GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

27,123

Geological, Geochemical and Prospecting

Assessment Report Undertaken on the

Target Property

Telegraph Creek Area
Liard Mining Division

Target 1-5 Claims
NTS 104G/12 and 104G/13 BCGS 104 G071
Latitude: 57 46' N
Longitude: 131 55' W

Prepared For:
Newcastle Minerals (Operator)
Viceroy Resources Ltd. (Owner)

Prepared By:
Keewatin Consultants 2002
J. Moore, M.Sc. Geology
A. Travis, B.Sc. Geology

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I. SUMMARY

The Target property consists of five claims, totaling 94 units, which are optioned by Newcastle Minerals Ltd. from Viceroy Resource Corporation. The claims are situated 45 kilometers west of Telegraph Creek in northwestern British Columbia. The property is underlain by sedimentary rocks and minor volcanic rocks belonging to the Upper Triassic Stuhini Group, which have been intruded by several monzonitic, monzodioritic and syenitic stocks, or dykes.

Exploration programs from 1980-1992 identified numerous small showings, auriferous boulders and copper/gold soil geochemical anomalies throughout the property. Nine main showings have been discovered to date on the property. These showings are characteristically small, low-grade with grades typically <0.1 oz/t gold; these commonly are associated with skarns, shear zones, and quartz veins. Sampling of these gold occurrences has produced results up 0.965 oz/t gold from grab samples and 0.403 oz/t gold over a 25 centimeters chip sample. One of the nine showings, the Ridge Zone showing, contains numerous small occurrences. The Ridge Zone occurs on the southwestern end of the Limpoke Pluton, which is thought to be an important mineralizing event on the property. This is the most significant gold target on the property. The Ridge Zone is associated with a significant >200 ppb gold soil anomaly. This anomaly is at least 900 meters long and averages 350 meters in width. A central core of this anomaly, which is 500 meters by 100 meters in size, is characterized by values greater than 1,000 ppb gold. The central core anomalous zone is primarily covered by talus and exhibits little outcrop. In the south-central part of the anomaly, chip sampling of a shear zone returned 0.155 oz/t gold over 55 centimeters.

Fieldwork conducted during 2002 included a total of 12 person-days prospecting and sampling in the south-central portions of the claims, a Notice of Work was not required for this work. This exploratory work resulted in financial expenditures of $22,250. Highlights of this work included confirmation of grades for the Barrington Vein, which assayed 28.53 g/t gold as well as the new discovery of semi-massive arsenopyrite quartz vein float, which occurred approximately 400 meters east of the Barrington Vein. From this new discovery, float samples of talus returned values up to 18.97 g/t gold. Although these samples were talus and are classified as float or grab samples, they most likely represent locally derived materials due to area geography. Samples of highly pyritized siltstone and intrusive, also taken in this area, have returned interesting copper-gold values; these assayed up to 0.25% copper and 4.05 g/t gold. This may indicate a copper-gold enriched porphyry system that is present below the lower talus covered slopes which may also be spatially and temporally associated with the proximal ridgeline Barrington Vein.

It is the opinion of the authors that this extensive and high-order gold enriched soil anomaly and associated gold showings exhibit good potential and warrant further exploration. The primary target is a Mesothermal shear/vein gold deposit with similar characteristics akin to the Snip Mine, with also potential for a copper-gold porphyry. Carlin-style gold mineralization, which is similar to the nearby Golden Bear Mine should also not be overlooked. Proposed work for the 2003 field season includes a 4 man fly-camp for ten days comprised of prospecting and sampling the relatively underexplored south eastern portions of the property to follow up the exciting new discoveries of 2002. The proposed program is estimated to cost $75,000.

II. LOCATION AND ACCESS

The Target property is within the Liard Mining Division, this is within the Coast Range Mountains, approximately 45 kilometers southwest of Telegraph Creek in north-western British Columbia (Figure 1). It is centered at 57 46'N latitude and 131 55'W longitude. The NTS map sheet is 104G/13 and BCGS map sheet 104G 071.

A secondary road extends sixteen kilometers south of Telegraph Creek to Glenora on the Stikine River. An access road, suitable for four-wheel drive vehicles, has been constructed southwest from Glenora to the site of a placer mining camp on the Barrington River. In the 1960's a cat road was built up Shakes Creek from the Barrington River road, passing within fifteen kilometers of the Target property. This cat road would have to be cleared and upgraded before it could be utilized. Access to the Target property is commonly gained by helicopter stationed temporarily from the Barrington River Placer Camp or Telegraph Creek or from a permanent base in Dease Lake.

III. TOPOGRAPHY AND PHYSIOGRAPHY

The topography on the Target property is rugged, typical of the Coastal mountainous and glaciated terrain. Most of the peaks and ridges have elevations ranging up to 2000 meters. Two northwest to southeast trending, U-shaped ridges constitute the backbone of the property. The axis of these ridges is situated near the Legal Claim Post at the center of the property. Most of the upper slopes are very steep but moderate at lower elevations. Bowl shaped valleys with numerous tributaries occur between the ridges and drain off in all directions.

Steep lower slopes are covered by a dense growth of slide alder but, where the slopes are less extreme, thick coniferous forest prevails. At higher elevations, above 1200 meters, open grassy slopes and alpine flora exists where rocky bluffs are not present.

The property lies in an intermediate or gradational belt between the wet zone of the Coast Range and the dry zone of the Stikine Plateau. The summers are typically cool and showery with the occasional snowfall. Snow accumulations in the winter is considerably less than in the wet belt. Exploration work could be started in early July and continued till October in a normal year.

Water for drilling and camp purposes are available throughout the property, although the ridges would provide a challenge to obtaining water. Other infrastructure elements

such as access and power would be difficult but, as demonstrated at the Eskay Creek and Golden Bear Mines, could be overcome.

IV. CLAIM DETAILS

The Target property is comprised of four 20-unit claims and one 14-unit claim, giving a total of 94 units with an area of 23.5 square kilometers (Figure 2). The four northern claims are contiguous, having a common, central Legal Claim Post. Target 1-4 claims were staked in March 2002 and, because of the dangerous terrain and weather conditions, many of the claim posts were not placed. The Target 5 claim was staked during the 2002 field season on September 9th. The Target 5 claim is immediately adjacent to the southern boundary of the Target 1-4 claims. The claims have not been legally surveyed, although they have been located by handheld GPS. The relevant claim statistics that are listed in Table 1.

Tenure No.	Claim Name	Owner Number	Map No.	Date Staked	Good Standing Status	Mining Division	Units	Tag Number
392371	TARGET 1	127898 100%	104G071	2002/03/08	2003/03/08	9 Liard	20	238723
392372	TARGET 2	127898 100%	104G071	2002/03/08	2003/03/08	9 Liard	20	238724
392373	TARGET 3	127898 100%	104G071	2002/03/08	2003/03/08	9 Liard	20	238725
392374	TARGET 4	127898 100%	104G071	2002/03/08	2003/03/08	9 Liard	20	238726
396468	TARGET 5	127898	104G071	2002/09/06	2003/09/04	9 Liard	14	229725

Table 1 Claim tenure information

A review of the records at the Mineral Titles office in Vancouver shows that the Target claims are wholly owned by Viceroy Resource Corporation. A press release dated April 19, 2002 indicates that the property has been optioned to Featherstone Resources Ltd. (now Newcastle Minerals Ltd.). A letter Agreement dated April 12, 2002 covers the terms of this option. Newcastle Minerals Ltd. can earn a 100% interest in the Target property, subject to a 1% net smelter return to Viceroy Resource Corporation, by paying $5,000 and issuing 200,000 post-consolidation shares of the Newcastle Minerals Ltd. over a period of one year. Featherstone may purchase one-half of the royalty for $500,000.

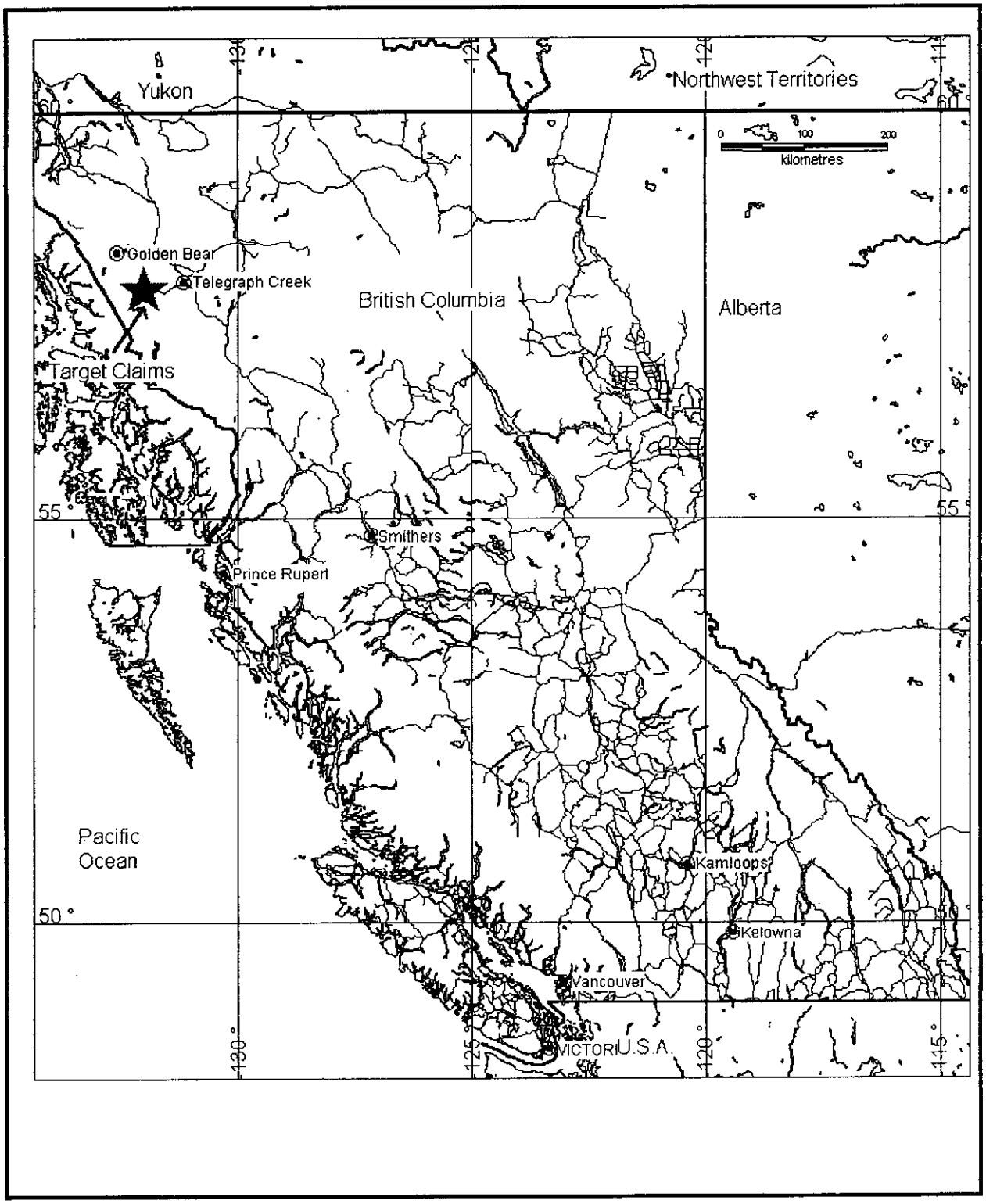


Figure 1 Target Property Location Map

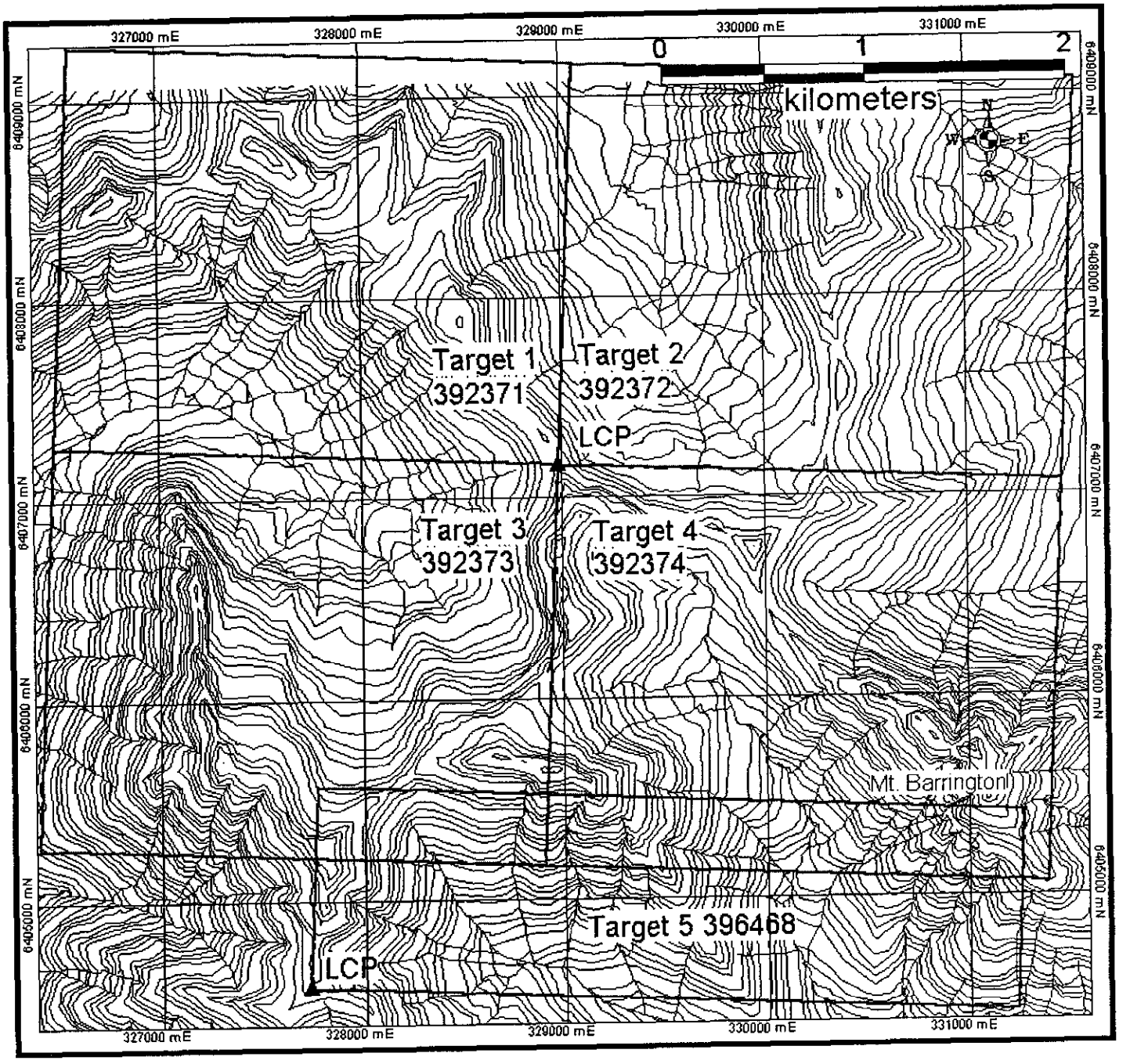


Figure 2 Target Topography and Claims Location Map

V. PROPERTY WORK HISTORY

The Target claims were staked for Viceroy Resources Inc. on March 8, 2002. During the past ten years no work has been done in the claim area and most of the previous claims lapsed several years ago. The first recorded history of the area began in the late 1800's.

