EXPLORATION REPORT
GEOCHEMICAL, SELF POTENTIAL and GEOLOGY
SURVEYS and PHYSICAL WORK
on the
JASON CLAIM GROUP
COGBURN CREEK, HARRISON LAKE AREA
NEW WESTMINSTER MINING DIVISION
BRITISH COLUMBIA

PROPERTY LOCATION:  29km, 15º East of Harrison Hot Springs, British Columbia
UTM 10 595283, 5489423
Geographic: 121º 40’58”, 49º 33’0”
N.T.S. – 92H/12E,

BCGS – 92H052

WRITTEN FOR: INTERNATIONAL MILLENNIUM
MINING CORP.
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SUMMARY

Phase 1, described herein, is the first phase of an exploration program carried out on the Jason Claim group during the summer of 2007. The claims are owned by the author and have been optioned to International Millenium Mining Corp since February 2002. The claim group is located approximately 36 kilometers north of Harrison Hot Springs and overlies the confluence of Cogburn and Hut Creeks. The area is reached by means of a 22 kilometer rough gravel road along the east shore of Harrison Lake connecting to logging roads, enabling access to the claims.

Because of the mountainous terrain, accessible primarily by logging roads, high spring flood conditions and because no work had been done on the claims since 2004, it was necessary to evaluate and to insure access for this initial exploration phase and for the Phase 2 component of the project. Access was impeded by two major rock slides blocking the Cogburn Creek road and by severe damage to an old log bridge that in the past had enabled access, across Cogburn Creek to the stream producing the Cu, Ni, Co, Cr Au, PGE anomalous sediment samples, Anomaly Creek (Project 2). Therefore, in Phase 1, access was restored to Project 2. Access by logging road to drill sites at Discovery Creek will require repair of road washouts on the south side of Cogburn Creek. However, drill targets at Hut Creek can still be reached using logging roads.

In 2004, coincident VLF-EM, magnetometer and SP anomalies detected along Cogburn Main road east of Hut Creek had been confirmed. Consequently, examination of this area resulted in a recommendation to construct a 700 x 500 meter grid to follow up, detail and expand the 2004 exploration.

The prime exploration purpose of Phase 1 was to locate the previously undetected source of Cu, Ni, Co, Cr, Au and PGE anomalous stream sediments collected in the summer of 2004 (Mark, 2005). This was done by exploration activities including: collection of additional closely spaced stream sediments in the area of the previously collected anomalous samples, prospecting and defining the geology of associated outcrop. The source of the anomalous samples was determined to be mineralization in an altered outcrop of olivine orthopyroxenite. Magmatic sulphides, pyrrhotite, chalcopyrite, and pentlandite were found, in outcrop, characterized as interstitial sulphides in a crystal mush. Analysis of a bulk stream sediment identified Sperrylite as one source mineral for the high platinum values. Eight grains of native gold were also identified from analysis of a bulk stream sediment sample. A grab sample from outcrop within a gossanous zone contained up to 0.63 % Cu, 0.64% Ni, 777 ppb Pt and 465 ppb Pd. These values are comparable to the ore grades found at the Giant Mascot mine that lies at the southeast end of the a zone of ultramafic rocks herein described as the Ni Belt.
In order to further evaluate this showing, a grid has been recommended to be cut over the gossanous zone in Phase 2 of the project. In Phase 2 of the project it is recommended that Self Potential, magnetometer, VLF-EM geophysical surveys be conducted. In addition, geochemical surveys including collection of overburden B1 samples and mobile metal ion samples are recommended. This would serve to optimize the drill target location.

Previously, drill targets had been located and recommended on projects 1 and 3 of the Jason claim group (Mark, 2005). Therefore, the detailed location of SP anomalies and drill targets was delineated between grid lines on these projects and their UTM locations were recorded utilizing a GPS instrument.

The location of a 2\textsuperscript{nd} order airborne EM anomaly on the claim group was also evaluated by prospecting the area designated by the survey. Unfortunately, the cause of the EM anomaly was not determined.
ASSESSMENT REPORT
JASON CLAIM GROUP

INTRODUCTION

This report describes the results of the first phase of an exploration program carried out on the Jason claims during the summer of 2007. The claims are located 36 kilometers north of Harrison Hot Springs and overlie the confluence of Cogburn and Hut creeks. The claims lie within and at the northwest extremity of the East Harrison Lake Nickel Belt. There has been little interest in the nickel-copper potential of the Cogburn area from the mid-1970s to the late-1990s. However, since 1999, when the Jason claims were first staked to the present, the belt has been the focus of exploration for mafic and ultramafic related magmatic copper and nickel sulphides and associated platinum group elements. One reason for this is that British Columbia’s only nickel mine, the Giant Mascot, lies at the southeast extent of the Nickel Belt near Hope.

The Jason claims are owned by the author, and were optioned to International Millennium Mining Corp. (IMMC) in February 2002. The prime purpose of the exploration activities in Phase 1 described herein, is to evaluate and precisely locate the source of a nickel, copper chromium and platinum anomaly detected through the use of stream sediment samples collected in 2004. This requires detailed sampling, prospecting and examination of the geology on Anomaly Creek, the stream that produced the anomalous sediment samples. Although Anomaly Creek lies a small distance to the west of outcrop containing sulphide bearing hornblendic pyroxenite, the source of the anomalous samples had not been detected in 2004. A bulk stream sediment sample (10 kg.) was collected and analyzed to determine what mineral species may be producing the copper, nickel and particularly the platinum group element anomaly. To prepare for a more detailed examination of the anomalous area, and to aid in the definition of a drill target, a grid is herein proposed over which lines will be established to enable detailed geology, geochemistry and geophysics surveys to be undertaken in Phase 2.

In 2004, work by IMMC had been done on four projects within the Jason claims (Figure 1). Drill targets had been established on Project 1, and Project 3. The Cu, Ni, PGE anomaly (Anomaly Creek), was established on Project 2. On the Cogburn Creek Road, east of Hut Creek, a self potential anomaly and magnetometer anomaly lies within Project 4. Therefore, it was necessary to establish recommendations for the location of the grid for project 4. In 2004 an airborne magnetometer and electromagnetometer survey had established a second order electromagnetometer anomaly at the eastern boundary of the Jason claims over Settler Creek. Consequently, the area of this anomaly was prospected to locate the source of the anomaly.
Figure 1: Four projects on the Jason Claims.
Work was last conducted on the Jason Claim group in 2004 however, because of mountainous terrain and the high volume and erosive capacity of Cogburn Creek and its tributaries, it was necessary, before deploying a larger exploration staff, to evaluate and provide access, where required, to the Jason claims. To insure that previously established drill targets are well located, additional work was required to mark and confirm exploration and drilling targets established in 2004 (Mark, 2004).

PROPERTY AND OWNERSHIP

The Jason claim group consists of six two-post legacy claims and seven tenures, all contiguous and located within the New Westminster Mining Division (Table 1 & Figure 2). The total area of the claims is 694.899 hectares.

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TOTAL AREA 694.899

The registered owner of the Jason Claims is David R. Haughton of Brentwood Bay, B.C. The property was optioned to International Millennium Mining Corp. (IMMC) of North Vancouver. The original option agreement is dated February 22, 2002.

LOCATION AND ACCESS

The Jason claim group is located approximately 9 kilometers east of Harrison Lake and straddles the confluence of Cogburn Creek and a tributary, Hut Creek. The east boundary of the claim group lies approximately 500 meters east of the confluence of Cogburn Creek and its tributary Settler Creek. The claims lie 29 kilometers, 15º E of the village of Harrison Hot Springs which is 90 kilometers east of Vancouver, British Columbia.
Figure 2: Tenures within the Jason claim group.
The geographical coordinates of the center of the claim group are: west longitude 121° 40’ 58”, north latitude 49° 33’ 0”. The Universal Transverse Mercator coordinates (B.C. Albers: 1312390, NAD 83, Zone 10 are Easting: 595,283 and Northing: 5,489,423. The NTS index is 92H/12E and the BCGS index is 92H052 (MTOL).

Access to the claims is available by 36 kilometers of winding mainly rough gravel road, from Harrison Hot Springs along the east shore of Harrison Lake to Lakeside Pacific’s log sorting yard. The yard lies on the east shore of Harrison Lake at Pretty Harbour, directly southwest of the junction of Cogburn and Talc Creeks. A logging road, (Cogburn Main) runs in an easterly direction, for 15 kilometers from the yard, along the length of Cogburn Creek. The west boundary of the claims intersects Cogburn Main at approximately 8.5 kilometers from Lakeside Pacific’s log sort yard.

The largest area of the claims lies south of Cogburn Creek. In order to gain access to the western portion of the claims south of Cogburn Creek, a section of deactivated logging road must be used. This road branches off to the southeast from Cogburn Main at 7.4 km. Since 2002, this road has been only available as a walking trail but in Phase 1 of this project, to improve access, it has been prepared so that it may be traversed by 4x4 pickup trucks. The trail provides access to the remnants of an old logging bridge which provides temporary access to Jason claims south of Cogburn Creek and on the west side of the claim group. In Phase 1 of the project, two of the remaining three logs on the bridge were used to support a surface that enables a small ATV or individuals to cross the Creek.

In 2004, debris flows had eroded portions of an overgrown logging road that connected the east and west sides of the claim group. In the past it had provided ready access to the Jason claims along the south side of Cogburn Creek. The deep gullies now dissecting this trail, limit access to walking and climbing to traverse the gullies.

**PHYSIOGRAPHY**

The Jason property is situated in the Pacific Ranges of British Columbia’s Coast Mountains. Elevations on the Jason claims vary from less than 300 meters along Cogburn Creek to over 1300 meters along the mountain ridge between Cogburn Creek and Talc Creek to the south. At lower elevations and on the claims on the north side of Cogburn Creek, slopes are moderate. However, on the south side of the Cogburn Creek Valley at higher elevations, slopes on the claims are steeper and approach and exceed 45 degrees.

The Cogburn Creek valley is the main physiographic feature in the area of the claims. Cogburn Creek flows west through its steep sided valley to a junction with Talc Creek. It then flows a short distance to Harrison Lake forming a large alluvial fan. On the fan is located an old airstrip and Lakeside Pacific Logging Company’s log sorting yard. East of Harrison Lake, up the Cogburn Creek valley, Settler Creek flows north, from the foot of Old Settler Mountain, through the eastern boundary of the Jason claims, into Cogburn
Creek. On the north central portion of the claims, Hut Creek flows south into Cogburn Creek.

Surficial deposits in the area and along the south and north sides of the Cogburn Creek valley include large alluvial fans formed by streams with steep gradients. These streams flow into Cogburn Creek through steep sided gorges that are most common at higher elevations. At lower elevations debris flows have recently (2004) carved deep gullies through fluvial and other surficial deposits. Away from the alluvial fans, the overburden consists of a mixture of colluvium, talus deposits and glacial till. At lower elevations, overburden tends to be thicker than deposits at higher elevations. At higher elevations, surficial deposits are commonly only a few meters in thickness, especially where outcrop is abundant.

Vegetation on the claims includes trees of the Coastal Douglas Fir biogeoclimatic zone, Douglas Fir, western red cedar and hemlock. Spruce, amabilis fir and birch are found at elevations less than 900 meters. Alder, willow and cottonwood are commonly found on old logging roads. Undergrowth is typically a variable mixture of salal, devil's club and salmonberry.

At lower elevations, clearcuts of various ages are common with their associated logging roads. However, more recently, helicopter logging has been used to harvest first growth timber at higher elevations.

Mean annual temperature is approximately 6.5° C and annual rainfall ranges from 1500mm to 3400mm at higher elevations.
FIGURE 3: GEOLOGY TALC-COGBURN CREEK AREA

Recent and Quaternary Deposits

Alluvium or fluvial deposits, colluvium, glaciofluvial deposits, glacial till

Cenezoic: Tertiary (Oligocene)

Granite, quartz diorite, granodiorite, diorite

Mesozoic: Middle to Late Cretaceous

Quartz diorite and granodiorite (Settler Creek body of Spuzzum Pluton)

Mesozoic: Middle Cretaceous

Dunite, peridotite, pyroxenite, hornblende, gabbro, diorite, altered pyroxenite & peridotite

Mesozoic: Early to Middle Cretaceous

Shale, phyllite and schist with local metavolcanic and metadiorite (Slollicum Schist)

Mesozoic: Triassic

Arenaceous metasediment, shale and schist with abundant pyrite (Settler Schist)

Paleozoic: Carboniferous

Shale and schistose metasediment (Cogburn Group, tectonic melange)

Paleozoic and Proterozoic

Metavolcanic and Metadiorite (includes Baird Diorite in Settler Mountain)

Thrust Fault

Symbol

Scale & Contour Interval

Scale: 1:50,000, 1 inch = 0.79 miles; 1 centimetre = 0.5 kilometres
Contour Interval: 1000 feet
Figure 3: Geology Talc-Cogburn Creek area.
GEOLOGY

Regional
The regional geology is complex as the area contains unconsolidated surficial deposits, metasedimentary rocks, metavolcanic rocks, acid-igneous rocks and basic to ultrabasic intrusive rocks. The surficial deposits include alluvium, colluvium, glacial-fluvial and glacial deposits. Rock types are granodiorite, quartz diorite, diorite, gabbro, hornblendite, hornblendic, pyroxenite, pyroxenite, peridotite, metavolcanics and metasediments (Figure 3).

The Nickel belt is composed of meta-volcanic, meta-sedimentary and plutonic rocks. Metamorphism in the metasedimentary units increases, on a regional basis from east to west across the belt from greenschist to amphibolite facies. However, where these units have been intruded by plutons of intermediate to ultramafic composition, they exhibit variable degrees of deformation and metamorphism, displaying textures and mineralogy ranging from those characteristic of contact metamorphism to migmatization.

The oldest rocks in the area are the metasediments and the metavolcanics. The metasedimentary units have been mapped as ranging in age from Carboniferous (Cogburn Assemblage), Triassic (Settler Schist) to Early to Middle Cretaceous (Slollicum Schist). Metcalfe, et al (2002) state that the time of emplacement of the Pacific Nickel Complex (Giant Mascot) is between 102 and 95 Ma.

The metasediments occur in the Slollicum Schist, the Settler Schist and the Cogburn Group. The Slollicum Schist, the most westerly unit, is composed of greenschist facies shale, phyllite and schist with local metavolcanic and metadiorite rocks. The Carboniferous Cogburn Schist adjacent and east of the dioritic rocks of the Spuzzum platon and the Hut Creek platon surround the mafic and ultramafic rocks of the prospect area. The mafic and ultramafic igneous rocks intrude metapelites, shale, slate and metasediments. These metasedimentary rock types have been mapped in larger quantities south and north of the Nickel Belt. The Nickel Belt is truncated on the west by the right-lateral strike-slip Harrison Lake fault (Late Cretaceous to Tertiary) and on the east by the Fraser River fault (25 Ma).

Thick surficial deposits mantle more than sixty percent of the bedrock to depths greater than 30 metres in the valley bottoms. Much thinner deposits occur on higher slopes where outcrop is more abundant.

Slollicum Schist, in this area includes shale and schistose metacherts and meta-pelites. The Settler Schist lies the farthest east and is considered to be Triassic. It is composed of high-grade arenaceous metasediments, shale and schist with abundant pyrite. The specific age of the metavolcanics is unknown. However, they have been included with the Baird Diorite of Settler Mountain. This group may range in age from Paleozoic to Proterozoic. The Baird Diorite in the old Settler Mountain may be Precambrian (Monger, 1989). The age of the basic intrusive rocks which host the nickel and copper bearing sulphides was...
estimated by McLeod (1975) to be 119Ma (Middle Cretaceous). The age of the Spuzzum batholith was estimated as 89 Ma (McLeod, 1975). The former ultramafic was considered by McLeod to represent the earliest phase of the predominately dioritic Spuzzum pluton (Monger, 1989). Within the Cogburn Creek to Talc Creek area, Lowes (1972) mapped the ultramafic rocks as being separated into subparallel segments by the Shuksan Fault Zone. The age of this thrust fault was stated to be Albian (Gabites, 1985) (Middle Cretaceous, 97.5 to 113 Ma).

