



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

Assessment Report  
 Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Technical Work Assessment Report

TOTAL COST: 5,850.00

AUTHOR(S): Anton I. Issinski

SIGNATURE(S): Anton Issinski

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

YEAR OF WORK: 2015

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): \_\_\_\_\_

PROPERTY NAME: Portmine

CLAIM NAME(S) (on which the work was done): 1039709

COMMODITIES SOUGHT: Au, Ag

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

MINING DIVISION: Skeena

NTS/BCGS: \_\_\_\_\_

LATITUDE: 55 ° 56 '54 " LONGITUDE: 129 ° 55 '2 " (at centre of work)

OWNER(S):

1) Anton I. Issinski

2) \_\_\_\_\_

MAILING ADDRESS:

943 Fresno Place, Coquitlam BC, V3J 6G5

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

1) Anton I. Issinski

2) \_\_\_\_\_

MAILING ADDRESS:

943 Fresno Place, Coquitlam BC, V3J 6G5

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

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: \_\_\_\_\_

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping			
Photo interpretation			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil 26 samples		1039709	1140.00
Silt			
Rock			
Other			
<b>DRILLING (total metres; number of holes, size)</b>			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area) 7 days at \$550/day</b>		1039709	3850.00
<b>PREPARATORY / PHYSICAL</b>			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other		1039709	860.00
<b>TOTAL COST:</b>			<b>5850.00</b>

**SURFACE GEOCHEMISTRY REPORT**

PORTMINE PROJECT

Tenure number 1039709, owned by Anton I. Issinski

SKEENA MINING DIVISION

NTS103P13

Latitude 55°56'54, Longitude 129°55'2

Operator: Anton I. Issinski

Consultant: Lloyd Rodway

Author: Anton I. Issinski

Submitted October 31, 2016

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# Introduction

## ***Summary of regional geology***

Geologically, the area lies adjacent to the east margin of the Coast Crystalline Belt near the northern end of the Stewart Complex, a deformed belt of volcanic, sedimentary, and metamorphic rocks which lies along the west edge of the Bowser Basin. The Complex, which extends from Alice Arm on the south to the Iskut River on the north, includes major northerly trending structures which are complicated by complex plutonism and partly obscured by the extensive ice, snow, and rock debris.

Regionally, the Stewart Complex dips east under the main bulk of thick marine Bowser assemblage sediments and forms an integral part of the Bowser Basin.

The western contact of the Stewart Complex is largely delineated by the contact of the Coast Range Intrusives, while the eastern limits are marked by the main body of the overlying Bowser assemblage.

The importance of this complex has been relatively significant to British Columbia's economy in the past and should continue so in the future. The development and exploration of the Premier, Granduc, Anyox, Alice Arm, Lime Creek, and other mine areas has served to focus attention on the whole Stewart Complex, which is one of the most mineralized, most productive parts of British Columbia.

Mine products from this district have included gold, silver, copper, lead, zinc, cadmium, selenium, tungsten, iron, molybdenum, limestone, and quartz. Mineral deposits presently under development will produce significant quantities of copper and molybdenum, as well as gold and silver.

Most of the known mineral deposits in the Stewart area have been formed within the Hazelton assemblage. The Silbak Premier, Big Missouri, Prosperity Porter Idaho, and Indian mines are the outstanding vein-replacement deposits in the area and are found in deformed and altered equivalents of volcanic epiclastic Hazelton members [2].

