

**AR 2004 - 115**

**ASSESSMENT WORK REPORT APPLICABLE**

**TO EXPLORATION LICENCE NO. 04985,**

**DEBERT LAKE PROPERTY FOR**

**COBEQUID GOLD CORPORATION LTD**

**BY**

**AVARD D. HUDGINS**

**Truro, N. S.  
October 03/04**

**Phone: 902-893-2328  
Fax: 902-893-3806**

**DUPLICATE AVAILABLE**

*Oct 25 10 12 AM '04*

## TABLE OF CONTENTS

	Page
General / Summary	1
Location / Access	1
Legal Description of Property	1
History of Exploration	1
General Geology	1
Purposes of Work	2
Work Performed	2
Results of Work	3
Conclusions / Recommendations	4
Statement of Qualification	4
✓Appendix A - Report of recce prospecting - geochemical work in the eastern Cobequid Mountains to Avalon Ventures Ltd.	
✓Appendix B - Geological notes re the Cobequid Mountains Gold Venture by Avarud Hudgins	
✓Appendix C - Occasional Report # 2, Debert Lake Area by Dr. David Mossman	
✓Appendix D - Rock assays in Au - Ag	
✓Appendix E - Rock descriptions	
✓Appendix F - Analyses of stream sediment samples in Au - Ag	
✓Appendix G - Assays in Au - Ag for drill hole samples	
✓Appendix H - Descriptions of drill cores sampled	
✓Maps 1 and 2 appended at back of report.	

*noy*

## **General / Summary**

Prospecting and geochemical work for epithermal type gold - silver deposits in a rhyolitic volcanic terrane in the Debert Lake property yielded disappointing results. An evaluation of drill holes drilled by Gulf Minerals that was thought to contain gold - silver values yielded nil results. No more work is recommended in the property.

## **Location / Access**

The property is located in the eastern Cobequid Mountains near the boundary between Cumberland and Colchester Counties. It is situated about 2 miles south of the settlement of East Wentworth which occurs along Highway 246 which connects Wentworth Center to East Earlton. A well-traveled pulp road runs southwesterly from the highway along the west side of the Wallace River into the property to Debert Lake. All parts of the property are readily accessible by numerous side trails, old pulp roads and Gulf Minerals old drill roads which traverse many areas of the claim group. Please see Map 1.

## **Legal Description of Property**

Exploration Licence No. 04985 is held in Reference Map IIEIIB by Cobequid Gold Corporation Ltd. It is comprised of claims A-H, Tract 85; claim B, Tract 86; claims F-Q, Tract 83; claims C, E, F, L, M, Tract 82. Please see Map 1.

## **History of Exploration**

From 1976-1981, Gulf Minerals Ltd. carried out extensive exploration work for uranium in the property and surround terrains in the eastern Cobequid Mountains. This work consisted of geological mapping, multi-element soil sampling, airborne gamma ray spectrometer surveys, ground gamma ray spectrometer work, VLFEM-magnetometer surveys, trenching and the drilling of numerous holes. As a result of this exhaustive work, numerous, narrow low-grade uranium zones were located in several areas in the property but no further work was carried out by Gulf Minerals because in 1981 the Province of Nova Scotia placed a moratorium on uranium exploration.

## **General Geology**

The property is underlain by a thick series of early Carboniferous age sub-aerial rhyolite - tuff sequences belonging to the Byers Brook Formation. It encompasses parts of two lava dome complexes which are cored by rhyolite, basalt and thin beds of carbonaceous siltstone. Lahars are located adjacent to the flanks of the lava domes. A major northwesterly fault follows the course of the East Wallace River, passes through Debert Lake and thence follows the course of

the Debert River.

No attempt was made to map the property, for this was admirably done by Gulf Minerals. Our work in the property focused on prospecting and geochemical work to fast identify gold - silver mineralizations and to sample specific drill holes for potential precious metals zones.

For further details of the geology of the property please refer to Appendices A, B, and C.

### **Purposes of Work**

Exploration work carried out by Cobequid Gold Corp and grubstaked or backed by Avalon Ventures Ltd. in this property was just part of a large recce-type prospecting programme to locate epithermal-type gold - silver deposits in the eastern Cobequid Mountains from Wentworth easterly to Eartown carried out in the summer of 2003.

The geology of the rhyolite dome complexes as described by Gulf Minerals in the property and surrounding volcanic terranes which was searching only for uranium drew our interest because rock types described and related alterations suggested an overlooked, promising environment for several types of epithermal gold - silver deposits. As a result of an extensive study of Gulf Minerals' exhaustive data and some field checking of rock types in the Debert Lake area and surrounding volcanic terranes it was decided to stake large blocks of ground and carry out recce-type prospecting - stream geochemical programmes to locate gold - silver zones. Further to this a study of many holes drilled by Gulf Minerals in the Debert Lake property suggested that wide zones of altered rhyolites containing sulphides might contain gold - silver zones that were overlooked and not assayed.

The purpose of our work, therefore, was to hopefully make some significant, new, epithermal precious metals discoveries in this property and elsewhere in the volcanic terranes of the eastern Cobequid Mountains.

### **Work Performed**

Work was carried out in August 2003. It was supervised by the writer. Dr. David Mossman and his assistant James Vanderwoogen worked in part of the property and Sandy Chase along with his prospecting partner worked other parts of the claim group.

Prior to field work and the study of drill cores the writer and Dr. Mossman carried out considerable work studying Gulf Minerals exhaustive exploration data base and reviewing the great number of drill holes to glean information applicable to sites for epithermal-type gold - silver deposits on the ground and where they might occur in drill holes drilled for uranium in the volcanic sequences.

Prospecting was carried out on roads and trails shown on Map No. 2, along the shores of Debert Lake and along streams. Much prospecting was carried out on a roaming basis in highlands surrounding Debert Lake and many short, grown-over, old drill roads were prospected around Drill Areas 1 and 2 shown on the sketch map. Grown over bush trails and old drill roads in the center of the property which were hard to follow were also prospected.

Early in August Mr. Don Bubar and the writer visited the property to study the types of rhyolite flows surrounding Drill Area 2 and just west of Debert Lake. This was followed up by a visit to the NSDNR Core Library in Stellarton to study several holes from Drill Areas 1 and 2.

While the crew was prospecting stream sediment samples were collected as shown on Map No. 2.

The crew made three trips to the NSDNR Core Library in Stellarton to study and sample drill holes that had been selected by Dr. Mossman to evaluate for potential epithermal gold - silver deposits.

### **Results of Work**

Before we commenced work in the Debert Lake property we had knowledge of what rock types and related alterations would be the most likely ones to contain gold - silver values. This resulted from our past work in the eastern Cobequid volcanic terranes as well as in the western Cobequid.

The prospecting work studying many outcrops, large rubble piles and angular float areas did not locate what we hoped to find in sericitized - highly sulphidic rhyolites, sulphide-bearing cherts and sulphide-bearing siltstones. Only a few appealing rocks were collected for Au - Ag assaying at TUNS. The location of these samples are shown on Map No. 2. The assays which were negligible for Au and Ag and the rock descriptions are given in Appendices D and E.

The stream sediment samples are plotted on Map No. 2 and the analyses of them from TUNS are given in Appendix F. No Ag - Cu anomalies of note were found.

The assays from drill holes in Drill Areas 1 and 2 shown on Map 2 are given in Appendix G. The results for Au - Ag were essentially nil. The rock descriptions for the drill core samples cut and assayed are given in Appendix H.

It is important to note that even if significant epithermal gold - silver zones exist in the volcanic - sedimentary sequences in the property they would occur near zones of low-grade uranium which occur in shear zones. The nearby uranium deposits would preclude any potential exploitation of other types of mineral deposits.

**Conclusions / Recommendations**

Our work did not locate any significant epithermal type gold - silver targets to expand on in the Debert Lake property and no further work is recommended.

**Statement of Qualifications**

I, Avarad D. Hudgins of Truro, N. S. declare that I have over 40 years experience in all phases of mineral exploration and that I supervised the work described in this assessment report.

Avarad Hudgins, MSc  
for  
Cobequid Gold Corporation Ltd.

Appendix A

REPORT CONCERNING THE RESULTS OF AN EXPLORATION PROGRAMME  
IN THE COBEQUID GOLD VENTURE LANDS CARRIED OUT FOR AVALON  
VENTURES LTD. BY COBEQUID GOLD CORPORATION LTD.

