### WORK REPORT CONCERNING PROSPECTING

### AND GEOCHEMICAL WORK IN EXPLORATION

### LICENCE NO. 04902

BY COBEQUID GOLD CORPORATION LTD.

WORK CARRIED OUT IN THE FERGUSON BROOK PROPERTY.

BY

**AVARD HUDGINS MSc** 

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TRURO, N. S. JULY 15th/04

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### General / Summary

Detailed prospecting for gold and stream geochemical work in the property did not yield salient results to identify gold deposits in carbonate beds within the Diamond Brook Formation.

The sources of the gold anomalies in the stream formerly found by two other entities may be in the Waugh River Fault which is located to the north. Before this source is pursued, however, some trial lines of humus soil sampling should be initiated near the stream gold anomalies and any anomalous zones achieved should be trenched.

### **Location / Access**

The claim group is located just west of the village of Earltown in Colchester County, Nova Scotia. Several trails trend southerly from Highway 311 which connects Earltown and the village of East New Annand which makes the main project areas readily accessible. Please refer to Map No.1.

### **Legal Description of Property**

Exploration Licence 04902 is held by Cobequid Gold Corporation Ltd. It is comprised of claims ABCD, tract 62; claims JKLMNOPQ, tract 59; claims ABCD, tract 63; claims JKLMNOPQ, tract 58; claims B, C, D, F, G, K, L tract 64 and claims J, K, L, M, N, O, tract 57. All being in Reference Map 11E11A.

### **History of Exploration**

In 1976-1977, Gulf Minerals explored the general area for uranium. Airborne gamma ray spectrometer surveys were carried out along with geological mapping. No uranium showings were found.

In 1990, Westminer of Canada carried out a recce-type stream geochemical programme for gold in the property. This was part of the firms geochemical evaluation for epithermal-type gold deposits in the eastern Cobequid Mountains. Silt and heavy metal concentrate anomalies were found in two streams, but no follow up prospecting or detailed geochemical work was ever done.

In 1994, this writer staked the ground and Hendricks Canada Ltd. supported a prospecting programme to assess it for gold deposits. The stream anomalies located by Westminer of Canada were verified and detailed prospecting was to start along with geological mapping, but as a result of inclement weather in the late fall of 1994 this work had to be suspended and Hendricks Canada Ltd. pulled out of the project.

### General Geology

The Byers Brook Formation (BBF) of early Mississippian age trends N-S in the SW corner of the property. It is comprised of sub-aerial rhyolite - dacite lava flows, tuffs and minor rhyolite porphyry dikes. Rubble and floats of limestone and slate with greywacke boulders occur in the bed of Ferguson Bk near the contact with the younger Diamond Brook Formation (DBF). These sedimentary horizons may occupy a mini-basin or graben surrounded by the volcanic terrane.

The DBF which underlays the majority of the property is comprised of basalt flows with minor interbeds of basic tuff and rhyolite - dacite lava flows.

In MacDonald Brook and nearby areas outcrops of dark grey fetid limestone, argillite and greywacke also suggest a mini sedimentary basin within the DBF terrane. Abundant floats of magnetite-bearing siltstone also occur in this area.

Immediately to the north is located a south splay of the regional longitudinal fault known as the Waugh River Fault which separates the DBF from clastic sedimentary rocks comprised of sandstones and shales which may be of Horton age.

The BBF-DBF contact is also a major longitudinal fault or shear zone.

Several, well-defined N-S trending cross faults traverse the terrane.

No well mineralized zones are known to exist in the property except for some disseminated pyrite (2-5%) in limestone. No important alteration zones were noted. In the BBF terrane, large float blocks of sericitized - pyritized - silicified rhyolites occur, but these do not contain any gold, silver or base metals.

Unfortunately the property was not mapped. Funds for the epithermal gold venture in the eastern Cobequid Mountain ran out before this could be achieved. Our detailed knowledge of the geology of the property, therefore, was gleaned from what the prospectors related. Please refer to Appendix A for other details of the eastern Cobequid Mountain gold venture.

### Purpose of Work

In the spring of 2003, this writer had just finished an extensive research and compilation study on the potentials for several types of epithermal gold deposits in the BBF and DBF in the eastern Cobequid Mountains between Debert Lake and Earltown. As a result of this work, the gold anomalies found in Ferguson Bk and in MacDonald Bk by Westminer of Canada and Hendricks Canada Ltd. came to the forefront. Also of great interest was the fact that prospectors for the latter firm had reported the existence of carbonate (limestone) units in both the BBF and the DBF.

The work was then initiated to assess the property for Carlin-type (disseminated gold) gold deposits in limestone sequences in the volcanic terrane.

### Work Performed

Prior to field work in August 2003, various air photos were studied to glean structures (faults, shears, etc.) in the property. Along with this work a study of airborne magnetic maps was carried out. Information from Gulf Mineral's work and from Westminer of Canada's and Hendricks Canada's work was compiled.

The property was assessed in late August - early September. Jamie Hudgins and Sandy Chase carried out most of the prospecting and stream geochemical work. Dr. Dave Mossman and his assistant, James Duivenvoorden, also helped in this work.

