BRITISH COLUMBIA

Ministry of Energy & Mines
Energy & Minerals Division
Geological Survey Branch

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TITLE OF REPORT [type of survey(s)]: Geological Sampling Report

TOTAL COST: $9,800.67

AUTHOR(S): Samuel A. Hartmann, B.Sc. SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): N/A YEAR OF WORK: 2010

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S): 4788928 / August 31, 2010

PROPERTY NAME: Churchill-Hiller

CLAIM NAME(S) (on which work was done): 508840

COMMODITIES SOUGHT: Cu, Au

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092L 031, 0154

MINING DIVISION: Alberni NTS: 92L/02W BCGS: 092L 006

LATITUDE: 50 ° 04.2 ' " LONGITUDE: 126 ° 50.0 ' " (at centre of work)

OWNER(S)

1) Selkirk Metals Corp. 2)

MAILING ADDRESS
200-580 Hornby Street
Vancouver, BC V6C 3B6

OPERATOR(S) [who paid for the work]

1) Selkirk Metals Corp. 2)

MAILING ADDRESS
200-580 Hornby Street
Vancouver, BC V6C 3B6

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

A typical Vancouver Island assemblage of Upper Triassic Quatsino Limestone and Parsons Bay Formation straddling the NW-SE trending Coast Intrusive contact contains a lens shaped magnetite skarn and high grade quartz-sulphic veins containing gold and base metals.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 14457

(OVER)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	1 sq. km	508840	$ 4,831.25
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil			
Silt			
Rock	7 / 37 element ICP-MS	508840	$ 4,831.25
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying	Acme Analytical Labs	508840	$ 138.17
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	$9,800.67

GEOLOGICAL ASSESSMENT REPORT

on the

CHURCHILL PROPERTY

ZEBALLOS AREA

Tenure Number: 508840

Alberni Mining Division

NTS: 92L/02W

BCGS Map Sheets: 092L006

Latitude: 50°04.2′ N; Longitude: 126°50.0′W

UTM (NAD 83 Zone 09): 655 100; 5 548 700N

Owner / Operator: Selkirk Metals Corp. - 100%

Author: Samuel A. Hartmann B.Sc.

November 28, 2010

TABLE OF CONTENTS

SECTION A: REPORT

INTRODUCTION:

This assessment report documents the findings of Selkirk Metals Corp. general prospecting and geology work undertaken on the Churchill Property in July 2010. Selkirk Metals Corp. (the "Company") of Vancouver, BC owns the property which is located 10 km north of Zeballos on Vancouver Island and contains the Churchill magnetite showing along with two unnamed quartz sulfide veins.

The primary purpose of the 2010 field work was to assess the property in the field by locating showings, old workings and collect rock samples for assay where appropriate. The property was visited twice, on July 22 and 26, 2010.

PROPERTY:

The Property is 100% owned by Selkirk Metals Corp. The Company acquired its interest as a result of its acquisition in 2007 and subsequent amalgamation in 2009 with Doublestar Resources Ltd. who had in turn acquired the property from Falconbridge Ltd. in 2000.

The Property is located 10 km north of Zeballos and 60 km south-southeast of Port McNeill and consists one mineral tenure totalling 4 cells and covering a gross area of 82.96 ha (Figure CH-2010-2). Tenure 508840 was created on March 11, 2005 by the conversion of 13 2-post legacy claims (tenures 201331-201333, 201338-201339, 201388-201391 and 201700-201703) into one cell claim. The converted claim tenure was subsequently reduced to its current size.

The details of the mineral tenure that comprises the Property are set out in Section B of this report. The "good to" date shown is based on the Statement of Work filed on August 31, 2010 as Event #4788928 and assumes that the work contained in this report will be accepted for assessment purposes.

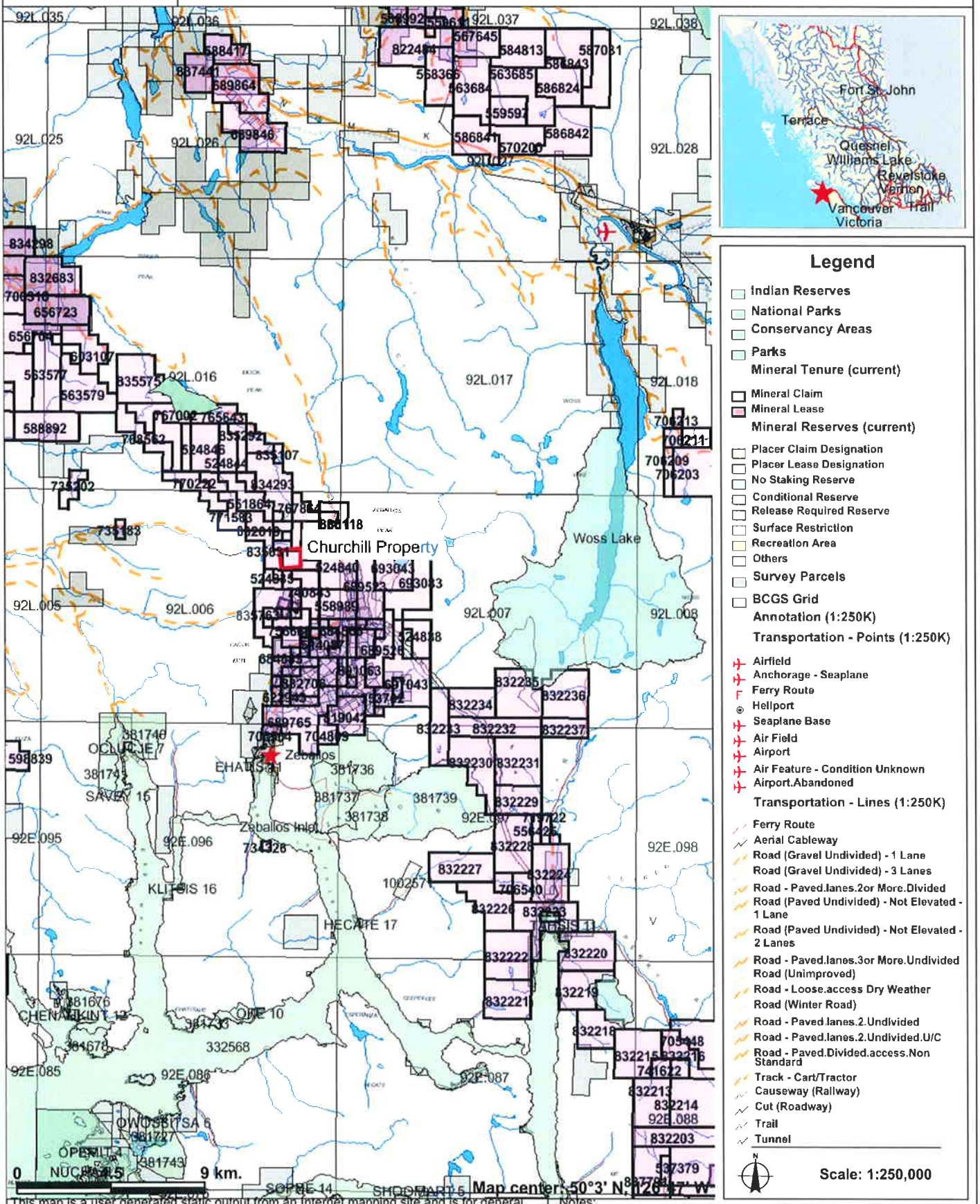
LOCATION AND ACCESS:

The Churchill Property covers an area of 82.96 ha and contains the upper drainage of Lime Creek; it is located 10 km north of Zeballos and 60 km south-southeast of Port McNeill. The Property is centered at approximately 50°04.2′ North Latitude and 126°50.0′ West Longitude (UTM NAD 83 Zone 09, coordinates 655 100 E, 5 548 700 N) on the north side of Zeballos River on Vancouver Island. The NTS map sheet reference is 92L02W and the BCGS map reference is 092L006. The town of Woss is 22 km to the northwest on Hwy19; Kaouk Mountain (1317 m) is approximately 5 km to the southwest of the centre of the Property.

Vehicle access to the property is not possible, although a recently constructed forestry road 10 km north of Zeballos, heads north off Zeballos Road and partially climbs the ridge between Lime Creek and Fault Creek to within 3 km of the centre of the property. The 2010 field crew attempted to drive to the property through a network of forestry roads following the Kaouk River basin to access the property from the northwest side and drove to within 2 km from where foot access may be possible, but since the vertical distance involved is over 1000 m there is little benefit to this approach.

