2012 Assessment Report

on

Prospecting and Geochemical Analysis of Rock samples

Quinn Eskay Property

License Number 5014903
Claims 834206, 834208, 534210, 834212

NTS 104B
Skeena Mining Division

Latitude 56°17'13
Longitude 130°27'7

By

Christopher Galbraith, BSc, MIT
Dave Lentz, Ph.D, P.Geo

Cache Minerals Inc.
24 December, 2012

Table of Contents

Table of Figures

Table of Tables

APPENDICES

Summary

The following Report of Work summarizes the exploration performed during the 2012 exploration program on the Quinn Eskay Property northwest of Stewart, BC. Work performed included prospecting and rock sampling on August 11th, 2012 where a total of 17 rock samples were collected from the property and then submitted to Activation Laboratories for instrumental neutron activation (INAA) and inductively coupled plasma (ICP) analysis.

The property, located 10 km northwest of the previously producing Granduc Mine revealed samples that were anomalous in gold and base metals. One grab sample of angular float in particular highlighted the potential at Quinn Eskay: 12-QECG-07 was taken from a quartz-sulfide vein float, containing 30.7 g/t Au, 159 g/t Ag, 139 g/t Sb, and 4.47% Cu. Four more grab? samples contained anomalous concentrations of Au, including 12-QECG-01 (429 ppb Au and 494 g/t Sb), 12-QECG-04 (207 ppb Au), 12-QECG-05E (309 ppb Au), and 12-QECG-11 (165 ppb Au). One other sample, 12-QECG-05D contained anomalous W-Mo mineralization as well (561 ppm W, 112 ppm Mo).

The results of the 2012 site visit and sampling program confirm the potential that Quinn Eskay may host a polymetallic gold-silver-copper vein deposit. It is highly recommended that follow up work for 2013 take place including, but not necessarily limited to:

- Additional prospecting & rock sampling
- Hand trenching in the area of 12-QECG-07 to expose the quartz-sulfide vein and identify size constraints and orientation
- Detailed geological mapping
- EM and/or IP ground surveys following the successful completion of the aforementioned exploration activities
- Drilling, following the identification of probable drill targets

Introduction

This report covers all work conducted for Cache Minerals Inc. on the Quinn Eskay Property, located in northwestern British Columbia, approximately 50 km northwest of Stewart and 10 km northwest of the previously producing Granduc Mine (Fig. 1), which is historically reported as producing 15.2 million tonnes of gold, silver, and copper ore (MINFILE Mineral Inventory 2011). The property is made up of 5 claims (Fig. 2) within NTS sheet 104B and cover approximately 28.7 km^2 of ground; however, a large portion of the property is covered by the Clara Smith Glacier.

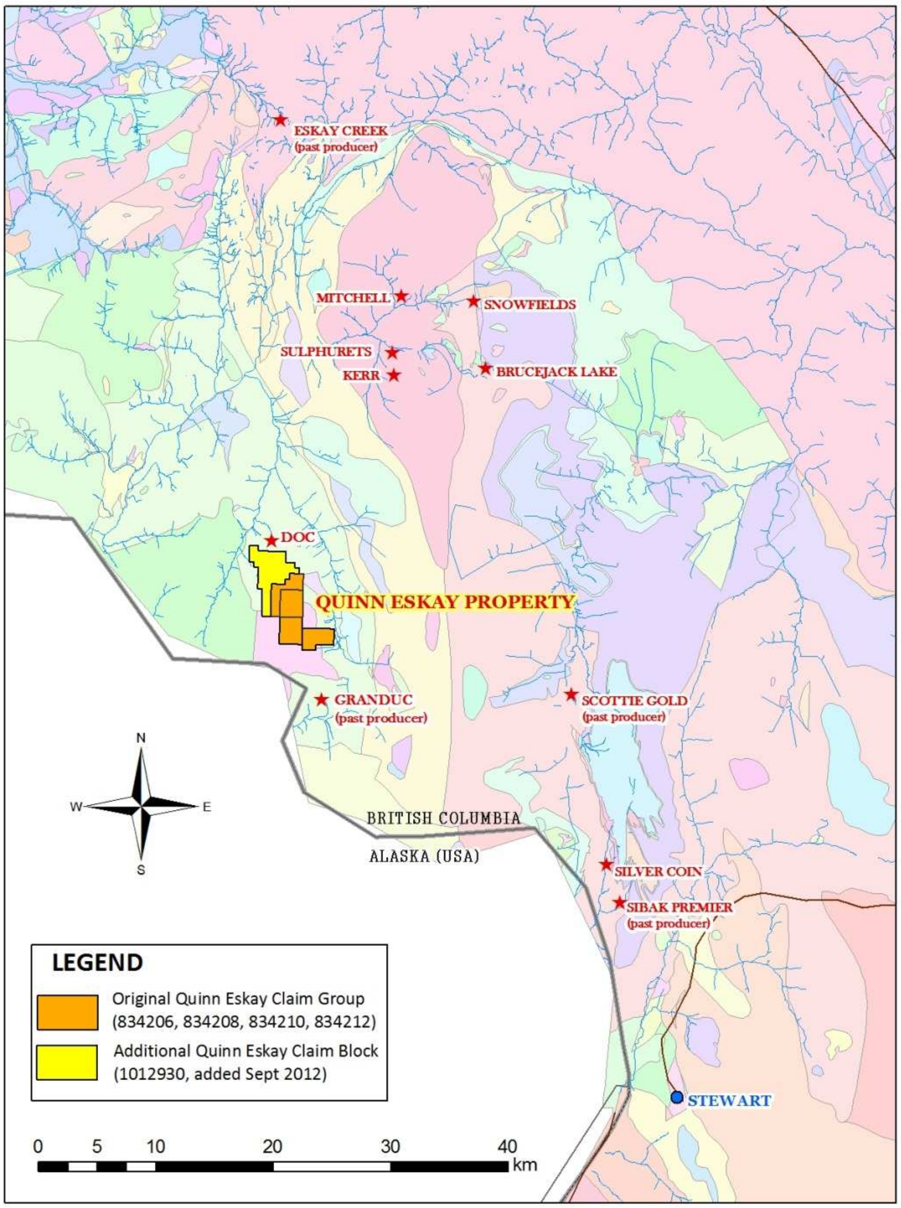

Figure 1. Location of the Quinn Eskay claims, near Stewart, BC. Significant deposits of the area are also shown.