The Ferguson property work was part of a recce-type prospecting - stream sediment sampling programme for epithermal types of gold in a large terrane underlain by the BBF and DBF in the eastern Cobequid Mountains which was sponsored by Avalon Ventures Ltd. Please see Appendix A.

Most of the major streams in the property were prospected in detail. Prospecting work was carried out during the geochemical silt sampling. All bush trails were prospected. Any outcrops or float boulders of any size that contained visible sulphides were collected and assayed for Au - Ag. Some of the more highly mineralized carbonate units were analyzed for gold and multi-elements. Several short prospecting traverses were made on the slopes of streams where carbonate units exist near the previously found gold anomalies.

Don Bubar, the president of Avalon Ventures Ltd. visited the property to study the area because he is experienced in Carlin-type gold deposits. This writer who supervised the work visited the property several times to study the sedimentary sequences in the DBF.

### Results of Work / General Discussions

Map No. 2 depicts the location of stream sediment samples (silt samples) and rocks that were assayed in the Ferguson Brook targeted area. The results of the silt geochemical values are given in Appendix B. The results of the rock assays are shown in Appendix C. The rock descriptions are given in Appendix D. The gold plus multi-element analyses are given in Appendix E.

The results from the prospecting and stream geochemical work were disappointing in the Ferguson Brook area - shown on Map No. 2 - and the same could be said about the results of the work in the MacDonald Bk targeted area which are depicted on Map No. 3.

Most of the silt samples yielded just background values for Au - Ag hence only the anomalies are plotted on the map. The rock sampling did not yield any significant Au - Ag values hence no plots of assays are given on the maps.

The difference in Au - Ag values in silt samples from the work and the geochemical work done by Westminer of Canada and Hendricks Canada may be a result of different size fractions screened and used in assaying. The previous assaying was done on a minus 200 fraction; in our work a minus 60 mesh fraction was used, hence really fine gold particles may not have been in the samples that were assayed. An heavy metal concentrate programme in the streams to track down the source of the previously found Au silt and heavy metals concentrate anomalies was in the works when the venture got aborted due to the lack of funding. The same applies to a humus soil programme that was to be carried out. Unfortunately, as well, the stream between Ferguson Bk and MacDonald Bk was not assessed by prospecting and geochemical work before the property had work ceased in it.

The property has the geological potentials for Carlin-type gold deposits in carbonate horizons. The original geochemical results for Au are deemed to be legitimate. The source of the gold anomalies may be local; if they are not, the gold in the overburden and stream alluvium may be derived from the Waugh River Fault as glaciation was in a southerly direction from this structure.

### **Conclusions / Recommendations**

The anomalous streams in Au should experience detailed heavy metal concentrate programmes with follow up humus soil sampling to locate the source of the gold anomalies. Trenching should be carried out on any anomalous zones. If this work cannot locate sources for gold then attention should be directed towards the Waugh's River Fault to the north by prospecting, mapping and stream silt sampling.

### **Statement of Qualifications**

I, Avard Hudgins, of Truro, N.S. declare that mineral exploration.	t I have over 45 years experience in all phases of
mmerar exploration.	
	Avard Hudgins

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 ± 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 <u>Debert Lake project</u> 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.

The silt sampling of the streams yielded values in Au from 100-400 ppb, but these anomalies correspond to the anomalous sites located in the previous work. Panning in the streams yielded several very small sights of Au near the silt anomalies, as it did in previous surveys.

An area about 2000 ft by 800 ft was chosen where the source area for gold in the stream alluvium might occur and 24 MMl soil samples were taken on a test basis to see if this method of geochemical work was applicable in the property. The results of this work yielded nil results.

Two thousand feet to the northeast of the Porters Brook targets exists the Sutherlands Brook targets for Au-Ag. In this area previous work had found anomalous gold up to 700 ppb in stream silts and up to 1000 ppb Au in panned concentrates. A few sights of free gold had also been found in panned samples. Silt sampling while prospecting the pre-existing anomalies yielded several anomalies for gold up to 300 ppb.

Prospecting in the stream and its tributaries located float boulders of sericitized - sulphidic rhyolite and tuffs, weakly sulphidic green-stone and sulphidic greywacke (?) all of which upon assay gave nil results for Au-Ag.

A large outcrop of hematitized tuff in a tributary of Sutherlands Brook was found near gold silt anomalies. Sampling here yielded nil for Au-Ag.

Prospecting along new lumber roads and old trails and along ridges near the Porters Brook - Sutherlands Brook gold targets located an appreciable amount of rubble and small floats of sulphide-bearing, sericitized rhyolite and tuff, jasper and chert or silicified rhyolite all of which assayed nil in Au-Ag.

To the east exists the Ferguson Brook - MacDonald Brook project where previous work had located several silt anomalies (up to 500 ppb) and Au anomalies in panned concentrates (up to 1000 ppb).

Prospecting in the streams and their tributaries located outcrops of black, fetid limestones with blobs and disseminations of pyrite like the carbonates found in Porters Brook. Sampling yielded nil Au-Ag.