BY

AVARD HUDGINS (MSc)

VICE PRESIDENT

COBEQUID GOLD CORPORATION LTD.

TRURO, N. S.

MARCH 17th/04

Appendix A

REPORT CONCERNING THE RESULTS OF AN EXPLORATION PROGRAMME  
IN THE COBEQUID GOLD VENTURE LANDS CARRIED OUT FOR AVALON  
VENTURES LTD. BY COBEQUID GOLD CORPORATION LTD.

BY

AVARD HUDGINS (MSc)

VICE PRESIDENT

COBEQUID GOLD CORPORATION LTD.

TRURO, N. S.

MARCH 17th/04



## GENERAL/SUMMARY

This report summarizes the results of a prospecting and geochemical programme carried out for Avalon Ventures Ltd. by Cobequid Gold Corporation Ltd. in the large block of ground known as the Cobequid Gold Venture Lands (CGVL) in the eastern Cobequid Mountains of Nova Scotia between the East Wallace River on the west to Earltown on the east.

The results of the work trying to locate epithermal gold - silver deposits in several geological environments within a belt of Carboniferous age acid and basic volcanics intercalated with volcano-clastic and sedimentary rocks did not locate any significant showings. The stream geochemical prospecting also did not locate any significant gold-silver anomalies other than those that had already been known to exist in the property.

The study and sampling of what was considered to be the most significant drill holes in the Gulf Minerals uranium project area near Debert Lake yielded disappointing results for gold - silver.

Seeing that the programmes were geared to fast outlining zones of mineralization or float boulders which Avalon Ventures could detail by further work and nothing of significance was found then no further work in the CGVL between the East Wallace River and Earltown is recommended.

Recently an excellent target for IOCG deposits has been found in the far eastern sector of the CGVL near Loganville. This target had not been staked in the CGVL staking and has been staked by the writer. It is recommended that Avalon Ventures which is now highly involved in IOCG explorations in N. S. acquires this property from Cobequid Gold and carries out a basic prospecting - stream geochemical programme in it.

## BACKGROUND

In the early spring of 2003 this writer promoted the idea to Avalon Ventures that the CGVL had the potentials for four types of gold  $\pm$  silver deposits in the eastern Cobequid Mountains listed as follows: 1) Epithermal Au-Ag deposits in lodes, stockworks, sheeted vein systems, etc in rhyolite-dacite lava domes; 2) subaqueous Au  $\pm$  Ag deposits in beds of siliceous sinter; 3) Eskey Creek-type Au-Ag base metal deposits in clastic sedimentary rocks in small grabens or mini-basins between volcanic centers and 4) Carlin-type Au gold deposits in beds of limestone and calcareous sandstones with siltstones which exist in the acid volcanic terranes of Carboniferous age with type (3) being the most obvious type existing in the property based on previous geological work and geochemical programmes in the region.

A fifth type or 5) was deemed to be the existence of (4) but in older Silurian age metasedimentary rocks to the north of the volcanic terranes in the East New Annan to north of Earltown area and further easterly to the Loganville-Dalhousie Mountain region. This terrane had similar geological characteristics to the Silurian age Botwood Basin area of Newfoundland where an epithermal or Carlin type Au play had started in 2002.

Avalon Ventures entered into an agreement to spend \$150 K in the CGVL project in a first phase exploration programme which commenced on July 21st/03. By expending the \$150 K Avalon Ventures would have garnered a 33 1/3% interest in the CGVL and a second phase of exploration work amounting to \$350 K would have given the firm an additional 26 2/3% interest for a total 60% interest.

On Oct. 01/03, Don Bubar, president of Avalon ventures knowing that work in the CGVL was not yielding salient results for new types of epithermal gold  $\pm$  silver deposits in the eastern Cobequid Mountain terranes decided to halt the programme and focus attention on prospecting for IOCG deposits in the West River Station and Upper Kempton properties which Avalon Ventures had optioned from Cobequid Gold.

Mr. Bubar requested a report concerning what was carried out in the CGVL project and the results related thereto before assigning the properties back to Cobequid Gold. This brief is to comply with his request.

## **PURPOSE OF WORK**

The intent of the venture was to prospect specific targets which suggested that epithermal types of Au  $\pm$  Ag existed in the Carboniferous age volcanic - sedimentary terranes and to carry out stream geochemical work to locate surface indications for Au and Ag which could be detailed by other work in the first stage of work, or in a second stage. Lesser work was to focus on targets suggestive of epithermal gold in the older Silurian age terranes. While the prospecting and geochemical work was being carried out a study and sampling of Gulf Minerals drill holes for uranium was to be carried out to hopefully find Au-Ag zones of an epithermal nature.

## **WORK PERFORMED**

About \$80 K before an H.S.T. rebate was spent by Avalon Ventures in the CGVL projects searching for epithermal types of gold  $\pm$  silver previously cited. This work consisted of compilation work, basic prospecting, geochemical work, geological studies and studying - sampling previously drilled holes by Gulf Minerals which only had an interest in uranium. Panning for gold was carried out in several streams near targeted areas and a MMI recce-type geochemical survey was done in a grid near high silt/HMC Au anomalies in streams.

In respect to the prospecting-geological work 87 samples of mineralized rock or rocks containing favourable alterations for epithermal Au-Ag mineralizations existing in outcrop or float were collected and assayed for Au-Ag. In the geochemical work 429 stream sediment samples were collected.

In the latter part of work in the region, Mr. Bubar requested that samples of rock where Type 3 deposits were suspected to exist be analyzed for Au plus multi-elements. Twenty-six samples of rock were analyzed.

Twenty-two Gulf Minerals drill holes were studied and sections were assayed for Au-Ag - 87 samples were taken in this phase of the work.

Extensive compilation studies were done concerning a great amount of Gulf Minerals exploration data consisting of geochemical work that would be applicable to gold-silver mineralizations.

The bulk of the prospecting work was done in numerous streams and their tributaries in the project areas to be described and along numerous, new lumber roads that have been constructed over the past ten years or so.

Basic prospecting was also carried out on grid lines over several Zn-Pb soil anomalies resulting from Gulf Mineral work where VLF/EM anomalies also occur.

The above is applicable to the Carboniferous age volcanic terranes. In the Silurian age metasedimentary terranes numerous new logging roads were prospected over a large area.

## RESULTS OF WORK/GENERAL DISCUSSIONS

In the western sector of the CGVL venture known as the Debert Lake project prospecting in streams, sides of valleys and in numerous new logging roads located many boulders and much rubble and a few, small outcrops of unaltered rhyolite-dacite flows, altered (sericitic) rhyolites and tuff containing abundant pyrite. None of this material yielded any elevated Au or Ag. Floats of siliceous sinter (chert) - minor jasper containing sulphides (pyrite) also yielded unelevated trace amounts of gold. Float specimens of carbonaceous, weakly sulphidic sandstone - siltstone sequences yielded upon assay no values for Au-Ag.

Several, very small showings in several areas were found to contain very weak Zn-Pb mineralizations in shear zones traversing rhyolite - tuff sequences. These mineralizations of about 1.2% Zn-Pb combined did not contain elevated trace amounts of Au-Ag.

The soil anomaly - VLF/EM targets of Gulf Minerals work were prospected in detail. A lot of outcrop and rubble of unaltered rhyolite flows and tuffs occur in these targeted areas. Samples of these rocks containing weak pyrite did not yield any significant Au-Ag values.

Sampling of the most significant drill holes drilled by Gulf Minerals for uranium consisting of sections of rhyolite flows and tuffs exhibiting various stages of alteration consisting of silicification, sericitization, albitization and hematitization containing pyritic mineralizations did not produce any elevated trace amounts of Au-Ag.

All of the predetermined, well-thought out targets to prospect and study geologically in regards to favourable alterations for epithermal Au-Ag deposits yielded very disappointing results.

In regards to the stream geochemical surveys for Au-Ag in stream sediment sampling carried out when the prospecting in streams was done, only several low-ranked Au-Ag anomalies were obtained in a few of the streams. These sort of low values are common in many areas of the Cobequid Mountains where Carboniferous age granites and volcanic-sedimentary sequences occur.