For all practical purposes helicopter access will be necessary, although in the event of further development of the property an access road could be constructed from Zeballos Road.

Churchill-Hiller: General Location Map



Legend

Indian Reserves
National Parks
Conservancy Areas
Parks

Mineral Tenure (current)
- Mineral Claim
- Mineral Lease

Mineral Reserves (current)
- Placer Claim Designation
- Placer Lease Designation
- No Staking Reserve
- Conditional Reserve
- Release Required Reserve
- Surface Restriction
- Recreation Area
- Others

Survey Parcels
BCGS Grid
Annotation (1:250K)

Transportation - Points (1:250K)
- Airfield
- Anchorage - Seaplane
- Ferry Route
- Heliport
- Seaplane Base
- Air Field
- Airport
- Air Feature - Condition Unknown
- Airport.Abandoned

Transportation - Lines (1:250K)
- Ferry Route
- Aerial Cableway
- Road (Gravel Undivided) - 1 Lane
- Road (Gravel Undivided) - 3 Lanes
- Road - Paved.lanes.2or More.Divided
- Road (Paved Undivided) - Not Elevated - 1 Lane
- Road (Paved Undivided) - Not Elevated - 2 Lanes
- Road - Paved.lanes.3or More.Undivided
- Road (Unimproved)
- Road - Loose.access Dry Weather
- Road (Winter Road)
- Road - Paved.lanes.2.Undivided
- Road - Paved.lanes.2.Undivided.U/C
- Road - Paved.Divided.access.Non Standard
- Track - Cart/Tractor
- Causeway (Railway)
- Cut (Roadway)
- Trail
- Tunnel

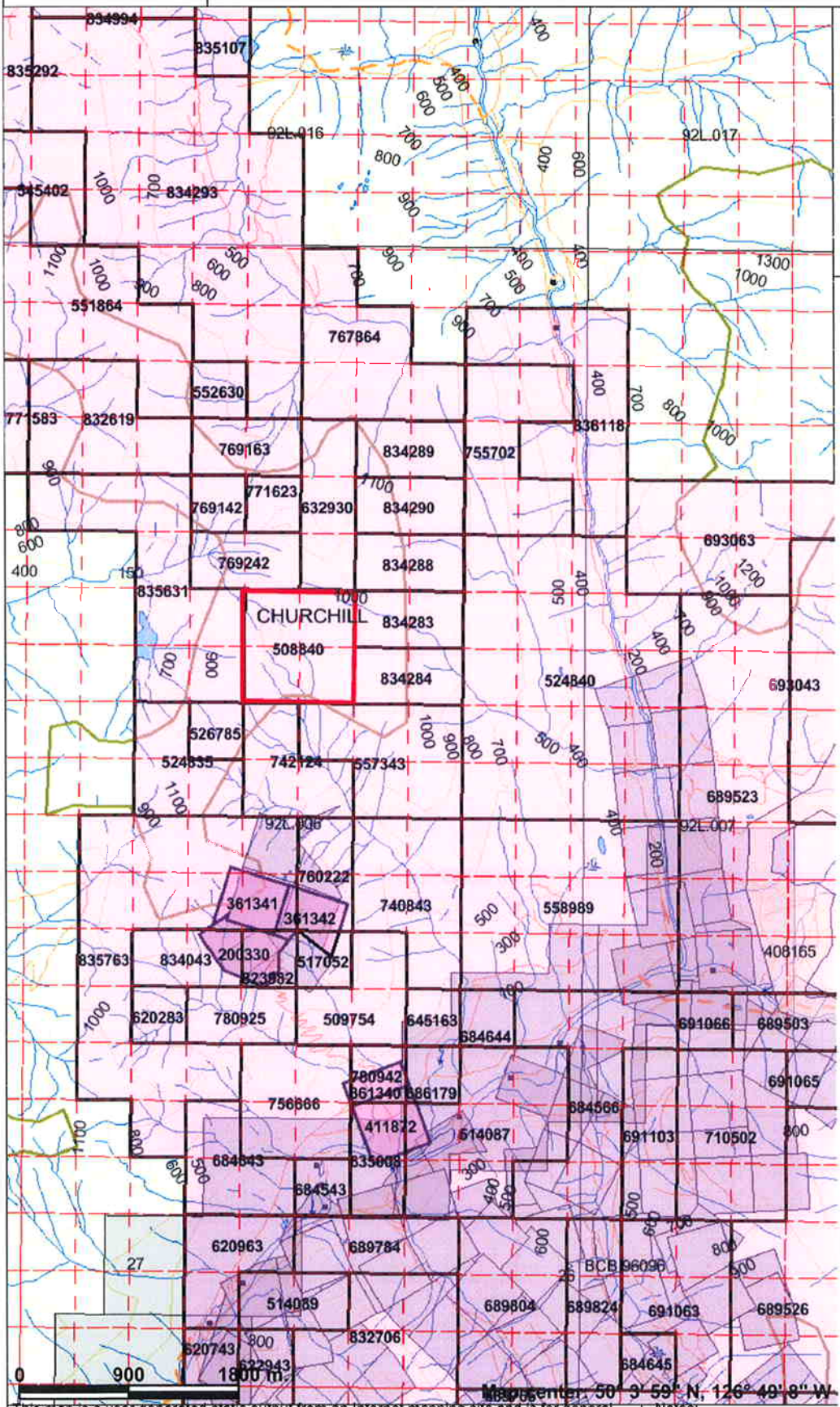
N

Scale: 1:250,000

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Notes:
Figure CH-2010-1
Nov 26 2010

Churchill-Hiller: Mineral Tenure



Legend

- Indian Reserves
- National Parks
- Conservancy Areas
- Parks

MTO Grid (MTO)

- Blocked by MEM
- Other

Mineral Tenure (current)

- Mineral Claim
- Mineral Lease

Mineral Reserves (current)

- Placer Claim Designation
- Placer Lease Designation
- No Staking Reserve
- Conditional Reserve
- Release Required Reserve
- Surface Restriction
- Recreation Area
- Others

Survey Parcels

BCGS Grid

Contours (1:250K)

- Contour - Index
- Contour - Intermediate
- Areaof Exclusion
- Areaof Indefinite Contours

Transportation - Points (TRIM)

- Helipad

Transportation - Lines (TRIM)

- Airfield
- Airport
- Airstrip
- Airport.Abandoned
- Ferry Route
- Road (Gravel Undivided) - 1 Lane
- Road (Gravel Undivided) - 2 Lanes
- Road (Gravel Undivided) - U/C - 1 Lane
- Road (Gravel Undivided) - U/C - 2 Lanes
- Road (Paved Divided) - Not Elevated - 1 Lane Each Way
- Road (Paved Divided) - Not Elevated - 2 Lanes Each Way
- Road (Paved Divided) - U/C - Not Elevated - 2 Lanes Each Way
- Road (Paved Undivided) Not Elevated - 3 Lanes
- Road (Paved Undivided) - Not Elevated - 1 Lane
- Road (Paved Undivided) - Not Elevated - 2 Lanes
- Road (Paved Undivided) - Not Elevated -

N

Scale: 1:50,000

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Notes:
Figure CH-2010-02
Nov 22 2010

CLIMATE, TOPOGRAPHY AND VEGETATION

The Churchill area has a climatic profile typical of its northwestern Vancouver Island location with an annual precipitation of over 400 cm falling as mostly rain. Snowfall covers the areas at higher elevations, typically from November to May and varies in depth with location on the mountain; snowfall in valleys such as the Zeballos River and Kaouk River valley is negligible. The property is most easily worked from late June to September

Elevations range between 820 m and 1230 m on generally mixed terrain. The northern and north eastern part of the property is of generally moderate topography, while the southern portion is extremely steep with rocky canyons and bluff, including the Churchill Cliffs. Approximately one third of the property is too steep to be traversed on foot.

A small lake and numerous smaller creeks on the property would provide enough water for diamond drilling; none of the creeks are fish bearing and there are no known environmental sensitivities on the property.

Although the tree line is at approximately 1200 m, growth at elevation is stunted and consists of yellow cedar, mountain hemlock and amabilis fir. Underbrush is only significant at lower elevations.

HISTORY:

Argonaut Development, a subsidiary of Utah Mining and Construction Ltd. performed work on the Churchill Property in 1951 and 1952 including the drilling of 20 diamond drill holes of which ten were drilled on the Churchill iron deposit. In 1962 the Utah Construction and Mining Ltd performed some geophysical work and geological mapping of the area. At the time ± 1,000,000 tons grading 30-40% iron with 3-4% sulphur was estimated (Saukko, 1965). Ground magnetic surveys carried out near the main magnetite deposit served as a basis for some of the drilling. Supplies were flown in, although an access trail up Lime Creek from Zeballos River was constructed. After the drill program Utah allowed the option on the property to lapse.

