

#### ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Geology, Geochemistry and Geochronology on Claim 918829

TOTAL COST: \$2,675.65

AUTHOR(S): Jacques Houle, P.Eng.

SIGNATURE(S):

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

STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): 5411293/2012/oct/17

YEAR OF WORK: 2012 PROPERTY NAME: Victoria

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

918829

COMMODITIES SOUGHT: Au, Ag, Cu, Mo

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: Victoria MINFILE 092F 264

MINING DIVISION: Nanaimo NTS / BCGS: 092F10E / 092F078

LATITUDE: ° ' "

LONGITUDE: " (at centre of work)
UTM Zone: 10N EASTING: 386300 NORTHING: 5510850

OWNER(S): Northstar Mining Ltd.

MAILING ADDRESS: 4520 Franklin Ave, Powell River, B.C. V8A 3E3

OPERATOR(S): Northstar Mining Ltd.

MAILING ADDRESS: 4520 Franklin Ave, Powell River, B.C. V8A 3E3

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude.) volcanics, intrusive, breccia, limestone, Triassic, Jurassic, faulting, quartz vein, sulphides, chalcopyrite, pyrite, galena, gold, silver, copper, lead, zinc, bismuth, arsenic

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

6414, 7939, 9511, 11626, 12701, 13731, 18212, 18672, 25126

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	0.01 ha	918829	1117.87
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samp	les analysed for)		
Soil			
Silt			
Rock	1	918829	44.35
Other			
DRILLING (total metres, number o	f holes, size, storage location)		
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Freight	1	918829	9.90
Petrographic			
Geochronology	1	918829	332.64
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (sca	ale, area)		
Legal Surveys (scale, area	)		
Road, local access (km)/tra	ail		
Trench (number/metres)			
Underground development	(metres)		
Other - reports		918829	1170.89
		TOTAL COST	2675.65

## 2012 Assessment Report for

# Geology, Geochemistry and Geochronology

October, 2012

On Claim 918829 of the

BC Geological Survey Assessment Report 33753

# **Texada Property**

**Nanaimo Mining Division** 

BCGS 092F078 NTS 092F10E

UTM Zone 10N 5510850N 386300E

For Northstar Mining Ltd. and Coast Minerals Corp.

Report written by Jacques Houle, P.Eng.

March 27, 2013



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#### Introduction

#### Property location, access and physiography

Cell mineral claim 918829 of the Texada Property is located in the Nanaimo Mining Division, on northern Texada Island in the Strait of Georgia, BC, Canada. The claim is 3 kilometres southwest of Van Anda, B.C. and is centred at UTM Zone 10N, 5510850N 386300E situated on BCGS map sheet 092F078, and NTS map sheet 092E10E. The claim is part of Coast Minerals Corp.'s Texada Property, which at the time of this report consists of 71 mineral claims covering 16,675 hectares on Texada Island, held beneficially by Alexandra Resources Inc. for Coast Minerals Corp.

The paved Gillies Bay Road and partially overgrown logging roads, provide access year round to the claim from Van Anda (15 minutes) and Gillies Bay (30 minutes), both which have basic services. The provincial power grid is within 1 km. east of the claim. The topography of claim 918829 is gently rolling and slopes to the east with elevations ranging from 150 to 250 metres. The claim is crossed by a small east-flowing creek which drains Kirk Lake to the west into Priest Lake to the north of the claim. The claim is covered by second or third growth forest of several ages of regeneration, and logging roads at different stages of degeneration. The area of claim 918829 is temperate rainforest, with heavy rain in the autumn to spring period, warm dry summers, and snow at higher elevations in the winter. Relatively mild coastal climate and low elevation generally allows year round fieldwork to be carried out.

#### Property definition, owner, operator, geology and history

The claim owner is Northstar Mining Ltd., and the property operator who paid for the work is Coast Minerals Corp., both privately held B.C. corporations. See Figure 1 for the mineral tenure map of the area of claim 918829 at 1:20,000 scale, and Figure 2 for the infrastructure map of the area of the claim at 1:20,000 scale, including locations of MINFILE occurrences and ARIS reports. The claim covers approximately 84 hectares and consists of one 4-cell mineral claim, with details and status listed in Table 1:

Table 1 – Cell Mineral Claim and Status as of March 27, 2013:

Tenure Number	Claim Name	Owner	Tenure Type	Map Number	Issue Date	Good To Date	Status	Area (ha)
918829	VICTORIA	143663 (100%)	Cell Mineral Claim	092F	2011/oct/19	2016/oct/19	GOOD	83.5232

Claim 918829 is underlain by mafic volcanics of the Triassic Karmutsen Formation, probably including the upper portion of the formation which is known to contain interflow beds of limestone and siltstone. To the north and east, the claim is surrounded by basins of massive limestone of the Triassic Quatsino Formation, which conformably overlies the Karmutsen. Both the NW-trending Holly Fault and the E-W trending Kirk Lake fault are steeply dipping structures which traverse and intersect on the claim and locally offset the contact between the Quatsino and Karmutsen Formations. Small dykes and stocks of granodiorite to diorite either of the Cretaceous Coast Suite or the Jurassic Island Suite occur in the area of the claim. See Figure 3 for the geological map of the area of the claim at 1:20,000 scale.

The following geology legend lists rocks found on northern Texada Island on or near claim 918829, taken from the BCGS 2005 Geology layer in BC MapPlace, which applies to Figure 3:

#### **EARLY CRETACEOUS**

Coast Plutonic Suite

EKgd granodioritic to dioritic intrusive rocks

#### EARLY JURASSIC TO MIDDLE JURASSIC

Island Plutonic Suite

EMJIgd granodioritic to diorite intrusive rocks

#### **UPPER TRIASSIC**

Vancouver Group

Quatsino Formation

uTrQ massive limestones

Karmutsen Formation

uTrK mafic volcanics, limestone and siltstone

Figure 4 shows contoured first derivative aeromagnetic data for the area of claim 918829, taken from BC MapPlace. Sedimentary limestone and iron/copper skarn deposits have historically been the main sources of mineral production from Texada Island as documented in BC MINFILE including the 2 currently operating limestone quarries Imperial 092F394 and Gillies Bay 092F395, the 2 largest past producers of iron (magnetite) +/- copper-gold-silver Prescott 092F106 and Yellow Kid 092F258; and the 3 largest past producers of copper-gold-silver Little Billie 092F105, Cornell 092F112 and Marble Bay 092F270. From 1896 to 1976, 14 past producers extracted a total of about 21 million tonnes of ore averaging 45% iron, 0.17% copper, 1.9 g/t silver and 0.16 g/t gold. Claim 918829 covers the MINFILE showing 092F264 Victoria. A summary of the history of previous work filed in the immediate area of claim 918829 follows, taken from old BC Minister of Mines Reports plus some of the ARIS reports listed in Table 2 below:

Table 2 – ARIS Reports submitted as of March 27, 2013:

Report#	Year	Author	Owner/Operator	Work Program / MINFILE #
25126	1997	Perry, R.	not documented /	Geophysical – Self Potential / 092F264 –
			Perry, R.	Victoria, 092F359 – Gem
18672	1989	Sargeant,	multiple owners / Echo	Geological, Geophysical, Geochemical,
		P.T.	Bay Mines Ltd.	Physical / multiple MINFILE occurrences
18212	1988	Wares, R.	Beale,S.L /Wares,R.	Geochemical / 092F264 - Victoria
13731	1985	Garratt, G.L.	multiple owners /	Diamond Drilling / 092F359 - Gem
			Northair Mines Ltd.	
12701	1984	Wares, R.	Beale, S.L. / Rhyolite	Diamond Drilling / 092F524 – Golden Rod
			Resources Inc.	
11626	1983	Wares, R.	Johanson,E. / Rhyolite	Geophysical – Magnetics / 092F524 –
			Resources Inc.	Golden Rod
9511	1980	Beale, S.L.	Beale,S.L. / Beale,S.L.	Geochemical / 092F264 - Victoria
7939	1979	Beale, S.L.	Beale,S.L. / Beale,S.L.	Geochemical / 092F264 - Victoria
6414	1977	Manifold,	Gordon, E. / Manifold,	Geochemical / 092F359 – Gem
		A.H.	A.H.	

The first documented mining activity in the immediate area of claim 918829 is from 1896 (AR 1896 p.553), when a shaft was sunk to 50 feet (15 metres) on a ledge (vein) on the Victoria group of claims, with good assays obtained from the ledge. By 1897 (AR 1897 p. 563), the shaft was extended to 102 feet (31 metres) on one two veins containing sulphides and some free gold, but the shaft was allowed to flood. The other vein was explored by shallow holes (pits) and found to contain pyrite, chalcopyrite and galena. There is a lack of documented work on the area of the claim itself from 1897 to 1976, although northern Texada Island was actively explored, developed and mined during this period, including the nearby MINFILE occurrences 092F359 Gem and 092F524 Golden Rod, immediately east of the claim.