Similar types of rocks described above were located in rubble and in floats in several, new logging roads west of Nuttby Mountain in the headwaters of Cavanaugh Brook all of which gave nil Au-Ag results.

Recce-type prospecting of many logging roads in the volcanic belt between the above project areas only located several outcrops and float areas of sulphidic-sericitic rhyolites and silicified rhyolites which assayed nil in Au-Ag.

Recce-type prospecting along numerous logging roads and new fire roads in the Silurian metasedimentary terranes around East New Annan, Spidell Hill-Earltown suggested these age of rocks are unaltered and unmineralized. Similar type of recce work in the Silurian age terrane between Loganville, South Loganville and easterly to Dalhousie Mountain on logging roads also found slates, siltstones and greywackes to be unaltered and barren.

Recce prospecting in the northern lobe of the Salmon River granite pluton west of Loganville only located normal type, unaltered and unmineralized granites of a two-mica type.

## CONCLUSIONS AND RECOMMENDATIONS

Well thought out, pre-determined assessment of targets for epithermal-type Au-Ag deposits in the CGVL project areas did not locate any mineralized zones of Au-Ag. The paucity of hydrothermal or vein quartz in the large terrane bodes poorly for the existence of Type (1) epithermal Au-Ag deposits. No Au-Ag values were found in samples of Type (2). No evidence was gleaned for type (3) deposits and the lack of silicification in carbonate beds and the nil Au-Ag values in them precludes a Carlin Au environment in Type (4).

Although there were many indications found in the large project area for epithermal-type Ag-Au deposits such as sulphidic-sericitic rhyolites and dacites, tuffaceous rocks, sulphidic carbonates, sulphide bearing chert and jasper, hematitic zones, alunitized shears, etc. not one significant or elevated Au-Ag value was obtained in the prospecting programme which covered the main targets and where many samples of the most obvious types of rocks and mineralizations were sampled.

Work in the Debert Lake project area both by prospecting, geochemical work and drill-core assaying did not generate any salient results for Au-Ag. The numerous radioactive zones in the property near any potential Au-Ag zones, if they existed, would be a very sensitive issue in regards to the potential exploitation of them.

No further work is recommended in any of the project areas previously referred to.

It still remains a question in regards to the sources of Au in Porter Brook, Sutherlands Brook, Ferguson Brook and MacDonald Brook. The Au in the alluvium of these streams appears to be particles of fine Au washed out of till by stream action. It is not now deemed that the Au is of a local source in the streams. Glaciation in these volcanic terranes was north to south. Just to the north of these targeted areas is located a deep-seated fault known as the Waugh River Fault. This east-west trending fault is part of the Fundy Rift System.

Up-ice, or north of the Au anomalous streams, several, well-defined, north-south cross-faults traverse across the Waugh River Fault. In the case of the Porters Brook - Sutherlands Brook areas in the French River project area, the Waugh River Fault separates the Carboniferous age volcanic terrane on the south from late Precambrian age meta-volcanics and metasediments on the north. North of the Ferguson Brook - MacDonald Brook project area the main break separates the same volcanic terrane from Silurian age metasedimentary rocks. Streams near the cross-faulted areas are reported to contain abundant quartz floats.

It may be that the source of gold found in the streams in the aforementioned project areas had its source near the Waugh River Fault. This was speculated just before programmes in the CGVL project were terminated, but not acted upon. Recce-type prospecting and stream geochemical work was slated for these new targeted areas. Unfortunately no previous work was done in this part of the large CGVL position, hence the ground had no assessment credits and it was lost. In about 90 days some of the ground encompassing the new targets which may be the source for gold in the aforementioned project areas will be staked by Cobequid Gold and the writer will be carrying out some prospecting-geological work in them.

In regards to the new claim group staked by the writer in the Loganville area which is located north of Avalon Ventures IOCG property at Mount Thom, which is adjacent to a large block of ground in the CGVL, this may be of interest to Avalon for IOCG potentials. New information shows the intersection of 5 major faults traversing Silurian age metasediments intruded by the Salmon River Pluton comprised of granite and diorite being part of a large, positive gravity anomaly. Old geological maps show the existence of copper showings in the area and float boulders of hematitized granites are located in the severely faulted terrane. The Loganville IOCG target should be prospected and multi-element stream sediment analyses should be carried out in several streams. The next time Mr. Bubar comes to N. S. this writer will present to him the details of the property to see if Avalon Ventures wishes to get involved in the evaluation of it for IOCG deposits.

Mr. Bubar and Cobequid Gold have a verbal agreement that the CGVL will be turned back to the latter. But this writer promised Mr. Bubar that Avalon Ventures would have the rights to first refusal if Cobequid Gold on its own worked in the original CGVL holdings and located any showings or targets of significance. The only work that might be carried out by Cobequid Gold in the original CGVL holdings would be along the Waugh River Fault that will be staked in the near future.

All of the more promising targets in the CGVL, the most of which occurred in the Carboniferous age volcanic terrane were evaluated. No important situations were outlined in which to carry out further work. Epithermal Au-Ag environments do exist in rhyolite flow-dome complexes, but no proofs of Au-Ag mineralizations were encountered.

Respectfully submitted,

Avard Hudgins, MSc  
Vice President  
Cobequid Gold Corporation Ltd.

Truro, N. S.  
March 17th/04

## Appendix B

### THE COBEQUID MOUNTAINS GOLD VENTURE Colchester and Cumberland Counties, Nova Scotia

- An epithermal-type (hot spring) gold-silver environment in the Eastern Cobequid Mountains of northern Nova Scotia never previously systematically explored for gold.
- A large Devonian to Carboniferous-age volcano-sedimentary terrane having the potential for the following types of epithermal deposits: (a) bonanza type Ag-Au lodes and stockworks in volcanic centers; (b) Eskay Creek type subaqueous hot springs deposits of Au-Ag ± base metals in sedimentary rocks; and (c) Au in beds of siliceous exhalites interbedded with (b).
- Volcanic centers: Bimodal, rift related subaerial rhyolite-dacite flows, rhyolite domes, tuffs, ignimbrites, lahars, minor andesite-basalt flows similar to the El Indio gold belt in Chile. A later volcanic event characterized by chiefly basalt lava flows. Extensional tectonic regime.
- Interbedded carbonaceous clastic sediments, limestones and siliceous iron formation. Thick beds of chert-jasper. Lacustrine or shallow marine deposition in a caldera setting. In other areas, shallow marine sediments were deposited in fault-controlled basins fronting volcanic centers similar to the depositional environment of Eskay Creek in B.C. Eskay Creek hosts geological reserves of 4.3 Mt grading 0.84 oz/ton gold and 30 oz/ton silver plus recoverable lead and zinc.
- Syntectonic, subvolcanic, fluorine rich, tin-tungsten type of granitic plutons intrude their comagmatic pile of felsic volcanics and epiclastic sedimentary sequences similar to the Mount Pleasant/Clarence Stream area in southwestern New Brunswick. Later thermal event involved swarms of topaz-type rhyolite dikes and rhyolite porphyry-granophyres.
- Hydrothermal activity manifest in broad sericite-sulphide alteration zones; zones of alunite-jarosite; potassic (andalusia) alteration, widespread fluorite, epithermal Ag-Mo-Sn±W mineralization, propylitization (chlorite-epidote-carbonate alterations). Old reports refer to tellurides in the area. In sedimentary rocks, subaqueous hot springs siliceous exhalites and with sulphide-rich intervals containing elevated Ag, Cu, Pb, Zn in carbonaceous siltstone-tuff beds.
- Area transected by major deep-seated fault structures adjacent to the regional Cobequid-Chedabucto fault zone which separates the Meguma and Avalon tectonic zones. These structures represent the "plumbing system" for metal-rich hydrothermal fluids.
- Fault-controlled blocks of Silurian-age sedimentary basins adjacent to the volcanic terrane in the Cobequids are similar to the Botwood basin gold area in Newfoundland and have never been explored for metallic mineralization.
- Outstanding geochemical targets: Streams have anomalous Hg, Mo, As, Ba, Pb, Zn, Ag, and Sn in silts. Some streams have highly anomalous Au in silts (100's of ppb Au). These

correlate with highly anomalous gold in heavy mineral concentrates which show sights of free gold and electrum and yield assays of up to 2000ppb Au.

