BC Geological Survey Assessment Report 30781

## Geological,Geochemical,Conventional and Physical Work Assessment Report On The FREEDOM Claim Group

Nanaimo Mining Division

NTS Map 92F/11W located 49 38' 37 north 125 20' 39 west

Owner:Gary M.Thorsen Author of the Report: Gary M. Thorsen

# 30781





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

#### ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TOTAL COST [ITLE OF REPORT [type of survey(s)] Trospecting AUTHOR(S) GA SIGNATURE(S YEAR OF WORK 200 8 NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) Fee 175 STATEMENT OF WORK 7CASH PAYMENT EVENT NUMBER(S)/DATE(S) misi 94 Even UM Nato 07 PROPERTY NAME FILD Tenuro # 570706 and nee 580600 CLAIM NAME(S) (on which work was done) COMMODITIES SOUGHT CODDEN and MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN NTS 92 F/11E naimo, BC MINING DIVISION LONGITUDE 125 0 20 . 39 " (at centre of work) LATITUDE 3 OWNER(S) 1) GARY THORSEN 2) MAILING ADDRESS 29 South Ss. Hurg. P.O Box 20 VOR3BO OPERATOR(S) [who paid for the work] 1) GARY THORSEN 2) MAILING ADDRESS SAME AS ABOVE PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude): arma 1 min Cha conto inc magne REFERENCES area dtal= REPOR RK AND ASSESS FNT showingson staking in my no preven (OVER)

TYPE OF WORK IN Conventional EXTENT OF W THIS REPORT, Mysical and (IN METRIC UN Clochemical	and the second se	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)	Freedom-57070	6 DONE - 100 4.36 Work am
Ground, mapping 1:10,000 Scale, 439.31	ha * Freedom- 58061	00 - "1757.24 worke and
GEOLOGICAL (scale, area) Ground, mapping <u>/:/0,000 Scale, 439.31</u> Photo interpretation <u>Google Earth</u>		\$ 2761.16
GEOPHYSICAL (line-kilometres)		
Ground		
Magnetic		
Electromagnetic		
Induced Polarization		
Radiometric		
Seismic		
Other		
Airborne		
*GEOCHEMICAL ALS CHEMEX LAB-ASSAYS		
(number of samples analysed for)		20.0-
Soil 2 composites of 8 moss matter		93.37
/ Silt		
Rock 4-33 Element 1CP-61 and Au-FA		170.21
Water - 35 Field Cold Citra table THM soil Same	Kes II	
Other 35 Field Cold Citra table THM soil same Water- 16 pH craek same and 16 craek THM DRILLING (Test strips) for PH Heavy nuta (Test strips) (total metres; number of holes, size) detection levels, 10, 20, 50, Core	1.114 (( 00,200, (+9/1)	
Non-core		
RELATED TECHNICAL	5	
Sampling/assaying		
Petrographic		
Mineralographic		
Metallurgic		
PROSPECTING (scale, area) 6 cm = 5 km - 439.31	ha.	
PREPARATORY/PHYSICAL		**************************************
Line/grid (kilometres)	±	
Topographic/Photogrammetric (scale, area)		
Legal surveys (scale, area)Hiking	9	
Road, local access (kilometres)/trail 43.2 km . 8 km	ng.	# 225.75-925
Trench (metres)		
Underfround ut (metres) 20 days @ 20.00 (de	ey	400.00
Other Soil and water testing, moss mat	t samples)	3000.00
and gold panning. Prospecting outerops	01 3	AL COST 7889.33
Water courses for myself and two assis	tants	

### REPORT OF PHYSICAL EXPLORATION AND DEVELOPMENT Section 15 - Mineral Tenure Act Regulation

1. Event number: 2. To	enure I	number(s):	3. Type of Tenure:
4273494 5	5806	500 and 570706 (Report sentin.)	Mineral, or Placer
4. Recorded holder:	Addr	Box 8, (5429 South Is. Hwy.	Phone:
GARY THORSEN	P.1	0 (50x 8, (5429 Aoun \$5. Hwy.	250.335.0467
5. Operator:	Addro	ess: Union Bay, BC	Phone:
6. Report author:	Addr	ess: same	Phone:
GARY THORSEN		- Anne	Rockand
7. Qualifications/experience	362	rears of Prospecting minister of mines	ASB.C
of operator:	, Jalla	olaught Prospecting + Gold Panne	unat north de Collans
	y Saco	and the to pering the factor	ngu noun os course
8. Brief summary of work activity on claim(s) in	Una	ve received about 7 Prospectors Asu I discovered moly showing west of Jake. Was project manages for Type	Tost At James and
recent years (not including	Stuart	Lales. Was projet manages for Tuber	posources on the
this year's new work):	Indep	endent Property minfile 92 F236. 120	spected for Walter
tino your o new worky.	Supp	yand sam para araig of Topino 1	at from Ration
	Have	endent froverty minfile 92 F236. 10 u and Lam Otang Oracio of Tofino & Drospected the moth, Osland's ci ppy found near Winter Harbour.	an from Ray Con
	1997 - 19 - 19 - 1 <del>9</del> 97	11 0-1	
		Attach additional sheets if more space is required)	
9. Actual dates work was do	ne:	10. Tenure number(s) of claim(s) on which th	
Between 15 may to 2000	t-08	performed: 570706 and 580600	
love allo may a so			
11. Detailed written descript	ion of	Studia Sealan and Dara mampti- m	and theanen
the work activity: state what		Studied Geology and dero magnetic m forformed Regional Recommissioned	Water course + soil
done and how it was done, a		Levelemical testing, water pH's were to	stepand moss matts
the results. Mention equipme		taken for as says and interval go	edpanning of the
machinery, labourers, as		mossin Erictreek was done. The	explisa 680 ppm Hu
applicable. The cost statem	ent	RGs at the upper end of the grack a 279ph is locaded father down stramaboja	4 Km Wo Hi Do Hi An
(#19 on page 2) must corres	pond	sampling outcrops and arlas afore	dation and alteration
to what is stated here.		SEE. Assay Desults by ALS CHEMEX /	abin Appendix.
		Unod The assistants - Chair new	strom of Allatte for
Attach the 1:10,000 scale ma	ар	B. cand Soil thorsen son of seattle, I	vaghington for 5
showing the work sites.		10 days each at different times of	the season (1900) e
12. Metric dimensions of			- 1
workings: (Open cuts, adits, shafts, trenches)	pits,	none was done. Only prospecti	ing af areas.
13. Amount of material excav	vated		
and tested or processed:			
(metric units)			Part Pa
14. Geographic location of w	<i>ork</i>	From Courtenay, west on False Train	T ALATI
sites:		paging Id. worth side of lare to 182Km.	sign- un fight +
(access description, i.e., how y	/ou	and cross the Bridge at Eric Ocreek. 7	allow Eria creek for
get to the work site)	and- c 14	poont 5Km to centre of claim, 25 mi	les from Courteney.
15. Was GPS used to map we	OFK SIL	5? 16. Were work sites marked	
mystrom had one . ( ) non	iha	wons, Chus fagging, cut lines)? If yes, in	Marken used on thom.
17. Are photographs of work		attached? 7) /18. Was Notice of work filed	
		Hes Permit number: Didn't 7	
·		* did jump thru Tim	herenest's Hora
		in the second point	
Revision: March 23, 2007			Continued on next name