Placer gold was discovered on gravel bars of the Stikine River between Glenora and Telegraph Creek in 1861 and worked extensively until the early 1900's. The placer gold deposits of the lower Barrington River, located less than 10 kilometers southeast of the Target property, have been worked sporadically since 1903.

The area south and west of Telegraph Creek was extensively prospected during the 1960's for its copper potential following the discovery of the Galore Creek copper - gold porphyry deposit in 1955 and the Shaft Creek copper - molybdenum deposit in 1957. Both of these deposits contain greater than one million tonnes of contained copper. These deposits are located 60 to 90 kilometers south of Telegraph Creek.

Several copper occurrences were discovered southwest of Telegraph Creek at this time. Kennco explored copper mineralization within the syenitic border phase of a large granodiorite stock and its intruded volcanics on their Poke claims - 5 kilometers north of the Target property. Their Gordon claims, located at the confluence of Limpoke Creek and the Barrington River, also hosts disseminated copper mineralization within the syenitic phase of the stock and intruded volcanics. The MH iron deposit, hosted by a pyroxenite intrusion on Shakes Creek, sixteen kilometers northeast of the Target property was also explored extensively in the 1960's.

In 1980, Teck Explorations staked the area previously covered by Kennco's Poke claims. In 1981, a geochemical survey found high but erratic values for copper, gold, molybdenum, and silver in soils. This claim covers ground upslope from an anomalous gold-in-silt sample collected during the government's regional geochemical survey.

In 1980, Dupont staked the Tuff claims on the basis of highly anomalous gold values from field-sieved stream sediment samples, collected during a regional survey. That same year DuPont conducted a preliminary investigation of the claims, which are located near the southern boundary of the Target 4 claim. They carried out a program of stream and soil sampling, prospecting and mapping. In 1981, Dupont continued the program (Korenic, 1982) with geological, geochemical and geophysical (VLF and Magnetometer) surveys of selected areas. Interestingly, a black chert band was found and is up to 90 meters wide but commonly ranges between 10 and 20 meters. One sample of this chert contained 2% pyrrhotite and returned 3.6 g/t gold, 3.8 g/t silver and 0.3% copper.

In 1988, Integrated Resources Ltd. carried out exploration (Weatherly, 1989) on their 12-claim Goat Property. Their Goat 8 and Goat 10 claims almost completely overlap the present-day Target 2 and Target 4 claims. They carried out a geophysical survey, using magnetometer and electromagnetic techniques and geochemical surveys which included 59 stream silt sediment samples and 51 rock chip samples. Some of this work was concentrated on the "Cave Showing" which is the same showing as DuPont's Tuff occurrence (Figure 3). The results of the 1998 program showed one silt sample, collected from an area above the drainage where Government Regional Geochemical Survey (RGS) sample #871103 was collected, to be moderately anomalous in gold, silver and copper. This sample returned 200 ppb gold, 1.8 ppm silver and 320 ppm copper. Additionally, select altered silicified and mineralized rock samples from the upstream area of RGS sample 871112 carried anomalous values ranging from 145 to 1300 ppb gold, 100 to 1850 ppm for copper and 1.0 to 4.6 ppm for silver.

In 1989, Integrated Resources Ltd. continued the exploration of the Goat Claims with a program of prospecting, geological mapping and rock/silt geochemical sampling (Lehtinen, 1989). During the course of this work, one silt sample and 141 rock samples were collected. Several mineralized quartz veins and shear zones were discovered. Most of these are narrow, less than 2 meters in width, and discontinuous. In the Upper Cave Creek area, several narrow quartz veins were sampled. The best value was a series of grab samples over 1.25 meters that returned 0.802 ounces per tonne of gold and 46 ppm copper. At the Main Grid/Barrington Grid area, calcite veins in sheared sediments host the gold mineralization (Figure 3). Vein widths are generally less than one meter but swell, locally, up to 2 meters. The best result was a series of grab samples over 1.00 meters, which returned 0.962 oz/t gold, and 1855 ppm copper. Several rock grab samples from the Goat claims displayed extremely anomalous but widely dispersed gold values. Results from these samples returned values ranging from 1050 ppb to >10,000 ppb gold. Evidence of diamond drilling was found at this time on a ridge at the headwaters of Pokey Creek but is was determined that the work predated Dupont's exploration activities and no records were found to document the work.

During 1989, Integrated Resources Ltd. (Bell, 1989) also carried out a very limited reconnaissance exploration program, they collected 20 rock and 2 silt samples on their Target 1 claim. This is roughly the same area as the present-day Target 3 claim. Altered volcano-sedimentary rocks, containing quartz and calcite stockworks and veining, were reported to contain abundant disseminated pyrite, pyrrhotite, bornite, chalcopyrite and arsenopyrite. One grab sample returned 1,790 ppb gold.

Integrated Resources Ltd. (van Angeren, 1991) carried out a program of geochemical sampling; prospecting and diamond drilling on the Goat 4 to 11 claims. A total of 104 silt, 100 soil, 330 rock and 48 core samples were collected for analysis. Additionally, a 110 meter diamond drill hole was completed. Previously detected high-grade showings were determined to comprise small sulphide pods enclosed within larger altered zones. A total of 15 geochemical/geological targets were defined by this work.

The best target outlined in 1990 by Integrated Resources was the "Bob Showing" which is located just north of the present-day Target 2 claim (on ground now held by others). This 450 meter long structure is characterized by a 5 to 90 meter wide alteration zone which envelops a 2 to 4 meter-wide quartz stockwork zone. A chip sample across this zone returned 0.235 oz/t gold and 0.56% copper across 1.8 meters. A single diamond drill hole was drilled to test the "Bob Structure" but had to be abandoned 10 meters short of the targeted quartz stockwork zone because of poor drilling conditions. The wall rocks are highly anomalous in precious metals.

In May 1990, Dryden Resource Corporation, entered into an option agreement (Pegg, 1990) with Integrated Resources Ltd. whereby Dryden could earn a 50% interest in the Target #1, Waterfall #1, and IR #1,2,5,6,7, and 8 claims. Dryden carried out an initial limited reconnaissance program on the Target #1 claim, which resulted in the collection of 6 rock, 11 soil and 2 silt samples (Pegg, 1990) from the Target claim area. One grab sample from a gossanous siltstone returned 1,280 ppb gold but exhibited no visible sulphide mineralization. A subsequent Dryden (Blain et al., 1990) field program, comprising prospecting, rock, soil and silt sampling and very low frequency (VLF) surveying, was carried out in August and September 1990. A total of 112 rock, 674 soil, 45 silt and 6 heavy-mineral concentrate samples were collected. The VLF survey was carried out over three soil contour lines. Several geochemical anomalies and showings were discovered in 1990. One grab sample of float material from the previous IR #1 claim returned 11,320 ppb gold. This sample was collected at the headwaters of Wimpson Creek eastern tributary. Wherever possible, the soil samples were collected from the "B" horizon, at depths between 10 and 30 centimeters. In some locations, it was only possible to collect talus fines from the steeper slopes. The spacing of samples varied from 25 to 50 meters along contour lines. Fifteen samples from the previous Target 1 claim (present day Target #3 claim) were found to be anomalous (>300 ppb) in gold, the peak being 1,680 ppb gold. Forty-six samples were collected from streams; the finest active sediment was selected wherever possible. Three silt samples were anomalous and ran >100ppb in gold. Two of these are from the previous Target #1 claim (220 and 270 ppb gold), while one silt sample (430 ppb gold) was collected from a glacial stream which drains the Target #1 claim. Six sediment samples were concentrated in the field by panning from 4 liter size stream silt samples. One of these samples returned 1,992 ppb gold, this sample was from the IR #1 claim. A contour soil line immediately above this sample revealed no significant values. The VLF surveys were carried out along 3 soil-sampling contour lines. A Geonics EM-16 instrument was tuned to the Seattle transmitter and the 24.8 kHz frequency was used. Three cross-overs were delineated but they are not associated with any of the geochemical anomalies.

Dryden compiled all of the existent information onto 1:10,000 scale topographic maps of the property in 1991. This program was designed to evaluate anomalous grab and float sample sites that were found during the 1990 program Blaine et al., (1990) and Pegg (1990). The field work (Aspinal, 1991) comprised the establishment of a system of

monuments for location control, prospecting/boulder tracing, geological mapping, contour soil, heavy mineral and rock sampling. The rugged terrain is characterized by abundant outcrop but only one-half of the outcrop area could be examined due to lack of accessibility. A total of 15 gold occurrences were identified on the property. Six of the gold occurrences are associated with massive sulphides in narrow shear and fault zones. A massive sulphide vein hosts one occurrence, 3 are from quartz veins and 5 are derived from lenses of massive pyrrhotite-pyrite with minor chalcopyrite in the contact zone proximal to intrusive stocks. Of the seven auriferous boulder localities, only three were traced to their in situ source. Most of the mineralized occurrences were mapped at a 1:10,000 scale. A total of 360 contour soil samples, 338 rock samples and one heavy mineral concentrate sample were collected from the Target #1, Waterfall #1 and the adjoining IR #1 claims. Most of the soil sample material collected was talus "fines", all above the tree line, on mountain ridges or slopes of 300 or more. Within the previous Target #1 claim, a gold-in-soil anomaly (>200 ppb) occurs which is at least 900 meters long and 350 meters wide. The width may be exaggerated because of mechanical, down hill dispersion. This anomaly trends east-west to northeast - southwest across the southern part of the claim and is referred to as the South Target Gold Anomaly. This large and strong anomaly trends across the slope and the strike of the Upper Triassic rock units. In part, it overlies or is proximal to the monzodioritic intrusion. The 200 ppb gold contour is still open at both the eastern and western extremities.

Within the South Target Gold Anomaly, a 400 ppb gold contour encloses an area, which is 850 meters long and averages 250 meters wide (Figure 3). A significant (>1,000 ppb) anomaly lies in the center of the South Target Gold Anomaly. This anomaly is 540 meters long and 100 meters wide. This anomaly hosts 5 gold occurrences (0.03 to 0.965 oz/t gold from grab samples) and one auriferous boulder. The gold occurrences are hosted by thin (<25 centimeters) sheared and/or altered sedimentary rocks. A second gold-in-soil anomaly, referred to as the Central Target Gold Anomaly, is located immediately to the north of the South Target Gold Anomaly. A 200 ppb gold cut-of contour defines an area of 340 meters long and 260 meters wide. This anomaly is situated over two ridges and, conjecturally, continues beneath a glacier. Three small gold-in-soil anomalies were also found on the property. Two gold-in-soil single point anomalies (480 and 302 ppb gold) occur on the previous IR#1 claim.

Further work by Tupper (1992) identified the Barrington vein which yielded chip samples of up to 1.02 oz/t gold across 0.4 meters. In 1992, the vein was obscured by remaining snow patches but the structure that it occurred in was identifiable over a strike distance of 200 meters. The veins were considered to fill either a-c joint features related to regional folds, or, conjugate sets related to a major north-south compressional force. The Barrington Vein is located on the southernmost tip of the ridge on the Ridge Zone Showing in Figure 3.