In 1979 (ARIS 7939) and 1980 (ARIS 9511), S.L. Beale completed soil geochemistry programs in the area of claim 918829, which yielded a few isolated elevated values up to 1250 ppb gold, with no other elements analyzed. In 1988 (ARIS 18212), R. Wares on behalf of Mr. Beale completed soil and rock geochemistry on the claim, which yielded several generally isolated elevated values in soils up to 685 ppb gold, 3.5 ppm silver, 25 ppm arsenic, 20 ppm bismuth, 433 ppm copper, 53 ppm lead and 259 ppm zinc; and in rocks up to 393 ppb gold, 3.6 ppm silver, 16 ppm arsenic, 28 ppm bismuth, 1312 ppm copper, 7426 ppm lead and 163 ppm zinc. Considerably more systematic work was conducted from 1977 to 1989 on the nearby MINFILE occurrences 092F359 Gem and 092F524 Golden Rod, immediately east of the claim.

In 1997 (ARIS 25126) R. Perry completed a self-potential ground geophysical survey over the Holly claim group, including much of the area now covered by claim 918829, which yielded 3 conductive anomalies which he named after the coinciding crown granted mineral claims as follows:

- Climax Anomaly located 250 m. WSW of Kirk Lake
- Last Link Anomaly located 150 m. South of Kirk Lake
- Victoria Anomaly located 300 m. m. East of Kirk Lake, just east of the old shaft of MINFILE 092F264 Victoria

#### List of claims and work completed

On October 15, 2012, the author accompanied by D. McLelland, R. Duker and D. Clark, traveled to and visited the site of the old shaft of MINFILE 092F264 Victoria on cell mineral claim 918829, extracted a select rock grab sample in triplicate from mineralized bedrock along the south wall of the shaft, and completed basic geological mapping of the sample site. The sample location and mapping are shown in Figure 5 at 1:200 scale.

The author subsequently prepared and shipped one of the triplicate samples to AGAT's laboratory facility in Burnaby, B.C., one of the samples to PCIGR's geochronology laboratory facility at UBC in Vancouver, B.C., and completed rock sawing and microscopic examination of the other rock sample. Sample location, description and geochemistry results appear in Appendix 1. The geochemistry (Appendix 2) and geochronology (Appendix 3) reports were received and compiled, and the technical assessment report was written by the author. The mineral tenure assessment cost report (Appendix 4), and the MTO filing SOW 5411293 (Appendix 5) were also completed.

The rock sample taken by the author is best described as a select grab sample, and was taken to help characterize the mineralization at that location, but should not be considered representative of that mineralization. A geotul and moil was used to extract the sample, which was placed in new poly ore bags fastened with cable ties to prevent spilling, and portions of pre-numbered 3-part sample tags were placed in each bag. At the sample site, the rock sample was taken in triplicate, one of which the author cut with a rock saw, and inspected and described using a binocular microscope.

At the sample site, site characteristics were recorded on a pre-printed, waterproof, loose-leaf sample record form in a field notebook, and the sample number was recorded in triplicate: on the form, on a metal tag tied near the sample site and marked with flagging tape, and as a waypoint number in a hand-held Garmin 60CSx GPS.

Two shipments of rock samples were shipped, one to AGAT's laboratory sample preparation facility in Burnaby, B.C., and one to the Pacific Centre for Isotopic and Geochemical Research (PCIGR) geochronology facility at UBC in Vancouver, B.C., both by Greyhound from Nanaimo, B.C. on November 1, 2012. AGAT prepared the sample using package 211001, and then transferred the pulps to their laboratory in Mississauga, Ont. where they utilized multi-element metals package 201701, plus trace gold package 202051 for analysis of the rock sample. PCIGR utilized lead isotopes from sulphides extracted from the sample to determine the age of the sulphide mineralization.

#### **Technical Data, Interpretation and Conclusions**

The single rock sample collected from the south wall of the Victoria shaft is from a narrow (0.5 m. thick) dike of intrusive breccia, or possibly silicified volcanic breccia, containing about 10% fine grained disseminated sulphides. Unfortunately, geochemistry results from the sample failed to yield elevated values of precious or base metals, suggesting that the sulphides are mainly pyrite. It is not known if the pyrite mineralization is contemporaneous with precious metal mineralization documented by previous workers in the immediate area of the Victoria MINFILE occurrence.

The geochronology sample was combined with other samples taken from elsewhere on Texada Island and on Vancouver Island, and submitted to Dr. J.K. Mortensen at the Pacific Centre for Isotopic and Geochemical Research (PCIGR) at the University of British Columbia in Vancouver, B.C. The combined geochronology report including the sample taken from the claim 918829 appears in Appendix 3.

Geochronology results clearly demonstrate that the age of sulphide mineralization at the sample site is similar to that found in other precious and/or base metal bearing quartz-sulphide veins on northern Texada Island, interpreted to be genetically related to Early Jurassic intrusions in the vicinity.

Systematic exploration work is appropriate and warranted to test the area of claim 918829 as well as the surrounding area for additional precious/base metal quartz-sulphide veins, as well as genetically related porphyry copper-molybdenum-gold and copper-gold skarn mineralization, culminating in trenching and initial shallow diamond drilling of any priority targets. Acquisition of additional mineral tenures surrounding claim 918829 is recommended prior to initiating any further ground exploration work.

Table 3 – Proposed Work Program for Claim 981829:

Item	Units	Unit Cost	Scheduling	Pro	gram Cost
Grid soils, mapping	4 days - 2 samplers, 1 geol.	\$2,500 per day	Summer	\$	10,000
Prospecting	4 days - 1 prospector	\$750 per day	Summer	\$	3,000
Geochemistry	100 moss, soil, rock samples	\$45 per sample	Summer	\$	4,500
Geophysics (IP)	5 km ground or airborne	\$1,500 per km.	Summer	\$	7,500
Mechanized trenching	5 days including trails	\$1,500 per day	Fall	\$	7,500
Diamond Drilling	500 metres	\$200 per metre	Fall	\$	100,000
Compilation, Reports	12.5 days for 1 geologist	\$1,000 per day	Winter	\$	12,500
Permitting, Bonding	Estimate		Spring	\$	5,000
Totals				\$	150,000

Additional work programs may be recommended conditional upon results.

Respectfully submitted by:

Jacques Houle, P.Eng.

#### **Author's Qualifications**

I, Jacques Houle, P.Eng. Do hereby certify that:

I am currently self-employed as a consulting geologist by: Jacques Houle, P.Eng. Mineral Exploration Consulting 6552 Peregrine Road, Nanaimo, British Columbia, Canada V9V 1P8

I graduated with a Bachelor's of Applied Science degree in Geological Engineering with specialization in Mineral Exploration from the University of Toronto in 1978.

I am a member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia, the Society of Economic Geologists, the Association for Mineral Exploration British Columbia, and the Vancouver Island Exploration Group; I am also a member of the Technical Advisory Committee for Geoscience B.C., and of the advisory committee for the Earth Science Department of Vancouver Island University.

I have worked as a geologist for 35 years since graduating from university, including 5 years as a mine geologist in underground gold and silver mines, 15 years as an exploration manager, 3 years as a government geologist and 10 years as a mineral exploration consultant.

I have previously visited the site of claim 918829 in 2000 as the Southwest Regional Geologist for the B.C. government. I am independent of Alexandra Resources Inc., Northstar Mining Ltd. and Coast Minerals Corp., and hold no interest in the subject property of this report.