## ***Summary of local geology***

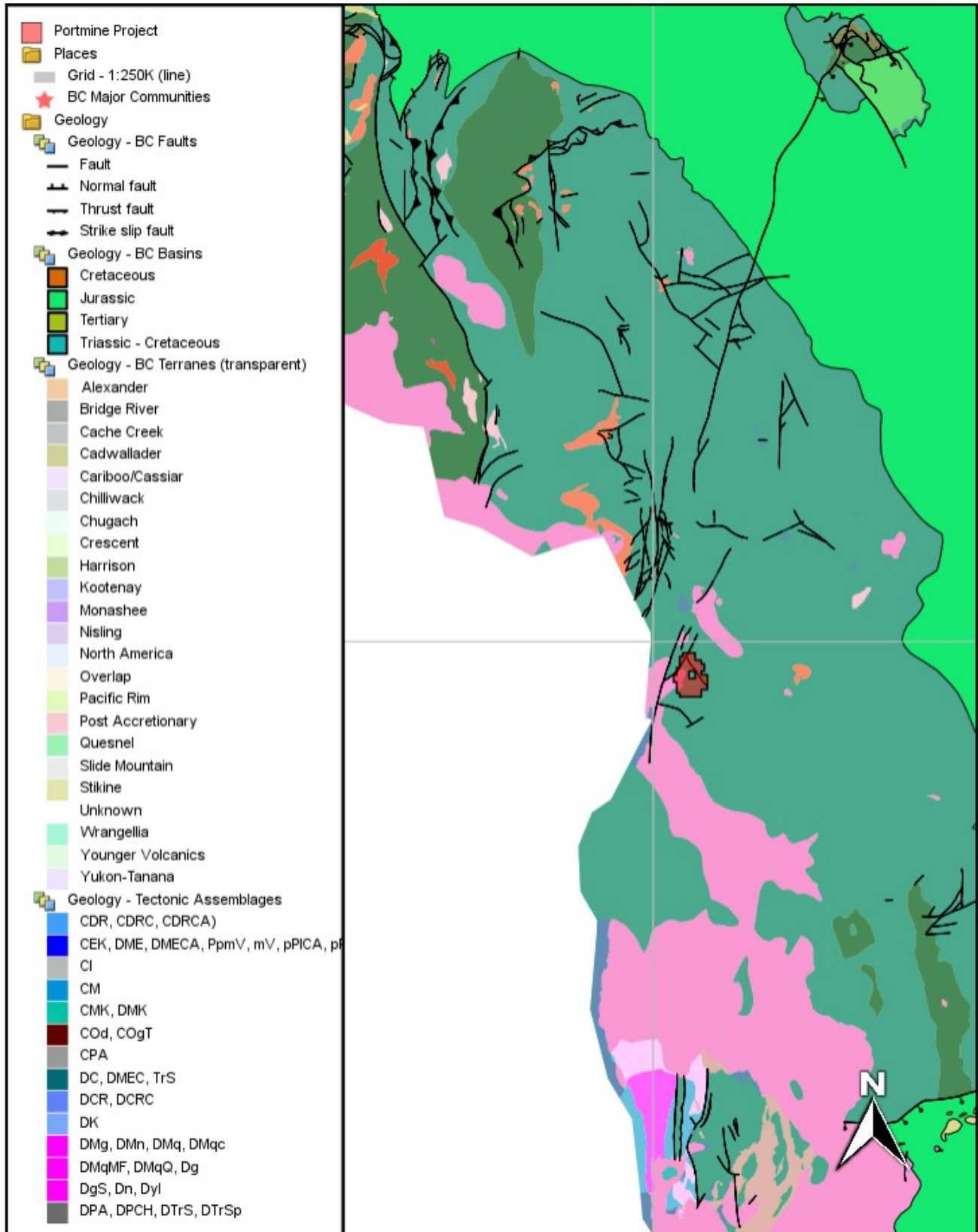
Vein mineralization on the property lies within thin-bedded dark Bowser graphitic siltstones and greywackes which overlie Hazelton volcanic epiclastics. The sedimentary rocks have been intensely folded and deformed and intruded by a number of plutons and dyke swarms. The veins have been injected into extensive fractures localized near the Bowser-Hazelton contact and apparently controlled by underlying intrusions. This fracture system, which included the known vein mineralization, was referred to as the Portland Canal Fissure Zone in old publications [1].