Figure 3 Mineralized Showings on the Target Property

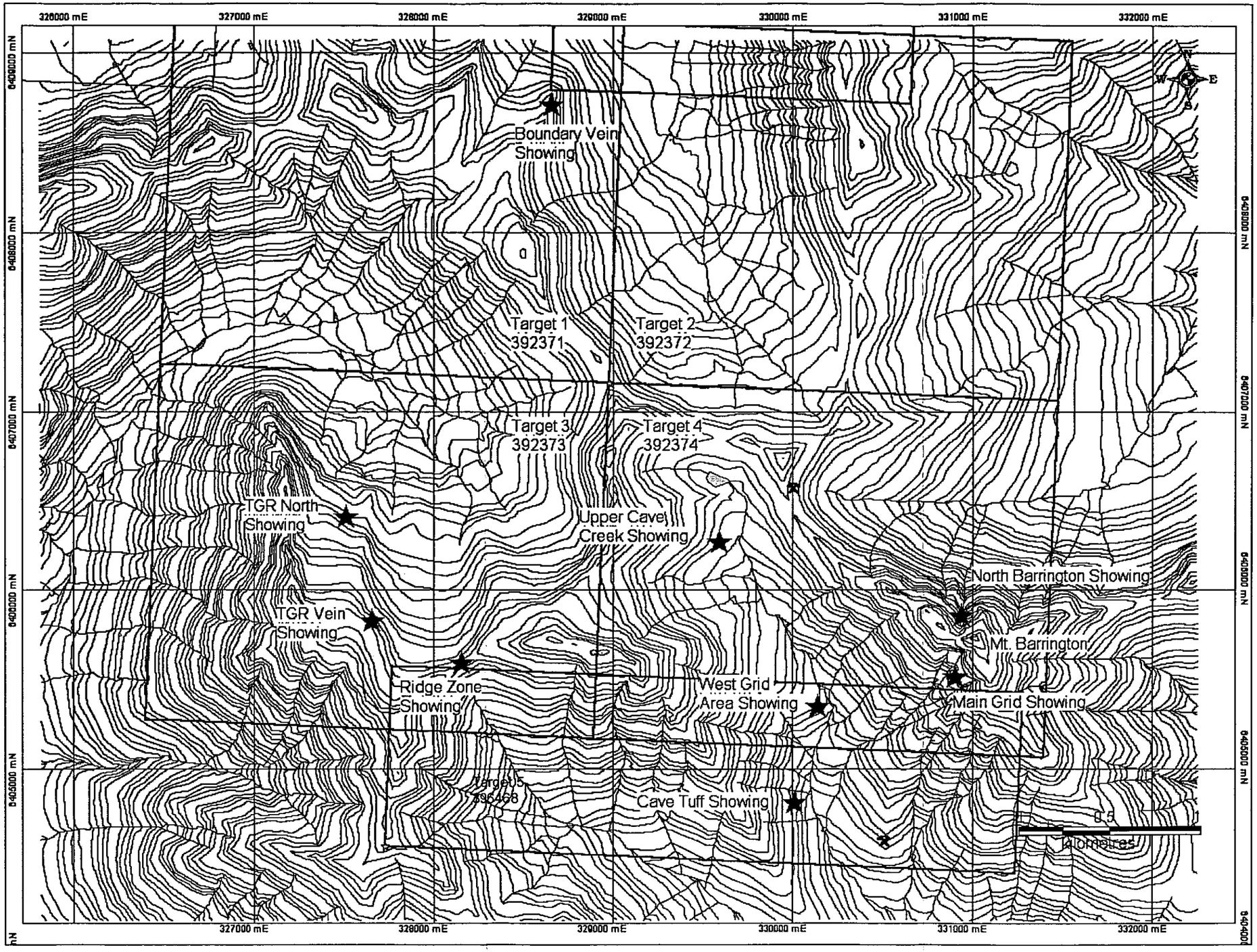


Figure 3 Mineralized Showings

VI. REGIONAL GEOLOGY

The Telegraph Creek area lies on the western margin of the Intermontane Belt, within the Stikine Arch near its contact with the Coast Plutonic Complex. Upper Triassic Stuhini Group island arc volcanic and sedimentary rocks unconformably overlie a sequence of Paleozoic to Middle Triassic marine sediments. These have been intruded by Upper Triassic to Lower Jurassic syenitic stocks and by Jurassic to Lower Cretaceous quartz diorite and granodiorite plutons of the Coast Plutonic complex.

The oldest Paleozoic rock assemblage in the Telegraph Creek area consists of Permian bioclastic limestone overlying metamorphosed sediments and volcanics, which in turn are overlain by a crinoidal limestone unit.

Unconformably overlying the Permian limestone unit is the Upper Triassic Stuhini Group, which is mainly composed of augite andesite breccias, conglomerates and volcaniclastic rocks. This Upper Triassic assemblage is correlative with the rocks that host the Snip Gold Mine, located 150 kilometers to the south.

Small oval or round syenite, pyroxenite and orthoclase porphyry stocks, dated as Late Triassic to Early Jurassic (Souther, 1971), intrude mainly Stuhini Group volcanic rocks. The surrounding sedimentary or volcanic rocks are commonly hornfelsed. Upper Triassic volcanics intruded by syenitic stocks hosts the Galore Creek and Copper Canyon copper-gold porphyry deposits. Orthoclase porphyry or syenitic stocks are associated with most of the significant precious metal deposits in the Stewart, Sulphurets and Iskut River Districts, including the Silbak Premier, Sulphurets, Johnny Mountain and Snip deposits.

Lower Jurassic conglomerates with granodiorite xenoliths unconformably overly Triassic sediments of the Stuhini Group. The Jurassic volcano-sedimentary strata are similar in appearance to those of the underlying Stuhini Group, with differentiation made possible by the identification of fossils.

Jurassic and/or Cretaceous granodiorite to quartz diorite batholiths of the Coast plutonic complex intrude all older stratigraphic units. This intrusive suite consists mainly of medium-grained hornblende-biotite granodiorite with lesser hornblende quartz diorite and is locally foliated near its edge. Marginal phases of this intrusive unit are commonly syenitic and "much additional work is needed to subdivide the many phases of the map-unit' (Souther, 1972).

Large scale northeast-southwest trending, upright isoclinal folds are the primary structural features. Post-intrusive deformation is characterized by regional scale; vertical, north-south trending faults and shear zones. Similar structures also trend

northwest-southeast. Many of these structures are typified by orange weathering, carbonate alteration. Quartz-biotite contact metamorphism occurs in the Stuhini Group rocks, at their contact with the coeval or later intrusions.

VII. REGIONAL MINERALIZATION

Gold bearing deposits in this part of British Columbia are dominantly mesothermal to epithermal vein or shear zone deposits (Panteleyev, 1986) typified by base metal bearing veins and massive to semi-massive sulphides in strong shear zones. These types of deposits are commonly related, spatially as well as temporally, to nearby Mesozoic intrusions. Due to the presence of one of these Mesozoic intrusions in the area, named the Limpoke Pluton, there is potential for large porphyry copper-gold or copper-molybdenum deposits such as Galore Creek, Copper Canyon or the nearby Golden Bear deposit which is a Carlin-type deposit. All of these deposits are located within the Quesnel Terrane, which is an elongate belt with volcanic, sedimentary and related intrusive rocks. They range in age from late Paleozoic to Jurassic and represent the remains of an allochthonous island arc. The Triassic and Jurassic basic and intermediate, in many cases alkalic, volcanic rocks, as well as time-correlative sedimentary units and the numerous intrusive suites of generally Mesozoic age, contain a wide variety of copper-gold-silver and copper-molybdenum "porphyry" deposits. They also are associated with copper-silver-gold skarn bodies as well as copper-gold veins and breccias. Three deposit types should be explored for on the Target property, these are mesothermal to epithermal shear zone deposits, such as the Snip Mine or Skyline deposit, Carlin-type deposits such as the Golden Bear deposit and copper deposits such as the Galore Creek deposit.

At the now closed Snip Mine, gold occurs in fractures and along grain boundaries in sulphide-annite, which is a low magnesium biotite, chlorite-quartz bodies in an east-west trending shear zone. Ribbon quartz veins are also common at the Snip Mine. Rocks in the shear zone exhibit cataclastic textures and, where the zone is wide, interfolial folds are developed. Conversely, the Skyline deposit is associated with north-south trending sulphide bearing quartz-potassium feldspar-annite veins. These show less evidence of movement and/or shearing and are more typical vein-lode deposits with strong wall rock alteration.

The Golden Bear mine, which is located approximately 40 miles north west of the Target property, is an important deposit model to examine. At the Golden Bear deposit, foliated hornblende diorite of Jurassic to Triassic age intrude the pre-Upper Triassic rocks. The Mesozoic strata are overlain unconformably by flat-lying Upper Tertiary and Pleistocene plateau basalts of the Level Mountain Group. The Permian strata consists of a 760 meter succession of limestones with local chert, shale and sandstone. The

pre-Upper Triassic rocks consist of fine-grained crystal tuff to lapilli tuff with intercalated phyllite and greenstone, minor chert, jasper, greywacke and limestone. A major north to northwest trending fault, known as the Ophir Break Zone, extends through the area for over 10 kilometers. The mineralization is primarily epigenetic, although supergene enrichment occurs locally. The deposits are characteristic of a low to medium temperature, low salinity, mesothermal system. Mineralized solutions ascended the fault zone to an area of extensive tectonic brecciation and alteration. Intrusive activity, alteration and mineralization along the major regional fault is postulated to have occurred over a 50 million year period during the Jurassic period, from 156 to 206 million years (Schroeter, 1987). With the exception of the Grizzly, all the zones at Golden Bear are oxidized and exhibit many characteristics of Carlin-type, sediment-hosted micron gold deposits. Mineralization is hosted by hydrothermally brecciated and silicified dolomites.

Due to presence of the Limpoke Pluton in the immediate area, there is also some potential for intrusion related porphyry copper-gold or copper-molybdenum deposits such as Galore Creek or Copper Canyon. To the east of the Target property, several smaller porphyry copper-gold deposits, such as the Red-Chris, have been discovered and have been subjected to several phases of exploration. The Galore Creek Syenite complex is comprised of twelve alkalic porphyry copper-gold deposits. This complex comprises a series of Late Triassic to Early Jurassic orthoclase-porphyry syenitic bodies which have intruded coeval Upper Triassic Stuhini Group volcanic rocks and related sediments. Faults which offset and segment the intrusive rocks and a sub-horizontal fracture cleavage are the two main structural elements in the syenite complex. The complex is roughly 5 by 2.5 kilometers in area. The deposits are hosted primarily by highly altered potassium-enriched volcanic rocks and pipe-like breccias adjacent to syenite dikes and stocks. Typically, the deposits are manto-shaped and have a north to northeast trend related to the syenite contacts and zones of structural weakness. The syenite complex is made up of four intrusive phases that are most closely associated with the copper deposits. The copper-bearing rocks near the syenite intrusion are extensively metasomatized, recrystallized and locally brecciated. These may include pyroclastic and intrusive breccia, trachyte, phonolite, lithic tuff, crystal tuff, pyroxene basalt, pyroxene andesite and minor sediments. The deposit appears to be localized at the intersection of two fracture zones which have produced a local center of brecciation in epidotized syenite porphyry lying 760 meters west of the south end of the Central Zone. The mineralization in the deposit includes chalcopyrite with minor bornite, associated partly with pyrite and magnetite. Sulphides and magnetite occur as fracture fillings, coarse replacements and disseminations.

VIII. PROPERTY GEOLOGY

The oldest rocks in the area are located just south of the present day Target #3 claim. Souther (1971) reports that these rocks are of Permian age and comprise phyllites, schists, and greenstones with minor chert, schistose tuff and limestone Most of the area in the vicinity of the Target Claims is underlain by Upper Triassic volcanic and sedimentary rocks intruded by small Jurassic stocks and dykes of granitic or syenitic composition. These stocks are related to the Coast Mountain Complex. The stock, which outcrops south of Limpoke creek and west of the Barrington River, covers the western part of the present day Target 2 and 4 claims. The sediments near the contact of this stock are hornfelsed and display a prominent gossan.

Upper Triassic Stuhini Group sediments and volcanics underlie the Target property. These are intruded by multiple dykes, several stocks and the western end of an oval, multi-phase granodiorite pluton measuring up to 8 kilometers long This pluton may be coeval and the feeder for the andesitic edifice. This is suggested by its close compositional similarity to glomerophyres in Stuhini Andesitic flows. The pluton (van Angeren, 1991) is intruded by plugs and dykes of pegmatitic syenomonzonite, porphyritic syenite and quartz monzonite. It is probable that these are all Late Triassic to Early Jurassic in age. Some of these intrusive phases are closely associated with large-scale alteration. Aspinal (1991) sub-divided the Upper Triassic Stuhini Group into the following lithological units:

- Generally massive, grey, fine grained tuffaceous wackes and greywackes
- Massive, grey, tuffaceous sandstones and siltstones
- Rhythmically banded chert
- Cherty argillite grading to grey argillite and slate
- Limestone conglomerate, generally occurring as narrow lenses
- Polymictic conglomerate

The greywacke unit is characteristically grey to greyish green in color, massive, well cemented and contains sand sized material mixed with quartzo-feldspathic grains. These rocks are well jointed but not bedded. The tuffaceous wackes are very similar, but were segregated from the greywacke by their higher feldspathic component.

Several units exist within the main sandstone unit. One type consists of light grey impure sandstone, which commonly is equigranular. It is also massive and composed of rounded sand grains with angular interstitial fine-grained mafic grains, possibly hornblende. These impure sandstones grade into impure siltstones. Both of these rock types appear to grade into tuffaceous varieties. A second type of sandstone, not differentiated from the former, shows good bedding, commonly demarked by variations in grain size and color banding. These variable grain sizes and banding suggest a

crude, graded bedding which Aspinal (1991) uses to determine that tops are to the north.

The rhythmically banded chert shows distinctive dark-grey to dull, yellow colored bands 5cm-10cm thick. Within the claims, they are commonly iron stained on their weathered surface. They are aphanitic, hard, siliceous, and gently folded which may imply syn-sedimentary deformation. They are resistant, easily traceable and represent key marker units.

The cherty argillite and grey argillite are widespread throughout the property. They range in color from light grey to a dark grey on fresh surfaces. Generally, the former exhibits good uniform bedding with individual bedding planes being 5-10 centimeters apart. They differ from the rhythmically banded chert by their more consistent grey color. The grey argillite is fine grained, well fractured and generally lack bedding. The cherty argillite unit is variably ferruginous on weathered surfaces. The slates were observed (Aspinal, 1991) in an area immediately adjacent to a persistent east-west trending fault. The schistocity is parallel to the trend of the fault and may be related to it.