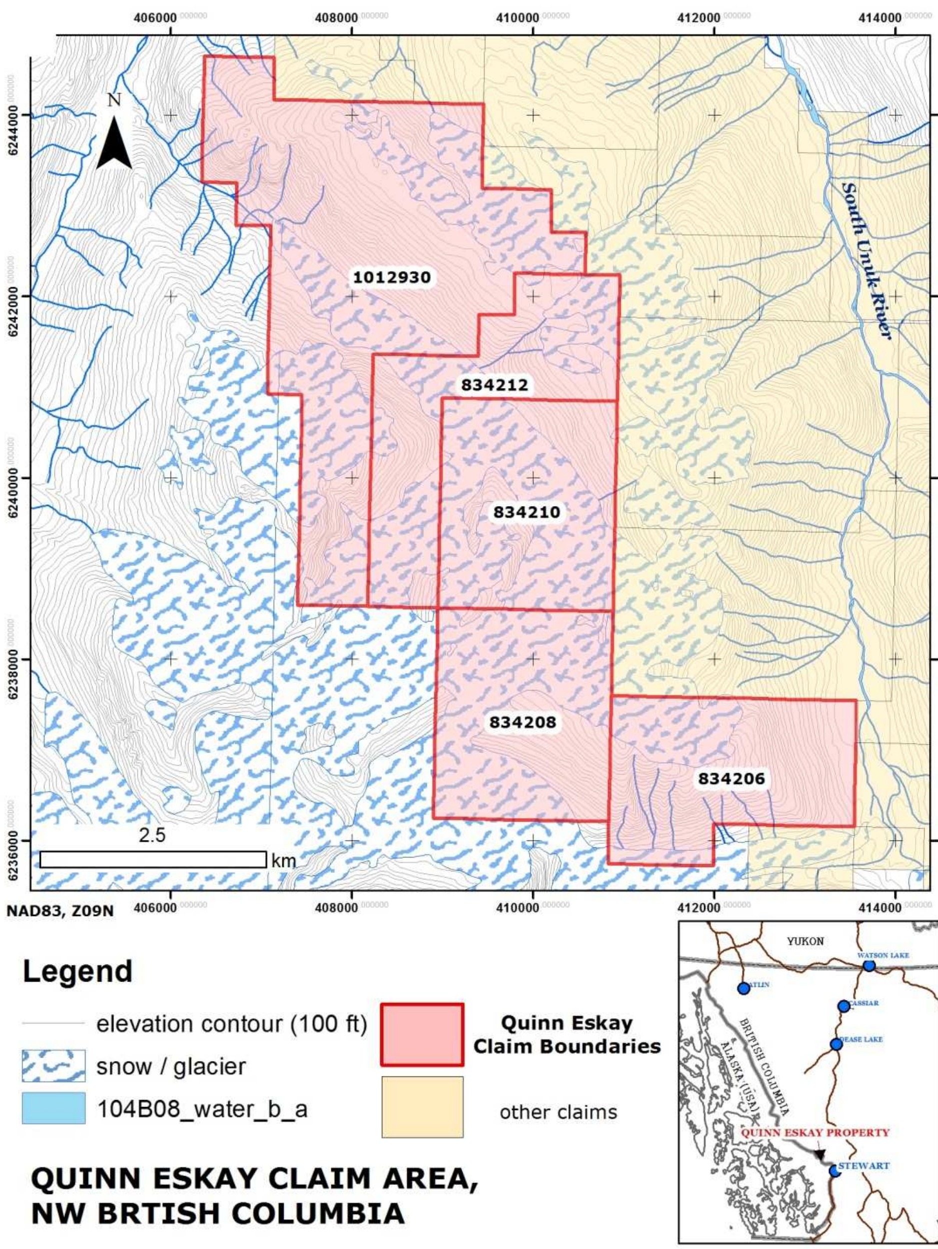

Figure 2. Quinn Eskay claims map.

Work on the property was conducted on August 11th, 2012 to determine gold, silver, and base-metal potential of the area. A total of 17 rock samples were collected for analysis. All samples were submitted to Activation Laboratories Inc. in Stewart, BC to be pulverized using a mild steel mill before analysis by *Code 1D enhanced* instrumental neutron activation (INAA) and inductively coupled plasma (ICP) methods at the laboratories in Ancaster, Ontario. One sample (12-QECG-07) was also analyzed for Cu by *Code 8* aqua regia (AR) and re-analyzed for Au by fire assay (FA).

Prospecting on the property was accomplished by two geologists: Cache's Exploration Manager (Galbraith) and Technical Director (Lentz).

The results of the prospecting program were highly encouraging. Additional anomalous Au and base metal mineralization was noted in numerous; one grab sample of an angular float boulder in particular was particularly encouraging, containing 30.7 g/t Au, 159 g/t Ag, and 4.47% Cu. Following the encouraging results of the 2012 program, additional ground was staked north of the original claim block, expanding the claim size to 28.7 km^2 (from 16.9 km^2), and bringing the northern boundary of the claim block to be shared with the southern boundary of the Doc Property's claim area.

Physiography and Glaciation

The area within the Quinn Eskay claims is high alpine, dominated by steep cliffs, often loose material, and widespread snow & glacial cover (Fig. 3). The valleys in the claim area are filled by glacier. The ridge tops and many of the valley walls are exposed.

Vegetation is rare; however, lichens and small shrubs do grow in the unglaciated areas at the tops of the ridges.

Figure 3. The terrain at Quinn Eskay is steep and dominated by active glacier.

Accessibility

Due to the challenging topography of the area, the Quinn Eskay Property is only accessible by helicopter. Flights were taken from Stewart, BC to the claim areas where there are sparse areas to land a helicopter.

Extreme caution must be taken during traverses in many areas of the property due to the steep terrain, slippery snow cover, and loose material.

History

The Unuk River, a rough eastern boundary of the claims, was first visited in 1905 by F.E. Wright of the U.S. Geological Survey as an extension of his work on the Alaskan side of the nearby International border. The National Geochemical Reconnaissance Program of Canada completed lake/stream sediment and water sampling in the area post-1975; several samples in the Unuk River are anomalous in Pb and above background for Au. Despite the abundance of glaciers covering most of the area at higher elevation, work has been completed in all directions of Cache's claims. Exploration to the east, around the Leduc Glacier was the focus during and after the development of Granduc Mine. Approximately 0.5 km south of the properties is the Nurse Property that includes a heavily mineralized boulder trail that contained (in 9 samples) up to 4.86 g/t Au, 1013 g/t Ag, 53% Pb, and 7.2% Zn; mineralization is suggested to have originated from several phases of quartz veins seen at higher elevations. Adjoining the northern extent of the claim group is the Doc Property that contains 8,547 oz Au and 675,233 oz of Ag (26,337 tonnes of ore, grading 9.2 g/t Au and 44.9 g/t Ag). Mineralization at the Doc Property occurs mainly as quartz veining with associated galena, pyrite, hematite, and/or chalcopyrite; however, skarn-related Au mineralization has been noted (McGuigan and McKinley 2004; MINFILE Mineral Inventory 2011).

In 2011 a 4-person field crew of Cache Minerals visited the specific area of the Quinn Eskay claims, for what is believed to be the first time. The program was limited by time constraints; however, several areas were visited, and the program did successful identify areas of anomalous gold & base metal potential (see Fig. 4 for Au-in-rock results).