#### References

#### B. C. Ministry of Energy, Mines and Petroleum Resources websites:

Assessment Reports

http://www.empr.gov.bc.ca/Mining/Geoscience/ARIS/Pages/default.aspx

MapPlace

http://www.empr.gov.bc.ca/Mining/Geoscience/MapPlace/Pages/default.aspx

Mineral Deposit Profiles

http://www.empr.gov.bc.ca/Mining/Geoscience/MineralDepositProfiles/Pages/default.aspx

MINFILE

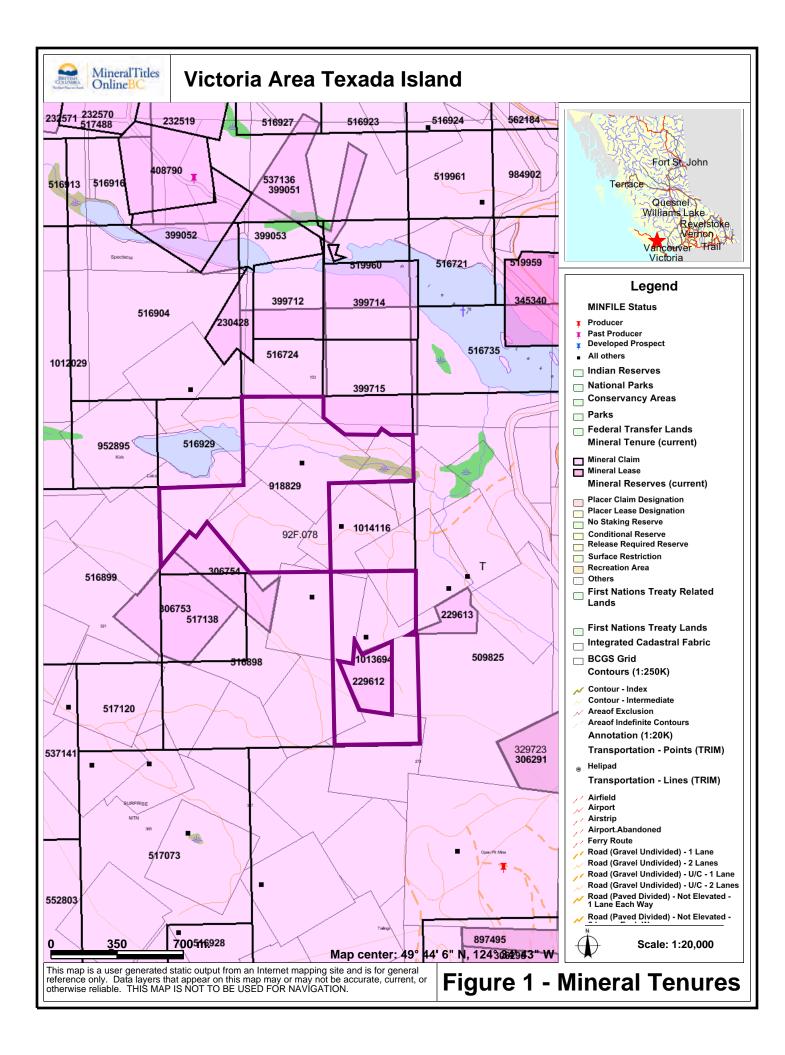
http://www.em.gov.bc.ca/Mining/Geolsurv/Minfile/

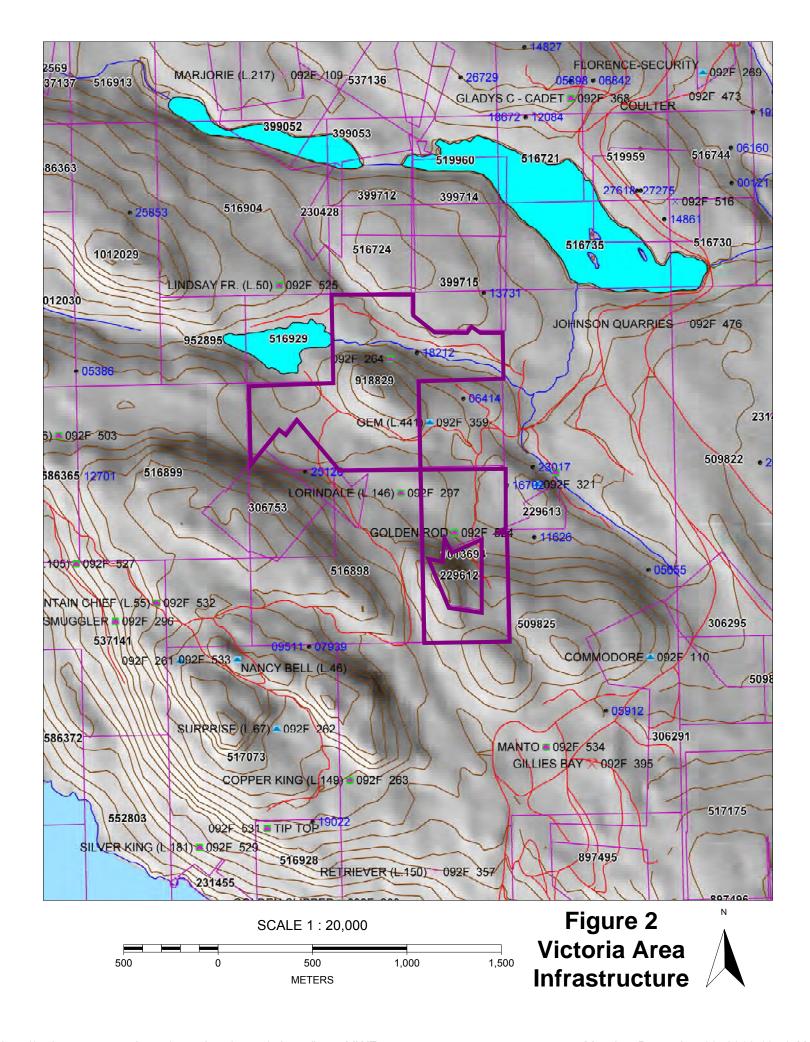
Ministry Publications

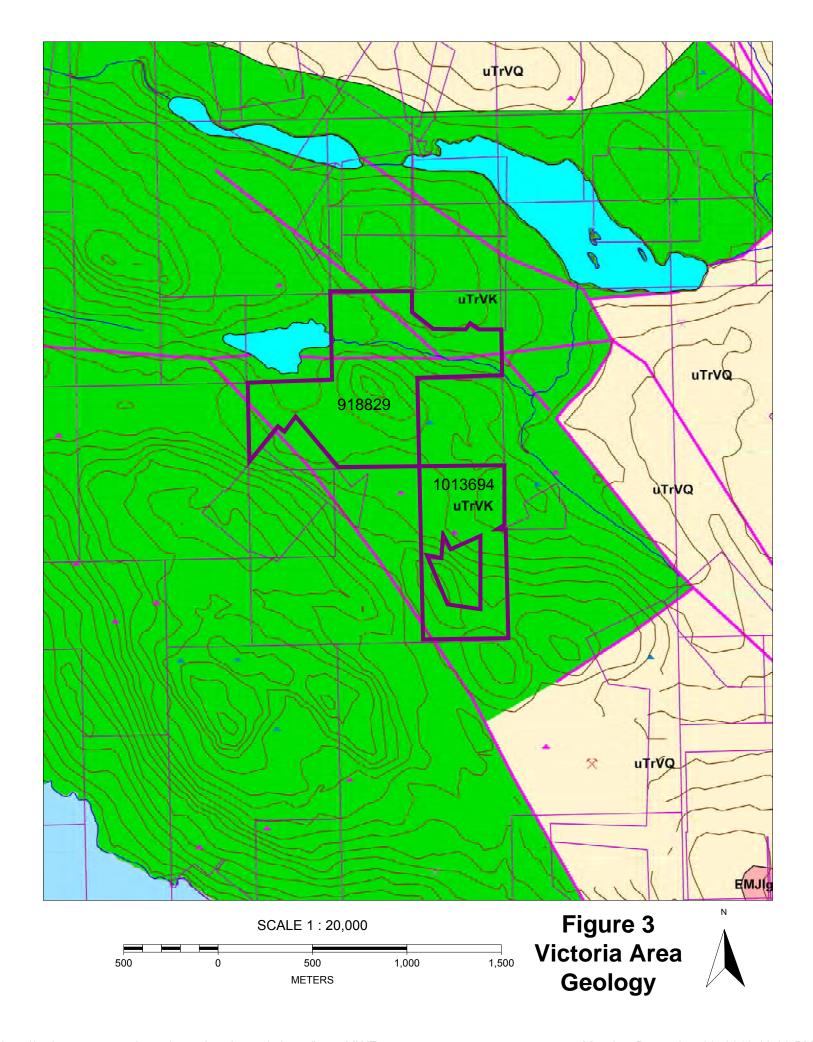
http://www.empr.gov.bc.ca/Mining/Geoscience/PublicationsCatalogue/Pages/default.aspx