The limestone conglomerate unit is grey in color and comprises recrystallized limestone lenses with limestone fragments. These lenses are short, generally several meters in length and only one or two meters wide. They were observed within the cherty argillite unit. A white recrystallized limestone unit with intercalated dull grey carbonate-siliceous lenses, occurs at the eastern boundary of the former IR#1 claim and has probably been metamorphosed during the intrusion of the Limpoke Pluton.

The polymictic conglomerate contains rounded fragments of granodiorite, basaltic pumice and tuffaceous sandstone in a matrix of grey sand-sized grains.

Compared to the sedimentary units, volcanic rocks are rare on the property, but several lenses are present within the sandstones, rhythmically banded chert and cherty argillite. Volcanic tuffs appear to be the most dominant sub-type. Lenses of andesite and rhyolite flows are rarely observed.

The Stuhini group sedimentary and volcanic units predominantly strike east-west. All units are vertical to steeply dipping, providing a stratigraphic section up to 4,000 meters thick. Bedding is best observed in the rhythmically banded chert and sandstone units.

Intrusive rocks within the property include:

- Diorite, quartz feldspar porphyry, quartz-eye porphyry and megacrystic syenite dykes.
- Fine to medium grained monzodiorite

- Biotite-hornblende quartz monzonite and megacrystic biotite hornblende monzodiorite.

The Limpoke Pluton is the most prominent geological feature in the area and its western extremities underlie the Target 2 and 4 claims. Its southern border displays a rusty weathering appearance due to the oxidation of pyrite. This pluton is a two-phase, texturally heterogeneous intrusion. It is dominated by a phase of pale grey or pink, fine to medium grained biotite-hornblende monzonite. The center of the intrusion and parts of its border zone are characterized by a medium grained to coarse-grained plagioclase megacrystic biotite-hornblende monzodiorite. The plagioclase phenocrysts within this rock type are set in a fine-grained matrix of potassic feldspar. The biotite hornblende quartz monzonite is equigranular and grey, pink or flesh colored on fresh surfaces.

For the most part, the rocks, which underlie the property, show very minor alteration. Weak alteration, generally combined with chlorite, does occur near some of the intrusive contacts and fault zones. Intense argillic alteration, combined with shear breccias, bordered by propylitic alteration, does occur within a northwest-southeast trending shear zone on a ridge in the south-eastern part of the former Target #1 claim. Nearby, carbonatization and carbonate-silica altered rocks are present locally along a major diorite dyke contact.

A major east-west trending fault, along the southern boundary of the present day Target #3 claim, separates units striking 1050 south of the break from units striking 1700 north of the break. Within the Target # 4 claim (near the Target South Gold Anomaly), northwest-southeast trending faults and shear zones have disrupted the sedimentary units. In the same area, the map units are gently folded about a north-south trending fold-axis.

IX. PROPERTY MINERALIZATION

Several mineralized zones in the vicinity of the Target property are described in the "History" section and shown on Figure 3. Specific showings on the Target property are described in the text below, the Minfile currently shows New Limpoke (104G024) and Tuff (104G121) within the claims.

A. CAVE TUFF SHOWING

Dupont of Canada Exploration Ltd first discovered this showing in 1980 (Figure 3). They carried out exploration in 1980 (Eccles) and 1981 (Korenic). Integrated Resources Ltd. also explored this area in 1988 and reported the work in 1989 (Weatherly) and 1989 (Lehtinen).

Basalts and andesites of the Upper Triassic Stuhini Group mainly underlie the occurrence. These are intercalated with black chert, grey ribbon chert and limestone. Immediately northwest of the showing is the large Limpoke Pluton, which has intruded the supracrustal, rocks in Jurassic Cretaceous time. A distinctive black chert horizon may be as much as 90 meters in width, but is commonly within 10 to 20 meters width.

One sample (Korenic, 1981) contained 2% pyrrhotite and returned 3.6 g/t gold, 3.8 g/t silver and 0.40% copper. Massive sulphide pods have been observed within the volcanics over an area of about 1200 meters by 1200 meters. These pods average less than 10 centimeters in width and are from 1 to 20 meters long. They occur oblique to bedding and are associated with carbonate alteration. They are composed of pyrite, with lesser amounts of arsenopyrite, chalcopyrite and pyrrhotite. Korenic (1981) reports that one grab sample from a sulphide pod assayed assayed 122.4 g/t gold, 25.03 g/t silver and 0.41% copper. Fifteen rock sample contained values greater than 27.43 g/t gold.

In 1988, (Weatherly, 1989) Integrated Resources Ltd. explored the Cave Creek showing which is the same occurrence evaluated by DuPont. Again, high gold values were obtained from the sulphide-rich lenses and pods. Seven of the eleven rock grab samples collected by previous workers returned significant assay results ranging from 0.106 to 3.044 oz/t gold and 0.13 oz/t to 0.83 oz/t silver. This area was not evaluated during the 2002 field program.

B. West Grid Area

Weatherly (1989) discovered a float sample of massive arsenopyrite, which was collected from a terminal moraine of a small glacier. This boulder may have been derived from the West Grid Zone (Figure 3). This grab sample assayed 0.172 oz/t gold and 0.74 oz/t silver.

In 1989 (Lehtinen) re-examined this area with prospecting, geological mapping and geochemical sampling. The mineralized zone is hosted by sub-parallel fault structures within greywacke, siltstone and argillite units. Arsenopyrite and pyrite occur as disseminations in the sediments and in quartz veins within the shear structure. The veins strike north-south with a dip varying from vertical to a steep easterly direction. The shear zone has a maximum width of 6 meters while the strike length is restricted to less than 15 meters due to poor exposure and late, cross-cutting faults which have segmented and displaced the shear-hosed structure. Sampling done during previous exploration programs returned assays greater than one oz/t gold from this zone. Detailed sampling in 1989 did not show any significant gold values. The highest values returned during this program were 880 ppb gold and 950 ppm copper. Lehtinen (1989)

believes that "The lower gold values resulted from poorly selected channel sample locations across the gossanous structure."

In the same vicinity, several quartz veins were sampled by Lehtinen (1989). The veins contain massive arsenopyrite and appear to host the best gold values. The significant sample results are in Table 2.

WEST GRID AREA – PREVIOUS SAMPLING RESULTS					
Sample #	Type	Width(m)	Gold oz/t	Copper ppm	Arsenic ppm
446794	Grab	0.10	0.114	1680	>10 000
446794	Grab	0.30	0.170	760	>10 000
446895	Chip	0.65	1.104	37	>10 000
446892	Grab	1.25	0.802	46	>10 000

Table 2 West Grid Area sampling results

C. Main Grid

An area to the south of Mount Barrington and to the east of the West Grid Area was prospected in 1989 (Lehtinen) and returned significant gold values. The majority of the gold mineralization occurs in calcite veins hosted by shear zones in sedimentary rocks. The strike potential of these structures is unknown. Vein widths are generally restricted to less than one meter but do swell to greater than two meters in isolated areas. The significant assay results are listed in Table 3.

MAIN GRID AREA – PREVIOUS SAMPLING RESULTS					
Sample #	Type	Width (m)	Gold (oz/t)	Copper (ppm)	Arsenic) ppm)
446833	Grab	0.25	0.052	26	125
446834	Grab	0.1	1.212	395	>10,000
446836	Grab	1	0.962	1855	>10.000
446837	Grab	0.5	0.107	1050	>10.000
446841	Grab	0.5	0.138	130	>10.000
446842	Grab	0.25	0.172	192	>10,000

Table 3 Main Grid Area sampling results

D. RIDGE SHOWING

Integrated Resources Ltd. (Bell, 1989) discovered this showing in 1989. This discovery resulted from the follow-up of two RGS gold-in-silt anomalies identified in 1988. The rock grab sampling (20 samples) program produced 10 results in excess of 100 ppb gold. Two samples returned values greater than 1000 ppb gold.

In 1990, a program of soil and rock sampling was carried out by Dryden Resource Corporation (Blain et al., 1990) over the Ridge showing. Small pods of massive pyrite and pyrrhotite were found along ridges of siliceous, gossanous wackes, siltstones, minor limestone and propylitic altered andesites. Limonitic quartz-carbonate zones up to 3.1 meters wide were outlined.

Dryden's 1991 program (Aspinal, 1991) identified several gold occurrences within the Ridge Zone. The gold showings are of four main categories:

- Massive to semi-massive sulphides (pyrrhotite, chalcopyrite, and bornite) in shear zones.
- Massive sulphide veins (pyrrhotite and trace chalcopyrite).
- Quartz veins with pods of pyrrhotite, pyrite and chalcopyrite.
- Intrusive contact zones with pyrrhotite, pyrite, and trace chalcopyrite in lenses up to one meter wide.

The massive sulphide type occurs in narrow shear and fault zones. Strong manganese and iron oxide gossanous zones up to 2.5 meters wide by 5 meters long are associated with this mineralized type. The most extensive shear zone is 25 meters long and 0.70 meters wide. Grab samples from this zone ranged up to 0.790 oz/t. One 75 centimeters chip sample returned 0.029 oz/t gold.

Massive sulphide veins, mainly pyrrhotite with trace chalcopyrite average 20 centimeters wide and 19 meters long, are associated with this style of mineralization. The longest shear is 25 meters long and 0.70 centimeters wide. The best chip sample returned 0.403 oz/t gold over 25 centimeters.

Quartz veins, with pods of pyrite, pyrrhotite and chalcopyrite occur within the siltstones on the Ridge Zone

Intrusive contact zones with pyrrhotite, pyrite and trace chalcopyrite occur in narrow lenses 0.10 meters by 1 meter. The highest gold value (0.531 oz/t) obtained from this type of material was a grab sample from the western part of the zone.

Four areas with auriferous boulders are located within the vicinity of the Main Zone. The highest value of 2.023 oz/t gold was obtained from a boulder located near the headwaters of Wimpson Creek.

The Ridge Zone is characterized by a >200 ppb gold-in-soil anomaly, which is at least 900 meters long and 350 meters wide. The width may be exaggerated because of mechanical, down hill dispersion. This anomaly trends east-west to northwest - southeast across the southern part of the claim and is referred to as the South Target Gold Anomaly. This large and strong anomaly trends across the slope and the strike of the Upper Triassic sedimentary units. In part, it overlies or is proximal to the monzodiorite intrusion. The 200 ppb gold contour is still open at both the eastern and western extremities. Within the South Target Gold Anomaly, a 400 ppb gold contour encloses an area, which is 850 meters long and averages 250 meters wide. A significant, >1,000 ppb gold anomaly lies in the center of the South Target Gold Anomaly. This anomaly is 540 meters long and 100 meters wide. It hosts 5 mineralized occurrences ranging from 0.03 to 0.965 oz/t gold from grab sample, as well as one auriferous boulder. The gold occurrences are hosted by thin, <25 centimeters sheared and/or altered sedimentary rocks.

A second gold-in-soil anomaly, referred to as the Central Target Gold Anomaly, is located immediately to the north of the South Target Gold Anomaly. A 200 ppb gold contour defines an area of 340 meters long and 260 meters wide. This anomaly is situated over two ridges and, conjecturally, continues beneath a glacier. Three small gold-in-soil anomalies were also found on the property. Two gold-in-soil single point anomalies, which returned 480 and 302 ppb gold occur on the previous IR#1 claim.

E. TGR Vein

Aspinal (1991) describes this showing as comprising 3 quartz veins, which are 45, 15, 5 meters long and are exposed over a total strike length of 115 meters. These veins are associated with altered, carbonatized and brecciated monzodiorite. Iron oxide zones commonly envelope the quartz veins. The mineralization consists of massive pyrrhotite, pyrite and minor chalcopyrite.

Twenty-one narrow, 6-60 centimeters wide chip samples were collected but returned low gold values. Twenty of the samples returned values less than 100 ppb gold and one sample returned a value of 0.041 oz/t gold.

F. TGR North Vein

This 1.5 meter wide quartz-carbonate vein with arsenopyrite selvages contains pyrite and pyrrhotite and is hosted by monzodiorite. Two grab samples were collected, with the best value being 0.254 oz/t (Aspinal, 1991).

G. Boundary Zone

Aspinal (1991) reports that this mineralized quartz vein, is up to 0.5 meters wide and 70 meters long and is hosted by monzodiorite and syenite. Lenses of wall rock and carbonate occur within the vein. Discontinuous mineralization in the vein comprises blebs and disseminations of pyrrhotite, pyrite and chalcopyrite. Eight grab samples collected from the Boundary Vein returned values up to 0.265 oz/t gold. Twenty-three chip samples were obtained from the vein. The sample width varied from 20 to 150 centimeters. Twenty-one of the samples returned values less than 300 ppb gold. The best chip sample result was 0.029 oz/t gold over 1 meter.

X. 2002 Exploration Program

A. Introduction

Field work was completed in 2002 over a period of 4 days from September 6th to 8th. The program focused on prospecting and re-sampling of the Barrington vein area, and areas to the north of the TGR North near the contact of the Limpoke Pluton.

Rock sampling was used in the 2002 evaluation of the Target property, these were collected by trained geological staff to be an accurate representation of the rocks in that particular area. The rock samples were described and put into sealed plastic bags for transfer to Acme Laboratories in Vancouver. All samples remained in Keewatin Consultants 2002 personnel possession and were later put into securely fastened rice sacks and sent via Bandstra Trucking Ltd. to Vancouver. (Keewatin personnel have no reason to believe that these samples were tampered with.)