The ultramafic rocks of the area between the Giant Mascot mine and Harrison Lake occur as lenses forming northwesterly trending belts lying east and west of Talc Creek. They can be traced from north of Cogburn Creek in this area, to Emory Creek near the Giant Mascot mine (Figure 4).
FIGURE 4:

LOCATION OF JASON GROUP & REGIONAL ULTRAMAFIC ROCKS

EXPLANATION

ULTRAMAFICS
GRANITE, DIORITE ANORTHOSITE
METASEDIMENTS
EXPLORATION TARGETS

The exploration targets are mineral deposits containing massive and disseminated nickel and copper bearing sulphides that have crystallized from a liquid Fe-S-O melt, immiscible with the host magmatic silicate melt. This type of deposit is classified simply as a copper-nickel magmatic deposit. These deposits are presumed similar to pipe-like and tabular ore shoots found at the Giant Mascot Mine. The mine is located about 10 kilometers north of Hope at the eastern end of the Harrison Lake Nickel Belt and 20 kilometers southeast of the Cogburn Creek alluvial fan at Harrison Lake. Knowledge of the origin of the deposit is embodied in its classification or type. A clear understanding of the origin of the targeted ultramafic deposits and their associated sulphides will greatly assist in the future location of these deposits.

Giant Mascot Mine

The Giant Mascot deposits lie 9.6 km northwest of Hope, on Zofka Ridge, between Emory Creek to the north and Stulkawhits Creek to the south. The Giant Mascot mine lies within a northwest-trending belt of basic to ultramafic rocks. This distinctive assemblage is herein referred to as the Nickel Belt.

The mine had changed names during its evolution. These names included: Pride of Emory, Giant Mascot, Giant Nickel, B.C. Nickel, Pacific Nickel, and Western Nickel. The mine has the distinction of having been the only significant economic producer of nickel within B.C.

The Spuzzum pluton diorite surrounds the Giant Mascot mine. In the Cogburn area the Hut Creek pluton is also enveloped by diorite. Mafic and ultramafic rocks including: dunite, peridotite, pyroxenite, hornblendite and gabbro occur as northwest trending lenses extending from the Giant Mascot Mine in the Nickel Belt to beyond Cogburn Creek (Figure 4). In spite of considerable debate regarding the origin of the sulphides, age of emplacement and relationship with associated diorite plutons at Hut Creek and the Giant Mascot (Ash 2002, Metcalfe et al 2002, Pinsent 2002), there is considerable potential for similar deposits throughout the belt.

Their still exists controversy regarding the origin of the sulphide deposits and their host rocks at the Giant Mascot mine. The ultramafic rocks hosting the Giant Mascot Mine were considered to be an early fractionation of the dioritic Spuzzum pluton by McLeod (1975). However, Ash (2002) suggests the possibility "that Giant Mascot is not primary but related to metasomatic interaction where the older ultramafic is intruded by the younger felsic plutons". There is no doubt that post-depositional alteration has been important. For example, at the Giant Mascot, The Pride of Emory and the Brunswick ore bodies are among the largest deposits of the Giant Mascot and are enveloped in hornblendic pyroxenite (Pinsent, 2002, Figure2), although other ore bodies occurred throughout in other ultramafic rocks. In addition, Clarke (1971) postulated that fault systems were favourable to the deposition of ore. Cairnes (1924) and Aho (1954, 1956) suggest that the ultramafic body may be younger than the Spuzzum Pluton. Therefore,
the exact origin of the ore deposits is uncertain. Nevertheless, the debate will continue, as there has been no unequivocal explanation regarding the relationship among the felsic intrusions and the ultramafic rocks and sulphides found at the Giant Mascot.

The deposits at the Giant Mascot Mine are crudely zoned, steeply dipping, intrusions, which in some cases are roughly concentric in cross section. Petrologic descriptions of associated rock types include: peridotite, olivine pyroxenite, pyroxenite, hornblende pyroxenite, hornblendite and gabbro. Crude zonation from a peridotite core to a hornblendite rim has been observed in some of the deposits. However, in some deposits reverse zonation also occurs. Therefore, the core of the ore body may be olivine barren or else olivine rich (Muir, 1971). The ore bodies are close to vertical in orientation, some are tabular, others are pipe-like in form and have diameters of approximately 10 to 50 meters.

Because of (1) the presence or calcium-poor pyroxene and orthopyroxene in ultramafic rocks, (2) the lack of podiform chromite deposits, and (3) the high content of nickel sulphide, the deposit is not classified either as an Alpine ultramafic or as an Alaskan ultramafic complex. However, because of the pipe-like form, the deposits of the Giant Mascot are structurally similar to the Alaskan-type deposits emplaced in an orogenic environment. Nixon and Hammack, 1991, describe the Giant Mascot as a synorogenic-synvolcanic copper-nickel gabbroid associated deposit.

Review of the literature indicates that faulting exhibits some significant control on this type of deposit. Also ore association with brecciation has been mentioned briefly in some reports. Four fault systems have been recognized (Clarke, 1971). One fault group striking 315°-355° and dipping 50°-75°NE is concluded to be pre-ore in age, with minor post ore movement. The second group of faults (15°-30°, 70°SE-70°NW) is closely associated with tabular ore bodies. The faults of group three (350°-10°, 55°E-55°W) are considered related to the second group and are common to all mineralized zones examined. The above three fault systems are all considered pre-ore and are postulated, by Clarke, to have established complicated zones of fracturing favourable to ore deposition. A fourth fault system (330°-30°, 20-30°E or W) is considered to be post ore. It has been reported that certain ore shoots have terminated against this fault type.

The following table lists the copper-nickel deposits that are related to ultramafic intrusions and that are listed as Minfile occurrences. These are described by the B.C. Provincial Geological Survey as tholeiitic intrusion-hosted nickel-copper deposits, indicating the uniformity of mineralization and host rocks. Three of these Minfile occurrences formed part of the Giant Mascot Mine.
TABLE 2: MINFILE OCCURRENCES NEAR THE GIANT MASCOT MINE

<table>
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</table>

* These form part of the Giant Mascot Mine

Pinseent (2002) reports that the “The mine is rumoured to have produced small amounts of platinum and palladium: however, there are no records of their production or presence in the concentrate.” However, he presents 14 analyses from Activation Laboratories of “platinum group elements” average: 1.07% Ni, 1.22% Cu, 148 ppb Pt, 202 ppb Pd, 17.3 ppb Rh and 60.2 ppb Au. Although the values show a great range of composition (i.e. Pt ranges from 1140 to-57 ppb) this indicates that the ores were not uniform in composition and that platinum PGE contents may be influenced by the volume of ore associated with each sample (dilution effect).

From 1958 to 1974, approximately 4,300,000 tonnes of ore were mined from this property. Nickel and copper were the prime metallic products with the ore grading 0.77 % nickel and 0.34 % copper with cobalt as a byproduct. However, chromium oxide, platinum, palladium, gold, and silver were also present (Assessment Report #16553). Higher grades of both nickel and copper occur within ore zones at the mine. For example, in 1936, the Mines Branch took eighteen samples of ore from several different sulphide bodies. Analysis yielded an average of 18.38% iron, 1.89% nickel, 0.14% cobalt, 0.31 % chromium, 10.87% sulphur, 0.7% copper and only a trace of arsenic (Minister of Mines Annual Report 1936, page F64). One 22.7 tonne bulk sample averaged 2.74 grams/tonne platinum and palladium and 0.68 grams/tonne gold.
In 1937, B.C. Nickel Mines had developed 1.2 million tons of ore at 1.38% nickel and 0.5% copper (RC.GEM, 1974, pg.105). Early records of samples of ore yielded 3.98 grams/tonne platinum and palladium and 7.89 grams/tonne gold. The chromium content of the ore averaged 0.2 to 0.4 % (Minfile report 092HSW004). Aho (1952) lists estimates of developed ore for the various ore bodies in the mine. Percentage copper ranged from 0.36 to 0.77. Percentage nickel ranged from 0.92 to 2.37. The mine closed in 1974 with reserves of 863,000 tonnes grading 0.75% nickel, 0.3% copper and 0.03% cobalt. The cumulative nickel and copper production from the mine was 26.8 million kilograms of nickel and 14 million kilograms of copper (Nixon & Hammack, 1991) from 22 mined ore bodies.

**Jason Property**

Figure 4 illustrates the location of the Jason Claim Group. In the northwest portion of the area and the Hut Creek grid (Project 3), is found diorite, which is quite magnetic and contains abundant magnetite. This occupies much of the Hut Creek pluton within the claim area. To the southeast, within the claims, at Discovery Creek, outcrops of hornblende pyroxenite containing disseminated sulphides have been mapped. Hornblende pyroxenite also occurs within the Project 2 (Anomaly Creek) area on the southwest side of the Hut Creek intrusion. This rock type also contains disseminated sulphides and is associated with stream sediments containing highly anomalous platinum values. The hornblende pyroxenite is interpreted to form a sulphide-bearing marginal phase of the Hut Creek Pluton.

Hornblende pyroxenite and hornblende diorite containing magnetite are characteristic of the basic to ultrabasic belt within which the Giant Mascot copper-nickel deposits occur. East of Discovery Creek on Project I, at East Creek and further to the east are found magmatic rocks including granite microporphry and biotite diorite. These rocks are thought to represent Lowe's Layered magmatic gneiss zones characteristic of contact margins of the Spuzzum and Hut Creek Plutons.

**PREVIOUS WORK**

**Exploration Prior to 1999**

Previous work on the Jason Property and surrounding area occurred primarily within the years 1969 to 1975. The Giant Mascot mine formed the Nickel Syndicate (Giant Explorations) and conducted the largest single exploration program in the area (Minfile: Settler Creek). The Nickel Syndicate operated during this time, in the hope of discovering additional ore, to expand and prolong mine operations. Following claim staking in 1969, in the Talc Creek/Cogburn Creek area, the exploration program conducted an airborne magnetic survey done by Seigel Associates (Crosby,1970), which lead to the definition of significant magnetic anomalies. As a result of this, seven target areas were developed. Detailed ground magnetic and Turam electromagnetic surveys were conducted on a sampling grid in conjunction with multi-media geochemical sampling (overburden, stream sediments, rock chips) and geological mapping.
(400 ft) separation on some lines]. Two of the selected areas were diamond drilled, as follows:

East of Settler Creek, three diamond drill holes were emplaced to an aggregate length of 457 m and located a short interval grading 0.3% Ni and 0.3% Cu (Berg and Clarke, 1971a). Southeast of Daioff Creek 17 holes were drilled to an aggregate length of over 1,219 m (4,000 ft). At the Daioff Creek site, copper and nickel sulphides consisted of weakly disseminated pyrrhotite and minor chalcopyrite. They were in part fracture-controlled and hosted by pyroxenite and peridotite. Assays yielded 0.19 percent nickel and trace copper. Drilling results did not indicate economic mineralization at either site and therefore the program ceased in 1975.

High magnetic relief occurs to over 3,500 gammas throughout the area and over the Giant Mascot deposit. This was determined from an airborne magnetometer survey, by Seigel Associates flown at 90m (1970), for the Nickel Syndicate. The Jason Claims cover a large portion of a concentric anomaly with magnetic values of over 3,500 gammas. This zone lies over Hut Creek and is here referred to as the Hut Creek pluton. The cause of the high magnetic relief was not known at that time. However, the Nickel Syndicate geologists observed magnetite in the peridotite. This is considered the probable cause of the high magnetic relief in peridotite throughout the area and the hornblende diorite of the Hut Creek pluton. Metasediments and biotite phase diorite exhibit lower relief in the 1,500 to 2,000 gamma range.

In March 20, 1972, Giant Explorations Limited (Nickel Syndicate) prepared a report titled: Geological, Geochemical and Geophysical Assessment Report on the Ni Claim Group (AR #3615). N.W. Berg authored the report. The area studied was referred to as Area Seven and was the last of the seven target areas selected by Giant Explorations in the Cogburn Creek and Talc Creek area east of Harrison Lake. The Jason claims include a portion of Area Seven. However, one of the SP anomalies located in Project 2, (Discovery Creek) by the author lies at the northeast corner of the grid between lines used by Giant Exploration. The other adjacent SP anomalous zone detected lies outside of the grid area (northeast corner) examined by the Ni Syndicate.

Berg, author of the Area 7 report, writes: "The most interesting aspect of Area 7 is the numerous and widespread exposures of hornblendic pyroxenite, and the accompanying pyrrhotite and chalcopyrite mineralization. This rock type is found in both upper and lower areas, and disseminated and lacy pyrrhotite is generally present. Based on the rock type and mineralization, this area represents one of the most exciting yet found, and it should be thoroughly examined."

Giant Explorations conducted additional studies on Area Seven, which resulted in assessment report #4071 dated December 18, 1972. The author of this report is R.A. Gonzalez, who was employed by Giant Explorations Limited. Gonzalez writes regarding Area Seven: "Sulfides are commonly present only in the hornblende pyroxenites. Sulfide mineralization is impressive, both pyrrhotite and chalcopyrite are present. Pyrrhotite occurs as lacy interstitial material and as clusters, disseminated pyrrhotite is rare." Geochemical, geophysical and geological surveys were undertaken.
Unfortunately, there is no detailed data listed or presented from the Turam survey mentioned in assessment report #4071. Gonzalez concluded (Pg. 8) "A ground Turam Survey over Area 7 outlined several anomalous areas. These anomalous areas also have coincident high geochemical values and high magnetometer response; they are also on or near geologically favourable ground. One such coincident anomaly was drilled with two short X-ray drill holes, and the results are favourable enough to warrant more drilling."

The Giant Mascot Mine closed in 1974. Therefore, Giant Explorations Ltd. was terminated and in spite of the highly favourable recommendations presented in assessment reports #3615 and #4071, no other assessment reports could be found on any further drilling done on the property.

**Exploration 1999**

In 1999, the author conducted an exploration and prospecting program to define target areas for more detailed work in the area drained by Cogburn and Talc Creeks. As a result, 12 Jason claims were staked. Float and outcrop samples were so abundant that they were collected as the primary sample type throughout the area. Sample type, location and description were recorded on field cards. These included samples from areas of favourable rock type (ultramafic rocks) and potential nickel/copper mineralization. From these samples, a suite of samples from potential exploration targets were analyzed by ICP multi-element analysis. Polished thin sections were made of samples from a nickel/copper mineral occurrence in ultramafic rocks on the Jason claims. An independent expert in the microscopic determination of ore minerals, Dr. J. Lusk, McQuarrie University, Australia, examined these sections. Examination of the polished thin sections indicated that the sulphides discovered were of magmatic origin. Twelve two-post claims, the Jason claims, were staked in the area including the southwest margin of the Hut Creek pluton, where new sulphide mineralization and stream sediment platinum/palladium anomalies had been discovered.

**Polished Thin Section Examination:** Examination of polished thin sections of hornblendic pyroxenites, (Haughton, 2000) shows evidence that sulphides from the Jason claims are magmatic in origin. The photomicrographs clearly show sharp grain boundaries between pyrite, pyrrhotite, chalcopyrite, and pentlandite. Pentlandite grains and exsolution textures showing flame texture where pentlandite has exsolved from pyrrhotite are indicative that nickel is contained in sulphides rather than just in silicate minerals. Textures showing sulphides interstitial to silicate phases are clearly shown. In addition, in other samples, circular cross sections of sulphides show clearly that immiscible sulphide globules have been trapped during quenching from a sulphur-saturated melt. These textural relationships are similar to those seen at Sudbury where sulphides are magmatic in origin.

**Exploration 2000**

In 2000 Haughton conducted a follow-up exploration program to evaluate targets defined in 1999 and to evaluate in more detail the Jason claims and a new discovery of magmatic copper/nickel mineralization in ultramafic rocks. The source of sulphide mineralized
houlders located in 1999 on the Jason 5 claim (southwest margin Hut Creek Pluton) was determined to be outcrop located in a zone of hornblendic pyroxenite.

In this area, four platinum-palladium and copper-nickel anomalous stream sediments were collected. This location herein referred to as Project 2, Anomaly Creek, is a new mineral discovery. This area and that at Discovery Creek (Jason 2) provide two distinct but widely separated outcrops of hornblendic pyroxenite. A ground based magnetic survey was done with a fluxgate magnetometer. This ground survey correlated with an airborne survey by Seigel Associates conducted for the Nickel Syndicate in 1970. A single traverse with a self-potential unit across the nickel/copper mineralization within Jason 2 located two significant anomalies, along an old logging road, each of magnitude -200 mv. One of the anomalies occurs adjacent to hornblendic pyroxenite containing disseminated sulphide mineralization. This direct association with disseminated sulphides led to the conclusion that the anomaly may result from sulphides in hornblendic pyroxenite. This last discovery warranted continued exploration in 2001.