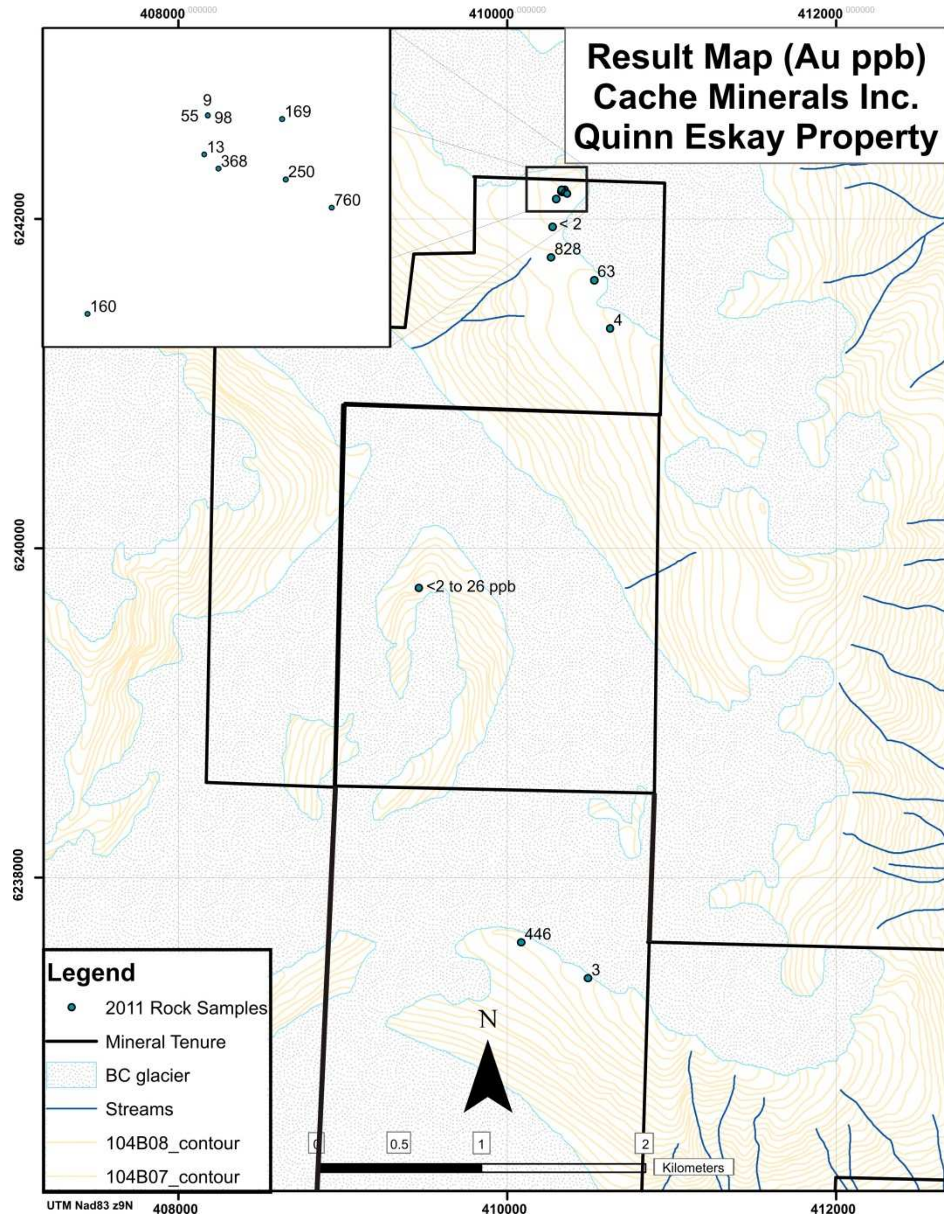

Figure 4. Results map (Au, ppb) of the 2011 site visit to Quinn Eskay by Cache Minerals personnel.

Regional Geology

Four major assemblages are present in the region (McGuigan and McKinley 2004) (Fig. 5):

- Upper Paleozoic Stikine Assemblage
- Upper Triassic Stuhini Group
- Lower and Middle Jurassic Hazelton Group
- Middle and Upper Bower Lake Group

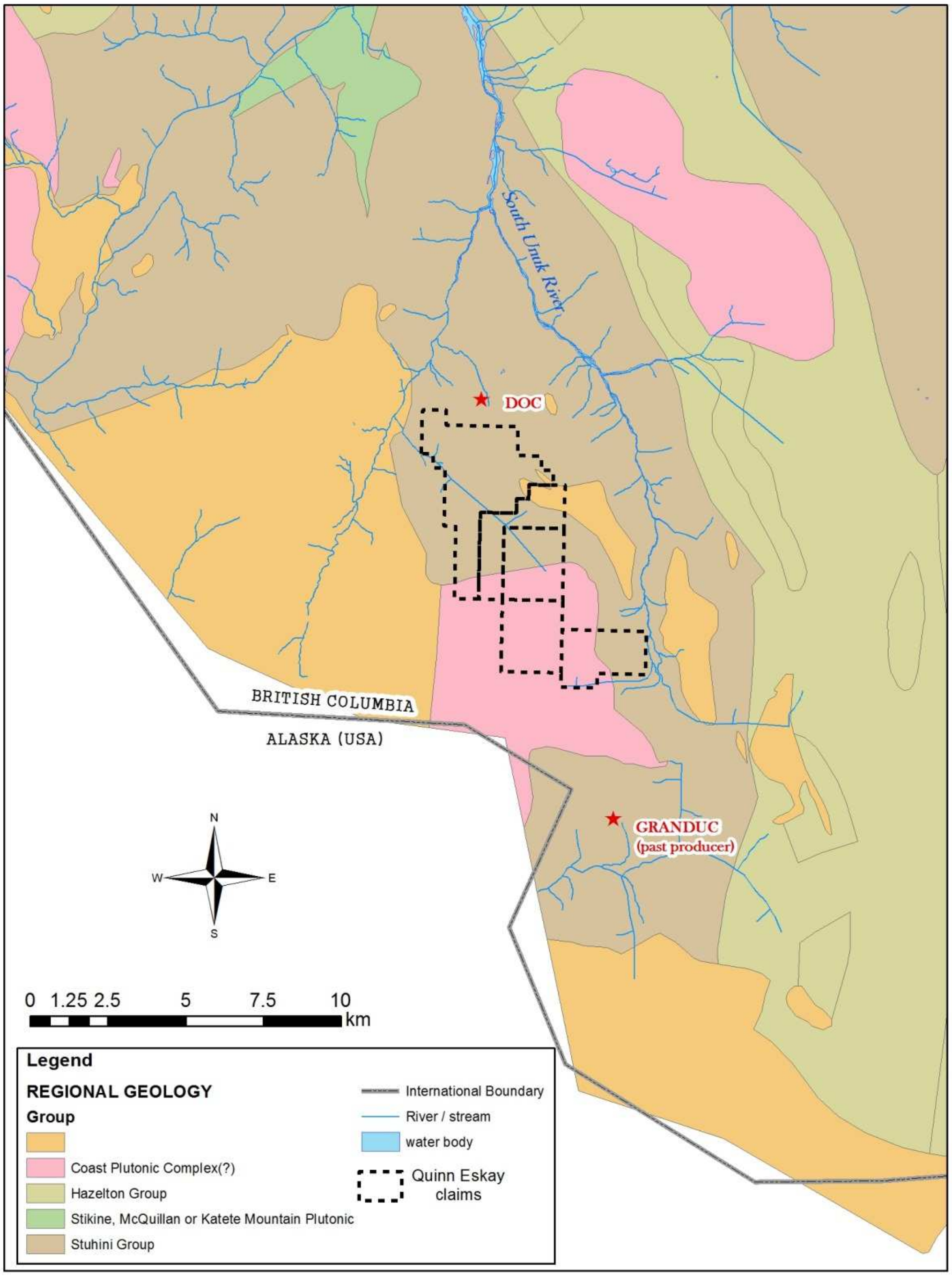

Figure 5. Regional geology of the Quinn Eskay claim area, simplified by geological groups.

The Paleozoic Stikine assemblage is located northwest of the property and composed of coralline limestones and intercalated mafic to felsic flows and volcaniclastic rocks, and siliceous siltstones, turbidites, chert, and conglomerates.

The Upper Triassic Stuhini Group, which mostly dominates the property, consists of two divisions, Upper and Lower. The Lower Division is dominantly sedimentary; undifferentiated fine-grained, well bedded rocks, and coarser conglomerate layers, whereas the Upper Division is dominantly volcanic and volcaniclastic; mafic to intermediate tuff and volcanic breccia, mafic porphyritic flows, felsic flows, and flow breccia.

The Lower to Middle Hazelton Group located to the east of property includes the Unuk River and Betty Creek formations. Primarily andesitic tuffs with black siltstone members dominate the Unuk River Formation. The Betty Creek Formation consists of interbedded tuffs, flows, and hematitic sedimentary rocks.