Falconbridge (Ventures Group) was interested in the property and acquired it from the owner, a resident of Zeballos.

In 1962 Falconbridge Nickel Mines drilled a total of 300 m on the Churchill Property, further defining the magnetite ore body (McDougall, 1982).

In 1984 Falconbridge conducted some work on the Churchill Property, although they focused on the A25 property. Geological work on the Churchill included packsack drilling the main magnetite showing and diamond drilling one of the two quartz gold veins (referred to as vein No. 1). Some geochemical sampling was undertaken with emphasis on where gold had been earlier reported. Drilling the No. 1 quartz gold vein yielded poor results; encouraging mineralizations were not encountered in any of the four shallow holes (Wilson, 1984).

In 1985 Falconbridge Ltd conducted a geophysical assessment of the area including the Churchill Property and flew a total of 340 line-km (Podolsky, 1986).

Since then no significant work has been performed on the property.

REGIONAL GEOLOGY:

After the Wrangell Terrane collided and amalgamated with the Alexander Terrane during the Late Carboniferous Period it was intruded to the east by granitoids of the Coast Plutonic Complex. The present crustal appearance of the Nimpkish Lake area and Northern Vancouver Island in general is a result of strongly northwest-trending structural geology. A sequence of 5-7 km thickness consisting of Karmutsen Volcanics, Quatsino Limestone and the Parson Bay Formation make up the Vancouver Group and underlie a large part of Vancouver Island, including the Zeballos area.

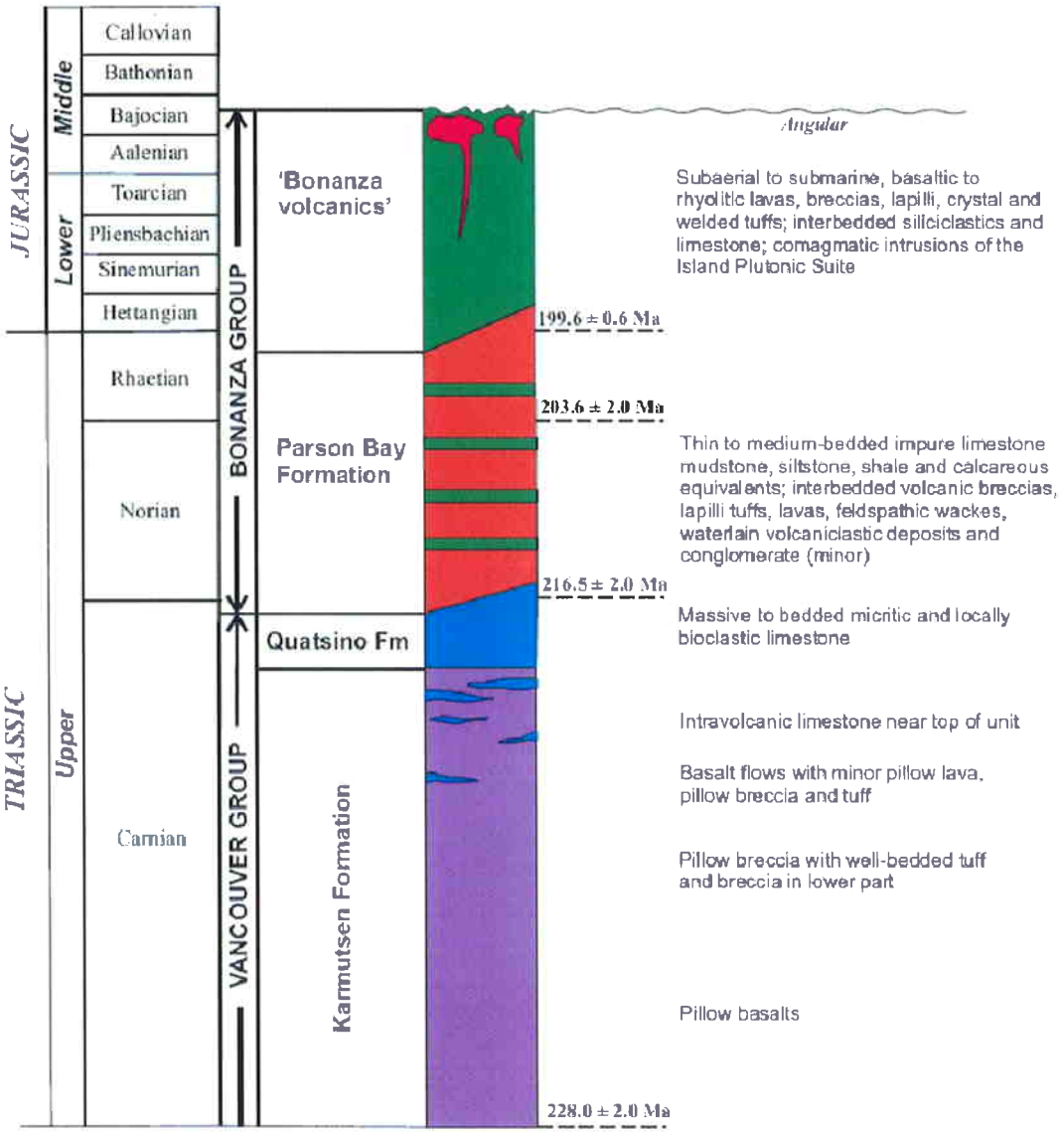


Figure 3. Revised stratigraphic nomenclature for Triassic–Jurassic lithostratigraphic units proposed in this study. The geological time scale is that of Gradstein *et al.* (2004).

Figure 2010-03: Stratigraphic section from Geological Fieldwork 2005, Paper 2006-1, Item 13, Preliminary Geology of the Nimpkish Map Area (NTS 092L/07), G.T. Nixon et al

Historically the Vancouver group characterizes the Upper Triassic as suggested by Muller in 1974; this had been generally accepted until Nixon *et al.* (2005) revised the stratigraphic nomenclature for Triassic-Jurassic lithostratigraphic units of the region. According to Nixon the Quatsino Limestone is now the youngest member of the Vancouver Group, while the Parson Bay and Bonanza Volcanics Formations belong to the Bonanza Group which is of Upper Triassic to Lower Jurassic age. For the updated stratigraphic section of these lithologies refer to Figure # 2010-3 above. The author will use the updated terminology in terms of Formation and Group placement within the geologic timescale for this report.

The Karmutsen Formation consists of dark gray to black aphanitic basalt flows that are often weakly magnetic. Different flow sequences are generally marked by sharp and unbrecciated contacts and consist of pillow basalts, pillow breccias with bedded tuff and intravolcanic limestone near the top of the unit, underlying the Quatsino Limestone. Where the Quatsino Formation is missing, blocky plagioclase phenocrysts reportedly mark the upper part of the Karmutsen Formation and may be useful as stratigraphic indicators. The Karmutsen basalt may show alteration to epidote-amphibole assemblages near Island Plutonic Suite intrusion contacts.

The youngest member of the Vancouver Group and structurally above the Karmutsen Formation is the Quatsino Limestone Formation and mark the transition to conditions found in shallow marine environments. The Quatsino Formation is well exposed in the Zeballos area and is significantly thick.

The Parson Bay Formation, now the oldest member of the Bonanza Group extends to the Lower Jurassic and is characterized by thinly bedded impure limestone, mudstone, shale and calcareous equivalents with interbedded basaltic breccias and tuffs with minor conglomerates *(*Nixon *et al.,* 2005*)*. In terms of contact, the Parson Bay Formation grades into the Quatsino Limestone over 0.5-5 m.

Bonanza Volcanics overlie the above described units and mark a change in deposition from marine sedimentary to volcanic; only their lower parts are preserved, making an estimate of their thickness difficult but has been approximated at over 2 km (Muller, 1974). Since the Bonanza formation and Parson Bay Formation both contain similar intercalated strata, differentiation may be challenging.

All the above units have been locally or regionally intruded by granitoids of the Island Plutonic Suite. In the Zeballos region these intrusions are gray pale, medium to coarse grained and consist of the rock types granodiorite, quartz diorite and quartz monzonite *(*Nixon *et al.,* 2005*)* although mafic phases have been reported also. Basaltic dykes related to the Coast Intrusives cut all stratigraphic units in the area. The contact between the Coast Intrusives and the Quatsino Limestone is shown on Figure 2010-4.

