately 1300 metres east west by 250 metres north south and stretches down the west facing slope.
- Target E lies within the Quatsino limestones with some interbedded Karmutsen basalts. A 450 metre section of 50 metre spaced road soil sampling contains gold values ranging from a low of 6 ppb Au to a high of 146 ppb Au. Additional values of 9, 7, 6 and 14 ppb occur further to the south. Sampling in 2013 returned a 150 metre section with values of 7, 17, 23, and 27 ppb Au a kilometre to the southeast.

#### DEPOSIT TYPES

There are two main deposit types targeted for the Tahsis property. They include: auriferous quartz veins typical of the Zeballos Gold Camp and gold skarns associated with the Quatsino limestones. There is also the potential for disseminated gold in limey clastic sediments which would be related to auriferous quartz veins.

The following description of auriferous quartz veins is summarized from the Mineral Deposits Profile for Au-Quartz Veins by Ash and Alldrick (1996). Gold-bearing quartz veins and veinlets with minor sulphides crosscut a wide variety of host rocks and are generally localized along major regional faults and related splays. The wall rock is typically altered to silica, pyrite and muscovite within a broader carbonate alteration halo. Veins form within fault and joint systems produced by regional compression or transpression (terrane collision), including major listric reverse faults, second and third-order splays. Veins usually have sharp contacts with wallrocks and exhibit a variety of textures, including massive, ribboned or banded and stockworks with anastomosing gashes and dilations. Textures may be modified or destroyed by subsequent deformation. Tabular fissure veins are present in more competent host lithologies, while veinlets and stringers forming stockworks are present in less competent lithologies. They typically occur as a system of en echelon veins on all scales. Lower grade bulk-tonnage styles of mineralization may develop in areas marginal to veins with gold associated with disseminated sulphides. These deposits may also be related to broad areas of fracturing with gold and sulphides associated with quartz veinlet networks.

The ore mineralogy is native gold, pyrite, arsenopyrite, galena, sphalerite, chalcopyrite, pyrrhotite, tellurides, scheelite, bismuth, cosalite, tetrahedrite, stibnite, molybdenite, gersdorffite (NiAsS), bismuthimite (Bi<sub>2</sub>S<sub>2</sub>), tetradyomite (Bi<sub>2</sub>Te<sub>2</sub>S). The gangue mineralogy is quartz, carbonates (ferroan-dolomite, ankerite ferroan-magnesite, calcite, siderite), albite, mariposite (fuchsite), sericite, muscovite, chlorite, tourmaline, graphite. Alteration assemblages consist of silicification, pyritization and potassium metasomatism and generally occur adjacent to veins (usually within a metre) within broader zones of carbonate alteration, with or without ferroan dolomite veinlets, extending up to tens of metres from the veins. Individual deposits average 30 000 tonnes with grades of 16 g/t Au and 2.5 g/t Ag and may be as large as 40 million tonnes.

Geochemical signatures include elevated values of Au, Ag, As, Sb, K, Li, Bi, W, Te and B ± (Cd, Cu, Pb, Zn and Hg) in rock and soil and Au in stream sediments. Geophysically, faults are indicated by linear magnetic anomalies. Areas of alteration indicated by negative magnetic anomalies due to destruction of magnetite as a result of carbonate alteration. Placer gold or elevated gold in stream sediment samples is an excellent regional and property-scale guide to gold-quartz veins.