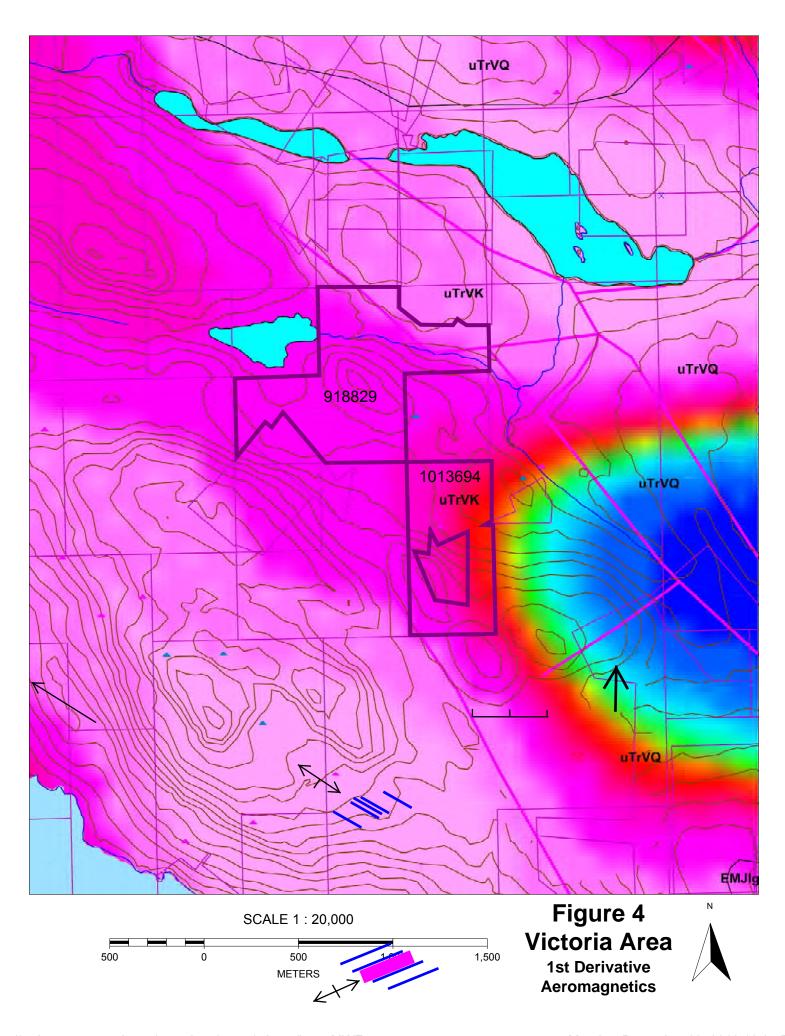
Mineral Titles Online

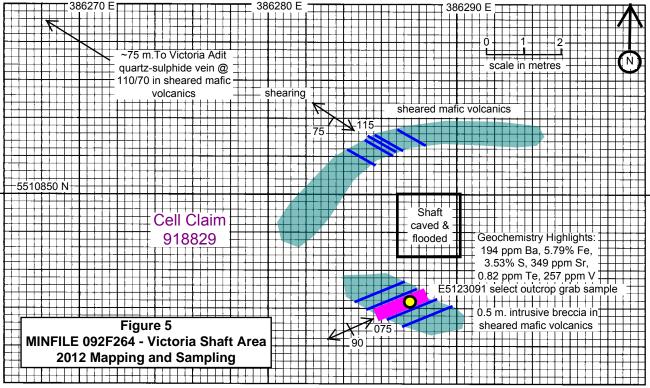
https://www.mtonline.gov.bc.ca/mtov/home.do

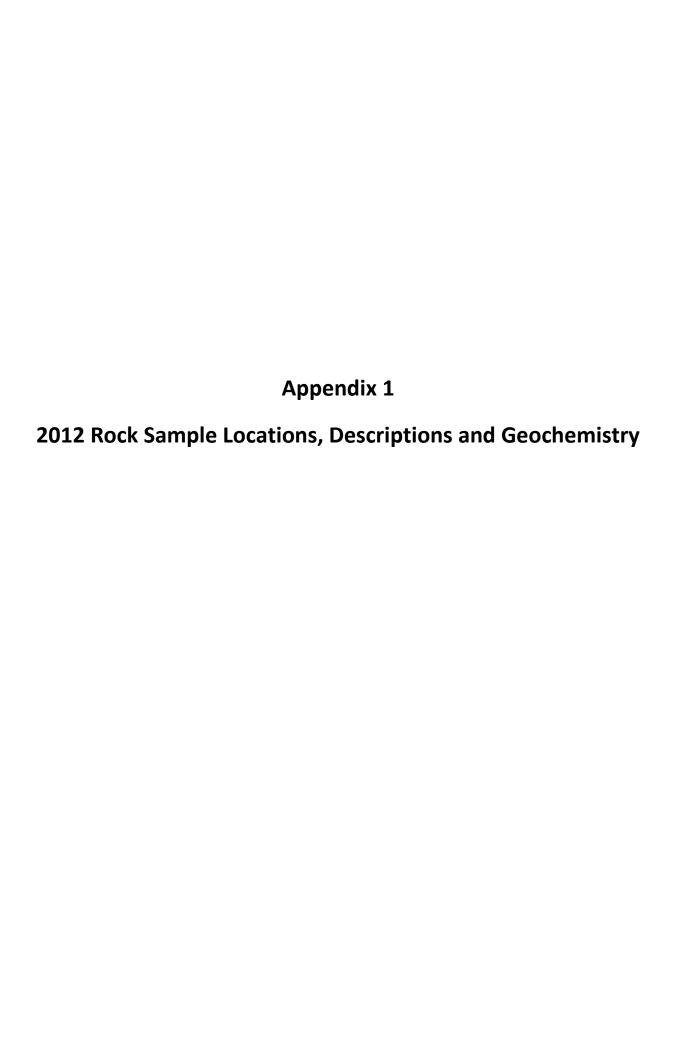












#### 2008, 2012 Rock Sample Locations for Texada Project

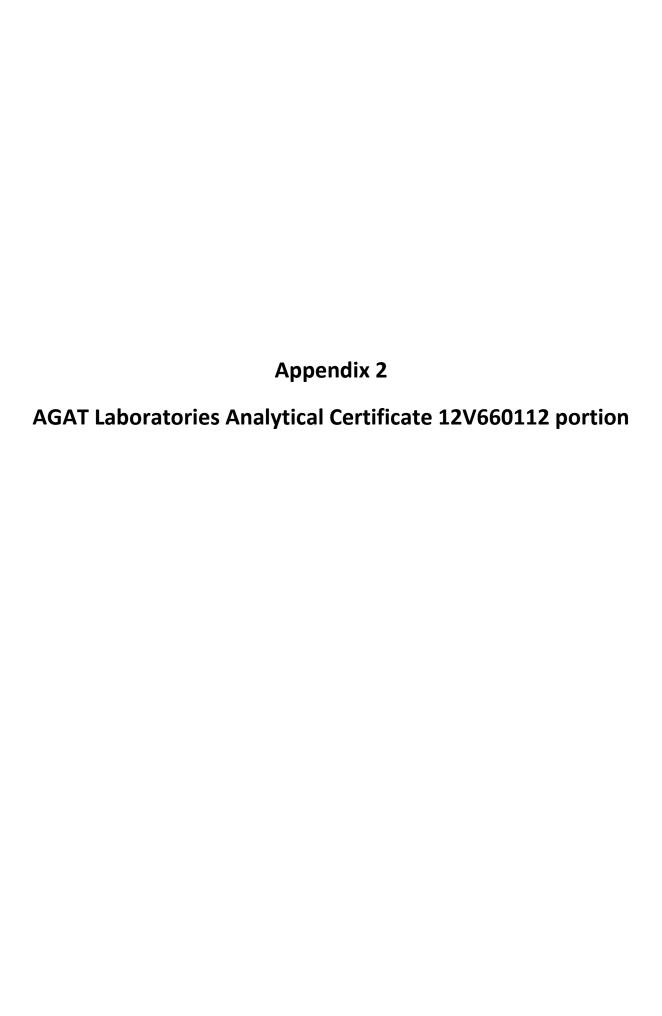
Sample #	Date	Sampler	Property	Location	Details	UTM Zone	Easting		
E5123091	15-Oct-12	J.Houle	Victoria	Texada Island - Victoria shaft area south wall 5 m. south of shaft	Select outcrop grab of 0.5 m. thick sulphidic volcanic? Breccia w/ shearing @ 075/90 & 115/90	10N	386287	5510844	175
E5123092	16-Oct-12	J.Houle	Angel	Texada Island - Angel trench area adjacent to channel sample 100m. north of main road and ddh	Select outcrop grab of quartz-carb-sulphide stringers in shear zone @ 155/65	10N	409593	5492478	618
E5123093	16-Oct-12	J.Houle	Cisco	Texada Island - Cisco pit area small knoll north of pit north of old logging road	Select outcrop grab of qtz-carb-sulph stockwork stringers @ 070/90 w/shearing @305/65	10N	411461	5491735	5 555