The Middle to Upper Jurassic Bowser Lake Group is composed of marine basin turbidites, black siltstones, fine-grained sandstones, and conglomerates (Alldrick and Britton 1992).

Within the property, the Stuhini Group is cross-cut by the granitoid batholith and stocks of the Eocene Coast Plutonic Complex that displays a range of rock types including medium- to coarse-grained biotite +/- hornblende granite and granodiorite with minor quartz diorite. The complex also includes co-genetic dyke swarms between 50 and 65 Ma.

Sampling Procedure and Preparation

The 2012 site visit and sampling program placed a focus on the areas identified in 2011 as bearing potential for gold-base metal mineralization. Two areas were visited and sampled and given more time to explore than during the 2011 visit; another area was also prospected that was not previously visited in 2011 (Figure 5).

A total of 17 rock samples were collected from two areas that were visited on the Quinn Eskay Property during the one day exploration program. See Table 1 for coordinates of locations. No samples were taken in the previously unvisited area as nothing of interest was noted. Grab samples were taken only in areas that were composed of mostly talus material; however, the source was perceived to be local, exhibiting characteristics of limited mobility. Chip samples were taken where outcrop was readily accessible.

Table 1. Coordinates of samples collected in 2012. Coordinates listed are NAD83, Zone 09N.

Sample	UTM E	UTM N	elev (m)
12-QECG-01	410068	6241988	1670
12-QECG-02	410030	6242121	1681
12-QECG-03	410079	6242127	1692
12-QECG-04	410071	6242156	1688
12-QECG-05A	410192	6242195	1710
12-QECG-05B	410196	6242198	1712
12-QECG-05C	410206	6242197	1715
12-QECG-05D	410202	6242201	1715
12-QECG-05A, B, C, D, E	410215	6242198	1718
12-QECG-06	410308	6242184	1739
12-QECG-07	410292	6242189	1735
12-QECG-08	409503	6239840	1445
12-QECG-09	409505	6239835	1452
12-QECG-10	409485	6239801	1470
12-QECG-11	409533	6239763	1488
12-QECG-12	409469	6239775	1470
12-QECG-13	409480	6239739	1480

All samples were submitted to Activation Laboratories Inc. (Actlabs) in Stewart, British Columbia for preparation by crushing, splitting then pulping using a mild steel mill; one sample was analysed separately for Cu by *Code 8* aqua regia (AR) in Stewart. All samples were forwarded to the laboratory's primary facility in Ancaster, ON to be analyzed by the *Code 1D enhanced* instrumental neutron activation (INAA) and inductively coupled plasma (ICP) methods. Sample 12-QECG-07, which was found to have high concentrations of gold, was re-anlayzed for Au by fire assay (FA) at the Ancaster facility. Complete results and accuracy measurements are available in Appendix 3.

Results

Both areas that were sampled were also prospected in 2011. Each area was geologically distinct. The first area ("Site A", Table 2) identified the greatest number of anomalous Au concentrations in 2011. The geology of this area is dominated by schistose rocks with gossanous zones and widespread quartz +/-carbonate veining and the rocks contain anomalous concentrations of Au +/- base metals (Table 3, Figures 6 & 7a). Most notably this included a grab sample 12-QECG-07 of angular float, which contained 30.7 g/t Ag, 159 g/t Ag, and 4.47% Cu (Figure 7b). This float sample is believed to be near-source based on the relative size of the boulder (60-100 cm around), location (on a hilltop), and shape (highly angular).

Other notable composite grab sample included 12-QECG-05A, a schistose rock that contained visible flecks of an unknown silver-purple metallic mineral; although the rock was not analyzed for Pb, the unknown mineral was evidently not molybdenite, based on the rock's lack of significant Mo in the geochemical analysis. Sample 12-QECG-05D proved to be of interest as well; the rock was dense and pitted and appeared to contain fine-grained interstitial malachite; although this sample was not analyzed for Cu, it did contain the highest concentrations of Mo (112 ppm), Fe (10.4%), and anomalous W (561 ppm).

Table 2. Sample descriptions from 2012 "Site A" samples.

Site A **Sample ID**	**Sample Type**	**Notes**
12-QECG-01	chip (55 cm)	Grey volcanic with ~20% qtz veining, local breccia pods throughout (5-10%); diss. sulfides incl chalcopyrite (with malachite staining)
12-QECG-02	chip (15 cm)	Well banded, mylonitized rhyolite/andesite; light dusting of malachite w/ diss. py & cpy. C.g. py cubes (oxidized) locally
12-QECG-03	composite grab	Rusty talus, abundant quartz-sulfide veining, mostly pyrite
12-QECG-04	chip (200 cm)	Gossanous zone, rich in pyrite and hematite
12-QECG-05A	composite grab	Chloritic schist, abundant quartz-carbonate veins; sample contains purplish flaky metallic mineral (not moly or hematite)
12-QECG-05B	chip (40 cm)	White & brown rusty outcrop, intense quartz veining throughout
12-QECG-05C	chip (40 cm)	White & brown rusty outcrop, intense quartz veining throughout
12-QECG-05D	composite grab	Dark green & rusty talus, jagged & pitted w/ ~15% black metallic stringers. Minor malachite staining visible under 16X hand lens
12-QECG-05E	chip (120 cm)	White & brown rusty outcrop, intense quartz veining throughout, adjacent to contact with unaltered (i.e., un-silicified) rock - contact trends E-W
12-QECG-06	chip (300 cm)	Sericite schist w/ intercalated quartz-carbonated veins (~5%)
12-QECG-07	composite grab	Gossanous, quartz vein w/ 10-15% chalcopyrite, abundant malachite staining. ~2-3 m boulder train exposed along 260 deg trend

Table 3. Geochemical results from 2012 "Site A" samples.

Site A **Sample ID**	**Au (ppb, INAA)**	**Au (ppm, FA)**	**Ag (ppm)**	**Cu (%)**	**Zn (ppm)**	**As (ppm)**	**Mo (ppm)**	**Sb (ppm)**
12-QECG-01	428		27		300	23.8	< 1	494
12-QECG-02	87		< 5		< 50	4.8	< 1	2.4
12-QECG-03	59		< 5		< 50	2.4	< 1	2.2
12-QECG-04	207		< 5		< 50	4	30	2.8
12-QECG-05A	16		< 5		180	3.8	< 1	3.2
12-QECG-05B	65		11		90	< 0.5	16	2.8
12-QECG-05C	78		< 5		110	4.4	20	3.1
12-QECG-05D	11		< 5		100	3.9	112	4.4
12-QECG-05E	309		< 5		< 50	3.5	35	2.2
12-QECG-06	88		< 5		< 50	5.6	7	6.2
12-QECG-07	28300	30.7	159	4.47	230	14.9	< 1	139