B. 2002 Field Program Results

A total of 33 rock samples were collected during the 2002 field program (Appendix III, IV) and are located principally in the south central portions of the Target claims (Figure 3). The highlights of these results were one sample (417178) taken as a re-sample of the Barrington Vein that returned 28.53 g/t gold, 23 g/t silver, > 10% As, 9688 ppm Zn, 2462 ppm Pb, and 509 ppm copper. Six other samples, 126672-126678, were taken downslope and east of the Barrington Vein. Sample 126674 returned 14.13 g/t gold and sample 126673 returned 18.97 g/t gold from arsenopyrite rich quartz vein float. Sample 126677 returned 1.20 g/t gold and 0.16% copper and sample 126678 returned 1.53 g/t gold and 0.16% copper from gossanous siltstone. Sample 126675 returned 4.05 g/t gold from gossanous diorite. Results from the remainder of the sampling of massive sulphide pods and sulphidized siltstones generally returned values < 500 ppb gold and <0.25% Cu.

XI. RECOMMENDATIONS AND CONCLUSIONS

The exploration of the Target property is at an early stage. Several previous phases of exploration have been carried out but mainly comprise geological mapping, geochemical surveys such as heavy mineral, silt, soil and rock surveys, lesser amounts of prospecting, geophysical surveys such as VLF and EM and one diamond drill hole, which stopped short of its target zone. The work done on this property to date has been limited and sporadic.

However, this work has identified nine main mineralized showings on the property. Most of these are located near small plutonic stocks and comprise the following styles:

- Massive to semi-massive sulphides comprised of pyrrhotite, chalcopyrite, and bornite in shear zones.
- Massive sulphide veins of pyrrhotite and trace chalcopyrite.
- Quartz veins with pods of pyrrhotite, pyrite and chalcopyrite.
- Intrusive contact zones with pyrrhotite, pyrite, and trace chalcopyrite in lenses up to one meter wide.

In general, these types of mineralization are similar to those found at the Snip mine on the Iskut River, which is located 150 kilometers to the south of the Target property. Most of the known showings on the Target property are narrow and exhibit low precious metal grades. They appear to have limited potential but should be re-examined to determine if they are part of a larger system.

The most important target is the Ridge Showing, or South Target Gold Anomaly. This target exhibits a >200 ppb gold-in-soil anomaly, which is at least 900 meters long and 350 meters wide. This large and strong anomaly trends across the slope and the strike of the Upper Triassic rock units. In part, it overlies or is proximal to the monzodioritic Limpoke intrusion. The 200 ppb gold contour is still open at both the east and west extremities. Within the South Target Gold Anomaly, a 400 ppb gold contour encloses an area, which is 850 meters long and averages 250 meters wide. A significant, >1,000 ppb gold anomaly lies in the center of the South Target Gold Anomaly. This anomaly is 540 meters long and 100 meters wide. Seven grab and chip samples collected from this showing have returned values greater than 0.1 oz/t gold. The best grab sample assayed 0.965 oz/t gold. These samples were collected from contact skarn zones; shear zones, fractures and quartz veins and one auriferous boulder locality. Most of these zones are narrow and have a short exposed strike length.

It seems improbable that the significant gold-in-soil anomaly could be explained by the known, thin mineralized zones. It is possible that the source of this anomaly has not

been located to date or that it is covered by talus material. It is also possible that the anomaly is underlain by numerous mineralized features which, when taken together, could host a large bulk-tonnage deposit. This zone warrants additional work as it has substantial untested potential.

Based on the 2002 field program, the following recommendations are made:

1. The Target properties mineral potential is significant enough to warrant further work. It is recommended that an initial phase of compilation work be done, which incorporates all of the results obtained from previous work programs. This necessary compilation work his should be accomplished using a GIS system such as Mapinfo or Arcview.

2. Remote sensing analysis should be done on the area, as the terrain has high rock exposure This could be done using either Landsat7 data or Aster data. Aster would be the preferred satellite, as it has higher resolution with better bandwidths which enhance geology. Images that should be done are ratios which enhance FeOH alteration, as well as silicification and clay alteration. Additionally other images should be include structural analysis, geologic mapping for accurate delineation of the lithologies, and an integrated compilation image including structural, geochemical, geologic, and alteration mapping to delimit the most likely sources of mineralization on the property and thus develop better targets.

3. A program consisting of 10 days of field work should be developed. This work should focus on the Ridge Showing and West Grid Areas. A Phase I program of geological map detailing, soil sampling, and extending high-grade veins with hand trenching. Table 4 is a proposed budget of $75,000 intended for phase one exploration costs; this suggestion is based on exploration needed to advance the Target property.

4. Contingent upon success of the first phase of work, a more ambitious second phase of exploration should be considered. This would consist of systematic trenching, IP survey and light duty exploration drilling of 4-6 drill holes. Additionally, exploration may be warranted for copper porphyry-style mineralization. The second phase of work is estimated to cost $200,000.

Pre-fieldwork Compilation of Previous Data and Reporting	$15,000.00
Field Labor	
Senior Geologist - $450/day x 14 days	$6,300.00
Project Geologist - $375/ day x 14 days	$5,250.00
Prospector - $350/day x 14 days	$4,900.00
Geological Assistant - $300/day x 14 days	$4,200.00
Total Labor:	$20,650.00
Geochemical Analysis (Acme Labs)	
200 rock samples @ $25/rock	$5,000.00
50 overlimit fire assays @ $10/ sample	$500.00
200 soil/talus fines samples @ $ 25/ soil	$5,000.00
Rock Shipment (Bandstra)	$250.00
Total Geochemical Analysis:	$10,750.00
Camp Costs	
56 person-days total @ $130/ person-days (all inclusive)	$7,280.00
Communication	$250.00
Total Camp Costs	$7,530.00
Transportation	
Mobilization (apportioned with other projects)	$2,000.00
Helicopter (206) 10 hours @$1,000 / hr	$10,000.00
Truck Fuel	$500.00
Truck Rental (10 days @ $75/day)	$750.00
Demobilization (apportioned with other projects)	$2,000.00
Total Transportation:	$13,250.00
Office and Reporting	
Geological Report Writing	$5,000.00
Drafting, Computer	$2,000.00
Report copying, plotting, printing, etc.	$820.00
Total Office and Reporting	$7,820.00
Total Expenditures	$75,000.00

Table 4 Cost recommendations for future exploration.

XII. REFERENCES

Aspinal, N. Clive, (1991) Geological and Geochemical Report of the 1991 Mineral Exploration Program on the IR Property, Internal Report for Dryden Resource Corporation

Blain, A., and Aspinal, N.C., (1990) Assessment Report on prospecting, Geochemical Sampling and Geophysical Surveying on the Target #1, Waterfall #1 and IR Claims, Internal Report for Dryden Resource Corporation

Bell, T., (1989) Prospecting Report on the Waterfall #1 Claim, Internal Report for Integrated Resources Ltd.

Bell, T., (1989a) Prospecting Report on the Target #1 Claim, Internal Report for Integrated Resources Ltd.

Korenic, J., (1982) Assessment Report on the Tuff Property, DuPont of Canada Exploration Limited

Lehtinen, J., (1989) Geological and Geochemical Report on the Goat 1 to 11 Claims, Internal Report for Integrated Resources Ltd.

Pegg, R., (1990) Geological and Geochemical Report on the Waterfall Property, Internal Report for Dryden Resource Corporation

Pegg, R., (1990) Geological and Geochemical Report on the Target Property, Internal Report for Dryden Resource Corporation

Souther, J.G., (1971) GSC Map 11-1971 – Geological Map of the Telegraph Creek Map Sheet 104F

Souther, J.G., (1959) GSC Map 7-1959 - Geological Map of the Chutine River Map Sheet 104F

Van Angeren, P., (1990) Assessment Report on the 1990 Exploration Results of the Goat 4 to 7 Claims, Internal Report for Integrated Resources Ltd.

Weatherly, M., (1989) Assessment Report on the Goat 1 to 11 Claims, Internal Report for Integrated Resources Ltd.

APPENDIX 1 STATEMENT OF QUALIFICATIONS

To Accompany Target Property Assessment Report, British Columbia, Canada, dated April 1/2003. I, Adam Travis, B.Sc., of 3579 Lansbury Court, Westbank, British Columbia, Canada, V4T 1C5 do hereby certify that:

- I am a consulting geologist with an office at 3579 Lansbury Court, Westbank, B.C., V4T 1C5.
- I graduated from the University of British Columbia in 1990 and was awarded a B.Sc. in Geology.
- I have practiced as a geologist since 1986 in many parts of Canada, the United States, Mexico and Africa.
- I was present and supervised all aspects of woron the Target property contained within this report.
- I have gathered my information for this report from government publications, internal company memos, geological field notes and data that are believed to be reliable and accurate.
- Based on company reports and information, an expenditure of $ 22,250 appears accurate for the 2002 work on the Target property.
- I do not hold shares in Viceroy Resources or Newcastle Minerals.
- I hereby grant my permission for Viceroy Resources Ltd. or Newcastle Minerals to use this Geological Report for whatever purposes it wants, subject to the disclosures set out in this Certificate.

Signed in Vancouver, British Columbia this 26th day of Sept., 2003.

Signed Adam Travis
A. Travis, B.Sc

To Accompany Target Property Assessment Report, British Columbia, Canada, dated April 1/2003. I, J. A. Moore, of 39147-3695 W. 10th Ave. Vancouver, V6R 4P1, in the Province of British Columbia, Canada, do hereby certify:

- I graduated in 1996 from Prescott College in Prescott, Arizona, U.S.A, with a B. A. in Environmental Geology. I completed a postgraduate degree at Rhodes University in Grahamstown, South Africa. I was admitted to the degree of M. Sc. in Mineral Exploration in 2002.

- Since 1991, I have been involved in the exploration and exploitation of precious metals and diamonds in British Columbia, NWT, Central America, South America, and West Africa.

- The information, conclusions, and recommendation in this report are based on collaboration of other professional colleagues involved with various aspects of exploration on the property and in review of the literature stated in the bibliography. I have prepared this report on behalf of Keewatin Consultants 2002.

- This report may be used for the development of the property, provided that, no portion will be used out of context in such a manner as to convey meanings different from that set out in the whole.

- I am unaware of any material fact or material change with respect to the technical matter of this report that might cause the technical report to be inaccurate or misleading.

- Consent is hereby given to the company for which this report was prepared to reproduce the report or any part of it for the purposes of development of the property, or facts relating to the raising of funds by way of a prospectus and/or statement of material facts.

Signed in Vancouver, British Columbia this 25 day of September 2003.

Signed J.A. Moore
J. A. Moore, M.Sc.

APPENDIX II STATEMENT OF EXPENDITURES

I, J. A. Moore, as agent for Keewatin Consultants 2002, do solemnly declare that work was completed on the Target 1-5 claims this September, 2002. An outline of expenditures is listed in Table 5.

I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at Vancouver in the Province of British Columbia this 26 day of September 2003.

J. A. Moore
Exploration Geologist

I, A. Travis, as agent for Keewatin Consultants 2002, do solemnly declare that work was completed on the Target 1-5 claims this September, 2002. An outline of expenditures is listed in Table 4.

I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at ~~Vancouver~~ Kelowna in the Province of British Columbia this 26th day of Sept., 2003.

Mobilization (apportioned with other projects)	$2,000.00
Field Labor (September 5- 9, 2002)	
Adam Travis, Senior Geologist - $450/day x 3 days	$1,350.00
Jill Moore, Project Geologist - $375/ day x 4.5 days	$1,688.00
Don Coolidge, Prospector - $350/day x 3 days	$1,050.00
Jan Tindle, Geological Assistant - $300/day x 4.5 days	$1,350.00
Total Labor:	$5,438.00
Geochemical Analysis (Acme Labs)	
33 rock samples @ $25/rock	$825.00
7 overlimit fire assays @ $10/ sample	$70.00
Rock Shipment (Bandstra)	$22.00
Total Geochemical Analysis:	$917.00
Camp Costs	
14 person-days total @ $130/ person-day (all inclusive)	$1,820.00
Communication	$250.00
Total Camp Costs	$2,070.00
Transportation	
Helicopter (206 PWH) 6.5 hours @$1,000 / hr	$6,500.00
Truck Fuel	$100.00
Truck Rental (5 days @ $75/day)	$375.00
Total Transportation:	$6,975.00
Demobilization (apportioned with other projects)	$ 2,000.00
Office and Reporting	
Jill Moore, report preparation (2 days @ $375/day)	$750.00
Adam Travis, report preparation (3 days @ $450/day)	$1350.00
GeoSim Services, drafting, computer	$500.00
Report copying, plotting, printing, etc	$250.00
Total Office and Reporting	$2,850.00
Total Expenditures	$22,250.00

Table 5 Summary of 2002 expenditures by category.

APPENDIX III ROCK SAMPLE DESCRIPTIONS

The sampling program comprised of 33 grab, float and chip samples. The sample locations and descriptions are identified below in Table 6.