#### 2008, 2012 Rock Sample Descriptions for Texada Project Sample # | Microscopic Descriptions

E5123091 Grey, green, black and bronze, silicified, chloritic, biolitic and sulphidic intermediate intrusive breccia with 75% medium grained matrix, 25% coarse mainly tuffaceous volcanic fragments, 25% medium quartz eves, 10% medium chlorite/biolite crystals, 10% disseminated to clustered fine sulphides, mainly pyrite with traces chalcopyrite, sphalerite	
E5123092 Cream, green, grey and tan, silicified, sericitic and chloritic foliated and brecciated mafic volcanic with 30% quartz-calcite-siderite-sulphide stockwork stringers, 1% fine clustered and rust-rimmed sulphides mainly pyrite, minor chalcopyrite, trace bornite	
E5123093 Green, white and cream, chloritic, sericitic and silicified, massive mafic volcanic with 15% quartz-calcite-siderite-sulphide stockwork stringers, 0.1% fine sulphides, mainly chalcopyrite, clustered locally in quartz stringers	

#### 4 Acid Digest - Metals Package, ICP/ICP-MS finish (201071)

Fire Assay	- Irace Au, AA	Stinish	(202051)	,																																														
			Sample																																					T	Т		Т							
	Ana	alyte:	Login	Au	Ag	AI	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr C	Cs	Cu	Fe (	Ga	Ge H	lf	In K		La Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb S	Se	Sn	Sr	Ta	Tr	a Th	ı Ti	TI	I U	v	w	Y	Zn	Zr
	Sample Descrip	otion:	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm p	pm p	pm p	pm	ppm	% p	pm	ppm pp	m p	ppm %	F	ppm ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm pp	m ppr	n ppr	n ppr	1 ppm	n ppr	m ppr	n %	ppr	m ppm	ppm	ppm	ppm	ppm	ppm
																																								T	Т		Т	T				. — 1		
AGAT WOR	Sample D	RDL:	0.01	0.002	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	.05	0.5 0.	.01	0.2 0	.01 0	.05	0.05 0.	.1 0	.005 0.0	1	0.5 0.1	0.01	1 1	0.05	0.01	0.1	0.2	10	0.1	0.1	0.002	0.01	0.05 0.	1 0.5	0.2	0.2	0.05	5 0.0	/1 0.1	1 0.01	1 0.01	0.005	0.5	0.1	0.1	0.5	0.5
12V660112	E5123091		2.06	0.01	0.37	4.1	4.6	194	0.64	0.44	2.81	0.4	15.9	2.6 8	39.5 0	.16	25.2 5	5.79	14	0.28	1.4	0.07 0.5	3	6.6 5.2	2.34	4 872	1.5	1.95	15.6	51.2	871	5.4	8.7	0.01	3.53	0.89 24	.2 1.	5 1.	5 34	9 1.04	4 0.8	32 0.	.6 0.6	3 0.1	13 0.44	257	0.4	14.4	62.9	35.4
	E5123092		1.58	2.54	0.3	1.96	6.7	52	0.49	0.11	0.26	0.13	6.85 2	5.8	159 0	.42	24.4	3.61 1	2.7	0.36	0.2	0.05 0.9	15	2.9 19.6	1.15	163	1.15	0.13	4.1	54.7	338	3.9	14.5	0.01	3.4	2.03 17	.2 4.	1 0.	5 36.	7 0.28	3 0.7	24 0	.1 0.3	3 0.1	15 0.05	279	0.1	2.7	37.3	4.5
12V660112	E5123093		1 83	200.03	0.29	5 14	5.3	36	0.27	0.01	3 64	0.33	10.1 3	4 7	146 0	11	228	59 1	4.6	0.27	16	0.04 0.1	6	4 286	2 85	5 1150	0.33	2 18	6.4	79.8	450	4 1	2	0	0.02	1.4 26	1 0	5 0	6 22	3 0.48	8 00	12 0	3 0.28	8 0.0	0.08	212	0.1	8.3	96.8	12.9



CLIENT NAME: JACQUES HOULE MINERAL EXPLORATION 6552 PEREGRINE ROAD NANAIMO, BC V9V1P8 (250) 390-3930

ATTENTION TO: JACQUES HOULE PROJECT NO: 2012 Assay Pricing

AGAT WORK ORDER: 12V660112

SOLID ANALYSIS REVIEWED BY: Yufei Chen, Analyst

DATE REPORTED: Nov 27, 2012

PAGES (INCLUDING COVER): 8

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

-11012 <u>0</u>		

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

\*NOTES



## Certificate of Analysis

AGAT WORK ORDER: 12V660112 PROJECT NO: 2012 Assay Pricing 5623 McADAM ROAD MISSISSAUGA, ONTARIO CANADA L4Z 1N9 TEL (905)501-9998 FAX (905)501-0589 http://www.agatlabs.com

CLIENT NAME: JACQUES HOULE MINERAL EXPLORATION

ATTENTION TO: JACQUES HOULE

			4	Acid Dige	est - Met	als Pack	age, ICP	/ICP-MS	finish (	201071)					
DATE SAMPLED: No	v 05, 2012			DATE REC	EIVED: Nov	05, 2012		DATE	REPORTE	D: Nov 27, 2	012	SAM	IPLE TYPE	: Rock	
	Analyte:	Ag	Al	As	Ва	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Unit:	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
Sample Description	RDL:	0.01	0.01	0.2	1	0.05	0.01	0.01	0.02	0.01	0.05	0.5	0.01	0.2	0.01
E5123091		0.37	4.10	4.6	194	0.64	0.44	2.81	0.40	15.9	32.6	89.5	0.16	25.2	5.79
E5123092		0.30	1.96	6.7	52	0.49	0.11	0.26	0.13	6.85	25.8	159	0.42	24.4	6.61
E5123093		0.29	5.14	5.3	36	0.27	0.01	3.64	0.33	10.1	34.7	146	0.11	228	5.90
E5123094		18.6	0.03	>10000	<1	< 0.05	4.71	0.21	3070	3.32	0.32	9.8	0.06	1710	25.5
E5123095		0.26	0.19	144	7	0.08	0.04	10.4	21.8	2.21	15.8	25.5	0.06	8.5	4.47
E5123096		0.08	0.10	20.6	12	0.08	0.01	18.5	2.39	1.07	1.75	14.8	0.06	63.6	2.24
	Analyte:	Ga	Ge	Hf	In	К	La	Li	Mg	Mn	Мо	Na	Nb	Ni	Р
	Unit:	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
Sample Description	RDL:	0.05	0.05	0.1	0.005	0.01	0.5	0.1	0.01	1	0.05	0.01	0.1	0.2	10
E5123091		14.0	0.28	1.4	0.069	0.53	6.6	5.2	2.34	872	1.50	1.95	15.6	51.2	871
E5123092		12.7	0.36	0.2	0.046	0.95	2.9	19.6	1.15	163	1.15	0.13	4.1	54.7	338
E5123093		14.6	0.27	0.6	0.044	0.16	4.0	28.6	2.85	1150	0.33	2.18	6.4	79.8	450
E5123094		2.22	0.49	<0.1	38.3	0.02	3.9	0.3	0.22	>10000	0.76	<0.01	2.2	<0.2	112
E5123095		0.55	1.85	<0.1	0.251	0.01	2.6	15.2	3.12	1260	0.94	<0.01	0.5	34.8	552
E5123096		0.16	<0.05	<0.1	0.029	<0.01	1.8	0.5	0.19	555	1.04	<0.01	0.2	4.1	234
	Analyte:	Pb	Rb	Re	s	Sb	Sc	Se	Sn	Sr	Та	Te	Th	Ti	TI
	Unit:	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Sample Description	RDL:	0.1	0.1	0.002	0.01	0.05	0.1	0.5	0.2	0.2	0.05	0.01	0.1	0.01	0.01
E5123091		5.4	8.7	0.008	3.53	0.89	24.2	1.5	1.5	349	1.04	0.82	0.6	0.63	0.13
E5123092		3.9	14.5	0.009	3.40	2.03	17.2	4.1	0.5	36.7	0.28	0.24	0.1	0.33	0.15
E5123093		4.1	2.0	0.004	0.02	1.40	26.1	0.5	0.6	223	0.48	0.02	0.3	0.28	0.02
E5123094		69.6	0.4	0.004	16.5	76.8	0.2	6.1	1.2	4.6	0.18	0.05	<0.1	<0.01	0.01
E5123095		3.9	0.4	0.004	0.09	5.21	2.8	<0.5	<0.2	174	< 0.05	<0.01	<0.1	<0.01	<0.01
E5123096		1.1	0.6	0.003	0.16	0.32	0.4	<0.5	<0.2	95.0	<0.05	0.01	<0.1	<0.01	<0.01

Certified By:

J. chan.



## Certificate of Analysis

AGAT WORK ORDER: 12V660112 PROJECT NO: 2012 Assay Pricing 5623 McADAM ROAD MISSISSAUGA, ONTARIO CANADA L4Z 1N9 TEL (905)501-9998 FAX (905)501-0589 http://www.agatlabs.com

CLIENT NAME: JACQUES HOULE MINERAL EXPLORATION

ATTENTION TO: JACQUES HOULE

			4 A	cid Dige	st - Me	tals Pack	age, ICF	P/ICP-MS	S finish (20	1071)	
DATE SAMPLED: No	v 05, 2012		С	DATE RECE	EIVED: No	v 05, 2012		DATE	REPORTED:	Nov 27, 2012	SAMPLE TYPE: Rock
	Analyte:	U	V	W	Υ	Zn	Zr	Mn-OL	Zn-OL		
	Unit:	ppm	ppm	ppm	ppm	ppm	ppm	%	%		
Sample Description	RDL:	0.005	0.5	0.1	0.1	0.5	0.5	0.01	0.01		
E5123091		0.437	257	0.4	14.4	62.9	35.4				
E5123092		0.050	279	0.1	2.7	37.3	4.5				
E5123093		0.080	212	0.1	8.3	96.8	12.9				
E5123094		0.037	0.6	<0.1	5.1	>10000	2.5	2.33	13.4		
E5123095		0.466	81.5	0.3	10.2	571	2.4				
E5123096		0.296	13.0	0.2	2.8	57.0	2.4				

Comments: RDL - Reported Detection Limit

3893823-3893828 As, Sb values may be low due to digestion losses.

Certified By:

J. chan.



## Certificate of Analysis

AGAT WORK ORDER: 12V660112 PROJECT NO: 2012 Assay Pricing 5623 McADAM ROAD MISSISSAUGA, ONTARIO CANADA L4Z 1N9 TEL (905)501-9998 FAX (905)501-0589 http://www.agatlabs.com

CLIENT NAME: JACQUES HOULE MINERAL EXPLORATION

ATTENTION TO: JACQUES HOULE

				Fire Assay - Trace Au, A	AAS finish (202051)	
DATE SAMPLED: No	v 05, 2012			DATE RECEIVED: Nov 05, 2012	DATE REPORTED: Nov 27, 2012	SAMPLE TYPE: Rock
	Analyte:	Sample Login Weight	Au			
	Unit:	kg	ppm			
Sample Description	RDL:	0.01	0.002			
E5123091		2.06	0.008			
E5123092		1.58	2.54			
E5123093		1.83	< 0.002			
E5123094		1.47	0.015			
E5123095		0.29	< 0.002			
E5123096		0.96	<0.002			

Comments: RDL - Reported Detection Limit

Certified By:

J. cha

# **Quality Assurance**

CLIENT NAME: JACQUES HOULE MINERAL EXPLORATION AGAT WORK ORDER: 12V660112
PROJECT NO: 2012 Assay Pricing ATTENTION TO: JACQUES HOULE

			Solid	d Anal	ysis						
RPT Date: Nov 27, 2012		REPLICATE				REFERENCE MATERIAL					
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Method Blank	Result	Expect	Recovery	Accepta	ble Limits
		·		,			Value	Value		Lower	Upper
Fire Assay - Trace Au, AAS finish (2020	051) 1	3893823	0.008	0.008	0.0%	< 0.002	0.269	0.363	102%	90%	110%
Au	'	3093023	0.006	0.006	0.0%	< 0.002	0.209	0.263	10276	90%	110%
4 Acid Digest - Metals Package, ICP/ICF	P-MS finish	n (201071)									
Ag	1	3893823	0.37	0.27		0.01	11.5	13.0	89%	80%	120%
Al	1	3893823	4.10	4.10	0.0%	0.01				80%	120%
As	1	3893823	4.57	3.91	15.6%	0.2				80%	120%
Ва	1	3893823	194	214	9.8%	< 1				80%	120%
Ве	1	3893823	0.64	0.71	10.4%	< 0.05	0.4	0.4	102%	80%	120%
Bi	1	3893823	0.44	0.42	4.7%	< 0.01				80%	120%
Ca	1	3893823	2.81	3.24	14.2%	< 0.01				80%	120%
Cd	1	3893823	0.399	0.331	18.6%	< 0.01				80%	120%
Ce	1	3893823	15.9	16.0	0.6%	< 0.02				80%	120%
Co	1	3893823	32.6	34.9		< 0.05				80%	120%
	ı	3093023	32.0	34.9	6.8%	< 0.05				60%	120%
Cr	1	3893823	89.5	90.9	1.6%	< 0.5				80%	120%
Cs	1	3893823	0.16	0.16	0.0%	< 0.01				80%	120%
Cu	1	3893823	25.2	26.3	4.3%	< 0.2	5826	6000	97%	80%	120%
Fe	1	3893823	5.79	6.50	11.6%	< 0.01				80%	120%
Ga	1	3893823	14.0	16.0	13.3%	< 0.05				80%	120%
Ge	1	2002022	0.202	0.252	24 70/	< 0.05				909/	1200/
Hf		3893823	0.283	0.352	21.7%					80%	120%
	1	3893823	1.4	1.3	7.4%	< 0.1				80%	120%
In	1	3893823	0.069	0.080	14.8%	< 0.005				80%	120%
K La	1 1	3893823 3893823	0.53 6.62	0.59 6.53	10.7% 1.4%	0.01 < 0.5				80% 80%	120% 120%
Lu		3033023	0.02	0.55	1.470	< 0.5				0070	12070
Li	1	3893823	5.2	5.4	3.8%	< 0.1				80%	120%
Mg	1	3893823	2.34	2.52	7.4%	< 0.01				80%	120%
Mn	1	3893823	872	1010	14.7%	< 1				80%	120%
Mo	1	3893823	1.50	1.43	4.8%	0.05	331	380	87%	80%	120%
Na	1	3893823	1.95	2.28	15.6%	< 0.01				80%	120%
Nb	1	3893823	15.6	12.5	22.1%	0.1				80%	120%
Ni	1	3893823	51.2	55.7	8.4%	< 0.2				80%	120%
P	1	3893823	871	977	11.5%	< 10	588	600	98%	80%	120%
Pb	1	3893823	5.4	5.8	7.1%	0.1	000	000	0070	80%	120%
Rb	1	3893823	8.73	6.83	24.4%	< 0.1				80%	120%
D			0.0070		0.00/	0.000				000/	1000/
Re	1	3893823	0.0078	0.0086	9.8%	< 0.002				80%	120%
S	1	3893823	3.53	3.75	6.0%	< 0.01				80%	120%
Sb	1	3893823	0.889	0.936	5.2%	< 0.05				80%	120%
Sc	1	3893823	24.2	22.9	5.5%	< 0.1				80%	120%
Se	1	3893823	1.5	1.6	6.5%	< 0.5				80%	120%
Sn	1	3893823	1.51	1.33	12.7%	< 0.2				80%	120%
Sr	1	3893823	349	400	13.6%	< 0.2	382	390	98%	80%	120%
Та	1	3893823	1.04	0.85	20.1%	< 0.05				80%	120%
Те	1	3893823	0.825	0.943	13.3%	< 0.01				80%	120%
Th	1	3893823	0.6	0.5	18.2%	0.1				80%	120%
Ti	1	3893823	0.63	0.69	9.1%	< 0.01				80%	120%

# **Quality Assurance**

CLIENT NAME: JACQUES HOULE MINERAL EXPLORATION

AGAT WORK ORDER: 12V660112

PROJECT NO: 2012 Assay Pricing

ATTENTION TO: JACQUES HOULE

•	J										
		Solid	Analy	ysis (C	Conti	nued)					
RPT Date: Nov 27, 2012	REPLICATE					REFERENCE MATERIAL					
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Method Blank	Result Value	Expect Value	Recovery	Acceptable Limits	
	Balcii									Lower	Upper
TI	1	3893823	0.13	0.15	14.3%	< 0.01				80%	120%
U	1	3893823	0.437	0.461	5.3%	< 0.005				80%	120%
V	1	3893823	257	283	9.6%	< 0.5				80%	120%
W	1	3893823	0.36	0.32	11.8%	< 0.1				80%	120%
Υ	1	3893823	14.4	13.4	7.2%	< 0.1				80%	120%
Zn	1	3893823	62.9	68.0	7.8%	0.5				80%	120%
Zr	1	3893823	35.4	27.7	24.4%	< 0.5				80%	120%