- From 1977-1981, Gulf Minerals spent over \$2 million exploring the area only for uranium. Gulf drilled over 100 holes (20,000 ft.) in a large area around a radiometric anomaly near Debert Lake. Logs of these holes indicate the presence of thick sulphide zones, alteration zones in volcano-sedimentary rocks that were never assayed for gold. Some intervals up to 60 ft. thick were analyzed for base metals and silver yielding highly anomalous values of up to 8-10oz/ton Ag. Siliceous exhalites were also not assayed for gold. The drill core is archived at the core library of the Nova Scotia Dept of Natural Resources at Stellarton and is available for study and sampling.
- Similarly, hundreds of sieved stream sediment samples collected by the N.S.D.N.R. in the 1980's from numerous streams in the Cobequid Mountains Venture area, are in storage and available for further testing. These samples were never analyzed for Au or related pathfinder elements.
- Initial prospecting on logging roads last year turned up numerous new occurrences of sulphide mineralization and hydrothermal alteration zones. Several old known occurrences have produced gold values in grab samples ranging up to 1000 ppb gold.
- Follow-up program will involve intensive prospecting and mapping of numerous obvious targets identified from the work done to date. Floats and geochemical anomalies will help target significant Au-Ag zones which can then be opened up by trenching. Sampling of sulphide-rich intervals in old drill holes may identify new gold zones and analysis of archived stream sediment samples may detect new anomalies.
- A large land package (over 50,000 acres) has been staked, controlling all of known target areas.
- Access to the area has recently been opened up with new pulp roads. Just 25 km north of Truro.
- The lack of homes, cottages or tourist resorts in the area reduces potential for land use conflicts.
- Inexpensive exploration and acquisition costs make this one of the most cost-effective areas for mineral exploration in Canada.

Avard Hudgins, M.Sc.

March, 2003

Occasional Report #2

COBEQUID GOLD EXPLORATION

Debert Lake Area

Overview of the geology

A visit to the falls on the East Wallace River, located just off the northwest corner of the map area (1: 30,000) provides a splendid opportunity for direct 3-D viewing of the intimate mixture of lithologies that lurk beneath the thin glacial cover in this part of the Cobequids. Something very similar (but more two-dimensional than the falls' exposure) is revealed in the large quarry (location J) opened in the northwestern corner of the map area (small map; scale approx 1: 30,000). Here the rocks are exclusively volcanogenic in origin. Strike is east-west, with the dip ranging from steep north to vertical. The main units are massive rhyolite (including ignimbrite), flow-banded rhyolite, a volcanic breccia or lahar (which includes fragments of the latter), and a rhyodacite tuff. This last-mentioned unit can be classed as a subaerial sediment. A thin bed of felsic ash-like volcanic tuff (see below) represents the sole possible example of a possible subaqueous sedimentary rock at this location.

A basaltic intrusion (several meters thick), amygdaloidal in part, occupies the southern half of the quarry, but it is split such that one portion appears to occupy a low-angle thrust fault inclined to the south. A felsic ash-like volcanic tuff showing weak lamination on a millimeter scale, is heavily pyritized (about 20%) adjacent to the basalt. Purple fluorite is conspicuous, and chloritization intense. Traces of fluorite are also common along contacts between the units of felsic volcanics. Despite the evidence of hydrothermal activity here, it could not have been pervasive, for the quartz eyes in the rhyolites are absolutely fresh. The basaltic rock exposed as a shallow-level intrusion in the quarry exhibits modest epidotization, chloritization, and fairly advanced albitization.

Basic volcanic rock (as remarked in occasional report #1) in this area is not as prevalent as in the Porter Brook - Sutherland Brook section to the east. Indications are however, that the main eruptive center(s) was/were in what is now the Debert Lake area. Such centers will doubtless have been built up as domes, given the viscous nature of rhyolite lavas. Gower writes at length of rhyolite dome/flow complexes as potential foci for mineralization. Supporting evidence for their existence includes the great abundance of rhyolite flows, the higher incidence of "mill rock" and hydrothermally altered rocks here as compared to the eastern area, and the presence of dilation features in the form of small breccia dikes. These latter are possibly equivalent to what Gower (p.55) terms "degassing breccia dikes". At location K, for example, fragments of millimeter-scale laminated rhyolite are enclosed in a matrix of agate and otherwise cherty ferruginous material (e.g. DLR-159) in several small, irregularly-shaped dikes. These may reflect what has taken place on a much large scale such as, say, a siliceous sinter cone or tufa on the flank of a volcano or volcanic caldera. The problem here of course is one not only of scale but also orientation, the stratigraphic sequence being exposed on edge.

Disclaimer: Please note that no effort has been made on any of the three accompanying reconnaissance scale geological maps to locate, or otherwise relocate, the major lithological boundaries such as that between the felsic volcanic belt and the Hart Lake -Byers lake pluton.

Mineralization/ metallization (observed)

Apart from the presence of pyrite (noted above) in the laminated tuff of the large quarry (location J), three main areas merit brief description. These are: (1) metallization along the East



Wallace River - Debert Lake lineament in the northwest (location L), (2) metallization within the so-called "window" of DC<sub>B</sub> (mainly volcanic rocks) surrounded by granite in the south of the map area (location M), and (3) metallization in and along the tributaries to Mill Brook (location N) in the vicinity of the second Pb - Zn anomaly.

(1) East Wallace - Debert Lake lineament (vicinity of Pb - Zn anomaly)

The showing of fine-grained pyrite and galena ( $\pm$  sphalerite ?) discovered by Sandy Chase on the north bank of the East Wallace River just above the culvert (location L) provides a key to the nature of Pb-Zn mineralization/metallization present at this locality. A second narrow (several centimeters thick) horizon of sulfide-bearing (pyrite and galena) occurs uphill, north of the river and 150 feet (about 45 meters) south of the baseline. These two modest showings may help account for the anomaly. Short of a more closely spaced soil survey, or trenching program on this very steep hillside, it is difficult to be absolutely certain. In all likelihood however, these are minor showings, and although laterally persistent (or possibly recurrent ?) along an east-west trend, they scarcely deserve detailed follow-up. At least as attractive a target along this lineament is the nature and extent of the bedrock source of the large boulders of fluorite-enriched brecciated volcanic rock present along the stream bed (e.g., sample DLR-166).

(2) "Window" of DC<sub>B</sub> (southern area)

This area of volcanic rocks appears to be a good deal smaller than indicated on the 1982 regional geological map by Donohoe and Wallace. Diorite occurs widely in the southern portion, and several different kinds of granite border the "window"; elsewhere diabase and/ or diorite, and outcrops of felsic volcanic rocks are far more common than basalt. Granitic rocks surrounding the "window" include: granodiorite, felsite, grey granite, pink granite, and hornblende granite, all of these rather fresh and apparently unmineralized. (G. Piper and co-workers report the occurrence of no fewer than 10 different varieties of granite in the area). Nor are there any significant signs of hydrothermal alteration of mineral assemblages in the area. It may be that analogous to the Halifax granite, which invades the slates at Purcell Cove and other localities in the metro area, the Hart Lake-Byers Lake pluton has intruded relatively unreactive host rocks, resulting in little more than quite abrupt knife-edge contacts. This is the impression gained by geological reconnaissance in and around the "window".

2a) Weak (pyritic) mineralization was observed in a thick bed of banded cherty rock (DLR-167) which outcrops (strike 40°, vertical) along the northern edge (Location O) of the DC<sub>B</sub> "window" about one kilometer east of Little Snare Lake. This site is as good as any for either Gower's "...laminated cherty siltstone of the DL-zone" (p.39 of his thesis) or his "... zone of siliceous sinter, comprising massive amorphous cherty material which outcrops east of the DL-zone.....10 to 20 m thick.....thought to be a strike extension of the cherty siltstone beds..." (p.55). Bedding at this locality deviates appreciably from the general east-west strike. Cleavage here, virtually coincident with the banding/bedding in the cherty material, is refracted in diabase, showing that tectonic movement continued long after deposition of the chert and its intrusion by diabase. Nearby, half a kilometer to the west, granite contains xenoliths of diabase (75 m northwest of DLR -152); elsewhere (e.g., location P, along the Old Debert Road) diabase cuts granite.