Sample ID	Sampler	Date	Easting	Northing	Sample Type	Unit	Description
417178	J.M.	Sep-06-02	327890	6405159	Grab	Vein	Resample of Barrington vein.
417179	J.M.	Sep-06-02	327894	6405316	Grab	Siltstone	Massive sulfide pod in siltstone, pyrrhotite, chalcopyrite. Approximately 50 cm exposed width and 5 m exposed strike length.
417180	J.M.	Sep-06-02	327930	6405381	Grab	Chert	Massive pyrrhotite vein occurring in chert stratigraphy.
417181	J.M.	Sep-06-02	327911	6405363	Grab	Chert	Small pyrrhotite vein occurring in subcrop.
417182	J.M.	Sep-06-02	327985	6405451	Grab	Siltstone	Small 1 cm quartz-pyrite-pyrrhotite veinlet in siltstone, strongly gossaned and weathered.
417183	J.M.	Sep-06-02	327924	6405380	Grab	Siltstone	Brecciated quartz-pyrite-pyrrhotite vein. Strikes 102/66NE. Same as sediments. Folding and faulting disrupts stratigraphy and mineralization.
417184	J.M.	Sep-07-02	327843	6407140	Float	Siltstone	Massive pyrrhotite blebs occur with 10% disseminated throughout. Trace chalcopyrite, <1mm in size. Strongly silicified with trace carbonate.
417185	J.M.	Sep-07-02	327631	6407064	Float	Vein	Quartz vein float below. Approximately 10% pyrite, pyrrhotite and minor chalcopyrite. Weak carbonate.
417186	J.M.	Sep-07-02	327427	6407021	Float	Vein	Quartz vein float, strong 10-15% pyrrhotite, 5% chalcopyrite and pyrite occurring in blebs and in quartz vein fractures. White quartz.
417187	J.M.	Sep-07-02	327426	6406998	Float	Diorite	Massive pyrrhotite and chalcopyrite, small remnant blebs of fine grained silicified diorite and white coarse quartz veining.
417188	J.M.	Sep-07-02	327451	6406916	Float	Diorite	Quartz carbonate veins in contact with diorite. Strong silicification of diorite, biotite and augite are remnant minerals. Diorite is medium to fine grained. Approximately 5-10% pyrrhotite and 5% chalcopyrite.
417189	J.M.	Sep-07-02	327389	6406790	Float	Siltstone	Quartz pyrrhotite veinlets in cliff face. Sample located just east of major cave on west side of the western glacier.
417190	J.M.	Sep-07-02	327461	6406753	Float	Sulfide	Massive pyrrhotite with 10% chalcopyrite and 5% quartz.
417191	J.M.	Sep-08-02	328443	6406695	Float	Siltstone	Strongly gossaned siltstone and granodiorite contact. Approximately 3% pyrrhotite and 1% chalcopyrite. Siltstone moderately silicified with disseminated pyrrhotite.
417192	J.M.	Sep-08-02	328457	6406682	Float	Siltstone	Strongly silicified with moderate hematization. Approximately 3% disseminated pyrrhotite and 1-2% disseminated chalcopyrite.
417193	J.M.	Sep-08-02	328538	6406637	Float	Siltstone	Strongly chloritized siltstone with streaky red hematitic blebs. Approximately 1-2% finely disseminated pyrrhotite and 1% chalcopyrite. Moderate silicification. Strong carbonate alteration.
417194	J.M.	Sep-08-02	328791	6406392	Float	Diorite	Strongly pyrrhotized intrusive veinlet of quartz and granodiorite into siltstone.

Sample ID	Sampler	Date	Easting	Northing	Sample Type	Unit	Description
417195	J.M.	Sep-08-02	328838	6406353	Float	Porphyry	Hornblende-feldspar porphyry. 1-3% pyrrhotite and 1% chalcopyrite. Moderately gossaned.
417196	J.M.	Sep-08-02	328835	6406353	Float	Vein	Quartz diorite veinlet intruding into siltstone. Approximately 1-3% pyrrhotite and trace chalcopyrite. Moderate silicification
417197	J.M.	Sep-08-02	328588	6406612	Float	Diorite	Strongly silicified and altered diorite. Approximately 5-10% pyrrhotite and 3% chalcopyrite.
417198	J.M.	Sep-08-02	328588	6406610	Float	Diorite	Strongly silicified and altered diorite. Approximately 5-10% pyrrhotite and 3% chalcopyrite.
417199	J.M.	Sep-08-02	328587	6406611	Float	Diorite	Strongly silicified and altered diorite. Approximately 5-10% pyrrhotite and 3% chalcopyrite.
417200	J.M.	Sep-08-02	328588	6406611	Float	Diorite	Strongly silicified and altered diorite. Approximately 5-10% pyrrhotite and 3% chalcopyrite.
126670	A.T.	Sep-06-02	328155	6404789	Float	Quartz Vein	5-7% arsenopyrite, 1-3% pyrite, 15cmx10cm float at base of cliffs.
126671	A.T.	Sep-06-02	328161	404813	Grab	Intrusive	Prominent 170 degree trending, 1 m wide quartz carbonate veined intrusive, trace arsenopyrite and chalcopyrite.
126672	A.T.	Sep-06-02	328228	6405035	Grab	Monzodiorite	1 m wide gossanous fracture zone in monzodiorite, trace galena, 1-3% pyrite, probably limited strike
126673	A.T.	Sep-06-02	328228	6405040	Float	Quartz Vein	10% arsenopyrite, trace galena, 1-3% pyrite, 5cm width vein.
126674	A.T.	Sep-06-02	328228	6405050	Float	Quartz Vein	Massive arsenopyrite, 5x15cm vein.
126675	A.T.	Sep-06-02	328208	6405071	Grab	Diorite	Subcrop. Gossanous, pyritic, cut by gossanous veinlets with 3-5% galena and 1-3% arsenopyrite.
126676	A.T.	Sep-06-02	328212	6405423	Grab	Diorite	Strongly fractured at 160 degrees, near vertical, near contact with sediments. Semi massive pyrite, pyrrhotite, arsenopyrite, skarn.
126677	A.T.	Sep-06-02	328223	6405424	Grab	Siltstone	160 degree trending gossanous zone, 5 meters wide, trace to 1% chalcopyrite, 1-3% arsenopyrite, platy pyrrhotite.
126678	A.T.	Sep-06-02	328223	6405427	Grab	Siltstone	Same as sample ID 126677
126679	A.T.	Sep-06-02	328249	6405408	Grab	Siltstone	Diorite. Trace chalcopyrite, 1-3% pyrite. Gossanous zone.

Table 6 Sample locations and descriptions.

APPENDIX IV ROCK SAMPLE ASSAYS

A 26 element analysis package was used. All assays from the program are listed below in Table 7. A complete assay table can be found in Appendix V.

SAMPLE ID	AU ppb	AU g/t	AG	CU	PB	ZN	AS
126670	527		0	126	14	29	49,561
126671	34		1	44	3	40	515
126672	1,841	2.14	7	73	1,567	5,774	240
126673	15,824	18.97	51	122	10,543	18,967	99,999
126674	11,582	14.13	66	75	13,896	6,003	99,999
126675	2,970	4.05	88	129	16,955	6,003	16,742
126676	81		0	491	134	58	157
126677	1,763	1.20	0	1,595	18	85	8,472
126678	1,314	1.53	0	1,595	25	6,159	55,190
126679	301		0	397	5	136	299
417178	29,420	28.53	23	509	2,462	9,688	99,999
417179	83		0	2,519	-3	64	451
417180	52		0	1,181	6	50	130
417181	31		0	296	10	33	89
417182	528		0	698	28	74	152
417183	106		0	172	5	29	88
417184	10		0	2,650	5	26	48
417185	37		2	178	11	9	94
417186	27		0	1,400	47	19	124
417187	25		0	1,792	26	40	288
417188	146		7	837	14	22	27
417189	33		0	377	16	60	81
417190	30		0	2,983	11	26	83
417191	8		0	250	-3	5	12
417192	23		0	410	5	31	21
417193	8		0	203	6	16	19
417194	11		0	132	5	29	20
417195	10		0	70	8	5	15
417196	3		0	99	5	15	10
417197	26		0	622	5	71	32
417198	26		0	945	3	61	30
417199	6		0	527	18	61	31
417200	28		0	539	5	42	24

Table 7 Analysis of Au, Ag, Cu, Pb, Zn, and As.

APPENDIX V 2002 ACME LAB CERTIFICATES

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Keewatin Consultants PROJECT Trarget File # A203845

900 - 475 Howe St., Vancouver BC V6C 2B3 Submitted by: Jill Moore

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
SI	<1	1	<3	1	<.3	1	<1	5	.05	<2	<8	<2	<2	3	<.5	<3	<3	<1	.14	<.001	<1	2	<.01	3	<.01	<3	.01	.53	.01	<2	.3
126670	9	126	14	29	<.3	36	13	375	8.53	49561	<8	<2	<2	21	3.2	4	7	98	.54	.131	4	55	.93	30	.04	3	1.14	.06	.02	3	526.8
126671	1	44	3	40	.6	8	7	1447	2.33	515	<8	<2	<2	278	<.5	<3	<3	32	10.75	.046	4	13	.53	95	.01	<3	.93	.02	.10	2	34.0
126672	3	73	1567	5774	6.9	7	2	966	7.85	240	<8	<2	<2	25	90.8	<3	17	110	.55	.064	1	67	1.20	97	.15	3	1.79	.07	.08	2	1841.1
126673	7	122	10543	18967	50.9	12	52	4344	16.47	99999	<8	10	2	134	294.9	46	67	2	12.46	.009	7	161	.12	12	.01	<3	.09	.01	.03	<2	15824.4
126674	15	75	13896	6003	65.9	4	28	598	23.46	99999	<8	15	2	9	133.3	172	26	23	.19	.022	1	68	.14	22	.02	12	.29	.01	.04	27	11581.7
126675	3	129	16955	6003	87.5	5	4	611	6.08	16742	<8	4	<2	23	103.6	44	15	64	.15	.074	2	66	.75	85	.08	<3	1.08	.04	.16	5	2970.1
126676	11	491	134	58	<.3	82	43	230	8.75	157	<8	<2	2	9	3.9	<3	7	110	1.16	.066	8	177	.41	24	.09	<3	1.06	.02	.04	4	81.0
126677	15	1595	18	85	<.3	88	86	463	26.74	8472	<8	2	2	15	6.3	28	26	51	1.13	.065	5	18	.39	25	.06	9	.77	.02	.04	<2	1763.2
126678	19	1595	25	6159	<.3	107	207	233	26.87	55190	<8	2	2	12	247.6	57	34	68	.24	.055	2	102	.49	20	.05	11	.65	.01	.02	<2	1314.1
126679	42	397	5	136	<.3	96	24	1448	9.05	299	<8	<2	2	76	6.5	<3	7	491	5.60	.350	5	143	.77	10	.10	3	1.26	.03	.07	3	301.3
417178	11	509	2462	9688	23.4	31	62	1791	23.88	99999	<8	41	2	48	204.0	73	36	4	5.67	.023	7	91	.09	15	.01	5	.10	.01	.04	<2	29420.4
417179	17	2519	<3	64	<.3	117	227	402	35.24	451	<8	<2	3	6	6.4	48	36	38	1.01	.195	2	27	.33	6	.03	10	.70	.01	.03	<2	83.0
417180	101	1181	6	50	<.3	112	58	551	19.69	130	<8	<2	2	37	6.7	<3	17	178	4.83	.175	15	15	.14	3	.02	6	.64	.01	.01	<2	52.0
RE 417180	105	1203	6	53	<.3	115	59	575	20.09	129	<8	<2	3	37	6.9	<3	20	183	4.83	.180	15	17	.15	5	.03	5	.65	.01	.01	<2	44.0
417181	15	296	10	33	<.3	55	16	255	12.87	89	<8	<2	<2	110	6.2	<3	10	134	1.55	.090	3	49	.66	62	.12	<3	2.12	.02	.07	<2	31.0
417182	9	698	28	74	<.3	68	31	1057	10.53	152	<8	<2	<2	63	5.5	<3	9	187	4.94	.229	8	49	.37	6	.06	<3	1.34	.04	.03	<2	527.6
417183	43	172	5	29	.4	35	8	1016	3.63	88	<8	<2	2	134	.7	<3	6	154	12.60	.276	6	16	.20	14	.03	<3	.67	.01	.02	3	106.3
417184	10	2650	5	26	<.3	36	97	107	16.83	48	<8	<2	2	221	6.6	<3	19	23	2.23	.089	3	7	.16	24	.07	5	2.66	.37	.04	213	10.0
417185	7	178	11	9	2.2	4	13	67	3.89	94	<8	<2	<2	3	<.5	<3	116	2	.13	.003	<1	43	.02	2	<.01	<3	.08	.01	.01	13	37.0
417186	11	1400	47	19	<.3	42	66	42	16.20	124	<8	<2	<2	1	4.8	<3	20	3	.17	.008	<1	24	.03	2	<.01	5	.04	<.01	.01	10	26.7
417187	17	1792	26	40	<.3	97	145	263	31.58	288	<8	<2	2	30	6.6	43	35	121	1.65	.066	2	42	1.09	8	.05	10	.98	.01	.04	<2	24.5
417188	13	837	14	22	7.3	42	11	145	10.42	27	<8	<2	<2	15	4.0	<3	240	117	.90	.088	3	60	.61	25	.06	<3	.73	.01	.09	7	145.5
417189	6	377	16	60	<.3	90	44	240	5.68	81	<8	<2	<2	10	2.1	<3	7	69	3.94	.091	5	37	.47	4	.13	<3	3.01	.02	.02	4	32.9
417190	19	2983	11	26	<.3	47	164	137	24.23	83	<8	<2	2	5	5.9	14	22	56	2.56	.053	1	20	.18	4	.04	7	1.61	.01	.01	54	30.2
417191	2	250	<3	5	<.3	26	17	82	3.40	12	<8	<2	<2	39	<.5	<3	<3	38	1.05	.112	5	16	.18	13	.15	<3	.89	.13	.05	2	8.0
417192	4	410	5	31	<.3	30	46	441	7.50	21	<8	<2	<2	29	3.0	<3	9	61	3.70	.105	3	25	.64	3	.11	6	2.91	.03	.07	<2	22.9
417193	9	203	6	16	.4	24	12	198	1.40	19	<8	<2	<2	35	<.5	<3	<3	63	3.61	.068	8	18	.03	25	.13	1244	.19	.03	.09	4	7.8
417194	3	132	5	29	<.3	39	22	208	3.57	20	<8	<2	<2	12	.5	<3	<3	71	4.56	.095	5	30	.38	3	.15	9	2.94	.03	.02	8	10.6
417195	6	70	8	5	<.3	9	6	205	2.11	15	<8	<2	<2	12	<.5	<3	<3	64	4.73	.107	4	34	.24	1	.14	5	3.29	.01	.01	8	10.3
417196	8	99	5	15	<.3	11	12	178	2.36	10	<8	<2	5	101	<.5	<3	<3	42	1.53	.127	16	10	.24	62	.11	<3	1.25	.14	.07	2	2.7
417197	17	622	5	71	<.3	25	64	363	14.51	32	<8	<2	2	30	8.7	<3	13	70	2.29	.113	4	9	.22	38	.07	9	1.34	.02	.08	<2	25.7
417198	29	945	3	61	<.3	23	68	473	13.22	30	<8	<2	<2	46	8.0	<3	13	95	3.39	.129	5	9	.17	29	.09	7	1.53	.06	.06	<2	25.8
417199	8	527	18	61	<.3	23	27	383	3.63	31	<8	<2	<2	65	2.6	<3	<3	61	4.55	.125	16	20	.17	32	.12	6	1.81	.07	.07	3	6.4
417200	19	539	5	42	<.3	19	106	254	11.95	24	<8	<2	<2	67	6.5	<3	8	40	1.88	.126	5	6	.25	31	.09	7	1.49	.09	.06	<2	27.6
STANDARD DS4	8	121	28	147	<.3	37	12	748	3.19	22	<8	2	3	27	5.1	5	6	77	.53	.083	15	163	.55	148	.09	<3	1.66	.03	.14	3	25.0

