

**A NATIONAL INSTRUMENT 43-101 REPORT ON  
THE 2010-2013 EXPLORATION PROGRAMS  
on the  
ARANKA NORTH GOLD PROJECT  
BARIMA-WAINI ADMINISTRATIVE REGION NUMBER 1,  
REPUBLIC OF GUYANA  
7.05° to 7.40° North Latitude  
59.50° to 59.15° West Longitude**

**September 30, 2014**

**Written For:**

**Canamex Resources Corp.  
Suite 818, 475 Howe Street,  
Vancouver, BC  
Canada V6C 2B3**

**and**

**Canamex Resources Corp.  
Suite 818, 475 Howe Street,  
Vancouver, BC  
Canada V6C 2B3**

**Prepared By:**

**Dr. Duncan Bain, P. Geo.  
Duncan Bain Consulting Ltd.  
49 Midale Crescent  
London, Ontario  
Canada N5X 3C2**

**Dr. Jim Renaud, P. Geo.  
Renaud Geological Consulting Ltd.  
21272 Denfield Road  
London, Ontario  
Canada N6H 5L2**

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## **1.0 SUMMARY**

On August 20, 2010 GMV Minerals Inc. acquired a one hundred percent (100%) interest in the mineral rights inherent under 454 medium scale and two large scale permits, referred to as the "Alphonso Property". Within the Alphonso Property the Aranka North Property is part of the Alphonso Property and consists of a total of 97 medium permits totalling 98,056 acres or 39,681 hectares in discrete and aggregate blocks. The Aranka North property is located in the Barima-Waini (No. 1) Administrative Region, 175 kilometers northwest of the capital city of Georgetown, Republic of Guyana. All permits fall within an area defined by 59.50° to 59.15° West Longitude and 7.05° to 7.40° North Latitude. On July 6, 2011, Canamex Resources Corp., through its wholly-owned subsidiary Canamex Guyana Inc., was granted an option to acquire up to a 100% interest in the Aranka North project by making cash payments to GMV, expending US\$1,000,000 in exploration work on the property before December 31, 2013, and issuing a total of 3,750,000 shares to GMV. As of the news release dated July 30, 2014, Canamex has fulfilled these terms and now owns 100% interest in the property.

The property is accessible from Georgetown via the Barima Forest Road. Local secondary and forest roads provide access to more remote permits. Primary and secondary roads degrade during periods of prolonged rainfall making access more problematic. Dr. Bain and Dr. Renaud accessed the property by a combination of fixed wing aircraft, 4WD 5 person truck and by boat to the Canamex base camp at Maka Falls. The Camp Anomaly grid lies directly southeast of the Base Camp while the trail from Base Camp to Ridge Camp, where Bain and Renaud examined parts of the Ridge Anomaly, took an hour to travel. Guyana has a tropical climate with almost uniformly high temperatures and humidity, and much rainfall. Although rain falls throughout the year, about 50 percent of the annual total arrives in the summer rainy season that extends from May to the end of July along the coast and from April through September farther inland. Topography ranges from low, relatively flat areas along drainages with elevations of less than 50 m to relatively steep hills which reach elevations in excess of 300 m. The permits are covered by dense rain forest vegetation. Small communities of contract alluvial gold miners are active on several of the permits. Port Kaituma and Matthew's Ridge, with respectively, populations of less than 1,000, and 170 persons, are the largest commercial centers accessible to the Aranka North permits. Matthew's Ridge and Port Kaituma are served by scheduled flights or charter aircraft. Heavy sea-going barges operate bi-monthly between Georgetown and Port Kaituma. All permits are located in remote, isolated parts of Guyana and no established power or water sources are available. Adequate local water sources and timber are available on the Property to sustain exploration and development.

Gold production in Guyana has been almost exclusively small-scale and carried out by artisanal miners utilizing suction dredges, sluicing, hand-crushing and panning and amalgamation to recover gold. Beginning in 1999 the Geological Services Division of the Guyana Geology and Mines Commission (GGMC) investigated the geology, and mineral resources of various project



areas and compile relevant geological reports. Work completed as part of these surveys included regional geochemical sampling. In August 2010 GMV Minerals acquired an option on the "Alphonso Property" and a review of the regional 1:250,000 scale aeromagnetic map was carried out. On July 6, 2011 Canamex was granted an option to acquire up to a 100% interest in the Aranka North project from GMV. In December 2011 Canamex carried out a preliminary interpretation of airborne magnetic and radiometric geophysical data from the Aranka North Project. A total of sixteen (16) targets are identified based on the interpretation of faults, shears, and lithological contacts from the magnetic data and correlation with radiometric anomalies. Priority 1 targets were selected for follow-up ground geochemical sampling. Canamex carried out stream sediment sampling over the entire Aranka North property. Four discrete anomalous areas were identified. All are coincident with one or more of the airborne geophysical anomalies. Values ranged up to 647 ppb (0.647 gpt) Au in the pan concentrates and the samplers reported visible gold. In early 2012 follow-up stream sediment sampling of the Priority #1 target outlined an area of anomalous gold values that is approximately two kilometers wide by eight kilometers long. This area was subdivided into the Ridge Anomaly and Camp Anomaly. Soil sampling grids via hand auger holes one meter deep were established over both anomalies. Results showed that the Ridge Anomaly contained the highest and most extensive gold values and identified two prominent gold-in-soil anomalies: Ridge North Anomaly and Ridge South Anomaly. The Ridge South Anomaly has overall dimensions of 1 kilometer wide by 1.8 kilometers long, and trends in a NNW direction towards the Ridge North Anomaly, which is 0.8 kilometers wide by 1.2 kilometers long. Deeper power auger drilling completed in March 2013 attempted to get below leached and transported saprolite soils and define the location of the bedrock source for gold outlined by the anomalies. Results show 3 main anomalies, including the Ridge North and Ridge South areas. Maximum value was 129.5 ppb Au, in the Ridge North anomaly, but with 120.6 in the Ridge South Anomaly. No geochemical survey work has been carried out over the other targets suggested by the airborne geophysical survey. Geological mapping made use of the sparse bedrock and rock fragments from auger holes. It identified major rock units on the property. Petrographic work including microscope and electron microprobe analysis was carried out by Renaud Geological Consulting on 8 rock samples. That work identified rock types, compositions, textures and degree of metamorphism.

In northern Guyana the Lower Proterozoic Barama-Mazaruni Supergroup of the Guiana Shield is recognized to be the rifted extension of the Paleoproterozoic Birimian Supergroup granite-greenstone terrane of the West African Craton; known to contain African numerous gold deposits. The greenstone rocks of the Barama-Mazaruni Supergroup are intercalated with Archaean-Proterozoic gneiss and intruded by Trans-Amazonian granite, mafic and ultramafic rocks. Younger continental clastic rocks, volcanic flows, and volcanic sedimentary units were subsequently indurated by folding and compression and were in turn intruded by two or more stages of granitoid bodies. In Guyana, the Barama-Mazaruni Supergroup occurs in three sub-parallel groups with broadly similar lithostratigraphy. The northern belt dated at  $2,250 \pm 106$  Ma where the Aranka North Property trends generally east to northeast. Syn- to late tectonic



calc-alkaline intrusive rocks ranging in composition from granite, to granodiorite, diorite, tonalite, and adamellite have been dated at 2,250 to 1,960 Ma. The tectono-thermal Trans-Amazonian Orogenic Cycle (2,000 Ma) resulted in block faulting, crustal shortening, folding, metamorphism, and anatexis.

Although there is very little bedrock exposure at Aranka North, mineralization being investigated at surrounding projects provides some indications of styles and characteristics of what might be expected. Chlorite and carbonate alteration and pyrite-pyrrhotite are reported to occur with gold mineralization at the Monosse project. At Tassawini gold mineralization occurs in association with silica, pyrite and arsenopyrite in zones of silicification, carbonatization, and especially in deformed micro-quartz and quartz-carbonate veining related to high strain zones, fold hinges and intrusive contacts. Indications of gold mineralization on the Aranka North project are based on geochemical sampling, in addition to historical and ongoing artisanal alluvial gold mining. Regional magnetic and mineral occurrence data also suggest that the permits are located along prospective structures.

In May 2013 Renaud and Bain carried out a site visit and stream, hand auger and power auger sampling of the most promising areas of the Ridge Anomaly. The Bain/Renaud sampling showed that assays on individual sites are erratic but in general produce similar results as those samples collected by Canamex. The Company work included duplicates of samples with anomalous gold values. In some cases results of duplicate samples show a wide variation in gold assay values which may be an indication of "nugget effect" in gold assays. This effect suggests proximity to the bedrock source for gold. The similarity of assay results between Bain and Renaud to those taken by Canamex shows that anomalous gold values do exist on the Ridge Anomaly, independent of Canamex work. Based on the presence of low but anomalous gold values covering a linear ridge resistant to weathering, the presence of quartz vein material, active alluvial gold mining in the area, and a lack of bedrock at or near surface, it is recommended that an initial diamond drilling program of 1500 m, consisting of 12-15 holes each approximately 100 meters in depth, be initiated to test the Ridge Anomaly along roughly 1 kilometer of strike length. The program is estimated to cost \$429,900 (US dollars).



## 2.0 INTRODUCTION

This report is specific to the standards dictated by National Instrument 43-101, companion policy NI43-101CP and Form 43-101F (Standards of Disclosure for Mineral Projects) in respect to the Aranka North Property. It is intended to document the economic potential for gold and other economic mineralization on the property.

It has been prepared at the request of Canamex Resources Corp. ("Canamex" or "the Company") and Canamex Guyana Inc., and documents the results of the exploration carried out by Canamex from May 2010 to the present on the project, with recommendations and appropriate budget for additional exploration.

In May 2013, Dr. Bain and Dr. Renaud were asked to visit the property to evaluate the results of the work completed to the present in order to carry out the preparation of an NI 43-101 report. Detailed information is available in individual technical reports listed in the References section of this report. Canamex Resources Corp. ("Canamex") is currently a public Vancouver based exploration and development company that has acquired the rights to explore the Aranka North concessions from private Guyanese individuals. Canamex Guyana Inc. is the Company's Guyanan subsidiary.

For the purpose of this Technical Report the authors, Dr. Duncan J. Bain, P.Geo. and Dr. Jim Renaud, P.Geo., are both independent Qualified Persons in accordance with National Instrument 43-101 and as defined in the CIM Standards on Mineral Resources and Reserves.

Historical grades and tonnages are reported in a variety of forms, the most common of which is grams per tonne or percent (%). Distance measurements are most commonly reported in metres or kilometres. When necessary, numbers in other units have been converted to their metric equivalents, with the original values inserted to show the conversion.

This report is to be submitted to regulatory bodies including the various securities commissions and the TSX Venture Exchange ("TSXV") and is to be used by Canamex to raise funds for further exploration of the project.

Dr. Renaud has visited Guyana previously and is therefore familiar with the climate, topography and infrastructure. Dr. Bain has not visited Guyana previous to the visit in May 2013, but has worked in other countries with similar tropical climates, topography and infrastructure. The initial visit to the Aranka North project familiarized Dr. Renaud and Dr. Bain with topography, climate, infrastructure, historical mining activities and available work force of the project. It also provided the opportunity to review the procedures and standards used during the surface work done, including grid cutting, stream sediment, soil and power auger sampling.

Both public domain and confidential information have been used in the compilation of this report. Public domain sources of information include regional geological maps and topographic



maps prepared by the Guyana Geology and Mines Commission (GGMC), news releases and internal company reports by Canamex Resources Corp. and GMV Minerals Inc., and publications from scientific journals. All are reported in relevant sections of this report and compiled in the references section. These reports documented work done on and around the Aranka North property prior to the visit by Dr. Renaud and Dr. Bain in May 2013. Those written prior the implementation of the Standards of National Instrument 43-101 in 2005, revised and updated in 2011 describing alluvial mining and preliminary geology of the region. These reports were written by engineers and geologists and are considered, in Dr. Renaud's and Dr. Bain's opinion, to be accurate for their time of writing. Reports written for GMV Minerals Resources after 2005 were written by Robert A. Lunceford, Certified Professional Geologist, Certified Professional Geologist #6456 with the American Institute of Professional Geologists and a Qualified Person (QP), who by reason of his education, affiliation with a professional association and past relevant work experience fulfills the requirements to be a "qualified person" as defined by NI 43-101. Work carried out for Canamex between January 2011 and the present has been directly supervising by Greg Hahn, who is a Certified Professional Geologist (CPG) in the United States and is the President & Interim CEO of Canamex, and therefore not an independent Qualified Person.

Bain and Renaud's investigations in May 2013 and August/September 2014 allowed confirmation of ownership, area of concessions, exploration activity, availability of exploration and mining equipment and the presence of an ISO certified assay laboratory in the region. The two tables below provide explanations for various mining industry terms and conversions.

**Table 1: CONVERSIONS**

The following table sets forth certain standard conversions from the Standard Imperial units to the International System of Units (or metric units).

<u>To Convert From</u>	<u>To</u>	<u>Multiply By</u>
Feet	Meters	0.3048
Meters	Feet	3.281
Miles	Kilometers	1.609
Kilometers	Miles	0.621
Acres	Hectares	0.405
Hectares	Acres	2.471
Grams	Ounces (troy)	0.032
Ounce (troy)	Grams	31.103
Tonnes	Short tons	1.102
Short tons	Tonnes	0.907
Grams per ton	Ounces (troy) per ton	0.029
Ounces (troy) per ton	Grams per tonne	34.438

**Table 2: SELECTED GLOSSARY OF TERMS, MINING AND MINERAL PROPERTIES**

“BLEG” Bulk Leach Extractable Gold, is a geochemical sampling/analysis tool used during exploration for gold. It was developed in the early 1980s to address concerns relating to accurately measuring fine grained gold, and dealing with problems associated with sample heterogeneity.

“DDH” means a diamond drill hole

“diamond drill” means a machine designed to rotate under pressure, using an annular diamond studded cutting tool to produce a more or less continuous sample of the material that is drilled.

“g/t” grams per (metric) tonne

“ICP” Inductively Coupled Plasma – a type of plasma source in which the energy is supplied by electrical currents which are produced by electromagnetic induction – used for analysis of multi-elements

“km” means kilometer

“m” means meter

“Ma” means million years ago

“magnetic” means a total field magnetic geophysical survey

“mineralization” means a natural aggregate of one or more minerals, which has not been delineated to the extent that sufficient average grade or dimensions can be reasonably estimated or called a “deposit” or “ore”. Further exploration or development expenditures may or may not be warranted by such an occurrence depending on the circumstances.

“ounce” troy ounces precious metal

“ppb” concentration of an element measured in parts per billion

“ppm” concentration of an element in parts per million

“grams per tonne” concentration of an element equivalent to parts per million.

“strike length” means the longest horizontal dimension of a body or zone of mineralization.

“GGMC” Guyana Geology and Mines Commission



### **3.0 RELIANCE ON OTHER EXPERTS**

The authors have not relied, without verification by the authors, on a report or a statement of an expert who is not a Qualified Person as laid out in accordance with National Instrument 43-101.

Bain and Renaud have reviewed the ownership agreement between the original owner and GMV Minerals. They have also reviewed the option agreements between GMV and Canamex, signed in early 2011 and which relates to the concessions that make up the Aranka North project.

However, the reader is reminded that neither Bain nor Renaud is trained in the legal profession and cannot provide a legal opinion of the documents.

All projections and opinions in this report have been prepared on the basis of information made available to the authors, and are subject to uncertainties and contingencies, which are difficult to accurately predict. Notwithstanding, the authors consider this report to be a true and accurate representation of the assessment of the work completed by GMV and Canamex and the mineral potential of the Aranka North project.

### **4.0 PROPERTY DESCRIPTION AND LOCATION**

The Aranka North project is located in the northern sector of the Republic of Guyana north of the capital city Georgetown (Figure 1, 2). All permits fall within an area defined by 59.50° to 59.15° West Longitude and 7.05° to 7.40° North Latitude, with its center approximately 175 kilometres northwest of the capital city of Georgetown.

The Property consists of a total of 97 medium permits totalling 98,056 ac. or 39,681 Ha in discrete and aggregate blocks in the Barima-Waini (No. 1) Administrative Region of Guyana. These are owned by Mr. Andron Alphonso, CEO of Afro Alphonso & Sons Mining.

Subject to the terms of an August 20, 2010 Option Agreement (the "Option Agreement") GMV has the exclusive right to acquire one hundred percent (100%) interest in the mineral rights inherent under 454 medium scale and two large scale permits (referred to as the "Alphonso Property"- see Lunceford, 2010). The 97 medium scale permits of the Aranka North Property are part of the Alphonso Property.

On July 6, 2011, Canamex, through its wholly-owned subsidiary Canamex Guyana, was granted an option to acquire up to a 100% interest in the Aranka North project by making cash payments to GMV totalling US\$520,627.62 over 36 months, expending US\$1,000,000 in exploration work on the property before December 31, 2013, and issuing a total of 3,750,000 shares to GMV in stages as follows: (a) 1,500,000 shares upon approval of the transaction by the TSX Venture Exchange (Approval Date), (b) 1,250,000 within 18 months of the Approval Date, and (c) 1,000,000 shares within 36 months of the Approval Date. In addition, upon exercise of the option, Canamex agreed to pay GMV US\$500,000 cash and issue 500,000 shares



in the capital stock of Canamex to GMV for every 500,000 ounces of gold contained in measured and indicated resources as referenced in a National Instrument 43-101 qualifying report, up to a maximum of US\$2,000,000 and 2,000,000 shares of Canamex.

As of February 1, 2013 a total of 1,250,000 common shares were issued to GMV Minerals Inc. These shares, representing the second of three staged issuances of shares that are required to be made pursuant to the Agreement, are subject to a hold period expiring on June 2, 2013.

As of the news release issued June 30, 2014, issued by Canamex, the Company has fulfilled all terms of the Option Agreement with GMV Minerals and now owns 100% interest in the property.

In 2011 Canamex expended \$447,609 on exploration and evaluation costs. In 2012 the Company expended \$871,581 on exploration and evaluation, and made property payments totalling \$177,848. In 2013 Exploration and expenditures totaled \$478,011. Property payments of \$188,456 were made and 1,250,000 common shares valued at \$125,000 were issued. In the 6 months ending June 30, 2014, \$106,639 was expended in exploration and evaluation, and 1,000,000 common shares valued at \$140,000 were issued. A total of \$1,903,840 was spent on exploration and evaluation. A total of \$366,304 was spent on property payments, and a total of 2,250,000 common shares were issued.