Revision: March 23, 2007

Continued on next page:



#### REPORT OF PHYSICAL EXPLORATION AND DEVELOPMENT Section 15 - Mineral Tenure Act Regulation

**NEW WORK** (continued)

\* New Form

from the nearest town: From Contenary, West on Jake hail the north side of Comon Jake. Follow to	muckshane Riverand rass the Midan
and follow up the high stall of the over it. To straight west along Er be about the contre of the claim and	25 miles from Courtenay

		4	
17. Was Notice of work filed? (Y/N)	no	If YES, Permit Number:	

#### COST STATEMENT

18. Expense(s) (complete either hourly rate or daily rate)	Total Hours OR # of days	Hourly Rate	Daily Rate	Total(s) (\$)
Labour cost: (specify type)				
Sampling soil + Water More That				
gold Danning mosson hochs +				
Stream gravel.	me Guya	<u>b</u>	#	4
Mo and Tul assistants: Christ Lei	20 dayst/0 days	12.50	\$100.00	3,000.00
Equipment & Machinery cost: (specify type)				
Lodging / Food:	Days	R	ate(s)	
Ford	20	\$ 20.00/ da	<u>ute(3)</u>	400.00
		2 j	7	1-1-0
Other: (specify) ALS CHEMEX LAD A	55445		and the second	
2-Sediment 33 demont + Au FA				93.37
4-rock 33.elemant + Au-FA				+ 170.21
	19. Total costs of	work from abo	ve:	7663.58\$0.00

20. Transportation/travel (specify type)	Days	Rate(s)	Total(s) (\$)
Ford Bronco IF 4X4	E.C.a		+ 000-
Jeep TJ 4×4 2,569.8 Kms	For GAS	20 days	225.75
1 2		V	
	21. Transportation/tr	ravel, maximum 20% of value in 19:	
	22. Total costs of wo	ork (add 19 and 21):	\$0.00
	23. Amount claimed	for assessment credit on claims:	3889.33

Jany M. (LANGA) Signature of Recorded Holder / Agent

may Date

2/3

## **TABLE OF CONTENTS**

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CONCLUSION	6
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### **ILLUSTRATIONS**

- Fig.2 Freedom Claim Group Location
- Fig.3 Coloured Geological Map of the Area
  - Fig.4 Freedom Claim Group MTO Map
  - Fig.5 Google Earth Map of Eric Creek

Fig.6 – Topo Map 1:50,000 scale

### **PHOTOS**

- #1 ~ Author, Gary Thorsen Moss Matt Sampling Eric Creek
- 2 Moss matt Sampling and Gold Panning
- 3 Magnetite Float with Malachite, Cu and Zn
- 4 Magnetite Outcrop with Malachite, Cu and Zn
- 5 Chris Nystrom at oxidized pyrite/ Chalcopyrite vein
- 6 Same vein as #5 with my silver ring in the foreground

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- #7 The Author Gary Thorsen Sampling a Cu Mineralized Boulder
- 8 Photo Looking West up Eric Creek Valley from the ridge of Freedom Claim #570706. With Mt. George V, Mt. Frink, and Castlecrag Mt.
- 9 View from the Old Landing at the Headwaters of Eric Creek, with the logged Area and roads in Freedom Claim block # 570706. (Top Centre)
- 10 My Son Leif after a Long Hard Day of Sampling and Prospecting



Mt. George I as seen from new road out, looking South-West with Brie creek below the drop off.

## INTRODUCTION

Preliminary reconnaissance with conventional prospecting, soil and water geochemical testing, water course pH testing and field work were done on the Freedom Claim Group. The work was accomplished at various times between May 15<sup>th</sup> - Oct. 20<sup>th</sup> 2008.

Fieldwork described in this report has been principally directed towards the exploration inside and around the claim group-57076 and 580600 to prospect for economic mineralization associated with the quartz-diorite intrusion in that area. (see **pro**) Televis (**MI**, or Fig. 3)

The units in the claim 57076 run in a north-south line and include one of the Carey Lakes to the east, while the units in the claim 580600 covers most of Eric Creek in a east-west direction. (see  $F(\mathbf{q}, 4)$ ).

The claim block centers on a point lying some 12 air-miles west of Courtenay, BC., and over lies the Eric Creek valley and roughly 4 miles west of the confluence with the Cruickshank River. From the Island Highway at Courtenay, the property is reached via the public road to Comox Lake, thence by the private (Timberwest) logging road along the north shore of Comox Lake and up the east side of the Cruickshank River for a distance of about 25 miles.

There are several showings in and around the claim group. Mainly copper minerals and some zinc. Some areas have been logged several years ago and there are new roads being built with a small amount of new logging taking place.

There are several drainage basins flowing from both steep slopes that drain into Eric Creek from the north and south. The area has heavy underbrush and treed steep slopes which impedes onfoot access however this disadvantage is largely compensated by the good primary access by the general network of local logging roads.

During the average field season, approximately early May to mid- November, the property and showings can be reached with standard and four wheel drive motor vehicles.

### FIELD AND LABORATORY WORK

The writer made his first visit to the property on May 15, 2008 visually prospecting all the logging roads, new and old in the claim areas by 4x4 Ford Bronco II and a full suspension Cannondale Mountain Bike with 21 gears. The bike was useful on over-grown old roads and newly blasted road beds into new logging blocks, and where previous Heli-logging had decked their logs in huge piles in wider areas of the old roads.

I had two assistants that I employed. One was Chris Nystrom of Abbottsford, BC that has prospecting experience with his father in both BC and the Yukon and has assisted me on other occasions. The second is my oldest son Leif of 31 years of age that now resides with his wife in Seattle, Washington. Leif has university geology and has accompanied me on several prospecting trips over the years from north-western BC, Barkerville, and several times on Vancouver Island. Vancouver Island trips included the rugged west-coast on the north end, from Raft Cove (south of Cape Scott) to Lippy Point near Winter Harbour.

