



Geochemical Report
(bedrock sampling)

on

Golden Loon I, Golden Loon II, Golden Loon III & Golden Loon VIII

of the Golden Loon Group Mineral Claims

NTS Map 92 P/8

Lat: 51° 27'N
Long: 120° 20'W

for:

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by:

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GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

November 29, 1999

26,100

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INTRODUCTION AND SUMMARY

In August of 1999 the writer was requested by Belmont Resources Inc., of #1180 – 666 Burrard Street, Vancouver, BC, to conduct a preliminary examination of the mineral claim holdings of Tilava Mining Corp. in the Little Fort area of BC. (Figure 1) with special attention to the possibilities of Platinum Group mineralization of importance in a reasonably well defined system of ultramafic rocks which in the past had received minimal attention relative to gold occurrences present in granitic rock.

The holdings consist primarily of a number of gold /quartz holdings (to the north) investigated sporadically by several large mining groups in the 20± years preceding. These holdings occur within a granitic intrusive which cuts across - or terminates to a large extent – the minimally investigated (to the south) ultramafic complex of a kind now being described as an “Alaskan – type Ultramafic”, (Foley, J. - Economic Geology, 1997). Since the writer has been involved with such systems in the past, Belmont suggested an appraisal of the platinum-group elements (PGE’s) instead of the ‘gold-only’ potential. Investigation of the ultramafic complex, (Platinum Group Elements, or PG Minerals) previously recorded only a few slightly above normal “PGE” background levels (i.e. + 50 – 70 ppb) during locally extensive but wide spaced rock (plus some stream silt) geochemical coverage. Based on these levels and within the extent of time and finances available, the writer decided to enlarge upon those slightly anomalous (generally tightly restricted locally) zones earlier generated in the hope of developing a trend towards something with potential enough to warrant trenching or drilling. PGE values detected (by rock sampling) during the 1999 program were up to double those obtained in earlier surveyed areas but extensive trends with increasing PGE content could not be established locally, and time did not permit resampling of extended areas showing only minor (background) PGE content, such as along grid crosslines or poorly developed stream drainages.

Following the above base-line directed sampling, two logging roadways built or upgraded (after most of the earlier gold and the very minor PGE exploration ceased) - and using backhoe equipment rather than “cat” in overburdened material - exposed bedrock in cuts in which fresh rock-unit exposures could be more easily identified and sampled. The first of these – the Corona Road ‘upgrade’ – clearly exposed all the rock units required to establish the presence of an ‘Alaska-Type Ultramafic’- including easily identified chromite (or chromitite) exposures often associated with elevated PGE content in such ultramafics. However PGE values on this short section of fresh outcrop failed to indicate anomalous PGE concentration despite several samples relatively rich in chromite.

A distance to the southeast (Area E) along the original controlling base line, expanded sampling of an earlier, weakly anomalous (slightly above normal ultramafic PGE background) zone was carried out but no persistent trend could be developed locally within the parameters of investigation (time and budget) although slightly higher values than previous were obtained. A short distance to the northeast of the area described above, a deactivated (blocked to public) but unusually well constructed logging road (#2320) exposed a 400 meter length of fresh rock (Area F) along its west bank, the best exposure noted in the Golden Loon claim area. All major ultramafic rock units, except gabbro, were exposed. Extensive sampling of an area within one section produced a “high-grade”, semi in place, but oxidized, sample – assaying 13.8 gms (about

0.4 oz) PGE's – the highest such value reported within the map area. Resampling of some of the other roadcut exposures in the local vicinity proved negative but a re-assay of the original high PGE sample 'reject' confirmed the approximate (albeit slightly lower) PGE content. Low powered microscopic viewing of the highly oxidized material showed chromite and questionable sulphide grains in this sample. A second, slightly chromitiferous sample, taken by the writer in an overburdened slide area about 1 km northwest along the road, assayed, in relative PGE content, several times as much as formerly reported in the Golden Loon area. This light but extensively overburdened zone (Area F) near the eastern edge of the ultramafic deserves attention. In the writer's opinion, a disseminated but lower grade PGE occurrence in this most eastern area is a reasonable target.

Work is recommended along the relatively easily accessible areas northerly of the significant occurrence on Road #2320. Prospector types capable of digging and blasting down through a couple feet of overburden and taking "C" horizon or near bedrock samples of soil or bedrock are suggested rather than soil sampling of glacially transported material. Also suggested is a thorough sampling along the upper, largely sloughed main road bank below, and east of, Road #2320, particularly in case the PGE – anomalous sample, taken on the #2320 road several hundred feet above is controlled by steep fractures (of which there are many) crossing the NW trend of the ultramafic such as clearly occupied by at least one chalcedonic carbonate (?) vein. In addition, several earlier taken soil samples high in chromium, particularly several kilometres to the northwest, should be investigated.