In July 2000, the Jason 13 and 14 claims were staked and in October 2000 the Jason 15, 16, 17, and 18 two-post claims were staked.

**Exploration 2001**

Prospecting in 1999 had lead to the location of a large area of hornblendic pyroxenite containing nickel- and copper-bearing disseminated sulphides (Jason 2). A new discovery of sulphides in hornblendic pyroxenite was located in outcrop in 2000 (Jason 7).

In 2001, lines were blazed above an east-west trending logging trail on the Jason claims and geochemical multi-media samples were collected and analyzed. A self-potential survey was completed along the logging trail and along cut lines to locate the extent of the SP anomalies located in 2000. Unfortunately, large portions of the anomalies were off the lines and consequently pace and compass surveys were used to locate the position of these anomalous SP readings. In addition, HLEM, VLF-EM and magnetometer surveys were conducted along 1,250 metres of old logging trail across the SP anomalous area (Mark, 2002).

The results of work during 2001 were: Two large areas that have self-potential anomalies of -306 mv and -398 mv, respectively, were located off the blazed lines on the Jason claims. The -306 mv anomaly is part of a larger zone which also contains a -206 mv reading. This zone is east of Discovery Creek and south of Cogburn Creek and will be referenced as the Discovery Creek anomaly. The -398 mv anomaly is located on the north side of Cogburn Creek and the west side of Hut Creek and is referenced as the Hut Creek anomaly. The Discovery Creek anomaly, with the minimum value of -306 mv appears to commence within hornblendic pyroxenite containing the disseminated magmatic sulphides: pyrrhotite, pentlandite, chalcopyrite and pyrite. Also geochemical analysis of overburden indicates that anomalous copper and nickel values are associated with the anomaly. This suggested that copper and nickel-bearing massive magmatic sulphides might cause the anomaly. Anomalous values were measured over the
Discovery Creek SP anomaly when a Max-Min, horizontal loop, electromagnetometer (HLEM) and VLF-EM were used to conduct a survey across the SP anomaly (Mark. 2001). This supports the conclusion that the sulphides causing the anomaly are conductive, connected, and possibly massive. It was concluded that a grid should be emplaced over the area of the anomalous zone, which should then be used to conduct additional geological, geophysical and geochemical surveys. The geophysical surveys should include self potential surveys and other complementary geophysical surveys, such as VLF-EM and HLEM. The large self-potential anomaly located on the north side of Cogburn Creek along the Cogburn Creek logging road also lies within the Hut Creek pluton, and was an additional target area for geological, geochemical, and geophysical surveys.

**Exploration 2004**

In 2004 Geotronics Consulting Ltd. was retained by International Millenium Mining Corp. (IMMC) to prepare grids on Project 1 and 3 to delineate two known SP anomalies in order to define drill targets. SP anomalous zones totaled four on the two grids with two prominent zones on each grid. They ranged in size from a zone of 105 by 150 meters which reached a high of -279 mv; to a zone of 150 by 360 meters which reaches a high of -401 mv. Additional geophysical surveys including magnetic and VLF-EM surveys were also done on these two projects. The two SP anomalies on each of the two grids occur on the flanks of a broad magnetic high that also correlates with a VLF-EM zone. This indicates that the host rock contains magnetite and is conductive, perhaps being a hornblende pyroxenite. In support of this, hornblende pyroxenite mineralized with sulphides occurs to the immediate west of the western anomaly on the Project 1 grid site. In addition, each of the SP anomalies occurs on the side of a magnetic sub-high. This is similar to the Giant Mascot ore deposits, which are known to occur on the side of, or adjacent to magnetic highs.

On these two projects, detailed overburden sampling was undertaken. Unfortunately, because of thick deposits on alluvial fans, mantling the location of the SP anomalies, geochemical analysis of the overburden samples was only marginally successful on the Project #1 and #3 grids.

Project 2 (Anomaly Creek) was subjected to detailed stream sediment sampling to define the source of previous stream sediment Cu-Ni-PGE anomalies on Anomaly creek (Haughton, 2000). Anomaly Creek also produced the highest platinum result (95.8ppb) in a Ministry of Energy and Mines regional geochemical survey (Lett, 2002). This latter survey collected and analyzed stream sediment and moss samples from the drainage systems of the Nickel Belt, including the area containing the Giant Mascot mine. Analysis of Stream Sediment samples from Anomaly Creek produced samples with high levels of Cu, Ni, Cr, Au and PGEs. The most anomalous sediment samples yielded values of 0.12% Cu and Ni and 651 ppb Pt. The most anomalous area on Anomaly Creek is 250 meters west of an outcrop containing both diorite and sulphide bearing hornblende pyroxenite.
A fourth project was initiated east of Hut Creek and along the Cogburn Creek road. This resulted in an 800 meter survey which delineated one strong SP anomaly correlating with a VLF-EM conductive zone and a strong magnetic high. It also shows two weaker SP anomalies correlating with weak VLF-EM conductive zones further to the east. These are considered to be prime exploration targets.

Surficial and geology maps were prepared for projects 1 and 3.

In December of 2004, a combined airborne magnetic and electromagnetic survey was carried out over the Jason Claims as well as over the much larger Sutcliffe and International Millenium property that abuts the Jason claims the the north south and east. This proved most useful in interpreting the geology of the area.

2002 Publications
During 2002 four significant publications relating directly to the area were published by the British Columbia Geological Survey and associated authors in Exploration and Mining in British Columbia. These studies present information to be considered when developing models of formation for the sulphides associated with the ultramafics in the Nickel Belt.

The first paper was by Chris Ash (2002) who presented the results of mapping two east-northeast trending areas across the ultramafic units. His work covered the area containing the Jason claims. He considered the ultramafic rocks to be a package of remnant abyssal oceanic (ophiolitic) rocks. These are broadly grouped in the Cogburn Assemblage, referring to the oceanic crustal (ophiolitic) rocks of variably deformed and metamorphosed chert-argillite, mafic volcanics, gabbros and ultramafic rocks.

He refers to ultramafic bodies associated with the Hut Creek Pluton as xenoliths, present along the western margin where the pluton intrudes the north extent of the prominent eastern ultramafic belt, where it extends north across Cogburn Creek and along Hut Creek Valley. (Ash and Pinsent (2002) refer to the Hut Creek pluton as a larger unit including the Hut Creek pluton referenced in this report.). Ash presents the proposal that the ultramafic bodies are not early differentiates of the diorites, but are instead mafic xenoliths engulfed by the younger diorite intrusions. He comments that Lowe (1972) noted that the Spuzzum and Hut Creek plutons have metosomatic contact margins accompanied by ductile, deformed and well-banded marginal zones, termed "layered magmatic gneiss zones", as being a characteristic feature of the Spuzzum and the Hut Creek plutons.

He argues that nickel-copper (PGE) mineralization is consistently found only in ultramafic rocks of the Cogburn assemblage where they occur as xenoliths within the mid Cretaceous diorite intrusions. The reason for this was uncertain. Therefore, he proposes that the Giant Mascot ore is not primary but related to metosomatic interaction where the older ultramafics are intruded by the younger felsic plutons.
Pinsent (2002) in the *second paper* presents a different view of the formation of the sulphides. He presented the results of a study comparing and contrasting the geology and mineralization found at the Giant Mascot Mine with that of the Cogburn Creek area, east of Harrison Lake. He also reviewed the exploration potential of the ultramafic rocks.

The study demonstrated that the two areas of nickel-copper mineralization were similar in their geological setting and the style of mineralization. He considers that the sulphides are magmatic in origin and the deposits occur in bodies of ultramafic to mafic cumulate that are intimately related to Settler Schist and Spuzzum-type diorite. However, the role of the Spuzzum-type diorite in the formation of the copper-nickel deposits still remains uncertain.

Geochemical analysis of rock samples collected in both areas illustrated that copper, nickel, gold and platinum group element concentrations are similar to other gabbro-related deposits that have not suffered depletion of platinum group elements.

The conclusions of Pinsent’s paper suggest that evaluation of the Project 2 (Anomaly Creek), on the southwest Margin of the Jason claims is highly desirable particularly because of the high platinum, palladium, nickel, and copper values in stream sediments collected in that area.

*A third paper* of relevance to exploration in the Cogburn Creek area is that of Lett and Jackaman (2002). They conducted a stream geochemical survey in the Cogburn Creek - Stulkawhits area during 2001 to expand the knowledge of platinum group element dispersal. The study area covered approximately 500 square kilometers between Harrison Lake and the Fraser River. It comprised the Fraser River as well as the Cogburn, Settler, Talc, Emory and Stulkawhits Creek watersheds. This is an area approximately 20 kilometers in length containing the Giant Mascot at its southeast extremity and extending beyond the Jason claims at its northwest extremity.

Twenty-three stream water, 25 stream sediment, and 25 moss mat samples were collected from creeks draining catchments covering 10 to 15 square kilometres. Streams near known sulphide mineralization, including the Giant Mascot Mine and the Jason claims were sampled.

The highest platinum value (95.8 ppb) detected by the survey occurred in the -80mesh fraction of the sediment from a small stream within the Jason claims, which within this report is named Anomaly Creek and occurs within Project #2. The -230 mesh of the moss sediment from this site has lower platinum (76 ppb) but the highest palladium (18.6 ppb) found in the survey. This sediment also has up to 345 ppm nickel and 229 ppm copper (-230 mesh). (The location of this sample was approximately the same location as anomalous samples 114 collected by D. Haughton in 2000 and sample DH17 collected in 2004)

The -230 mesh fraction of moss sediment from Stulkawhits Creek downstream from the Giant Mascot Mine contained the second highest platinum (89.2 ppb) and palladium (10
In the area sampled, the -230 mesh sediment samples for platinum and palladium were lower than the -80 moss sediment samples. However, in the -230-mesh sediment, samples were anomalous with respect to platinum and palladium but showed high values of the pathfinder elements copper and nickel.

The fourth paper relating to the origin of the Giant Mascot Mine is that of Metcalfe, McLaren, Gabites and Houle (2002). They propose a model for the mine that is based upon the model for the Aquablanca Ni-Cu deposit in Spain. They suggest that the mafic silicate melt containing the Ni-Cu-PGE enriched magmatic sulphides is the mafic component of a hybrid system coeval with a felsic melt. A transpressive stress field permitted injection of both the mineralized pipes containing the sulphide ores of the Giant Mascot but also the apophyses of felsic (dioritic) magma observed in the mafic and ultramafic rocks. This model explains that sulphide-silicate crystal mushes have been injected along linear zones of weakness either by mechanical or high temperature hydrothermal emplacement. The “near-contemporaneity of the Pacific Nickel (Giant Mascot) and Spuzzum intrusions” is an essential and key component of their argument.

**PHASE 1 OBJECTIVES**

Since work had not been done on the Jason Claims since 2004, logging using haul trucks had ceased along Cogburn Creek. Therefore, log haul roads were deteriorating and access was severely restricted. Considering this and that three years had passed since the four projects on the Jason claims had been visited, Phase 1 was designed as a two man party to achieve important preliminary objectives. This was preparation for a larger Phase 2 program with increased personnel that could be guided by the work and findings achieved in Phase 1. Therefore, Phase 1 was designed to accomplish the following:

1) **Project 2 (Anomaly Creek)**

Determine the source of the Cu, Ni, Cr, PGE anomalous samples collected in 2004 in the upper reaches of Anomaly Creek. This requires the collection of closely spaced samples to precisely locate the source of the previously collected anomalous stream sediment samples. Since no sulphide bearing rock samples had been collected or observed on Anomaly Creek, one bulk (10kg) sample was collected to identify platinum minerals and Cu and Ni sources.

Examine the bedrock and surficial geology on Anomaly Creek in the anomalous zone above the logging road providing access to the area. Positive identification of the rock types and geology is a necessary element in the following components of the program. Therefore, rock samples collected were submitted to Vancouver Petrographics to provide detailed petrographic reports including identification of the sulfide and silicate minerals in polished thin sections.

Define the Grid limits (location, extent and orientation) for VLF-EM, Magnetometer, Self Potential and Geochemical sampling programs for Phase 2
Recommend the type of geochemical samples, (i.e. overburden B1 samples or Mobile Metal Ion (MMI) samples) for the grid at Anomaly Creek. This will depend on the thickness and type of till and colluvium.

2) Project 1 (Discovery Creek) and Project 3 (Hut Creek)
Evaluate, and recommend access routes or means of access to each proposed drill target defined in Projects 1 and 3. This is necessary, as a result of severe access restrictions that have occurred since 2004.

Outline, using SP equipment, drill targets previously identified over a grid (50 meter line spacing) in 2004 and locate, using GPS to obtain UTM coordinates of each drill site. Flag and mark each target using a post or stake to assist in future rapid deployment of drill rigs. Drill site location, for project 2 (Anomaly Creek) may be determined after the geology, geochemistry and geophysical reports resulting from work in 2007 have been completed.

3) Second Order EM Anomaly (Settler Creek)
Prospect the 2nd order airborne electromagnetic anomaly on Settler Creek, located by Aeroquest survey, 2004 at the east boundary of the Jason Claims. Based on the geology or mineralization observed, recommend if a grid should be established there, to evaluate the potential for mineralization.

4) Project 4 (East Hut Creek)
Define grid location, and dimensions for project #4, east of Hut Creek.

ACCESS EVALUATION AND REMEDIATION

Access to the Jason Claims was blocked in early May. At approximately 6.8 kilometers, the Cogburn Creek road was blocked by two rock slides. At the location of the slides, the road is constructed on a sliver fill along Cogburn Creek. Two large rock masses prevented passage of vehicles past this point in the road. Therefore, SquareLog Lumber Co. was retained to remove one large rock mass from the road and to clear the slide enough to allow a pickup truck past the second rock mass (Figure 5). Removal of the first rock mass and clearing of slide debris, provided a minimum of about 0.6 meters between the side of the pickup and a precipitous drop-off to Cogburn Creek below. The second rock mass on the road causing this restriction could only be removed through the use of a drill and explosives.
Further east along the Cogburn road, there were several locations along the road where streams had flooded and washed out portions of the road. Most could be crossed by use of a 4X4 pickup truck. However, at kilometer 11.3, one washout had removed a culvert and was flowing through a channel eroded across the road. Since no loaders were available a portion of the channel was filled manually with cobbles and boulders to enable safe passage of the pickup truck beyond this point. To access Project 1 on the South side of Cogburn Creek and directly west of Settler Creek, Cogburn Creek must be crossed at a concrete and steel bridge at kilometer 12.1 on the Cogburn Creek road. However, about 400 meters beyond the bridge, on the road leading to Settler Creek, a major washout had occurred that could not be crossed by truck and must be crossed on foot. On walking to Settler Creek, a distance of about 2.5 kilometers, it was observed that an old log bridge that leads to an overgrown logging road to Project 1(Discovery Creek) was still intact.
WEST JASON - ANOMALY CREEK

UTM NORTH IS 59' EAST OF TRUE NORTH
MAP CENTER 49° 32' 50'' N  121° 41' 53'' W

Figure: West Jason - Anomaly Creek
Access to Project 2 (Anomaly Creek) is by a trail off Cogburn Main at 7.4 kilometers that extends in a southeast direction for 0.6 kilometers to an old log bridge with a 30 meter span that had in the past enabled passage to the south side of Cogburn Creek. However, the bridge had been stripped during previous spring high water levels and most of the logs composing the bridge had been lost down river. In order to facilitate Phase 2 personnel to travel safely across the remnants of the old bridge, the trail was cleared, using an excavator, to enable transport of timber and lumber to the bridge and to enable 4x4 pickups to transport workers to the bridge. A plank surface was placed on two of the remaining three logs spanning the Creek and wooden safety rails were installed. The planked surface on the two logs will allow the passage of small ATVs across the bridge to enable transport of men and equipment over the old logging road (now a trail) to Anomaly Creek. The trail on the claims was cleared and brushed to enable passage of an ATV over the 3 kilometer distance which climbs more than 350 meters from the bridge site.