Multi-element analyses of this favourable-looking rock only yielded slightly elevated Zn values (up to 300 ppm) which is very common in black, fetid or organic carbonates.

The stream sediment sampling yielded silt anomalies up to 700 ppb Au which occur where the previous Au anomalies existed. Multi-element analyses of silt samples did not yield any significant values for potential path finders for gold.

Towards the end of the programmes, recce prospecting in the Nuttby Mountain area south of Ferguson Brook located outcrops and rubble areas of favourable-looking, highly altered rocks in several, new logging roads. In one area, highly sulphidic, sericitic rhyolites were sampled and gave nil results for Au-Ag. A zone several hundred feet wide of hematitic-alunitized rhyolite - tuff also yielded nil results for Au-Ag. Just east of Nuttby Mountain, large angular blocks of siliceous exhalite (chert) assayed nil in Au-Ag.

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, tufaceous 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. Burar 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

## 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 (andaluria) 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.
- Pault-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.

- 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



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October 2, 2003

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**DALHOUSIE** 

Attention: J. Wightman

Re: Results of analysis on submitted soil samples.

Analysis on minus 60 mesh fraction.

	ppm (	g/t)		ppm (	g/t)
Sample	Au	Ag	Sample	Au	Ag
FBS-1	<0.003	0.09	FBS-35	<0.003	0.56
FBS-2	<0.003	0.25	FBS-36	0.040	0.16
FBS-3	<0.003	0.18	FBS-37	0.450	0.12
FBS-4	<0.003	0.16	FBS-38	0.003	0.12
FBS-5	<0.003	0.20	FBS-39	<0.003	0.05
<u>FBS-6</u>	<0.003	0.15	FBS-40	<0.003	0.11
FBS-7	<0.003	0.18	FBS-41	0.024	0.12
FBS-8 FBS-9	<0.003	0.15	FBS-42	0.003	0.09
FBS-10	<0.003	0.12	FBS-43	0.005	0.13
FBS-11	<0.003	0.15	FBS-4,4	0.005	0.32
FBS-12	<0.003	0.11	FRS-45	<0.003	0.18
FBS-13	<0.003	0.29	FRS=46	<0.003	0.35
FBS-14	<0.003 <0.003	0.27	<u>FBS-47</u>	<0.003	0.17
FBS-15	<0.003	0.18	FBS-48	<0.003	0.05
F <u>BS-1</u> 6	<0.003	0.20	FBS-49	<0.003	0.10
F <u>BS-1</u> 7	0.003	0.10	<u>FBS-5</u> 0 .	<0.003	0.11
F <u>BS-1</u> 8	<0.003	0.20 0.21	<u>FBS-51</u>	<0.003	0.09
F <u>BS-1</u> 9	<0.003	0.09	FBS-52	0.030	0.13
FBS-20	<0.003	0.03	FBS-53	<0.003	0.14
FBS-21	<0.003	0.00	FBS-54	<0.003	0.04
FBS-22	<0.003	0.08	FBS-55 FBS-56	<0.003	0.05
FBS-23	<0.003	0.14	FBS-57	<0.003	0.04
FBS-24	<0.003	0.10	FBS-58	<0.003 <0.003	0.06
F <u>BS-2</u> 5	<0.003	0.16	FBS-59	0.005	0.03
F <u>BS-2</u> 6	<0.003	0.11	F <u>BS-6</u> 0	0.003	0.21
FBS-27	<0.003	0.12	EBS=61	<0.003	0.16 0.13
F <u>BS-2</u> 8	<0.003	0.12	FBS-62	<0.003	0.13
F <u>BS-29</u>	<0.003	0.13	FBS-63	0.003	0.12
FBS-30	<0.003	0.12	FBS-64	0.005	0.12
F <u>BS-3</u> 1	<0.003	0.16	FBS-65	0.005	0.13
F <u>BS-3</u> 2	0.003	0.18	FBS-66	<0.003	0.04
F <u>BS-1</u> 3	<0.003	0.11	FBS-67	<0.003	0.04
<u>FBS-34</u>	<0.003	0.29	FBS-68	<0.003	0.09

ppm (g/t)

	ppm (	9/ 5/
Sample	Au	Ag
FBS-69	0.030	0.10
FBS-70	0.008	0.08
FBS-71	<0.003	0.07
FBS-72	<0.003	0.01
FBS-73	<0.003	0.08
FBS-74	<0.003	0.09
FBS-75	<0.003	0.14
FBS-76	<0.003	0.09
FBS-77	<0.003	0.15
FBS-78	<0.003	0.06
FBS-79	<0.003	0.16
FBS-80	<0.003	0.13
FBS-81	<0.003	0.22
FBS-82	0.003	0.19
FBS=83	0.005	0.34
FBS-84	0.005	0.11
FBS-85	<0.003	0.05
FBS-86	<0.003	0.18
FBS-89	<0.003	0.11
FBS-90	0.003	0.06
FBS-91	<0.003	0.07
FBS-92	<0.003	0.09
FBS-93	<0.003	0.14
FBS-94	<0.003	0.11
FBS-95	<0.003	0.15
FBS-96	<0.003	0.11
FBS-97 FBS-98	<0.003 <0.003	0.24
FBS-99	<0.003	1.39
FBS-100	<0.003	0.17 0.12
FBS-101	<0.003	0.12
FBS-102	<0.003	0.11
FBS-103	<0.003	0.12
FBS-104	<0.003	0.07
Panasta:		