2b) Abundant outcrop along the larger of two streams which cross the eastern contact of the "window" reveals weathered felsic volcanics near the Old Debert Road; the rock is strongly foliated and sheared although it is barren of sulfides. Extensive bodies of diabase and a coarse-grained porphyritic rhyolite (equivalent to DLR-169) outcrop along this stream. Solid barren pink granite occurs in close proximity to a sheared massive outcrop of diabase. A sharp lookout for dark metallic minerals (magnetite, cassiterite, allanite, etc.,) in this granite yielded only specks of magnetite.

2c) An occurrence along the Debert River of bog iron, believed to be the same as that recorded by E.R. Faribault, approximately one kilometer south (location P) of the DC<sub>B</sub> "window", was sampled as a silt (DLS- 206); the material occurs as a flocculated iron hydroxide/oxide in a mass of filamentous algae along the river's edge.

### 3) Tributaries to Mill Brook (Pb - Zn anomaly east southeast of the quarry)

Apart from several colours of gold panned on two different tributaries to Mill Brook (see the Kimberley-Clarke map), little evidence of metallization was observed in this heavily wooded mountainous terrain. One sample (DLR - 171) of slightly pyritic massive rhyolite at the huge cliff-cavern locality close to the reported Pb- Zn anomaly was taken for analysis. Efforts were likewise directed to assessing the extent of metasedimentary rocks, a belt of which is confirmed as striking 110°, with vertical to steep southerly dip, and outcropping at various points along the main tributary to Mill Brook. The metasediments include brown siltstone, sparse channel-filling conglomerate (DLR-172) in the siltstone, greyish-white quartzite, black shale/argillite, and lesser quartz-wacke. Oolitic chert occurs as float along the main tributary. At the eastern end of this tributary (location Q), a four meter-wide band of well-bedded (on centimeter and decimeter scales) and indurated fine-grained clastic metasedimentary rocks, attests to an elevated regional metamorphic grade (estimated. lower amphibolite facies).

## COMMENTS

### Metallization potential (Debert Lake area)

It is curious that many geologists (admittedly none of them economic geologists) who have devoted much time studying the geology of this portion of the eastern Cobequids, mention very little about the mineral potential. This, despite the common appearance in their texts of terms such as "intense magmatic activity" and "major heat source". Yet in his substantial M.Sc. thesis, D.P. Gower reports wholesale tantalizing finds such as "... massive pyrite beds with up to 276 gm/t Ag in lacustrine siltstones..." and "... fluorite-zircon-calcite-allanite veins with highly anomalous REE concentrations...". And in assessment reports, Gulf geologists report, for example, malachite-stained boulders with up to 5.38 oz/t Ag, and local occurrences of up to 15% sulfides and abundant graphite. Unfortunately, to date, the results of our reconnaissance work (both in the field, and selective sampling/analysis of Gulf's stored drill core) have failed to substantiate these early indications of high economic potential. True, our focus is on gold potential, yet even here we are puzzled in failing to duplicate finds of precious metals similar to those reported by Gulf in boulders of float. Thus, in Gulf's rock samples, returns of 47ppm to 55ppm Ag are common, and in rock sample RR051700, 98ppm Ag is reported. Elsewhere, in rock sample RO 203 analysis for gold is given as 3 (ppb? or ppm?), and in RO 212, as 13 (ppb or ppm?) (Analyzed Oct 21, 1980 - Assessment Report AR 80-009).

In view of the picture of rhyolite dome/flow complexes (probably centered as Gower maintains (p.64), in the DF zone), the widespread hydrothermal alteration, and reports of siliceous sinter, composite dikes, graphitic fault zones, etc., the area must be considered one of high interest for precious metals and for elements of the Sn, W, REE association. However, as Gower's supervisor D. Strong points out, economic grades and tonnages for granite-related deposits require efficient processes of concentration. Thus, despite numerous encouraging signs we must still question whether, in this area, the timing of granitic intrusion was favourable (i.e., to what extent had differentiation already occurred?), and whether the nature and volume of the accompanying fluid regime were adequate to the task of ore genesis.

### The metasedimentary belts

During our reconnaissance of the Debert Lake area (and in light of Gower's thesis), we had expected to commonly encounter metasediments. It turns out that, except for the belt of metasediments in the north central portion of the map area along the tributary to Mill Brook (and of course the two distinct bands of metasedimentary bands encountered along Byers Brook), the few metasedimentary rocks encountered are those of volcanogenic subaerial affinity. Doubtless others lie hidden to a considerable extent beneath the present extensive zones of clear cut, completed and on-going since Gulf's exploration ceased here in the early 80s. Thus, for example, in the south between Little Snare and Big Snare Lakes no outcrops of chert or exhalite-like rock were encountered., although both Gower's and Gulf's reports refer to them (without pin-pointing their locations). Therefore, considering the general trend and the short distances involved, it is likely that those rocks belong to the same unit as that (described in 2a, above) at location O.

By comparison, in the relatively pristine area of Mill Brook, a belt of subaqueous (probably lacustrine) metasedimentary rocks is clearly on record as forming an integral part of the geology to the north of Debert Lake. Whether the belt passes just north of the quarry has not been established. However, it is probable that this same unit extends eastward to, and well beyond the area mapped by Donohoe and Wallace as "quartz wacke concordant and conformable". As such it should be seen as a part of one and the same basin marking an hiatus between two major (felsic/basic) volcanic belts.

Two last observations: 1) This metasedimentary belt and several others encountered in the Porter Brook - Sutherland Brook area are stratigraphically well above the main granitic mass of the Hart Lake - Byers Lake pluton and will therefore not have been directly linked to the particular rhyolite dome/flow complexes and their comagmatic chambers of granite described by Gower in the Debert Lake area. Therefore any mineral deposit associated with the recently discovered metasedimentary belts (fine-grained clastics, wackes, and limestone) will not necessarily bear the same stamp (structural features, geochemical signature, alteration etc.) as showings in the Debert Lake area. We ought therefore be on the lookout for something new and different in areas to the east. 2) It seems clear that the basic volcanics and their constituent metasedimentary belts represent a greater span of geologic time than the earlier felsic volcanic belt (with its various units so characteristic of explosive volcanism), as seen in the Debert Lake area. Supporting evidence for a lengthy time factor is the intensely weathered features of the basic volcanics (as remarked in occasional report #1). This condition might of course also signal the existence of climatic conditions that favoured relatively intense chemical weathering.

David J. Mossman  
September 15, 2003

## **Appendix D**

**Rock assays in Au - Ag**



August 8, 2003

Cobequid Gold Ltd.  
142 Granville St  
PO Box 485  
Bridgetown, NS  
B0S 1C0

Attention: J. Wightman

Re: Results of analysis on submitted samples.

Sample	ppm (g/t)	
	Au	Ag
DLR-1	0.013	0.95
DLR-2	0.005	0.15
DLR-3	0.008	0.47
DLR-4	0.003	1.07
DLR-5	<0.003	0.61
DLR-6	<0.003	0.01
DLR-7	<0.003	0.29
DLR-8	0.003	0.29
DLR-9	0.011	0.93
DLR-10	0.013	0.25
DLR-11	0.019	0.13
DLR-12	0.013	0.13
DLR-13	0.030	0.34
DLR-14	0.013	0.17
DLR-15	0.003	0.73
DLR-16	0.003	0.19
DLR-17	<0.003	0.17
DLR-18	<0.003	0.70
DLR-19	0.013	0.10
DLR-20	0.005	1.23
DLR-21	0.005	0.50
DLR-22	0.150	0.21
DLR-23	0.090	0.23
DLR-24	<0.003	0.54
DLR-25	<0.003	0.14
DLR-26	<0.003	0.10
DLR-27	0.005	0.94
DLR-28	0.023	0.20
DLR-29	0.013	0.09
DLR-30	<0.003	0.29
DLR-31	<0.003	0.24
DLR-32	<0.003	0.23

  
Cyril Cole



DALHOUSIE  
University

MINERALS ENGINEERING CENTRE

DalTech  
P.O. Box 1000  
Halifax, Nova Scotia  
B3J 2X4

Tel: 902.494.3955  
Fax: 902.425.1037  
E-mail: mec@dal.ca


August 21, 2003

Cobequid Gold Corp.  
142 Granville St  
PO Box 485  
Bridgetown, NS  
B0S 1C0

Attention: J. Wightman

Re: Results of analysis on submitted samples.