Two oreshoots averaging 5 feet wide, were mined from the quartz-breccia vein which averaged 8 feet wide and was traced on surface for about 2,000 feet. Both oreshoots were essentially flat-lying pods confined to narrow portions of the main vein. Sulphide mineralization in the quartz breccia consisted primarily of pyrite, with galena and minor sphalerite.

Like other similar veins in this zone, the vein has a sinuous swelling shape and is cut or bounded by later, narrow, hornblende diorite (lamprophyre) dykes [1].

# Regional Geology Map

## Stewart Camp Area



## Description of the physical geography

Area location within the province of British Columbia is shown on Figure 1:

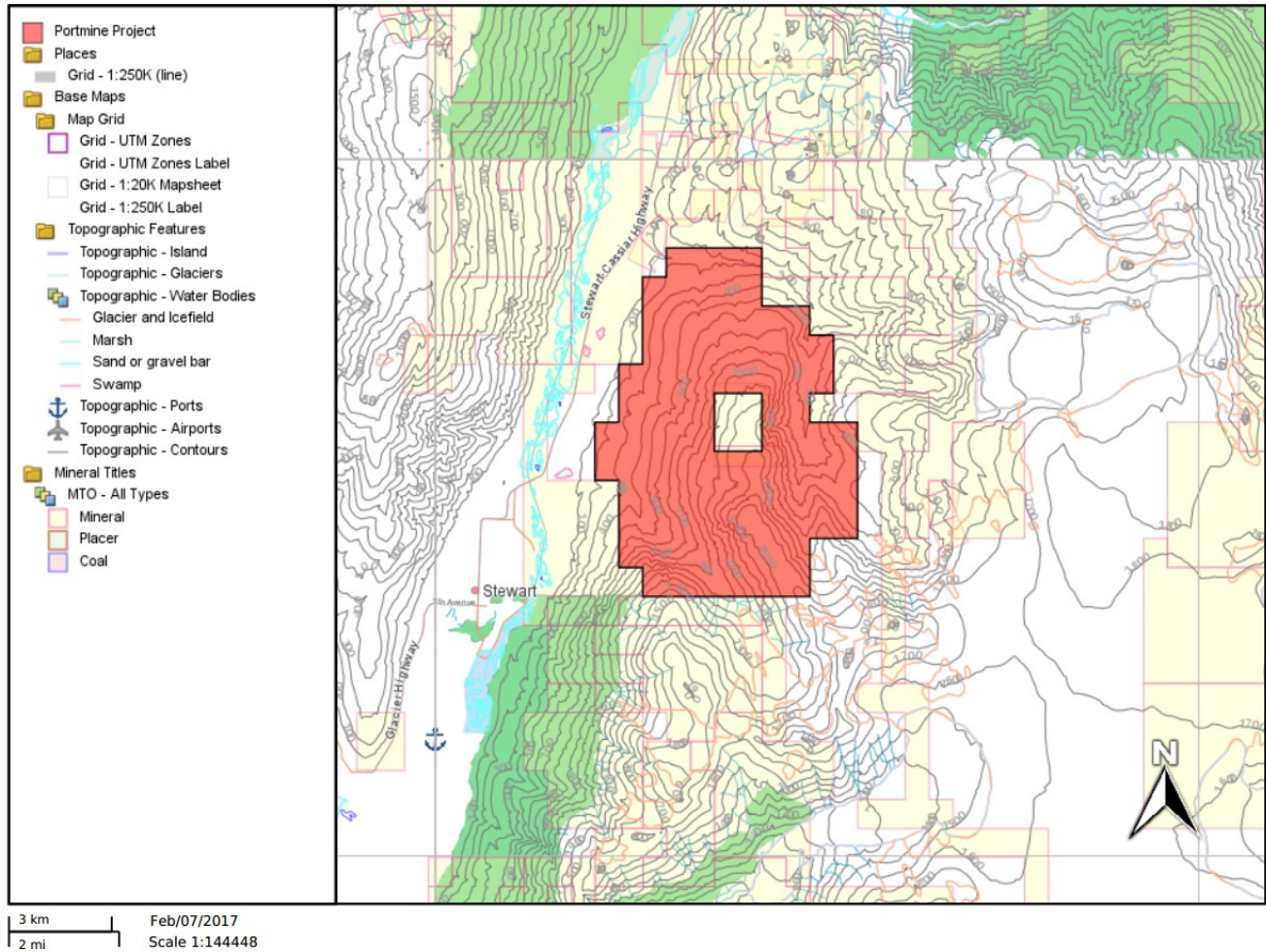


**Figure 1. Index Map.**

The 1,700 hectare Portmine project is situated within the rugged Boundary Ranges of the Coast Mountains in the Skeena Mining Division near the town of Stewart in NW British Columbia. The property is located approximately 2 km North-East of the town of Stewart between the Barney Gulch and Glacier Creeks at elevation ranging between 100 and 1300m. The Portmine project is located in NTS map sheet 103P13 and is centered on 55°56'54", 129°55'2", Figure 2:



# Portmine Project Tenure 1039709



**Figure 2. Project Location.**

Terrain is moderately rugged with average slopes ranging from 20 to 40 degrees. Vegetation at lower elevations consists of dense alder, brambles and ferns. Below the treeline level of about 1100 m, hemlock, spruce and fir are abundant.

The coastal climate in this region produces mild temperatures and heavy precipitation through most of the year. Average annual snowfall ranges between 3.5 and 9 m, depending on the elevation. The field season is limited from about May to October at high elevations. Lower elevations can be accessed year round.

## Access

South-West area of the project can be accessed directly from Stewart. Higher elevations require either helicopter or a long hike along an overgrown old mining trail at the North-West side of the area.