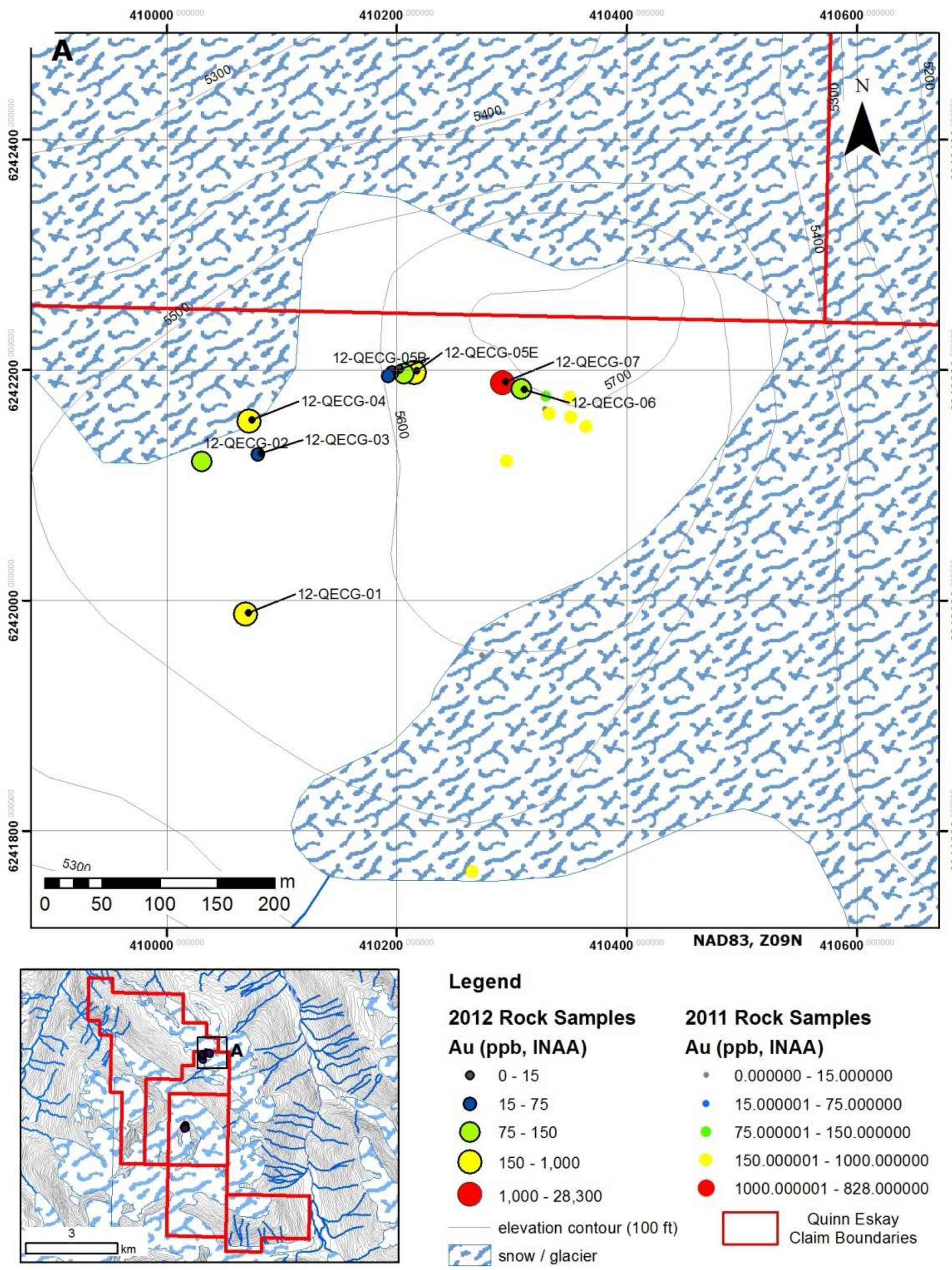

Figure 6. Sample map from “Site A” visited in 2012. Samples from 2011 are also included for reference.

Figure 7.a) Schistose rocks are common at Site A; Sample 12-QECG-01 exhibits malachite staining and contained 207 ppb Au; **b)** Sample 12-QECG-07, which contained 30.7 g/t Au, 159 g/t Ag, 4.47% Cu.

The second area ("Site B", Table 4 & Figure 8) was identified in 2011 and showed prospective, based on its gossanous alteration and silicification. Additional time was permitted in 2012 to more thoroughly sample and prospect this area. The area is dominated by dense, rounded outcrops that are extensively limonite- and hematite-stained at surface and dark grey to black with finely disseminate pyrite (+/- pyrrhotite) when broken.

Although the area appeared to be of interest, the results of the samples did not indicate significant gold or base metal concentrations (Table 5). The highest value was noted in sample 12-QECG-11, which contained 165 ppb Au. The rocks of Site B do contain the highest concentrations of Fe, ranging between 6.93% and 10.9%.

For complete geochemical results of all 2012 samples, consult Appendix 4.

Table 4. Sample descriptions from 2012 "Site B" samples.

Site B **Sample ID**	**Sample Type**	**Notes**
12-QECG-08	chip (100 cm)	Very rusty at surface, highly siliceous/dense, very hard rock. Dark gray, f.g. int./mafic dyke or volcanic; 1-2% v. finely diss. pyrite +/- pyrrhotite throughout
12-QECG-09	chip (80 cm)	Very rusty at surface, highly siliceous/dense, very hard rock. Dark gray, f.g. int./mafic dyke or volcanic; 1-2% v. finely diss. pyrite +/- pyrrhotite throughout
12-QECG-10	chip (50 cm)	Very rusty at surface, highly siliceous/dense, very hard rock. Dark gray, f.g. int./mafic dyke or volcanic; 1-2% v. finely diss. pyrite +/- pyrrhotite throughout
12-QECG-11	chip (120 cm)	Rusty, siliceous and brecciated, ~15% quartz-carbonate vein network with black needly crystal aggregates (actinolite?)
12-QECG-12	chip (25 cm)	Grey & white m.g. sericite schist, minor carbonate & 20-25% quartz veins/clots; ~3-4% c.g. pyrite cubes
12-QECG-13	chip (60 cm)	Rusty, siliceous and smooth, very dense f.g. rock (i.e., similar to QECG-08, 09, 10) w/ thin quartz veins, 1-2% finely diss. pyrite, phlogopite also present

Table 5. Geochemical results from "Site B" samples.

Site B **Sample ID**	**Au (ppb, INAA)**	**Ag (ppm)**	**Zn (ppm)**	**As (ppm)**	**Mo (ppm)**	**Sb (ppm)**
12-QECG-08	44	< 5	< 50	< 0.5	< 1	1.2
12-QECG-09	10	< 5	210	2.9	< 1	0.6
12-QECG-10	8	< 5	210	4.1	< 1	1
12-QECG-11	165	< 5	230	< 0.5	< 1	0.8
12-QECG-12	< 2	< 5	< 50	11.4	< 1	2
12-QECG-13	28	< 5	150	5.1	< 1	0.7