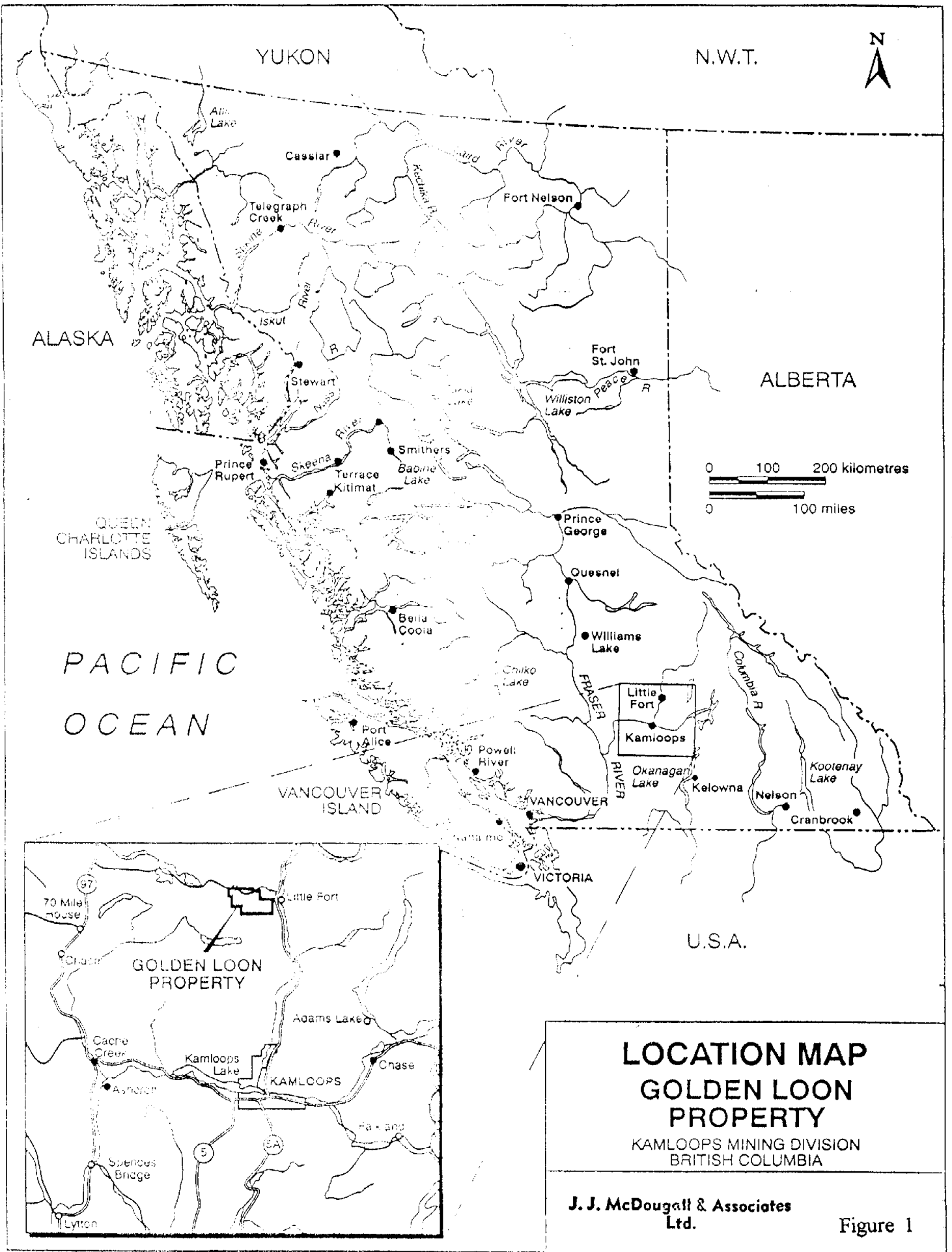
Some preliminary mineralogical and petrographical studies should be done to help guide further exploration, preferably by the B.C. Geological Survey. In the writers' opinion, identification in the field of 'platiniferous' vs. 'barren' chromite (based on 'dual populations') would add efficiency. In the writers' opinion, based on mapping and drilling of a number of "Alaskan" ultramafics, chromium-rich solutions, during a lengthy passage through early stage structurally induced channelways (still identifiable) scavenged PGE's from low PGE-bearing olivine enroute, later precipitating it (Stage 2) in structures we now recognize ("remobilization"). Thus the two identifiable populations, which in the writers experience, are usually present.

PROPERTY AND OWNERSHIP

The Golden Loon I, II, III, IV, V, VII, VIII and IX 'MGS claims' and Dum 1 to 8, LUC 1 – 14, and Loon 14, 16 – 21, 24 and 26 – 29 '2 post claims' comprise the Golden Loon property (Figure 2) consisting of 210 units located in the Kamloops Mining Division (N.T.S. 92P-8). The claims are registered in the name of Tilava Mining Corporation.

LOCATION AND ACCESS

The Golden Loon Property is covered by N.T.S. sheet 92P/8 and is centered seven kilometers west of Little Fort, B.C., which is on Highway 5, 100 km north of Kamloops (Figure 1). A network of well travelled forestry and logging roads affords good access to most parts of the