A brief description of the method of acquisition of mineral tenures in Guyana is reported below.

Further details of the Aranka North permits are found in Table 3.

#### **4.1 Mineral Tenure in Guyana**

##### **4.1.1 Application for Mineral Properties in Guyana**

The Mining Act, 1989 allows for four scales of operation:

1. A Small Scale Claim has dimensions of 1500 ft x 800 ft whilst a river claim consists of one mile of a navigable river.
2. Medium Scale Prospecting and Mining Permits. These cover between 150 and 1200 acres each.
3. Prospecting Licenses for areas between 500 and 12,800 acres.
4. Permission for Geological and Geophysical Surveys for reconnaissance surveys over large acreages with the objective of applying for Prospecting Licenses over favorable ground selected on the basis of results obtained from reconnaissance aerial and field surveys.
5. Small and medium scale property titles (items 1 and 2 above) are restricted to Guyanese citizens; however, foreigners have been entering into joint-venture arrangements whereby the two parties jointly



develop the property. This is strictly by private contract. In 2003 there were 2,513 Medium Scale Prospecting Permits and 18 Prospecting Licenses in existence.

Foreign companies may apply for Prospecting Licenses and Permission for reconnaissance surveys.

#### **4.1.2 Prospecting Licenses (Who can apply?)**

- An individual who is a citizen of Guyana and an adult
- A company within the meaning of the companies Act
- Any other corporate body incorporated in or outside Guyana, including a company established outside Guyana
- Any organization established by Government or underwritten by law in Guyana and authorized to carry on mining operations
- A co-operative society registered under the Co-operative Societies Act
- A public Corporation

#### **4.1.3 Application Procedure**

1. Complete prescribed 5D Form.
2. Payment of US\$100.00 application fee.
3. Work Program and Budget for first year activities.
4. Submission of a map on Terra Survey 1:50,000 sheet.
5. Cartographic description of area.
6. Proof of financial and technical capability.

After satisfactory submission of the required documents the application is processed and, if recommended will be sent to the official gazette for publication. If there are no objections to the grant then ministerial approval is sought. When this is obtained the license becomes available on payment of the first year's rental and submission of an acceptable Performance Bond. Rental rates are: US\$0.50 acre for the first year; US\$0.60 for the second year and US\$1.00 for the third year. All Aranka North permits were acquired in 2007. The Performance Bond is equivalent to 10% of the approved budget for the respective year. However, since 1998 there has been a 50% rebate on rental rates, which in effect have halved rentals.

The term of the Prospecting License is for three years, with two rights of renewal of one year each. The Mining Act 1989 stipulates that three months prior to each anniversary date of the license, a Work Program and Budget for the following year must be presented for approval for the work to be undertaken during the following year.

The obligations of the licensee include quarterly technical reports on its activities and an audited financial statement to be submitted by June 30 of the following year for the previous year's expenditure. Should the licensee relinquish part or all of the Prospecting License area then he is required to submit an evaluation report on the work undertaken therein. Prospecting



License properties are subject to ad hoc monitoring visits by technical staff of the GGMC. It is the applicant's onus to select the area of interest; this will be based, principally, on availability and good geological prospectivity.

At any time during the Prospecting License, and for any part or all of the Prospecting License area, the licensee may apply for a Mining License. This application will consist of a Positive Feasibility Study, Mine Plan, an Environmental Impact Statement and an Environmental Management Plan. Rental for a Mining License is currently fixed at US\$5.00 per acre per year and the license is usually granted for twenty years or the life of the deposit, whichever is shorter; renewals are possible (<http://www.ggmc.gov.gy/lm.html>, 2010).

**Table 3. Medium scale permits comprising the Aranka North Property**

File_No.	Applicant	Application_Date	Sheet_No	Acreage
A-412/003	Andron Alphonso	20070327	11 SW	437.634
A-412/015	Andron Alphonso	20070327	11 SW	1188.77
A-412/016	Andron Alphonso	20070327	11 SW	1201.1
A-412/028	Andron Alphonso	20070327	11 SW	382.396
A-424/000	Andron Alphonso	20070518	11 SE	1180.55
A-424/001	Andron Alphonso	20070518	11 SE	1199.39
A-424/002	Andron Alphonso	20070518	11 SE	1195.37
A-424/003	Andron Alphonso	20070518	11 SE	1182.54
A-424/004	Andron Alphonso	20070518	11 SE	1190.13
A-424/005	Andron Alphonso	20070518	11 SE	1178.1
A-424/006	Andron Alphonso	20070518	11 SE	1184.34
A-424/007	Andron Alphonso	20070518	11 SE	1189.81
A-424/008	Andron Alphonso	20070518	11 SE	1177.18
A-424/009	Andron Alphonso	20070518	11 SE	1188.63
A-424/010	Andron Alphonso	20070518	11 SE	1195.3
A-424/011	Andron Alphonso	20070518	11 SE	1199.09
A-424/012	Andron Alphonso	20070518	11 SE	1175.24
A-424/013	Andron Alphonso	20070518	11 SE	1171.18
A-424/014	Andron Alphonso	20070518	11 SE	995.675



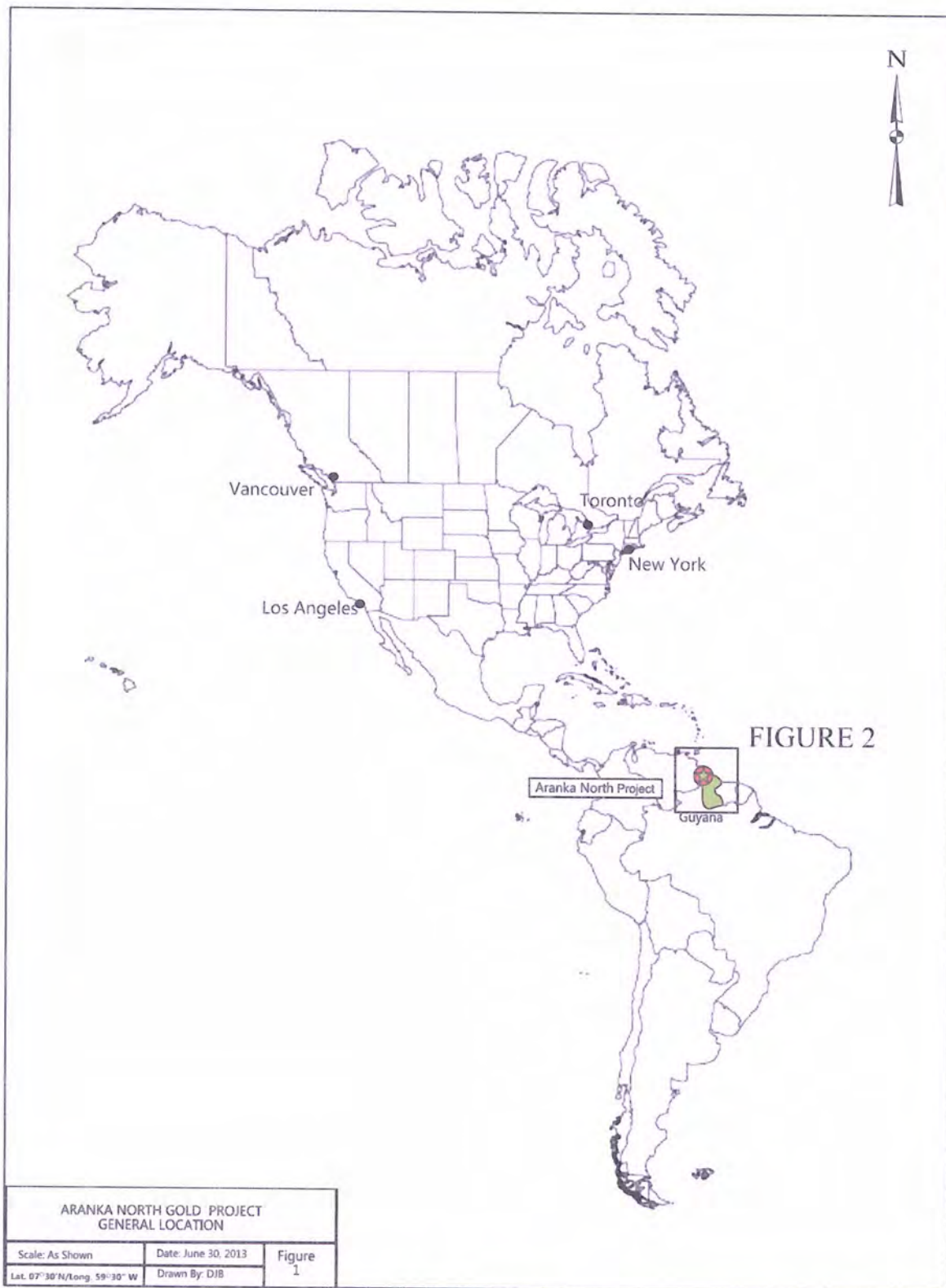
A-424/016	Andron Alphonso	20070518	11 SE	502.832
A-424/017	Andron Alphonso	20070518	11 SE	203.682
A-424/019	Andron Alphonso	20070518	11 SE	426.802
A-423/005	Andron Alphonso	20070518	11 NW	453.197
A-423/006	Andron Alphonso	20070518	11 NW	319.492
A-423/007	Andron Alphonso	20070518	11 NW	491.112
A-423/008	Andron Alphonso	20070518	11 NW	787.677
A-423/009	Andron Alphonso	20070518	11 NW	576.308
A-423/010	Andron Alphonso	20070518	11 NW	884.248
A-423/011	Andron Alphonso	20070518	11 NW	703.499
A-423/012	Andron Alphonso	20070518	11 NW	477.71
A-423/013	Andron Alphonso	20070518	11 NW	730.084
A-423/014	Andron Alphonso	20070518	11 NW	715.7
A-429/006	Sommonie Alphonso	20070611	11 NW	1198.16
A-429/007	Sommonie Alphonso	20070611	11 NW	1198.64
A-429/008	Sommonie Alphonso	20070611	11 NW	1193.49
A-429/009	Sommonie Alphonso	20070611	11 NW	1196.18
A-429/010	Sommonie Alphonso	20070611	11 NW	1197.74
A-429/011	Sommonie Alphonso	20070611	11 NW	1198.05
A-429/012	Sommonie Alphonso	20070611	11 NW	1195.94
A-429/013	Sommonie Alphonso	20070611	11 NW	1200.4
A-429/014	Sommonie Alphonso	20070611	11 NW	1185.27
A-429/015	Sommonie Alphonso	20070611	11 NW	1194.22
A-429/016	Sommonie Alphonso	20070611	11 NW	1196.27
A-429/017	Sommonie Alphonso	20070611	11 NW	1199
A-429/018	Sommonie Alphonso	20070611	11 NW	1195.26
A-429/019	Sommonie Alphonso	20070611	11 NW	1199.76
A-429/020	Sommonie Alphonso	20070611	11 NW	1196.52
A-429/021	Sommonie Alphonso	20070611	11 NW	1195.79
A-429/022	Sommonie Alphonso	20070611	11 NW	1196.49
A-429/023	Sommonie Alphonso	20070611	11 NW	1198.14
A-429/024	Sommonie Alphonso	20070611	11 NW	1193.97

A-429/025	Sommonie Alphonso	20070611	11 NW	1194.85
A-429/026	Sommonie Alphonso	20070611	11 NW	1199.59
A-429/027	Sommonie Alphonso	20070611	11 NW	1194.3
A-429/028	Sommonie Alphonso	20070611	11 NW	1193.15
A-429/029	Sommonie Alphonso	20070611	11 NW	1193.39
A-429/030	Sommonie Alphonso	20070611	11 NW	1196.41
A-429/031	Sommonie Alphonso	20070611	11 NW	1196.01
A-429/032	Sommonie Alphonso	20070611	11 NW	1199.31
A-429/033	Sommonie Alphonso	20070611	11 NW	1200.22
A-429/034	Sommonie Alphonso	20070611	11 NW	1199.33
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A-429/036	Sommonie Alphonso	20070611	11 NW	1197.06
A-429/037	Sommonie Alphonso	20070611	11 NW	1196.51
A-429/038	Sommonie Alphonso	20070611	11 NW	1197.57
A-429/039	Sommonie Alphonso	20070611	11 NW	1200.09
A-429/003	Sommonie Alphonso	20070611	11 NW	1199.86
A-429/002	Sommonie Alphonso	20070611	11 NW	1198.86
A-429/001	Sommonie Alphonso	20070611	11 NW	1102.07
A-429/000	Sommonie Alphonso	20070611	11 NW	1086.46
A-433/000	Sommonie Alphonso	20070626	11 NW	612.67
A-433/002	Sommonie Alphonso	20070626	11 NW	1199.06
A-433/003	Sommonie Alphonso	20070626	11 NW	1198.43
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A-433/009	Sommonie Alphonso	20070626	11 NW	869.037
A-433/010	Sommonie Alphonso	20070626	11 NW	1071.25
A-433/011	Sommonie Alphonso	20070626	11 NW	1066.78
A-433/012	Sommonie Alphonso	20070626	11 NW	1159.11
A-433/013	Sommonie Alphonso	20070626	11 NW	295.78
A-433/015	Sommonie Alphonso	20070626	11 NW	1198.05
A-433/016	Sommonie Alphonso	20070626	11 NW	1199.34
A-433/017	Sommonie Alphonso	20070626	11 NW	1198.77
A-433/018	Sommonie Alphonso	20070626	11 NW	1199.66



A-433/019	Sommonie Alphonso	20070626	11 NW	1195.5
A-433/020	Sommonie Alphonso	20070626	11 NW	1196.39
A-433/023	Sommonie Alphonso	20070626	11 NW	1196.35
A-433/024	Sommonie Alphonso	20070626	11 NW	694.634
A-433/025	Sommonie Alphonso	20070626	11 NW	587.635
A-433/026	Sommonie Alphonso	20070626	11 NW	599.199
A-433/027	Sommonie Alphonso	20070626	11 NW	719.32
A-433/028	Sommonie Alphonso	20070626	11 NW	699.419
A-432/007	Andron Alphonso	20070625	11 SW	817.581
A-432/000	Andron Alphonso	20070625	11 SW	1122.94
A-432/001	Andron Alphonso	20070625	11 SW	805.469
A-432/002	Andron Alphonso	20070625	11 SW	742.074
A-432/003	Andron Alphonso	20070625	11 SW	302.342
A-433/022	Sommonie Alphonso	20070626	11 NW	555.01
<b>97 PERMITS</b>		<b>TOTAL</b>		<b>98056.72</b>

To Dr. Bain's knowledge, there are no further obligations, liens or encumbrances on the property. He is also unaware of any environmental liabilities to which the property is subject. As the proposed work has not been initiated the author is unaware of whether all necessary permits have been obtained. Dr. Bain and Dr. Renaud propose a diamond drilling program and do not anticipate any issues with obtaining the required permits. To their knowledge there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the property.



**Figure 1. General Location**



## **5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

The Aranka North permits occur in aggregate blocks and as discrete permits in northern Guyana north of Georgetown (Figure 2). The permits are accessible from Georgetown, with the southern block accessible via the Barima Forest Road. Local secondary and forest roads provide access to more remote permits. Expected travel times vary widely and range from 1-2 days for more accessible permits to as much as 3 or more days to reach more remote permits. Primary and secondary roads degrade during periods of prolonged rainfall making access more problematic and increasing travel times. The extent of local roads and trails to reach individual permits is unknown at this time. Dr. Bain and Dr. Renaud accessed the property by a combination of a one hour flight by fixed wing small plane from Georgetown to Kamaka Landing, on the Maruca River, from there taking a 4WD 5 person truck for one and a half hours to the logging village of Kwebanna, and from there up the Waini River for 1.5 hours by boat to the Canamex base camp at Maka Falls. The Camp Anomaly grid lies directly southeast of the base camp. All-Terrain Vehicle (ATV) roads and trails lead off to various parts of the project. The trail from base camp to Ridge Camp, where Bain and Renaud examined parts of the Ridge Anomaly, took an hour to travel. At present, the most reliable and efficient access to all permits is via helicopter service which can be chartered from Georgetown. However, actual landing sites are limited to cleared areas. Helicopter time varies with most southern permits reachable within 1 to 1.5 hours while northern permits may require two or more hours travel time.

Guyana has a tropical climate with almost uniformly high temperatures and humidity, and abundant rainfall. Seasonal variations in temperature are minor, particularly along the coast. Locations in the interior, away from the moderating influence of the ocean, experience slightly wider variations in daily temperature, and nighttime readings as low as 12°C have been recorded. Humidity in the interior is also slightly lower, averaging around 60 percent. Rainfall is heaviest in the northwest and lightest in the southeast and interior. Annual averages on the coast near the Venezuelan border are near 250 centimeters, south of Georgetown at New Amsterdam 200 centimeters, and 150 centimeters in southern Guyana's Rupununi Savannah. Areas on the northeast sides of mountains that catch the trade winds average as much as 350 centimeters of precipitation annually. Although rain falls throughout the year, about 50 percent of the annual total arrives in the summer rainy season that extends from May to the end of July along the coast and from April through September farther inland. Coastal areas have a second rainy season from November through January. Rain generally falls in heavy afternoon showers or thunderstorms. Overcast days are rare; most days include four to eight hours of sunshine from morning through early afternoon (<http://countrystudies.us/guyana/21.htm>, 2009).

Topography ranges from low, relatively flat areas along drainages with elevations of less than 50 m to relatively steep hills which reach elevations in excess of 300 m. The permits are covered by dense rainforest vegetation although local travel and basic exploration can be achieved by machetes or saws when necessary.



Small communities of contract miners ranging from less than 50 to greater than 100 persons are believed to be active from time to time on several of the permits. The larger more established exploration camps of Tassawini, and Monosse employ a few tens to in excess of 100 persons depending on ongoing work activities. Port Kaituma and Matthew's Ridge, with populations of less than 1,000, and 170 persons respectively, are the largest commercial centers accessible to the Aranka North permits. Secondary roads serving Matthew's Ridge, and Port Kaituma located respectively 90 kms west-northwest and 70 kms northwest respectively, are a source of basic goods and services and non-technical labor. With a flying time of about two hours from Georgetown, Matthew's Ridge and Port Kaituma are served by scheduled flights or charter aircraft. Heavy sea-going barges operate bi-monthly between Georgetown and Port Kaituma.