PHASE 1 ACHIEVEMENTS

1) Project 2 (Anomaly Creek)
Figure 6 illustrates the location of the trail below the gossan (Figure 7) zone on Anomaly Creek. Anomaly Creek forms a deep ravine upstream, south of the trail for approximately 130 meters. The average slope of Anomaly Creek and the surrounding terrain above the trail is about 45º. Wherever the stream could be reached safely and sediments were available, stream sediment samples were collected. One bulk stream sediment sample (14.9 kg) was collected from a depression where the stream met the trail (0 meters) and 10 stream sediments and 11 outcrop samples were collected up the stream beyond this point.

Field cards were used to describe the characteristics and location of the stream sediments and outcrop samples. These are listed in Appendix III.
Stream Sediment Samples: The majority of the stream sediment samples are composed of 80% sand, 10% gravel, and 10% silt. Above an elevation of 565 meters, at the trail, the stream depth was shallow and varied from about 5 centimeters to 15 centimeters. Stream width was, on average, less than one meter, except where it flowed over a large smooth outcrop of diorite before it intersected the trail.

One hundred and forty meters along the slope above the trail, measured by hip chain, was located the gossan zone. This 15 meter zone was most visible in the banks of the stream. Overburden in the steam banks where the gossan is exposed is dark brown to orange-brown. Gossanous outcrop was visible in the center of the stream where shallow water was flowing over outcrop and rock debris. The gossan zone is characterized by patches of highly decomposed gossanous rock mantled by rust coloured masses of overburden intermixed with brown overburden. Stream sediment samples from 0 meters, at the intersection of the trail, to 170 meters, beyond the gossan zone, contain the highest levels of Cu, Ni, Co, Cr, Au, Pt, Pd and Rh. The range of values for the six stream sediment samples collected from 0 to 170 meters are presented in Table 3. These values are compared to the maximum values for two stream sediments collected further upstream beyond 170 meters.
Figure 8: STREAM SEDIMENTS: Cu Ni Co

Figure 9: STREAM SEDIMENTS Au Pt Pd
TABLE 3: CONCENTRATION OF ELEMENTS 
ANOMALY CREEK STREAM SEDIMENTS

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</tr>
<tr>
<td>Chromium</td>
<td>982-873 ppm</td>
<td>342 ppm</td>
</tr>
<tr>
<td>Magnesium</td>
<td>9.28-8.62 %</td>
<td>3.89 %</td>
</tr>
<tr>
<td>Gold</td>
<td>24-12 ppb</td>
<td>1 ppb</td>
</tr>
<tr>
<td>Platinum</td>
<td>111.7-23.4 ppb</td>
<td>0.3 ppb</td>
</tr>
<tr>
<td>Palladium</td>
<td>37.1-18.3 ppb</td>
<td>&lt;0.5 ppb</td>
</tr>
<tr>
<td>Rhodium</td>
<td>1.5-0.9 ppb</td>
<td>&lt;0.1 ppb</td>
</tr>
</tbody>
</table>

From the above table it is clear that the source of all of the anomalous elements are associated with the gossan zone.

Two charts displaying this data are presented as Figures 8 & 9. Values plotted for contents less than a specified value are reduced by one integer after the decimal point (i.e. < 0.5 = 0.4). The bar chart showing the stacked concentration values for Cu Ni and Co indicates that the highest cumulative values occur at the location of sample W6 at 170 meters upstream from the trail very close to the source. This also illustrates that stream sediment samples upstream of 170 meters are depleted in Cu, Ni and Co. Those stream sediments downstream and sample W6 are enriched in Cu, Ni and Co.

The results are similar for the bar chart for stacked concentrations for Au, Pt and Pd. W10 a sample below the gossan zone at 110 meters shows the highest concentration of Au, Pt and Pd. This is likely due to the high specific gravity of the PGE metal or minerals. Unlike Cu, Ni and Co, the PGEs and Au have concentrated slightly further downstream from their source.

A similar situation was displayed in 2004 when the highest copper, nickel and cobalt values in stream sediments were in sample #8: Cu 1192.3 ppm, Ni 1208.6 ppm and Co 88.3 ppm. Au and PGE content of sample #8 were Au 34 ppb, Pt 65.4 ppb and Pd 78.5 ppb. However, the next sample collected downstream from sample #8 contained Au 33 ppb, Pt 651.1 ppb and Pd 42.1 ppb. As can be seen, the next sample downstream contained Pt values that were 10 times higher than sample #8. Judging from this year’s detailed examination of Anomaly Creek, it is concluded that this was likely the result of accelerated erosion in 2004 of the sulphide bearing rock and the placer-like concentration of platinum downstream from the gossanous source.
A bulk stream sediment sample was collected where Anomaly Creek intersected the trail. This was south and downstream from the gossan zone. The bulk sample was analyzed by Overburden Drilling Management Limited for Cu, Ni, Au and PGE minerals. They identified chalcopyrite, pyrrhotite and pentlandite in the bulk stream sediment. In addition, approximately 100 grains of sperrylite were identified along with 8 grains of gold. The lack of observation of Pd minerals suggested that sulphide or telluride minerals are unstable in the stream environment. Two hundred grains of chromite indicate that the source is rich in chromite. Red Cr rutile was also abundant.

**Outcrop samples:** The outcrop samples collected consisted of hornblende diorite, altered hornblende pyroxenite from the gossan zone, gabbro, aplite and skarn samples. The gabbro, pyroxenite, gossan samples and skarn samples were chemically analyzed. Results of the analysis are presented in Appendix IV. Only the gossanous samples and the pyroxenite collected from the gossan zone showed high levels of Cu, Ni, Co, Cr and PGE levels. The gossanous samples were coated with a thick layer of dark brown iron oxide. However, these appeared to be composed of altered hornblende pyroxenite bearing the sulphides pyrrhotite, pentlandite and chalcopyrite. Table 4 below shows the maximum values for the five anomalous hornblende pyroxenites.

**TABLE 4: ANOMALY CREEK OUTCROP SAMPLES FROM THE GOSSAN ZONE (MAXIMUM VALUES)**

<table>
<thead>
<tr>
<th>SAMPLE #</th>
<th>Cu ppm</th>
<th>Ni ppm</th>
<th>Co ppm</th>
<th>Cr ppm</th>
<th>Au ppb</th>
<th>Pt ppb</th>
<th>Pd ppb</th>
<th>Mg %</th>
<th>Mn ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3</td>
<td>6295.3</td>
<td>6418.3</td>
<td>291.7</td>
<td>1140.0</td>
<td>169</td>
<td>777.3</td>
<td>445.8</td>
<td>11.40</td>
<td>1294</td>
</tr>
<tr>
<td>W5</td>
<td>2656.0</td>
<td>2196.4</td>
<td>173.9</td>
<td>1144.3</td>
<td>73</td>
<td>564.6</td>
<td>351.8</td>
<td>9.61</td>
<td>1244</td>
</tr>
<tr>
<td>W13</td>
<td>466.1</td>
<td>408.2</td>
<td>93.7</td>
<td>587.9</td>
<td>9</td>
<td>0.9</td>
<td>3.9</td>
<td>8.96</td>
<td>1808</td>
</tr>
<tr>
<td>W14</td>
<td>1618.6</td>
<td>1362.2</td>
<td>151.1</td>
<td>693.8</td>
<td>39</td>
<td>503.6</td>
<td>465.1</td>
<td>6.97</td>
<td>1033</td>
</tr>
<tr>
<td>W15</td>
<td>5252.9</td>
<td>3497.1</td>
<td>206.2</td>
<td>1117.6</td>
<td>222</td>
<td>391.6</td>
<td>307.2</td>
<td>10.33</td>
<td>1340</td>
</tr>
</tbody>
</table>

These values are indicative that there is a strong correlation between Magnesium and Cu, Ni and PGE elements. Therefore, the noritic character of the rocks, or presence of orthopyroxene in these rocks may be related to the mechanism of sulphur saturation producing the Cu, Ni and PGE bearing minerals formed from the resulting immiscible Fe-S-O melt.
**Anomaly Creek Geology:** Below the gossanous zone on Anomaly Creek to the trail crossing the creek, the outcrop is composed of a foliated hornblende diorite containing two to three percent magnetite ilmenite and 0.5 % magnetite. Pyrite is minor.

Within the gossanous zone, where outcrop is exposed the rock is an altered olivine orthopyroxenite (Figure 10). It is now composed primarily of tremolite/actinolite (65-70%) with relic orthopyroxene grains and minor olivine grains surrounded by medium to very coarse grains of tremolite/actinolite. Sulphides are interstitial to the silicates and form patches up to several mm across, Figure 11, dominated by pyrrhotite with lesser pentlandite and locally abundant chalcopyrite. Ilmenite/magnetite and chromite are present in small quantities forming anhedral patches up to 0.2 mm in size. In a typical sample from the gossan zone, the sulphides were found in the ratio: pyrrhotite/pentlandite/chalcopyrite = 20/5/1.

![Figure 10: Gossanous outcrop of altered olivine orthopyroxenite.](image)

South of the gossan zone, a highly deformed mixture of diorite and mafic rock was observed. These are referred to, at this time as fusion tectonites. They may be reclassified after more detailed examination in Phase 2.
A metamorphosed porphyritic aplite north-south trending dyke was observed (Figure 12) where Anomaly Creek had exposed bedrock over the hornblende diorite and the fusion tectonite. The aplite appeared to be a late intrusive phase cutting these latter rock types. The dyke had been faulted and displaced at two locations where observed. Consequently, it was not continuous. It was observed in float samples south and at higher elevations above the gossan zone. Some of the float samples of aplite were notable as they had a rust coloured, rind resulting from the breakdown of considerable pyrite contained in some samples. Selected samples were analyzed but showed no anomalous base or precious metal content.
Anomaly Creek Geophysics: Previous geophysical work on the Jason Claims (Mark, 2004) had included self potential, magnetometer, VLF-EM and airborne magnetometer and electromagnetometer. All instruments had yielded information that has proved useful in defining drill targets and the trend of anomalous zones on each project.

In Phase 1, the only geophysical instrumentation that was available is that for self potential measurements. However, this is the first phase of a two phase program. In Phase 2 a grid will be established in order to precisely define the locations of additional geophysical and geochemical data that will be collected. In Phase 1, the SP instrumentation will be used to simply estimate, on a preliminary basis, if there is a significant range of millivolt readings to define anomalous areas. Therefore, SP readings were taken along the west side of Anomaly Creek from about 5 meters south of the trail that intersects the creek to a point about 140 meters upstream (south) as measured using a GPS. The resultant survey results are displayed in Figure 13. Although the stations established for the readings had variation with respect to their easting location, the data indicate that there will likely be a minimum variation of more than 60 millivolts. This should provide sufficient variation to delineate anomalous areas. The data also indicate that it would be desirable to conduct additional reconnaissance surveys to establish the location of high positive locations that can be used as locations for an anchor or reference base station electrode. Because water is flowing through the gossanous zone, the preliminary data suggests that readings near Anomaly Creek and the present gossan zone in the creek, may not show large millivolt contrast. This is typical of SP surveys close to other streams over bedrock containing disseminated sulphides. It has been the author’s experience that the presence of water saturated soil or standing or flowing water over
Figure 13: Self Potential (SP) readings on the west bank of Anomaly Creek

sulphide bearing bedrock reduces millivolt readings considerably compared to readings in terrain where soil is not saturated. Therefore, it is expected that even if there is a considerable amount of sulphide mineralization, as in the gossan zone, highly anomalous SP readings may only be produced a short distance from the stream (i.e. 25 meters) and beyond. However, if the gossanous zone has a shallow dip or is extensive, then SP instrumentation should be useful in defining the trend of the gossanous zone beyond 25 meters.

Because of the concentration of magnetic pyrrhotite in the samples, magnetometer readings are expected to provide an excellent indication of the location of the mineralized bedrock in and beyond the stream banks.

**Drill Target Definition:** Analysis of outcrop samples and preliminary evaluation of the geology has indicated the gossan area is an outcrop exposure that may represent an orogenic intrusion bearing magmatic sulphides containing Cu, Ni, Pt and Pd values comparable to those of the Giant Mascot ore deposits. Therefore the area of the gossan
zone is a prime drill target. In order to define the optimal location for a drill it is necessary to construct a grid over and around the gossan zone. Except in the streambed, close to the erosional channel of the stream there is little outcrop exposure. Consequently, it is recommended that geochemical and geophysical surveys be undertaken.

From examination of overburden exposed in the banks of Anomaly Creek overburden in the area is primarily composed of a mixture of glacial fluvial deposits, colluvium and till. The overburden is estimated in this area to be approximately two to three meters thick. Sampling using B1 horizon soils and MMI sample procedures should be productive. As in Projects 1 and 3, geophysics including self potential, magnetometer and VLF-EM will assist in locating the optimal drill target location.

Because the terrain is extremely difficult to work in (helicopter clearcut, 45 degree slopes, old growth forest) and the crew to cut a grid was limited to three men it was necessary to limit the size of the operational grid. The grid is composed of a north south baseline that will lie on the west side of Anomaly Creek. The orientation of the base line will be UTM north. The grid will have the dimensions of 175 meters (north-south) x 250 meters (east-west). One hundred meters of the grid will be located east of Anomaly Creek in the clearcut and 150 meters should extend west of Anomaly Creek through the first growth timber. Because the Giant Mascot pipe-like ore zones have small horizontal dimensions averaging 10 to 50 meters, the grid lines are 25 meters apart. Over the gossan zone a smaller grid should be placed to insure that the trend of the mineralized zone is detected. This grid would be 200 meters in an east-west direction and 50 meters in a north-south direction. Lines should extend 100 meters on each side of the creek. On this grid three lines spaced 25 meters apart run in an east west direction and sample spacing along these lines should be at 12.5 meter intervals. Sample spacing on the remaining lines of the grid should be at a maximum of 25 meter intervals.

2) Project 1 (Discovery Creek) and Project 3 (Hut Creek)
Once the rock slides were cleared from the Cogburn Creek road (km 6.8), Hut Creek could be accessed with a 4x4 pickup truck.

Project 1 can be reached by driving east along the Cogburn Creek road, crossing to the south side of Cogburn Creek and driving west to Settler Creek. However, after crossing Cogburn Creek at kilometer 12.1 using a concrete and steel bridge it was necessary to stop at a washout and walk approximately 2.5 kilometers to access Project 1 (Discovery Creek).

For future access with a drill truck, the washouts on the north and the south side of Cogburn Creek on Lakeside Pacific’s logging road will have to be filled and culverts added where necessary. The log bridge crossing Settler Creek must be examined to determine its condition. The bridge deck must be resurfaced and supporting timbers used to strengthen the bridge. After this year, if it is still standing, it will have to be repaired so that it will support a drill truck. Presently, the west side of the bridge has slumped so that the west bank would require removal of overburden to establish a driving surface level.
with the bridge deck. To allow access by vehicles such as a drill truck, the trail west of the Settler Creek bridge would have to be brushed and cleared. This would enable vehicle access to the drill target 40 meters northeast of the road. However, a trail could be developed to this drill site east of East Creek by clearing the edge of the logging trail and brushing a trail off the road to the site.

Access to the west drill site lies between two creeks, East Creek and Discovery Creek. To access this drill site, East Creek must be crossed. A bulldozer and excavator would likely be required to clear a path through a large debris flow that has infilled East Creek (Figure 15). Once past East Creek, the logging trail must be brushed and cleared. Once this is done a drill truck could readily access the second drill site which is on the south side and adjacent to the logging trail.

Figure 14: Debris flow on East Creek.

Discovery Creek drill target locations were detailed by Self Potential. This was done at two locations: 1) East of Discovery Creek and 2) East of East Creek. To insure accurate locations a GPS was use to obtain UTM coordinates.