The following description of gold skarns is summarized from the Mineral Deposits Profile for Au Skarns by Ray (1998). Gold-dominant skarn mineralization is genetically associated with a skarn gangue consisting of Ca - Fe - Mg silicates, such as clinopyroxene, garnet and epidote. Gold is often intimately associated with Bi or Au-tellurides, and commonly occurs as minute blebs (<40 microns) that lie within or on sulphide grains. The vast majority of Au skarns are hosted by calcareous rocks. Most Au skarns form in orogenic belts at convergent plate margins. They tend to be associated with syn to late island arc intrusions emplaced into calcareous sequences in arc or back-arc environments. These deposits are generally related to plutonism associated with the development of oceanic island arcs or back arcs. Gold skarns are hosted by sedimentary carbonates, calcareous clastics, volcanoclastics or (rarely) volcanic flows. They are commonly related to high to intermediate level stocks, sills and dikes of gabbro, diorite, quartz diorite or granodiorite composition. Gold skarns vary from irregular lenses and veins to tabular or stratiform orebodies with lengths ranging up to many hundreds of metres. Rarely, can occur as vertical pipe-like bodies along permeable structures.

The ore mineralogy consists of gold, commonly present as micron-sized inclusions in sulphides, or at sulphide grain boundaries. To the naked eye, ore is generally indistinguishable from waste rock. Due to the poor correlation between Au and Cu in some Au skarns, the economic potential of a prospect can be overlooked if Cu-sulphide-rich outcrops are preferentially sampled and other sulphide-bearing or sulphide-lean assemblages are ignored. The mineralization in pyroxene-rich and garnet-rich skarns tends to have low Cu: Au (<2000:1), Zn: Au (<100:1) and Ag/ Au (<1:1) ratios. The gold is commonly associated with Bi minerals (particularly Bi tellurides). The presence of other minerals varies due to original host lithology and can include: ± pyrrhotite ± chalcopyrite ± pyrite ± magnetite ± galena ± tetrahedrite ± arsenopyrite ± tellurides (e.g. hedleyite, tetradyomite, altaite and hessite) ± bismuthinite ± cobaltite ± native bismuth ± sphalerite ± maldonite. They generally have a high sulphide content and high pyrrhotite : pyrite ratios. These deposits range in size from 0.4 to 13 million tonnes and grade from 2 to 15 g/t Au.

The gangue mineralogy varies due to original host lithology. Magnesian exoskarn gangue includes: olivine, clinopyroxene (Hd2-50), garnet (Ad7-30), chondrodite and monticellite. Retrograde minerals include serpentine, epidote, vesuvianite, tremolite-actinolite, phlogopite, talc, K-feldspar and chlorite. Calcic exoskarn gangue can be broken down into three subtypes: pyroxene rich, which has high pyroxene:garnet ratios and diopsidic to hedenbergitic clinopyroxene (Hd 20-100), K-feldspar, Fe-rich biotite, low Mn grandite garnet (Ad 10-100), wollastonite and vesuvianite; garnet rich, which has low pyroxene:garnet ratios and includes low Mn grandite garnet (Ad 10-100), K-feldspar, wollastonite, diopsidic clinopyroxene (Hd 0-60), epidote, vesuvianite, sphene and apatite; and epidote rich, which includes abundant epidote and lesser chlorite, tremolite-actinolite, quartz, K-feldspar, garnet, vesuvianite, biotite, clinopyroxene and late carbonate.

Geochemical signatures include Au, As, Bi, Te, Co, Cu, Zn or Ni soil, stream sediment and rock anomalies, as well as some geochemical zoning patterns throughout the skarn envelope (notably in Cu/Au, Ag/Au and Zn/Au ratios). Geophysically, airborne magnetic or gravity surveys are used to locate plutons with follow-up induced polarization and ground magnetic used to locate skarns. Placer gold can also be an indicator of gold skarns. As well, any carbonates, calcareous tuffs or calcareous volcanic flows intruded by arc-related plutons have a potential for hosting Au skarns.