Mineral deposits in the Zeballos iron belt consist of either magnetite-bearing skarns or narrow, high-grade lode-gold vein deposit; the Churchill property contains both deposit types.

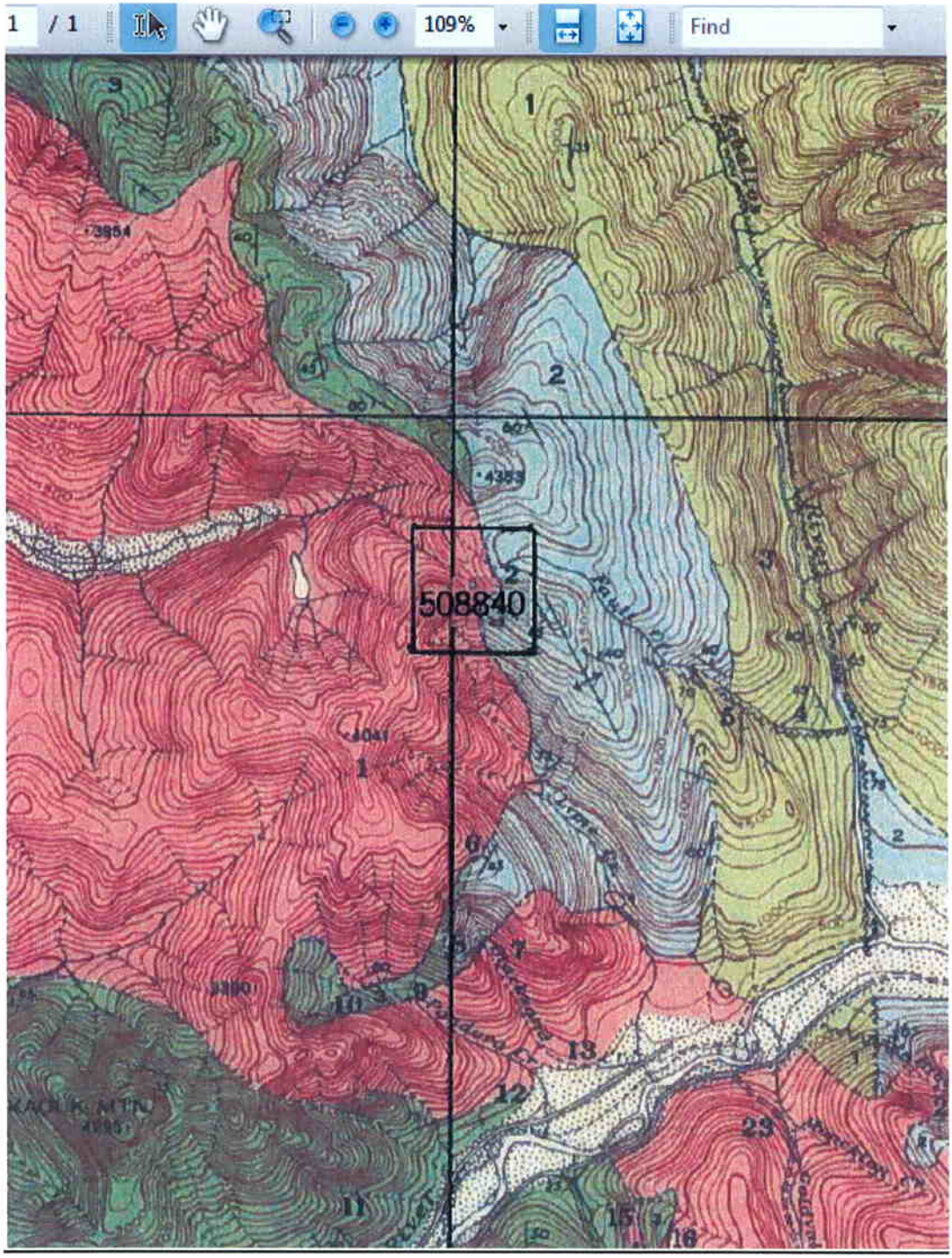


Figure 2010-4: Regional Geology, portion of GSC Map 1028A, Woss Lake, H.C. Gunning et al, 1954. (see appended Figure 2010-6 for full size map with legend and map symbols)

PROPERTY GEOLOGY:

The main magnetite showing on the property can be described as a contact metamorphic deposit where carbonates of the Quatsino Limestone formation have been altered or replaced by the hydrothermal fluid associated with the Coast Intrusives. Although limestone is the most common rock to be replaced, sedimentary Bonanza Group members can be replaced as well. On the Churchill Property the Quatsino Limestone is the most abundant rock type and host to all known mineral deposits.

Skarn minerals observed on the property include garnet, epidote and calc-silicates. The magnetite deposit contains some pyrite and chalcopyrite which explains the sulphur and the copper content of the magnetite. Some gold has been recovered from core within the magnetite body and may be related to the quartz-sulphide gold veins nearby.

The other mineral deposit type is in form of narrow high grade quartz-sulphide gold veins and occurs within limestone. Gold mineralization is either related to the intrusive, or occurred at a later time (Kermeen, 1987)

Two quartz-sulphide gold veins are reported on the property, they are entirely in limestone on the southwest flank on an anticlinal structure between Lime Creek and Fault Creek. Some accessory minerals reportedly include galena, pyrite and arsenopyrite.

2010 GEOLOGICAL PROGRAM:

The 2010 program aimed to evaluate the property in the field for the first time since Selkirk assumed control of the property in 2007. Field work was carried out over a period of two days on July 22 and July 26, 2010. The field personal consisted of the author and one assistant and were quartered in Ahousaht BC from where they flew by helicopter to the property.

A total of seven rock samples were taken from the Property;

All samples were analyzed by ACME Analytical Laboratories from Vancouver BC using the 1DX2 analytical package; samples containing Ag, Cu, Mo, Pb and Zn above the upper limit for 1DX2 analysis were re-analyzed using the 7AR method. The analytical report and statement of analytical procedures is appended in Section D.

The field crew traversed the property from north to south and from west to east. Rock samples were taken with a hammer where appropriate.

Sample 781162 was removed from the main magnetite showing and contained 25.59% Fe along with elevated amounts of copper (712ppm) and zinc (11ppm). The sulphur content in the sample was 2.93% which corresponds with what Saukko found in 1965. An open cut where an in situ sample was removed is still evident; the values of 30-40% Fe assayed in 1965 may be more accurate due to the larger sample size.

East of the small unnamed lake near the center of the property evidence of an old drilling camp included fuel barrels, abundant plastic pipes and hose and the remnants of a cabin. This was most likely a camp established by Falconbridge in 1962. Some stations and lines from a geophysical program are also still evident.

A small pack sack diamond drill hole was located at (UTM NAD 83 Zone 09) coordinates 655 236E, 5 548 819N with a dip of 40° at a magnetic azimuth of 300°. The discarded core consisted of pure crystalline limestone without mineralization. The hole was not collared and no further drill holes were located.

The high grade quartz-sulphide gold veins reported on the ridge between Lime Creek and Fault Creek were not located; significant amounts of snow on the west side of the property covered the ground. In the future fieldwork should be done later in the season. Since the quartz veins were trenched and partially uncovered over 50 years ago, they may be grown over by now and require re-trenching.

Sample 781164 was collected by the field assistant at (UTM NAD 83 Zone 09) 654 474E, 5 548 810N and consisted of a light and significantly weathered vein material. It assayed at 236.9ppm copper which is anomalous considering the distance of several hundred meters from the magnetite deposit. The writer interprets this as a result of hydrothermal fluids originating from the Intrusives.

None of the rock samples taken the property were anomalous for gold.

CONCLUSIONS:

The magnetite-bearing skarn contains an indicated 726,000 tons grading 35-40% iron that is of little interest at this point. Evaluation of the property in the field for the first time since the 2009 acquisition identified the iron deposits and old workings. Future field work should be conducted in August and focus on locating the quartz-sulphide gold veins.

RECOMMENDATIONS:

Future field work should focus on locating the two reported quartz-sulphide veins on the ridge between Lime and Fault Creek which are the primary interest on the property at this time. Both should be exposed by trenching, sampled along strike and mapped in detail. A soil grid of the area would help delineate the veins. Once their extent and reported high grade gold content has been confirmed, the veins should be diamond drilled to determine continuity at depth using a portable diamond drill.

Respectfully submitted,

Samuel A. Hartmann, B.Sc.