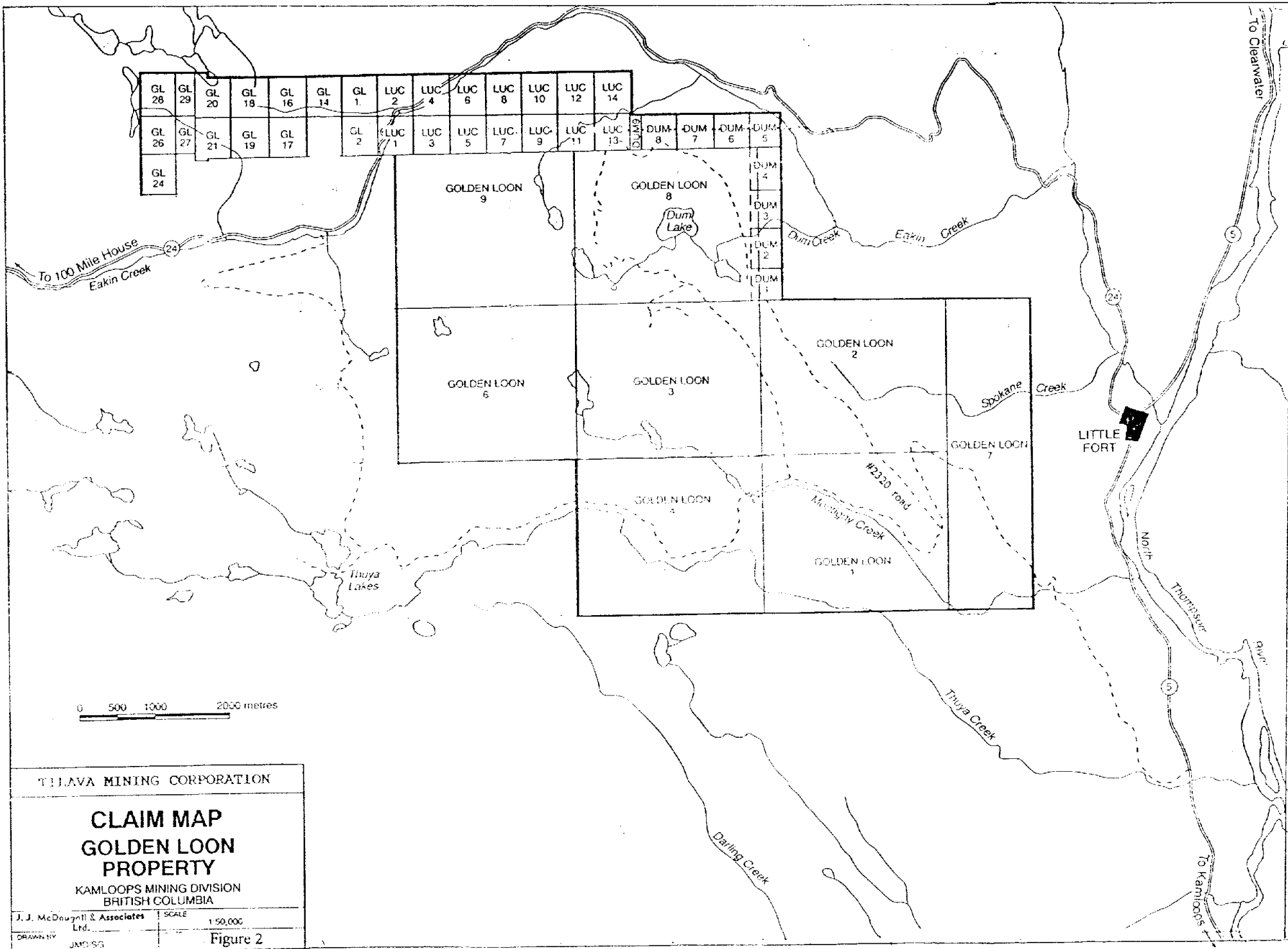


**LOCATION MAP
GOLDEN LOON
PROPERTY**

KAMLOOPS MINING DIVISION
BRITISH COLUMBIA

**J. J. McDougall & Associates
Ltd.**

Figure 1



THUYA MINING CORPORATION

CLAIM MAP GOLDEN LOON PROPERTY

KAMLOOPS MINING DIVISION
BRITISH COLUMBIA

J. J. McDougall & Associates

SCALE

1:50,000

DRAWN BY

JMD/SG

Figure 2

property from both Little Fort to the east and Thuya Resort and Eakin Creek Valley roads to the west. The Geographic coordinates of the claim group are approximately 51°25'N latitude by 120°20'W longitude.

The majority of the Golden Loon Property lies to the south of Eakin Creek gorge and occupies an undulating plateau region between 1100 and 1400 m in elevation. In the north-west the claims straddle Eakin Creek and cover steep topography with up to 500 m relief. Golden Loon, I, II and III claims, which are the main subject of this report, cover the south central but most elevated edge of the plateau.

Vegetation, including tree cover on the property, is generally thick with stands of mature pine and/or poplar. Large sections of the western area were logged ten to fifteen years ago and have very thick alder and scrub vegetation. Recent logging activity (1995) has taken place on the central and eastern claims. The new roads, Corona Road, Scott Road, and upgraded Road #2320 built on the claims, are involved in this report, and shown on Figures 1, 4, 5, 6, and 7.

As elevations are not severe, the climate approximates that of south-central B.C. Up to a metre of snow covers the claim area between late November and late March or April. Water is available in several small creeks and numerous small lakes, but unfortunately no deeply incised creek crosses the ultramafic rocks thus this most common guide to heavy mineral prospecting is unfortunately lacking.

HISTORY AND DEVELOPMENT

- 1920's: Placer gold was discovered on Eakin and Lemieux Creeks, north of the Golden Loon property. Coarse gold was found in higher bench gravels, and a number of placer mining claims were staked on a 2.4 kilometer length of Eakin Creek, (Three Mile Creek), directly north of the Golden Loon claims. Total production from 1925 to 1945 was 176 ounces of gold. The source of the placer gold has never been determined, but conceivably the source area could be the northern part of the Golden Loon claims.
- 1960's: In the 1960's, Noranda explored the Kira claims in the area for copper and nickel associated with the large ultramafic intrusion crossing the claims (Assessment Report # 1055).
- 1973: Rio Tinto explored the area and outlined Cu, Zn and Pb anomalies west of Dum Lake. There is no indication that they followed up these anomalies with further work. (AR # ??)
- 1980 - 81: Teck explored the Minerva claims in the area and outlined Cu and Ag soil anomalies over the Thuya Batholithic intrusives in the western part of the present claims. (AR # 4689, 9061) Pyrite, chalcopyrite and galena were found in trace

amounts in quartz selvages near the contact of hornblende diorite with the ultramafic body. A total of 1,349 samples were analyzed for Mo, Cu and Ag.