Hut Creek is accessible by means of the logging road Cogburn Main, on the north side of Cogburn Creek. This year a few small washouts had to be crossed using the 4x4 pickup truck. However, in the future, it is likely that Lakeside Pacific or other logging contractors may maintain the road. Two drill targets at Hut Creek are a short distance from the road and are may easily be reached by clearing a short trail from the road. A large SP anomaly extends in a southwest direction from the edge of the south side of Cogburn Main to the minimum millivolt anomaly 55 meters south of the road. The entire anomaly is more than 110 meters long. The two most intense (minimum mv readings) end points of this large anomaly have been marked by two four-sided posts. A third SP
drill target lies approximately 30 meters from the north side of the road. Blaze marks were placed on a Cedar tree at the anomaly. Hut Creek contains two more anomalies that in 2004 were more negative than -300 mv. They are more remote from the road but could be considered as drill targets depending on the drill results obtained from the previous two targets.

The largest drill target at Hut Creek could be drilled directly from the Cogburn Road at its north end, the point where it intersects Cogburn Main. This assumes that there is no logging truck traffic on the road. The second drill target on the north side of the road may be reached by clearing some trees and using a bulldozer to produce a drivable surface on the fluvial gravels and boulders.

Figure 15: Preparing a post marking SP anomaly at Hut Creek (Project 3).

The drill targets located in 2004 along grid lines were surveyed in Phase 1 using Self Potential equipment to locate the anomalous SP minimum values. To assist in their future location, these anomalies were marked with posts or blaze marks (Figure16). The UTM coordinates of the drill targets for Discovery Creek and Hut Creek are listed below in Table 5.
### TABLE 5: PROJECTS 1 & 3, DRILL TARGETS: UTM COORDINATES

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>EASTING</th>
<th>NORTHING</th>
<th>GRID COORDS</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISCOVERY CRK</td>
<td>595,226</td>
<td>5,490,226</td>
<td>3+00E, 0+00N</td>
<td>East of East Crk Marked by Flagging</td>
</tr>
<tr>
<td>Project 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISCOVERY CRK</td>
<td>595,111</td>
<td>5,490,170</td>
<td>1+00E, 0+50N</td>
<td>East of Discovery Crk Tree blazed on four sides</td>
</tr>
<tr>
<td>Project 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUT CRK</td>
<td>594,532</td>
<td>5,490,516</td>
<td>5+30E, 1+10S</td>
<td>Long Anomaly Post #1</td>
</tr>
<tr>
<td>Project 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUT CRK</td>
<td>594,444</td>
<td>5,490,461</td>
<td>4+50E, 1+57S</td>
<td>Long Anomaly Post #2</td>
</tr>
<tr>
<td>Project 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUT CRK</td>
<td>594,519</td>
<td>5,490,543</td>
<td>5+5E, 0+75S</td>
<td>Cedar Tree blazed on 4 sides</td>
</tr>
<tr>
<td>Project 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* NAD 83, Zone 10

3) **Second Order EM Anomaly (Settler Creek)**

In 2004, Aeroquest airborne EM surveys located a second order EM anomaly across Settler Creek. The specific location is outlined on the map showing a contoured map of the airborne magnetic survey (Mark, 2005). The rock type in the area of the anomaly was hornblende diorite.

The location of this anomaly was prospected but no sulphides other than those normally seen in diorite were observed. It is recommended that the mapped location of the anomaly be confirmed. Since no gossanous zones or evidence of sulphide mineralization were observed a grid location can not be recommended.

4) **Project 4 (East Hut Creek)**

On Project 4, east of Hut Creek an SP, VLF and magnetometer surveys were conducted east from the Hut Creek bridge along the Cogburn main access road. Mark (2004) states that “the magnetic surveying revealed a strong anomaly that correlates directly with the first SP anomaly centered about 125 meters from the bridge. Occurring at the eastern edge of this magnetic/SP high is a VLF-EM conductive zone as indicated by the field strength and Fraser Filter results.” The survey also shows two weaker SP anomalies correlating with weak VLF-EM conductive zones further to the east. These were considered to be prime exploration targets.

On Project 4, east of Hut Creek, because of the steep terrain along the south side of Cogburn Main, it is advised that any base line constructed should run approximately north-south and lines run east-west. Such a grid could be oriented so that its baseline runs UTM north-south. The grid proposed is 700 meters along Cogburn Main by 500 meters wide. Because of the steep terrain only 100 meters is presently required south of the road.
Because there are great thicknesses of fluvial overburden, mobile metal ions (MMI) are recommended as the geochemical sample of choice. Magnetometer, VLF-EM and SP surveys have detected anomalous areas and should continue to be used in this area. Because fluvial fan deposits are thick and mantle the bedrock, the character of the geology can not be observed directly. Therefore, this project possibly should be conducted after drilling has occurred on Hut Creek (Project 3). This would assist in defining the significance of the geophysical anomalies that occur on this project.

CONCLUSIONS AND RECOMMENDATIONS

1) Since work had not been done on the Jason Claims since 2004, one objective of Phase 1 of this 2007 exploration program was to evaluate access to the Jason claims and to ensure that safe access was provided for crews carrying out exploration work on Project 2 (Anomaly Creek), in Phase 2. This objective was achieved by SquareLog Lumber Co. through the construction of a wooden planked surface with side safety rails over two of the three remaining logs of an old bridge over Cogburn Creek.

2) Preliminary exploration work in this phase of the exploration program located sulphide mineralization in outcrop in a gossan zone on Anomaly Creek. This is clearly the source of anomalous Au, Cu, Ni and PGE mineralization that had been detected since 1999, using stream sediments, in the vicinity of Anomaly Creek. In a bulk stream sediment sample the Pt arsenide Sperrylite was identified. This mineral is a Pt bearing mineral found at Sudbury and the Bushveld complex. Both of these are magmatic deposits. Eight grains of native gold were also identified. Both chromite and abundant red rutile were identified in the bulk stream sediment sample. A sulphide bearing outcrop rock sample from the gossan zone was examined in thin section by Vancouver Petrographics and classified as an altered olivine orthopyroxenite that contained relic orthopyroxene grains and minor olivine grains surrounded by medium to coarse grains of tremolite/actinolite. Grab samples from the outcrop contained up to 0.63 % Cu, 0.64% Ni, 777ppb Pt and 465ppb Pd. These values are comparable to the ore grades at the Giant Mascot mine. The sulphides are magmatic and similar to interstitial sulphides described from the mine. In some ore shoots these had the appearance of a “crystal mush.” The interstitial sulphides in a cut slab of the olivine orthopyroxenite were several millimeters in diameter, with some grains having 20 mm diameters in cross section.
3) As a result the high Cu, Ni and PGE values in outcrop, this area contains a drill target. Therefore, it is recommended that a 175 x 250 meter sampling grid be established over the gossan zone. This grid should be used to locate and collect multi media samples especially overburden B1 and MMI overburden samples. Geophysics including SP, VLF-EM and magnetic surveys should also be undertaken to define the optimal drill target location.

4) Previously (Mark, 2005), drill targets had been defined for Project 1 (Discovery Creek) and Project 3 (Hut Creek). SP surveys defined anomalous areas under fluvial deposits. These anomalous areas may also be ore shoots similar to those found at the Giant Mascot. With the location on Anomaly Creek of a possible ore shoot similar to that found at the Giant Mascot mine, the potential for these targets to also be similar ore shoots has increased. Therefore, in preparation for a future drill program, detailed SP surveys were conducted between and along project grids to define the optimal drill targets. The UTM coordinates of these precise locations were determined using a GPS.

5) The area of the second order airborne EM anomaly across Settler Creek located in 2004 was prospected. However, no sulphide mineralization was observed in the diorite rocks observed in the area. Therefore, no recommendations are presented regarding placement of an exploration grid.

6) On Project 4, east of Hut Creek, surveys along Cogburn main located coincident or closely associated SP, VLF and magnetic anomalies (Mark, 2004). A 700 x 500 meter grid is proposed along Cogburn Main. The 500 meter width should be oriented north-south. Because of steep terrain only 100 meters is recommended south of Cogburn Main. The construction of this grid should be dependent on favourable results of a drill program on Project 3. If the grid is emplaced, because of the presence of thick fluvial deposits at this location, MMI overburden sampling is advised. If additional work is planned, geophysics should include SP, VLF-EM and magnetometer surveys.
REFERENCES


APPENDIX I: STATEMENT OF QUALIFICATIONS

I, David R. Haughton, resident of the town of Brentwood Bay in the Province of British Columbia, do hereby certify that:

I am registered as a Professional Engineer with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

I am self employed under the proprietorship of Argo Mineral Exploration with an office at 1131 Sluggett Road, Brentwood Bay, British Columbia.

I further certify that:

1) I am a graduate of Queen’s University, Kingston Ontario, where I obtained a B.Sc. (Eng.) in Geological Engineering, 1965 and a Ph.D. in Geology in 1971.

2) I am a graduate of McMaster University, in Hamilton, Ontario, where I obtained a M.Sc in Geology in 1967.

3) I have been actively involved in geological and geotechnical work for 36 years since my graduation in 1971.

4) I am author of this report which is based on an exploration program carried out by myself and an assistant.

5) As a result of my professional registration, education and experience, I am a qualified person as defined in N.I. 43-101.

6) I am not an independent qualified person as defined by N.E. 43-101, as I am the owner of the Jason Claim Group and hold common shares in International Millenium Mining Corp. as a result of an option agreement.

7) The foregoing report on the Jason Claim Group is based on a study of previous reports relating to the geology of the area and geological, geochemical, geophysical and physical work that I and my assistant have undertaken on this property in 2007.

[Signature]
August 17, 2007

David R. Haughton, Ph.D., P.Eng.
APPENDIX II: STATEMENT OF EXPENDITURES

Explanation: The author and an assistant worked in the area for 16 days. The work included geological, geochemical, geophysical surveys and physical work. Project costs for personnel and these items are defined below:

**Personnel:**
- D.R. Haughton, M.Sc., Ph.D., P.Eng., 16 days @ $500/day \( \text{\$8000.00} \)
- Geological Assistant, 16 days @ $175/day \( \text{\$2800.00} \)

**Food and Accommodation:**
- $1,266.95

**Vehicle Rental:**
- 4x4 truck \( \text{\$1,100.00} \)
- 2 CT70s all terrain bikes \( \text{\$400.00} \)

**Mobilization and Demobilization:**
- $500.00

**Equipment and Supplies:**
- $1500.00

**Miscellaneous Expenses**
- Tool repair of brush hooks \( \text{\$53.50} \)
- Computer rental & internet connection \( \text{\$53.50} \)
- Sample delivery to Acme, Van Petro (Ferry & Gas) \( \text{\$122.83} \)
- UPS to Ottawa ODM Sample delivery \( \text{\$47.15} \)

**Laboratory Analysis:**
- Acme Analytical stream sediments \( \text{\$342.70} \)
- Acme Analytical stream sediments & rocks \( \text{\$463.48} \)
- Overburden Drilling Management Ltd., Bulk Stream Sed. \( \text{\$1284.51} \)
- Vancouver Petrographics sample prep & thin sect. Report \( \text{\$1279.42} \)

**Report Preparation:**
- $3000.00

**TOTAL** \( \text{\$22,214.04} \)

**Access Costs**
- Check trail & Cogburn bridge before arrival \( \text{\$53.50} \)
- Excavator rental for clearing access road (preliminary) \( \text{\$535.00} \)
- Trail prep& culvert install \( \text{\$1070.00} \)
- Clear blocker rock & two slides on Cogburn road \( \text{\$1605.00} \)

**TOTAL** \( \text{\$3,263.50} \)
<table>
<thead>
<tr>
<th>SAMPLE</th>
<th>GRAIN SIZE</th>
<th>COLOUR</th>
<th>ROCK</th>
<th>DESCRIPTORS</th>
<th>MINERALS</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>W3A (oc)</td>
<td>medium</td>
<td>grey to black</td>
<td>gabbro</td>
<td>equigranular</td>
<td>felds., horn. pyroxene</td>
<td>OC indicates outcrop</td>
</tr>
<tr>
<td>W5 (oc)</td>
<td>medium</td>
<td>dark brown</td>
<td>pyroxenite</td>
<td>gossanous</td>
<td>po, pn, ch</td>
<td>FT indicates float samples</td>
</tr>
<tr>
<td>W11 (oc)</td>
<td>med-coarse</td>
<td>grey to white</td>
<td>aplite</td>
<td>sugary texture</td>
<td>qtz, feldspar pyrite</td>
<td>Abundant sulphides producing alteration</td>
</tr>
<tr>
<td>W12 (oc)</td>
<td>medium</td>
<td>grey to white</td>
<td>aplite</td>
<td>sugary texture</td>
<td>qtz, feldspar pyrite</td>
<td>Pyrite in sample, dike, runs up centre of strm.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UTM on west bank, Zone 10 NAD 83</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>E: 593970 N: 5489570</td>
</tr>
<tr>
<td>W13 (oc)</td>
<td>med-coarse</td>
<td>dark brown</td>
<td>gossan</td>
<td>abundant gossan</td>
<td>sulphides</td>
<td>Approx. 146m from W1 at intersect of Anomaly Ck &amp; Logging trail.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Contains abundant pyrite.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aplite dike. Frequently displaced by faulting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Brown rind on aplite where found as float.</td>
</tr>
<tr>
<td>W14 (oc)</td>
<td>med-coarse</td>
<td>dark brown</td>
<td>gossan</td>
<td>abundant gossan</td>
<td>sulphides</td>
<td>From walls of Anomaly Creek in gossan zone.</td>
</tr>
<tr>
<td>W15 (oc)</td>
<td>med-coarse</td>
<td>dark brown</td>
<td>gossan</td>
<td>abundant gossan</td>
<td>sulphides</td>
<td>From walls of Anomaly Creek in gossan zone.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Quartz feldspar pyrite analyzed by ACME!</td>
</tr>
<tr>
<td>W16 (oc)</td>
<td>medium</td>
<td>white &amp; brown</td>
<td>aplite</td>
<td>gossanous rind</td>
<td>pyrite</td>
<td>Diorite or Tonalite submitted for petrologic study</td>
</tr>
<tr>
<td>D2 (oc)</td>
<td>medium</td>
<td>black &amp; white</td>
<td>diorite</td>
<td>fresh</td>
<td>hornblende</td>
<td>massive. No significant sulphides. Located at intersection of logging rd</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and Anomaly Crk.</td>
</tr>
<tr>
<td>D3 (oc)</td>
<td>coarse</td>
<td>dk green, blk</td>
<td>hornblendite</td>
<td>surface alteration</td>
<td>hornblende pyrite</td>
<td>pyrrhotite</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>D4</td>
<td>medium</td>
<td>pale brn white</td>
<td>aplite</td>
<td>banded, altered</td>
<td>qtz, feldspar pyrite</td>
<td>pyrite</td>
</tr>
<tr>
<td>D5</td>
<td>fine</td>
<td>dk grn to blk</td>
<td>skarn</td>
<td>fresh</td>
<td>sulphides</td>
<td></td>
</tr>
<tr>
<td>SMP NO</td>
<td>UNCONSOLIDATED SEDIMENTS</td>
<td>COLOUR</td>
<td>WATER FEATURES</td>
<td>REMARKS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------</td>
<td>--------------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W1</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>med. to dark brown</td>
<td>Width less than 1m</td>
<td>Sample collected at base of large outcrop where Anomaly Creek intersects logging trail. Slopes 45 to 53 deg. UTM Zone 10 E: 593,931 N: 5,489,663 +/-7m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W2</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>med. to dark brown</td>
<td>Width less than 1m</td>
<td>Sample collected on slope visible from W1 @ approx 40 m by hip chain, V gully in rock grey diorite slope.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W3</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>med. to dark brown</td>
<td>Width less than 1m</td>
<td>60m south of W1 on 40 deg. diorite slope.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W4</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>med. to dark brown</td>
<td>Width less than 1m</td>
<td>Collected well into gully, diorite to gabbroic rock. 65m from W1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W5</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>med. to dark brown</td>
<td>Width less than 1m</td>
<td>140m south of W1, sample rocks in gossanous zone, rocks in zone contain abundant pyrrhotite and chalcopyrite. A white to yellow aplite vein runs up the centre of the gully. Prior to this point gully walls are about 15m high. Here at gossanous zone walls are 7m high.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W6</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>med. to dark brown</td>
<td>Width less than 1m</td>
<td>170m south of W1 sample, steep slope.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W7</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>med. to dark brown</td>
<td>Width less than 1m</td>
<td>240m south of W1 on steep slope, no outcrop observed, abundant boulders. Estimate a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Width</td>
<td>Depth</td>
<td>Location Details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>----------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W8</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>Width less than 1m</td>
<td>Depth less than 5cm</td>
<td>250m south of W1 on steep slope, no outcrop observed, abundant boulders. Estimate a short distance to underlying bedrock.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W9</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>Width less than 1m</td>
<td>Depth less than 5cm</td>
<td>Sample from bulk sample sieved at -12 mesh (less than 2mm). Should be slightly higher in elements than W1 collected at same spot.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W10</td>
<td>gravel 10%, sand 80%, silt 10%</td>
<td>Width less than 1m</td>
<td>Depth less than 5cm</td>
<td>Collected at 110m from suspended tree in drop-off (see photo). Below (north of) gossan zone.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>100% sand</td>
<td>Width less than 1m</td>
<td>Depth less than 5cm</td>
<td>UTM Zone 10: E: 593,931 N: 5, 489, 663 Bulk Stream Sed Sample: same location as W1 Sent to Overburden Drilling Management Ltd. for analysis. Ten kilogram sample.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 16: Anomaly Creek (Project 2)
### APPENDIX IV: GEOCHEMICAL ANALYSIS CERTIFICATES