Sample	Au	Ag
FBS-105	0.008	0.02
FBS-106	0.003	0.08
FBS-107	<0.003	0.15
FBS-108	<0.003	0.23
FBS-109	0.008	0.07
FBS-110	<0.003	0.17
FBS-111	<0.003	0.15
FBS-112	<0.003	0.12
FBS-113	<0.003	0.17
FBS-114	<0.003	0.12
FBS-115	0.005	0.10
FBS-116	0.013	0.12
FBS-117	<0.003	0.15
FBS-118	0.003	0.18
FBS-119 FBS-120	<0.003 <0.003	0.12 0.13
FBS-121	0.003	0.13
FBS-121	<0.003	0.12
FBS-123	<0.003	0.13
FBS-124	<0.003	0.08
FBS-125	<0.003	0.04
FBS-126	<0.003	0.06
FBS-127	<0.003	0.08
FBS-128	<0.003	0.07
FBS-129	<0.003	0.04
FBS-130	<0.003	0.04
FBS-131	0.800	0.17
FBS-132	0.003	0.10
FBS-133	0.003	0.09
FBS-134	<0.003	0.10
FBS-135	<0.003	0.02
FBS-136	<0.003	0.08
FBS-137	<0.003	0.01
FBS-138	<0.003	0.01

Repeats: FBS-36 0.350 FBS-37 0.400 FBS-131 0.500

Chil Cole

copy to: Avard Hudgins



## MINERALS ENGINEERING CENTRE

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

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

October 17, 2003

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

Attention: J. Wightman

Re: Results of analysis on submitted samples.

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Cyzil Cole

copy to: Avard Hudgins

### 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

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 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 HNO3) 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 tolal sample is transferred to a 125 mL seperatory funnel and 10 mL of methyl isobutyl ketane is added. The funnel is shaken for about 2 minutes and the layers allowed to seperate. 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 releached 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

Quantitative Trace Element Analysis of Rocks, Ores, etc.

(Copper, lead, zinc, nickle, cobalt, bismuth, cesium, chromium, indium, lithium, manganese, rubidium, cadmium, vanadium, tellurium, antimony, silver, molybdenum & arsenic)

l gram samples are digested with hydrochloric-nitric-hydrofluoric-perchloric acids. Analysis is determined by Flame Atomic Absorption with detection limit of 1 ppm. Arsenic determined by colorimetric method.

Appendix D

## **ROCK DESCRIPTIONS**

FBR-7	~	Slightly silicified / sericitized rhyolite, few specks of pyrite
FBR-8	*	Do, 5% pyrite
FBR-9	-	Grey fetid limestone, few specks of pyrite
FBR-10	-	Grey-white limestone, slightly silicified, 3-5% pyrite grains
FBR-11	-	Grey fetid limestone, few specks of pyrite
FBR-12	-	As above, 5% disseminated. pyrite
FBR-13	**	Black siltstone, 20-25% grains of fine magnetite
FBR-14	-	Grey micritic limestone, slightly silicified, 5% disseminated pyrite
FBR-15	-	As above
FBR-16	-	As above, 10-15% disseminated pyrite

06/11/03



### CERTIFICATE OF ANALYSIS

Work Order: 074949

To:

Annapolis Valley Goldfields Inc. Attn: John Wightman

P.O. Box 485 142 Granville St. **BRIDGETOWN** 

N.S./CANADA/BOS 1CO

Copy 1 to

P.O. No.

Project No.

No. of Samples

**Date Submitted Report Comprises** 

18 20/10/03

Cover Sheet plus

Pages 1 to

Distribution of unused material:

Pulps: Rejects: Discarded After 90 Days Unless Instructed!!! Discarded After 90 Days Unless Instructed!!!

Certified By

Tim Elliott, Operations Manager

Date

### **ISO 9002 REGISTERED**

ISO 17025 Accredited for Specific Tests. SCC No. 456

Report Footer:

L.N.R.

= Listed not received

I.S.

= Insufficient Sample

n.a.

= Not applicable

= No result

\*INF

= Composition of this sample makes detection impossible by this method  ${\it M}$  after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Subject to SGS General Terms and Conditions

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F		Mont. Ondon
P	•	, ,

Work Order: 074949

**Date:** 06/11/03

Λu FA301 SBR-6 SBR-6B QURTZ SBR-7 SBR-9 \*Dup DLR-13 FBR-18 \*Bik BLANK SBR-2 SBR-3 SBR-5 \*Dup SBR-3 \*Std ST23 DLR-13 FBR-2 FBR-3 FBR-7 FBR-10 FBR-11 FBR-12 FBR-13 FBR-14 Element. Method. Det.Lim. Units.