REFERENCES:

Kermee, J. S., **1987**; A Report on The Hiller-Churchill Group. For Footwall Explorations Ltd. Report No. C87-5

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

McDougall, J. J., **1964**; Report on Churchill Magnetite Deposit, Zeballos, BC

McDougall, J. J., **1961**; Preliminary Report on Hiller Iron Prospects, Zeballos Area

McDougall, J. J., **1982**; Hiller-Churchill Deposits Update to 1982

Nixon, G. T., Kelman M. C., Stevenson, D., Stokes, L. A. and Johnston K. A. **(2005)**: Preliminary Geology of the Nimpkish Area (NTS 092L/07), Northern Vancouver Island, British Columbia; *in* Geological Fieldwork 2005, *BC Ministry of Energy, Mines and Petroleum Resources,* Paper 2006-1

Podolsky, G. and Chandler, T. **1986;** Geophysical Assessment Report on the ZEB 1-12 Mineral Claims. British Columbia Assessment Report No 14457

Saukko, R. N., **1965**; Report on Hiller-Churchill Iron Deposits.

Wilson, J., **1984**; Hiller-Churchill Project, for Falconbridge Nickel Mines Ltd

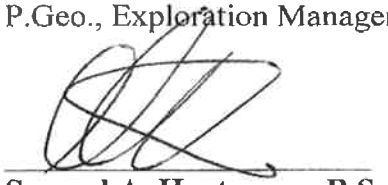
STATEMENT OF QUALIFICATIONS:

For: Samuel A. Hartmann of 2395 Scenic Road, Kelowna, B.C. V1V 2C8

I graduated from the University of British Columbia with a Bachelor of Science Degree in Earth and Environmental Sciences (2010);

I have been practising my profession as a geologist in mineral exploration and mining continuously since my graduation;

The observations, conclusions and recommendations contained in the report are based on data generated from field work I performed on July 22 and 26, 2010 while under the supervision of Jim Miller-Tait, P.Geo., Exploration Manager of Selkirk Metals Corp.



Samuel A. Hartmann, B.Sc.

SECTION B: MINERAL TENURE

Tenure Number: 508840
No. of Cells: 4
Area (ha): 82.96
Annual Work Requirement: $663.65
Record Date: March 11, 2005
Good to Date: September 1, 2020 (Based of work filed on August 31, 2010 as Event #4788928)
Owner: Selkirk Metals Corp.
Client Number: 231261
Mining Division: Alberni
Location: 11 km N of Zeballos, BC on the west side of Vancouver Island.
NTS: 092L/02W
BCGS: 092L 006
Geographic Coordinates: 50° 04.2′ N, 126° 50.0′ W
UTM Coordinates: 5 548 700 N, 655 100 E
UTM Datum: NAD 83, Zone 9

SECTION C: EXPENDITURES (Churchill 2010 Geological Assessment Program)

Item	Work Performed	Quantities / Rates	Amount
Geological Survey:			
Personnel:			
Jim Miller-Tait, P.Geo Exploration Manager	Project supervision: Period: Jul 22-26, 2010	1 day @ $550.00	550.00
Sam Hartmann Geologist	Mapping and sampling Period: Jul 22-26, 2010	2 days @ $230.00	460.00
George P. Frank Field Assistant	Mapping and sampling Period: Jul 22-26, 2010	2 days @$250.00	500.00
Subtotal			1510.00
Accommodation & Meals:			
	Room and board for S. Hartmann and G.P.Frank Period: Jul 22-26, 2010	2 persons, 2 days @ $100.00	400.00
Subtotal			400.00
Transportation:			
Pacific Rim Helicopters: Bell 206LR	Air transport: Tofino to property to drop off crew and return later to pickup crew (2 days) Jul 22 and 26, 2010	6.3 hours @ $1084.52	6,832.50
Subtotal			
Field Supplies:	Sample supplies and tools		-
Analytical Services:			
Acme Analytical Laboratories Ltd. Vancouver, BC	Rock samples: 7 Code 1DX: 37 elements (ICP-MS)	7 samples @ $19.74	138.17
Subtotal			
Map Preparation:			
Mike Davies, Moonraker Multimedia	Base map preparation, data plotting,	4 @ $70.00	280.00
Printing	Map printing		20.00
Subtotal			300.00
Report Preparation:			
Sam Hartmann, Geologist	Data review, interpretation and map and report preparation	2 days @ $230.00	460.00
Erik Andersen, Land Administrator	Data and report compilation and editing	4 hours @ $40.00	160.00
Subtotal			620.00
Total Survey			**$9800.67**

SECTION D: ANALYICAL REPORTS

1. Analyses carried out by Acme Analytical Laboratories Ltd. of Vancouver, B.C.

File Number	Date of Certificate	No. of Samples	Sample Type	Analytical Procedure
VAN10003660.1	Aug. 23 2010	7	Rock	1DX2 / 7AR
Total		**7**		

1. Statement of Analytical Procedures: 2 data sheets
   - Group 1D & 1DX; Multi-Element Assay by ICP-MS; Aqua Regia Digestion
   - Group 7AR; Multi-Element (36) Assay by ICP-MS; Aqua Regia Digestion

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Selkirk Metals Corp.**
200 - 580 Hornby Street
Vancouver BC V6C 3B6 Canada

Submitted By: Email Distribution List
Receiving Lab: Canada-Vancouver
Received: August 04, 2010
Report Date: August 23, 2010
Page: 1 of 2

CERTIFICATE OF ANALYSIS VAN10003660.1

CLIENT JOB INFORMATION

Project: Churchill
Shipment ID: 2010-EX-02
P.O. Number
Number of Samples: 7

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	7	Crush, split and pulverize 250 g rock to 200 mesh			VAN
1DX2	7	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN

SAMPLE DISPOSAL

STOR-PLP	Store After 90 days Invoice for Storage
DISP-RJT	Dispose of Reject After 90 days

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

ADDITIONAL COMMENTS

Invoice To: Selkirk Metals Corp.
200 - 580 Hornby Street
Vancouver BC V6C 3B6
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
RAYMOND CHAN
CHIEF ASSAYER

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.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Selkirk Metals Corp.**
200 - 580 Hornby Street
Vancouver BC V6C 3B6 Canada

Project: Churchill
Report Date: August 23, 2010

CERTIFICATE OF ANALYSIS VAN10003660.1

Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
Unit	kg	ppm	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	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
781162 Rock	1.99	0.1	712.0	0.3	11	<0.1	8.2	14.9	179	25.29	1.0	0.3	2.8	<0.1	1	<0.1	<0.1	<0.1	38	0.14
781163 Rock	0.66	1.9	63.0	1.0	21	<0.1	18.2	26.3	260	4.00	6.4	0.5	0.8	0.3	30	<0.1	0.4	0.2	66	0.82
781164 Rock	0.76	0.4	236.9	1.1	40	0.4	79.0	19.5	329	3.14	18.1	<0.1	4.3	<0.1	128	0.1	<0.1	0.3	46	2.38
781165 Rock	0.27	<0.1	8.4	1.0	5	<0.1	0.7	4.0	115	1.23	2.4	0.3	<0.5	1.2	164	<0.1	<0.1	<0.1	36	1.55
781166 Rock	0.27	0.2	63.5	1.5	4	<0.1	196.5	112.4	122	1.64	11.6	0.2	1.5	1.2	67	<0.1	<0.1	<0.1	47	3.39
781167 Rock	0.25	<0.1	10.0	1.0	12	<0.1	1.1	0.8	43	0.47	1.6	0.2	1.2	4.0	6	<0.1	<0.1	<0.1	3	0.04
781168 Rock	1.04	0.2	3.7	0.6	6	<0.1	18.6	2.1	281	1.70	1.5	0.2	<0.5	1.0	220	<0.1	0.3	<0.1	12	3.33

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Phone (604) 253-3158 Fax (604) 253-1716
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200 - 580 Hornby Street
Vancouver BC V6C 3B6 Canada

Project: Churchill
Report Date: August 23, 2010

CERTIFICATE OF ANALYSIS VAN10003660.1

Method		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
Analyte		P	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		0.001	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
781162	Rock	0.010	<1	20	0.13	15	0.029	<1	0.19	0.007	<0.01	<0.1	0.01	0.9	<0.1	2.93	5	2.5	0.3
781163	Rock	0.107	4	22	0.95	8	0.195	1	1.47	0.137	0.05	<0.1	<0.01	2.7	<0.1	2.00	4	0.8	0.3
781164	Rock	0.014	<1	92	1.31	24	0.051	3	4.85	0.407	0.08	<0.1	<0.01	4.3	<0.1	0.23	8	0.6	<0.2
781165	Rock	0.081	7	6	0.10	8	0.222	2	1.07	0.006	0.05	0.4	<0.01	3.6	<0.1	<0.05	9	<0.5	<0.2
781166	Rock	0.008	1	8	0.36	8	0.072	6	3.19	0.092	0.03	<0.1	<0.01	0.8	<0.1	0.09	6	0.7	<0.2
781167	Rock	0.001	12	7	0.05	25	0.008	1	0.23	0.050	0.07	<0.1	<0.01	1.0	<0.1	<0.05	2	<0.5	<0.2
781168	Rock	0.185	2	2	0.55	<1	0.133	3	1.75	<0.001	<0.01	<0.1	<0.01	1.8	<0.1	<0.05	4	<0.5	<0.2