#### GEOCHEM PRECIOUS METALS ANALYSIS

**Argo Exploration Project #2**  
File # A703930  
1131 St. George Road, Brentwood Bay BC V8N 1V9  
Submitted by: David Haughton

<table>
<thead>
<tr>
<th>SAMPLE#</th>
<th>Au ppb</th>
<th>Pt ppb</th>
<th>Pd ppb</th>
<th>Rh ppb</th>
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<tr>
<td>S3-1420</td>
<td>2</td>
<td>3</td>
<td>2.8</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>STANDARD FA-100S</td>
<td>19</td>
<td>120.8</td>
<td>31.2</td>
<td>&lt;.1</td>
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<tr>
<td>STANDARD FA-100S</td>
<td>49</td>
<td>48.0</td>
<td>48.0</td>
<td>.0</td>
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</tbody>
</table>

**Group 30-HS** - FIRE GEOCHEM AU PT PD RH - SEMI-QUANTITATIVE FOR RH.  
SAMPLE TYPE: STREAM SED. 558

Data:  
FA  
DATE RECEIVED:  JUN 18 2007  
DATE REPORT MAILED: JUL 10 2007

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.
| SAMPLE | Pb | Zn | Cu | Fe | As | Au | Ag | Bi | Ni | Co | Mn | Zr | Cr | V | Mg | Na | Si | K | Sr | Ca | Cl | Na | Mg | Ca |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|----|----|
| 0.35 | 2.3 | 2.3 | 1.2 | 0.3 | 1.2 | 0.8 | 1.2 | 0.2 | 1.2 | 0.2 | 1.2 | 0.2 | 1.2 | 0.2 | 1.2 | 0.2 | 1.2 | 0.2 | 1.2 | 0.2 | 1.2 | 0.2 | 1.2 | 0.2 |

GROUP 10X - 0.05 GM SAMPLE DIGESTED WITH HCLOH3-MCC-HF TO 10ML. (>5 CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACORATORY AND GRAPHITE SAMPLES CAN LIMIT Au SOLUBILITY. FOR SOME MINERALS & MAY VOLATILE SOME ELEMENTS, ANALYSIS BY ICP-MS.

- SAMPLE TYPE: STREAM SED. 55B

Data FA DATE RECEIVED: JUN 18 2007 DATE REPORT MAILED: July 3/07

Clarence Leong

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.
### GEOCHEM PRECIOUS METALS ANALYSIS

**Arco Exploration PROJECT #2**  
File #: A703931  
1131 Blaggett Road, Brentwood Bay BC V8M 1E9  
Submitted by: David Haughton

<table>
<thead>
<tr>
<th>SAMPLE#</th>
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<th>Pd</th>
<th>Rh</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ppb</td>
<td>ppb</td>
<td>ppb</td>
<td>ppb</td>
</tr>
<tr>
<td>G-1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;.5</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>D3</td>
<td>169</td>
<td>777.3</td>
<td>445.8</td>
<td>5.4</td>
</tr>
<tr>
<td>W3A</td>
<td>5</td>
<td>5.6</td>
<td>4.4</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>W5 OC</td>
<td>73</td>
<td>302.4</td>
<td>351.8</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>W11</td>
<td>3</td>
<td>1.0</td>
<td>1.3</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>W12</td>
<td>2</td>
<td>1.1</td>
<td>1.2</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>W13</td>
<td>2</td>
<td>1.9</td>
<td>3.8</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>W14</td>
<td>39</td>
<td>503.6</td>
<td>465.1</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>W15 OC</td>
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<td>391.6</td>
<td>307.2</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>W16</td>
<td>1</td>
<td>2.4</td>
<td>2.7</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>STANDARD FA-10R</td>
<td>493</td>
<td>488.4</td>
<td>488.5</td>
<td></td>
</tr>
</tbody>
</table>

GROUP 3D-MS - FIRE GEOCHEM Au PT Pd RH - 3G GR SAMPLE FUSION, SORTE DISSOLVED IN ACID, ANALYZED BY ICP-MS. SEMI-QUANTITATIVE FOR RH.  
- SAMPLE TYPE: ROCK 3T50

Data: FA  
DATE RECEIVED: JUN 18 2007  
DATE REPORT MAILED: JUL 1 2007

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.
### GEOCHEMICAL ANALYSIS CERTIFICATE

**Argo Exploration PROJECT #2**

File #: A703931

1131 Blaggard Road, Burnaby, BC V8N 1G7

Submitted by: David Haughton

<table>
<thead>
<tr>
<th>Date</th>
<th>Fe</th>
<th>Mg</th>
<th>Ca</th>
<th>Na</th>
<th>K</th>
<th>Al</th>
<th>Si</th>
<th>Ti</th>
<th>Cr</th>
<th>Mn</th>
<th>FeO</th>
<th>CaO</th>
<th>MgO</th>
<th>SiO₂</th>
<th>Al₂O₃</th>
<th>TiO₂</th>
<th>Cr₂O₃</th>
<th>MnO</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/10</td>
<td>1.6</td>
<td>4.0</td>
<td>0.7</td>
<td>0.1</td>
<td>0.6</td>
<td>4.4</td>
<td>4.5</td>
<td>1.1</td>
<td>1.0</td>
<td>0.1</td>
<td>2.0</td>
<td>1.0</td>
<td>0.1</td>
<td>3.4</td>
<td>0.9</td>
<td>1.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>5/11</td>
<td>1.6</td>
<td>4.0</td>
<td>0.7</td>
<td>0.1</td>
<td>0.6</td>
<td>4.4</td>
<td>4.5</td>
<td>1.1</td>
<td>1.0</td>
<td>0.1</td>
<td>2.0</td>
<td>1.0</td>
<td>0.1</td>
<td>3.4</td>
<td>0.9</td>
<td>1.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>5/12</td>
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<td>4.0</td>
<td>0.7</td>
<td>0.1</td>
<td>0.6</td>
<td>4.4</td>
<td>4.5</td>
<td>1.1</td>
<td>1.0</td>
<td>0.1</td>
<td>2.0</td>
<td>1.0</td>
<td>0.1</td>
<td>3.4</td>
<td>0.9</td>
<td>1.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**GROUP 1**
- 0.25 m sample with HCLO₄-HNO₃-HF to 10 mL.
- Concentration exceeds upper limits. Some minerals may be partially attacked. Refractory and graphitic samples may limit Au solubility. For some minerals may volatize some elements, analysis by ICP-MS.
- Sample Type: Rock #150

**Date**

FA: June 18, 2007

Date Received: June 18, 2007

Date Report Mailed: July 2, 2007

All results are considered the confidential information of the client. A&F assumes the liabilities for actual cost of the analysis only.

ACMI ANALYTICAL LABORATORIES LTD.
582 E. HASTINGS ST. VANCOUVER BC V6A 1R6
PHONE: (604) 253-3158 FAX: (604) 253-1716

ISO 9001 Accredited Co.
| SAMPLE# | K | Ca | Al | Fe | Si | Mg | Na | Ti | Mn | Zn | Cu | Pb | Ag | KI | Co | Mn | As | Au | Th | Sr | Cd | Hg | Bi | V | Cr | Fe | Ni | Sc | Ti | Al | Na | K | W | Zr | Sn | Y | Nb | Zr | Sr | Cr | Fe | Mg | Ba | Sr | Ca | P | Fe | Be | T1 | Al | Na | K | W | Zr | Sn | Y | Nb | Zr | Sr | Ca |
| S-1     | 2 | 2 | 20 | 55 | <5 | 6 | 5 | 79 | 2.54 | <5 | 20 | <4 | 14 | 5.45 | <5 | 56 | 2.79 | 0.07 | 46 | 10 | 76 | 1107 | 0.29 | 8.7 | 2.75 | 3.16 | <6 | 7 | 3 | 16 | 28 | 3 | 6 | 3 | 6 |
| SS-W7   | 2 | 536 | 3 | 111 | 6.6 | 64 | 50 | 1311 | 9.90 | <5 | 20 | <4 | 4 | 276 | 1.1 | 5 | 6 | 237 | 6.40 | 0.07 | 8 | 9.6 | 0.63 | 0.12 | 72 | 5.4 | 1.20 | 5 | 16 | <2 | 12 | <2 | 1 | 23 |
| SS-W8   | 2 | 258 | <5 | 199 | <5 | 378 | 64 | 1318 | 8.95 | <5 | 20 | <4 | 5 | 286 | 0.6 | <5 | 515 | 4.34 | 0.07 | 2 | 9.2 | 0.36 | 0.10 | 81 | 5.3 | 1.21 | 15 | 4 | 16 | 3 | 12 | <2 | 1 | 12 |
| SS-W9   | 2 | 343 | 5 | 185 | 6.6 | 64 | 60 | 1417 | 7.95 | 5 | 20 | <4 | 4 | 264 | 1.0 | 5 | 6 | 191 | 4.69 | 0.05 | 6 | 87 | 0.62 | 0.14 | 81 | 5.2 | 1.24 | 16 | 6 | 15 | <2 | 11 | 2 | 1 | 22 |
| SS-W10  | 2 | 332 | 5 | 182 | 6.6 | 64 | 67 | 1476 | 8.19 | 5 | 20 | <4 | 4 | 258 | 1.1 | 5 | < | 195 | 4.69 | 0.05 | 6 | 99 | 0.99 | 0.18 | 81 | 5.2 | 1.15 | 4 | 7 | 16 | <2 | 11 | <2 | 1 | 22 |
| SS-W11  | 2 | 517 | <5 | 104 | 9.8 | 67 | 76 | 1531 | 7.85 | <5 | 20 | <4 | 4 | 256 | 1.1 | 5 | 6 | 173 | 3.73 | 0.05 | 7 | 89 | 0.28 | 0.13 | 8 | 5.7 | 1.15 | 15 | 10 | 15 | 2 | 10 | <2 | 1 | 20 |
| SS-W12  | 2 | 60 | <5 | 199 | 7.1 | 188 | 61 | 1652 | 7.48 | 8 | 20 | <4 | 6 | 412 | 1.9 | 5 | 6 | 265 | 4.96 | 0.16 | 11 | 275 | 3.80 | 0.26 | 8 | 8.4 | 1.22 | <2 | 10 | <2 | 19 | 5 | 12 |
| SS-W13  | 2 | 60 | <5 | 113 | 6.8 | 181 | 38 | 1779 | 9.23 | 10 | 20 | <4 | 6 | 383 | 1.0 | 5 | 6 | 303 | 5.60 | 0.15 | 12 | 342 | 5.23 | 0.26 | 8 | 7.7 | 1.73 | <2 | 18 | <2 | 21 | 6 | 12 |
| SS-W14  | 2 | 291 | <5 | 195 | 8.6 | 144 | 50 | 1660 | 8.37 | 6 | 20 | <4 | 4 | 282 | 1.5 | <5 | 326 | 4.52 | 0.05 | 6 | 85 | 0.80 | 0.14 | 8 | 5.4 | 1.24 | 13 | 5 | 16 | 5 | 13 | 2 | 1 | 24 |

GROUP 1E: 0.25 g SAMPLE DIGESTED WITH HCL/3NO3/HCL-HF 10 ML (+) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARITIALLY ATTACKED/VOLATIZED. REFRACTORY AND GRAPHITE SAMPLES CAN LIMIT X SOLUBILITY. ANALYSIS BY AAO-CMS.
- SAMPLE TYPE: SOIL KOH. 555

Data __FA__ DATE RECEIVED: __JUN 11 2007__ DATE REPORT NAIRED: ________________

All results are considered the confidential property of the client. AEC assumes the liabilities for actual cost of the analysis only.
<table>
<thead>
<tr>
<th>SAMPLE</th>
<th>Au (ppb)</th>
<th>Pt (ppb)</th>
<th>Pd (ppb)</th>
<th>Rh (ppb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-1</td>
<td>&lt;1</td>
<td>2</td>
<td>&lt;0.5</td>
<td>2</td>
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<tr>
<td>SS-W1</td>
<td>18</td>
<td>67.0</td>
<td>22.5</td>
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<td>SS-W2</td>
<td>18</td>
<td>21.4</td>
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<td>1.9</td>
</tr>
<tr>
<td>SS-W3</td>
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<td>21.8</td>
<td>1.0</td>
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<tr>
<td>SS-W7</td>
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<td>&lt;0.5</td>
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<tr>
<td>SS-W8</td>
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<td>&lt;0.5</td>
<td>&lt;0.1</td>
</tr>
<tr>
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<tr>
<td>STANDARD FA-100S</td>
<td>48</td>
<td>48.5</td>
<td>48.8</td>
<td>-</td>
</tr>
</tbody>
</table>

GROUP 38-MS - FIRE GEOCHEM AU PT PD RH - 30 ON SAMPLE FUSION, DORE DISSOLVED IN ACID, ANALYZED BY ICP-MS. SEMI-QUANTITATIVE FOR RH.
- SAMPLE TYPE: STREAM SED. SUB

DataFA

DATE RECEIVED: JUN 11 2007
DATE REPORT MAILED: 

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.
### Geochemical Analysis Certificate

**Argo Exploration Project #2**  
File # A703734  
1131 Staggart Road, Brentwood Bay BC V8N 1G9  
Submitted by: David Houghton

| SAMPLER | Na  | Cu  | Pb  | Zn  | Ag  | Ni  | Co  | Mn  | Fe  | As  | U  | Th  | Sr  | Cd  | Sb  | Bi  | V  | Ca  | P  | La  | Cr  | Mg  | Ba  | Ti  | Al  | Na  | K  | W  | Zr  | Sn  | Y  | Nb  | Be  | Sc  |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|----|----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|
|         | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| C-1     | <2  | 2   | 23  | 50  | <.5 | 4   | 6   | 3   | 756 | 2.47 | 5   | <.5 | 51  | 2.54 | 2.5  | 0.58 | 25 | 7   | .74 | 466  | .27 | 7.7  | 2.57 | 1.43 | <4 | <1  | 4   | 14  | 22  | 3   | 6   |     |
| DC W-5  | <2  | 22  | 70  | <.5 | 1465 | 163 | 1833 | 10.17 | 5   | <.5 | <.5 | 54  | 2.54 | 2.30 | 0.53 | 25 | 7   | .74 | 166  | .27 | 7.7  | 2.57 | 1.43 | <4 | <1  | 4   | 14  | 22  | 3   | 6   |     |
| STANDARD | 12  | 122 | 41  | 164 | <.5 | 32  | 13  | 936 | 3.86 | 26  | <.5 | 52  | 2.54 | 2.30 | 0.53 | 25 | 7   | .74 | 166  | .27 | 7.7  | 2.57 | 1.43 | <4 | <1  | 4   | 14  | 22  | 3   | 6   |     |

Standard is STANDARD DST6.

GROUP 1E - 0.25 G SAMPLE DIGESTED WITH HClO4-HNO3-HCl-HF TO 10 ML. (>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED/VOLATILIZED. REFRACTORY AND GRAPHITE SAMPLES CAN LIMIT AL SOLUBILITY. ANALYSIS BY ICP-ES.

SAMPLE TYPE: ROCK R150

Data | PA | DATE RECEIVED: Jun 11 2007 | DATE REPORT MAILED: .................