Field work included detailed mapping of vein exposures and showings with reconnaissance prospecting, water course sampling for pH and Heavy Metals with test strips and Cold Extractable "Total Heavy Metals" in soils and sediments. (Holman Bloom Test). Eric Creek was Moss Matt sampled approximately every 300 meters to the triple fork at the head-waters below Faith Lake (see photo #2). I did some random gold panning of the "fines" for visible economic minerals (see photo # 1). The side creeks flowing into Eric Creek were also sampled and some stream beds were followed up to steeper sections and the rocks and boulders were observed for types and geology changes. ( see ILLUSTRATIONS )

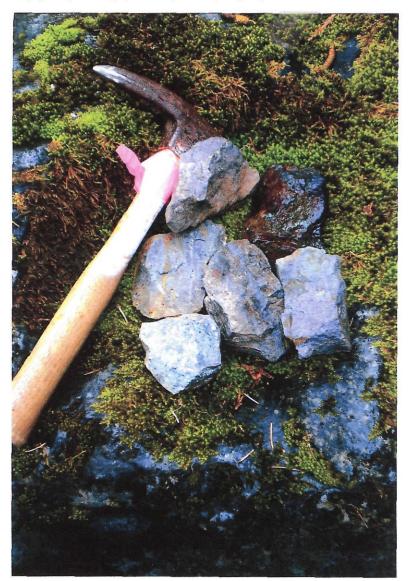
The writer also did further detailed geological mapping and sampling sites within the Claim areas. Fill in soil and water sampling will be done this season in between a 270 ppm gold, 279 ppm copper lower down the creek, and a 680 ppm gold Regional Geochemical Survey further up stream. Also, traverses are planned for up slope soil sampling and possibility a magnetometer survey above the 10,000+ ppm (5.7% ore grade) copper with zinc sample area.

Soil- samples were taken with a conventional mattock or grub hoe. The yellow-brown limonitic soil horizon (B-zone, or its nearest equivalent was sampled. This layer occurring within a general range of a few inches to two feet below the predominately organic surface layer of soil.

All rock and moss matt samples were sent to the ALS Chemex Lab. In North Vancouver. The moss matts were dried and sieved at home and tested as sediment samples. All samples were analysed for a 33 element four acid ICP-AES and 30g Au FA-AA finish. The rock samples were Crushed Split and Pulverized, the two high 10,000+ ppm Cu rock samples were four acid ore grade assayed. The assay results are found in the APPENDIX.

Geological mapping of bedrock exposures included observations in regard to rock-type, alteration, mineralization, and structural attitudes. General and detailed features of the geology and mineralization mapped within the claims are contained in Drw.#1 fig.2.

Due to the vast area of the claim group, the sampling intervals are very random. The objective of any sampling done in and around the Group was to locate mineralization and any target areas for follow-up prospecting. (see Topo Map Fig. 2).



### **GENERAL GEOLOGY**

The Eric Creek section of the Comox map area is principally underlain by basaltic lava of the Upper Triassic Vancouver Group, Karmutsen formation of flows, pillow, breccias, aquagene tuff, and some thin sedimentary layers. The unit is intruded by a granodiorite stock that resembles a sock in shape and is about 6 km. from heel to toe, with the top (3 km. wide) bordering a fault of the Cruickshank River about ½ km. north of the confluence with Eric Creek. Which flows from its source at Faith Lake to the west, to the east and into the Cruickshank River. (see the coloured Geology map Illustration #3).

The general course of the Cruickshank River has been determined by a north-south trending fault that extends from Mt. Joan in the south to Mt. Alexandra to the north.

There are also bodies of quartz diorite thought to be related to the Late Eocene to Early Oligocene Mount Washington Intrusive Suite (Massey, N., Personal Communication).

Alteration consists of malachite, limonite, chlorite, epidote, and silica. With significant minerals being found include chalcopyrite, pyrite, chalcocite, bornite, zinc and magnetite. Mineralization is found around the contact zone with the volcanics and within the granodiorite stock related to the Jura- Cretaceous system of the Vancouver Island Intrusives.

There are three known main showings and one minor occurrence in the general area of my claims. They are Faith Copper ,Minfile # 092F 241, Faith Lake Rim, Minfile # 092F 240 to the west, and Heather, Minfile # 092F 278 to the north-east. There is no previous knowledge of prospecting, staking, or minerals found in my claim group.

There are several areas of outcropping, in the Eric Creek valley and surrounding steep hillsides, with varying sizes of water courses within the "Drainage Basins". The local geology varies from mainly greenstone volcanics to several contacts with the quartz-diorite, granodiorite intrusive stock. Some areas have several feet of glacial till and debris filling the spaces of the host rock and creating tall bluffs of the compacted composite material.

-5-

### CONCLUSION

The present geological and geochemical evidence that the local copper mineralization preferentially occurs within volcanic rocks and more specifically, within shear and fracture zones cutting them. This apparent tendency, however, does not rule out the possibility that zones of disseminated copper mineralization may occur in (altered) volcanic rocks flanking the local intrusive stock.

From my observations of the mineralization in outcrop showings and lower water course pH's, along with elevated arsenic, mercury, and manganese samples as "pathfinder" elements, the 279 ppm, 3000ppm, and up to 10,000+ppm Cu results in my assays would be good indicators that a deposit my be in the area.

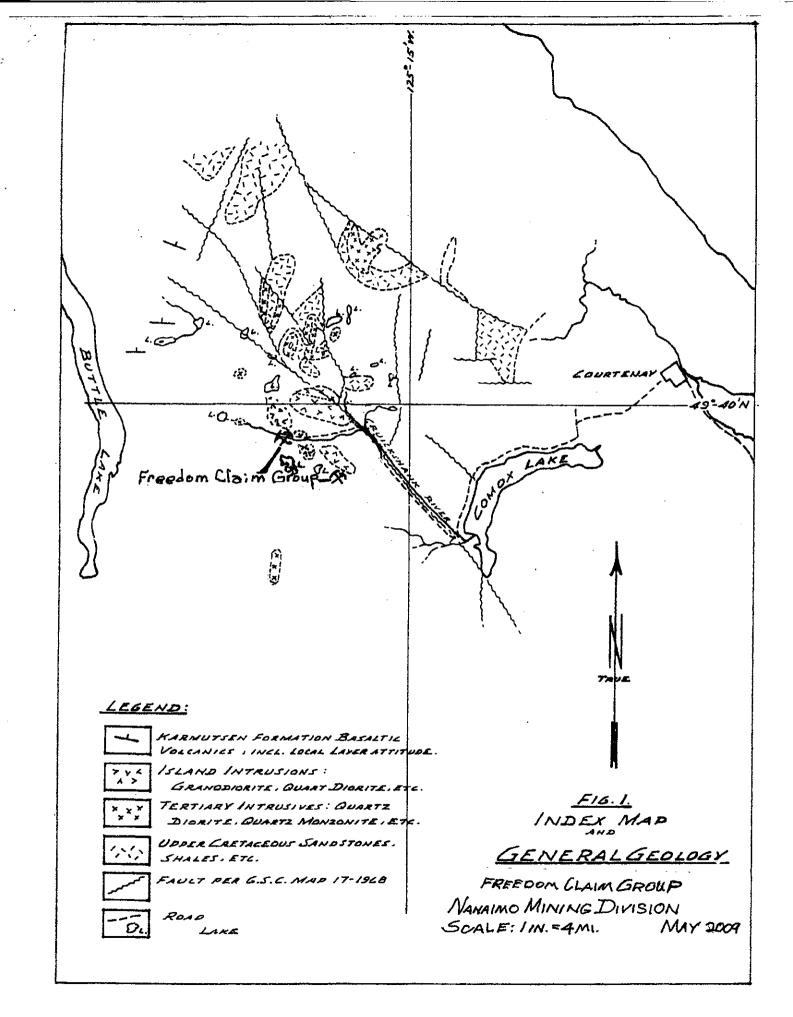
Geochemical patterns within the areas provide substantive evidence of their presence and tracing some patterns to their source would prove to be a challenge. The terrane itself is a challenge for all but a mountain goat.