Sample	ppm (g/t)	
	Au	Ag
DLR-33	<0.003	0.19
DLR-34	<0.003	0.20
DLR-35	<0.003	0.47
DLR-36	<0.003	0.57
DLR-37	<0.003	0.05
DLR-38	0.003	0.33
DLR-39	0.003	0.13
DLR-40	0.005	0.14
DLR-41	<0.003	0.13
DLR-42	0.005	0.15
DLR-43	<0.003	0.01
DLR-44	<0.003	0.32
DLR-45	<0.003	0.02
DLR-46	<0.003	0.16
DLR-47	<0.003	0.05
DLR-48	<0.003	0.05
DLR-49	0.095	1.09
<u>DLR-50</u>	0.003	0.14
DLR-150	<0.003	0.43
DLR-151	0.003	0.10
DLR-152	0.003	0.16
DLR-153	<0.003	0.23
DLR-154	0.005	0.12
DLR-156	0.003	0.70
DLR-157	0.024	0.33
DLR-158	<0.003	0.28
DLR-159	<0.003	0.50
DLR-160	0.003	0.72

  
Cyril Cole

copy to: Avarud Hudgins

**APPENDIX E**

**ROCK DESCRIPTIONS**

**DLR SERIES**

### Rock Descriptions - DLR Series

- Sample No. DLR-5 - slightly sericitic rhyolite, 5% fine dissemin. pyrite - outcrop
- Sample No. DLR-4 - do, about 10% fine dissemin. py - rubble
- Sample No. DLR-6 - slightly sericitic acid tuff, 5% dissemin. pyrite, rare speck of chalc. - rubble crop
- Sample No. DLR-15 - slightly sheared sericitic rhyolite or dacite porphyry, 10% pyrite - angular floats
- Sample No. DLR-50 - weakly hematitic tuff? 5-10% fine pyrite - outcrop

A. H.



## **Appendix F**

**Analyses of stream sediment samples in Au - Ag**



September 5, 2003

Cobequid Gold Corp.  
142 Granville St  
PO Box 485  
Bridgetown, NS  
B0S 1C0

Attention: J. Wightman

Re: Results of analysis on submitted samples. Analysis on minus 60 mesh.

Sample	ppm (g/t)		Sample	ppm (g/t)	
	Au	Ag		Au	Ag
DLS-1	0.008	0.22	<u>DLS-21</u>	<0.003	0.37
DLS-2	<0.003	0.30	<u>DLS-22</u>	<0.003	0.12
DLS-3	<0.003	0.45	DLS-23	<0.003	0.10
DLS-4	0.007	0.24	DLS-24	<0.003	0.09
DLS-5	0.013	0.28	DLS-25	<0.003	0.08
DLS-6	<0.003	0.36	DLS-26	0.013	0.02
DLS-7	<0.003	0.26	DLS-27	<0.003	0.04
<u>DLS-8</u>	0.015	0.42	DLS-28	<0.003	0.03
DLS-9	<0.003	0.31	DLS-29	0.013	0.09
DLS-10	<0.003	0.29	DLS-30	<0.003	0.20
DLS-11	<0.003	0.39	DLS-31	<0.003	0.13
DLS-12	0.005	0.40	DLS-32	<0.003	0.25
DLS-13	<0.003	0.47	DLS-33	<0.003	0.02
DLS-14	<0.003	0.19	DLS-34	<0.003	0.02
<u>DLS-15</u>	<0.003	0.44	DLS-35	<0.003	0.01
<u>DLS-16</u>	<0.003	0.37	DLS-36	<0.003	0.05
<u>DLS-17</u>	<0.003	0.47	DLS-37	<0.003	0.07
<u>DLS-18</u>	<0.003	0.08	DLS-38	<0.003	0.05
<u>DLS-19</u>	<0.003	0.17	DLS-39	<0.003	0.13
<u>DLS-20</u>	0.003	0.12	DLS-40	<0.003	0.10
			DLS-41	<0.003	0.06

  
Cyril Cole

copy to: Avarud Hudgins



September 12, 2003

Cobequid Gold Corp.  
142 Granville St  
PO Box 485  
Bridgetown, NS  
B0S 1C0

Attention: J. Wightman

Re: Results of analysis on submitted samples. Analysis on minus 60 mesh.

Sample	ppm (g/t)		Sample	ppm (g/t)	
	Au	Ag		Au	Ag
DLS-42	<0.003	0.09	DLS-68	0.013	0.03
DLS-43	<0.003	0.10	DLS-69	0.023	0.08
DLS-44	<0.003	0.13	<u>DLS-70</u>	<0.003	0.06
DLS-45	<0.003	0.05	<u>DLS-71</u>	<0.003	0.23
DLS-46	0.003	0.11	<u>DLS-72</u>	<0.003	0.37
DLS-47	0.005	0.16	<u>DLS-73</u>	<0.003	0.12
DLS-48	<0.003	0.20	<u>DLS-74</u>	<0.003	0.10
DLS-49	<0.003	0.08	<u>DLS-75</u>	<0.003	0.33
DLS-50	<0.003	0.09	<u>DLS-76</u>	<0.003	0.06
DLS-51	<0.003	0.05	<u>DLS-77</u>	<0.003	0.13
DLS-52	0.003	0.20	<u>DLS-78</u>	<0.003	0.13
DLS-53	0.003	0.17	DLS-79	<0.003	0.12
DLS-54	<0.003	0.03	DLS-80	<0.003	0.14
DLS-55	<0.003	0.40	DLS-81	0.005	0.05
DLS-56	<0.003	0.08	DLS-82	<0.003	0.12
DLS-57	0.005	0.10	DLS-83	<0.003	0.13
DLS-58	0.013	0.02	DLS-84	<0.003	0.65
DLS-59	<0.003	0.02	DLS-85	<0.003	0.64
DLS-60	<0.003	0.01	DLS-86	0.003	0.89
DLS-61	0.013	0.22	DLS-87	<0.003	0.32
DLS-62	<0.003	0.95	DLS-88	<0.003	0.43
DLS-63	<0.003	0.15	DLS-89	<0.003	0.13
DLS-64	0.003	0.50	DLS-90	<0.003	0.24
DLS-65	0.003	0.01	DLS-91	<0.003	0.10
DLS-66	<0.003	0.10	DLS-92	<0.003	0.05
DLS-67	0.005	0.01			

Cyril Cole

copy to: Avarud Hudgins



September 18, 2003

Tel: 902.494.3955  
Fax: 902.425.1037  
E-mail: mec@dal.ca

Cobequid Gold Corp.  
142 Granville St  
PO Box 485  
Bridgetown, NS  
B0S 1C0

Attention: J. Wightman

Re: Results of analysis on submitted soil samples.

Analysis on minus 60 mesh fraction.

Sample	ppm (g/t)		Sample	ppm (g/t)	
	Au	Ag		Au	Ag
DLS-93	0.003	0.05	DLS-121	<0.003	0.05
DLS-94	0.005	0.04	DLS-122	<0.003	0.02
DLS-95	<0.003	0.09	<del>DLS-123</del>	<0.003	0.10
DLS-96	0.005	0.06	DLS-124	<0.003	0.07
DLS-97	0.003	0.02	DLS-125	<0.003	0.02
DLS-98	<0.003	0.16	DLS-126	<0.003	0.15
DLS-99	<0.003	0.06	DLS-127	<0.003	0.20
DLS-100	<0.003	0.16	DLS-128	<0.003	0.31
DLS-101	<0.003	0.23	DLS-129	<0.003	0.26
DLS-102	0.005	0.09	DLS-130	<0.003	0.51
DLS-103	0.005	0.02	DLS-131	<0.003	0.26
DLS-104	<0.003	0.01	DLS-132	<0.003	0.11
DLS-105	<0.003	0.09	DLS-133	<0.003	0.24
DLS-106	<0.003	0.01	DLS-134	<0.003	0.29
DLS-107	<0.003	0.05	DLS-135	<0.003	0.22
DLS-108	<0.003	0.01	DLS-136	<0.003	0.19
DLS-109	<0.003	0.01	DLS-137	<0.003	0.25
DLS-110	<0.003	0.02	DLS-138	<0.003	0.15
DLS-111	<0.003	0.02	DLS-139	<0.003	0.17
DLS-112	<0.003	0.15	DLS-140	<0.003	0.14
DLS-113	<0.003	0.04	DLH-1	<0.003	0.06
DLS-114	<0.003	0.10	DLH-2	<0.003	0.11
DLS-115	<0.003	0.11	DLH-3	0.003	0.10
DLS-116	<0.003	0.06	DLH-4	<0.003	0.16
DLS-117	<0.003	0.05	DLH-5	0.105	0.11
DLS-118	<0.003	0.04			
DLS-119	<0.003	0.13			
DLS-120	<0.003	0.17			