FINAL

Page 1 of 3



		Cu ICP70 0.5	61.9 14.2 8.8 19.0	19.5 36.5 29.5 74.9 13.6	32.4 56.3 37.7 13.4 20.9	37.2 13.7 49.6 59.9 35.2	<0.5
	Ni ICP70 1	20 4 2 4 9 20 4 3	34 27 37 18	25 64 13 4 4 5	23 39 13	<1 682	
		Co ICP70 1	7777	4 27 4 2 2 9	0 8 th 1 th	19 6 7 7 7 6	^ 491
	ge 2 of 3	Fe ICP70 0.01	2.49 2.95 2.22 4.17 1.76	3.21 2.96 3.25 7.24 2.06	2.10 6.91 8.95 2.14 4.79	3.36 2.01 6.50 2.47 8.83	<0.01
	Page	Mn ICP70 2	38 52 36 981	759 273 693 514 892	897 1300 1250 205 871	445 284 972 39 1210	<2 523
		Cr ICP70 1	23 22 25 25	30 43 26 26	43 43 43	78 77 77 88 89 77 89 89	<1 274
		V ICP70 2 ppm	22222	23 96 129 43	8 178 85 7 7	78 116 72 73 85	<2 27
		Ti ICP70 0.01	0.03 0.02 0.01 < 0.01 < 0.01	<pre>&lt;0.01 &lt;0.01 &lt;0.01 &lt;0.02 0.02 </pre>	<0.01 0.20 0.14 0.08 0.29	0.34 0.13 0.02 0.03 0.15	<0.01
		Sc ICP70 0.5 ppm	<0.5 <0.5 <0.5 <0.5 3.1	4.2 7.9 7.9 6.7 8.5	2.6 9.2 6.1 1.5 8.4	1.8 2.8 12.8 <0.5 6.2	<0.5
	7	Ca ICP70 0.01 %	0.03 0.03 0.07 <0.01 > 15.00	3.18 0.32 7.26 0.37 10.67	>15.00 3.09 0.36 0.07 1.54	4.30 0.49 4.44 0.04 0.36	<0.01
	FINAL	K ICP70 0.01	0.24 0.21 0.34 0.10	0.22 0.01 0.21 0.06 0.05	0.19 0.04 0.19 0.03	<0.01 0.28 0.10 0.24 0.03	<0.01
		P ICP70 0.01	<ul><li>&lt; 0.01</li><li>&lt; 0.01</li><li>&lt; 0.03</li><li>&lt; 0.01</li><li>&lt; 0.04</li></ul>	0.04 0.03 0.03 0.03	0.04 0.09 0.12 0.01 0.01	0.09 0.04 0.15 <0.01 0.12	<0.01
	06/11/03	AI ICP70 0.01	0.22 0.21 0.40 0.13 1.72	2.03 1.24 0.80 2.52 1.05	0.39 4.08 2.44 0.58	2.49 1.21 3.04 0.23 2.42	<0.01
	Date: 06	Mg ICP70 0.01	0.01 <0.01 0.02 <0.01 2.45	1.26 0.89 3.40 2.20 2.52	1.70 4.01 0.67 0.10	1.19 0.37 2.02 0.01 0.66	<0.01
	Dai	Na ICP70 0.01	<pre></pre>	0.01 0.11 0.06 0.08 0.02	<ul><li>&lt; 0.01</li><li>&lt; 0.02</li><li>&lt; 0.01</li><li>&lt; 0.03</li></ul>	<pre>&lt; 0.01 &lt; 0.08</pre>	<0.01
	074949	Be ICP70 0.5 ppm	1.2 1.0 2.3 2.7 1.3	4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	0.8 1.1 2.7 0.9 0.7	0.6 2.7 1.7 1.3 2.7	<0.5 <0.5
とこと	Work Order:	Element, Method. Det.Lim. Units.	DLR-13 FBR-2 FBR-3 FBR-7 FBR-10	FBR-11 FBR-12 FBR-13 FBR-14	FBR-18 SBR-2 SBR-3 SBR-5 SBR-6	SBR-6B QURTZ SBR-7 SBR-9 *Dup DLR-13 *Dup SBR-3	*BIK BLANK *Sid XRAL01