## EXPLORATION

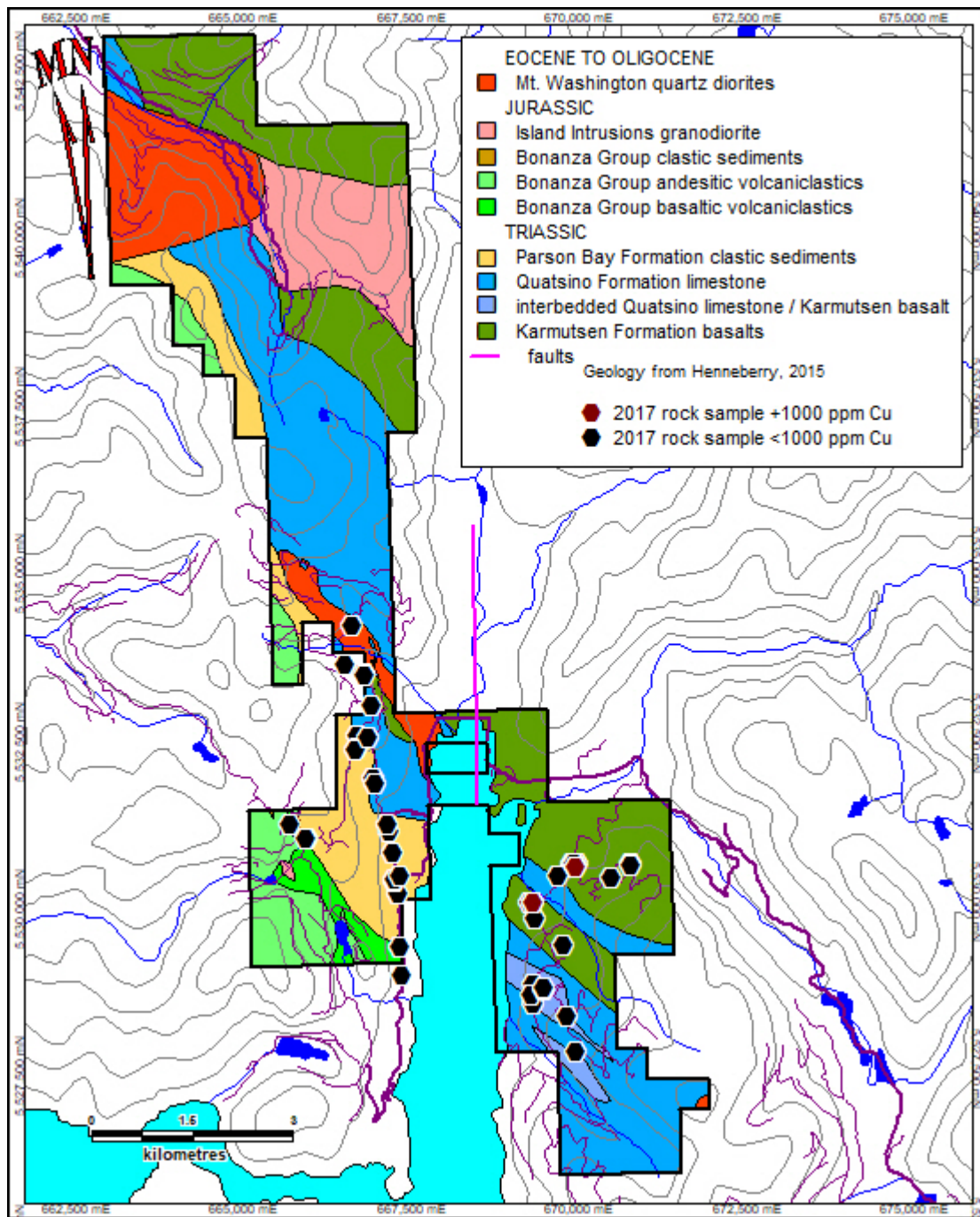
Cross River Ventures Corp. has yet to undertake any exploration on the Tahsis property. However, Qualitas Holdings Corp., the property vendor, completed a small exploration program for assessment credits in December 2017 which will be described in the following sections.

A total of 47 rock samples were taken throughout the property to provide additional background geochemical data for the various rock types on the property. The samples were taken from the voluminous outcropping throughout the property, both general samples to establish background values for the various rock types and specific samples where signs of alteration or mineralization were noted. One to three kilograms were taken from bedrock and placed in a plastic bag, with an assay ticket also placed in the same bag. Each sample location was marked as a waypoint in a GPS unit in the map datum NAD 83. Sample sites were then flagged with fluorescent ribbon and marked with the sample number.