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200 - 580 Hornby Street
Vancouver BC V6C 3B6 Canada

Project: Churchill
Report Date: August 23, 2010

QUALITY CONTROL REPORT VAN10003660.1

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	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	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
Reference Materials																					
STD DS7	Standard		20.3	106.1	62.0	377	0.9	53.6	8.9	621	2.38	53.0	4.6	61.3	4.5	75	6.5	5.7	4.4	80	0.99
STD DS7	Standard		20.4	103.7	60.8	375	1.1	51.1	8.7	626	2.28	50.2	4.5	69.7	4.5	78	6.4	5.6	4.1	77	0.99
STD DS7 Expected			20.5	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	4.6	4.5	84	0.93
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
Prep Wash																					
G1	Prep Blank	<0.01	<0.1	3.5	2.9	50	<0.1	3.6	4.6	571	2.05	0.9	1.5	2.0	4.8	60	<0.1	<0.1	<0.1	37	0.60

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QUALITY CONTROL REPORT VAN10003660.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	P	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	0.001	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
Reference Materials																			
STD DS7	Standard	0.081	13	208	1.03	385	0.123	37	1.08	0.097	0.49	3.5	0.20	2.6	4.0	0.20	5	3.2	1.4
STD DS7	Standard	0.075	14	202	1.04	382	0.125	39	1.08	0.100	0.46	3.5	0.21	2.7	3.8	0.19	5	3.2	1.6
STD DS7 Expected		0.08	12	179	1.05	410	0.124	39	0.959	0.089	0.44	3.4	0.2	2.5	4.2	0.19	5	3.5	1.08
BLK	Blank	<0.001	<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	0.089	10	8	0.62	210	0.139	2	1.06	0.074	0.54	<0.1	<0.01	2.3	0.3	<0.05	5	<0.5	<0.2

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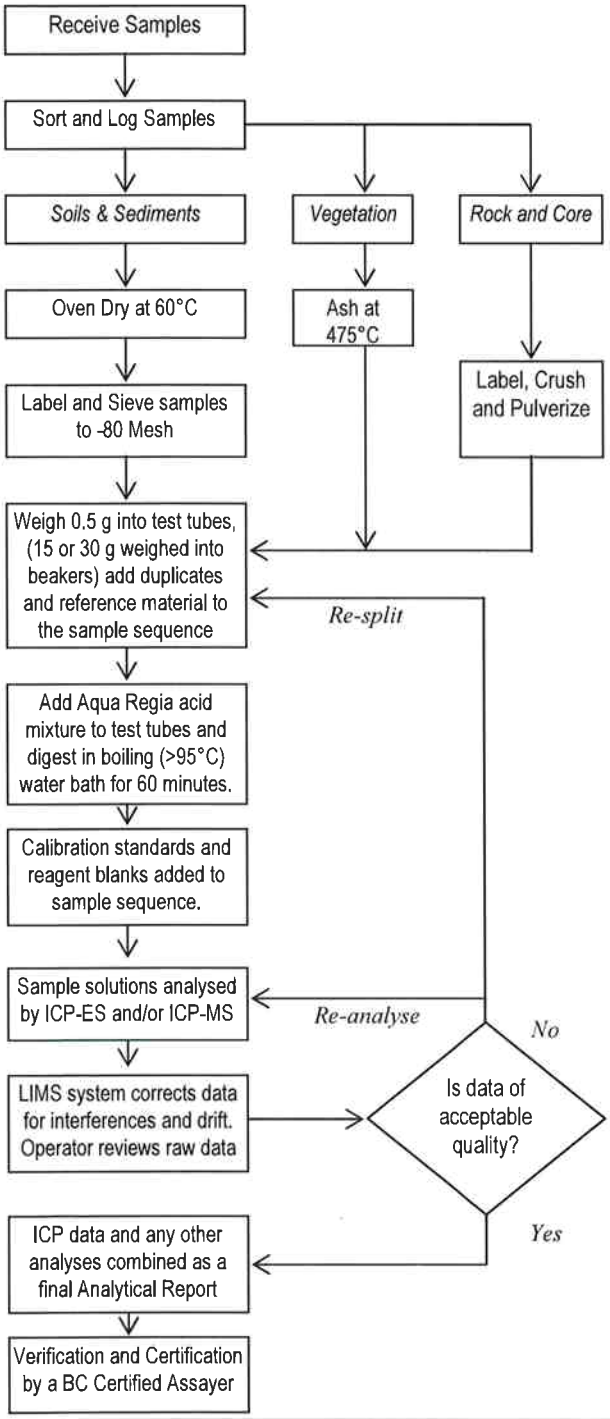
CARECOMMITMENTPERFORMANCE

ISO 9001:2008
FM 63007

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1D & 1DX – ICP & ICP-MS ANALYSIS – AQUA REGIA

Analytical Process



Comments

Sample Preparation

All samples are dried at 60°C. Soil and sediment are sieved to -80 mesh (-180 μm). Moss-mats are disaggregated then sieved to yield -80 mesh sediment. Vegetation is pulverized or ashed (475°C). Rock and drill core is jaw crushed to 80% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 85% passing 200 mesh (75 μm) in a mild-steel ring-and-puck mill. Pulp splits of 0.5 g are weighed into test tubes, 15 and 30 g splits are weighed into beakers.

Sample Digestion

A modified Aqua Regia solution of equal parts concentrated ACS grade HCl and HNO_3 and de-mineralised H_2O is added to each sample to leach for one hour in a heating block or hot water bath (>95°C). After cooling the solution is made up to final volume with 5% HCl. Sample weight to solution volume is 1 g per 20 mL.

Sample Analysis

Group 1D: solutions aspirated into a Spectro Ciros Vision or Varian 735 emission spectrometer are analysed for 30 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Group 1DX: solutions aspirated into a Perkin Elmer Elan 6000/9000 ICP mass spectrometer are analysed for 36 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, *Ga*, *Hg*, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, *S*, Sb, *Sc*, *Se*, *Tl*, Sr, Th, Ti, U, V, W, Zn.

Quality Control and Data Verification

QA/QC protocol incorporates a sample-prep blank (G-1) as the first sample in the job which is carried through all stages of preparation to analysis. An Analytical Batch comprises 36 client samples and incorporates a pulp duplicate to monitor analytical precision, a -10 mesh rejects duplicate to monitor sub-sampling variation (drill core only), a reagent blank to measure background and aliquots of in-house Reference Material like STD DS7. Data undergoes a final verification by a British Columbia Certified Assayer who then validates results before it is released to the client.

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Group 1D, 1DX ICP-ES & ICP-MS DETECTION LIMITS

	Group 1D Detection	Group 1DX Detection	Upper Limit
Ag	0.3 ppm	0.1 ppm	100 ppm
Al*	0.01 %	0.01 %	10 %
As	2 ppm	0.5 ppm	10000 ppm
Au	2 ppm	0.5 ppb	100 ppm
B*^	20 ppm	20 ppm	2000 ppm
Ba*	1 ppm	1 ppm	10000 ppm
Bi	3 ppm	0.1 ppm	2000 ppm
Ca*	0.01 %	0.01 %	40 %
Cd	0.5 ppm	0.1 ppm	2000 ppm
Co	1 ppm	0.1 ppm	2000 ppm
Cr*	1 ppm	1 ppm	10000 ppm
Cu	1 ppm	0.1 ppm	10000 ppm
Fe*	0.01 %	0.01 %	40 %
Ga*	-	1 ppm	1000 ppm
Hg	1 ppm	0.01 ppm	100 ppm
K*	0.01 %	0.01 %	10 %
La*	1 ppm	1 ppm	10000 ppm
Mg*	0.01 %	0.01 %	30 %
Mn*	2 ppm	1 ppm	10000 ppm
Mo	1 ppm	0.1 ppm	2000 ppm
Na*	0.01 %	0.001 %	10 %
Ni	1 ppm	0.1 ppm	10000 ppm
P*	0.001 %	0.001 %	5 %
Pb	3 ppm	0.1 ppm	10000 ppm
S	-	0.05 %	10 %
Sb	3 ppm	0.1 ppm	2000 ppm
Sc	-	0.1 ppm	100 ppm
Se	-	0.5 ppm	100 ppm
Sr*	1 ppm	1 ppm	10000 ppm
Th*	2 ppm	0.1 ppm	2000 ppm
Ti*	0.01 %	0.001 %	10 %
Tl	5 ppm	0.1 ppm	1000 ppm
U*	8 ppm	0.1 ppm	2000 ppm
V*	1 ppm	2 ppm	10000 ppm
W*	2 ppm	0.1 ppm	100 ppm
Zn	1 ppm	1 ppm	10000 ppm

* Solubility of some elements will be limited by mineral species present.
^Detection limit = 1 ppm for 15g / 30g analysis.