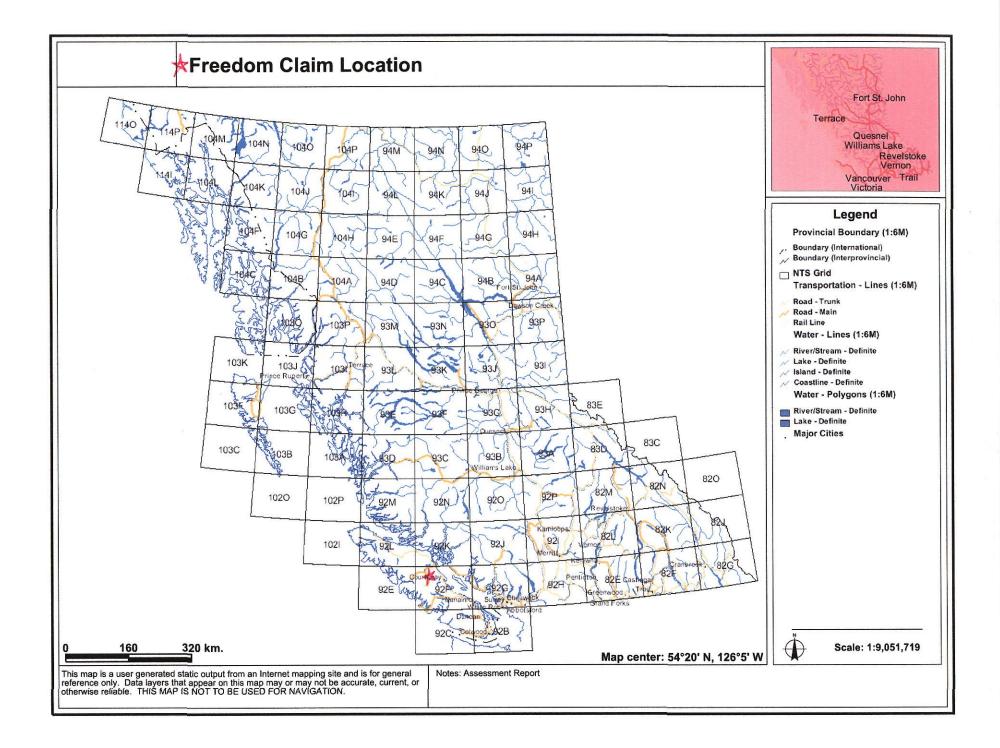
I have located four main "Target" areas that I plan to explore further with the forthcoming season, as soon as the snow melts in the high country. One target is to trace a 680 ppm Au and high arsenic result in a water course, and to expand on two areas of high Cu ppm's, and one area with elevated mercury, arsenic, Cu and Au Regional Geochemical Results.