The author is not aware of any sampling or recovery factors that could materially impact the accuracy and reliability of the assay results. The author believes the samples taken to be representative and does not feel there are any factors that would cause sample bias.

Three of the 47 samples returned copper values in excess of 1000 ppm: E07507 returned 11 ppb Au and 1070 ppm Cu, E07516 returned 22 ppb Au and 1255 ppm Cu and E07515 returned 1 ppb Au and 6190 ppm Cu from a carbonate vein carrying malachite. These results are in line with the results from the earlier exploration program (Figure 13).

There is no record of diamond drilling on the Tahsis Property.



Projection NAD 83 Zone 9

Figure 13. 2017 Sample Locations

## SAMPLE PREPARATION, ANALYSIS AND SECURITY

Cross River Ventures Corp. has yet to undertake any exploration on the Tahsis property. However, Qualitas Holdings Corp., the property vendor, completed a small exploration program for assessment credits in December 2017 which will be described in the following sections.

At the end of the field day, all rock samples were brought back to town. They were put in sequence and placed seven to eight in a rice bag. One standard, sealed in a Ziploc bag, was also placed in two of the rice bags. The bag was then zip strapped and stored in the project manager's motel room. Since these were preliminary surveys no sample splitting or reduction was necessary. The samples were delivered by the field manager directly to ALS Canada Ltd. in North Vancouver, British Columbia an ISO/IEC 17025:2005 certified facility. ALS Minerals is independent of both Cross River and Qualitas.

All samples are logged in the tracking system, weighed and dried. Silt and soil samples are first dried at 60°C and then dry-sieved using a 180 micron (Tyler 80 mesh) screen. Rock samples are finely crushed to better than 70 % passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen after which a split of up to 250 g is taken and pulverized to better than 85 % passing a 75 micron (Tyler 200 mesh, US Std. No. 200) screen. A 30gm sub-sample of the pulverized rock sample pulp is leached with 90ml or 180ml of 2-2-2 HCl-HNO<sub>3</sub>-H<sub>2</sub>O solution at 95°C for one hour, followed by dilution to 300ml or 600ml and 36 element ICP-MS.

One standard from WCM Minerals was inserted into the sample stream, returning values with the 2 Standard Deviations of the expressed values.

The author feels the sample preparation, security and analytical procedures for the preliminary ground surveys on the Tahsis property were adequate for each of the three exploration programs.

## DATA VERIFICATION

The author applied minimal verification procedures as he supervised or conducted all of the exploration programs. A review of the assay data shows no irregularities. The author is therefore satisfied that the data is adequate for the exploration programs it supports for the purpose of this technical report.

## MINERAL PROCESSING AND METALLURGICAL TESTING

There has been no mineral processing or metallurgical testing undertaken on the Tahsis property.

## MINERAL RESOURCES AND MINERAL RESERVE ESTIMATES

There are presently no mineral reserves or mineral resources on the Tahsis property.



## ADJACENT PROPERTIES

This technical report is not relying on data from adjacent properties.

## OTHER RELEVANT DATA AND INFORMATION

There is no additional relevant data or information known that is not disclosed on the Tahsis property.

## INTERPRETATION AND CONCLUSIONS

The Tahsis Property lies within an area of high geological potential on the northwest coast of Vancouver Island. This area is prospective for auriferous gold veins, as shown by the proximal Zeballos Gold Camp; skarn and replacement mineralization within the Quatsino limestones and disseminated gold deposits in the limey sediments of the Parson Bay Formation.