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C AU* IGNITED, ACID LEACHED, ANALYZED BY ICP-MS. (10 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 12 2002 **DATE REPORT MAILED:** Sept 26/02 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL LABORATORIES LTD. (ISO 9002 Accredited Co.) 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

ASSAY CERTIFICATE

Keewatin Consultants PROJECT Trarget File # A203845R

900 - 475 Howe St., Vancouver BC V6C 2B3 Submitted by: Adam Travis

SAMPLE#	Au** gm/mt
126672	2.14
126673	18.97
126674	14.13
126675	4.05
126677	1.20
126678	1.53
417178	28.53
STANDARD AU-1	3.34

GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1 A.T. SAMPLE, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: ROCK PULP

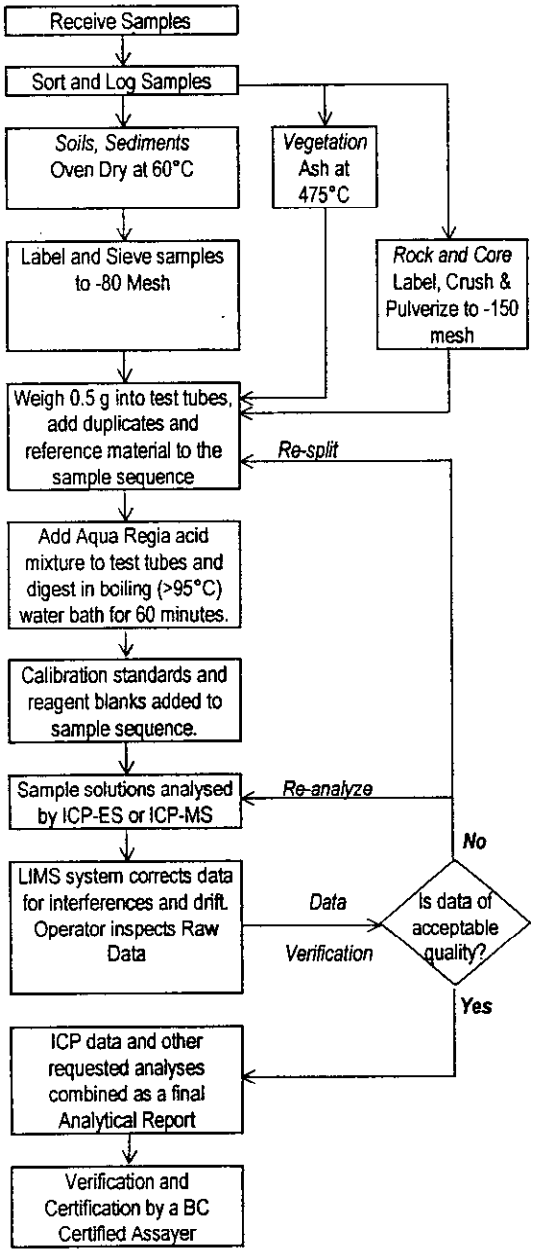
DATE RECEIVED: NOV 8 2002 **DATE REPORT MAILED:** Nov 15/02 **SIGNED BY:** C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA YNG

APPENDIX VI ACME LAB PROCEDURES

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1D & 1DX - ICP & ICP-MS ANALYSIS – AQUA REGIA

Analytical Process



Comments

Sample Preparation

Soil or sediment is dried (60°C) and sieved to -80 mesh (-177 µm). Vegetation is dried (60°C) and pulverized or ashed (475°C). Moss-mats are dried (60°C) and sieved to yield -80 mesh sediment. Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 95% passing 150 mesh (100 µm) in a mild-steel ring-and-puck mill. Pulp splits of 0.5 g are weighed into test tubes.

Sample Digestion

A 2:2:2 solution of concentrated ACS grade HCl, HNO_3 and de-mineralised H_2O (modified Aqua Regia) is added to each sample to leach for one hour in a hot water bath (>95°C).

Sample Analysis

Group 1D: solutions aspirated into a Jarrel Ash AtomComp 800 or 975 ICP emission spectrometer are analysed for 30 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Group 1DX: solutions aspirated into a Perkin Elmer Elan6000 ICP mass spectrometer are analysed for 36 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, *Ga*, *Hg*, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, *S*, Sb, *Sc*, *Se*, *Tl*, Sr, Th, Ti, U, V, W, Zn.

Quality Control and Data Verification

An Analytical Batch (1 page) comprises 34 samples. QA/QC protocol incorporates a sample-prep blank (SI or G-1) carried through all stages of preparation and analysis as the first sample, a pulp duplicate to monitor analytical precision, a -10 mesh rejects duplicate to monitor sub-sampling variation (drill core only), two reagent blanks to measure background and aliquots of in-house Standard Reference Materials like STD DS4 to monitor accuracy.

Raw and final data undergo a final verification by a British Columbia Certified Assayer who signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

852 East Hastings Street • Vancouver • British Columbia • CANADA • V6A 1R6
Telephone: (604) 253-3158 • Facsimile: (604) 253-1716 • Toll Free: 1-800-990-ACME (2263) • e-mail: info@acmelab.com

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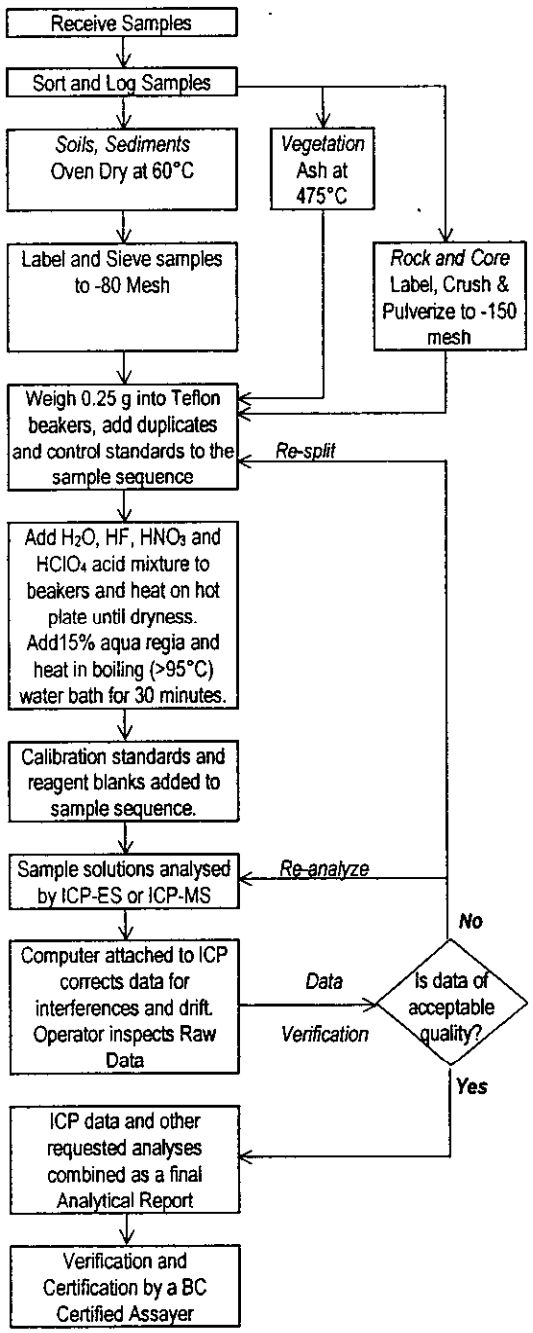
ANALYTICAL LABORATORIES LTD.

852 East Hastings Street • Vancouver, British Columbia • CANADA • V6A 1R6
Telephone: (604) 253-3158 • Fax: (604) 253-1716 • Toll free: 1-800-990-ACME (2263) • e-mail: info@acmelab.com

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1E & 1EX - ICP ANALYSIS – TOTAL DIGESTION

Analytical Process



Comments

Sample Preparation

Soil or sediment is dried (60°C) and sieved to -80 mesh (-177 µm). Vegetation is dried (60°C) and pulverized or ashed (475°C). Moss-mats are dried (60°C), pounded and sieved to yield -80 mesh sediment. Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g aliquot is riffle split and pulverized to 95% passing 150 mesh (100 µm) in a mild-steel ring-and-puck mill. Aliquots of 0.25 g are weighed into Teflon beakers. QA/QC protocol requires inserting two duplicates of pulp to measure analytical precision, a coarse (10 mesh) rejects duplicate to measure method precision (trench and drill core samples only) and an aliquot of in-house reference material STD DST3 to measure accuracy in each analytical batch of 34 samples.

Sample Digestion

The 4-Acid solution of 18:10:3:6 H_2O-HF-$HClO_4$-HNO_3 (ACS grade) is added to each sample, heated to fuming on a hot plate and taken to dryness. The residue is dissolved in dilute (15%) aqua regia of 2:2:2 HCl-HNO_3-H_2O (ACS grade) heated in a boiling water (>95°C) bath for 30 minutes. QA/QC protocol requires simultaneous digestion of two regent blanks randomly inserted in each batch.

Sample Analysis

Group 1E: sample solutions are aspirated into a Jarrel Ash AtomComp 800 or 975 ICP emission spectrograph to determine 35 elements: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Sb, Sc, Sr, Th, Ti, U, V, W, Y, Zn, Zr.

Group 1EX: sample solutions are aspirated into a Perkin Elmer Elan 6000 ICP mass spectrometer to determine 41 elements: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, *Ce*, Co, Cr, Cu, Fe, *Hf*, K, La, *Li*, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, *Rb*, *S*, Sb, Sc, Sr, *Ta*, Th, Ti, U, V, W, Y, Zn, Zr.

Data Evaluation

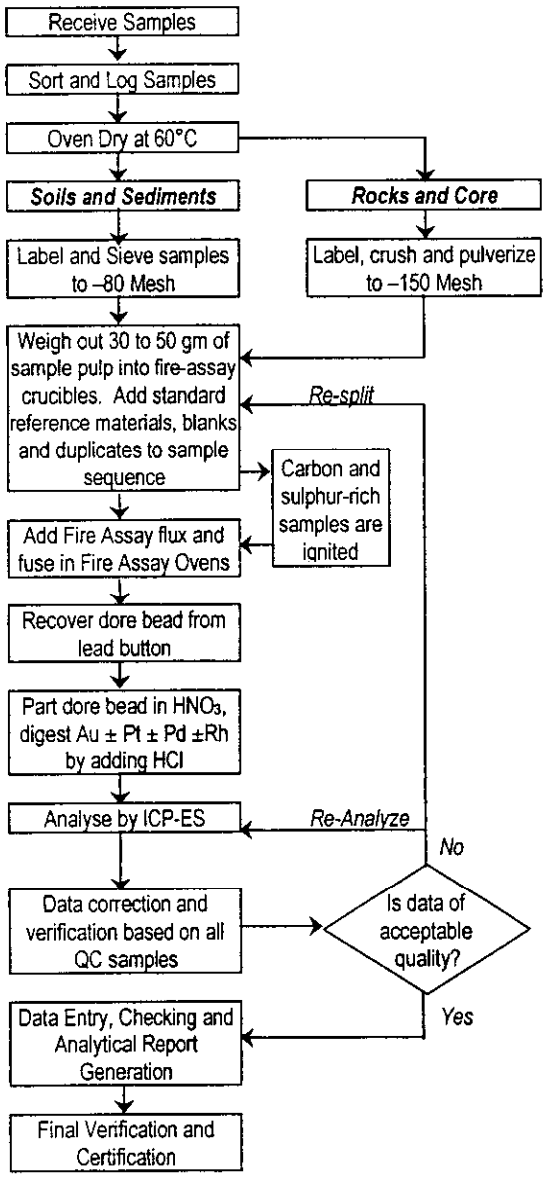
Raw and final data from the ICP-ES undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

ACME
ANALYTICAL LABORATORIES LTD.