  
Cyril Cole

copy to: Avarud Hudgins

## **Appendix G**

**Assays in Au - Ag for drill hole samples**



August 28, 2003

Cobequid Gold Corp.  
142 Granville St  
PO Box 485  
Bridgetown, NS  
B0S 1C0

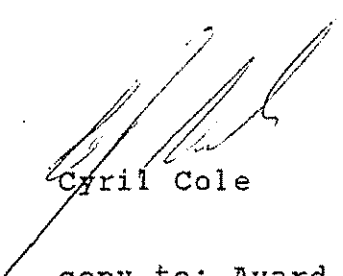
Tel: 902.494.3955  
Fax: 902.425.1037  
E-mail: mec@dal.ca

Attention: J. Wightman

Re: Results of analysis on submitted samples.

Sample	ppm (g/t)	
	Au	Ag
DLR 51	<0.003	0.04
DLR 53	<0.003	0.20
DLR 161	<0.003	0.17
DLR 162	<0.003	0.17
DLR 163	0.003	0.19
DLR 164	<0.003	0.15
DLR 165	<0.003	0.17
DLR 166	<0.003	0.51
JZ-22-(150-160')	<0.003	0.65
JZ-22-(160-170')	0.003	2.50
JZ-22-(178-198')	0.005	0.43
JZ-22-(386-396')	<0.003	0.66
JZ-22-(396-406')	0.003	0.75
JZ-22-(416-426')	<0.003	0.45
JZ-22-(426-438')	<0.003	0.33
DF-2-(126-146')	<0.003	0.26
DF-2-(191-211')	<0.003	0.14
DF-2-(293-313')	<0.003	0.21
DF-2-(316-326')	<0.003	0.13
DF-17-(218.5-256.9')	<0.003	0.15
DF-23-(98.8-105m)	0.003	0.54
DF-32-(24.4-29.5)	0.003	0.19
DF-32-(91-94')	<0.003	0.26
DF-32-(105-116.5)	<0.003	8.21
DF-32-(116.4-122)	<0.003	1.90
DF-32-(150.8-153m)	<0.003	0.43
DF-32-(159.8-167)	<0.003	0.27
DF-37-(4-13)	<0.003	0.05
DF-37-(150.5-152.5)	<0.003	0.16
DF-48-(17.4-21)	0.003	0.16
DF-48-(34.3-51m)	<0.003	0.59
DF-48-(51-55.5m)	<0.003	0.29
DF-48-(57.0-60.0)	<0.003	0.60
DF-48-(60-63.2)	0.008	0.32
DF-48-(75-81)	0.013	0.37
DF-48-(81-84)	<0.003	0.22
DF-48-(102.3-108.2m)	<0.003	0.25

Sample	ppm (g/t)	
	Au	Ag
DF-48-(114-121.8)	<0.003	0.57
DF-48-(148.1-150)	<0.003	0.09
DF-48-(153.9-155)	0.005	0.14
DF-49-(5.5-9.5)	<0.003	0.10
DF-49-(22.1-25.1)	<0.003	0.09
DF-49-(83.1-88.8)	0.003	0.36
DF-49-(88.8-94.5)	0.005	0.35
DF-49-(101-106.3)	<0.003	0.06
DF-49-(113-116)	<0.003	0.21
DF-49-(137.5-140m)	<0.003	0.29
DF-52-(1.5-6.6m)	0.003	0.15
DF-52-(8.1-11)	0.030	0.16
DF-52-(14.51-18)	<0.003	0.14
DF-52-(18-20)	0.030	0.11
DF-52-(20-23.1)	0.003	0.11
DF-52-(23.1-29)	0.003	0.06
DF-52-(29-33.7)	0.003	0.21
DF-52-(41-44)	0.013	0.31
DF-52-(44-50.4m)	<0.003	0.16
DF-52-(50.4-55.8)	0.003	0.10
DL-16-(3.3-7m)	<0.003	0.03
DL-16-(101-111')	<0.003	0.19
DL-16-(151-161')	<0.003	0.07
DL-16-(233-243')	0.005	0.08
DL-16-(448-458')	<0.003	0.08



Cyril Cole

copy to: Avard Hudgins



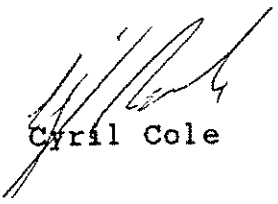
August 21, 2003

Cobequid Gold Corp.  
142 Granville St  
PO Box 485  
Bridgetown, NS  
B0S 1C0

Attention: J. Wightman

Re: Results of analysis on submitted samples.

Sample	ppm (g/t)	
	Au	Ag
DL-5-(45-57')	<0.003	0.68
DL-5-(106-124')	0.005	0.84
DL-5-(240-256')	0.005	0.68
DL-5-(256-272')	0.008	0.67
DL-5-(298-303')	0.024	0.46
DL-5-(312-325')	0.028	1.24
DL-5-(377-386.5')	0.024	1.14
DL-5-(394.5-412')	0.030	2.70
DL-14-(49-55')	<0.003	0.20
DL-14-(58-63')	<0.003	0.19
DL-14-(67-76.5')	<0.003	0.21
DL-14-(260-271')	<0.003	0.33
DL-14-(340-363')	<0.003	0.80
DL-14-(380-399')	<0.003	0.26
JZ-10-(48-55')	<0.003	0.30
JZ-10-(85-105')	<0.003	0.40
JZ-10-(121-136')	<0.003	0.80
JZ-10-(148-163')	<0.003	0.30
JZ-10-(163-181')	<0.003	0.10
JZ-10-(185-200')	<0.003	0.40
JZ-10-(200-220')	0.008	0.90
JZ-10-(222-242')	0.003	0.24
JZ-10-(498-508')	<0.003	0.11
JZ-10-(542-554')	<0.003	0.31
JZ-10-(558-570')	<0.003	1.35



Cyril Cole

copy to: Avarud Hudgins





### Gold & Silver Analysis by Aqua Regia Method

After multiple stage crushing (minus 4.0 mm) with jaw crushers, samples are riffle split and pulverized with ring and puck (Spex Industries Inc. Shatterbox) to 100% passing 0.15 mm. Equipment is cleaned with jets of air and silica sand between samples.

A 10 g ( or 20 g) sample is weighed into 400 mL beaker. The gold and silver is extracted with 120 mL of aqua regia (3 parts HCl and 1 part HNO<sub>3</sub>) by heating on hot plate. The samples are evaporated down to approximately 40 mL. After adding 25 mL water, the samples are filtered into 100 mL flasks. Silver is read directly by atomic absorption and gold is concentrated and separated from any interfering elements by extraction with M.I.B.K. By extracting into an organic phase (MIBK) not only are interfering elements removed and the sample concentrated but the sensitivity in the M.I.B.K. phase is much greater than in aqueous medium. The total sample is transferred to a 125 mL separatory funnel and 10 mL of methyl isobutyl ketane is added. The funnel is shaken for about 2 minutes and the layers allowed to separate. The aqueous layer is run off and discarded. 35 mL of 10% HCl is added and the funnel shaken again for two minutes and the aqueous layer discarded. The M.I.B.K. layer is washed in a similar manner 3 to 5 times. The gold is determined by atomic absorption. For gold and silver the Minerals Engineering Centre use Smith-Hieftje background correction method.

Standards are prepared in 25% HCl and extracted into an equal volume of M.I.B.K. Range of standards include 0.0, 0.25, 0.50, 1.0, 2.0, 3.0, 4.0, 5.0 and 10.0 mg/L gold.

For ore samples containing high levels of sulphides or carbonates. The residue from aqua regia extraction is re-leached with aqua regia and analyzed for gold, as above. Total gold in the sample is the sum of the two leaches.