1987: Mineta Resources Ltd. acquired claims in the eastern part of the area and completed geochemical and geophysical surveys, outlining targets on the Golden Loon VIII claim.

The more recent exploration, largely for gold, is described in progress and assessment reports from 1987 – 1997 by R. C. Wells for W. Kovacevic of Tilava Mining Corp., B.D. Price for Mesa Biomedical Inc. in 1996, J.M. Dawson in 1997 and Mineta Resources Ltd. in 1988. The reports by Wells are the most significant with respect to the current work program and the report by Price is the most comprehensive to 1996.

REGIONAL GEOLOGY (after Price 1996)

“Previous mapping in the area was done along Thompson River by W.L. Uglow in 1921. The most detailed work so far was done by Campbell and Tipper from 1963-65 and published as GSC Memoir 363 and accompanying Map 1278A (Figures 3a,b).

The Bonaparte Plateau occupying most of the 92P mapsheet comprises three tectonic belts or terranes; on the east are metamorphosed and highly deformed pre-Cambrian to late Paleozoic rocks of the Omineca belt or geanticline; on the west are folded late Paleozoic rocks of the Pinichi Geanticline. In the center, underlying the Bonaparte Lake area and the Golden Loon project area, is a thick section of Mesozoic volcanics and intrusions, primarily of Triassic and Jurassic age, within the “Quesnel Trough”.

The Thompson River valley is occupied by a major north-striking fault zone which separates the Quesnel and Shuswap Highlands, on the east, from the Thompson Plateau, (part of the Bonaparte Plateau) on the west. The Shuswap Highland is underlain by folded, metamorphosed Paleozoic rocks of the Eagle Bay and Fennell Formations, intruded by Cretaceous granitoid rocks, which form the summits. The Thompson Plateau is underlain primarily by moderately folded and block faulted late Paleozoic and early Mesozoic volcanic and sedimentary rocks intruded by a major Triassic to early Jurassic Thuya batholith and a tectonically controlled mafic to ultramafic layered intrusion which has been faulted, sheared and converted to secondary serpentinite. On the western side of the plateau, in the Bonaparte River and Cache Creek areas, rocks of the Cache Creek Group and Pavillion Group of late Paleozoic age are separated from the Quesnel Trough rocks by the major southern extension of the Pinichi Fault. Much of the plateau has later been covered by middle Tertiary Kamloops and Skull Hill Groups including volcanic and volcanoclastic sedimentary rocks followed by a thick series of Miocene plateau basalts.

Stratigraphy

As stated before, the Thompson River is a major crustal break, separating terrains of greatly differing stratigraphy. For purposes of brevity, only the stratigraphy relevant to the project area will be briefly described. Much of the description is condensed from Campbell and Tipper.

Cache Creek Group (Unit 6): The Cache Creek Group rocks outcrop from Kamloops to Darfield, north of Barriere, on either side of Thompson River westward to Jamieson Creek and eastward to Louis Creek. The rocks are mainly clastic sediments, with minor carbonate, and locally basic to andesitic flows. The sedimentary rocks are mainly grey to grey-green volcanic arenite and greywacke, with lesser amounts of argillite. Some of the rocks are referred to as greenstone; more schistose varieties may be metamorphosed tuffaceous rocks. Limestone is not as common in this region as it is in the western region (for example the Cache Creek area itself) and chert is absent here as well. The rocks are foliated but bedding is not often seen. Foliation and bedding are commonly parallel. The eastern contact of the Group is formed by the fault or faults following Lemieux Creek and Louis Creek valleys, with Fennell Formation volcanics on the east side. Fossil evidence indicates ages from Early Pennsylvanian to Late Permian, as in other parts of B.C.

Nicola Group (Unit 11): The Nicola Group, characteristic of the Quesnel Trough, was named by George M. Dawson in 1879. These volcanic and associated minor sedimentary rocks are found in Princeton, Kamloops, Ashcroft, Vernon and Nicola map sheets, and are mainly Triassic in age. The most common rocks according to Campbell and Tipper, are "dull, greenish grey, aphanitic or very fine-grained greenstones or actually coarse to fine volcanic clastics (agglomerates and tuffs), or augite porphyry breccias. Original rock types are obscured by metamorphic or alteration changes to chlorite, albite, amphibole, carbonate, epidote, sericite and other obscure minerals. Dioritic areas may result from recrystallization of andesitic greenstones. Bedding is rarely apparent. Bedding in the project area is thought to strike northwestward and dip steeply. Contacts with other units are generally faults, except for the batholithic intrusions.

Early to Middle Jurassic Rocks (Units 15, 16): These rocks are confined to the northeastern part of the plateau area, from Thompson River, north of Little Fort, to the Canim Lake area. Unit 15 includes variably coloured fine-grained volcanoclastic rocks. Conglomerates may form the base of the unit, and grits and breccias are present. Some of the clasts are indicative of origin in older formations like the Nicola Group. Prehnite and zeolite alteration is present south of Canim Lake. Elsewhere, adjacent to intrusive rocks, the unit may be hornfelsed to fine amphibole-biotite mixtures. The unit is extensively tilted by faulting. Map Unit 16, comprising augite porphyry breccia and conglomerate, is closely associated with Unit 15. Small, possibly intrusive bodies of hornblende porphyry are common. Some amygdaloidal varieties of the volcanic rock are filled with zeolites, epidote or quartz. Faulting controls the distribution of the rock. Stratigraphic relationship to Unit 15 is not known; they may be facies equivalents. Rocks of similar lithology in the Quesnel Lake area have Lower Jurassic fossils.