The 2011 Gold Ridge Exploration Corp. 2013 and 2015 Sojourn Ventures Inc. and the 2016 and 2017 Qualitas Holdings Corp. exploration programs on the present Tahsis property continue to meet with success. The 2011 program followed up on two of the four targets identified as a result of Robb's (2011) historic compilation. The 2013 program focused in on the Target A and Target B areas from the 2011 program and identified Au-in-soil and Cu-in-soil anomalies in prospective geological settings that require further exploration. The 2015, 2016 and 2017 programs concentrated on preliminary geological mapping and an initial assessment of the previously untested and peripheral areas of the claim block.

The geological mapping proved to be in general agreement with the government mapping, with the dominant units being the Vancouver Group in the eastern two thirds and the Bonanza Group dominating the western third. Local zones of copper mineralization of limited areal extent, typical of the Karmutsen Formation throughout Vancouver Island, were noted. The soil geochemistry located several areas of interesting gold and or copper values in the Quatsino limestone that will require follow up, especially the claims adjacent to the east side of Tahsis Inlet and north of the Mt. Washington stock in the southern section of the claim group. The Quatsino to the south of the stock did not show the same volume of interesting values.

There is very limited outcrop exposure over the areas of 2013 A grid accessed during the 2015 mapping so little comment can be offered on the anomalies. While there is abundant outcrop over the 2013 B grid, little of significance was noted to explain the anomalies. Aside from these two grids, the other area of interest is Target E, the Quatsino limestone with minor interbedded Karmutsen basalts along the eastern side of Tahsis Inlet. A 450 metre section of road soil sampling at 50 metre intervals contains gold values ranging from a low of 6 ppb Au to a high of 146 ppb Au. Additional values of 9, 7, 6 and 14 ppb occur further to the south. Sampling of proximal roads in the same area in 2013 also returned several elevated values further supporting further exploration.

The three target areas need to be followed up with some ground geophysics and trenching with some additional soil sampling. Ground geophysics will consist of magnetics and VLF-EM surveys over Grid A and Grid B. Grid A will consist of 5 N-S 1000 metre lines at 200 metre line spacings and Grid B will also consist of 5 N-S 1000 metre lines at 200 metre line spacings.

Excavator trenching and soil sampling will be directed at Grid E, with some of the trenching also directed at Grid A and Grid B. A total of 100 soil samples will be taken over for Grid E and 25 hours of excavator trenching are earmarked for each of the three grids.

### RECOMMENDATIONS

A program of excavator trenching and/or ground magnetics and VLF-EM is recommended for the three grid target areas at the Tahsis property. The ground geophysics contract is estimated at \$50,000 all in, while the excavator trenching with limited soil sampling is estimated at \$52,700, including permitting. The total Phase I budget with a \$7,300 contingency is \$110,000 as shown in Table 7.

**Table 7. 2018 Budget Recommendation**

Ground Geophysics						
All in (contract)						\$50,000
Prospecting / trenching:						
Two man crew all in	10	days	@	\$1,950		\$19,500
Analysis - soils	100	samples	@	\$25		\$2,500
Analysis - rock	50	samples	@	\$40		\$2,000
Analysis - standards	10	samples	@	\$20		\$200
Excavator mob/demob						\$1,500
Excavator (all in)	75	hours	@	\$150		\$11,250
Equipment and Supplies:						\$750
Supervision						\$2,000
Travel						\$3,000
Permitting						\$5,000
Documentation						\$5,000
Contingency						\$7,300
<b>Total Budget</b>						<b>\$110,000</b>