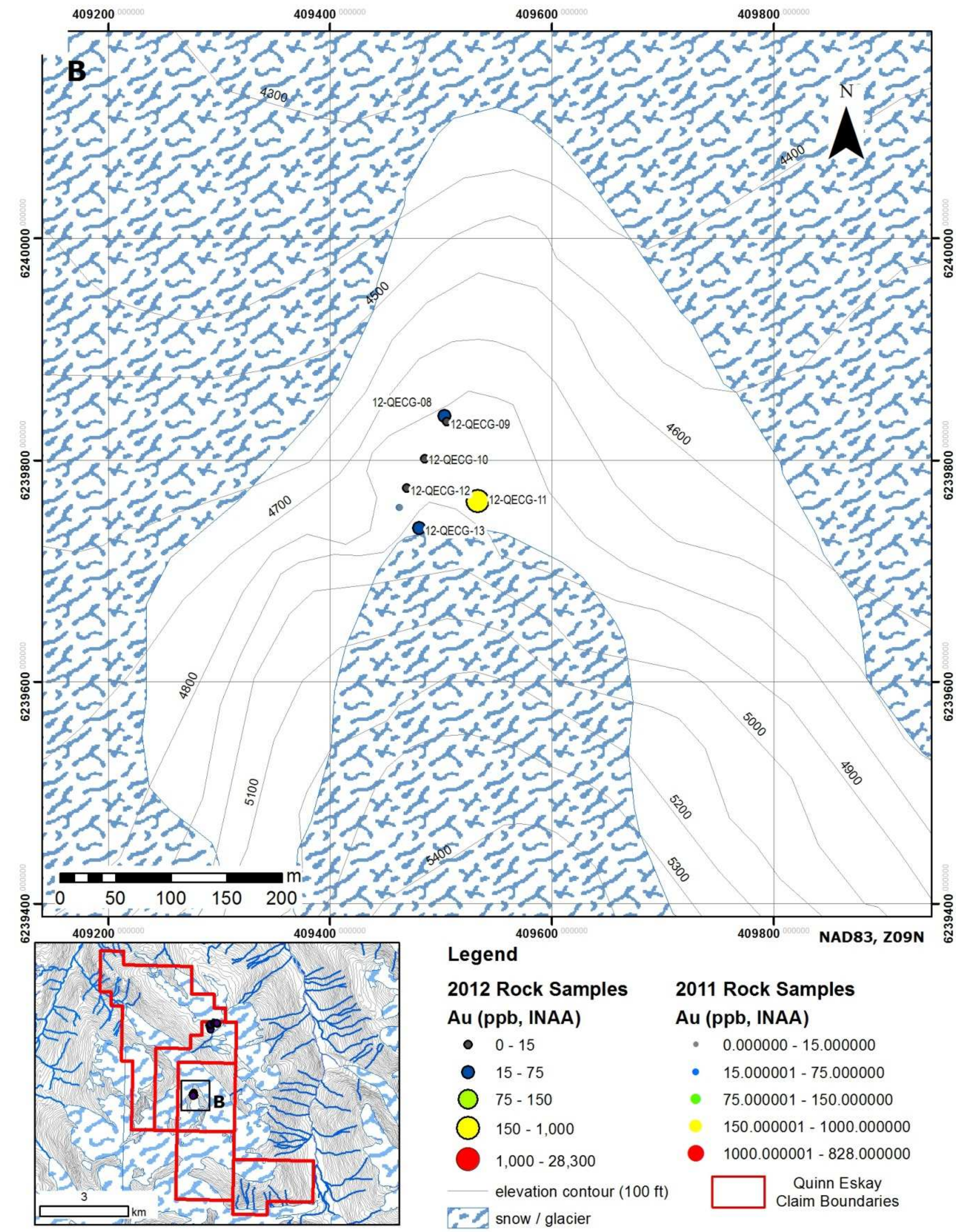

Figure 8. Sample map from “Site B” visited in 2012, showing Au concentrations (ppb). Samples from 2011 are also included for reference.

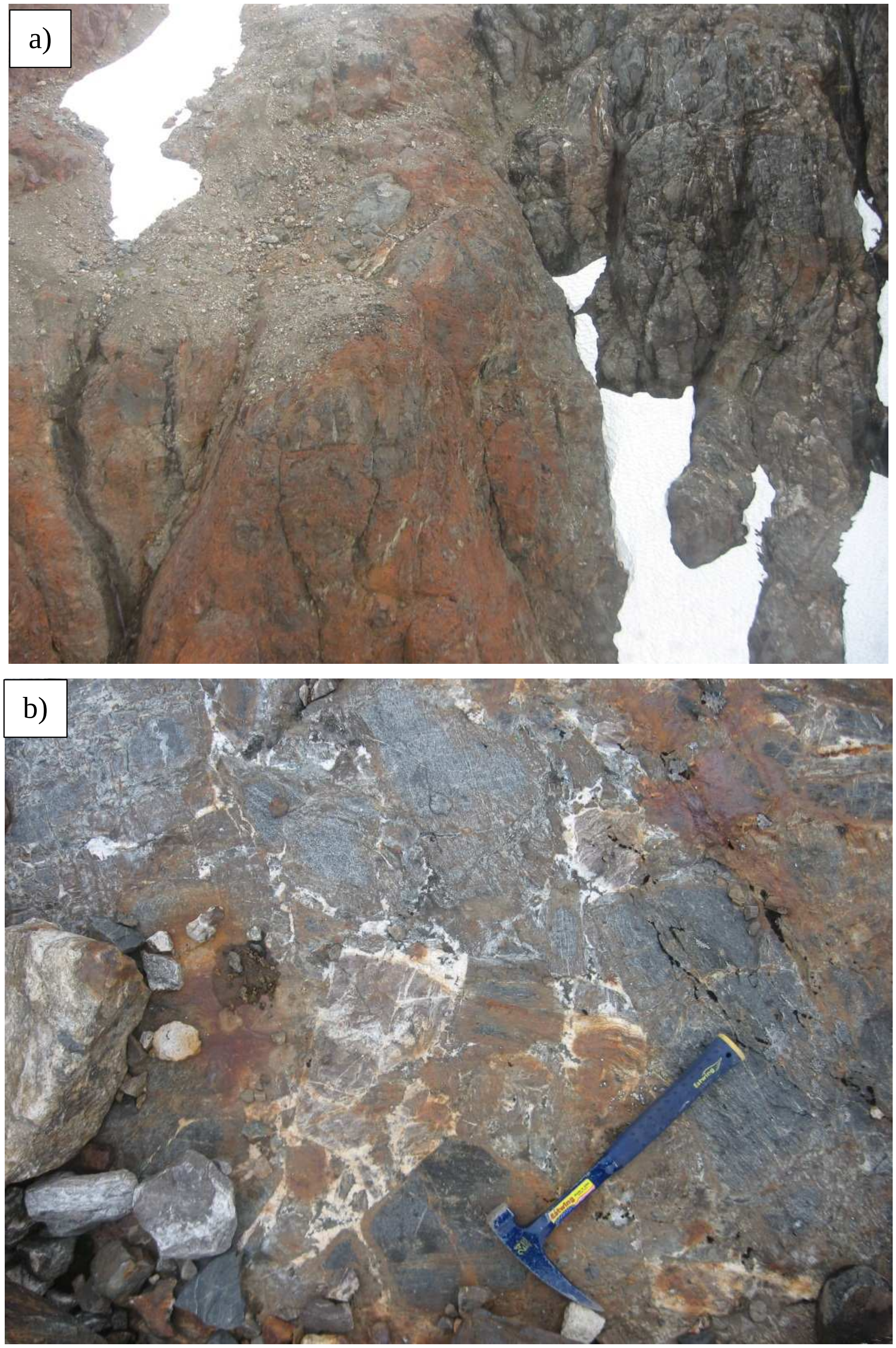

Figure 9. **a)** Rusty, dense outcrops are ubiquitous at Site B; **b)** Brecciation and infilling by quartz-carbonate veins at Site B.

Discussion and Conclusions

Prior to the 2012 site visit, the Quinn Eskay claim area was believed to host potentially significant gold +/- base metal mineralization. The 2011 site visit was successful in identifying zones of interest (Fox et al., 2011) and the primary objective of the 2012 visit was following up on those targets identified in 2011, while also covering ground that was not visited at the time. In these respects, the 2012 program was a success.