All permits are located in remote, isolated parts of Guyana, where no established power or water sources are available. As warranted, construction of new and rehabilitation of existing roads and boat landing facilities will be an integral part of phased exploration programs. Adequate local water sources and timber are available on the Property to sustain expanded exploration and development.

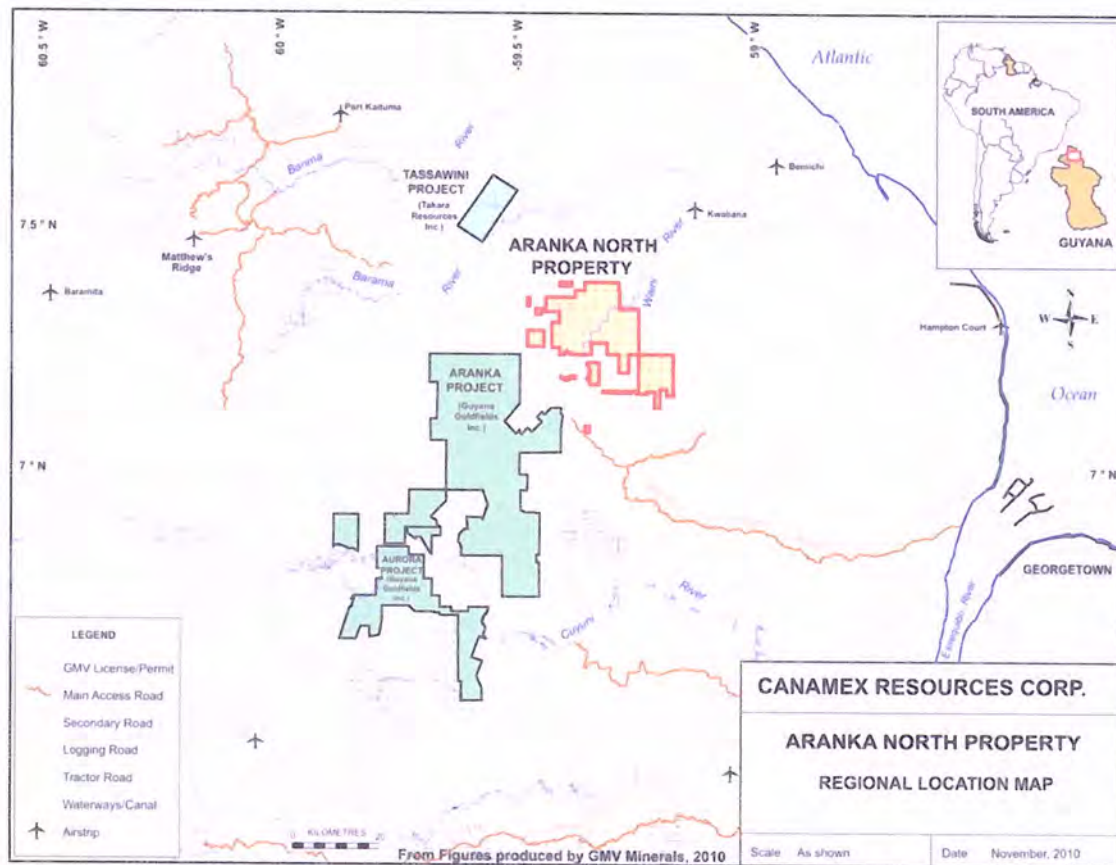




Figure 2. Regional Location Map

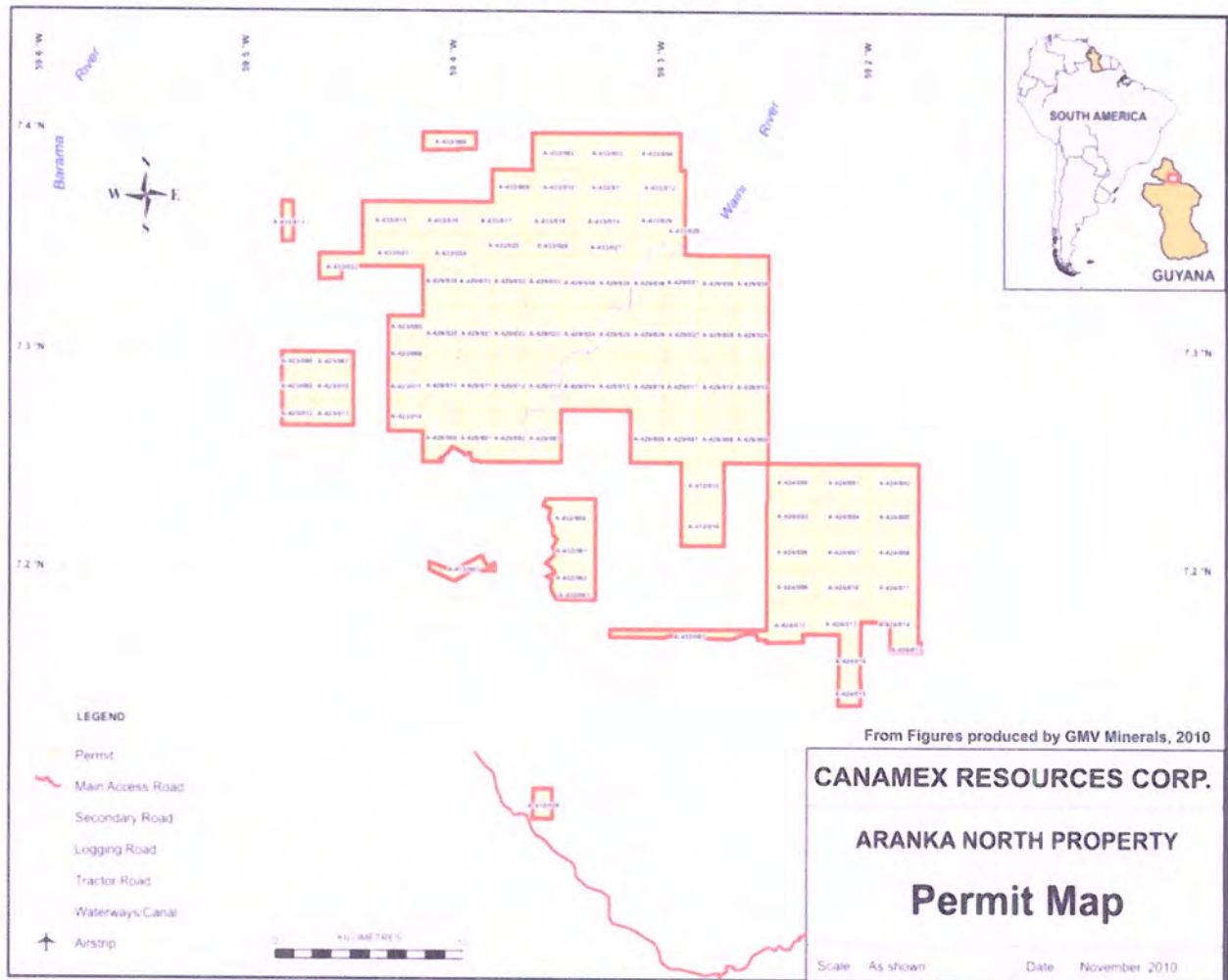


Figure 3. Permit Map



**Plate 1. Typical Topography of Aranka North Project, with ATV trail**

## **6.0 HISTORY**

### **6.1 Pre Canamex**

Gold mining and prospecting have been active in Guyana since the latter part of the 19th Century. These operations have been restricted almost exclusively to exploitation of alluvial and eluvial deposits by panning and sluicing. Operations have eventually expanded with the introduction of dredging and hydraulic methods. Gold production in Guyana has been almost exclusively small-scale and carried out by artisanal miners utilizing suction dredges, sluicing, hand-crushing and panning and amalgamation to recover gold.

Recorded gold production from 1884 through 1958 (Leroux and Zabev, 1997) is as follows:

1884 – 1906 1,936,495 ounces;  
1907 – 1920 670,329 ounces; and  
1920 - 1958 791,836 ounces.

In 1998, Veiga (1998) reported that 400 operating dredges and about ten thousand artisanal miners in Guyana produced 110,047 ounces gold. By 2008, the latest year government production statistics were available, 308,438 ounces gold were produced by artisanal miners (<http://www.ggmc.gov.gy/Documents/MinProduction1979-2010.pdf>).

Located 160 km south of Georgetown, the Omai mine was the largest lode gold mine in Guyana and one of the largest in South America. After production of 3.7 million ounces gold over 13



years the mine shut down in 2005 after exhausting reserves within the Fennel Pit (<http://www.iamgold.com/omai.php>, 2009). Remaining resources beneath the Fennel Pit are currently being evaluated for an underground operation.

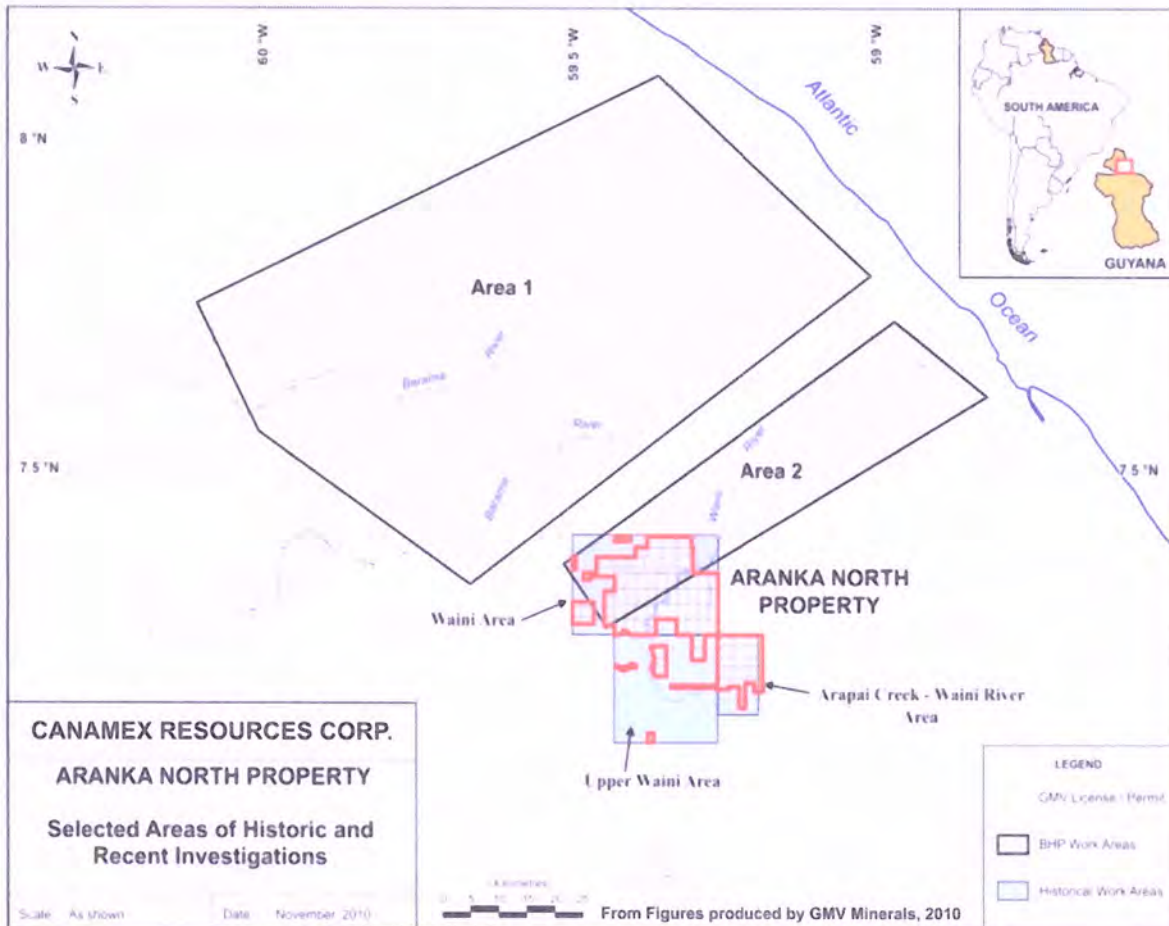
Mr. Andron Alphonso (2010, Personal Communication) provided a series of anonymous and undated [likely 1950's or 1960's] historic prospect reports pertaining to investigations conducted on or near the Aranka North group of permits. These historic references (Figure 3) are summarized below by topographic sheet and geographic (latitude-longitude) reference.

- *Arapai Creek – Aranka North, Sheet 11 SE - 7°08' and 7°15' North X 59°11' and 59°15' West.* Dolerite, amphibolites, gneiss, schist, and granite are reported. Gold is reported in gravels along Shararin Creek.
- *Upper Waini Area, Sheet 11 SW - 7°05' and 7°15' North X 59°15' and 59°25' West.* Underlying bedrock is described as from oldest to youngest; the Barama Group, the Cuyuni Formation, Younger Granite, basic Intrusives, and overlying white sand. Three main gold bearing areas were reported including Big Hope Creek (Imotai field- the area and tributaries of the Imotai River). Gold production of 13,466 ounces gold is reported from the Imotai field from 1906 to 1912. Imotai field production of less than 400 ounces gold per year is reported for 1936, 1937, and 1938.
- *Waini Area, Sheet 11 NW - 7°15' and 7°24' North X 59°15' and 59°29' West.* Meta-dolerite and “greenstone facies” rocks and granite are reported to underlie the area. Gold bearing gravel along the Imotai River is believed to be derived from local quartz veins as fracture fillings of the underlying bedrock.

During the period from 1996 to 1998, the BHP World Discovery Group surveyed a major portion of the North West District (Area 1, Area 2 - Figure 3) of Guyana using an integrated geophysical/geochemical approach. Area 2 on Figure 3 covers the northwest half of the Aranka North project area. Airborne geophysical data was integrated with Landsat TM (Thematic Mapper) data and was combined with regional BLEG/ICP (Bulk Leachable Extractible Gold/Inductively Coupled Plasma) stream sediment and soil geochemistry surveys. The objective of the project was to delineate potential shear-hosted gold deposits, Ernest Henry - style gold systems (Omai-type), Au-Cu deposits, iron ore and kimberlites. Surface geology was integrated with the airborne geophysical data and targets were compiled on 1:250,000 scale maps. A total of 10,000 square kilometers was flown in this survey by High Sense Geophysics Ltd. (of Toronto, Ontario). The entire survey area including the Monosse Project area was covered by this work since it was all located within BHP's PGGs (Permission for Geological and Geophysical Surveys) reconnaissance permit area known as “Area 1”. The specifications for the airborne survey included:

- Traverse Line 400 meters and Tie Line Spacing 4000 meters
- Traverse Line direction 0 - 180° and Tie line Direction 90 -270°
- Magnetic Data Sampling 10 Hz
- Radiometric Data Samples K, Th, U, Total Count

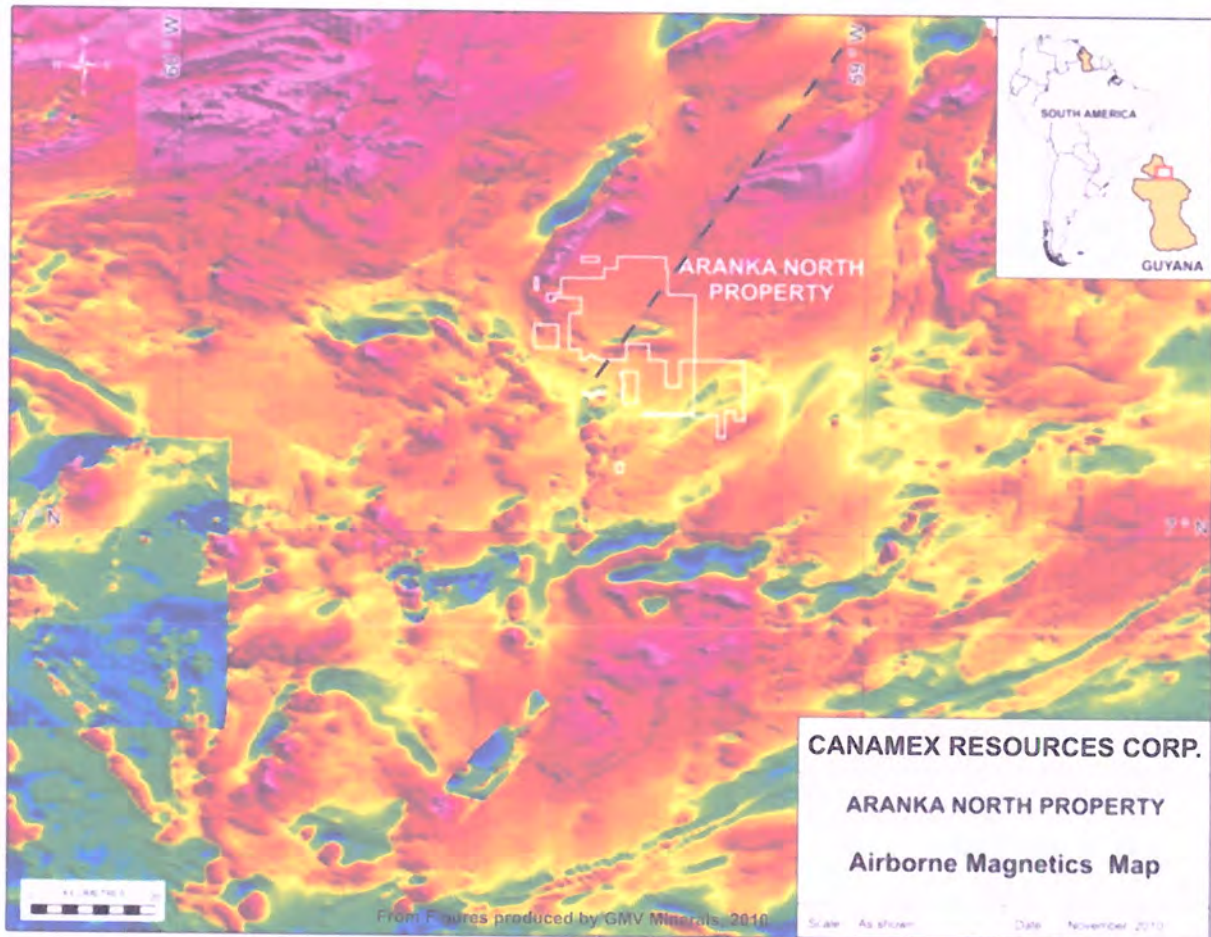
Beginning in 1999 the Geological Services Division of the GMMC, initiated field programs throughout Guyana to investigate the geology and mineral resources of various project areas and compile relevant geological reports. Work completed as part of these surveys included regional geochemical sampling (Heesterman, 2004a).