REFERENCES

- Ash, C. and Alldrick, D. (1996): Au-quartz Veins, in Selected British Columbia Mineral Deposit Profiles, Volume 2 - Metallic Deposits, Lefebure, D.V. and Høy, T., Editors, British Columbia Ministry of Employment and Investment, Open File 1996-13, pages 53-56.
- Beach, C.A. (1981). Assessment Credit Report Water Mineral Claim British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report 10659.
- Coombes, S.F. (1992). Geological, Geochemical and Geophysical Report on the Extra Property. British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report 22130.
- Cui, Y., Miller, D., Nixon, G. and Nelson, J. (2015). British Columbia Digital Geology. British Columbia Geological Survey, Open File 2015-2.
- Diakow, G. (1996a). Prospecting Report on the Extra Claim. British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report 28652.
- Diakow, G. (1996b). Prospecting Report on the Geo Claim. British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report 28653.
- Henneberry, R.T. (2013). 2013 Geochemical Report Tahsis Property. Ministry of Energy, Mines and Petroleum Resources Assessment Report 34395.
- Henneberry, R.T. (2015). 2015 Geochemical and Geological Report Tahsis Property. Ministry of Energy, Mines and Petroleum Resources Assessment Report 35793.
- Hoadley, J.W., 1953: Geology and Mineral Deposits of Zeballos-Nimkish Area, Vancouver Island, British Columbia; Geological Survey of Canada, Memoir 271.
- Muller, J.E., Northcote, K.E. and Carlisle, D., 1974: Geology and Mineral Deposits of Alert Bay - Cape Scott Map-Area, Vancouver Island, British Columbia; Geological Survey of Canada, Paper 74-8.
- Muller, J.E., Cameron, B.E.B. and Northcote, K.E., 1981: Geology and Mineral Deposits of Nootka Sound Map-Area, Vancouver Island, British Columbia; Geological Survey of Canada, Paper 80-6.
- Nelles, D.M. (1990). Report on the 1990 Programme of Geological Mapping, Geochemistry, Induced Polarization Resistivity and Magnetic Geophysics and Diamond Drilling Carried out on the Extra Property. British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report 20664.
- Peto, P. (1983). Geochemical Prospecting Report on the Tahsis and Independence. British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report 12354.
- Raven, W. and Nelson, M. (2008). Geochemical and Geophysical Assessment Report Cherry Property. British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report 30088.
- Ray, G.E. (1998): Au Skarns, in Geological Fieldwork 1997, British Columbia Ministry of Employment and Investment, Paper 1998-1, pages 24H-1 to 24H-4.
- Robb, W.R. (2011). Technical Report on the Geology of the Tahsis Property. Ministry of Energy, Mines and Petroleum Resources Assessment Report 32787.
- Stephenson, J.P. (1987). Assessment Report on the Independence Property. British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report 16673.

CERTIFICATE FOR R. TIMOTHY HENNEBERRY

I, R. Tim Henneberry, P. Geo., a consulting geologist, residing at 2446 Bidston Road, Mill Bay, B.C. V0R 2P4 do hereby certify that: I am the Qualified Person for:

**CROSS RIVER VENTURES CORP.**

Suite 2300 – 550 Burrard Street  
Vancouver, British Columbia V6C 2B5

I earned a Bachelor of Science Degree majoring in geology from Dalhousie University, graduating in May 1980.

I am registered with the Association of Professional Engineers and Geoscientists in the Province of British Columbia as a Professional Geoscientist.

I have practiced my profession continuously for 37 years since graduation.

I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101. My relevant experience for the purpose of this Technical Report is:

- 37 years of exploration experience for base and precious metals in the Western Cordillera
- I supervised or conducted the 2011, 2013, 2015, 2016 and 2017 exploration programs on the present Tahsis property.

I am responsible for the preparation of the technical report titled “43-101 Technical Report Report Tahsis Property” and dated February 5, 2018 relating to the Tahsis property. I visited the Tahsis property August 5, 2011, August 3, 2013, August 22, 2013, July 21 to August 1, 2015 and February 3, 2018.

I have had prior involvement with the property that is the subject of the Technical Report. My geological consulting company undertook the 2011, 2013, 2015, 2016 and 2017 exploration programs on the present Tahsis property.

As of February 5, 2018, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

I am independent of the issuer and property vendor after applying all of the tests in section 1.5 of NI 43-101.

I have read NI 43-101 and Form 43-101F, and the Technical Report has been prepared in compliance with that instrument and form.

I make this Technical Report effective February 5, 2018.



---

R. Tim Henneberry, P. Geo