Based on the 2011 and 2012 results, it is clear that Site A possesses the greatest prospects of significant mineralization. This is the area that, in 2011 identified 5 samples >150 ppb Au (of 12 samples total), and 4 more in 2012 (of 11 samples total). The greatest significance though, can be attributed to sample 12-QECG-07, which contained an impressive 30.7 g/t Au, 159 g/t Ag, and 4.47% Cu. It is important to note that this sample was collected from float; however, it is also important to note that there is sufficient reason to believe that the float was near-source. This particular sample is both encouraging and will weigh heavily on the planning of follow up programs. Perhaps most importantly, follow up plans will include location the bedrock source of this boulder. Because the sample was located near the top of a ridge, and loose material is easily cleared it is advised that hand-trenching of the area be carried out. The boulder from which that sample was taken was of formidable size and the likelihood of locating additional samples of similar grade is high; additional, detailed prospecting of the area is highly recommended.

Arguably of lesser significance, but still of interest includes the black, pitted rock of sample 12-QECG-05E. This sample contained anomalous Mo-W mineralization (112 ppm Mo, 561 ppm W).

Overall, additional prospecting, detailed mapping, and hand trenching in the vicinity of 12-QECG-07 are recommended as follow up work at Site A. Geophysical IP surveys would aid in identifying potential additional targets not exposed at surface, and drilling to confirm their presence. At minimum 1-2 days should be devoted to Site A follow ups, specifically.

Site B proved of interest based on appearances primarily. Rusty limonite-hematite staining was abundant and the rocks were siliceous and dense: alteration that is prospective to hosting Au +/- Ag mineralization. However, limited sampling in 2011 and detailed sampling in 2012 has indicated that the prospects for this area hosting significant mineralization are slim. Nevertheless, although mineralization is not evident at/near surface, a deeper mineralized body may yet be present. The alteration observed at Site B is consistent with that seen stratigraphically above porphyry-style gold +/- polymetallic deposits. Given this site's proximity to the adjacent glacier, it is possible that additional mineralization is present either nearer to the glacial surface, or hidden beneath the glacier. However, the terrain is rugged, steep, and treacherous. One possibility to confirm the presence of mineralization would be to land a helicopter on the glacier and sample the ridge walls. This however, may not be possible base on the glacier's stability at the ridge walls. Drilling may also confirm the presence (or lack thereof) of a deeper target.

Aside from the results of Sites A and B, there remains considerable ground of the Quinn Eskay claim area that has not yet been prospected. Related to this, in 2012, additional ground was staked, expanding the northern boundary of the Quinn Eskay claims. This new claim (1012930) has never been prospected previously and is located in the vicinity of Site A. It is also accessible by foot from the Site A area. A minimum of 2 days is recommended to further explore the recently staked area, as well as areas not previously prospected in the existing Quinn Eskay area.

In summary, the Quinn Eskay continues to show promise at hosting economic grades of mineralization. However, the logistics of grassroots exploration programs in the area are challenging and there is still much information to be gathered in the area. At minimum 3-4 days of at least a 2-person crew is recommended for follow-up work.

References

Fox, A., Lentz, D., and Beal, K. 2011. First Year Assessment report on Prospecting and Geochemical Analysis of Rock Samples, Quinn Eskay Property, BC. 30 p.

McGuigan, P.J and McKinley, S. 2004. Geological and Geochemical Assessment Report on the Corey Property: B.C. Ministry of Energy and Mines, Assessment Report 27511.

Alldrick, J.D. and Britton, J.M. 1992. Unuk River Area Geology (NTS 104B/7E, 8 & 9W, 10E): B.C. Ministry of Energy and Mines, Open File 1992-22.

APPENDIX 1

Statement of Expenditures

Wages (2 days)		
	Chris Galbraith	$700.00
	David Lentz	$1,800.00
Helicopter		$4,517.07
Analyses		$565.28
Car Rental		$588.66
Fuel		$109.00
Accommodation		$266.56
Food		$79.45
		$8,626.02

APPENDIX 2

STATEMENT OF QUALIFICATIONS

I, **Christopher Galbraith**, do hereby certify that:

1. I am a consulting geologist with an office at 75 Broadway St, Lakeside, NS.
2. I am a graduate of Dalhousie University (BSc, Honours Earth Sciences, 2007).
3. I am a Member In Training registered with the Association of Professional Engineers and Geoscientists of Nova Scotia (MIT-041), pending completion of the NPPE.
4. I have practiced my profession since 2005.
5. This report is based on work carried out on the Quinn Eskay Property. All field work was carried out by myself and David Lentz.
6. I serve as Exploration Manager for Cache Exploration and its wholly-owned subsidiary Cache Minerals, owner of the Quinn Eskay Properties.
7. I hold a stock option in the company and I am a shareholder

Dated at Lakeside, NS, 21 December 2012

Christopher Galbraith, BSc

I, David R. Lentz, do hereby certify that:

1. I am a mineral property consultant with an office at 208 Stanley Street, Fredericton, NB

2. I am a graduate of the University of New Brunswick (B.Sc. Honours Geology, 1983; M.Sc. Geology, 1986) and the University of Ottawa (Ph.D. Geology, 1992)

3. I am a Professional Geologist registered with the Association of Professional Engineers and Geoscientists in the Province of New Brunswick (M5612) and been register since 2001.

4. I have practiced my profession since 1982.

5. This report is based upon work carried out on the Quinn Eskay Properties. All people on the project were supervised by Christopher Galbraith and myself, so all sampling and analytical protocols were followed.

6. I am a principle of Cache Exploration Inc. and Cache Minerals Inc., owner of the Quinn Eskay Properties; this report was prepared solely for satisfying assessment work requirements in accordance with government regulations.

7. I have stock options with Cache Exploration.

Dated at Fredericton, NB this 21st day of December, 2012.

David R. Lentz PhD, P.Geo.

APPENDIX 3

Quality Analysis ... Actlabs Innovative Technologies

Date Submitted:	13-Aug-12
Invoice No.:	A12-08673
Invoice Date:	10-Sep-12
Your Reference:	Quinn Eskay

Cache Exploration
2 Bailey Dr. Box 4400
Fredericton NB E3B 5A3
Canada

ATTN: David Lentz

CERTIFICATE OF ANALYSIS

17 Rock samples were submitted for analysis.

The following analytical packages were requested:

Code 1A3 Au - Fire Assay Gravimetric (QOP AA-Au)
Code 1D Enh INAA(INAAGEO)
Code 8-AR Code 8-Assays

REPORT **A12-08673**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:
For values exceeding the upper limits we recommend assays.

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266
LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

APPENDIX 4

QA/QC

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CZN-3 Meas																							
CZN-3 Cert																							
CCU-1C Meas																							
CCU-1C Cert																							
PTC-1a Meas																							
PTC-1a Cert																							
MP-1b Meas																							
MP-1b Cert																							
OREAS 13b (4-Acid) Meas																							
OREAS 13b (4-Acid) Cert																							
OREAS 13b (4-Acid) Meas																							
OREAS 13b (4-Acid) Cert																							
CDN-GS-6A Meas																							
CDN-GS-6A Cert																							
DMMAS 113 Meas	1760		1480	1400			37	71		3.11					1.85				6.7				
DMMAS 113 Cert	1665		1468	1519			36	75		2.86					1.82				5.8				
Method Blank																							
Method Blank																							
Method Blank	< 2	< 5	< 0.5	< 50	< 0.5	< 1	< 1	< 5	< 1	< 0.01	< 1	< 1	< 5	< 1	< 0.01	< 20	< 15	< 0.1	< 0.1	< 3	< 0.02	< 0.05	< 0.5