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SECTION E: SAMPLING DATA

SAMPLE DESCRIPTIONS

Sampling Date: July 22 and July 26, 2010
Coordinate Datum: UTM NAD 83, Zone 9

Sample Number	ACME Tag No.	Date	Easting	Northing	Comments
CH-10-01	781162	Jul-26	655159	5548891	Magnetite; main showing, east of lake
CH-10-02	781163	Jul-26	655177	5549256	Magnetite showing, south end
CH-10-03	781164	Jul-26	654474	5548810	Light, weathered vein material NW ridge
CH-10-04	781165	Jul-26	654548	5548845	Light, weathered vein material NW ridge
CH-10-05	781166	Jul-26	654726	5548745	Collected by George, calcite vein
CH-10-06	781167	Jul-26	654473	5548857	Collected by George, light vein material
CH-10-07	781168	Jul-26	654945	5548936	Skarnified green limestone float in NW gully

SECTION F: ILLUSTRATIONS

Plan Number	Title	Scale
CH-2010-1 (after p. 3)	General Location Map	1:250,000
CH-2010-2 (after p. 3)	Mineral Tenures	1:50,000
CH-2010-3 (p. 5)	Stratigraphic Section	No scale
CH-2010-4 (p. 7)	Regional Geology (portion)	1:63,360
CH-2010-5 (in pocket)	2010 Geological Sampling: Sample Locations	1:2,500
CH-2010-6 (in pocket)	Regional Geology: GCS Map 1028A, Woss Lake	1:63,360

654,250 mE
654,500 mE
654,750 mE
655,000 mE
655,250 mE
655,500 mE
655,750 mE
656,000 mE

5,549,250 mN
5,549,000 mN
5,548,750 mN
5,548,500 mN
5,548,250 mN

CH-10-02▲ 63 / 4 / 0.8 / 6.4
781163

CH-10-07▲ 3.7 / 1.7 / <0.5 / 1.5
781168

CH-10-01▲ 712 / 25.29 / 2.8 / 1
781162

CH-10-06▲ 10 / 0.47 / 1.2 / 1.6
781167

CH-10-04▲ 8.4 / 1.23 / <0.5 / 2.4
781165

CH-10-03▲ 236.9 / 3.14 / 4.3 / 18.1
781164

CH-10-05▲ 63.5 / 1.64 / 1.5 / 11.6
781166

★ 092L031
Churchill Magnetite

★ 092L154
Churchill

508840

Fault Creek

3400 3500 3600 3700 3800 3900 4000

3600 3900

4000 3900 3800

3300 3200 3100 3000 2900 2800

0 50 100 200
metres

LEGEND

★ Minfile showing

▲ Chip sample location

sample number ▲ Cu (ppm) / Fe (%) / Au (ppb) / As (ppm) values
lab sample tag

Note: Contour elevations in feet

SELKIRK METALS CORP.

CHURCHILL-HILLER PROPERTY

Alberni Mining Division

2010 Geological Sampling

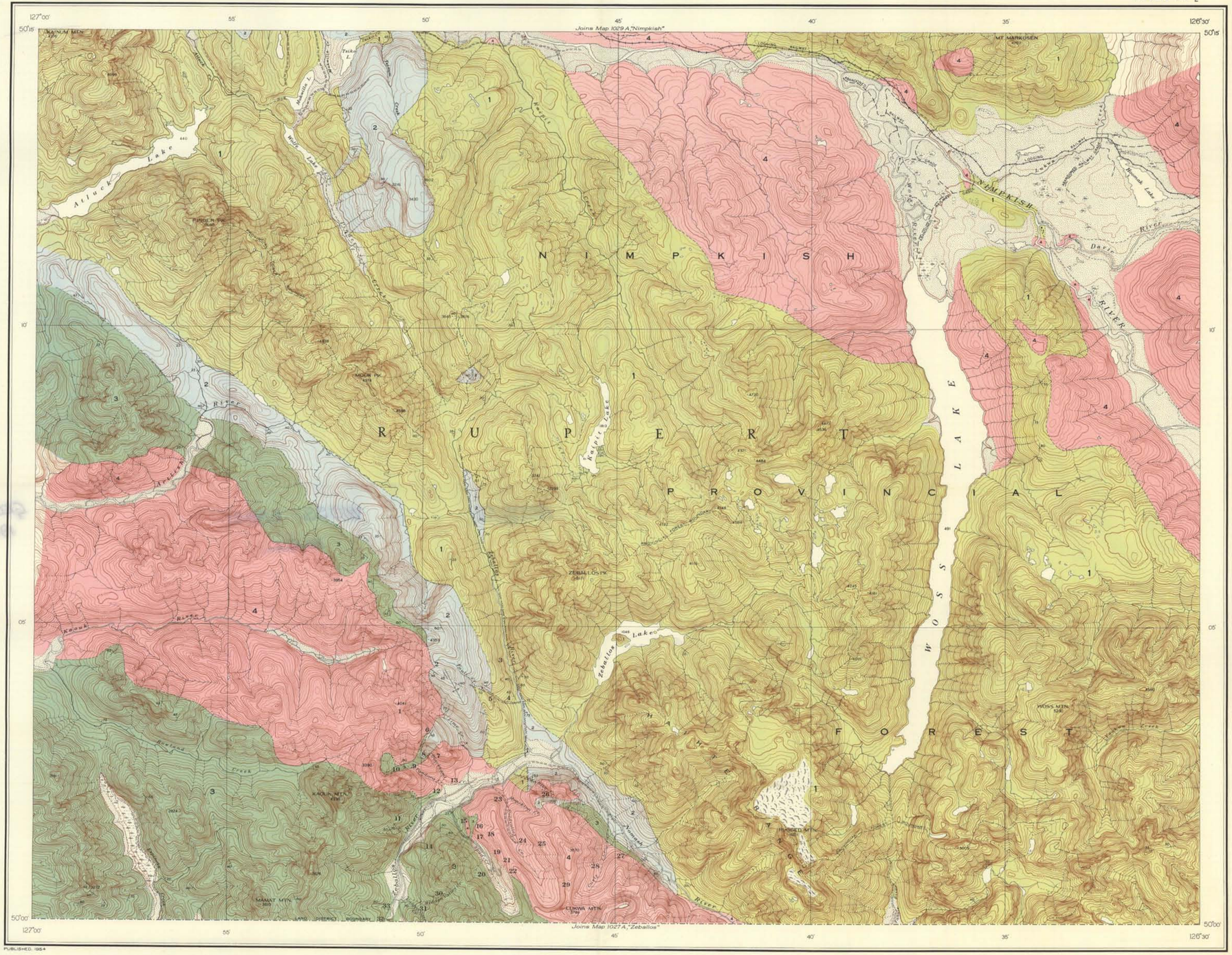
Date	Nov 25, 2010	Scale	1:2500	Figure CH-2010-5
Projection	UTM Zone 9 - NAD83	State/Province	BC	
Author	EA	File	Chrch_Base	

CANADA
DEPARTMENT
OF
MINES AND TECHNICAL SURVEYS

GEOLOGICAL SURVEY OF CANADA

GEOLOGICAL SERIES

SHEET 92 $\frac{1}{2}$



LEGEND

JURASSIC AND/OR CRETACEOUS
UPPER JURASSIC AND/OR LOWER CRETACEOUS
COAST INTRUSIONS

4 — *Quartz monzonite, granodiorite, quartz diorite, diorite, gabbro; minor aplite and micropegmatite*