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.
**GEOCHEM PRECIOUS METALS ANALYSIS**

**Argo Exploration PROJECT #2  File # A703734**

1131 Slaggett Road, Brentwood Bay BC V8N 1E9   Submitted by: David Haughton

<table>
<thead>
<tr>
<th>SAMPLE#</th>
<th>Au ppb</th>
<th>Pt ppb</th>
<th>Pd ppb</th>
<th>Rh ppb</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-1</td>
<td>1</td>
<td>.1</td>
<td>.8</td>
<td>&lt;.1</td>
</tr>
<tr>
<td>OC W-5</td>
<td>58</td>
<td>564.6</td>
<td>339.8</td>
<td>3.8</td>
</tr>
<tr>
<td>STANDARD FA-10R</td>
<td>495</td>
<td>490.0</td>
<td>490.0</td>
<td>-</td>
</tr>
</tbody>
</table>

**GROUP 3b: MS - FIRE GEOCHEM Au PT PD RH - 30 G SAMPLE FUSION, DORE DISPISSLE IN ACID, ANALYZED BY ICP-MS. SEMI-QUANTITATIVE FOR RH.**

- SAMPLE TYPE: ROCK R150

**Data**

- DATE:__ 
- DATE RECEIVED: Jun 11 2007
- DATE REPORT MAILED:__

---

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.
APPENDIX V: PETROGRAPHIC ANALYSIS REPORTS

Report 070504 for:
David Haughton,
Argo Exploration,
1131 Sluggett Road,
Brentwood Bay, B.C.,

June 2007

Project: Ni-Cu-Pt group Project: West Jason

Samples: D-2, D-3, D-4, D-5

Summary:

Sample D2 (A) is a metamorphosed slightly foliated hornblende diorite composed of plagioclase and hornblende, with much less abundant patches of magnetite and ilmenite, and with minor pyrite and apatite.

Sample D-3 is an altered ultramafic rock (possibly originally olivine orthopyroxenite) that contains relic orthopyroxene grains and minor olivine grains surrounded by medium to very coarse grains of tremolite/actinolite, with a few interstitial patches of plagioclase. A few strongly altered grains of orthopyroxene were replaced strongly by intimate intergrowths of phlogopite(?) and chalcopyrite. Sulphide patches up to several mm across are dominated by pyrrhotite with lesser pentlandite (in part altered to an unknown secondary sulphide) and locally abundant chalcopyrite.

Sample D-4 (A) is a metamorphosed porphyritic aplite dyke that contains scattered plagioclase phenocrysts in a groundmass of equant plagioclase and lesser quartz, with scattered flakes of muscovite and much less biotite and minor disseminated patches of pyrite and lesser pyrrhotite. A segregation patch is of muscovite surrounded by quartz and containing a few patches of pyrite.

Sample D-5 (A) is a zoned skarn, with Zone A dominated by hornblende with much less abundant garnet and quartz, and variably abundant disseminated magnetite, and Zone B dominated by garnet and tremolite/actinolite, with several lenses of calcite (in part replaced by ankerite and limonite) and lesser interstitial quartz. In Zone A, coarser grained bands contain only minor magnetite and pyrrhotite, whereas much finer grained bands contain abundant magnetite and lesser pyrrhotite. Apatite is concentrated strongly in seams in Zone A. Sample D-5 (B) is similar to Zone A of Sample D-5 (A).

From the thin sections it is not possible to confirm or deny some of the field observations. Sample D-4 is an aplite dyke, but its age relative to diorite is unknown. I would normally expect an aplite dyke to be younger than diorite. What are the field indications that the aplite dyke is among the oldest units?
Photographic Notes:

The scanned sections show the gross textural features of the sections; these features are seen much better on the digital image than on the printed image. Sample numbers are shown in or near the top left of the photos and photo numbers at or near the lower left. The letter in the lower right-hand corner indicates the lighting conditions: P = plane light, X = plane light in crossed nicols, R = reflected light, RP = reflected light and plane light, and RX = reflected light and incident light in partly crossed nicols. Locations of digital photographs (by photo number) are shown on the scanned section.

Petrographic Notes:

For each sample, the A sections were examined in detail in transmitted and reflected light. The B sections were examined in detail in reflected light and much more rapidly in transmitted light. Any distinct differences from the A samples are noted.

No probe work has been recommended because no platinum-group minerals or native gold were identified in Sample D-3, and no pentlandite or Pt-group minerals were identified in Sample D-5.

Do you have assays for these samples? That would help determine the probability finding Pt-group metals or native gold in a sample the size of a thin section. Normally, if the assay is less than 5 g/t, it is probable that the mineral will not be seen in a thin section. If it is greater than 15 g/t, a mineral bearing that element(s) should be seen. In between these levels, it largely depends on the grain size of the mineral, with coarser grains being less probable of being present in a thin section than finer grains for the same assay value.

John G. Payne, Ph.D., P.Geol.
Tel: (604)-597-1080
Fax: (604)-597-1080 (call first)
email: jgpayne@telus.net
Sample D2 (A)

Metamorphosed Hornblende Diorite

The sample is a slightly foliated intergrowth of plagioclase and hornblende, with much less abundant patches of magnetite and ilmenite, and with minor pyrite and apatite.

<table>
<thead>
<tr>
<th>Mineral</th>
<th>percentage</th>
<th>main grain size range (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plagioclase</td>
<td>55-60%</td>
<td>0.3-1.2</td>
</tr>
<tr>
<td>Hornblende</td>
<td>30-35%</td>
<td>0.3-1.5</td>
</tr>
<tr>
<td>magnetite-ilmenite</td>
<td>2-3</td>
<td>0.05-0.3</td>
</tr>
<tr>
<td>magnetite</td>
<td>0.5</td>
<td>0.05-0.1</td>
</tr>
<tr>
<td>pyrite</td>
<td>0.3</td>
<td>0.05-0.15</td>
</tr>
<tr>
<td>apatite</td>
<td>0.1</td>
<td>0.03-0.15</td>
</tr>
<tr>
<td>biotite</td>
<td>minor</td>
<td>0.1-0.2</td>
</tr>
<tr>
<td>chlorite(?)</td>
<td>trace</td>
<td>cryptocrystalline-0.005</td>
</tr>
</tbody>
</table>

Plagioclase forms anhedral, equant to less commonly prismatic grains with finely spaced albite twins and less common pericline twins. Grains are fresh.

Hornblende forms anhedral prismatic to equant grains with pleochroism from light/medium to medium/dark slightly brownish green.

Magnetite-ilmenite forms anhedral patches up to 0.5 mm in size that consist of coarse exsolution intergrowths of the two minerals, each of which contains extremely fine exsolution lenses of the other mineral. Magnetite also forms a few anhedral patches up to 0.7 mm in size without ilmenite.

Apatite forms disseminated subhedral to euhedral equant to prismatic grains.

Biotite forms scattered ragged flakes with pleochroism from pale to light/medium brown.

Pyrite forms disseminated anhedral patches, some with irregular outlines and dusty non-reflective inclusions that suggest that pyrite was formed by replacement of pyrrhotite.

Chalcopyrite forms scattered anhedral grains, mainly associated with patches of pyrite.

Chlorite(?) forms a patch 0.07 mm across included in a patch of extremely fine grained pyrite. It is medium greyish green in colour.

Section D-2 (B) is similar but also contains an inclusion or segregation 1.5 cm long and up to 5 mm wide that is dominated by hornblende.

One sulphide patch 0.7 mm across is dominated by pyrite with a few patches along its margins of intimate intergrowths of pyrite and chalcopyrite.
Sample D-3
Altered Olivine Orthopyroxenite(?)

Replacement: Tremolite/Actinolite-Pyrrhotite-Pentlandite-(Chalcopyrite)

The sample is an altered ultramafic rock that contains relic orthopyroxene grains and minor olivine grains surrounded by medium to very coarse grains of tremolite/actinolite, with a few interstitial patches of plagioclase. A few strongly altered grains of orthopyroxene were replaced strongly by intimate intergrowths of phlogopite(?) and chalcopyrite. Sulphide patches up to several mm across are dominated by pyrrhotite with lesser pentlandite (in part altered to an unknown secondary sulphide) and locally abundant chalcopyrite.

<table>
<thead>
<tr>
<th>Mineral</th>
<th>percentage</th>
<th>main grain size range (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>tremolite/actinolite</td>
<td>65-70%</td>
<td>0.7-2.5 (a few up to 5 mm)</td>
</tr>
<tr>
<td>orthopyroxene</td>
<td>5-17</td>
<td>0.3-0.8 (a few up to 1.5 mm)</td>
</tr>
<tr>
<td>plagioclase</td>
<td>2-3</td>
<td>0.2-0.5 (a few grains up to 1 mm long)</td>
</tr>
<tr>
<td>Mineral X</td>
<td>1-2</td>
<td>0.5-0.7</td>
</tr>
<tr>
<td>Olivine</td>
<td>1-2</td>
<td>0.3-1</td>
</tr>
<tr>
<td>Pyrrhotite</td>
<td>7-8</td>
<td>0.2-0.5 (a few up to 1 mm)</td>
</tr>
<tr>
<td>Pentlandite</td>
<td>1-2</td>
<td>0.05-0.15</td>
</tr>
<tr>
<td>Chalcopyrite</td>
<td>0.4</td>
<td>0.05-0.1</td>
</tr>
<tr>
<td>ilmenite/magnetite</td>
<td>0.1</td>
<td>0.05-0.15</td>
</tr>
<tr>
<td>pyrite</td>
<td>minor</td>
<td>0.05-0.15</td>
</tr>
</tbody>
</table>

Tremolite/actinolite forms anhedral prismatic grains, some of which contain relic inclusions of orthopyroxene and locally olivine. Grains commonly are irregularly colour-zoned; cores with pleochroism from pale to light greenish brown are surrounded by rims with pleochroism from pale to light green. A few grains contain abundant lensy blebs of plagioclase(?) from 0.01-0.03 mm in size in a sieve texture.

Orthopyroxene forms ragged to prismatic grains included in and probably corroded by tremolite/actinolite grains. A few grains were altered strongly to extremely fine to fine grained pale brown phlogopite. Some patches consist of granular aggregates of orthopyroxene (0.03-0.07 mm). Some of these contain abundant interstitial patches of pyrrhotite and/or chalcopyrite.

Olivine is present near one end of the section as several anhedral grains included in a large grain of tremolite/actinolite. A few grains were replaced completely by extremely fine grained aggregates of talc and/or serpentine, some of which contain 2-5% disseminated interstitial patches of pyrite.

Plagioclase forms scattered patches up to 1.5 mm in size interstitial to tremolite/actinolite of anhedral, equant to locally prismatic grains. Plagioclase ranges from fresh to altered slightly to sericite.

Sulphide patches up to a few mm across are dominated by pyrrhotite with generally much less abundant clusters of pentlandite. Some patches of pentlandite were altered moderately to strongly to secondary Ni-mineral and dusty, non-reflective material. The secondary mineral has slightly lower reflectivity and paler yellow colour than pentlandite and
about similar hardness. Adjacent pyrrhotite was not altered. Some sulphide patches are partly rimmed by amorphous orangish brown limonite.

Chalcopyrite forms patches up to 0.8 mm in size intergrown coarsely with pyrrhotite and pentlandite. A few patches of chalcopyrite are intergrown intimately with very fine grained orthopyroxene or secondary tremolite(?) and/or phlogopite(?). Chalcopyrite also forms a discontinuous wispy convoluted veinlet up to 0.07 mm wide that cuts a megacryst of tremolite/actinolite.

Ilmenite or magnetite forms a few anhedral patches up to 0.2 mm in size. It is possible that some of the opaque oxide is chromite (probably altered to magnetite).

Pyrite forms scattered anhedral grains associated with chalcopyrite and with pyrrhotite. A few patches up to 0.2 mm in size consist of intimate intergrowths of chalcopyrite and pyrite.
Sample D-4 (A)

Metamorphosed Porphyritic Aplite Dyke

Scattered plagioclase phenocrysts are set in a groundmass of equant plagioclase and lesser quartz, with scattered flakes of muscovite and much less biotite and minor disseminated patches of pyrite and lesser pyrrhotite. A segregation patch is of muscovite surrounded by quartz and containing a few patches of pyrite.

<table>
<thead>
<tr>
<th>Mineral</th>
<th>percentage</th>
<th>main grain size range (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>phenocrysts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>plagioclase</td>
<td>5-7%</td>
<td>1-1.5</td>
</tr>
<tr>
<td><strong>groundmass</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>plagioclase</td>
<td>60-65</td>
<td>0.1-0.3</td>
</tr>
<tr>
<td>quartz</td>
<td>20-25</td>
<td>0.1-0.3 (a few up to 0.5 mm across)</td>
</tr>
<tr>
<td>muscovite</td>
<td>3-4</td>
<td>0.3-0.5</td>
</tr>
<tr>
<td>pyrite</td>
<td>0.5</td>
<td>0.05-0.1 (a few up to 0.3 mm)</td>
</tr>
<tr>
<td>pyrrhotite</td>
<td>0.2</td>
<td>0.03-0.07</td>
</tr>
<tr>
<td>biotite</td>
<td>0.2</td>
<td>0.1-0.2</td>
</tr>
<tr>
<td>rutile</td>
<td>minor</td>
<td>0.02-0.05</td>
</tr>
<tr>
<td>apatite</td>
<td>trace</td>
<td>0.05-0.15</td>
</tr>
<tr>
<td>zircon</td>
<td>trace</td>
<td>0.05-0.07</td>
</tr>
</tbody>
</table>

Plagioclase forms anhedral to subhedral prismatic to equant phenocrysts. Some show compositional growth zoning with a thin rim of more-sodic composition enclosing a broad core of more-calcic composition. Alteration is commonly slight in the cores to sericite and some grains contain secondary muscovite flakes and dusty hematite inclusions.

In the groundmass, plagioclase forms anhedral, equant grains that are intergrown with lesser quartz of similar grain size.

Muscovite forms subhedral to anhedral flakes. One patch 3 mm across consists of a cluster of muscovite and lesser biotite flakes intergrown with and surrounded by patches of quartz and a few patches of pyrite.

Pyrite forms disseminated anhedral grains. Pyrrhotite forms anhedral patches up to 0.1 mm in size, most of which were replaced completely by intimate intergrowths of secondary pyrite and non-reflective material.

Biotite forms a few anhedral flakes with pleochroism from pale to light brown.

Apatite forms scattered subhedral to euhedral prismatic grains.

Rutile forms disseminated grains and clusters of up to several grains.

Zircon forms a few anhedral prismatic grains. It is concentrated in one patch where it forms about ten euhedral to subhedral prismatic grains (0.05-0.08 mm) included in a patch of muscovite-biotite.
Sample D-5 (A)
Zoned Skarn:

Zone A: Hornblende-Garnet-Magnetite-Quartz-Pyrrhotite Skarn

Zone B: Garnet-Tremolite/Actinolite-Calcite/Ankerite-Limonite

The sample is a zoned skarn, with Zone A dominated by hornblende with much less abundant garnet and quartz, and variably abundant disseminated magnetite, and Zone B dominated by garnet and tremolite/actinolite, with several lenses of calcite (in part replaced by ankerite and limonite) and lesser interstitial quartz. In Zone A, coarser grained bands contain only minor magnetite and pyrrhotite, whereas much finer grained bands contain abundant magnetite and lesser pyrrhotite. Apatite is concentrated strongly in seams in Zone A.