Detection Limits (lowest value reported).

Gold 3 ppb  
Silver 0.01 ppm

**APPENDIX H**

**DESCRIPTIONS OF DRILL CORES SAMPLED - ASSAYED**

**FROM GULF MINERALS DRILL AREAS NO. 1 - 2**

### Drill Core Descriptions

Unfortunately Dr. Mossman's brief descriptions of the samples taken for Au - Ag assaying were lost when we moved from one field office to another.

However, all of the 87 samples taken were all weakly sericitized rhyolite - dacite flows containing pyrite concentrations varying from 1 - 5%. Some of the samples were tuffaceous facies with weak sericitic alterations and about the same concentrations of sulphides.

JZ series of holes are from Drill Area 1. DF and DL series were from Drill Area 2.

A. H.

**STATEMENT OF ASSESSMENT WORK EXPENDITURES**

(N.B. Complete as necessary to substantiate the total claimed)

REGIONAL PROGRAM

RE: EXPLORATION LICENCE NO. 04985 DATE OF ISSUE July 29th 2003

TYPE OF WORK		AMOUNT SPENT
1. Prospecting	<u>PROSPECTORS</u> 40 days	<u>10,000.00</u>
2. Geological mapping	<u>GEOLOGISTS</u> 20 days	<u>8,000.00</u>
3. Trenching/Stripping/Refilling	<u>10</u> m <sup>2</sup>	<u>200.00</u>
4. Assaying & whole rock analysis	<u>@ 20</u> 10 #	<u>200.00</u>
5. Other laboratory		
6. Grid:		
a) Linecutting		
b) Picket setting		
c) Flagging		
7. Geophysical Surveys:		
Airborne:		
a) EM		
b) Mag or Grad		
c) Radiometric		
d) Combination		
e) Other		
Ground:		
a) EM		
b) Seismic Soundings		
c) Magnetic/telluric		
d) IP/Resistivity		
e) Gravity		
f) Other		
9. Geochemical Surveys:		
a) Lake, stream, spring (seds/water)		
b) Rock/core/chips @ 20	<u>87</u> samples	<u>1740.00</u>
c) Soil/Overburden @ 20	<u>20</u> samples	<u>400.00</u>
d) Gas Method		
e) Biogeochemistry		
f) Sample Collection	<u>10</u> days	<u>2500.00</u>
g) Other		
10. Drilling:		
a) Diamond (#holes/m)	<u>1</u> m	
b) Percussion (#hole/m)	<u>1</u> m	
c) Rotary (#hole/m)	<u>1</u> m	
d) Auger (#holes/m)	<u>1</u> m	
e) Reverse circulation (#holes/m)	<u>1</u> m	
f) Logging, supervision etc.	<u>1</u> days	
g) Sealing (# holes)		
11. Other: (describe)		
SUBTOTAL		<u>21,840.00</u>

REC'D  
 OCT 23 10 13 AM '04

**OVERHEAD COSTS**

12. Secretarial Services		<u>100.00</u>
13. Drafting Services		
14. Office Expenses (rent, heat, light etc.)		<u>500.00</u>
15. Field Supplies		<u>300.00</u>
16. Compensation Paid to Landowners		
17. Legal Fees		
18. Other (describe) <u>ADMIN</u>		<u>1000.00</u>
SUBTOTAL		<u>1900.00</u>
TOTAL		<u>23,740.00</u>

I hereby certify that the above information is true and correct and that it has not before been submitted for assessment work credit.

As the person who supervised the work I am duly authorized to make this certification.  
(Position in Company or Licensee)

DATED AT Truro in the Province of Nova Scotia  
this 03 day of October 2004.

Name and Address of Licensee: Cobeguid Gold Corporation Ltd  
Bridgetown, N.S.

Signature Armed P. Hudgins

East Wentworth

05 Map No

A. D. HADGINS  
MAR 10/03

COBEQUID  
GOLD CO. INC.

SCOTT GRANT  
JAN 29/04

5/03

GOLD  
CORPORATION  
JULY 29/03

HADGINS  
MAR 10/03

Big Snare Lake

Little Snare Lake

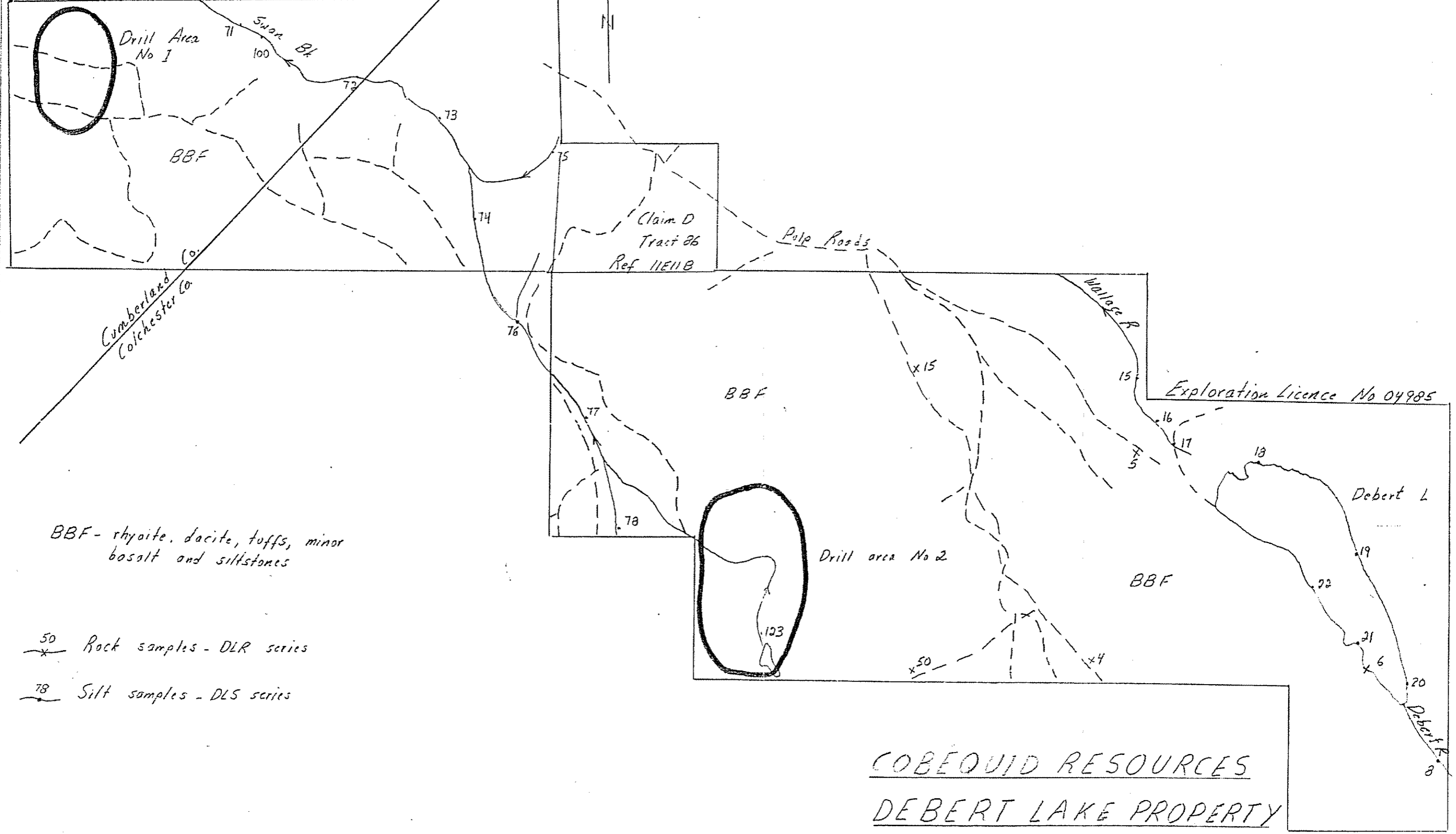
Rory Pond

A. D. HADGINS

MAR 103



63° 30' W, 45° 35' N



BBF- rhyolite, dacite, tuffs, minor basalt and siltstones

50 x Rock samples - DLR series

78 Silt samples - DLS series

COBÉQUID RESOURCES  
DEBERT LAKE PROPERTY

1:10,000

AR2004-115