Certified By:

y. cha

## Method Summary

CLIENT NAME: JACQUES HOULE MINERAL EXPLORATION

PROJECT NO: 2012 Assay Pricing

AGAT WORK ORDER: 12V660112 ATTENTION TO: JACQUES HOULE

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP-MS
AI	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP-MS
Ва	MIN-200-12020		ICP-MS
Ве	MIN-200-12020		ICP-MS
Bi	MIN-200-12020		ICP-MS
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP-MS
Ce	MIN-200-12020		ICP-MS
Co	MIN-200-12020		ICP-MS
Cr	MIN-200-12020		ICP/OES
Cs	MIN-200-12020		ICP-MS
Cu	MIN-200-12020		ICP-MS
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP-MS
Ge	MIN-200-12020		ICP-MS
Hf	MIN-200-12020		ICP-MS
ln	MIN-200-12020		ICP-MS
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP-MS
Li	MIN-200-12020		ICP-MS
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Мо	MIN-200-12020		ICP-MS
Na	MIN-200-12020		ICP/OES
Nb	MIN-200-12020		ICP-MS
Ni	MIN-200-12020		ICP-MS
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP-MS
Rb	MIN-200-12020		ICP-MS
Re	MIN-200-12020		ICP-MS
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP-MS
Sc	MIN-200-12020		ICP-MS
Se	MIN-200-12020		ICP-MS
Sn	MIN-200-12020		ICP-MS
Sr	MIN-200-12020		ICP-MS
Та	MIN-200-12020		ICP-MS
Те	MIN-200-12020		ICP-MS
Th	MIN-200-12020		ICP-MS
Ti	MIN-200-12020		ICP/OES
ТІ	MIN-200-12020		ICP-MS
U	MIN-200-12020		ICP-MS
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP-MS
Y	MIN-200-12020		ICP-MS
Zn	MIN-200-12020		ICP-MS
Zr	MIN-200-12020		ICP-MS
Mn-OL			AA



## Method Summary

CLIENT NAME: JACQUES HOULE MINERAL EXPLORATION

PROJECT NO: 2012 Assay Pricing

AGAT WORK ORDER: 12V660112
ATTENTION TO: JACQUES HOULE

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Zn-OL	MIN-200-12032		AA
Sample Login Weight	MIN-12009		BALANCE
Au	MIN-200-12019	BUGBEE, E: A Textbook of Fire Assaying	AAS

# Appendix 3 PCIGR Geochronology Report

# Lead Isotopic Analysis of Sulphide Samples from Vancouver Island (report prepared for J. Houle; March 26, 2013)

J.K. Mortensen, PhD, PEng

#### Introduction

Six samples of sulphide-bearing rock from Vancouver Island for Pb isotopic analysis were submitted to the Pacific Centre for Isotopic and Geochemical Research (PCIGR) at the University of British Columbia by J. Houle.

#### **Analytical Methodology**

Clean sulphide samples were separated from five of the six samples by hand-picking under a binocular microscope. The sulphide grains were very finely disseminated in one sample (E5123095) and it was therefore impossible to prepare a clean sulphide concentrate. Instead fine fragments of whole rock with relatively abundant fine grained sulphides were subjected to a partial leach in order to selectively dissolve the contained sulphides. Isotopic analyses were done using methods as described in Mortensen et al. (2008). Sulphides were dissolved in dilute nitric acid and Pb for analysis was separated and purified using ion exchange methods. Isotopic compositions were measured on a modified VG-54R thermal ionization mass spectrometer. All measured isotopic ratios were corrected for instrumental mass fractionation of 0.12%/amu based on repeated measurements of the NBS 981 standard and the values recommended by Thirwall (2000). Errors were numerically propagated throughout all calculations and are reported at the 2σ level (Table 1).

#### Results

Analytical results for the six samples are listed in Table 1, together with previously published Pb isotopic analyses of galenas from a suite of veins that cut Quatsino Limestone and Texada Formation (Karmutsen Group) mafic volcanic rocks on Texada Island (from BC Leadtable; Godwin et al., 1988). Results are plotted on Figure 1, along with fields of Pb isotopic compositions of sulphides from volcanogenic massive sulphide (VMS) deposits in the Myra Falls camp on Vancouver Island (from Godwin et al., 1988). The data is plotted in two formats: as <sup>207</sup>Pb/<sup>204</sup>Pb vs. <sup>206</sup>Pb/<sup>204</sup>Pb (Fig. 1A) and as <sup>208</sup>Pb/<sup>206</sup>Pb vs. <sup>207</sup>Pb/<sup>206</sup>Pb (Fig. 1B). The latter diagram is used in order to avoid the larger analytical errors associated with measurement of the relatively weak <sup>204</sup>Pb peak.

The results of the work are interpreted below, incorporating information on the specific occurrences that was provided by J. Houle.

The PD trench sample (Table 1) is from a replacement deposit adjacent to exposures of Permian Buttle Lake Group (Mt. Mark Formation) limestone. Mafic dykes that are interpreted to be related to the Middle Triassic Mt. Hall gabbro have been mapped nearby. The Pb isotopic composition of this sample falls within the field of Late

Devonian VMS deposits in the Myra Falls camp (Fig. 1); however, the mineralization clearly cannot be of this age, since the host rocks are much younger than this. It is not clear what the sulphide mineralization is related to – it is possible that it may have formed from mineralizing fluids emanating from the gabbro; however, such bodies typically have low water contents, and there is no evidence for skarn or replacement mineralization associated with Mt. Hall gabbros anywhere else on Vancouver Island.

The geological setting of the taconite and breccia samples from the PD property (Table 1) and the relationship, if any, with the PD trench sample (above) have not yet been established. These two samples yielded much more radiogenic compositions than the PD trench sulphide sample, suggesting either that they resulted from a somewhat younger mineralizing event, or that the Pb in these samples represented a mixture of Pb of similar composition to that in the PD trench sample and much more radiogenic Pb, perhaps derived from the host rocks.

The Victoria sample (Table 1) is from a quartz vein in mafic volcanic rocks of the Middle Triassic Texada Formation on northern Texada Island. The Victoria pyrite Pbs plot within the field of Pb isotopic compositions of galenas from other quartz veins that cut the Texada Formation and Quatsino Limestone on Texada Island and have been interpreted to be genetically related to Early Jurassic intrusions in the vicinity (J. Houle, personal communication, 2013). The Pb isotopic compositions of the Victoria sulphides are consistent with this interpretation.

The Angel and Cisco samples (Table 1) are from quartz veins that cut Texada Formation volcanics in south-central Texada Island. These samples give somewhat more radiogenic compositions than the Victoria occurrence and other vein occurrences on northern Texada Island (Fig. 1). The Pb isotopic compositions of these two occurrences suggest that they are younger than the Early Jurassic veins from farther north. They could be genetically related to Cretaceous granodiorite intusions that have been mapped nearby (J. Houle, personal communication, 2013).

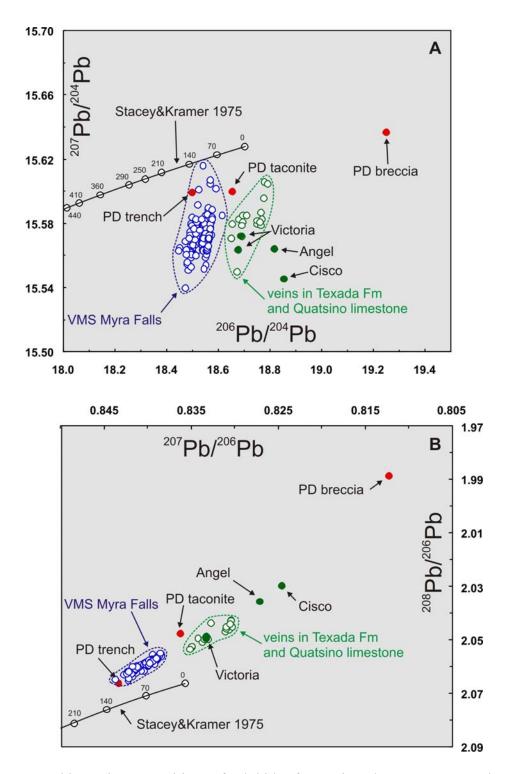


Figure 1. Lead isotopic compositions of sulphides from mineral occurrences north of Horne Lake area (red circles) and from Texada Island (green circles). Fields of Pb isotopic compositions of galenas from veins on Texada Island and from VMS deposits in the Myra Falls camp on Vancouver Island, along with the Stacey and Kramer (1975) average upper crustal growth curve, are also shown for reference.