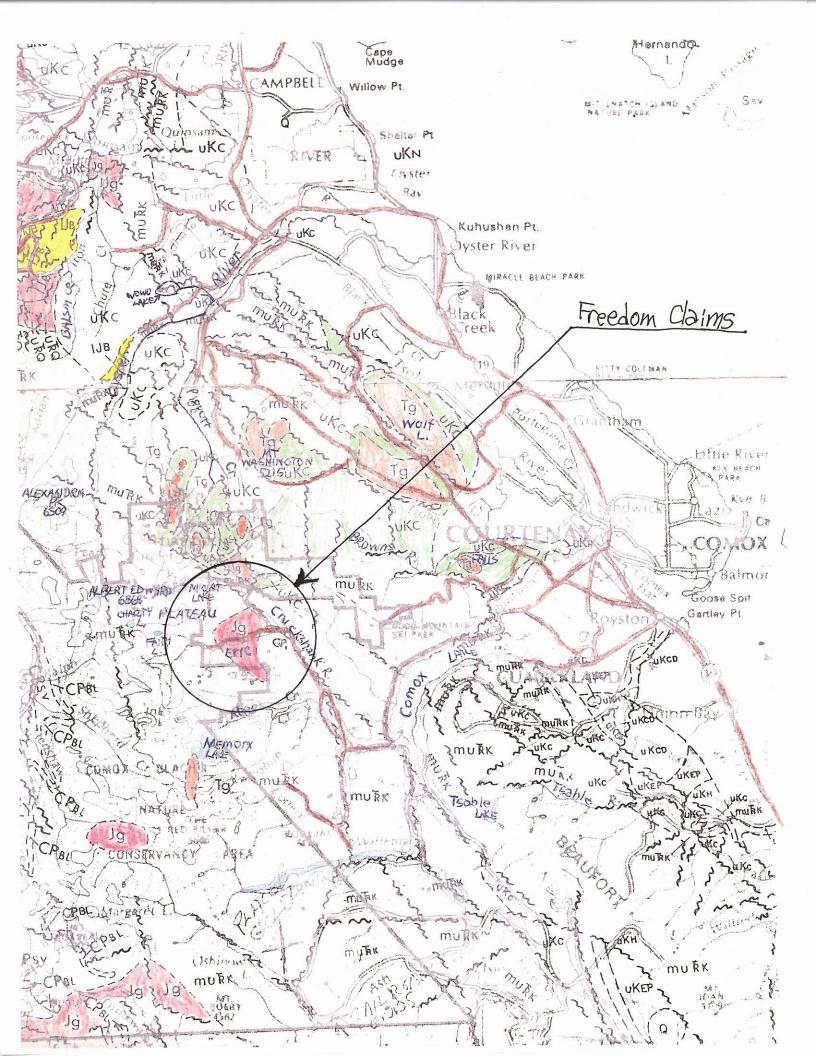


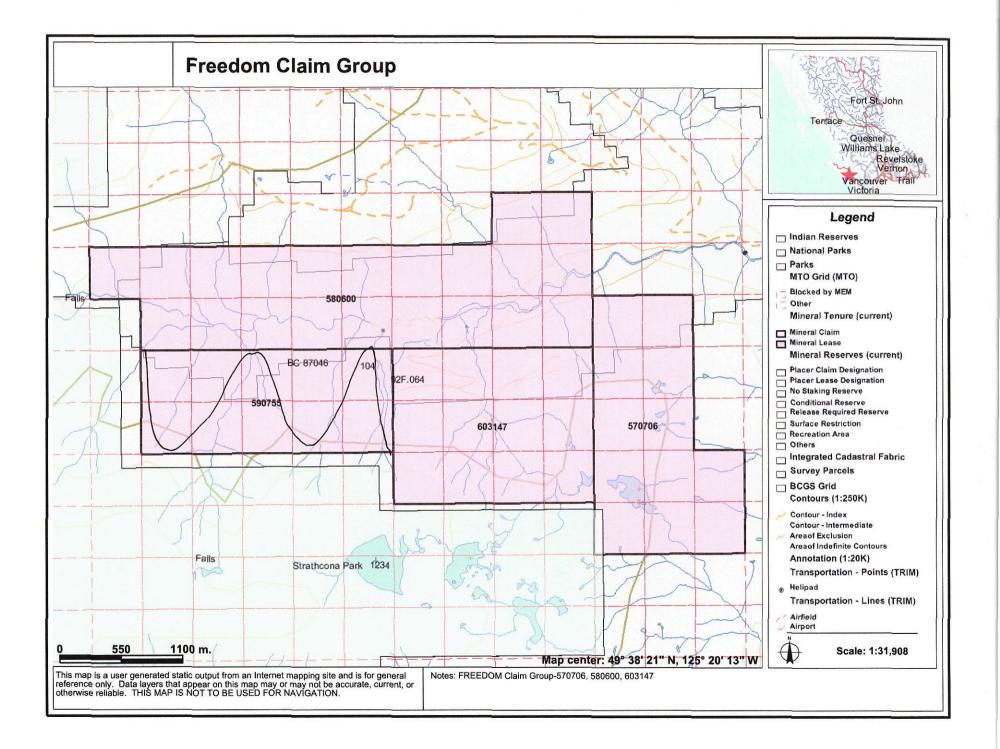
Respectfully Submitted,

## <u>APPENDIX</u>









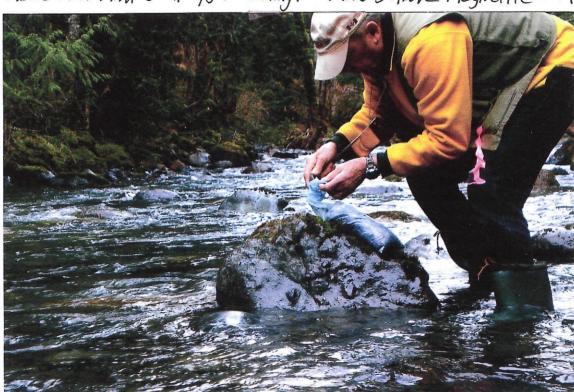


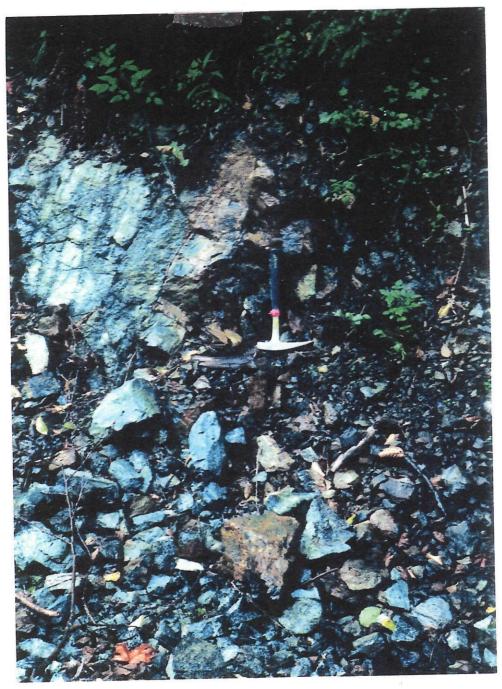
Frie Creek Valley and Claim area # 580600 from 18,787 ft. Fig. 5



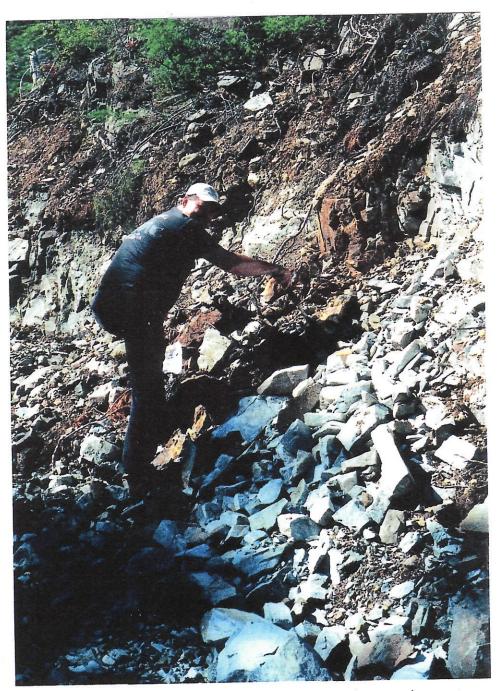
Photo #2 Above Moss MATT SAMPle /gold Banning. Photo#3 Above-Magnetite with Cut Zn