Kamloops Group:

Chu Chua Formation (Unit 21): The Chu Chua Formation is confined to the North Thompson and Clearwater Valleys. The unit includes sedimentary beds ranging from conglomerates to arkosic sandstones to sandy shale and coal. The formation was derived from local materials and deposited into the ancestral river valley. Age of the Chu Chua Formation, dated by plant fossils and pollens, is Eocene, and probably Middle Eocene.

Skull Hill Formation (Unit 22): The Skull Hill Formation was applied initially to volcanic flows, breccias and sills in the Thompson Valley. These rocks are widely scattered over the map area, suggesting they are remnants of a larger volcanic sheet. Included are a wide variety of volcanics including basalts, andesites, dacites and near-rhyolites. Flows and breccias are present, including vesicular and amygdaloidal varieties. Amygdules may be filled with chalcedony, calcite, opal and zeolites. The unit rests conformably on the Chu Chua Formation; age is late Eocene and possibly Oligocene.

Deadman River Formation (Unit 24): This unit is restricted to a few areas such as Deadman River, Bonaparte River and a few others areas. The unit includes buff to yellowish brown weathering tuff, breccia, diatomite, siltstone, pebbly arenites and conglomerate. The rocks are soft and poorly consolidated lacustrine sediments of late Miocene age.

Plateau Lavas (Unit 25):

The Miocene Plateau basaltic lavas cover a large part of the Bonaparte Plateau, particularly the western part of the mapsheet. To the east, isolated erosional or depositional outliers remain. The lavas were extruded as flows onto an irregular surface, often filling the more-deeply incised pre-existing drainages, such as Clearwater River. Olivine basalt is the main rock type and other lithologies such as pyroxene andesite are rare. Most flows are 5 to 50 feet thick. Vesicular to scoriaceous lavas are common but amygdaloidal textures are rare. Some of the individual flows are thicker where lavas filled depressions, and one flow is known to be 20 miles long. Several olivine gabbro plugs, for example Mt. Begbie, are thought to represent vents or feeders. The lavas are essentially comfortable with underlying Deadman Creek volcanics of late Miocene age, but in angular discordance with older formations where the Eocene volcanics are absent. The lavas resulted from the fluid outpouring from numerous centers rather than one large center.

Pleistocene to Recent volcanics: A few small areas of young basaltic flows and cinder cones exist, mainly outside of the Bonaparte mapsheet.

Intrusions

Thuya Batholith (Map Unit 14): The Thuya and Takomkane batholiths and other related igneous bodies are large intrusive igneous bodies. Most of these are hornblende-biotite granodiorite and quartz diorite with lesser amounts of diorite, syenodiorite, monzonite and quartz

monzonite. Thuya batholith is about 40 miles east-west by 20 miles north south. The Takomkane Batholith in the Canim Lake area is roughly circular and 30 miles in diameter.

Most of the batholith rocks are equigranular, grey to brownish grey in colour, and at least weakly altered. Hornblende and biotite may be altered to chlorite and epidote. Plagioclase is variably altered to epidote, sericite, clay minerals and carbonate. At the contact with the mafic complex, hornblendite is common. Peralkaline varieties are present in the western part of the area. An example is Rayfield River, where nepheline syenites are common, associated with large low-grade copper deposits.

The eastern contact of the Thuya Batholith with Nicola volcanic rocks contain many phases that are obviously contaminated. In some cases, one is not able to determine if the original rock belonged to the volcanics or the intrusive. The Thuya and Takomkane Batholiths cut Upper Triassic and older rocks, and are likely late Triassic to Early Jurassic in age.

Other Intrusives (Map Units 13, 20): Other intrusive rocks include the Cretaceous Raft and Baldy Batholiths. These rocks are mainly granodiorite or quartz monzonite, and are more potassic than the Thuya and Takomkane rocks and contain less mafics. Age determinations gave 80-96 M years for the Baldy Batholith and 105-140 M years for the Raft Batholith. A number of other small intrusions are present in the map area.

Mafic and Ultramafic bodies (Unit 9): Two masses of serpentinite were mapped by Campbell and Tipper, south and west of Little Fort, (within what is now the Golden Loon property). These were assumed to be tectonically emplaced bodies associated with the major northwest faults crossing the area. In reality, the rocks are more properly a mafic to ultramafic complex, which includes a broad variety of igneous rock types.

This unit is of uncertain age. Some of the rock types appear to be hornfelsed, and are probably Permian in age. Others, the more mafic varieties such as gabbro and hornblendite, may be contaminated phases of the Thuya Batholith. The mafic-ultramafic complex has an associated strong regional magnetic anomaly shown on accompanying figures.

Structure

For the area of Thompson River to Bonaparte River, encompassing the Bonaparte Plateau, the two main structural elements are 1) major faults in the North Thompson Valley, extending along Thompson River, Louis Creek and Lemieux Creek, and 2), strong block faulting in the Eakin Creek area.

The major northwest-trending Thompson River fault system is one strong fault in the southern area, where it separated Cache Creek Group rocks from Eagle Bay and Fennel volcanics. To the north, however, in the vicinity of Little Fort, the fault splays into a number of separate faults with north to northwest trends, forming a complex pattern.