	Li ICP70 1	22,28	35 17 58 73 86	E C 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 17 86 51 57	7 =
	Bi ICP70 5 5	\$ \$ \$ \$ \$	7 \$ \$ 11 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ 0 \$ \$ \$ \$ \$	\$ \$
	Pb ICP70 2 ppm	2370 112 24 126	16 10 12 278 35	28 111 52 7	<2 16 6 2330 12	<2 21
ge 3 of 3	W ICP70 10 ppm	9 9 9 9 9	9 9 9 9 9	2 2 2 2 2	99999	< 10 < 10
Page	La ICP70 0.5 ppm	21.8 14.8 18.9 17.3	30.6 19.7 12.7 10.4 15.2	9.2 15.4 10.8 9.2 14.0	8.5 26.9 24.4 24.6 11.1	<0.5 10.3
	Ba ICP70 1 ppm	17 10 19 237 45	46 25 35 39 39	57 16 8 27 40	33 33 8 9 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9	<1 128
	Sb ICP70 5 ppm	\$ \$ \$ \$ \$	2 2 2 2 2	2222	\$ \$ \$ \$ \$ \$	\$ \$
	Sn ICP70 10 ppm	99999	000000	99999	0 0 0 0 0	< 10 < 10
	Cd ICP70 1 ppm	9 ~ <del></del> ~ e	<u>^                                    </u>	7-877	77000	77
د	Ag ICP70 0.2 ppm	1.0 2.0 0.3 1.3	0.8 0.9 1.1 1.6 0.4	0.8 1.3 0.8 0.4	0.4 1.1 0.8 0.8	<0.2 4.7
FINAL	Mo ICP70 1 ppm	0 ¥ 0 ∞ <u>^</u>		6-1-2	77777	77
	Zr ICP70 0.5 ppm	48.2 16.2 19.6 10.0	21.2 21.5 15.5 10.5	9.6 11.8 9.7 21.1 35.2	31.4 23.2 10.6 47.9 9.9	<0.5 7.1
06/11/03	Y ICP70 0.5 ppm	24.2 7.5 10.3 12.2 9.3	12.7 15.5 12.4 11.5	8.1 7.5 16.5 8.2 18.5	8.9 13.8 27.3 25.8 16.9	<0.5 8.5
	Sr ICP70 0.5 ppm	3.3 1.3 3.7 9.2 513	87.9 12.4 589 29.9 457	624 57.3 2.4 1.9 25.9	92.2 5.3 109 3.6 2.1	<0.5 42.2
Date:	AS ICP70 3 ppm	7 41 113 741 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	251 251 95 4	<pre>&lt;3 &lt;3 6 6 251</pre>	<3 528
074949	Zn ICP70 0.5 ppm	668 857 26.3 66.3	80.4 55.8 58.5 285 115	55.3 93.0 128 105 166	133 45.6 103 659 128	< 0.5 80.3
Work Order:	Element. Method. Det.Lim. Units.	DLR-13 FBR-2 FBR-3 FBR-7	FBR-11 FBR-12 FBR-13 FBR-14	FBR-18 SBR-2 SBR-3 SBR-5 SBR-6	SBR-6B QURTZ SBR-7 SBR-9 *Dup DLR-13	*Bik BLANK *Sid XRAL01

## **Geochemical Analysis**

Elements and detection limits:

	Method ICP70	Method ICP80	Method ICP90	Method	Method	Method	Method
	Aqua	Multi	i.f	ICP95	ICAH70	IC30E	AAH70
	Regia	Acid	Na <sub>2</sub> O <sub>2</sub> Fusion	LiBO <sub>2</sub>	Aqua	Acid	Aqua
	riegia	Digestion	á.	Fusion	Regia	Digestion	Regia
		Digestion	Digestion		Digestion	Organic	Digestion
Aluminum Al	.01 % - 15 %	01 D/ 10 0/	010/ 050/			Extraction	Hydride
	5 ppm - 1 %	.01 % - 15 %	.01% - 25%	.01% - 25%	-	<b></b> .	
	3 ppm - 1 %	5 ppm - 1 %	50 ppm - 10 %	7.0		1 ppm - 1000 ppm	
	1 ppm - 1 %	3 ppm - 1 %	-	- <del> </del>		1 ppm - 1000 ppm	.1 ppm - 1000 ppm
The state of the s		1 ppm - 1 %		10 ppm + 10,9%			
Control of the second s		.5 ppm-2500 ppm	5 ppm-2500 ppn	] =	- 00 t		
	5 ppm - 1 %	5 ppm = 1 %	-		= =		.1 ppm - 1000 ppm
	1 ppm - 1%	1 ppm = 1 %	10 ppm - 5 %		1 ppm - 500 ppm	.05 ppm - 1000 ppm	***
	.01 % - 15 %	.01% - 15%	.01 % - 35 %	01%-35%		Neter	
	1 ppm - 1 %	1 ppm - 1 %	10 ppm - 10 %	01%-10%	= -	PAGE.	The second second section of the second seco
	1 ppm - 1 %	1 ppm - 1 %	10 ppm - 10 %		1 ppm - 1 %	-	***
***************************************	5 ppm - 1 %		10 ppm - 10 %		.5 ppm - 1 %	.05 ppm - 1000 ppm	
Contract of the contract of th	.01 % - 15 %	.01% - 15%	.01 % - 30 %	.01/% + 30 %	=	•••	-
Control of the State of the Sta	5 ppm - 1 %	.5 ppm - 1%	10 ppm - 1 %			we.	_
	2 ppm - 1 %	Married Company of the Company of th	20 ppm - 10 %		2 ppm - 1 %	1 ppm - 1000 ppm	w.
The state of the s	1 ppm - 1 %	1 ppm = 1 %	10 ppm - 10 %	15 (E. 16)	<del>-</del>	AAA.	-
	01 % - 15 %	.01 % - 15 %	.01 % - 30 %	.01% - 30%	and the second	West	**
The second secon	2 ppm - 1 %	2 ppm - 1 %	10 ppm - 10 %	201%-10%	_	-	
	1 ppm - 1 %		-	A S	*5 ppb - 100 ppm	*5 ppb - 100 ppm	-
1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	ppb - 100 ppm		****	7	de de Estado de de	<del>-</del>	Market
Committee of the Commit	1 ppm - 1 %	1 ppm - 1 %	10 ppm - 10 %		1 ppm - 1 %	.1 ppm - 1000 ppm	######################################
	1 ppm - 1 %	1 ppm - 1 %	10 ppm - 10 %		1 ppm - 1 %	***	Acta Company of the C
Niobium Nb	-		delta	10 ppm = 10 %	22 (24-5-29-5)	-	<del></del>
	01 % - 15 %	.01 % - 15 %	.01 % - 25 %	01% 25%	5 S S S S S S S	<u></u>	
Programme Company Comp	01 % - 15 %.	.01%-15%	.01 % - 25 %	.01 % - 25 %	<b>-</b>		ne annual popular annual a The state of the state o
	5 ppm - 1 %	1.5 ppm ± 1.%	5 ppm - 5 %	·		<del></del>	A A A A
Selenium Se		4 - F. S.		+	1140 0	where the same of	.1 ppm - 1000 ppm
Silicon Si	····	G 12 (G) (* 17 48 52)	-	.01%-30%		***	
And the second of the second o	ppm - 10 ppm	.2 ppm - 10 ppm		_	.2 ppm - 10 ppm	.1 ppm - 10 ppm	re en fine en enem and about the second of t
Sodium Na .	01 % - 15 %	.01% - 15%		.01% - 30%	SECTION PROPERTY.	***	_
	pm - 5000 ppm	.5 ppm - 5000 ppm	10 ppm - 1 %	10 ppm - 10 %		····	man amphilian ann ann ann ann ann ann ann ann ann
Tellurium Te	***		The state of the s		200	.1 ppm - 1000 ppm	.1 ppm - 1000 ppm
	0 ppm - 1 %	- 10 ppm - 1 %	50 ppm - 5 %	- 1			- is the second second
	01 % - 15 %	.01 % - 15 %	.01 % - 25 %	01%-25%	7-2	<del>-</del>	***
	0 ppm - 1 %	10 ppm - 1 % - 1	50 ppm - 5 %		7.50 S 1.40 S. T.	_	CONTROL OF THE PROPERTY OF THE
Vanadium V	2 ppm - 1 %	2 ppm - 1 %	10 ppm - 5 %		112 YE 6214 E 64	<u>.</u>	
Yttrium Y .	5 ppm - 1 %	.5 ppm - 1 %	5 ppm - 5 %	10 ppm - 10 % =		jans,	manufactures of the second of
Zino Zn .	5 ppm - 1 %	. 5 ppm - 1 % ⊚	10 ppm - 10 %		*****	.05 ppm - 1000 ppm	The substitute and a property of the substitute
The state of the same of the s	5 ppm - 1 %	.5 ppm - 1 %		0 ppm - 10 %			or a horizontal and a sono succeeding a great of the sono
The second secon			and the second s	PARTIES BE BENEFIT OF THE PARTIES OF	- 4 0 mm (1995 ) 1 mm (1995 )	A Bit on a final transmission and a transmission for the contract of the contr	The state of the s
Price per sample:							
One element:	\$3.65	\$10.60	\$9.20	\$9.20			pp 10
Each additional element:		\$1.55	\$1.55	\$1.55	•	-	\$5.40
All elements:	\$8.95	\$14.40	\$12.65	\$1.55 \$12.65	S14.80	<b>61</b> E 40	\$3.15
1	IC70Hg - \$1.10	- 1 11 12	J (2.00	512.00		\$15,40 *\$2.15	\$17.75
Other add-ons:	**S3.15				*S3.15	<b>*\$3.15</b>	





### FA301 - LEAD COLLECTION / FIRE ASSAY, ICP FINISH FOR LOW LEVEL GOLD

### Purpose:

This procedure applies to all low level geological samples to be analyzed for gold by lead collection fire assay / ICP finish.

### Procedure:

Weigh an assay ton (30 grams) or other weights as per client's instructions into a crucible with 150 grams (or more) of flux, Mix sample, add 1 mg of silver nitrate, cover with borax. Place crucible in furnace for 45 minutes at 1080 C. Pour into cast iron mold, cool, hammer lead button free of slag. Place lead button on pre-heated cupel at 950 C all lead is removed. Remove from furnace and cool. Digest dore bead by adding 1 ml of 1:1 HNO3 and place in a hot water bath for 15 minutes. Add 1 ml HCL and return to bath for 60 minutes. Bring to final volume of 10 mls with distilled water.

#### Instrumentation:

Samples are analyzed on an ICP-ES Instrument equipped with an auto sampler and automatic data capture.