## ***History***

Exploration of the area started in 1906. The Gypsy, Little Joe, and Lucky Seven Crown-granted claims were located along the south slope of Glacier Creek about 4 miles north of Stewart. Portland Canal Mining Co. Ltd. acquired the original claims as well as nine more in 1908. Two adits were driven and a third, No. 3 tunnel, was projected at elevation 2,400 feet as the main haulageway. After some feasibility studies, a 75-ton concentrator at 55°59.250'N 129°56.880'W and an aerial tram-line from the mill site to 55°58.448'N 129°54.853'W at 650 meters elevation were constructed in 1910.

A short spur-line from the Portland Canal Short Line Railway was laid to the concentrator and the wagon-road to Stewart improved.

Up until October, 1911, the mill treated 7,000 tons of gold-silver-lead ore from which about 1,500 tons of concentrates was shipped. The ore apparently averaged 0.12 to 0.3 ounce gold; 5 to 25 ounces silver per ton; 2.5 to 12 per cent lead, and minor variable zinc with an average value of \$12 per ton at that date [1].

While operating, the Portland Canal mine deposited its tailings from the tunnels located on the East-facing slopes to the lower-middle portion of the Glacier creek valley. That effectively created a water reservoir in the upper section of the valley. In 1911 the resulting flood from Glacier creek destroyed the mine's mill located at Bear river and all further operation around that time were ceased.

In 1993-2005 the upper ridge portion of the area was a subject for drilling and exploration operations by Lloyd Rodway, when several tons of high-grade silver ore were extracted for bulk-sampling. The results of 1993-2005 exploration program prompted this year 2015 exploration work.

## ***Existing Infrastructure***

There is an old overgrown tramline clearcut from 55°58.448'N 129°54.853'W at the elevation 655 meters to the bottom of the Bear river valley at 55°59.250'N 129°56.880'W, where the Portland Canal mine mill was operating till 1911. There is also about half a dozen of abandoned old timer tunnels in the area.

## ***Property definition***

PORTMINE PROJECT property presently owned and operated by A. I. Issinski.