In the Eakin Creek area, numerous closely spaced topographic lineaments visible in air-photos have been ascribed to block faults. Many faults of this series cross the Golden Loon property. Thus in the Golden Loon property area, the Thuya Batholith and Nicola Volcanics, and likely the mafic-ultramafic complex as well are shattered by thousands of fractures, joints and small faults giving a perfect setting for mineralization in veins and stockworks. The faults separate panels of rocks with different ages or lithologies. Narrow zones of shearing, brecciation and slickensides are common. Most of the faults appear to be near vertical. Because the Deadman River Formation is not cut by these faults, Campbell and Tipper indicate that the structures are dated as pre-Late Miocene.

Glacial History

The entire area was covered with continental glaciers, leaving abundant glacial features as evidence. The last movement of ice was southward to southeastward from the Cariboo Mountains. The glacial deposits are widespread but are not deep except in Thompson River valley in which glacial silts are thick. Determination of glacial history becomes important in the interpretation of geochemical anomalies.”

LOCAL GEOLOGY

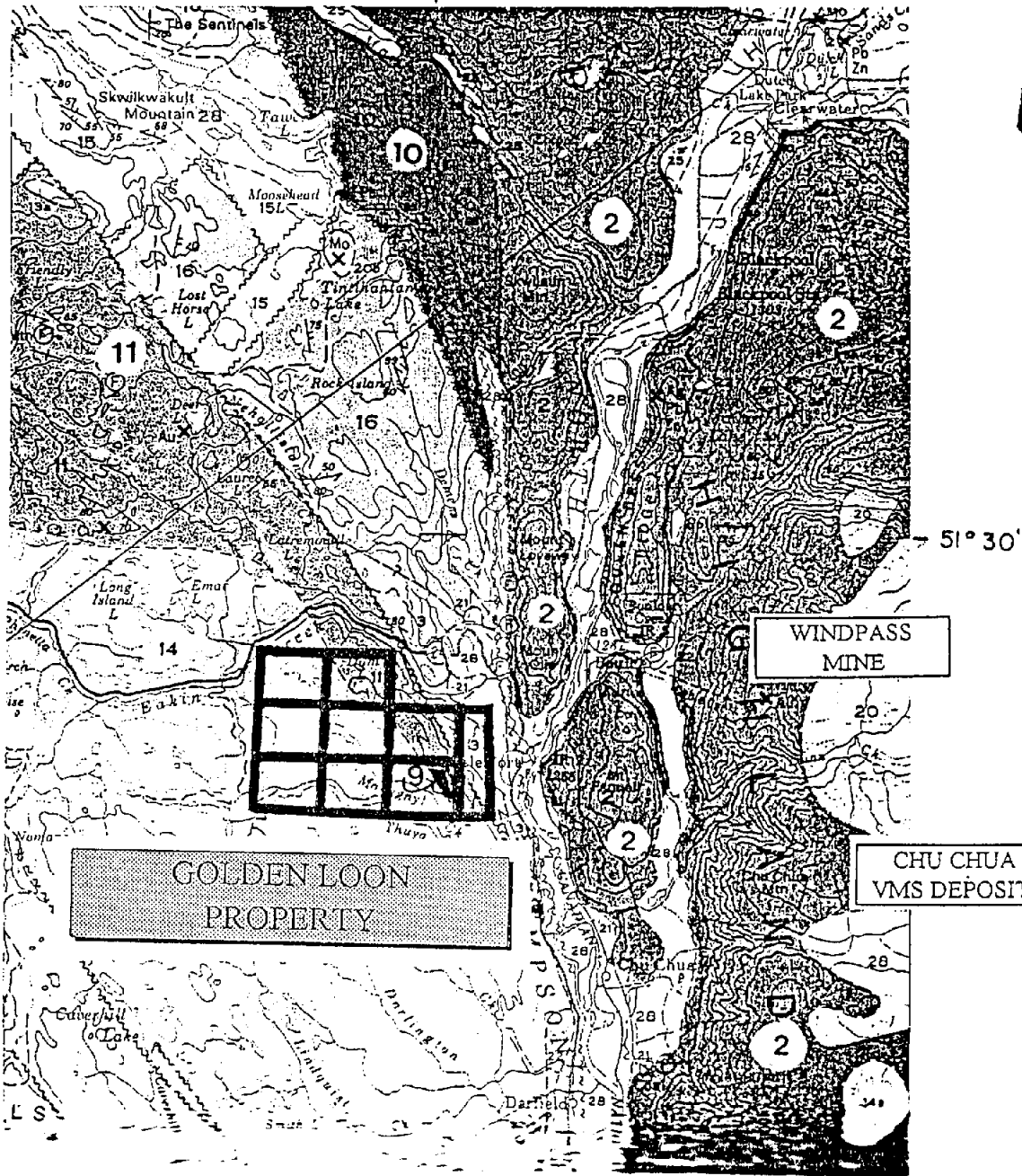
The following report on Local Geology is based on a report by Price (1996) who researched most available records. Only minimal information was available regarding the ultramafic intrusion, which occupies much of the south central portion of the claim area. Silver Standard, Mineta, Corona, Placer Dome, Tilava, Noranda and Meteor Minerals, among others, conducted exploration in the area, which contributed geological data.

As described by Price:

“Much of this discussion is condensed from a report by Wells, Evans and Bellamy, (1990) describing geological surveys conducted by Corona Corporation on the Golden Loon Property. Reconnaissance geological mapping at 1:10,000 scale has previously been done by R.C. Wells over large parts of the property using the extensive road and trail systems in the area and the Mineta grids. Detailed geological mapping at 1:2300 scale was conducted by I. Mitchell BSc. over the Dum Lake grid.

Outcrops are generally sparse, except along road cuts and steeper slopes; thick glacial sands and gravels cover much of this area.