TRIASSIC AND (?) JURASSIC
UPPER TRIASSIC AND (?) LATER
BONANZA GROUP

3 — *Andesitic lavas, agglomerates, tuffs, and breccias; basaltic, trachytic, and dacitic lavas; minor intercalated limestone; 400 to 500 feet composed of thin-bedded argillite, tuffaceous argillite, impure limestone, and quartzite at base; numerous thin, intercalated andesitic lavas and associated pyroclastic rocks*

TRIASSIC
UPPER TRIASSIC

2 — *QUATSINO FORMATION: crystalline limestone; minor volcanic rocks*

UPPER TRIASSIC AND (?) EARLIER
KARMUTSEN GROUP

1 — *Basaltic and andesitic lavas, agglomerates, breccias, and tuffs; minor intercalated limestone*

MESOZOIC

Heavily drift-covered area
Bedding (horizontal, inclined, vertical)
Fault (arrow indicates direction of dip)
Shear zone
Glacial striae
Anticlinal axis
Mining property 2

INDEX TO MINING PROPERTIES

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5 Gold Spring (gold)
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27 Monitor (gold)
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3 North Fork Exploration (gold)
9 Omega (gold)
13 Pandora (gold)
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33 Tagore (gold)
14 Van Isle (gold)
17 White Star (gold)
19 Zeballos (Pacific) (gold)

Geology mainly by H.C. Gunning, 1931, 1932
Descriptive notes by J.W. Hoadley, 1952

Cartography by the Geological Cartography Division, 1953

Road
Logging road
Trail
Building
Logging railway
Abandoned railway grade
Provincial forest boundary
Glacier
Intermittent stream
Marsh
Shoal, sand or gravel
Contours (interval 100 feet)
Height in feet above mean sea-level 2924

Base-map compiled and drawn by the Surveys and Mapping Branch, from air photographs taken by the Royal Canadian Air Force, and from surveys by the Department of Lands and Forests, British Columbia

Air photographs covering this map-area may be obtained through the National Air Photographic Library, Topographical Survey, Ottawa, Ontario

Approximate magnetic declination, 24° 15' East

PUBLISHED, 1954

MAP 1028A

WOSS LAKE

VANCOUVER ISLAND
BRITISH COLUMBIA

Scale: One Inch to One Mile = $\frac{1}{63,360}$

Miles

DESCRIPTIVE NOTES

The map-area occupies part of the rugged, mountainous region of north-central Vancouver Island. Except in the small area of the Zeballos mining camp, there are no roads, and existing trails are much overgrown. The rugged, highly mountainous nature of the terrain, combined with the dense forest cover, make travel below timber-line, at an elevation of about 4,000 feet, very arduous.

The Karmutsen group (1) consists of a great thickness of basaltic and andesitic lava flows, agglomerates, breccias, and tuffs, with minor intercalated sedimentary strata. With the exception of the tuffs, the volcanic rocks are generally massive and dark green or black, and are characteristically amygdaloidal. In some places pillowed lavas are common. Much of the group has undergone regional metamorphism: where the rocks are well removed from intrusive bodies, the principal changes have been due to induration, some recrystallization, chloritization, and epidotization, but in the immediate vicinity of intrusions the processes of dynamic and thermal metamorphism have resulted in complete obliteration of most of the original textures.

The Karmutsen group is conformably overlain by the Quatsino formation (2), which consists of crystalline limestone intercalated with thin volcanic flows. Its apparent stratigraphic thickness, where exposed in the relatively undisturbed area along Artlish River, varies from about 2,000 to 5,000 feet. Its true thickness may, however, be considerably less, although no definite evidence of overthickening by faulting or folding was noted in that particular region. The limestone is fine to coarsely crystalline, and varies in colour from pure white to black. Towards the base, it tends to be exceedingly fine grained, and grey and brownish or buff types are characteristic. Midway of the formation the predominant colours are white and grey, but towards the top they change to dark grey or black, due to the presence of more or less carbonaceous matter. In places where the limestone has been cut by Coast intrusions it has been much altered, and in part has been converted to a variety of contact metamorphic silicate minerals. Some of these metamorphic zones contain varying amounts of magnetite and of copper, lead, and zinc sulphides. Elsewhere little alteration was noted beyond simple recrystallization.

The Quatsino formation is conformably overlain by rocks of the Bonanza group (3). The lower 400 to 500 feet of the group consists of thin-bedded argillite, tuffaceous argillite, impure limestone, quartzite, and numerous, thin, intercalated andesitic lava flows. Above this lower, predominantly sedimentary part, the rocks of the group consist of a great thickness of andesitic lavas, agglomerates, tuffs, and breccias, with lesser amounts of basaltic, trachytic, and dacitic lavas and minor intercalated lenses of limestone. The top of the group has nowhere been recognized either in this or nearby map-areas. In general, the rocks are much altered by induration and regional metamorphism so that original textures are largely obliterated.

Primary structure within this conformable series of volcanic and sedimentary rocks (1-3), which in earlier accounts have been generally referred to the widespread Vancouver group, have been largely preserved, and over large parts of the area the strata occupy a seemingly simple monocline striking northwest and dipping at moderate angles, generally not more than 45 degrees to the southwest. In the vicinity of large bodies of Coast intrusions, however, the rocks are commonly greatly contorted and are intersected by faults of varying magnitude. This condition is illustrated along Nomash River, and over most of the area contiguous to the lower reaches of Zeballos River, in all of which places very steep to vertical to overturned dips and, less commonly, abrupt, radical changes in strike, are prevalent. In addition, the regional monoclinal structure is complicated by a tightly folded syncline whose axis approximately parallels, and lies close to, the north fork of Zeballos River and continues northward along the valley of Pinder Creek towards Nimpkish Lake. The structure is in many places partly isoclinal, and the beds may be overturned either to the west or to the east. As a result, narrow remnants of Quatsino limestone are preserved, along the north fork, in the underlying Karmutsen volcanic rock. The folding was accompanied, or followed, by faulting. The most pronounced fault trends a little west of north along the north fork of the Zeballos and, where observed, dips vertically or steeply east. It forms the western boundary of the infolded masses of limestone, and the east side of the fault has moved down, and possibly northward, relative to the west side.

No well-preserved diagnostic fossils have been found in the map-area, but in the Zeballos map-area, to the south, fossils of Upper Triassic age were found in a small lens of argillite intercalated with volcanic rocks near the top of the Karmutsen group. Also, in Nimpkish map-area, to the north, diagnostic fossils, including *Monotis subcircularis*, were found in the sedimentary part of the Bonanza group, thus establishing the age of this part of the group as late Upper Triassic. It would, therefore, seem probable that much, if not all, of the entire series of pre-batholithic sedimentary and volcanic rocks in this and adjoining map-areas is Upper Triassic in age.

The Coast intrusions (4) provide a variety of rock types, the commonest being quartz monzonite, granodiorite, and quartz diorite. A pronounced northwest trend of the masses may be noted, and for the most part they exhibit intrusive contacts. Basic border phases containing a high percentage of included material are common except where the intruded rocks are Quatsino limestone.

The Coast intrusions are cut by diabase and lamprophyre dykes, which follow prominent joint fractures in the granitic rocks.

Almost all of the known mineral deposits of the area are confined to what is known as the Zeballos mining camp, which comprises an area about 5 miles square in the extreme south-central part of the map-area. Excellent access to the major properties of the camp is provided by a good gravel road from the town of Zeballos, situated 4 miles to the south at the mouth of Zeballos River.

The mineral deposits of the camp are of two main types: (a) narrow, high-grade, lode-gold vein deposits, and (b) contact metamorphic, iron and copper-lead-zinc deposits. The former are considered to be genetically related to the intrusion of the Zeballos batholith, and occur in fractures and shear zones within that body, and within the surrounding volcanic and sedimentary rocks of the Bonanza group. The contact metamorphic deposits are likewise genetically related to the intrusion of the Zeballos batholith, and occur as replacement deposits in the rocks of the Quatsino formation and those of the lower sedimentary part of the Bonanza group, where these formations have been intruded by the batholithic rocks.

Interest in the lode-gold deposits of the area commenced about 1934 and rapidly increased, so that by 1938 several properties were being prepared for production, with many others in various stages of development, and the name Zeballos had become a familiar word throughout the mining fraternity. Activity continued at a high level until about 1942 when all the mines were forced to close due to a labour shortage. Subsequently, one mine, the Privateer, reopened, but was forced to close again in 1948. During the short, active life of the camp, thirteen mines produced a total of 287,811 ounces of gold. Of this amount all except a few thousand ounces came from five mines, of which the Privateer was by far the largest producer, with a total of 154,361 ounces. At present, activity in the district is restricted to exploration of two contact metamorphic magnetite deposits.

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