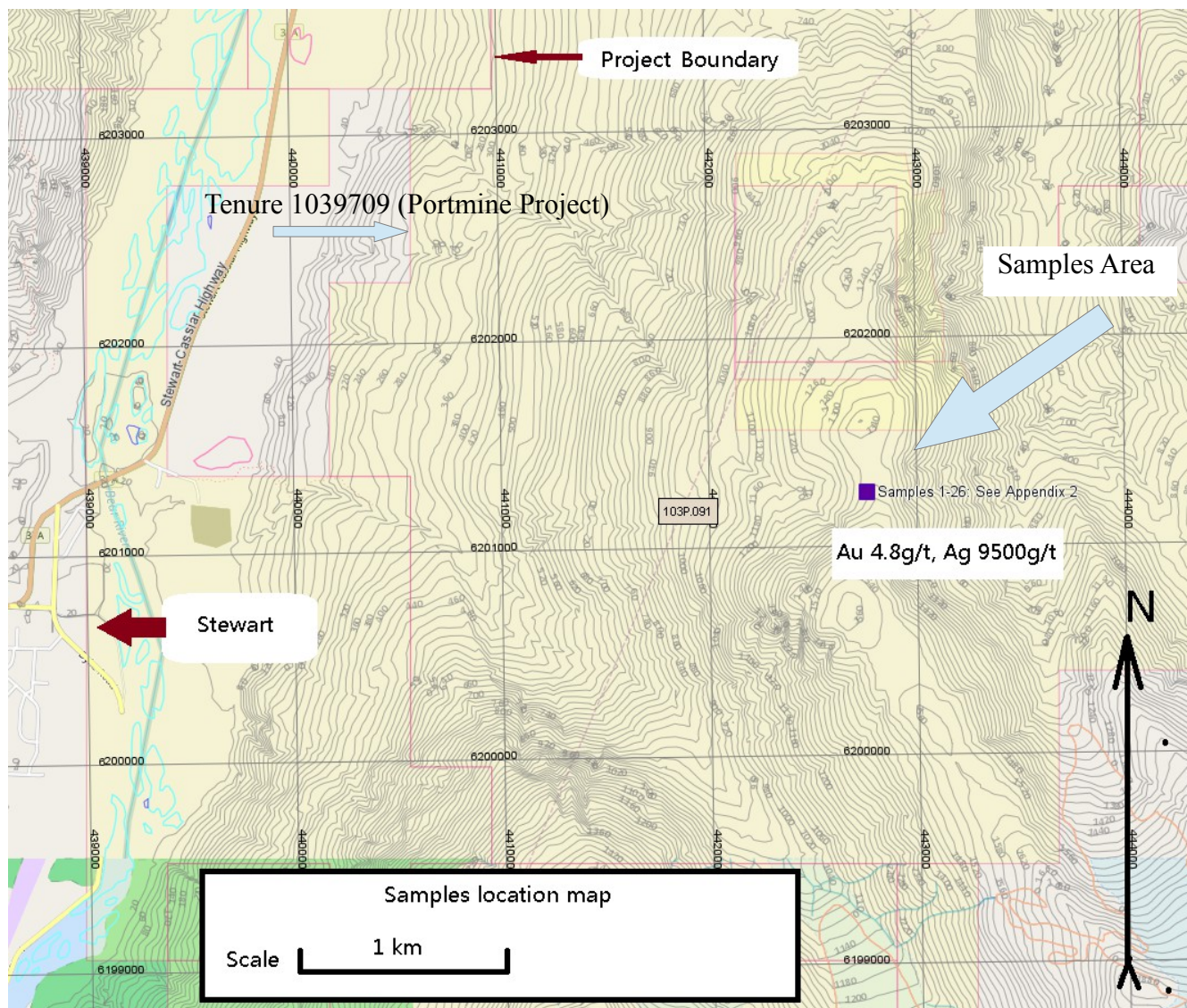
## ***Explanation of the type of exploration and development***

The year 2015 exploration work was performed on tenure number 1039709.

The goal of the 2015 exploration work was to collect and assay rock samples from old mining tunnel positioned on the top of the ridge at the elevation 1200 meters, approximately in the center of the project.