Analyte Symbol	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Cu	Au
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	%	g/tonne
Detection Limit	0.2	0.5	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.001	0.03
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	ICP-OES	FA-GRA
CZN-3 Meas														0.691	
CZN-3 Cert														0.685	
CCU-1C Meas														25.6	
CCU-1C Cert														25.6	
PTC-1a Meas														13.2	
PTC-1a Cert														13.51	
MP-1b Meas														3.01	
MP-1b Cert														3.069	
OREAS 13b (4-Acid) Meas														0.23	
OREAS 13b (4-Acid) Cert														0.23	
OREAS 13b (4-Acid) Meas														0.237	
OREAS 13b (4-Acid) Cert														0.23	
CDN-GS-6A Meas															5.44
CDN-GS-6A Cert															5.79
DMMAS 113 Meas		13.3			14	23		2.6							
DMMAS 113 Cert		15.6			14.5	24		2.2							
Method Blank														< 0.001	
Method Blank															< 0.03
Method Blank	< 0.2	< 0.5	< 1	< 50	< 0.5	< 3	< 5	< 0.1	< 0.2	< 0.5	< 0.2	< 0.05	30		

Analytical Results

Report Date: 9/10/2012

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
12-QECG-01	428	27	23.8	480	< 0.5	< 1	7	16	2	2.29	< 1	< 1	< 5	< 1	0.1	< 20	92	494	4.4	< 3	< 0.02	< 0.05
12-QECG-02	87	< 5	4.8	950	< 0.5	< 1	28	9	< 1	5.07	< 1	< 1	< 5	< 1	2.87	< 20	68	2.4	8.6	< 3	< 0.02	< 0.05
12-QECG-03	59	< 5	2.4	950	< 0.5	3	20	18	2	2.79	< 1	< 1	< 5	< 1	0.76	130	58	2.2	7.9	< 3	< 0.02	< 0.05
12-QECG-04	207	< 5	4	290	< 0.5	< 1	5	41	< 1	3.05	< 1	< 1	< 5	30	0.06	< 20	43	2.8	2.8	< 3	< 0.02	< 0.05
12-QECG-05A	16	< 5	3.8	640	< 0.5	3	16	< 5	5	4.84	2	< 1	< 5	< 1	2.83	< 20	133	3.2	13.1	< 3	< 0.02	< 0.05
12-QECG-05B	65	11	< 0.5	1330	< 0.5	< 1	< 1	22	3	1.73	2	< 1	< 5	16	0.92	< 20	158	2.8	5.5	< 3	< 0.02	< 0.05
12-QECG-05C	78	< 5	4.4	860	< 0.5	< 1	5	20	3	2.76	< 1	< 1	< 5	20	0.27	< 20	112	3.1	5.3	< 3	< 0.02	< 0.05
12-QECG-05D	11	< 5	3.9	250	< 0.5	11	14	11	< 1	10.4	< 1	< 1	< 5	112	0.04	< 20	< 15	4.4	0.5	< 3	< 0.02	< 0.05
12-QECG-05E	309	< 5	3.5	240	< 0.5	< 1	2	31	2	1.44	< 1	< 1	< 5	35	0.06	< 20	59	2.2	4.3	< 3	< 0.02	< 0.05
12-QECG-06	88	< 5	5.6	1140	< 0.5	3	15	25	5	4.14	2	< 1	< 5	7	0.99	< 20	143	6.2	10.4	< 3	< 0.02	< 0.05
12-QECG-07	28300	159	14.9	< 50	< 0.5	< 1	7	16	< 1	5.74	< 1	< 1	< 5	< 1	2.41	< 20	< 15	139	3.4	< 3	< 0.02	< 0.05
12-QECG-08	44	< 5	< 0.5	470	< 0.5	5	30	60	< 1	7.77	5	< 1	< 5	< 1	1.99	< 20	< 15	1.2	38.1	< 3	< 0.02	< 0.05
12-QECG-09	10	< 5	2.9	< 50	< 0.5	5	28	73	2	7.75	3	< 1	< 5	< 1	1.72	< 20	< 15	0.6	34	< 3	< 0.02	< 0.05
12-QECG-10	8	< 5	4.1	390	< 0.5	6	58	9	20	10.9	3	< 1	< 5	< 1	1.25	< 20	< 15	1	45.3	< 3	< 0.02	< 0.05
12-QECG-11	165	< 5	< 0.5	750	< 0.5	4	26	61	6	6.93	3	< 1	< 5	< 1	1.35	< 20	109	0.8	31.4	< 3	< 0.02	< 0.05
12-QECG-12	< 2	< 5	11.4	460	< 0.5	17	28	6	< 1	9.36	< 1	1	< 5	< 1	0.05		65	2	17.4	< 3	< 0.02	< 0.05
12-QECG-13	28	< 5	5.1	730	< 0.5	4	44	7	11	9.78	6	< 1	< 5	< 1	1.39	< 20	64	0.7	38	< 3	< 0.02	< 0.05

Report Date: 9/10/2012

Analyte Symbol	Ta	Th	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Cu	Au
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	%	g/tonne
Detection Limit	0.5	0.2	0.5	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.001	0.03
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	ICP-OES	FA-GRA
12-QECG-01	< 0.5	1.6	< 0.5	11	300	5.1	9	< 5	1.4	< 0.2	< 0.5	< 0.2	< 0.05	26.3		
12-QECG-02	< 0.5	1.7	2.1	< 1	< 50	6.5	14	< 5	2.4	< 0.2	< 0.5	0.8	0.18	29.6		
12-QECG-03	< 0.5	1	< 0.5	5	< 50	3.7	6	< 5	1.2	< 0.2	< 0.5	0.4	0.09	28.4		
12-QECG-04	< 0.5	0.6	5.1	12	< 50	7.9	15	< 5	2.5	1	0.8	2.8	0.39	28.5		
12-QECG-05A	< 0.5	2.3	1.5	10	180	16.3	28	22	4.3	0.9	< 0.5	1.3	0.17	25.5		
12-QECG-05B	< 0.5	2	0.9	22	90	6.2	6	< 5	1	< 0.2	< 0.5	0.8	0.13	21.4		
12-QECG-05C	< 0.5	1.4	< 0.5	61	110	5.3	10	< 5	1.5	0.4	< 0.5	0.8	0.09	25.4		
12-QECG-05D	< 0.5	< 0.2	< 0.5	561	100	0.6	5	< 5	0.8	0.3	< 0.5	< 0.2	< 0.05	30.3		
12-QECG-05E	< 0.5	0.9	0.9	16	< 50	8.3	11	< 5	0.9	0.3	< 0.5	0.8	0.14	26.9		
12-QECG-06	< 0.5	3.4	2.2	20	< 50	13.4	25	23	3.5	0.7	< 0.5	1.3	0.22	25.9		
12-QECG-07	< 0.5	1.6	< 0.5	6	230	2.6	< 3	33	0.9	< 0.2	< 0.5	< 0.2	< 0.05	24.4	4.47	30.7
12-QECG-08	< 0.5	1.9	< 0.5	10	< 50	14.5	33	16	7.1	1.8	< 0.5	2.9	0.29	24		
12-QECG-09	< 0.5	1.6	< 0.5	< 1	210	11.8	28	21	5.5	1.5	1	2.8	0.2	25.5		
12-QECG-10	< 0.5	1.1	< 0.5	< 1	210	13.2	33	31	5	2	< 0.5	2.8	0.09	26.1		
12-QECG-11	< 0.5	1.4	3	< 1	230	12.3	31	21	4.7	1.7	< 0.5	3.1	0.29	27.5		
12-QECG-12	< 0.5	< 0.2	< 0.5	8	< 50	6.7	22	< 5	5.4	3.7	1.1	3.1	0.18	24.8		
12-QECG-13	3.6	1.9	2.4	< 1	150	22.1	51	57	9.7	2.5	1.3	4.6	0.43	25.7		