#### References

- Godwin, C.I., Gabites, J.E. and Andrew, A., 1988, Leadtable a galena lead isotope database for the Canadian Cordillera, with a guide to its use by explorationists: B.C. Mineral Resources Division, Geological Survey Branch, Paper 1988-4, 188 p.
- Mortensen, J.K., Hall, B.V., Bissig, T., Friedman, R.M., Danielson, T., Oliver, J., Rhys, D., Ross, K.V., and Gabites, J.E., 2008, Age and paleotectonic setting of volcanogenic massive sulfide deposits in the Guerrero Terrane of central Mexico: Constraints from U-Pb age and Pb isotopic studies: Economic Geology, v. 103, p. 117-140.
- Stacey J.S. and Kramer, J.D. 1975, Approximation of terrestrial lead isotope evolution by a two-stage model: Earth and Planetary Science Letters, v. 26, p. 207-221.
- Thirwall, M.F. 2000, Inter-laboratory and other errors in Pb isotope analyses investigated using a <sup>207</sup>Pb-<sup>204</sup>Pb double spike: Chemical Geology, v. 163, p. 299-322.

Table 1. Lead isotopic compositions of sulphides from mineral occurrences on the PD property north of Horne Lake, and on central and northern Texada Island. Isotopic compositions of galenas from other vein occurrences on Texada Island are also listed (from Godwin et al., 1988).

1700).															
Sample	Locality	Lithology	Mineral	206Pb/	Error	207Pb/	Error	208Pb/	Error	207Pb/	Error	208Pb/	Error	Latitude	Longitude
Number				204Pb	% 2σ	204Pb	% 2σ	204Pb	% 2σ	206Pb	% 2σ	206Pb	% 2σ		
Trace Pb is	sotopic analyses (this study)														
E5123091	Victoria (Texada) - 092F264		pyrite	18.6772	0.06	15.5640	0.05	38.2762	0.06	0.8333	0.016	2.0494	0.023		
E5123091	Victoria (Texada) - 092F264		pyrite	18.6871	0.02	15.5725	0.02	38.2890	0.02	0.8333	0.005	2.0490	0.004		
E5123092	Angel (Texada) - 092F327		pyrite pyrite	18.8166	0.02	15.5645	0.01	38.2998	0.02	0.8272	0.007	2.0354	0.006		
E5123093	Cisco (Texada) - 092F200		and chalco	18.8512	0.02	15.5457	0.01	38.2598	0.02	0.8247	0.007	2.0296	0.008		
E5123094	PD occurrence - 092F271	Trench sample	pyrite	18.4961	0.08	15.5996	0.07	38.2150	0.09	0.8434	0.036	2.0661	0.048		
E5123095	Bountiful property (PD) - 092F271	Breccia sample	mixed sulphides	19.2500	0.04	15.6370	0.04	38.2796	0.04	0.8123	0.010	1.9886	0.008		
E5123096	Bountiful property (PD) - 092F271	Taconite sample	pyrite	18.6541	0.01	15.5998	0.00	38.1914	0.01	0.8363	0.005	2.0474	0.004		
Galena Pb	isotopic analyses (Godwin et al., 1988)														
30560	SHOWING30560	Quatsino vein	galena	18.763	0.01	15.587	0.01	38.371	0.02	0.8307	0.01	2.0450	0.01	49.75	124.53
30560	SHOWING30560 BY Copper Queen	Quatsino vein	galena	18.777	0.04	15.606	0.04	38.430	0.05	0.8311	0.01	2.0466	0.02	49.75	124.53
30561	SHOWING30561	Quatsino vein	galena	18.776	0.02	15.596	0.02	38.415	0.02	0.8306	0.01	2.0459	0.01	49.75	124.54
30563	ALLADIN	Quatsino vein	galena	18.791	0.06	15.605	0.04	38.381	0.07	0.8305	0.04	2.0425	0.04	49.72	124.52
30563	ALLADIN	Quatsino vein	galena	18.766	0.02	15.583	0.02	38.330	0.02	0.8304	0.01	2.0426	0.01	49.72	124.52
30564	SENTINEL	Quatsino vein	galena	18.748	0.02	15.580	0.02	38.351	0.02	0.8310	0.01	2.0457	0.01	49.72	124.53
30564	SENTINEL	Quatsino vein	galena	18.749	0.02	15.582	0.02	38.341	0.03	0.8310	0.01	2.0449	0.02	49.72	124.53
30565	SANDY	Quatsino vein	galena	18.763	0.02	15.579	0.02	38.365	0.03	0.8303	0.01	2.0448	0.01	49.71	124.53
30565	SANDY	Quatsino vein	galena	18.761	0.01	15.581	0.02	38.344	0.02	0.8305	0.01	2.0439	0.01	49.71	124.53
30566	SILVER TIP	Texada Fm vein	galena	18.650	0.02	15.571	0.02	38.276	0.03	0.8349	0.01	2.0523	0.02	49.73	124.59
30566	SILVER TIP	Texada Fm vein	galena	18.650	0.02	15.571	0.02	38.273	0.02	0.8349	0.01	2.0522	0.01	49.73	124.59
30567	STURT POINT (OKE)	Quatsino vein	galena	18.673	0.05	15.550	0.05	38.160	0.06	0.8328	0.02	2.0436	0.03	49.77	124.56
30568	NANCY BELL	Texada Fm vein	galena	18.654	0.06	15.580	0.06	38.301	0.06	0.8352	0.01	2.0533	0.02	49.72	124.59
30569	VICTORIA	Texada Fm vein	galena	18.680	0.01	15.583	0.02	38.277	0.02	0.8343	0.01	2.0492	0.01	49.74	124.58
30571	HOLLY FAULT	Quatsino vein	galena	18.693	0.03	15.585	0.03	38.335	0.03	0.8337	0.01	2.0507	0.01	49.73	124.56
30571	HOLLY FAULT	Quatsino vein	galena	18.694	0.01	15.581	0.01	38.311	0.02	0.8335	0.01	2.0494	0.01	49.73	124.56
30571	HOLLY FAULT	Quatsino vein	galena	18.676	0.02	15.564	0.02	38.261	0.02	0.8334	0.01	2.0486	0.01	49.73	124.56
30571	HOLLY FAULT	Quatsino vein	galena	18.690	0.02	15.579	0.02	38.307	0.02	0.8335	0.01	2.0496	0.01	49.73	124.56
30571	HOLLY FAULT	Quatsino vein Texada Fm	galena	18.689	0.02	15.572	0.02	38.291	0.03	0.8332	0.01	2.0489	0.02	49.73	124.56
30572	RETRIEVER	shear zone	galena	18.707	0.02	15.585	0.02	38.339	0.02	0.8331	0.01	2.0495	0.01	49.72	124.57

## Appendix 4

**2012 Cost Statement for Assessment Work Program** 

Texa	da Project October 2012 Co	st Sta	tement		
Exploration Work type	Comment	Days			Totals
		ı		ı	
Personnel (Name)* / Position	Field Days (list actual days)	Days		Subtotal*	
Jacques Houle /Geologist	October 15-16, 2012	2		\$1,612.80	
David McLelland / Prospector	October 15-16, 2012	2	\$448.00	\$896.00	
				\$2,508.80	
Office Studies	List Personnel (note - Office on	ly, do no			
Report preparation	estimate 4 days - Jacques Houle	4.0		\$3,225.60	
	estimate 4 days - Houle office use	4.0	\$80.64	\$322.56	
				\$3,548.16	\$3,548.16
Geochemical Surveying	Number of Samples	No.	Rate	Subtotal	
Rock	estimate 3 rock samples by AGAT	3.0	\$44.80	\$134.40	
Other (specify)	3 Pb isotope age dates by MDRU	3.0	\$336.00	\$1,008.00	
				\$1,142.40	\$1,142.40
Transportation		No.	Rate	Subtotal	
truck rental	Houle 4x4 pickup truck hourly rate	7.50	\$40.32	\$302.40	
Other	Ferry Comox-Powell RTexada			\$222.80	
		1		\$525.20	
Accommodation & Food	Rates per day	No.	Rate		
Hotel	1 night for 2 people @ Gillies Bay	2.00	\$134.40	\$268.80	
		,		\$268.80	\$268.80
Equipment Rentals		No.	Rate		
Field Gear (Specify)	Houle field gear hourly rate for 2	4.00	\$16.13	\$64.51	
Other (Specify)	Houle office use hour rate	2.50	\$8.06	\$20.16	
				\$84.67	\$84.67
Freight, rock samples					
	estimate 3 samples to AGAT labs			\$15.00	
	estimate 3 samples to MDRU			\$15.00	
	·			\$30.00	\$30.00
TOTAL Expenditures					\$8,108.03
					7 - 7 - 2 - 2 - 2 - 2
Filing Distribution:	Tenure Number	На	Area %	Filing %	Cost Allocation
Victoria	918829				
Dandt	918869				· ·
Take	918870	62.9	0.875358	67%	\$5,432.38
IIANC					