**Figure 4. Historic prospects, recent exploration areas.**



In August 2010 GMV Minerals Inc. acquired an option to earn a one hundred percent (100%) interest in the mineral rights inherent under 454 medium scale and two large scale permits (referred to as the "Alphonso Property"). A review of the regional 1:250,000 scale aeromagnetic map (Heesterman, 2004b) was carried out. The position of the Aranka North project on that map is shown in Figure 5. The Waini River defines a major regional NE-trending structure.



**Figure 5. Airborne magnetic map showing NE trending regional structure through Aranka North project (modified from Heesterman, 2004b)**

No other exploration was conducted by GMV on the Aranka North Property although a program of geochemical sampling, reconnaissance geologic mapping, trenching, and shallow auger drilling leading to diamond drilling was proposed. The objective of the program was to enhance understanding of geologic controls to mineralization, and develop specific targets for drill testing.



## **6.2 Canamex Exploration**

On July 6, 2011, Canamex, through its wholly-owned subsidiary Canamex Guyana, was granted an option to acquire up to a 100% interest in the Aranka North project by making cash payments over 36 months and issuing shares to GMV, and by expending US\$1,000,000 in exploration work on the property before December 31, 2013.

### **6.2.1 Phase 1 Program – Review of Regional Airborne Magnetic and Radiometric Maps**

In December 2011, at the request of Canamex Resources Corp., a report of a preliminary interpretation of airborne magnetic and radiometric geophysical data for the Aranka North Project was delivered to Canamex (Bell, 2011).

A fixed wing airborne magnetic and radiometric data set acquired in 2011 for the Aranka North Project was interpreted using qualitative methods to map subsurface geology and develop exploration targets with the potential for hosting lode gold deposits.

The airborne geophysical data were obtained from GMV Minerals Inc. of Vancouver, Canada. The data set consisted of 3760 line kilometers of fixed wing total magnetic intensity (TMI) and reduced to pole (RTP) TMI data along with a standard package of radioelement spectrometric data (i.e. K, U, Th, Total Count), GPS elevation, radar altimeter, and calculated topography. The majority of the data were acquired along parallel flight lines separated by 200 meters and oriented N0° E. Data were acquired along tie-lines oriented N 90° E spaced 2000 meters apart. The data were draped over the minimally varying topography at a flight height of 145 meters.

Seven (7) maps were developed from this interpretation. They all contain the target areas along with interpreted bedrock geologic structural, the rivers, and the location of the alluvial mining areas. These included:

- AN-1 Interpreted Geology
- AN-2 Interpreted Geology on Reduced to Pole Total Magnetic Intensity Data
- AN-3 Interpreted Geology on First Vertical Derivative of RTP TMI Data
- AN-4 Interpreted Geology on Second Vertical Derivative of RTP TMI Data
- AN-5 Interpreted Geology on Potassium (%)
- AN-6 Interpreted Geology on Tilt Derivative of RTP TMI Data
- AN-7 Interpreted Geology on Total Horizontal Derivative of Tilt Derivative of RTP

A total of sixteen (16) targets were identified based on the interpretation of faults, shears, and lithological contacts from the magnetic data and correlation with anomalous potassium. Lode gold deposits in similar geological environments (i.e. greenstone belts) are often found at the contacts between different rock units, within structural deformation zones, in association with



and/or at the intersection of fault and shear zones. Higher levels of potassium indicate hydrothermal alteration, which is genetically linked to the deposition of gold.

The target areas were prioritized for further investigation according to:

- (a) target (geophysical signature) type
- (b) proximity to alluvial gold mining operations
- (c) accessibility

The interpreted lithological units shown on Figure 6 were derived from the magnetic texture map image provided by the second vertical derivative of the RTP (Bell, 2011). This was supplemented with the regional geologic map published by the Geological Survey of Guyana and the *Geology Map of Upper Waini River Country North West District (1938)* by D.A. Bryn Davies published by the Geological Survey of British Guiana. The regional geological map is thought to have been derived from the regional magnetic data.

All of the exploration targets selected are associated with faults, shears, and/or contacts. With the exception of Target #9, all have an anomalously high potassium association. The radiometric dose rate is low in the area that covers Target #9. It is associated with an area of higher topography. Davies maps a lateritic unit at the surface that is directly associated with the topography high. Thus, the low dose rate may be due to a lateritic or other low potassium caprock masking a potassium anomaly. Figure 6 shows the location of the exploration targets with respect to the geologic structure (i.e. contacts, faults, and shear zones) interpreted from the magnetic data. The rating scheme of each target is as follows:

1 point is assigned for an association with a contact, fault, or shear zone

2 points are assigned to targets associated with the granite contact

1 point is assigned for proximity to a river

1 point is assigned for proximity to existing or former alluvial mine working

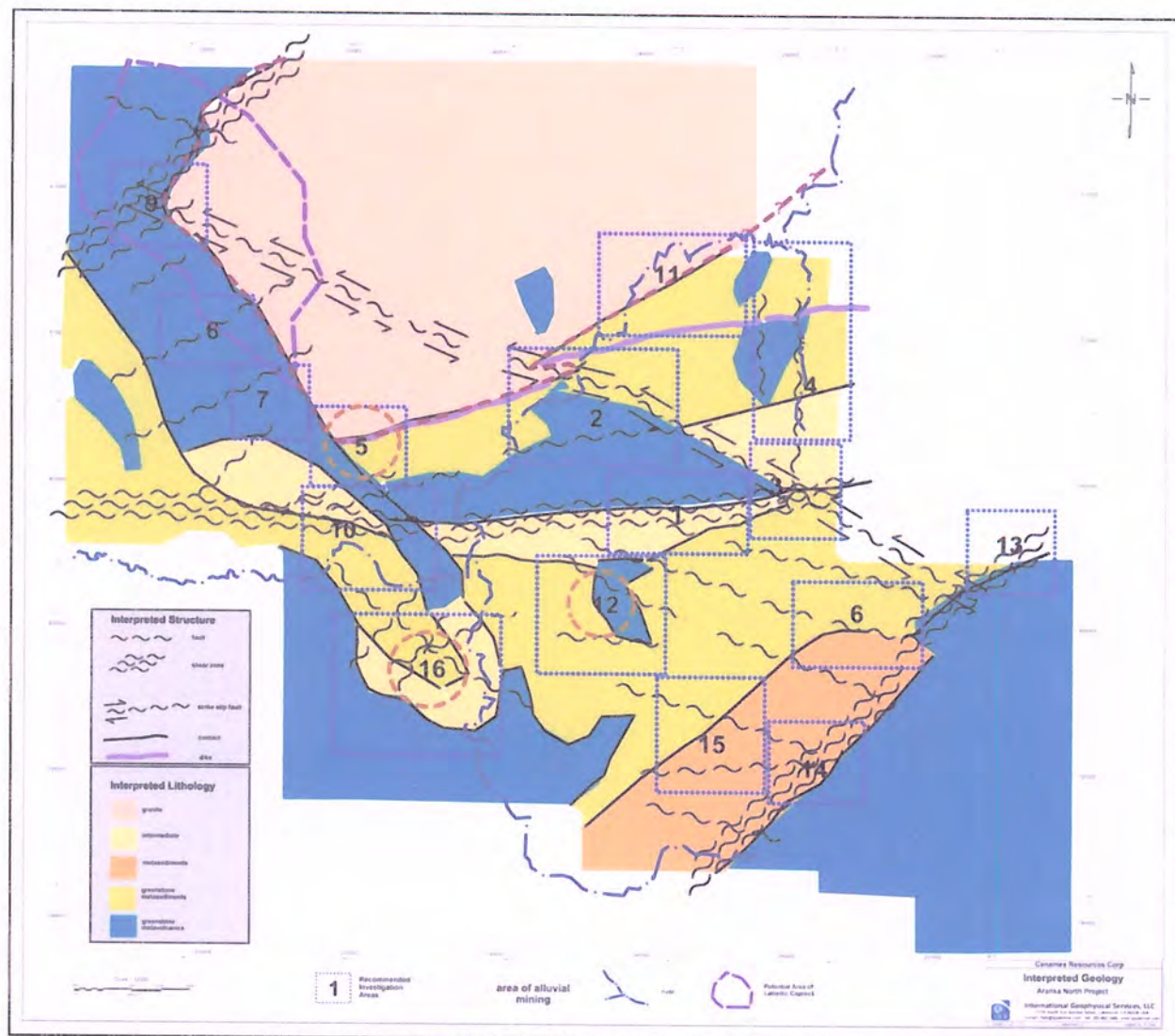
The points are summed to obtain a rating. A rating of 4 or more is given a priority of 1, those of 3 or less are given a priority of 2 for ground follow up. Table 4 below lists the targets.

Those highlighted in yellow are of the Priority 1 targets for follow up ground geochemical sampling.



Target	Easting (UTM)	Northing (UTM)	contact	fault	shear	granite	K	workings	river	rating	priority
1	803933	246185	1	0	1	0	1	0	0	3	2
2	807256	243404	0	1	1	2	1	0	1	6	1
3	804971	250041	1	0	1	0	1	0	0	3	2
4	808432	250803	0	1	0	0	1	0	1	3	2
5	806188	235342	1	0	0	2	1	1	1	6	1
6	800127	252267	1	1	0	0	1	0	0	3	2
7	807749	232381	0	1	0	0	1	0	0	2	2
8	810149	230121	0	1	0	0	1	0	0	2	2
9	814431	228340	1	0	1	2	0	0	0	4	1
10	803186	235522	1	1	0	0	1	0	0	3	2
11	812010	246245	1	1	0	0	1	1	1	5	1
12	800387	243524	1	0	1	0	1	0	0	3	2
13	802220	257517	1	0	1	0	1	0	0	3	2
14	795045	250886	1	1	1	0	1	0	0	4	1
15	796686	247405	1	1	0	0	1	0	0	3	2
16	798546	236943	1	1	0	0	1	1	1	5	1

**Table 4. List of Exploration Targets from Airborne Geophysics**



**Figure 6. Exploration Targets with Interpreted Geology**

### 6.2.2 Regional Stream Sediment sampling

In early November 2011, Canamex completed initial stream sediment sampling across the 44,545 hectare (98,000 acre) property (Canamex news release, Jan. 12, 2012). The Company collected two samples at each site: a -100 mesh silt sample and a pan concentrate sample. A total of 171 stream sediment and pan concentrate samples were collected from 85 sample sites (Figure 7). They were prepared and analyzed for gold and 35 other elements by Acme Labs in Georgetown, Guyana and Santiago, Chile respectively. The program was designed to evaluate the gold signature of the 15 airborne geophysical anomalies described in the previous section 6.2.1. Sample density was roughly one sample per 2.5 square kilometers. This work was carried



out under the supervision of Greg Hahn, Certified Professional Geologist (#7122), a Qualified Person under the terms of the CIM Definition Standards for Mineral Resources and Mineral Reserves, 2005, and President and Interim CEO of Canamex. Dr. Bain and Dr. Renaud have reviewed this work. Based on that review and their own site inspection, observation of the sampling methods and personnel used, the use of an internationally recognized assay lab, and comparison with their own independent sampling, Dr. Bain and Dr. Renaud consider Mr. Hahn's work to be both reliable and relevant to the project.

Gold stands out as the anomalous element, with values ranging up to 647 ppb (0.647 gpt) Au. None of the other 35 elements correlate with gold. Four distinct gold sample populations are evident in the geochemical database. Fifty-seven samples contained background values of below detection (0.5 ppb Au. In addition, 88 samples had results of between 0.5 and 2 ppb Au and are also considered part of the background population. Samples containing greater than 2 ppb Au (36 samples) are considered anomalous with six of these samples containing between 10 and 100 ppb Au and another eight samples containing 100-647 ppb Au. The higher value samples are interpreted to be closer to the bedrock source of the gold, or closer to the source area, versus the lower value samples, which lie either further downstream from the source area or are peripheral to the source area.

From the initial stream sediment sampling program results four (4) discrete anomalous areas were identified (Table 5). All are coincident with one or more (for a total of seven) of the airborne geophysical anomalies reported earlier. Values ranged upwards to 647 ppb (0.647 gpt) Au in the pan concentrates. The samplers reported visible gold in the pan concentrates from drainages off several of the airborne anomaly target areas. These targets were prioritized for follow-up sampling in January 2012. Airborne Anomaly 5 was of particular interest because the area showed evidence of recent gold dredging activity.

**Table 5. Phase 1 2011 Stream Sediment Sample Program Anomalies**

<b>Priority</b>	<b>Characteristics</b>
1	<ul style="list-style-type: none"> <li>- active alluvial mining of gold existed</li> <li>- gold identified from five separate drainages</li> <li>- quartz vein float, some with oxidized sulfides</li> <li>- coincident with three (3) priority airborne anomalies, including Anomaly #5</li> <li>- cover an E-W trending shear zone, contact between granite and metasediments</li> </ul>
2	- along same sheared granite/metasediment contact as Priority #1
3	- along same sheared granite/metasediment contact as Priority #1
4	- along prominent NE trending shear zone between metasediments and granitic rocks



Each of these four anomalous stream sediment areas, ranging from 10 to 25 square kilometers in size, required more detailed sampling along the anomalous drainages to delimit the bedrock source of the gold. This more detailed sampling consisted of an additional 90 sample sites draining a total of approximately 25 square kilometers. This more focused program gave a sample density of one sample per 0.3 square kilometers and defined the drainages containing the source gold. This work was completed in May 2011.

The field crew completed follow-up stream sediment sampling by the end of March 2012. It focused in the Priority #1 anomalous area (see Figure 5 above) where active alluvial mining of gold existed. It covers an area that is approximately two kilometers wide by eight kilometers long. Here gold was identified in stream sediments across an area of approximately 25 square kilometers from five separate drainages. Tourmaline-bearing quartz vein float, some with oxidized sulfides, was present in the rejects from alluvial mining in this area. It is coincident with three priority geophysical anomalies (#5, 2 and 11) and covers the east-west trending sheared contact between granite to the north and metasedimentary rocks to the south. From historical geological reports (Bryn Davies, 1938) quartz veins are present in both the sheared granite and in the sheared metasediments.

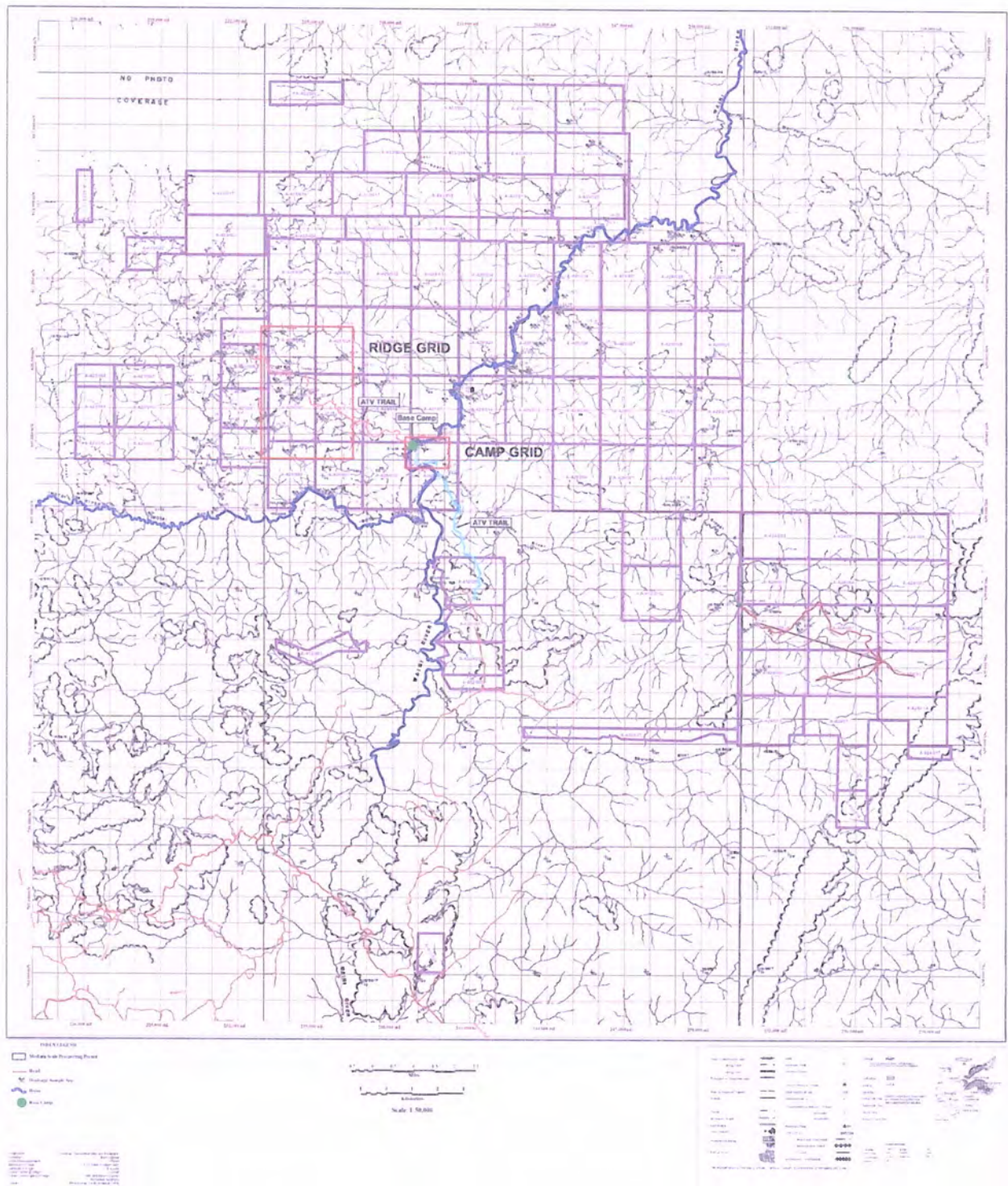
Two of the other three gold in stream sediment anomalies (Priority #2 and Priority #3) are east of and along the same sheared contact of the Priority #1 anomaly area. The fourth anomaly area is located to the southeast on a different prominent northeast trending shear zone that separates metasedimentary rocks from granitic rocks.