### **Quality Control:**

A reference material is digested and analyzed with each batch of 28 samples or less to ensure batch accuracy. Duplicates are digested and analyzed every 12<sup>th</sup>. sample or less to ensure batch precision. A blank is also analyzed in every batch of 28 to monitor contamination.

### Reporting:

Results from the instruments are processed automatically, loaded into the LIMS where the QC parameters are checked before final reporting.

### **Elements and Reporting Limits**

### **Detection limits Upper Limits**

Au	1ppb	2,000 ppb
Standards	<b>Au</b> ppb	
TDB-1 Certified Valu	e 6.3 +/-1.0	ı
XRAL AVG.	6.2 +/-1.2	
WPR-1 Certified Valu	e 42 +/-3	
XRAL AVG.	42 +/-3	
WMG-1 Certified Value	e 110 +/-11	
XRAL AVG.	107 +/-6	

### ICP12B - Geochem Analysis by Aqua Regia Digestion / ICP-ES

### Purpose:

This procedure applies to all geological samples to be analyzed for multielement by ICP-ES. .

### Digestion:

Weight 0.25 gram sample, add 2 mls HNO3, mix and heat in water bath for ½ hour. Cool, and then add 1ml HCL. Heat in a water bath for 2 hours. Cool to room temperature and add 17 mls distilled water, mix.

#### Instrumentation:

ICP-ES – Samples are analyzed on ARL 3560 or Optima (3000 or 4300). The calibration stds. are made up of a blank, a 5ppm std., a 50 ppm std. An Fe at 1000 ppm and Ag at 1 ppm. Drift check solution is also used to monitor drift.

### **Quality Control:**

A reference material is digested and analyzed with each batch of 48 samples or less to ensure batch accuracy. Duplicates are digested and analyzed every 20 samples or less to ensure batch precision.

### Reporting:

Results from the instruments are processed automatically, loaded into the LIMS where the QC parameters are checked before final reporting.

#### **ELEMENTS AND LIMITS**

	<b>Detection Limits</b>	Upper Limit
Al	*0.01%	15%
Sb	*5 ppm	1%
As	3 ppm	1%
Ba	*1 ppm	1%
Be	0.5 ppm	2500 ppm
Bi	5 ppm	1%
Cd	1 ppm	1%
Ca	*0.01%	15%
Cr	*1 ppm	1%
Co	1 ppm	1%
Cu	0.5 ppm	1%
Fe	*0.01%	15%
La	*0.5 ppm	1%
Pb	2 ppm	1%
Li	*1 ppm	1%
Mg	*0.01%	15%
Mn	2 ppm	1%
Mo	1 ppm	1%
Ni	1 ppm	1%
P	*50 ppm	1%
K	*0.01%	15%
Sc	*0.5 ppm	1%
Ag	.2 ppm	10 ppm
Na	*0.01%	15%
Sr	*0.5 ppm	5000 ppm
Sn	10 ppm	1%
Ti	*0.01%	15%
W	*10ppm	1%
V	*2 ppm	1%
Y	*0.5 ppm	1%
Zn	*0.5 ppm	1%
Zr	*0.5 ppm	1%

<sup>\*</sup> Leach is partial for these elements. Other elements may be partial depending on their mineralogy

***	Haturol	Nesources
	Natural	Nesources

MAP REFS.	// E // B	

# STATEMENT OF ASSESSMENT WORK EXPENDITURES (N.B. Complete as necessary to substantiate the total claimed)

RE: EXPLORATION LICENCE NO. 04902 TYPE OF WORK L. Prospection	• **	AMOUNT SPENT
I. Prospecting	days	3320,00
3. Trenching/Strington/Dague.	· · days	- 220,00
4 Accusion Contact	· · _ m²	
5. Other laboratory 6. Grid: a) Linecutting b) Picket setting c) Flagging	·· — // #	165,00
6. Gild: a) Linecutting	#	2,00
b) Picket settion	· ·kın	
c) Flagging	· ·km	
Airborne: a) EM		
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c) Radiometric d) Combination	· — km	
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c) Magnetic/tellurie	·kın	-07
d) IP/Resistivity c) Gravity	·kın	
f) Other	·kın	
9. Geochemical Surveys:	/ km	
a) Lake stream coston		-
(seds/water) TULLIC	ر ا مسریک	
(seds/water) TUNS b) Rock/core/chips S65. c) Soil/Overburden	-21413 64 samples	_ 800.00
c) Soll/Overburden	samples	65.00
d) Gas Method	samples	
e) Biogeochemistry  f) Sample Collection	samples	-
Sample Collection     Sample Collection     Sample Collection	- Samples	
g) Other	- Gu) S	
		······································
a) Diamond (#holes/m)b) Percussion (#holes/m)	/	_
b) Percussion (#hole/m) c) Rotary (#hole/m)		
c) Rotary (#hole/in)		
d) Auger (#holes/m) e) Reverse circulation	m	
(#holes/m)	m	
cic.		
etc. g) Scaling (# holes) Other: tdescribe)	days	
Other: (describe) FIELA SUPERVISION		
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