Magnetite outcropwith Malachite cutZn

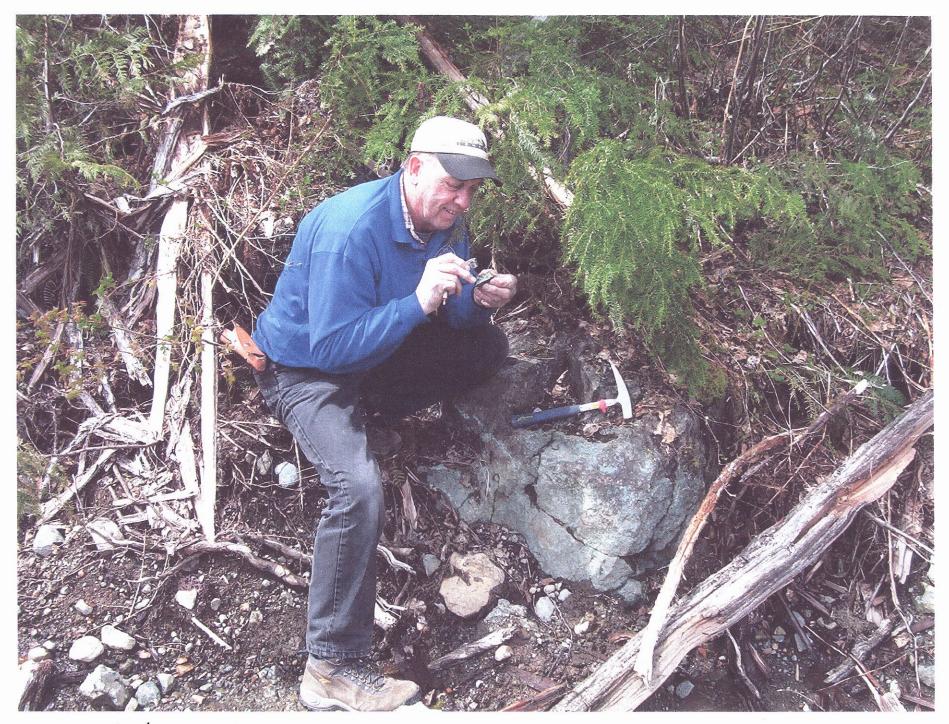


Assistant Chris NYSTROM at Oxidized PYrite/Chalcopyrite vein above ERic CREEK

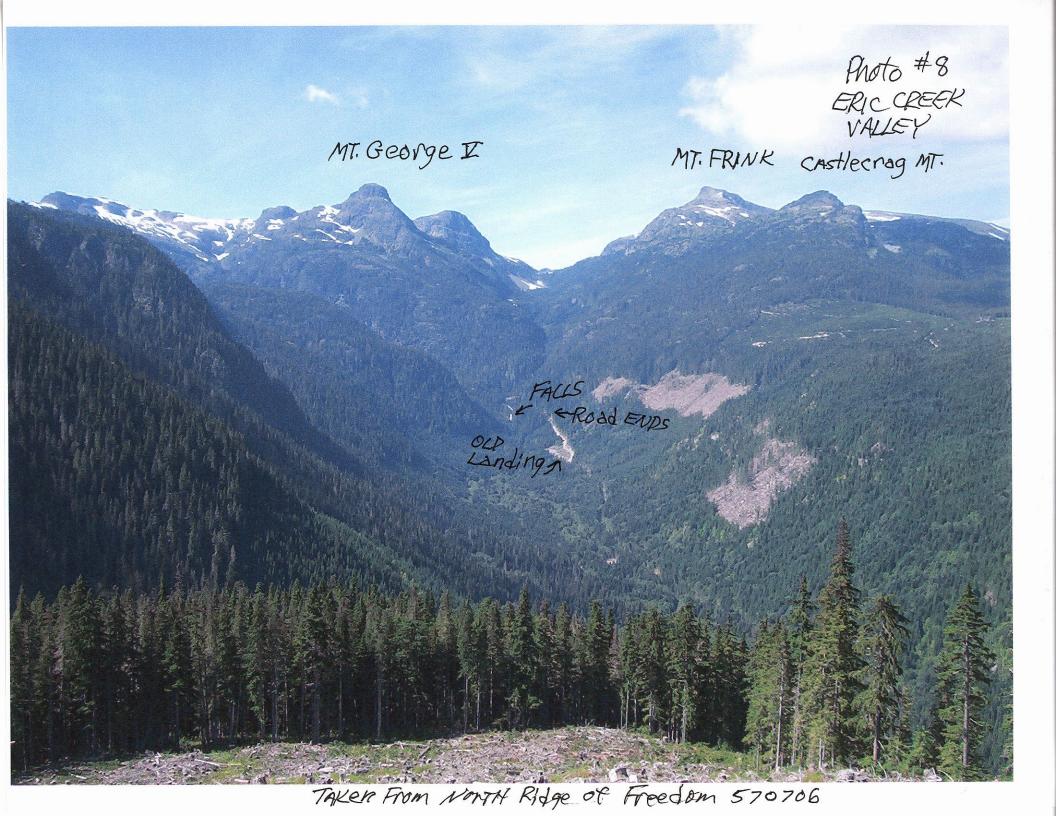
up

1

Bottom



Photo#7 Author GARY THORSEN with Malachite Cu bou/der

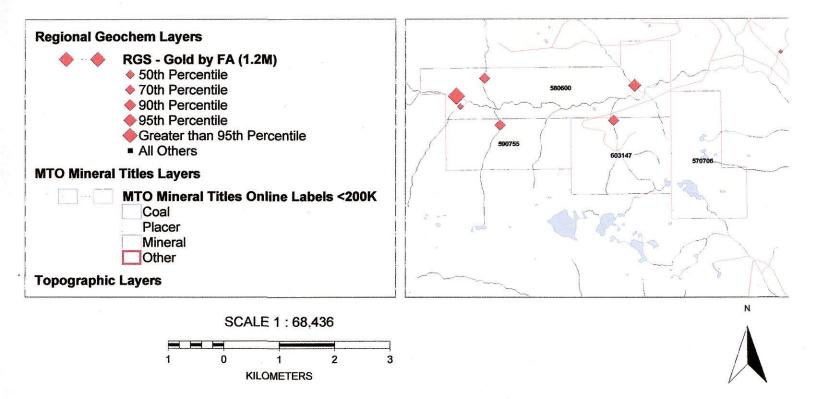




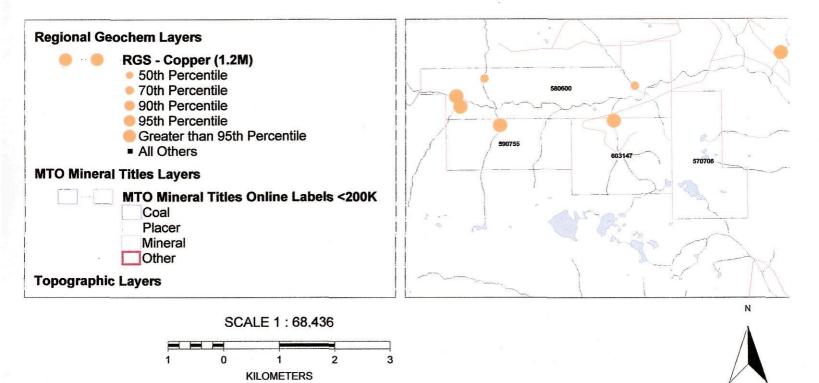


ERIC OREK-SON Leif THORSEN After 2 hard day of Prospecting & SAMPLING

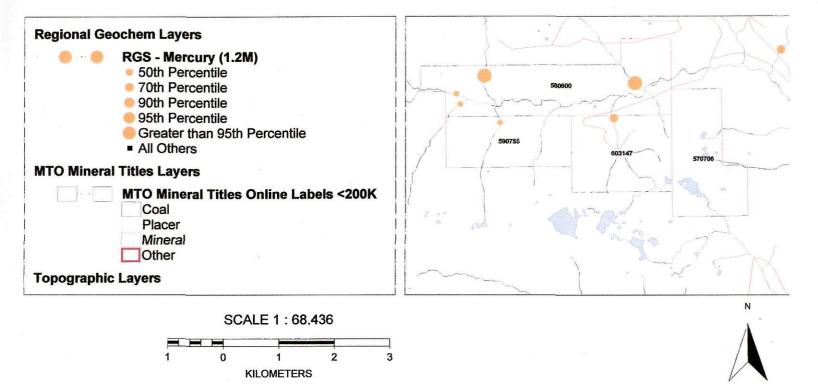
## Freedom Group Au-570706,580600,603147