Gold in pan concentrates are associated with abundant quartz vein detritus, which comprises up to 80% of the rock material in the drainages. Quartz material consisted of several vein types: brecciated quartz, gray quartz with tourmaline, rusty quartz with weathered sulfide casts, and white quartz. In this area observations of topography, bedrock, saprolite and float indicated that the anomalous stream sediment samples are draining the sheared contact zone between granite and steeply dipping metasediments, with quartz vein material present in both host rock environments.

Several isolated and significantly smaller anomalies were also identified, but they appear to be smaller targets and therefore represent lower priority anomalies at this time.

The follow up stream sediment sampling program reported anomalous gold with values ranging up to 12,234 ppb (12.234 gpt) Au in the stream sediment samples pan concentrates. These results were used to design a gridded soil sampling program across the Priority #1 drainages (Figure 8) to define the bedrock source locations of the gold indicated by the stream sediment anomalies. This work outlined the Ridge Anomaly and the Camp Anomaly.





**Figure 7. Stream Sediment Sampling Map**



The most important part of the stream sediment Anomaly #1 is a large 2.5 kilometers wide by 5 kilometers long area called the Ridge Anomaly (Figure 8). It appears to be the source of historic and current alluvial gold operations. Eighteen streams drain the Ridge Anomaly, and all of them contain anomalous gold. Values range from 2.8 ppb to 12,224 ppb Au, and twelve of the streams contain over 100 ppb gold. Visible gold in stream sediment and pan concentrates from this area is fine-grained and needle shaped with very sharp edges, suggesting it has not been transported very far. Most of these sample locations are within 1 kilometer of the headwaters of the streams draining the Ridge Anomaly, suggesting very close proximity to the source of the gold. A map of the Ridge Anomaly area is shown below.

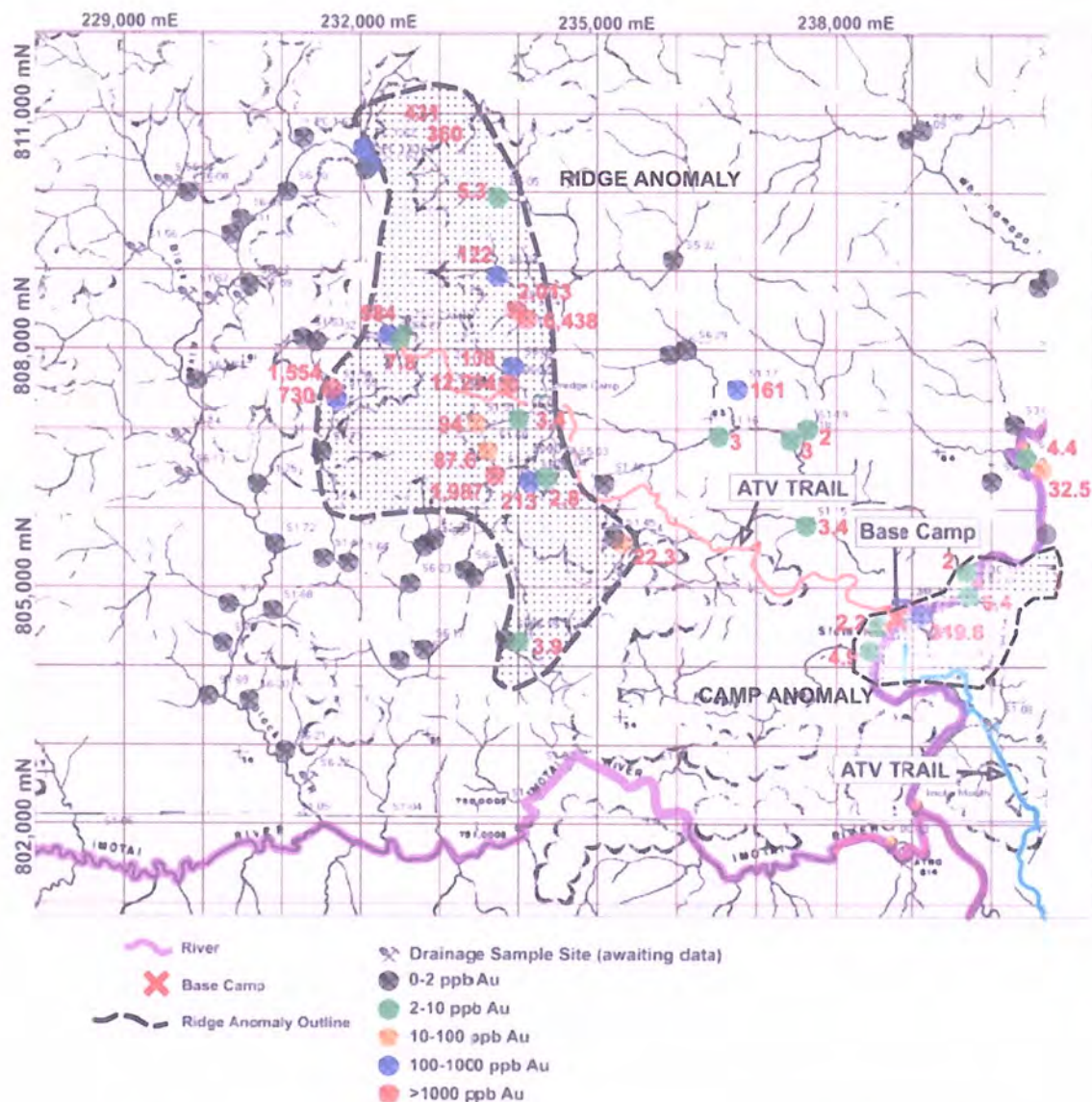


Figure 8. Stream Sediment Sample Map, Ridge and Camp Anomalies



### 6.2.3 Soil Sampling Program

The first soil sampling grid covered the Camp Anomaly (Canamex news release Feb. 28, 2012), which includes three anomalous drainages (with previously reported values of up to +300 ppb Au) draining the plateau to the SE of the Base Camp on the Waini River (Figure 8). The grid covers 1 X 1.75 kilometers and was sampled on 100 meter centers. It is defined by four gold in stream sediment anomalies and locally exposed quartz veins and veinlets in deeply weathered iron-rich sericite schist and metavolcanic sediments. A total of 181 soil samples were collected and a gold-in-soil anomaly approximately 1 kilometer long and 200 meters wide was identified. The anomaly is at the north end of the grid, trending off the grid to the northeast. This anomaly reflects gold-in-soil values that exceed the mean plus three standard deviations, and appears to coincide with the sheared contact between metavolcanic rocks and meta-sedimentary rocks. Results of the soil sampling gave a maximum value of 3.7 ppb Au.

On the Ridge Anomaly (Figure 8) shallow 1-2 meter hand auger drilling on a 100 meter x 100 meter grid across an area of 2 km x 4 km was completed in July 2012. A total of 137 soil samples were collected. Samples were not collected where white sand caps the saprolite soils. Samples from that drilling detected two gold-in-soil anomalies along the Ridge Anomaly grid. The Ridge South Anomaly has overall dimensions of 1 kilometer wide by 1.8 kilometers long, and trends in a NNW direction towards the Ridge North Anomaly, which is in turn 0.8 kilometers wide by 1.2 kilometers long. The southern anomaly was designated Priority #1 for follow-up deeper power auger drilling to attempt to get below leached and transported saprolite soils and define the location of the source for the broad and apparently dispersed shallow gold-in-soil anomaly. The work was completed in March 2013. It further defined the outline of the Ridge South Anomaly (Figure 9).

No geochemical survey work has been carried out over the other targets delineated by the airborne geophysical survey.

# Aranka North Soil Samples Au contours

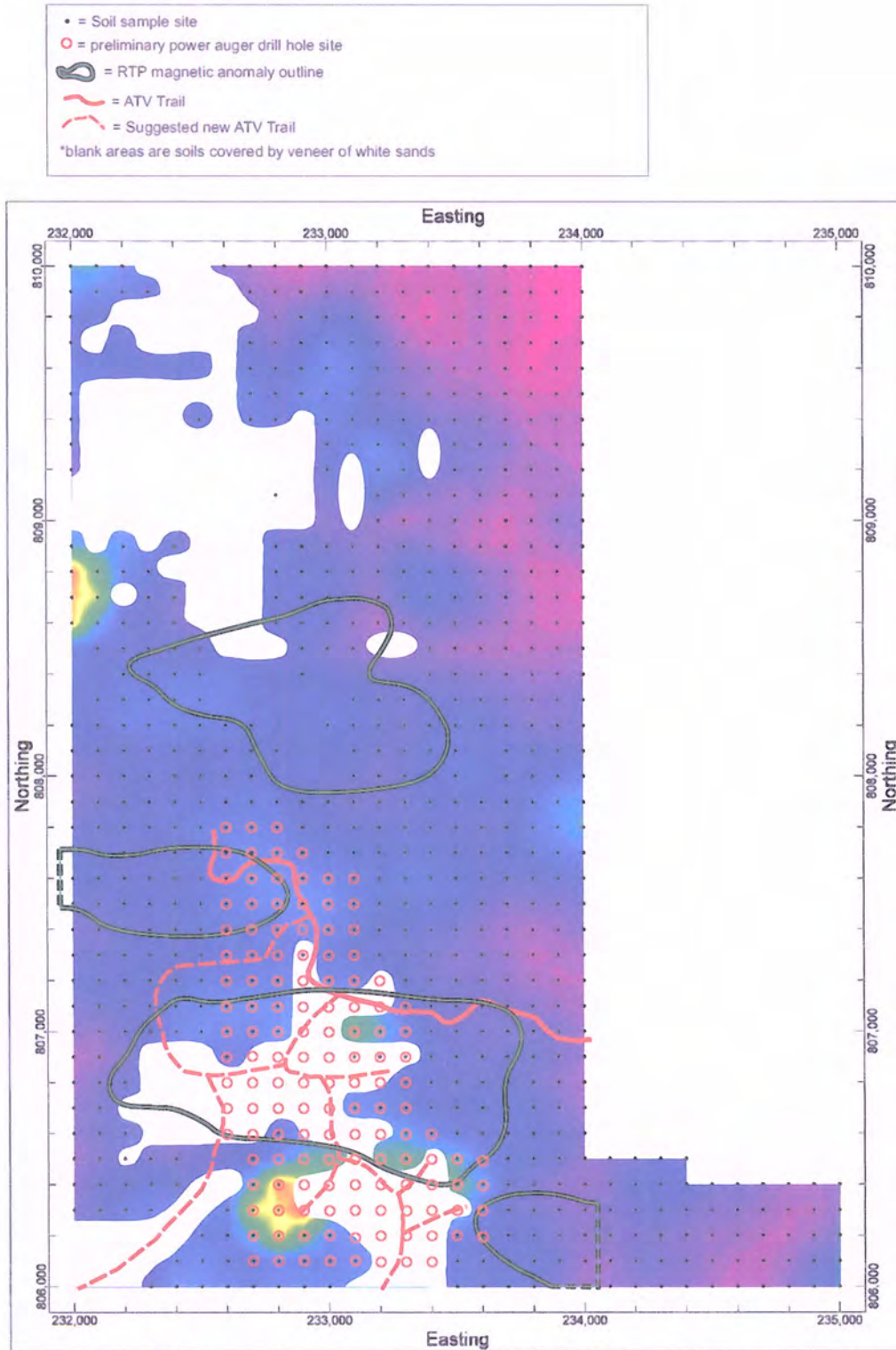


Figure 9. Ridge Anomaly Soil Sampling, Au contours



#### **6.2.4 Power Auger Drilling**

The focus for the Power Auger drilling was the Ridge Anomaly. At the top of the ridge which contains the Ridge Anomaly the area is covered in places by a thin (1 to +3 meter) veneer of unconsolidated white sand. This white sand masks the bedrock geology beneath it. The Company acquired two power auger drills and attempted to drill through the white sand that caps a large portion of the Ridge Anomaly and that appears to cover some of the more obvious gold in soil anomalous areas.

Drilling commenced in September 2012. Challenges with drilling through white sand, hardpan, and gravelly layers were encountered immediately with the cutting bits that were locally available. However, implementation of a final bit design consisting of welding carbide faces onto the steel bits and bending every other "tooth" inward significantly improved penetration in difficult material, overall drilling rate, sample recovery from depth, and bit wear.

Since November 2012 a total of 144 power auger holes have been drilled, some to depths of 12-14 meters. Each was sampled every meter down the hole. Many of these holes were still unable to penetrate the unconsolidated white sand layer.

Bedrock was rarely encountered in the auger drill holes, suggesting saprolite soils on the ridge are thicker than previously anticipated. Many power auger holes could not be completed through the white sand which caps the ridge, and these holes were not sampled.

Results (Figure 10) show 3 main anomalies, which include the Ridge North and Ridge South areas. Maximum value was 129.5 ppb Au, in the Ridge North anomaly, but with 120.6 in the Ridge South Anomaly. The third anomaly, in the southwest part of the grid, is a single point anomaly of 41.3 ppb Au. It has not been designated for follow up.

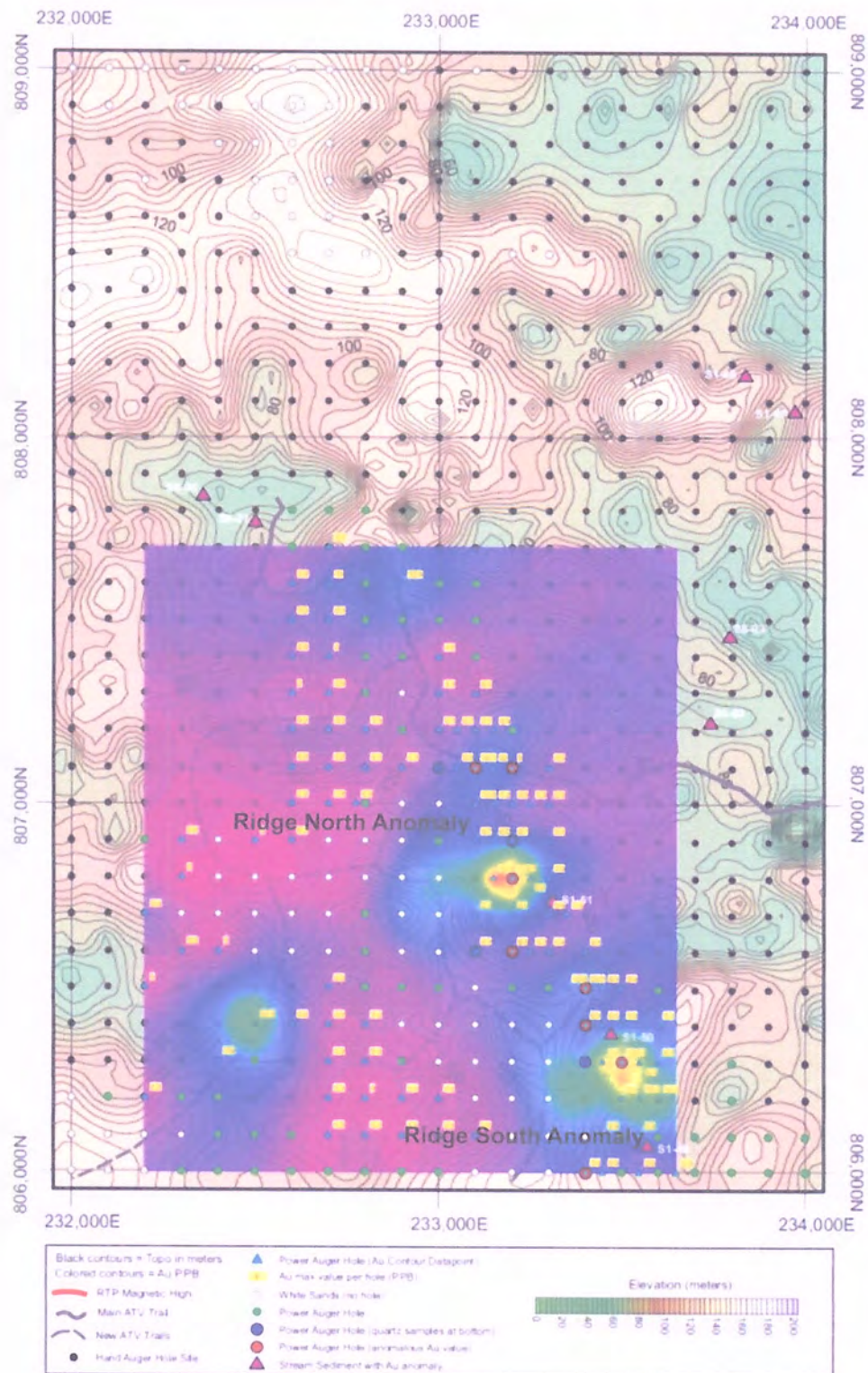


Figure 10. Final 2013 Power Auger Sample Results, Au maximum value





**Plate 2. Hand Auger Sampling**

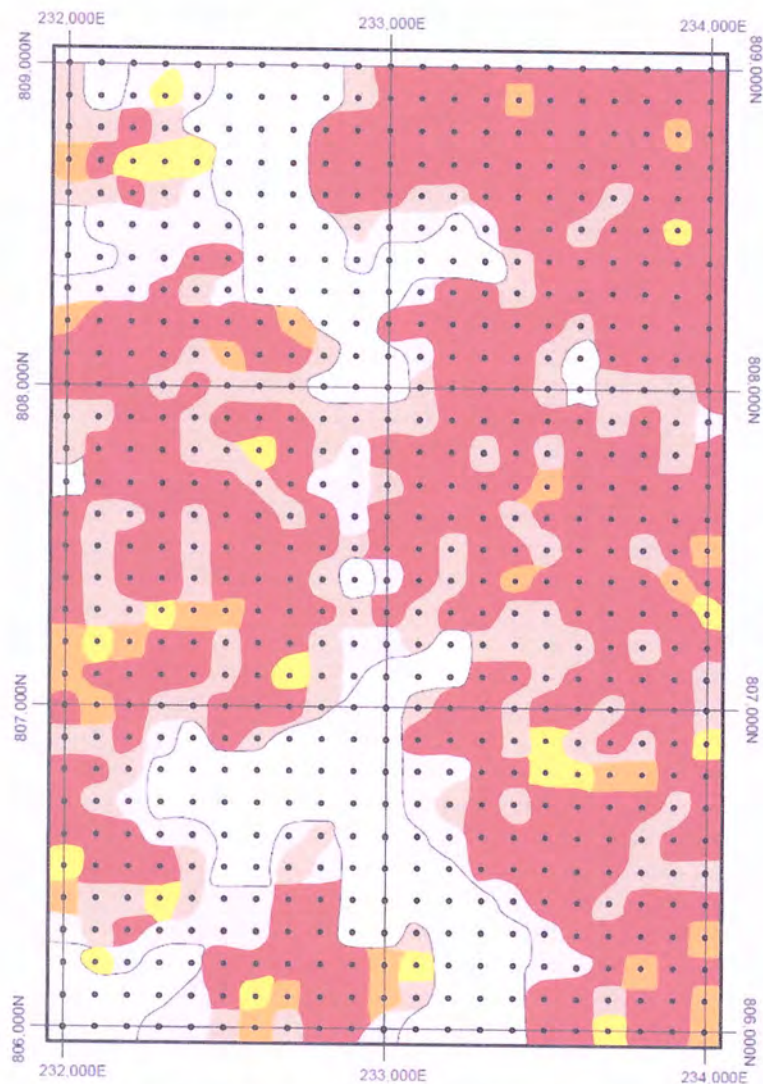


**Plate 3. Power Auger Sampling**

### **6.2.5 Geological Mapping**

There is very little bedrock exposed on the Aranka North property, and in particular in the area of the Camp and Ridge anomalies. Geologic mapping of the Ridge grid was carried out on the soil grid by examining the saprock (deeply weathered bedrock) at the bottom of each soil auger hole. Principal rock types noted are hematitic quartz sericite schist and fine-grained equigranular granite. Medium and coarse grained pale green sericite (paragonite) and quartz veins are also present along the contacts between the schist and the granite.