<table>
<thead>
<tr>
<th>Mineral</th>
<th>percentage</th>
<th>main grain size range (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zone A</td>
<td>Zone B</td>
</tr>
<tr>
<td>Hornblende</td>
<td>70%</td>
<td>0.05-0.5 (a few up to 1.5 mm)</td>
</tr>
<tr>
<td>tremolite/actinolite</td>
<td>70-75%</td>
<td>0.2-0.5</td>
</tr>
<tr>
<td>garnet</td>
<td>7- 8</td>
<td>0.05-0.08 (a few from 0.1-0.3 mm)</td>
</tr>
<tr>
<td>magnetite</td>
<td>7- 8</td>
<td>0.3-0.7</td>
</tr>
<tr>
<td>quartz</td>
<td>5- 7</td>
<td>0.03-0.07 (a few from 0.2-0.5 mm)</td>
</tr>
<tr>
<td>pyrrhotite</td>
<td>2</td>
<td>0.02-0.05</td>
</tr>
<tr>
<td>ankerite</td>
<td>5- 7</td>
<td>0.5-1</td>
</tr>
<tr>
<td>calcite</td>
<td>4- 5</td>
<td>cryptocrystalline</td>
</tr>
<tr>
<td>apatite</td>
<td>1- 2</td>
<td>0.02-0.05 (0.07-0.15 with quartz)</td>
</tr>
<tr>
<td>chalcopyrite</td>
<td>0.3</td>
<td>0.03-0.08 (one coarser patch)</td>
</tr>
<tr>
<td>limonite</td>
<td>3- 4</td>
<td></td>
</tr>
</tbody>
</table>

In Zone A, coarse grained bands are dominated by anhedral, equant hornblende grains with a subgranular texture. Pleochroism is from light/ medium to medium/dark green. Finer grained bands and patches (0.05-0.1 mm) up to a few mm wide contain abundant disseminated, equant grains of magnetite and lesser ones of pyrrhotite.

Garnet forms anhedral grains intergrown coarsely with quartz and less common finer grains intergrown with hornblende. It is medium orange in colour and isotropic (probably almandine).

Quartz forms disseminated grains (0.05-0.1 mm) in coarser hornblende-rich bands, finer grains (0.002-0.05 mm) in hornblende-magnetite-rich bands, and is concentrated slightly in quartz-rich patches up to 1.5 mm across in which grains are from 0.1-0.3 mm in size.

Magnetite forms disseminated grains that are concentrated strongly in finer grained hornblende-rich bands. Coarser grains are disseminated more widely in coarser grained hornblende bands.
Apatite forms anhedral to subhedral grains that concentrated strongly in a few seams up to 0.1 mm wide in hornblende-rich bands. It also forms coarser grains associated with patches of quartz.

Pyrrhotite forms disseminated grains that are concentrated moderately to strongly in finer grained bands with magnetite and hornblende. It also forms a few coarser grained patches up to 1.5 mm in size associated with these layers. Towards the garnet-rich band, pyrrhotite becomes increasingly altered to secondary pyrite with abundant dusty inclusions.

Chalcopyrite forms disseminated grains associated with pyrrhotite and magnetite in finer grained, hornblende-magnetite-rich layers. It is concentrated strongly in one patch 1 mm across associated with moderately altered pyrrhotite and finer grained hornblende and garnet.

In Zone B garnet and tremolite/actinolite form intergrowths of equant grains; tremolite/actinolite is pleochroic from neutral to pale green and garnet is paler orange than in Zone A.

Calcite forms lenses up to 1.5 mm wide parallel to the contact with Zone A. Calcite was replaced slightly to completely by networks of much finer equant grains of ankerite. In some patches, relic calcite was leached, leaving a dense network of ankerite seams with cavities. Associated with ankerite are patches of limonite, probably mainly secondary after ankerite.

Pyrrhotite forms scattered patches up to 0.1 mm in size; most of these are fresh.

Sample D-5 (B) is similar to Zone A of Sample D-5 (A) with the following distinctive features.

A patch a few mm across is of fine grained pyrrhotite that was altered strongly to secondary pyrite and dusty non-reflective material. Adjacent to it is a lens up to 3.5 mm long and 1.5 mm wide of granular apatite.

Magnetite forms a lens 3 mm long and a few disseminated grains from 0.7-1 mm in size. Adjacent to this is a lens of granular apatite 1 mm wide and a few mm long; both contain disseminated interstitial grains of pyrrhotite.

A veinlet along one side of the section up to 0.2 mm wide is of colloform limonite/hematite. Near the veinlet, pyrrhotite was altered moderately to secondary pyrite and dusty non-reflective material.

How this sample fits into the picture is uncertain. It may have formed at the contact between the diorite and ultramafic rock. The fragments of diorite in it suggest that the diorite is older. Could it be that the ultramafic rock represents a wedge of oceanic crust that was caught up in a major shear zone and the alteration of the ultramafic rock and the skarn were formed by reaction of it with the diorite and with whatever solutions were present in the zone?
070504 argo sections
070504 argo blocks

A    B

D-2
D-3
D-4
D-5
Photo 01, Sample D-2 (A):
Equant plagioclase (showing albite and, in one grain, pericline twins) intergrown with anhedral hornblende, with patches of exsolution intergrowths of ilmenite and magnetite, and trace pyrite.
Photo02, Sample D-2 (A):
A cluster of magnetite (in part with exsolution lenses of ilmenite) and minor ilmenite (with exsolution lenses of magnetite) with inclusions of chalcopyrite and partly surrounded by patches of pyrite (with non-reflective inclusions that suggest that it was formed by replacement of pyrrhotite); enclosed in plagioclase and lesser hornblende.
Photo 03, Sample D-2 (B):
Pyrite bordered by intimate intergrowths of pyrite and chalcopyrite, adjacent to a patch of magnetite with lesser ilmenite (both with exsolution lenses of the other oxide), enclosed in hornblende with much less abundant plagioclase.
Photo 04, Sample D-3 (A):
Relic grains of olivine (probably partly corroded; partly altered to magnetite) and one of orthopyroxene included in actinolite grains; patch of pyrrhotite with lesser pentlandite.
Photo 05, Sample D-3 (A):
A patch of pyrrhotite-pentlandite-chalcopyrite intergrown coarsely with hornblende and olivine (altered strongly to epidote with abundant sieve-textured inclusions of chalcopyrite.)
Photo 06, Sample D-3 (A):
An intergrowth of pyrrhotite and pentlandite (altered along fractures and borders of grains to secondary mineral with relic cores of fresh pentlandite.)
Photo 07, Sample D-3 (A):
Olivine (altered to serpentine or talc-serpentine) and orthopyroxene with interstitial actinolite and patches of pyrrhotite; minor biotite(?) on the border of one orthopyroxene grain.
Photo 08, Sample D-4 (A):
Plagioclase phenocryst (altered along cleavage in the core to sericite/ muscovite); more-sodic rim contains scattered rounded inclusions of quartz; groundmass is of granular plagioclase and lesser quartz with scattered flakes of muscovite and disseminated patches of pyrite and of pyrrhotite (altered to pyrite and non-reflective material).
Photo 09, Sample D-4 (A):
Segregation of muscovite and quartz with minor pale brown biotite flakes and disseminated patches of pyrite adjacent to a groundmass of plagioclase-quartz-(muscovite) at the left side of the photo.
**Photo 10, Sample D-5 (A):**
Zone A: coarse grained hornblende with patch of quartz-garnet-magnetite containing abundant grains of apatite.
Photo 11, Sample D-5 (A):
Zone A: very fine grained band dominated by hornblende with abundant magnetite and less abundant pyrrhotite and quartz.
Photo 12, Sample D-5 (A):
Zone A: apatite-rich band in intergrowth of very fine grained hornblende with interstitial patches of magnetite and lesser pyrrhotite.
Photo 13, Sample D-5 (A):
Zone B: tremolite/actinolite-garnet with patches of calcite (altered partly to ankerite and limonite), a patch of limonite, and interstitial grains of quartz.
Photo 14, Sample D-5 (A):
Zone A: very fine grained hornblende with abundant disseminated pyrrhotite (altered moderately to secondary pyrite and dusty non-reflective material) with a coarse patch of chalcopyrite and minor interstitial patches of quartz.
Photo 15, Sample D-5 (B):
Patch of pyrrhotite (altered strongly to pyrite and secondary non-reflective material) adjacent to patch of granular apatite, in medium grained hornblende with much less abundant garnet and quartz; minor chalcopyrite in apatite.
Photo 16, Sample D-5 (B):
Magnetite-rich patch adjacent to an apatite-rich patch, both with disseminated grains of pyrrhotite.
APPENDIX VI: MINERAL ANALYSIS BULK STREAM SEDIMENT

EXPLORING HEAVY MINERALS

July 25, 2007

Mr. David Haughton,
Argo Mineral Exploration
131 Slagget Road,
Brentwood Bay, B.C.
V8M 1E9

E-Mail: drhaughton@shaw.ca

Dear Mr. Haughton:

Re: Ni-Cu-PGE Indicator Minerals in an Alluvial Gravel Sample, Harrison Lake Area, British Columbia

Attached please find our laboratory data for the above alluvial gravel sample.

In addition to micropanning our preliminary laboratory concentrate for ultra-heavy Ni-Cu-PGE indicator minerals of all sizes and picking the final, refined 0.25-2.0 mm S.G. >3.2 fraction for coarse indicators, we recorded the major background heavy mineral assemblage present in the 0.25-0.5 mm fraction. We established this assemblage by listing, in order of prominence, minerals comprising > 15-20 percent of paramagnetic (<0.8 amp) portion followed by minerals comprising > 15-20 percent of the nonparamagnetic (>1.0 amp) portion. Four major minerals – paramagnetic almandine, ilmenite and hornblende and nonparamagnetic orthopyroxene – are present. Brown orthopyroxene is dominant and SEM analysis indicates that it is bronzite. It is presumably derived from your target intrusion but appears to be a primary magmatic mineral unrelated to the paler orthopyroxene alteration that rims the dark brown clinopyroxene grains in your mineralized rock specimen. The ilmenite and hornblende are probably also derived from the intrusion. Some almandine grains are heavily included and occur as euhedral crystals suggestive of alteration-related rather than metamorphic garnet; however we are not familiar with metamorphic grade in the area. Some grossular garnet intergrown with clinopyroxene (hedenbergite) is also present.

The bronzite is suggestive of a fertile, Mg-rich mafic melt; however, only three Mg-olivine (forsterite) grains were found. Fertile melts also tend to be Cr-rich and the sample is anomalous in chromite (>200 grains including one coarse grain of cumulus chromite) and red Cr-rutile (83 grains >0.25 mm, ~300 finer grains observed during micropanning). No hybrid indicators were found to support the assimilation of felsic country rocks that is suggested by the secondary orthopyroxene in your mineralized rock specimen. However, indicators of actual mineralization are plentiful and their relative abundances follow a predictable pattern related to their differential resistance to degradation by weathering. Chalcopyrite is ten times more abundant than pyrrhotite (>2000 versus 200-300 grains) even though pyrrhotite is five times more abundant in the mineralized zone.

pf...2
Only a few grains of pentlandite have survived. PGMs are restricted to ~100 grains of sperrylite, a stable Pt-arsenide. The absence of any Pd minerals suggests that these occur as unstable sulphides such as vysotskite or tellurides such as michenerite. We also found eight pristine gold grains that are probably associated with the PGE mineralization.

I hope these observations and interpretations are helpful. Please call me if you have any questions. As requested we are now returning your rock specimen and our indicator mineral grains and related sample fractions.

Yours sincerely,

Stu Averill, P.Geo.,
President
DATA TRANSMITTAL REPORT

DATE: 25-Jul-07
ATTENTION: Mr. David Haughton
CLIENT: Argo Mineral Exploration
1131 Slaggert Road,
Brentwood Bay, B.C
V8M 1E9
E-Mail: drhaughton@shaw.ca
NO. OF PAGES:
PROJECT: Harrison Lake Showing
SAMPLE NUMBERS: Stream Sample 1
BATCH NUMBER: 3799
NO. OF SAMPLES: 1

THESE SAMPLES WERE PROCESSED FOR: MM/SM/Q, GOLD COUNT, PGE's

SPECIFICATIONS:
1. Submitted by client. One 14.9 kg sand and gravel sample prescreened to <2 mm in the field.
2. Heavy liquid separation specific gravity: 3.20.
3. 0.25-2.0 mm nonferromagnetic heavy mineral fraction picked for indicator minerals.

REMARKS:

Remy Hiuneault
Laboratory Manager
<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Sample Details</th>
<th>% Cu</th>
<th>% Ni</th>
<th>% Fe</th>
<th>% Cr</th>
<th>% Mg</th>
<th>% Ca</th>
<th>% Al</th>
<th>% Zn</th>
<th>% Mn</th>
<th>% Si</th>
<th>% P</th>
<th>% S</th>
<th>% Mg</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
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<td>Stream Sample 1</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Alexanderite, muscovite, orthopyroxene, bromellite, arsenopyrite. The sample contains: 0.1% Cu, 0.01% Ni, 0.5% Fe, 0.01% Cr, 0.01% Mg, 0.001% Ca, 0.001% Al, 0.001% Zn, 0.001% Mn, 0.001% Si, 0.001% P, 0.001% S.</td>
</tr>
</tbody>
</table>

**Note:** The table above represents the mineral composition of the sample, with specific percentages for each element. The sample contains a variety of minerals, including Alexanderite, muscovite, orthopyroxene, and bromellite, among others. The sample also contains trace amounts of other elements as indicated in the table.
ARGO EXPLORATION

OVERBURDEN DRILLING MANAGEMENT LIMITED
PLATINUM GROUP MINERAL SUMMARY PAGE

Project: NAME
Total Number of Samples in this Report = 1
Batch Number: 3799

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Observed PGMs</th>
<th>Mineral *</th>
<th>Number of Grains</th>
<th>TOTAL GRAINS</th>
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<tbody>
<tr>
<td>Stream Sample 1</td>
<td></td>
<td>Sperrylite</td>
<td>−100</td>
<td>100</td>
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</table>

* Sample is oxidized; therefore only native PGMs and PGE arsenides and antimonides (not PGE sulphides and tellurides) are likely to be preserved.
### OVERBURDEN DRILLING MANAGEMENT LIMITED

#### DETAILED GOLD GRAIN SHEET

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Panned / V. G.</th>
<th>Dimensions (microns)</th>
<th>Number of Visible Gold Grains</th>
<th>Nonmag HMC Weight (g)</th>
<th>Calculated V.G. Assay in HMC (ppb)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Yes</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Stream Sample</td>
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<td>1</td>
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<td></td>
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<td>Thickness</td>
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</tr>
</tbody>
</table>

- ~600 grains pyrite (50-150μm)
- ~450 grains chalcopyrite (75-150μm)
- ~150 grains pentlandite (50-200μm)
- ~75 grains pyrrhotite (50-200μm)
- ~100 grains spongyite (25-150μm)

SEM checks: 25 of ~600 pyrite versus pentlandite/pyrrhotite candidates (50-75μm) = 22 pyrite, 2 pentlandite and 1 pyrrhotite; 2 of ~100 pyrite versus chalcopyrite candidates (75-150μm) = 1 pyrite and 1 chalcopyrite; 1 of 10 purple tarnished pentlandite versus chalcopyrite candidates (100μm) = 1 pentlandite; 5 of 100 spongyite versus PGE-tetradon candidates (50μm) = 5 spongyite; and 1 platinum versus selenide candidate (100μm) = 1 Pd-selenide (contamination).

Note: 4 large pentlandite/pyrrhotite grains (200μm) reported to magnetic fraction.
## Gold Grain Summary Sheet

**Project Name:**

**Filename:** ArgoExp - Haughton - StreamSample - July 2007

**Total Number of Samples in this Report:** 1

**Batch Number:** 3799

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Number of Visible Gold Grains</th>
<th>Nonmag. HMC Weight (g)</th>
<th>Calculated PPB Visible Gold in HMC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total  Reshaped  Modified  Pristine</td>
<td>Total  Reshaped  Modified  Pristine</td>
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</tr>
<tr>
<td>Stream Sample 1</td>
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<td>1</td>
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### Laboratory Sample Log

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<th>Sample Number</th>
<th>Weight (kg)</th>
<th>Clasts &gt;2.0 mm</th>
<th>Matrix &lt;2.0 mm</th>
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<tr>
<td></td>
<td>Bulk</td>
<td>Rect</td>
<td>Table</td>
</tr>
<tr>
<td>Stream Sample 1</td>
<td>14.9</td>
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<td>0.0</td>
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</tbody>
</table>

*Prescreened to <2 mm in the field.
APPENDIX VII: UTM LOCATIONS OF SP ANOMALIES

Figure 17: SP Anomalies Project 1  Discovery Creek
See TABLE 5
UTM COORDINATES
ZONE10 NAD83
for Maximum SP
Anomalies

TENURES:
370211, 523975

Logging Trail

Cogburn Road

EASTING (594, NNN) METERS
NORTHING (5490, NNN) METERS

FIGURE 18: SP Anomalies Project 2, Hut Creek.