The work was performed by two persons. Lloyd Rodway hand selected 26 rock chip samples from the old mining tunnel at elevation of 1200 meters. Anton Issinski transported and submitted samples to laboratory in Vancouver for analysis. The work started in August 15, 2015 and ended in November 20, 2015. The work itself took 7 days.

## Collected Samples Location Map



**Figure 3. Samples Location map.**

For the table of numerical values, please see Appendix 2.

## **Technical data and interpretation**

### ***The field sampling procedure***

26 rock chip samples were picked and hand-selected from the old-timers tunnel, all from the same location at about 1200 meters elevation at 55°57.008'N 129°55.046'W near the ridge crest around the surface entrance. All samples looked as explosion-blasted rock chips of about fist size. Samples were selected, crashed, pulverized with a hammer to a mesh size 200 and then placed into plastic bags labeled from 1 to 26 respectively by Lloyd Rodway. The box with the samples then was transported to Vancouver and submitted to the laboratory by A. Issinski.

### ***Method of Analysis***

All 26 samples were analyzed using 50g lead collection fire assay fusion for 25 elements by Bureau Veritas Laboratories, see Appendix 2.

### ***Interpretation***

Samples show surprisingly consistent grades for Au and Ag, averaging at 4.8g/t and 9,500 g/t respectively.

This is most likely attributed to the fact that the samples are the same selected production ore brought to the surface for further transportation and that were protected by the tunnel from the elements since they were blasted about 100 years ago.

At the time the tunnel was built in early 1900, when there were no drilling exploration phase and tunnels followed veins visible from the surface with economically reasonable grades, which started from the about 1 oz per ton in gold equivalent. This is in line with the results from the laboratory analysis for the ore from the tunnel.

### ***Conclusion***

Most likely, the vein around which the tunnel was built, was mined out and the tunnel then was abandoned. But the presence of such high-grade ore close to the surface may be a good indication for prompting further investigation.

Unfortunately, most of the property is covered by a dense vegetation and outcrops are visible at less than 1% of the surface. Traditional prospecting methods that resulted in Portland Canal Mine activity a century ago would be hard to compete with at the present cost of the physical labor.

## Statement of Qualifications

I, Anton Issinski with residential address 943 Fresno Place, Coquitlam, B.C., Canada, do hereby certify that:

1. I am an owner of the tenure 1039709.
2. I am Director of HMI Communications Inc.
3. I graduated with a Masters degree in the Mathematical Methods in the Theoretical Physics from the Moscow Engineering Physical Institute in 1985.
4. Since my graduation, I have worked as a researcher in the area of experimental and theoretical nuclear physics, computer scientist and geophysical equipment designer.
5. I have been designing acoustic, electromagnetic, magnetotelluric and ground penetrating geophysical equipment as an associate of HMI Communications Inc.
6. Over the past 3 years I have been testing and qualifying geophysical equipment in the following areas of British Columbia: Atlin, Cariboo, Dease Lake, Fraser river, Princeton and Stewart.
7. I prepared this technical report relating to the Paradise property. I visited the Paradise property two times in October - November 2015 and one time in July-August 2016, where I performed the exploration activities discussed in this report.

Dated in Coquitlam, B.C. this 31 day of October, 2016.

## **Appendix 1. Statement of Costs**

<b>Date</b>	<b>Description</b>	<b>Unit Cost</b>	<b>Units</b>	<b>Cost</b>
November 1, 2015 - November 7, 2015	Field Personnel	\$550 / day / person	7 days person	\$3,850.00
November 1, 2015 - November 7, 2015	Food	\$80 / day	7 days	\$560.00
November 9, 2015	Laboratory Analysis	\$1140.00	1 batch, 26 samples	\$1140.00
October 30, 2016	Report Preparation	\$300.00	1 report	\$300.00
	<b>Total</b>			<b>\$5,850.00</b>

# Appendix 2. Sample Test Results.



**BUREAU VERITAS** MINERAL LABORATORIES  
Canada

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Bureau Veritas Commodities Canada Ltd.  
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PHONE (604) 253-3158