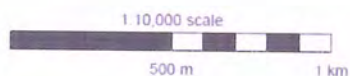
As reported previously an unconsolidated (Pliocene) white sand layer caps much of the ridge including the saprolite, and is in places greater than 3 meters thick. In many of the auger holes the sand could not be penetrated to sample the underlying saprolitic material (see Figure 11). Even in some of the power auger holes, which could reach as deep as 15 meters, white sand was still present.



Aranka North Property, Region 1, Guyana  
Canamex Resources, Inc.



Geologist: T. Stockhausen  
Date: July 2012  
Datum: WGS 1984 Zone 21N  
Topography gridding method: Kriging



**Figure 11. Ridge Anomaly Geology based on Auger Hole material**





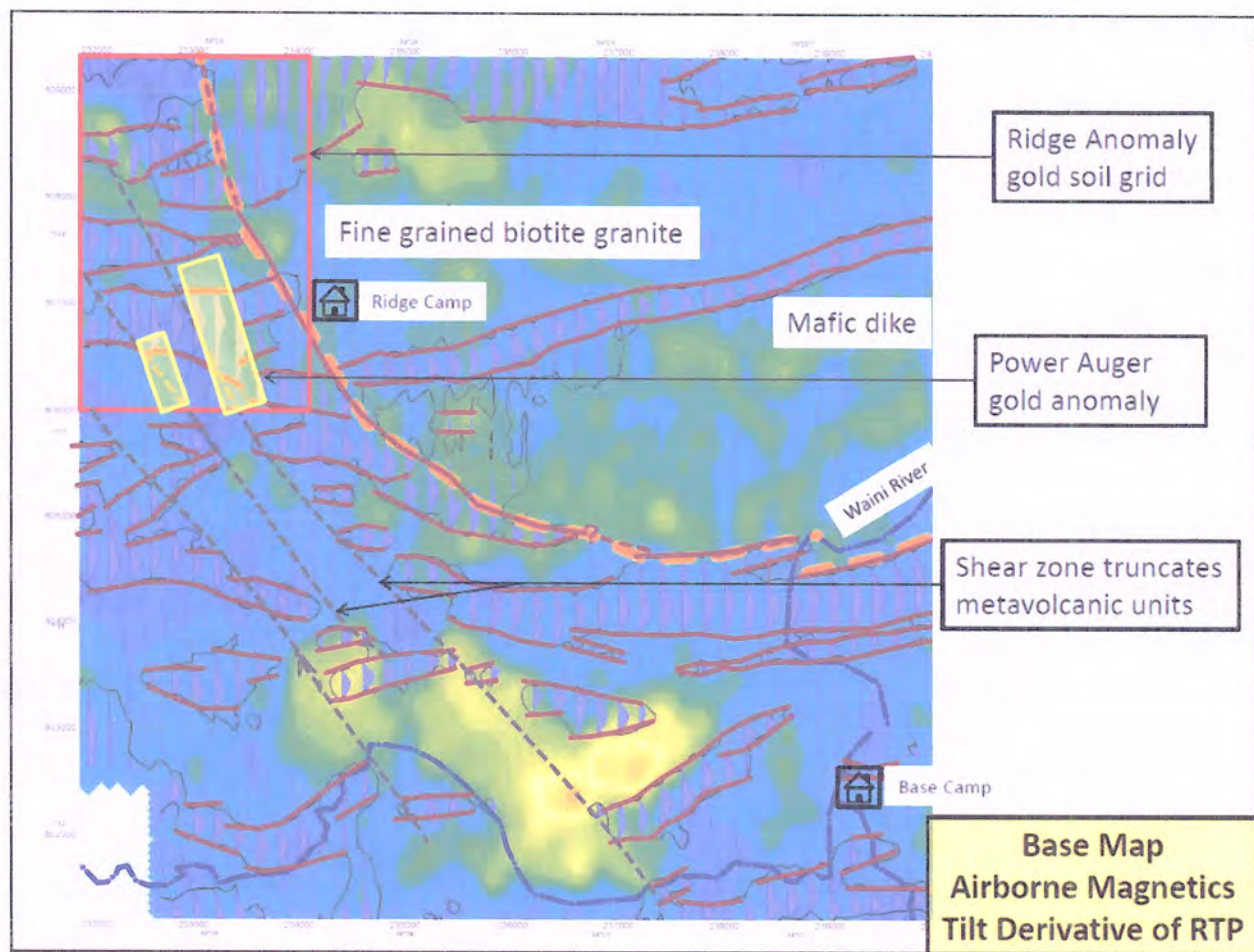
**Plate 4. Rock types from bottom of Power Auger holes**

Quartz and coarse pale green sericite cobbles and boulders are the dominant rock types present in the alluvial gold operation waste piles.

Detailed power auger samples showed the dominant southern Au anomaly is located along the eastern flank of the ridge. It trends N15W ( $345^{\circ}$ ), which is coincident with local foliation and probably reflects a bedrock source. This anomaly is currently at least 1.2-1.4 kms long, 100-200 m wide, with values up to 129.5 ppb Au from depths of 6-8.5 meters, against a background of less than 1 ppb Au. Rock material from some of the power auger holes within this anomaly are strongly sericitized and is typically composed of white clay altered equigranular quartz sandstone, medium grained monzonite to granodiorite, and gray (manganese-rich) quartz vein material (Plate 4). These are rock types that were not identified in shallow hand-auger drilling and mapping (Figure 9).

The area of the sericitic granodiorite is coincident with a prominent aeromagnetic anomaly detected in the original airborne survey completed by GMV Minerals immediately prior to Canamex's acquisition of the option on the property (Figure 12). Further examination of the regional airborne magnetic data reveals a very distinct break in the magnetic patterns, suggesting a NW-trending "shear zone", which is perfectly coincident with the deeper eastern gold-in-soil anomaly. These data may be due to the presence of an altered and mineralized

intrusion within or associated with the possible NW-trending shear zone, which is the common geologic setting of major gold deposits in Guyana.



**Figure 12. Structures Indicated by Airborne Magnetics in the Ridge Anomaly area**

## 6.2.6 PETROGRAPHY

In April 2012 Canamex submitted four rock samples to Renaud Geological Consulting Ltd. for petrographic and microprobe investigation (Renaud, 2012). The main purpose of the study was to examine the rocks and provide details of textures and mineral compositions of the host rock and alteration assemblages. The samples were collected from outcrop by Mr. Greg Hahn during routine traverses of the Aranka North Au project. The rocks were cut and polished thin sections were made. Samples were carbon coated and examined in transmitted and reflected light. All minerals were analyzed using a JEOL JXA 733 electron microprobe. No quantitative analyses were performed.



The description of the rock samples can be summarized as follows:

- 1) Sample HC-2 is a hydrothermally calc-silicate altered dolomite or feldspathic sandstone. The mafic mineral assemblages consist of clinopyroxene, zoned amphibole, epidote, zoned sphene, and zoned zircon. Very fine-grained chalcopyrite ( $\text{CuFeS}_2$ ) is randomly disseminated within fractures in the quartz. There are occasional fine-grained inclusions pentlandite ( $(\text{Fe,Ni})_9\text{S}_8$ ) of within clinopyroxene and the calc-silicate epidote.
- 2) Sample PK-3 is a quartz-muscovite schist. Micas have a phengitic and paragonitic component. Minor chlorite, hematite and Ti-magnetite plus trace chalcopyrite are present.
- 3) Sample PK-1 is a coarser equivalent of PK-3. Phengite and paragonite are present and contain an elevated sodium content relative to PK-3. No sulphides were observed.
- 4) Sample HC-3 is a biotite granodiorite with faint fabric defined by mafic minerals. The rock is composed of quartz, plagioclase, biotite, epidote, and the balance hornblende, sphene, Mn-ilmenite, and apatite. No sulphides were observed.

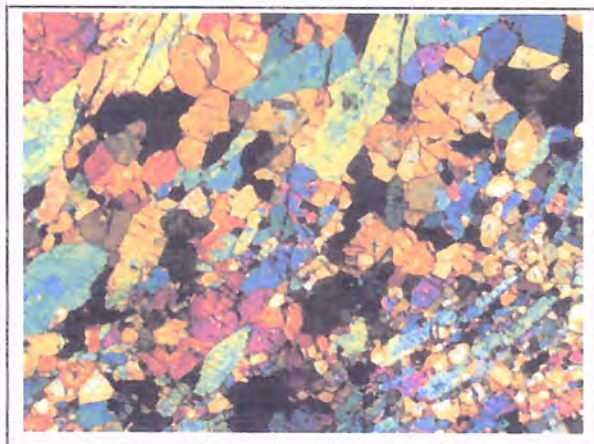
Based on the findings of this report the following recommendations were proposed:

- 1) A literature search of gold prospects in the immediate region of the Aranka property.
- 2) Soil sampling and possible trenching between the positively weathered outcrops.
- 3) Analyzing the mineral chemistry of the white micas in future samples to aid in vectoring towards mineralization.

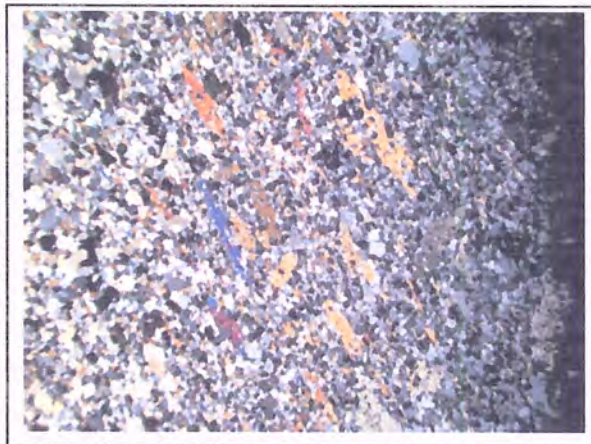
In September 2012 Canamex submitted four more rock samples to Renaud Geological Consulting Ltd. for petrographic and microprobe investigation (Renaud, 2012a) to detail mineral textures, metamorphic and hydrothermal conditions. As was done previously the rocks were cut and polished thin sections were made, and examined by microscope and electron microprobe. No quantitative analyses were performed.

These rocks were identified as tourmaline pegmatite, quartz-muscovite pegmatoid, coarse-grained muscovite-quartz pegmatoid altered by surficial waters and foliated amphibolite with almandine garnet porphyroblasts. These samples suggest bedrock is a combination of moderate to high grade regionally metamorphosed granitic and intermediate to mafic metavolcanic/metasedimentary rocks, and supports initial interpretation of airborne geophysics and topography that the project covers a granitic intrusion/intermediate to mafic metavolcanic contact.





**Plate 5. Crossed polarized light of Tourmaline pegmatoid. NW-SE foliation defined by quartz and tourmaline**



**Plate 6. Foliated amphibolite with garnet porphyroblasts; fabric is syn- or post-metamorphism of mafic volcanic/sediment**

To the authors' knowledge no further work has been completed until the site visit of Renaud and Bain on May 26, 2013.

## **7.0 GEOLOGICAL SETTING and MINERALIZATION**

### **7.1 Regional Geology**

The Guiana Shield is recognized to be the rifted extension of the West African Craton comprised of granite-greenstone terrane of the Paleo-Proterozoic Birimian Supergroup. In northern Guyana this is represented by the Lower Proterozoic Barama-Mazaruni Supergroup. The greenstone rocks of the Paleoproterozoic Barama-Mazaruni Supergroup are intercalated with Archaean-Proterozoic gneiss and intruded by Trans-Amazonian granite, mafic and ultramafic rocks (McConnell, Williams, 1970). The Lower Proterozoic Barama-Mazaruni Supergroup is interpreted to have formed by successive back-arc closure and extensional oceanic arc magmatism caused by migrating spreading ridges (Voicu et al., 2001). Continental clastic rocks, volcanic flows, and volcanic sedimentary units were subsequently indurated by folding and compression and were in turn intruded by two or more stages of granitoid bodies.

In Guyana, the Barama-Mazaruni Supergroup occurs in three sub-parallel groups with broadly similar lithostratigraphy. The northern belt dated at 2,250 ± 106 Ma, where the Aranka North Property is located trends generally east to northeast. Syn- to late tectonic calc-alkaline intrusives ranging in composition from granite, to granodiorite, diorite, tonalite, and adamellite have been dated at 2,250 to 1,960 Ma, (Gibbs, Barron, 1993) and are considered part of the tectono-thermal Trans-Amazonian Orogenic Cycle (2,000 Ma). This orogenic event was



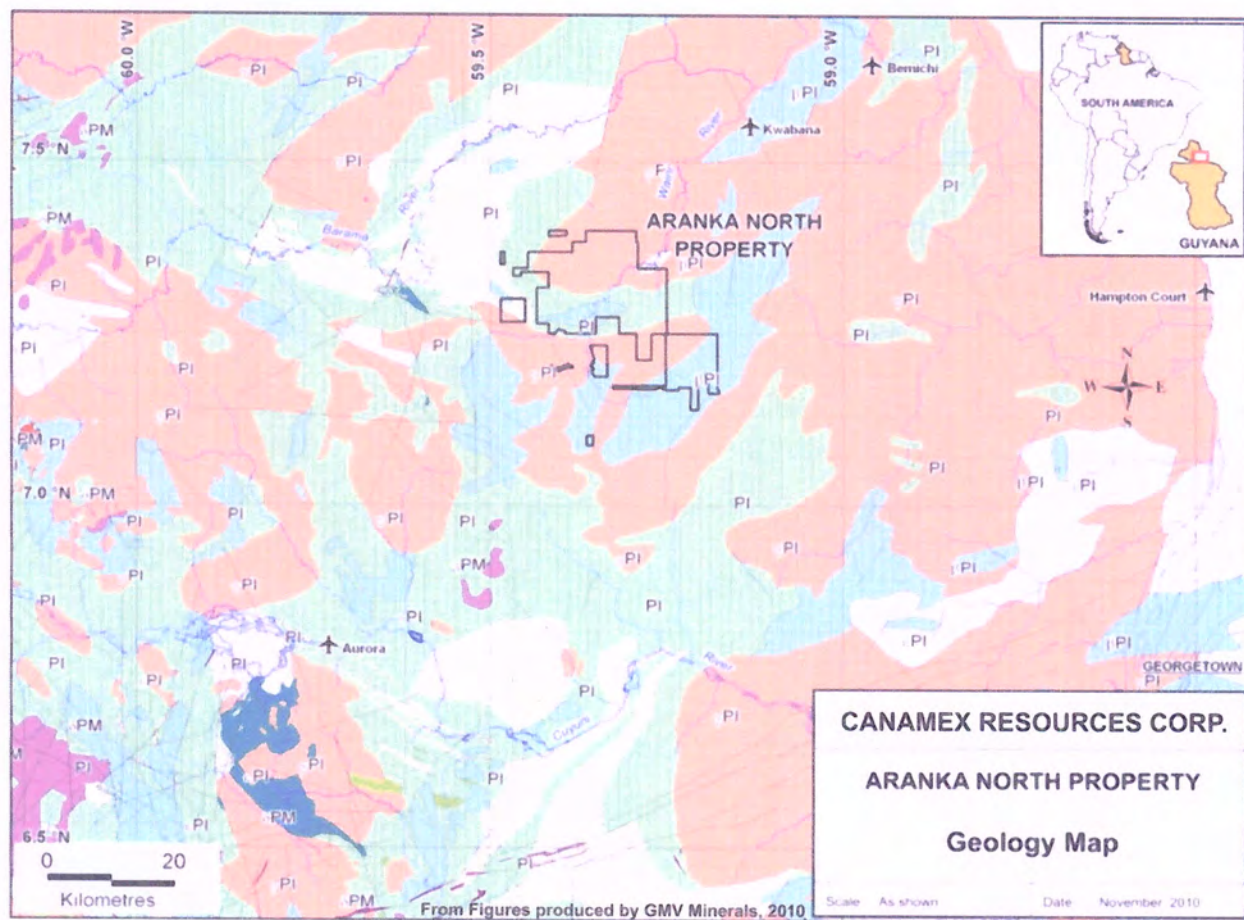
accompanied by block faulting, crustal shortening, folding, metamorphism, and anatexis (Hurley, et al., 1967).