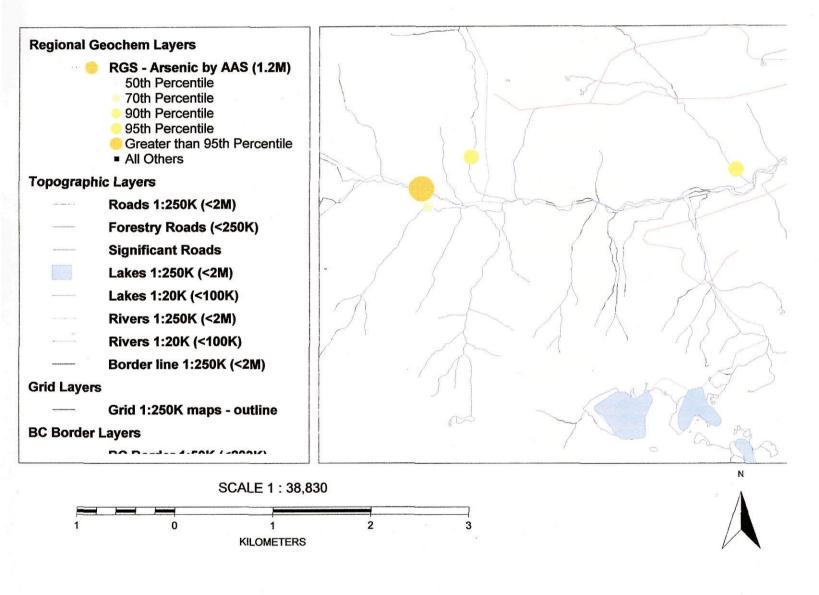
## Freedom Group Cu-570706,580600,603147



## Freedom Group Hg-570706,580600,603147



## Eric Cr. Arsenic Sampling Results



## **RGS** Locs



- Provincial Parks & Protected Areas (<1M)
- National Parks

**Regional Geochem Layers** 

RGS 2007 Labels(<200K)</p>

**Topographic Layers** 

- Coast 1:20K (<1M)
- Contours west 1:20K (<100K)
- Contours east 1:20K (<100K)</p>
- Lakes 1:50K (<300K)
- Rivers 1:50K (<300K)

Sea

**Grid Layers** 

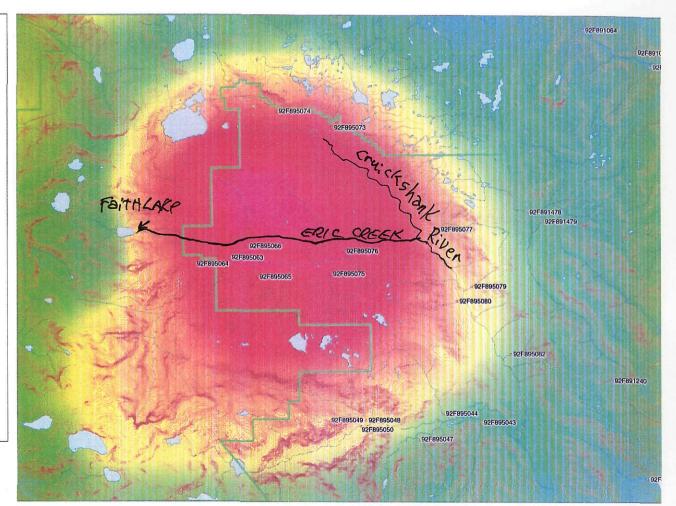
----- Grid 1:250K maps - outline

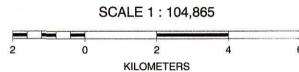
**Geophysical Layers** 

Aeromag (<300K)

**BC Border Layers** 

BC Border 1:50K (<200K)





Aero Magnetic Avomoly under the Freedom Claim Group



ALS Canada Ltd. 212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com 10: IHURSEN, GARY PO BOX 8 UNION BAY BC VOR 3B0

INVOICE NUMBER 18	51648
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BILLING INFORMATION				ANALYS	UNIT		
		QUANTITY	CODE -	DESCRIPTION	PRICE	TOTAL	
Certificate: Sample Type: Account: Date: Project: P.O. No.: Quote:	VA08171690 Rock THORGA 12-DEC-2008 Freedom 1 and 2		4 4.30 4 4 4 2 2 2 2	PREP-31 PREP-31 Au-AA23 ME-ICP61 GEO-4ACID ME-OG62 ASY-4A01 Cu-OG62	Crush, Spiit, Pulverize Weight Charge (kg) - Crush, Split, Pulverize Au 30g FA-AA finish 33 element four acid ICP-AES Four acid "near total" dig Ore Grade Elements - Four Acid Four acid digestion for OG62 Ore Grade Cu - Four Acid	6.55 0.65 14.15 7.65 5.45 2.20 7.65 2.20	26.20 2.80 56.60 30.60 21.80 4.40 15.30 4.40
Terms: Comments:	Due on Receipt	C3					

To: THORSEN, GARY PO BOX 8 UNION BAY BC VOR 3B0 
 SUBTOTAL (CAD)
 \$
 162.10

 R100938885
 GST
 \$
 8.11

 TOTAL PAYABLE (CAD)
 \$
 170.21

Payment may be made by: Cheque or Bank Transfer

Beneficiary Name:	ALS Canada Ltd.
Bank:	Royal Bank of Canada
SWIFT:	ROYCCAT2
Address:	Vancouver, BC, CAN
Account:	003-00010-1001098

Please Remit Payments To : ALS Chemex 212 Brocksbank Avenue North Vancouver BC V7J 2C1



## **ALS Chemex**

EXCELLENCE IN ANALYTICAL CHEMISTRY ALS Cenada Ltd.

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com To: THORSEN, GARY PO BOX 8 UNION BAY BC VOR 3B0 Page: 2 - A Total # Pages: 2 (A - C) Finalized Date: 12-DEC-2008 Account: THORGA

Project: Freedom 1and 2

Sample Description	CERTIFICATE OF									OF ANA	LYSIS	VA081				
	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-AA23 Au ppm 0.005	ME-ICP61 Ag ppm 0.5	ME-ICP61 Al % 0.01	ME-ICP61 As ppm 5	ME-ICP61 Ba ppm 10	ME-1CP51 Be ppm 0.5	ME-1CP61 Bl ppm 2	ME-ICP61 Ca % 0.01	ME+ICP61 Cd ppm 0.5	ME-ICP61 ME-ICP61 ME-ICP61 ME-ICP6 Co Cr Cu Fe ppm ppm ppm % 1 1 1 0.01		%	ME-ICP61 Ga ppm 10	
EMC 91208-1		1.00	0.171	3.6	2.13	17	20	1.9	<2	0.18	<0.5	104	14	>10000	41.0	20
EMC 91208-2		1.52	1.565	14.3	1.26	128	10	1.8	<2	0.11	<0.5	352	<1	>10000	41.9	20
CL 91608-1	1	0.60	0.033	1.0	7.73	14	100	<0.5	<2	7.91	<0.5	61	138	1810	9.93	30
CL 91608-2		0.98	0.007	<0.5	7.28	5	260	0.5	<2	6.88	<0.5	21	129	519	7.75	20



ALS Canada Ltd.