**Client:** HMI Communications  
943 Fresno Place  
Coquitlum BC V3J 6G5 CANADA

Submitted By: Anton Issinski  
Receiving Lab: Canada-Vancouver  
Received: November 09, 2015  
Report Date: November 21, 2015  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN15003010.1

### CLIENT JOB INFORMATION

Project: Issinski  
Shipment ID:  
P.O. Number  
Number of Samples: 26

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PUL85	26	Pulverize to 85% passing 200 mesh			VAN
FA550	26	50g Lead collection fire assay fusion - grav finish	50	Completed	VAN
MA370	26	4 Acid digestion ICP-ES analysis	0.5	Completed	VAN
MA371	7	4 Acid digestion ICP-ES analysis	0.1	Completed	VAN

### SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps

### ADDITIONAL COMMENTS

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

Invoice To: HMI Communications  
943 Fresno Place  
Coquitlum BC V3J 6G5  
CANADA



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. Bureau Veritas 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.







**BUREAU VERITAS** MINERAL LABORATORIES  
Canada

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**Client:** HMI Communications  
943 Fresno Place  
Coquitlum BC V3J 6G5 CANADA

**Project:** Issinski  
**Report Date:** November 21, 2015

**Page:** 2 of 2

**Part:** 2 of 2

**CERTIFICATE OF ANALYSIS**

**VAN15003010.1**

Method	Analyte	MA370	MA370	MA370	MA370	MA370	MA371
		Al	Na	K	W	S	Pb
Unit		%	%	%	%	%	%
MDL		0.01	0.01	0.01	0.01	0.05	0.02
1	Rock Reject	0.62	0.02	0.28	0.03	17.09	
2	Rock Reject	0.63	0.02	0.28	0.03	18.35	
3	Rock Reject	0.58	0.02	0.26	0.03	17.83	
4	Rock Reject	0.61	0.02	0.27	0.03	17.17	
5	Rock Reject	0.53	0.02	0.24	0.03	19.56	
6	Rock Reject	0.71	0.02	0.32	*	18.41	
7	Rock Reject	0.65	0.02	0.29	0.03	17.87	
8	Rock Reject	0.62	0.02	0.28	0.02	18.08	
9	Rock Reject	0.76	0.02	0.35	0.03	17.49	
10	Rock Reject	0.75	0.02	0.35	0.02	17.46	
11	Rock Reject	0.48	0.02	0.21	0.02	19.96	
12	Rock Reject	0.53	0.02	0.23	0.02	19.02	
13	Rock Reject	0.72	0.02	0.33	*	17.67	
14	Rock Reject	0.45	0.02	0.19	0.02	18.68	
15	Rock Reject	0.46	0.02	0.20	0.02	19.37	
16	Rock Reject	0.36	0.02	0.15	0.02	20.01	12.58
17	Rock Reject	0.41	0.03	0.17	0.02	19.25	10.65
18	Rock Reject	0.39	0.03	0.17	*	20.76	12.18
19	Rock Reject	0.41	0.02	0.18	0.02	20.48	11.92
20	Rock Reject	0.42	0.02	0.18	0.02	19.96	10.84
21	Rock Reject	0.46	0.02	0.20	0.01	19.07	9.81
22	Rock Reject	0.45	0.03	0.20	0.01	20.21	10.61
23	Rock Reject	0.72	0.02	0.32	<0.01	16.92	
24	Rock Reject	0.70	0.02	0.31	0.01	18.42	
25	Rock Reject	0.52	0.02	0.23	0.02	19.88	
26	Rock Reject	0.57	0.02	0.25	<0.01	18.91	

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.

## References

1. Minister of Mines B.C., Annual Reports, 1906, 1909, 1911-13, 1935, 1954, 1968.
2. British Columbia Department of Mines and Petroleum Resources, BULLETIN No. 58. GEOLOGY and MINERAL DEPOSITS of the STEWART AREA by EDWARD W. GROVE.