The Barama Group is comprised of pelitic metasediments with metamorphosed lavas and pyroclastic rocks characterized by gondites and manganiferous phyllite, conformably overlain by the Mazaruni Group. The Mazaruni Group includes the Cuyuni Formation and conformably overlying Haimaraka Formation. Cuyuni Formation lithology consists of pebbly sandstone, interbedded conglomerate, greywacke, and felsic to mafic volcanic units while the Haimaraka Formation contains mudstone, pelite, and greywacke, and is characterized by the lack of significant volcanic rocks (McConnell, Williams, 1970). Locally and regionally the Barama-Mazaruni Supergroup has been overprinted by lower to middle greenschist facies metamorphism. Upper greenschist to amphibolite facies can be found at granitoid contacts. Granitoid rocks, some of which reach batholithic dimensions have segmented metasedimentary and metavolcanic rocks of the Barama – Mazaruni Supergroup through development of thrusts, drag folds, and gold-bearing shear zones.

## **7.2 Local, Property Geology**

The regional geology of the Aranka North Property is summarized in Figure 5 and Figure 6 (after Heesterman, 2005). Permits of the Aranka North Property are predominantly underlain by greenstone rocks of the Barama-Mazaruni Supergroup including intermediate volcanics, mafic dikes, sills, and flows, and metasedimentary rocks on the southwestern part of the Property. Interpretation of magnetic (total magnetic) and regional geologic map is helpful in assessment of regional structural controls and dominant lithologic units (Figure 7). Regionally significant faults strike east-northeast and north-northeast with a second set trending west-northwest and north-northwest forming orthogonal blocks. In many instances faults appear to be re-activated indicating recurrent movement along a dominant northwest regional set with sympathetic northeast striking faults. An area of intense deformation and faulting just southwest of the property has segmented and rotated granitic and metasedimentary and metavolcanic rock units.

In general gold mineralization occurs more frequently in more brittle felsic to intermediate rock units indicated by shades of blue or green (intermediate to mafic lithologies) and along intrusive margins (orange and red tones). The area in the central part of the Property which lies between northern and southern granitoid stocks is underlain by intermediate metavolcanic rocks and may be a prospective target for investigation.



**Figure 13. Regional geologic map of the Aranka North Property.  
Legend follows in Figure 14 (after Heesterman, 2005)**





**Figure 14. Legend for Figure 13. Regional Geology**

### 7.3 Mineralization

Within deposits of the northern Guiana Shield where the Aranka North Property is located, free gold occurs as microscopic and macroscopic, irregularly shaped grains or as dendritic fillings within quartz or as inclusions in pyrite, chalcopyrite, and pyrrhotite and as intimate intergrowths with sulfide and tellurides. Pyrite is the most common sulfide found with gold which typically has very high fineness. Scheelite, molybdenite, tellurides, and bismuth minerals are commonly associated with gold hosted in felsic rocks. Although the nugget effect is significant, most deposits throughout the Guiana Shield have a constant gold grade which ranges from 1.3 to 2.3 g/tonne in bulk (Voicu et al., 2001).

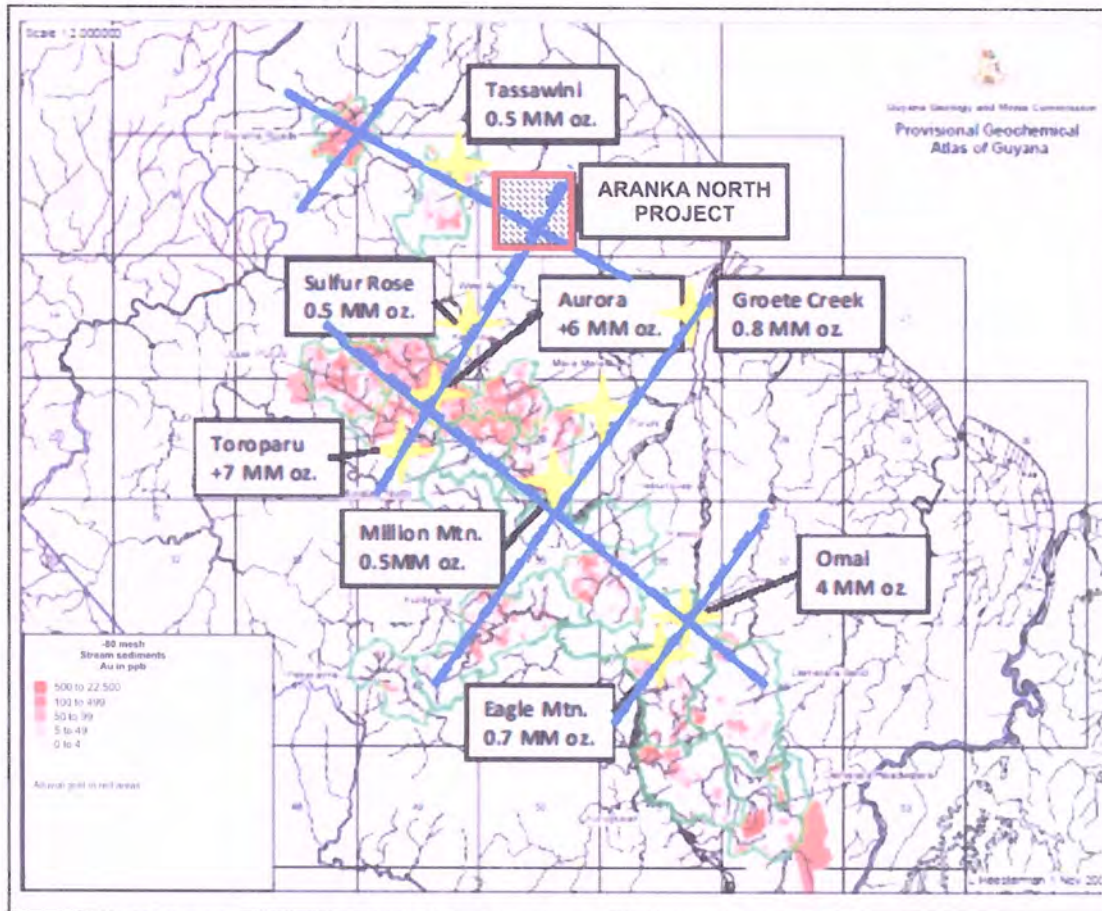
Gangue constituents include occasional tourmaline (e.g. strong tourmalinization of wall rocks at Las Cristinas, Venezuela), quartz, carbonate (siderite, ankerite, calcite) chlorite, epidote, albite, muscovite, and fuschite. Typical hydrothermal alteration includes silicification, carbonatization, and propylitization. Other deposits are associated with potassic and argillic alteration (Voicu, et. al., 2001).

The extension of the northern belt of the Barama-Mazaruni Supergroup (see Regional Geology, above) and its stratigraphic equivalent, the Pastora Supergroup that extends into southern Venezuela, the Pastora Supergroup, hosts several important gold deposits, including El Callao, and the Kilometer 88 deposits including Lo Increble. The El Callao mine was the most productive gold mine in the world in the latter part of the 19th century and reached peak production in 1885, producing 262,192 ounces gold (Locher, 1972). In 1974, non-NI43-101 compliant potential reserves of 84 metric tons of gold from 4.6 million tons with an average grade of 18.33 g Au/tonne were estimated. El Callao veins, ranging from 2 cm to greater than 10 m are localized by faults and shear zones within the El Callao Formation of the Pastora Supergroup. Native gold occurs with minor to trace amounts of pyrite, tetrahedrite, chalcopyrite, bornite, scheelite, molybdenite, galena, pyrrhotite, and sphalerite present in quartz veins. Carbonatization, propylitization, sericitization, and silicification have overprinted wall rocks several tens of meters away from quartz veins (Sidder, 1995). The superficial geochemical expression in the El Callo district has been studied in detail. The most useful pathfinder elements include gold, lead, mercury, manganese, and vanadium. Each element has a characteristic halo surrounding gold bearing quartz veins including Mn and V (great lateral dispersion), Hg (large vertical dispersion and moderate lateral dispersion), and Pb and Au (small vertical and lateral dispersion) (Pasquali, 1972). At Lo Increble, similar wall rock alteration and gangue constituents are present but fault- and shear zone- controlled veins are gold-quartz-tourmaline. Gold production in 1987 from the Cristina 5 mine (in the Kilometer 88 district, Venezuela) was 1,700 kg from 142,000 tonnes containing an average of 12 g gold per tonne, 0.36% copper and 50 ppm lead (Sidder, 1995).

Gold mineralization occurrences and proximal projects in northern Guyana relative to the Aranka North Property are indicated in Figure 15. Data is based on the 1987 Mineral



Exploration Map of Guyana, updated using the USGS (US Geological Survey) Mineral Resources Data Base, and GGMC field work 1999-2002, as well as historical maps examined during compilation of project reports (Heesterman, 2004b). Results and sample density should not be considered as comprehensive. However, the data does suggest open zones of mineralization related to faults and permissive lithology.



**Figure 15. Gold mineralization occurrences relative to the Aranka North Property**

Details of gold mineralization, gangue and alteration mineralogy at the Aranka North Property are not presently known. However, the Monosse and Tassawini projects are located around the Aranka North Property (see Figure 15 above). Chlorite and carbonate alteration and pyrite-pyrrhotite are reported to occur with gold mineralization at the Monosse project near Matthew's Ridge (Yeomans, 2007). At Tassawini gold mineralization occurs in spatial association with silica, pyrite and arsenopyrite in zones of silicification, carbonatization and especially, deformed micro-quartz and quartz-carbonate veining related to linear high strain zones, fold hinges and intrusive contacts. Mineralization is believed to be older than certain rock-forming



minerals such as garnet, pyrrhotite, potassium feldspar, quartz, carbonate, chlorite, and white mica (Weiershauser, et. al., 2008). Due to its proximity to these resources and its position on a major structure it is possible that Aranka North carries similar characteristics.

## **8.0 DEPOSIT TYPE**

The Aranka North Property and other gold occurrences and deposits within the Guiana Shield have formed in orogenic belts in successive back-arc closure and extensional oceanic arc magmatism caused by migrating spreading ridges. These deposits form along convergent margins during terrane accretion, translation, or collision, which were related to plate subduction and/or lithospheric delamination. They develop, typically in the latter part of the deformational – metamorphic - magmatic history of the evolving orogen (Groves, et al., 2003). Most of the gold deposits and occurrences in the Guiana Shield are hosted in supracrustal terranes which have been metamorphosed to upper greenschist facies metamorphism. Some of the deposits are associated with calc-alkaline felsic to intermediate intrusives (e.g. Omai) while others are associated with shearing and tectonic activity (e.g. Gros Rosebel) and syn- or post-date deformation (e.g. Kilometer 88, Venezuela). Voicu et al., (2001) speculated that the gold deposits of the Guiana Shield formed during a period of time bracketed between peak metamorphism at shallow levels (~ 2100 Ma) and a protracted peak metamorphism during the Trans-Amazonian orogeny at deeper crustal levels reflected by the high-grade metamorphic gneiss and granulite terranes (~ 2000 Ma).

Gold deposits within the northern Guiana Shield are characterized by strong structural control. Most are spatially associated with regional shear zones that trend northwest-southeast across the Guiana Shield (Figure 15). Characteristically, the northwest- southeast trend of the major shear zones is not mineralized, and the major gold prospects are localized at intersections of northeast trending structures and also oblique or conjugate structures which modify and offset the main structural trends. On a country scale, the CGSZ (Central Guiana Shear Zone) in Guyana is considerably less continuous and more segmented along transposed northeast-southwest cross faults. All magmatic and sedimentary rocks hosting gold mineralization have been affected by at least one or more phases of ductile deformation. High strain terranes are segmented against low strain boundaries affected by secondary foliation. These ductile shear zones which have not been commonly recognized in the Guiana Shield have received increased exploration attention since at least the mid- 1990's. Brittle faults trending north-northwest – south-southeast and north-northeast – south-southeast have been mapped throughout the Guiana Shield (Voicu et al., 2001).

Proximity to intrusions is common but not essential to all deposits. Gold deposits are more often associated with small intrusive stocks and plugs proximal to shear zones rather than larger batholiths sized bodies where mineralization is found away from contacts within country rocks. Mineralization of most deposits occurs within quartz veins or associated stockwork,



veinlet arrays and breccias within brittle rocks. Due to contrasting pressure gradients, epigenetic mineralizing fluids emanated along structural conduits which developed at brittle-ductile boundaries, typically intrusive and metavolcanic or metasedimentary contacts. Within the northern Guiana Shield, Voicu et. al. (2001) characterized secondary conjugate shears and extension zones as tens of meters wide constraining several high strain zones a few meters in width. The density of second and third order veins increases notably in felsic to intermediate sub-volcanic and plutonic rocks due to their greater competency.

Details of the style and characteristics of mineralization on the Aranka North Property are not yet specifically known. However, the Property is located southeast of the advanced projects Tassawini and Monosse. At Tassawini (Figure 15) gold mineralization is hosted in phyllites and mudstones and is characterized by silica flooding, and abundant sulfides within highly deformed strain zones including axial planes and parasitic folds (Weiershauser, et. al., 2008). At Monosse, gold mineralization as sulfide-rich quartz veins occurs within a dominant northwest trending shear zone at the contact of a carbonaceous mudstone and diorite plug (Yeomans, 2007).

## 9.0 EXPLORATION

This report is a compilation of work conducted by Canamex Resource Corp. and previous operators. It is intended to provide a detailed summary of the mineral potential of the Aranka North Project. That information is provided in various sub-sections of the section of this report **6.0 HISTORY**. However, independent work has been carried out by Bain and Renaud prior to and during their site visit in May 2013.

### 9.1 Geochemical Sampling

In May 2013 Dr. Renaud and Dr. Bain collected stream sediment, panned concentrate from streams, soil and power auger soil samples on the Ridge Anomaly grid. These samples were taken (considering the limited time available for the site visit) as repeat samples in an attempt to compare assay results to those samples already collected by Canamex between 2011 and the present. Samples were taken by the same crew as those used to take Canamex samples, using the same methodology. The new samples were tested by Acme Labs, using the same test facilities and analytical procedures and codes as those used by Canamex. Sample sites, with Canamex values and Bain/Renaud values are shown on Figure 11 below, and on Table 6.

**Table 6. Comparison Assay Results, Bain-Renaud and Canamex**

Sample Type	Bain/Renaud Sample	Au ppb	Cu ppm	Canamex Sample	Au ppb	Cu ppm	Depth
PanCon	80823	63.2	0.7	PC6-27	7.8	1.3	stream
PanCon	80875	604.1	6.3	PC6-26	583.8	0.8	stream



StreamSed	80801	<0.5	1.3	S6-27	226.2	1.6	stream
StreamSed	80856	7.6	43.8	S6-26	1	1.1	stream
StreamSed	80814	<0.5	0.8	806482N/232748E	N/S	N/S	stream
Soil	80811	1.1	4.8	806400N/232800E	0.8	3.7	1 m
Soil	80843	2.2	4.4	806500N/232800E	White sand	N/S	1 m
Soil	80893	1.5	5.0	806500N/233000E	White sand	N/S	1 m
Soil	80873	1.8	8.0	806100N/232700E	1.3	4.9	1 m
Soil	80825	2.4	15.1	806400N/232700E	<0.5	6.4	1 m
Soil	80842	2.5	7.0	806100N/232900E	2.1	7.3	1 m
Soil	80835	0.8	4.4	806500N/232700E	0.7	2.9	1 m
Soil	80846	1.3	2.7	806500N/232900E	White sand	N/S	1 m
Soil	80859	2.1	2.1	806100N/233000E	1.4	7.4	1 m
Soil	80833	4.5	11.5	806100N/232800E	2.6	7.5	1 m
Soil	80819	2.9	3.4	806200N/233000E	<0.5	6.1	1 m
Soil	80883	1.5	3.3	806200N/232900E	<0.5	3.0	1 m
<b>Soil</b>	<b>80850</b>	<b>1.6</b>	<b>3.3</b>	<b>806300N/232800E</b>	<b>31.3/1.2</b>	<b>3.5/3.2</b>	<b>1 m</b>
Soil	80831	1.6	9.4	806300N/232700E	<0.5	8.6	1 m
Soil	80809	2.7	10.8	806200N/232700E	1.2	12.2	1 m
Soil	80802	2.1	11.5	806200N/232800E	<0.5	8.6	1 m
PA	80852	1.8	2.9	807100N/233100E	N/S	N/S	1 m
PA	80810	1.6	6.0	807100N/233100E	N/S	N/S	2 m
PA	80816	1.5	4.6	807100N/233100E	N/S	N/S	3 m
PA	80900	1.4	4.2	807100N/233100E	N/S	N/S	4 m
PA	80812	21.4	4.1	807100N/233100E	18.1	35.2	5 m
PA	80866	10.7	9.5	807100N/233100E	N/S	N/S	6 m
PA	80808	5.8	4.0	806800N/233200E	N/S	N/S	1 m
PA	80828	6.8	4.9	806800N/233200E	N/S	N/S	2 m
PA	80821	4.4	6.2	806800N/233200E	N/S	N/S	3 m
PA	80804	1.4	3.7	806800N/233200E	N/S	N/S	4 m
PA	80824	1.3	5.1	806800N/233200E	N/S	N/S	5 m
<b>PA</b>	<b>80844</b>	<b>14.5</b>	<b>12.7</b>	<b>806800N/233200E</b>	<b>129.5/30.2</b>	<b>19.8/11</b>	<b>6 m</b>
PA	80862	9.3	14.1	806800N/233200E	13.8	12.9	7 m
PA	80803	4.0	14.1	806800N/233200E	4.9	13.4	8 m
PA	80853	2.3	19.7	806800N/233200E	3	15.11	9 m
PA	80815	3.5	10.5	806800N/233200E	0.6	14.2	10 m
PA	80807	1.1	8.9	806800N/233200E	1.5	12.6	11 m
PA	80861	3.4	16.8	806800N/233200E	0.9	17.6	12 m
PA	80822	1.1	17.7	806800N/233200E	<0.5	10.4	13 m

\*\*\* N/S

No sample

\*\*\* PA

Power Auger soil sample



The areas chosen by Bain and Renaud for sampling were on the Ridge Anomaly grid that Canamex reported contained one or more anomalous values in gold. The Bain/Renaud sampling showed that assays on individual sample sites may be somewhat erratic but in general produce similar results as those samples collected by the Canamex crews. No duplicate samples were taken.