Thuya Batholith granitic rocks underlie much of the southern and western parts of the property. A northwesterly trending mafic to ultramafic intrusion up to 1.3 kilometres wide forms a prominent ridge across the mineral claims (Fig. 3a, b and Fig. 4). This unit is strongly magnetic as shown on regional airborne magnetic maps, forming positive features 2000 to 3000 gammas above background, (GSC Geophysical Series Map 52440). Geological traverses over the ultramafic by



SCALE
 1 Km

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|--|
| <p>GOLDEN LOON CLAIMS Little Fort Area, B.C.</p> <p>FIGURE 3a REGIONAL GEOLOGY - LITTLE FORT After Campbell and Tipper, 1971 Map 1278 A</p> |
| <p>J. J. McDougall & Associates Ltd. 7720 Sunnyside Rd. Richmond, B.C. V6Y 1H1</p> |

LEGEND

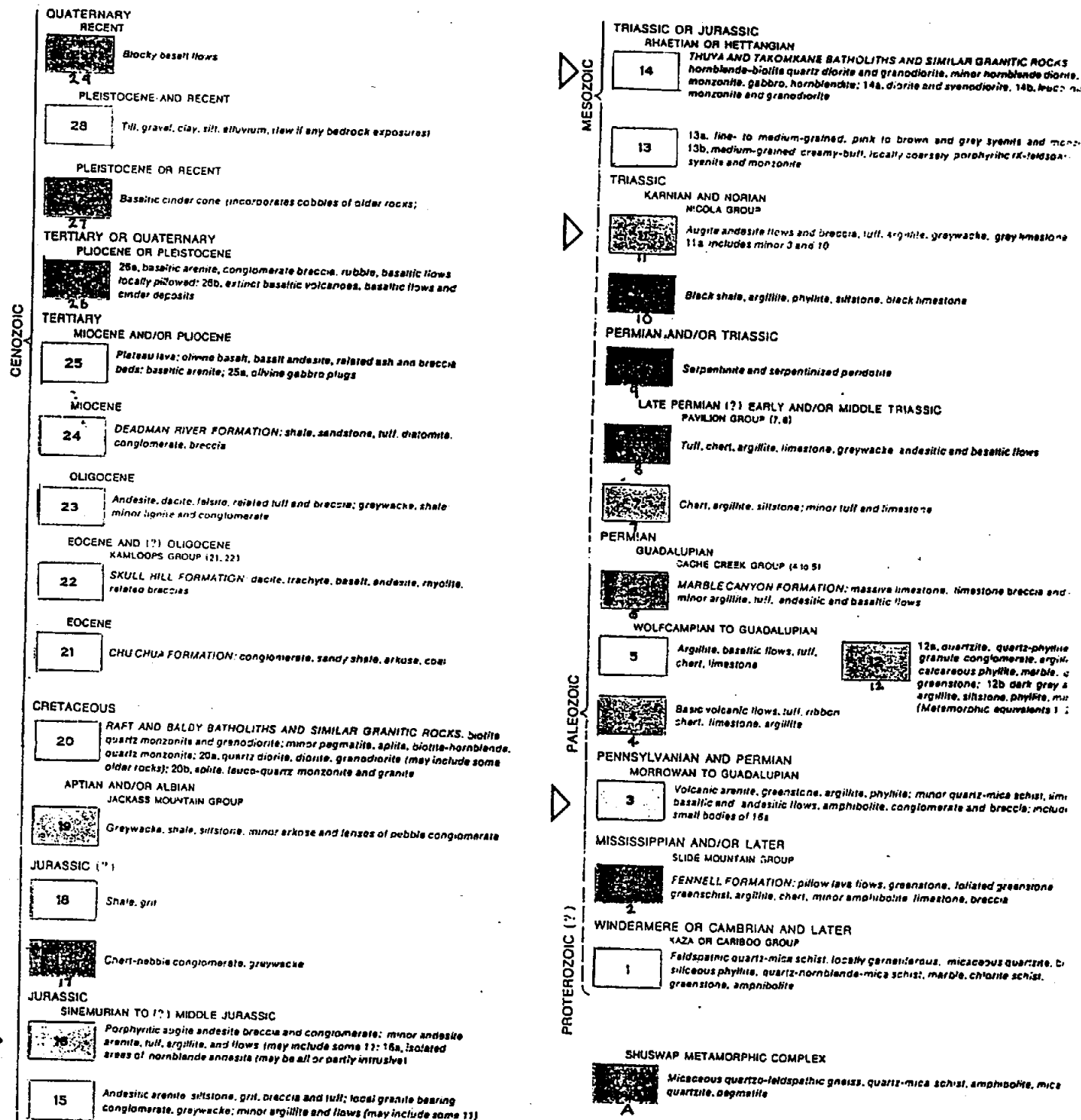


FIG 3b

UNITS ASSOCIATED WITH
GOLDEN LOON PROPERTY

Corona showed it to be compositionally layered with thick bands of dunite, peridotite, pyroxenite and gabbro.”

Thuya Batholith and Related Intrusions:

In the Dum Lake area north of the ultramafic body, Nicola Group volcanics and sediments are intruded by a mixed group of rocks ranging in composition from syenogabbro to quartz monzonites. These are thought to represent contaminated, satellite intrusive bodies of the Thuya Batholith-Takomkane Batholith suite. Evans and Bellamy described the map units as follows, modified slightly from their quotations to omit specific map-references:

“The Thuya Batholith south of the main ultramafic units consists of fairly monotonous medium to coarse grained, quartz monzonites and granodiorites. These are equigranular leucocratic rocks with quartz, plagioclase > K-spar, and between 5 and 10% mafic minerals (hornblende, biotite, chlorite). Porphyritic varieties have large K-spar phenocrysts. Mafic granodiorites are less common and occur as sparse outcrops in the southwestern part of the property.