212 Brooksbank Avenue North Vancouver BC V7J 2C1 To: THORSEN, GARY PO BOX 8 UNION BAY BC VOR 3B0

Page: 2 - B Total # Pages: 2 (A - C) Finalized Date: 12-DEC-2008 Account: THORGA

i

Phone: 604 964 0221 Fax: 604 964 0218 www.alschemex.com

Project:	Freedom	1and 2
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										CERTIF	ICATE	OF ANA	LYSIS	VA081	171690	
Sample Description	Method Analyte Units LOR	ME-ICP51 K % 0.01	ME-ICP61 La ppm 10	ME-ICP61 Mg % 0.01	ME-ICP61 Mn ppm 5	ME-ICP61 Mo ppm 1	ME-JCP61 Na % 0.01	ME-ICP61 NI ppm 1	ME-ICP61 P ppm 10	ME-ICP61 Pb ppm 2	ME-ICP61 S % 0.01	ME-ICP61 Sb ppm S	ME-ICP61 Sc ppm 1	ME-ICP61 Sr ppm 1	ME-ICP61 Th ppm 20	ME-ICP61 T} % 0.01
EMC 91208-1 EMC 91208-2 CL 91608-1 CL 91608-2		0.01 0.05 0.33 0.59	<10 <10 <10 <10	0.64 0.35 2.77 2.43	895 568 1015 1120	145 32 3 2	0.03 0.02 1.44 2.28	<1 <1 56 43	290 90 440 710	8 13 5 <2	1.87 7.54 3.45 0.43	> <5 <5 <5 <5	7 4 26 26	7 9 194 284	<pre>20 &lt;20 &lt;20 &lt;20 &lt;20 &lt;20 &lt;20 </pre>	0.08 0.03 0.64 0.67
					<u>.                                    </u>		, _, _, ,	<del>.</del>								



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Page: 2 - C Total # Pages: 2 (A - C) Finalized Date: 12-DEC-2008 Account: THORGA

Project: Freedom 1and 2

								CERTIFICATE OF ANALYSIS VA08171690
Sample Description	Method Analyte Units LOR	ME-ICP61 Ti ppm 10	ME-ICP61 U ppm 10	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	Cu-OG62 Cu % 0.001	
EMC 91208-1 EMC 91208-2 CL 91608-1 CL 91608-2		<10 <10 <10 <10	10 10 10 10	77 45 232 212	120 130 <10 <10	116 111 96 92	1.240 5.70	



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### **INVOICE NUMBER 1851649**

				ED FOR		UNIT	
2	BILLING INFORMATION	QUANTITY	CODE -	DESCRIPTION		PRICE	TOTAL
Certificate:	V/A00474004	1	BAT-01	Administration Fee		30.00	30.0
	VA08171691	2	PREP-41	Dry, Sieve (180 um) Soil		1.35	2.7
Sample Type:	Sediment	0.78	PREP-41	Weight Charge (kg) - Dry, Sieve (	180 um) Soil	2.20	1.7
Account:	THORGA	2	Au-AA23 ME-ICP61	Au 30g FA-AA finish 33 element four acid ICP-AES		14.15 7.65	28.3
Date:	10-DEC-2008	2	GEO-4ACID	Four acid "near total" dig		5.45	15.3 10.9
Project:	Freedom 1and 2	2	GEO-4AOID	Four acid mean total dig		0.40	10.3
P.O. No.: Quote:	mass mat						
	a Marchank and						
Terms:	Due on Receipt C3						
Comments:							
					SUBTOTAL (CAD)	\$	88.
To: T	HORSEN, GARY				R100938885 GST	\$	4.
22.12799	O BOX 8				TOTAL PAYABLE (CAD)	\$	93.
U	NION BAY BC VOR 3B0				·····		
				· · · · · · · · · · · · · · · · · · ·		1941 Cartagerra	
		F	Payment may be r	nade by: Cheque or Bank Transfer	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
		l	Beneficiary Name: Bank:	Royal Bank of Canada	formation of formation	n I	ered the
-	Disease Demik Desmands Te i		SWIFT: Address:	ROYCCAT2 Vancouver, BC, CAN			
	Please Remit Payments To : ALS Chemex		Account:	003-00010-1001098			

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Page 1 of 1



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CERTIFICATE OF ANALYSIS VA08171691

Project: Freedom 1and 2

ample Description	Method	WEI-21	Au-AA23	ME-ICP61												
	Analyte	Recvd Wl.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.005	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10
EMM 9908-1		0.30	0.012	<0.5	7.58	36	140	0.5	<2	4.56	<0.5	34	152	139	7.82	20
EMM 9908-2		0.48	0.006	<0.5	7.44	23	90	<0.5	<2	5.55	<0.5	36	205	164	8.03	20



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Page: 2 - B Total # Pages: 2 (A - C) Finalized Date: 10-DEC-2008 Account: THORGA

Project: Freedom 1and 2

#### **CERTIFICATE OF ANALYSIS** VA08171691 ME-ICP61 ME-ICP61 ME-ICP61 ME-ICP61 ME-ICP61 ME-ICP61 ME-ICP61 ME-JCP61 ME-ICP61 ME-ICP61 ME-ICP61 ME-ICP61 ME-ICP61 ME-ICP61 ME-ICP61 Method Ρ Pb \$ К Mg Mn Мо Na Ni Sb Sc Sr Th Analyte La Ti Units % % % % % ррт ppm ppm ppm ppm ppm ppm ppm ppm ppm ample Description LOR 0.01 0.01 20 10 0.01 5 1 0.01 10 2 5 1 1 0.01 1 EMM 9908-1 0.54 <10 3.07 1340 1.53 55 7 0.06 <5 31 215 <20 0.79 <1 940 EMM 9908-2 0.30 <10 3.70 1230 <1 74 500 8 0.03 <5 201 <20 1.64 34 0.92



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CERTIFICATE OF ANALYSIS VA08171691

Project: Freedom 1and 2

ample Description	Method Analyte Units LOR	ME-ICP61 Ti ppm 10	ME-ICP61 U ppm 10	ME-ICP61 V ppm 1	ME-ICP61 W ppm 10	ME-ICP61 Zn ppm 2	
EMM 9908-1 EMM 9908-2	-	<10 10	<10 <10	273 322	<10 <10	108 110	