However, Canamex work included duplicates of samples with anomalous gold values. Note that in some cases, for example at location of sample 80850 and 80824, the Canamex results show a wide variation in gold assay values. This may be an indication of “nugget effect” in gold assays due to nonuniform distribution of high-grade gold content of the sample. The presence of erratic values is encouraging as it suggests proximity to the bedrock source such as a quartz vein or breccia zone. The similarity of assay results of Bain and Renaud compared to those taken by Canamex also shows that anomalous gold values do exist on the Ridge Anomaly, independent of Canamex work. Values are low as absolute numbers. However, assays with were found with values greater than two standard deviations plus the mean value of the soil sample results, and are considered anomalous.

## 9.2 Petrography

Dr. Renaud has also carried out microscope petrographic studies of four rock samples taken from the bottom of hand auger and power auger holes of the Ridge Anomaly grid (*Samples: 6900N, 33100E(6m depth); 6500N, 33450E; 6900N, 33033E; and 6900N, 33100E (6.5m depth)*). As in 2012 the rocks were submitted by Mr. Greg Hahn for petrographic and microprobe investigation to detail mineral textures, metamorphic and hydrothermal conditions. A brief summary of the results shows:

**Sample 6900N, 33100E (6m):** a quartz-sericite schist with altered garnet grains and a groundmass dominated by fine-grained quartz and transparent to white to green, tabular-prismatic gibbsite crystals (aluminum hydroxide =  $\text{Al}(\text{OH})_3$ ). The relict garnet grains have been altered to wispy, wiry gibbsite.

**Sample 6500N, 33450E:** a quartz and staurolite-bearing sandstone with a kaolinite matrix. Backscatter scanning reveals trace concentrations of zircon-ilmenite-rutile-apatite.

**Sample 6900N, 33033E:** paragonitic-phengitic muscovite growth within a quartz-plagioclase-feldspar granodiorite. The muscovite laths are preferentially altered along grain margins to kaolinite-halloysite. Muscovite compositions reveal slightly elevated Na and Ti contents (see discussion below). Scanning the section in backscatter mode reveals fine-grained zircon, fine-grained monazite, and the occasional grain of fine-grained pyrite as inclusions in muscovite, quartz and in interstitial groundmass.



**Sample 6900N, 33100E (6.5m):** paragonitic-phengitic muscovite growth within a quartz-plagioclase-feldspar granodiorite. The muscovite laths are preferentially altered along grain margins to kaolinite-halloysite. Muscovite compositions reveal slightly elevated Na and Ti contents (see discussion below). Scanning the section in backscatter mode reveals fine-grained zircon, fine-grained monazite, and the occasional grain of fine-grained pyrite as inclusions in muscovite, quartz and in interstitial groundmass.

#### **Paragonitic-Phengitic Muscovite Discussion:**

It is interesting to consider the chemistry of micas within samples which contains elevated Na contents (Samples 6900N, 33100E (6m); 6900N, 33033E and 6900, 33100E (6.5m)). The Na content of muscovite has been used as a vector towards Au-mineralization in a number of gold deposits (e.g. Ridgeway, North Carolina). The basic building blocks of the white mica structure is the muscovite molecule which is a K-Al-silicate. In muscovite Na can substitute for K. Paragonite has the same structure as muscovite and is a mineral in which K is completely substituted for by Na. There is increasing substitution of Na for K as a function of temperature. One of the possibilities is that the paragonite samples have a strong hydrothermal component of Na and that these grains grew directly from hydrothermal solutions. A detailed study of muscovite from future drill holes could provide a vector towards a heat source and a potential mineralized zone (i.e. a pattern of increasing Na-content in muscovite correlating with increasing gold grades).

It is also important to note that the muscovite in these samples have elevated Ti content (~0.63 – 1.14 wt% TiO<sub>2</sub>). There is a consistent relationship between elevated Ti and an igneous origin for the muscovite involved. The suggestion here is the elevated Ti-contents suggest they might be related to post tectonic intrusions in the sample area.

## **10.0 DRILLING**

Drilling has not yet been conducted by Canamex on the Aranka North Property. No previous drilling has been completed by GMV Minerals, Alfro Alphonso & Sons Mining or predecessor interests based on historic records and more recent exploration data.

## **11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY**

For the Bain-Renaud work in May 2013 samples were delivered by the Canamex camp manager at the request of Renaud and Bain to a globally recognized ISO certified laboratory (Acme Labs) in Georgetown, Guyana for drying and crushing, and then sent for gold and 35 other elements analysis to Acme's lab in Santiago, Chile. Samples were of soil, stream sediment (silt) and panned concentrate of stream sediment material and weighed an average of 0.7 kilograms. As this site visit was only to compare assay results on a small group of samples no check samples were sent to other labs.



For the 35 element analyses the Induced Coupled Plasma Mass Spectrometry (ICP-MS) procedure was used. Gold contents were determined by Fire Assay-Mass Spectrometry method from 30 gram pulps. Pulps and rejects are stored by the lab for a minimum of 90 days.

### 11.1 Sample Preparation

Samples were dried at 110-120°C and then crushed with either an oscillating jaw crusher or a roll crusher. Both labs' Quality Control (QC) specification for crushed material is that >70% of the sample must pass a 2mm (10 mesh) screen. The entire sample is crushed, but typically 250 g to 1 kg, is subdivided from the main sample by use of a riffle splitter. If splitting is required, a substantial part of the sample (the "reject" or "spare") remains. A whole or split portion derived from the crushing process is pulverized using a ring mill. QC specification for final pulverizing is that >85% of the sample is less than 75 microns.

### 11.2 ICP-MS

In plasma mass spectroscopy, the inductively coupled argon plasma (ICP) is used as an excitation source for the elements of interest. The plasma in ICP-MS is used to generate ions that are then introduced to the mass spectrometer. These ions are then separated and collected according to their mass to charge ratios. The constituents of an unknown sample can then be identified and measured. ICP-MS offers extremely high sensitivity to a wide range of elements. It is a multi-element analytical technique capable of determining an extremely wide range of elements to very low detection limits (typically sub ppb).

Detection limits for this method are shown below. Values are in ppm or percent.

Ag (0.2 - 100)	Co (1 - 10,000)	Mn (5 - 10,000)	Sr* (1 - 10,000)
Al* (0.01% - 15%)	Cr* (1 - 10,000)	Mo (1 - 10,000)	Ti* (0.01% - 10%)
As (2 - 10,000)	Cu (1 - 10,000)	Na* (0.01% - 10%)	Tl* (10 - 10,000)
B* (10 - 10,000)	Fe (0.01% - 15%)	Ni (1 - 10,000)	U (10 - 10,000)
Ba* (10 - 10,000)	Ga* (10 - 10,000)	P (10 - 10,000)	V (1 - 10,000)
Be* (0.5 - 100)	Hg (1 - 10,000)	Pb (2 - 10,000)	W* (10 - 10,000)
Bi (2 - 10,000)	K* (0.01% - 10%)	S (0.01% - 10%)	Zn (2 - 10,000)
Ca* (0.01% - 15%)	La* (10 - 10,000)	Sb (2 - 10,000)	
Cd (0.5 - 500)	Mg* (0.01% - 15%)	Sc* (1 - 10,000)	

### 11.3 Fire Assay

Because ICP-MS does not give a sufficiently low detection limit for gold the Fire Assay method was used for this element. This consists of the melting (fusion and cupellation) of the pulp of a sample of interest. The precious metal bead that remains following cupellation is an alloy of silver and gold. When an atomic absorption spectroscopy finish is selected, the upper reporting



limit is set at 10 g/t (0.3 oz/ton) and samples higher than this must be re-analyzed using additional silver in the firing process and a larger dilution factor.

Alternatively, gravimetric finish can be used for those samples reporting greater than 10 g/t gold. Standard Fire Assay methods are used to produce a gold-silver bead. Gravimetric methods involve the use of balances to weigh the element of interest, either in its pure elemental form or as a chemical compound. Weighing this bead will give the total weight of silver and gold. If the bead is then treated with dilute nitric acid, it is possible to remove the silver quantitatively. The residual mass consists of pure gold which can then be weighed separately, thus allowing the silver to be determined by the difference. The balances used for this purpose are microbalances capable of weighing to the nearest microgram (one millionth of a gram). The fire assay procedure is universally accepted as the definitive method for the analysis of gold.

## **12.0 DATA VERIFICATION**

As reported above, Renaud and Bain had access to the Canamex database for its stream sediment, soil and power auger sample sites and results. The authors' sampling was an attempt to produce similar, though not exact, assay results from sample sites selected from that database. That work and its results are described above under Section 9.0 EXPLORATION.

## **13.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

As the project is still in an early stage of exploration no mineral processing or metallurgical testing has been carried out.

## **14.0 MINERAL RESOURCE ESTIMATES**

As the project is currently in a pre-drilling phase of exploration there is insufficient information to produce a resource estimate.

## **15.0 MINERAL RESERVE ESTIMATES**

No mineral reserve estimate has been done on this project

## **16.0 MINING METHODS**

To the authors' knowledge no mining methods have been outlined for this project.

## **17.0 RECOVERY METHODS**

Recovery methods have not been reported to the authors of this report.



## **18.0 PROJECT INFRASTRUCTURE**

No details of project infrastructure other than those described in section 5.0 of this report have been reported to the authors.

## **19.0 MARKET STUDIES and CONTRACTS**

To the authors' knowledge no market studies or contracts have been discussed.

## **20.0 ENVIRONMENTAL STUDIES, PERMITTING and SOCIAL or COMMUNITY IMPACT**

The authors of this report have no information on environmental studies, permitting or social/community impact other than those items reported in section 5.0.

## **21.0 CAPITAL and OPERATING COSTS**

No details of capital and operating costs have been discussed with the authors, except for that information reported in the 2011 Preliminary Economic Assessment summarized in section 6.6 and referenced in this report.

## **22.0 ECONOMIC ANALYSIS**

No economic assessment has been carried out on this project..

## **23.0 ADJACENT PROPERTIES**

To Dr. Bain's knowledge there is no other active exploration being done in the immediate area of the Project. Preliminary investigations report that there are a number of small alluvial mining operations on and within five kilometres of the current project. As described in Section 7.3 Mineralization and Figure 15 there are eight (8) mineralized zones in the region, that either lie on the same regional structure or on parallel structures. The closest of these is the Tassini project, approximately 20 kilometres to the west.

## **24.0 OTHER RELEVANT DATA AND INFORMATION**

There is no additional information or explanation necessary to make the technical report understandable and not misleading.



## **25.0 INTERPRETATION AND CONCLUSIONS**

Most of the information compiled by Dr. Bain and Dr. Renaud relating to the exploration work done on the Aranka North project is historical in nature as neither persons were onsite during the Canamex review of geophysics and sampling programs. The Canamex work was supervised by Mr. Greg Hahn, CPG.

There is very little bedrock on the property. Vegetation is thick, a pervasive unit of white sand covers much of the areas of greatest potential, and a saprolite layer all made a detailed description of the bedrock difficult. A geological map was developed based on airborne magnetic and radiometric responses, to known sites of alluvial gold mining, of stream sediment and panned concentrate sampling followed up by soil sampling to search for the bedrock source of these stream sediment anomalies. Soil anomalies of shallow (1 m) depth were followed up by power auger soil sampling to attempt to penetrate the white sand layer and the saprolite. From this work Canamex developed areas of weak but anomalous gold in soil, where the mean plus 2 standard deviations above the mean were considered anomalous values, despite the low absolute values. These low absolute values may be due to the leaching of near surface base and precious metals. Power auger sampling also provided some broken rock which probably represented bedrock material, giving a rough idea of bedrock composition.

The most prominent of these geochemical anomalies is the Ridge Anomaly, which appears to be a contact zone between quartz sericite schist (originally quartz sandstone), and medium grained monzonite to granodiorite. Gray (manganese-rich) quartz vein material was also noted. The Ridge Anomaly covers a prominent linear NNE-SSW trending ridge that is resistant to weathering. The quartz vein material is considered to be part of a shear zone related to that contact and may be the source of the gold in soil anomalies as well as the alluvial gold in the streams.

## **26.0 RECOMMENDATIONS**

Based on the presence of low but anomalous gold values covering a linear ridge resistant to weathering, quartz vein material present and active alluvial gold mining in the area it is recommended that an initial limited shallow diamond drilling program to test the Ridge Anomaly along roughly 1 kilometer of strike length. A drill contractor is available in Georgetown, and has a portable drill which can be transported to Base Camp along the Waini River and then up the recently improved ATV trail by an ATV flat-bed vehicle to the Ridge Camp. A 1500 meter drilling program is proposed, consisting of 12-15 holes each approximately 100 meters in depth, angled at -45 degrees primarily to the east. Each cross section will consist of four or five holes, with each section being 75 meters apart. A four-hole spread with test roughly 300 meters of width, and a five-hole spread will test nominally 400 meters of width, which should test the entire width of the eastern deep gold-in-soil anomaly.



A cost of \$100/meter plus standard hourly charges is anticipated from discussions with the contractor. Canamex has to provide accommodations in camp and equipment and personnel to move the drill in and out of camp and between drill sites, and thus the requirement for the ATV flat-bed vehicle. Drilling is anticipated to take 3-4 months to complete, on a 20-day on, 10-day off schedule. It is estimated that total all-in contractor costs are \$150/meter, and the cost to provide camp and support to the drillers is another \$100/meter, for total costs of \$250/meter. The budget totalling \$429,000 is presented in Table 10 and details expenditures required to complete the recommended program.

Respectfully submitted



Duncan J Bain



Date: September 30, 2014



Jim Renaud

Date: September 30, 2014

**Table 7. Proposed Phase 4 Budget**

Item	\$US
<b>EXPLORATION</b>	
Exploration Drilling – 1500 metres @ \$150/m	225,000
Senior Geologist – 80 mandays X \$600/day	48,000
Assistants – 4 men X 80 days @ \$25/ man day	8,000
Assays - \$40/sample X 250 samples	10,000
Room and Board – 11 men (5 drillers, 1 geologist, 4 assistants, camp manager) X 80 days @ \$50/man day	44,000
Transportation and Fuel – boats, ATVs, 80 days @ \$100/day	8,000
Camp Manager – 80 days @ \$400/day	32,000
Report, including drafting	15,000
Subtotal	390,000
Contingency @ 10 %	39,000
<b>TOTAL</b>	<b>429,000</b>



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## **28.0 CERTIFICATE OF QUALIFICATIONS – DUNCAN JAMES BAIN, P.Geo.**

- a) I, Duncan James Bain, am a Consulting Geologist and reside at 49 Midale Crescent, London, Ontario, Canada N5X 3C2.
- b) This certificate applies to the technical report entitled “A National Instrument 43-101 Report on the 2010-2013 Exploration Programs on the Aranka North Gold Project, Barima-Waini Administrative Region Number 1, Republic of Guyana” dated September 30, 2014.
- c) I graduated from the University of Western Ontario in London, Canada, and received my Bachelor of Science degree in Geology in 1977 and received my Ph.D. in Geology from the University of Western Ontario in 2010. I have practiced continuously as an exploration, development and mine geologist since that time. I have not worked in Guyana prior to this visit. I have been a Professional Geoscientist (P.Geo.) of the Association of Professional Engineers and Geoscientists of British Columbia since 1991 and have been a Professional Geoscientist (P.Geo.) in the Province of Ontario since October 2004. I am a Qualified Person as defined in the National Instrument 43-101.
- d) I was on the Aranka North property between May 25 and May 28, 2013.
- e) I, along with my colleague Dr. Jim Renaud, am responsible for all material contained in this technical report.
- f) I was contracted by Canamex Resources Corp. to review the results of the exploration work carried out by Canamex on the Aranka North project. I am independent of the issuer based upon the tests set out in National Instrument 43-101 section 1.5.
- g) Prior to May 2013 I have no prior involvement with the property that is the subject of this report.
- h) I have read National Instrument 43-101 and Form 43-101F1, and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.
- i) As of the date of this certificate to the best of the Qualified Person’s (QP) knowledge, information and belief this report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

**DATED in the CITY of LONDON, in the PROVINCE of ONTARIO, CANADA this 30<sup>th</sup> day of September, 2014.**

SIGNED: “*Duncan J. Bain*”

**Dr. Duncan J. Bain, P.Geo.**



## **29.0 CERTIFICATE OF QUALIFICATIONS – Jim Renaud, Ph.D., P.Geo.**

- a) I, Dr. Jim Renaud, am a Consulting Geologist and reside at 21272 Denfield Rd., London, Ontario, Canada N6H 5L2.
- b) This certificate applies to the technical report entitled “A National Instrument 43-101 Report on the 2010-2013 Exploration Programs on the Aranka North Gold Project, Barima-Waini Administrative Region Number 1, Republic of Guyana” dated September 30, 2014.
- c) I graduated from the University of Western Ontario in London, Canada, and received my BSc. Chemistry and Geology in 1999, my degree in Honors Standing Geology in 2000, followed by my MSc. (Economic Geology) in 2003. I received my Ph.D. in Geology from the University of Western Ontario in 2014. I started my own geological consulting business (Renaud Geological Consulting Ltd.) in 2005 and have serviced the exploration and mining sector with petrographic and electron microprobe investigations pertaining to exploration and geometallurgical issues. I have worked in Guyana for other exploration companies prior to this visit. I have been a Professional Geoscientist (P.Geo.) in the Province of Ontario since December 2012. I am a Qualified Person as defined in the National Instrument 43-101.
- d) I was on the Aranka North property between May 25 and May 28, 2013.
- e) I, along with my colleague Dr. Duncan Bain, P.Geo., am responsible for all material contained in this technical report.
- f) I was contracted by Canamex Resources Corp. to review the results of the exploration work carried out by Canamex on the Aranka North project. I am independent of the issuer based upon the tests set out in National Instrument 43-101 section 1.5.
- g) Prior to 2012 I have no prior involvement with the property that is the subject of this report.
- h) I have read National Instrument 43-101 and Form 43-101F1, and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.
- i) As of the date of this certificate to the best of the Qualified Person’s (QP) knowledge, information and belief this report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

**DATED in the CITY of LONDON, in the PROVINCE of ONTARIO, CANADA this 30<sup>th</sup> day of September, 2014.**

SIGNED: “*Jim Renaud*”

**Dr. Jim Renaud, P.Geo.**