852 East Hastings Street • Vancouver, British Columbia • CANADA • V6A 1R6
Telephone: (604) 253-3158 • Fax: (604) 253-1716 • Toll free: 1-800-990-ACME (2263) • e-mail: info@acmelab.com

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 3B - PRECIOUS METALS BY FIRE GEOCHEM

Analytical Process



Comments

Sample Preparation

Soils and sediments are dried (60°C) and sieved to -80 mesh ASTM (-177 ℿm). Rocks and drill core are crushed and pulverized to 95% -150 mesh ASTM (-100 µm). Splits of 30 gm (client may select 50 gm option) are weighed into fire assay crucibles. Quality control samples comprising blanks, duplicates and reference materials Au-S, Au-R, Au-1 or FA-100S (in-house standard reference materials) added to each batch of 34 samples monitor background, precision and accuracy, respectively.

Sample Digestion

A fire assay charge comprising fluxes, litharge and a Ag inquart is custom mixed for each sample. Fusing at 1050°C for 1 hour liberates Au, Ag, Pt and Pd. For Rh > 10 ppb, a Au inquart is used. After cooling, lead buttons are recovered and cupeled at 950°C to render Ag ±Au ±Pt ±Pd or Au ±Pt ±Pd ±Rh dore beads. Beads are weighed then leached in hot, conc. HNO_3 to dissolve Ag leaving Au (± PGE) sponges. Concentrated HCl is added to dissolve the sponges. Au inquart beads (Rh analysis) are dissolved in Aqua Regia.

Sample Analysis

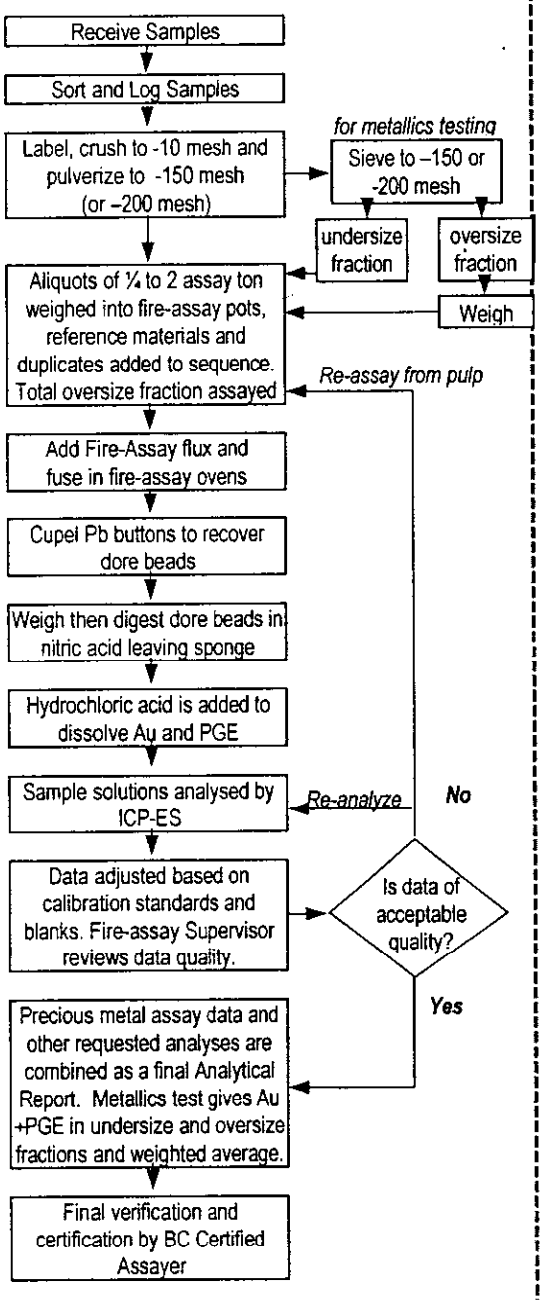
Au, Pt, Pd and Rh are analysed in sample solutions by ICP-AES (Jarrel Ash AtomComp model 800 or 975). Rh can be determined quantifiably up to 10 ppb from a Ag inquart fusion digestion, however a Au inquart must be used to accurately determine higher concentrations.

Data Evaluation

Data is inspected by the Fire Assay Supervisor then undergoes final verification by a British Columbia Certified Assayer who signs the Analytical Report before release to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE
GROUP 6 - PRECIOUS METAL ASSAY

Analytical Process



Comments

Sample Preparation

Rock and drill core is jaw crushed to 75% passing 10 mesh (1.7 mm), a 250 g aliquot is riffle split and pulverized to 95% passing 150 mesh (100 µm) in a mild-steel ring-and-puck mill (pulverizing to 95% passing 200 mesh is available). Splits of ¼ (7.3 g) to 2 (58.4 g) assay tons are weighed into fire assay crucibles. QA/QC protocol includes inserting into each batch of 34 samples: two analytical blanks (background), a pulp duplicate (analytical precision), a rejects duplicate (method precision for drill core samples only) and two in-house reference material aliquots of either STD Au-1, STD Ag-2 or STD FA-10R (accuracy). Results are in imperial (oz/t) or metric (gm/mt) measure. For metallics assaying, a 500+ g split is pulverized and sieved to 150 or 200 mesh. Oversize material is assayed in total. A 1 or 2 assay ton aliquot of the undersize material is also assayed.

Sample Digestion

A fire assay charge comprising fluxes, litharge and a Ag inquart is custom mixed for each sample. A Au inquart is used for quantitative Rh analysis. Fusing at 1050°C for 1 hour liberates Au, Ag, Pt, Pd and Rh. The Pb button is recovered after cooling and cupeled at 950°C to render a Ag (± Au, Pt, Pd, Rh) dore bead. After weighing, the bead is parted in HNO_3 then digested by adding HCl. Au inquart beads (Rh analysis) are dissolved in Aqua Regia.

Sample Analysis

The solutions are analyzed by ICP-ES (Jarrel Ash Atom-Comp model 800 or 975) to determine Au, Pt, Pd and Rh. Au or PGEs over 1 oz/t are determined by gravimetric finish. Ag is determined both by fire assay and wet assay with values > 10 oz/t reported from fire assay and values <10 oz/t reported from the wet assay. Metallic Assay reports give concentrations of Au ±PGEs in the oversize fraction, the undersize fraction and the calculated weighted average of these fractions.

Data Evaluation

Raw and final data undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

852 East Hastings Street • Vancouver • British Columbia • CANADA • V6A 1R6
Telephone: (604) 253-3158 • Facsimile: (604) 253-1716 • Toll Free: 1-800-990-ACME (2263) • e-mail: info@acmelab.com

327000 mE
327500 mE
328000 mE
328500 mE
329000 mE
329500 mE
330000 mE
330500 mE
331000 mE

Target 1
Target 2
Target 3
Target 4
LCP

6407000 mN
6406500 mN
6406000 mN
6405500 mN
6405000 mN
6404500 mN

417184 massive pyrrhotite in siltstone float
quartz vein float, 10% Py,Po, minor Cpy 417185
quartz vein float, 10-15% Po, 5% Cpy,Py 417186
417187
417188 diorite float, 5-10% Po, 5% Cpy
quartz/Po veinlets in cliff face 417189
417190 massive Po with 10% Cpy

Talus Slope

siltstone, 3% Po, 1% Cpy 417191
3% po, 1-2% cpy 417192
siltstone, 1-2% Cpy 417193
diorite, 5-10% Po, 3% Cpy 417200
diorite, 5-10% Po, 3% Cpy 417199
diorite, 5-10% Po, 3% Cpy 417198
diorite, 5-10% Po, 3% Cpy 417197

Gossanous Contact Zone

TGR North Showing

diorite float 417194
hornblende feldspar porphyry float, 1-3% Po, 1% Cpy 417195
qtz diorite dykelet 417196

UTrSs

EJ LIMPOKE PLUTON

NEW LIMPOKE Cu:Mo

Upper Cave Creek Showing

UTrSs

UTrSlm

TGR Vein Showing

Ridge Zone Showing

EJ

West Grid Area Showing

quartz-py-po veinlet in siltstone 417182
brecciated qtz-py-po vein in siltstone 417183
massive pyrrhotite vein in chert 417180
pyrrhotite vein in chert 417181
massive sulphide pod in siltstone 417178

126679 siltstone/diorite contact, gossanous,1-3% Py
126678 siltstone, gossanous, <1% Cpy, 1-3% Aspy
126677 siltstone, gossanous, <1% Cpy, 1-3% Aspy
126676 diorite, silarned, semi-massive, Py,Po,Aspy

Talus Slope

417176 Barrington Vein
vein trace (possible)

126675 diorite, gossanous, 3-5% PbS, 1-3% Aspy
126674 qtz vein float, massive aspy vein
126673 qtz vein float, 10% aspy, tr PbS, 1-3% Py
126672 monzodiorite, trace PbS, 1-3% Py

Cave Tuff Showing

MTrch

126671 intrusive, qtz/carb veined, tr aspy, cpy
126670 qtz vein float, 5-7% aspy, 1-3% Py

Target 5
LCP

TUF
Au:A

0 500 m

LEGEND

EJ	Early Jurassic Monzodiorite
UTrSlm	Upper Triassic Stuhini Group - limestone, marble, calcareous sedimentary rocks.
UTrSs	Upper Triassic Stuhini Group - undivided sedimentary rocks
MTrch	Middle Triassic cherts, siltstone,argillite
—— ——	Geological Contact
△	Rock Sample (with sample ID)

Newcastle Minerals Ltd.

TARGET PROPERTY

2002 SAMPLE ID & GEOLOGY MAP

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

DATE: Sept 2003	NTS: 104G071 NAD83 Z09
SCALE: 1:5000	FIGURE NO. 4

327000 mE
327500 mE
328000 mE
328500 mE
329000 mE
329500 mE
330000 mE
330500 mE
331000 mE

6407000 mN
6406500 mN
6406000 mN
6405500 mN
6405000 mN
6404500 mN

Target 1
Target 2
Target 3
Target 4
LCP

417184 : Au=10 Ag=-0.3 Cu=2650 Pb=6 Zn=28 As=48
417185 : Au=37 Ag=2.2 Cu=178 Pb=11 Zn=9 As=54
417186 : Au=26.7 Ag=-0.3 Cu=1400 Pb=47 Zn=19 As=124
417187 : Au=24.5 Ag=-0.3 Cu=1792 Pb=26 Zn=40 As=286
417188 : Au=148.5 Ag=7.3 Cu=837 Pb=14 Zn=22 As=27
417189 : Au=32.9 Ag=-0.3 Cu=377 Pb=16 Zn=60 As=81
417190 : Au=30.2 Ag=-0.3 Cu=2983 Pb=11 Zn=26 As=83
417191 : Au=8 Ag=-0.3 Cu=250 Pb=-3 Zn=6 As=12
417192 : Au=22.9 Ag=-0.3 Cu=410 Pb=5 Zn=31 As=21
417193 : Au=7.8 Ag=0.4 Cu=203 Pb=6 Zn=16 As=19
417200 : Au=27.6 Ag=-0.3 Cu=539 Pb=6 Zn=42 As=23
417199 : Au=6.4 Ag=-0.3 Cu=827 Pb=18 Zn=6 As=31
417198 : Au=26.8 Ag=-0.3 Cu=946 Pb=3 Zn=61 As=30
417197 : Au=26.7 Ag=-0.3 Cu=622 Pb=5 Zn=71 As=32
417194 : Au=10.6 Ag=-0.3 Cu=132 Pb=5 Zn=29 As=20
417195 : Au=10.3 Ag=-0.3 Cu=70 Pb=8 Zn=6 As=16
417196 : Au=2.7 Ag=-0.3 Cu=99 Pb=6 Zn=15 As=10

NEW LIMPOKE
Cu:Mo

TGR North
Showing

Upper Cave Creek
Showing

TGR Vein
Showing

Ridge Zone
Showing

126677 : Au=1200 Ag=-0.3 Cu=1696 Pb=18 Zn=85 As=8472
126678 : Au=1530 Ag=-0.3 Cu=1596 Pb=26 Zn=6169 As=55190
126679 : Au=301.3 Ag=-0.3 Cu=397 Pb=6 Zn=136 As=299
417182 : Au=527.8 Ag=-0.3 Cu=696 Pb=28 Zn=74 As=182
417183 : Au=106.3 Ag=0.4 Cu=172 Pb=6 Zn=29 As=88
417180 : Au=62 Ag=-0.3 Cu=1181 Pb=6 Zn=60 As=130
417181 : Au=31 Ag=-0.3 Cu=296 Pb=10 Zn=35 As=89
417179 : Au=83 Ag=-0.3 Cu=2519 Pb=-3 Zn=64 As=451
126676 : Au=81 Ag=-0.3 Cu=491 Pb=134 Zn=58 As=157

West Grid Area
Showing

417178 : Au=28830 Ag=23.4 Cu=509 Pb=2482 Zn=9683 As=99999
126675 : Au=4050 Ag=97.6 Cu=129 Pb=16966 Zn=6003 As=16742
126674 : Au=14130 Ag=86.9 Cu=75 Pb=13896 Zn=6003 As=99999
126673 : Au=18979 Ag=50.9 Cu=122 Pb=10543 Zn=18967 As=99999
126672 : Au=2140 Ag=6.9 Cu=73 Pb=1567 Zn=5774 As=240

Cave Tuff
Showing

126671 : Au=34 Ag=0.6 Cu=44 Pb=3 Zn=40 As=515
126670 : Au=526.8 Ag=-0.3 Cu=126 Pb=14 Zn=29 As=48561

Target 5
LCP

TUF
Au:A

0 500 m

LEGEND

△ Rock Sample

126672 : Au=2140 Ag=6.9 Cu=73 Pb=1567 Zn=5774 As=240
Rock Sample ID and Geochemical Reults
(all results in ppm except Au which is ppb)

Newcastle Minerals Ltd.

TARGET PROPERTY

ROCK SAMPLE GEOCHEMISTRY

DATE: Sept 2003	NTS: 104G071 NAD83 Z09
SCALE: 1:5000	FIGURE NO.: 5