On the eastern margin of the batholith, close to the North Thompson Fault, granodiorite is locally foliated and gneissic. On the Golden Loon VII claim, a northwesterly trending dyke-like body or fault block of equigranular quartz monzonite (+200 metres wide) outcrops east of a major splay fault.

North of the ultramafic unit, mineralogically and chemically similar rocks outcrop on the western part of the Dum Lake grid. These quartz monzonites are more altered (propylitic, locally silicified) and contain more K-spar (K-spar and plagioclase-roughly equal amounts) and less than 10% mafic minerals. To the east these rocks grade into monzonites, quartz diorites and diorites which have so far only been recognized in the Dum Lake area on the property”.

Monzonite, Quartz Monzonite

“This unit underlies much of the Dum Lake grid area and has gradational contacts. In the field this unit (monzonite) can be distinguished by the lack of quartz, high total feldspar, higher K-spar content and is generally finer grained (medium to medium-coarse grained) with equigranular textures. The mafic minerals (biotite, rare coarse hornblende) are commonly chloritized. Chemically, this unit is more alkali rich than the quartz monzonites or granodiorites”.

Diorite, Monzonite

“Small zones of more mafic rich diorites and monzonites occur on the Dum Lake grid, particularly north of Dum Lake. In the field these diorites are distinguished by their high mafic mineral content (greater than 10%, commonly 20%). Chloritization is common with

rare remnant biotite and hornblende. Chemically, the rocks are quartz diorites to quartz syenodiorites and monzonites”.

Gabbro, Syenogabbro

“Outcrops of magnetic gabbro and syenogabbro are restricted to small areas at the south end of Line 900E. A gabbro dyke cutting Unit 1 ultramafic rocks was intersected in DDH GL90-03. The dyke is clearly younger than most other igneous phases and could be an ultramafic contaminated variety. The gabbroic rocks are dark coloured, medium to coarse-grained equigranular and locally foliated. Plagioclase and K feldspar content varies from 5 to 30%. Hornblende and chlorite are the predominant mafic minerals. Chemically, these rocks contain high total alkalis and range from syenodiorites to syenogabbros. The more mafic, alkali poor varieties occur closer to the ultramafics and are another indication of contamination.”

Nicola Group (Triassic)

“The area north of the Thuya Batholith lies in a complex fault zone (splays) which displace all the major rock units. Nicola Group volcanics and sediments outcrop in this northeastern and eastern part of the property and appear to include two distinct rock packages. The sediments appear to underlie the volcanics – this relationship is not clear-cut as complex faulting is common.”

Volcanics

“Predominantly flows, minor volcanoclastics. These are dark green, fine grained volcanic flows with minor interflow fragmental units. Locally, these units are schistose and chloritic, especially in the vicinity of stronger fault zones. Close to the intrusive rocks the effects of thermal metamorphism are clear with significant epidote, metamorphic segregation of layers and recrystallization and partial melting (irregular diorite pods and swells). Chemically, the volcanics appear to be tholeiitic.”

Sedimentary Rocks

“These rocks are poorly exposed on the property and predominantly consist of dark coloured siltstones, shales, mudstones and dirty limestones (calcareous mudstones), as well as their more metamorphosed equivalents; slates and phyllites. Sericitic phyllites are fine-grained, light coloured rocks composed of quartz, sericite and chlorite. They outcrop along the power line east of the property boundary. The shales and slates are shattered and quartz veined (irregular), when close to major structures such as splay faults.”

Ultramafic Rocks: (Age Unknown)

"A distinct group of fine to coarse grained, brown weathering, ultramafic rocks form the main northwesterly trending ridge on the property. (Unit 9) These rocks have been variably (pervasively) serpentized and range from coarse olivine (remnant) rich dunites through pyroxenites, peridotites and gabbros. Serpentine veinlets with magnetite are common to all the units. Olivine grains can be distinguished through the serpentine alteration. Along the northern margin of the ultramafics there are a few outcrops of gabbro and pegmatitic gabbro. These are distinct from Unit 9 in their darker colour, variable grain size, lack of feldspar (plagioclase when present), serpentine alteration of pyroxenes and locally abundant biotite. Biotite occurs both in the groundmass and as coarse flakes in pegmatitic veins and pods.

Geochemically, the ultramafics and gabbros are a distinct group. The gabbroic marginal phase appears to have had a later introduction of potassium (biotite). A significant amount of gabbroic float was found along the northwestern margin of the ultramafic unit. Potassium introduction is a strong argument for a Pre-Thuya age for this unit."

Structure

"The property covers an area of complex splay and block faulting at the north end of the Thompson-Louis Creek fault system. These major splay faults from the Thompson system trend westerly to northwesterly and, in the Nicola Volcanics, are marked by wide zones of chloritic schist. Structural measurements and displacements indicate these are dextral shears with a large dip-slip component. Similar splay faults probably form the boundaries to the main ultramafic unit as is indicated by strong shearing and brecciation in a number of outcrops.

Between the main splay faults, especially in intrusive rocks, there are numerous faults with variable orientations and senses of movement. On the Dum Lake grid, the most common orientations are N, NE, E and SE. The N and NE set dip steeply to the east and southeast while the SE set dip steeply to the southwest. Lineations indicate both dip and strike-slip components to these faults.

A northeasterly trending fault system appears to follow the Dum Creek valley and across the ultramafic. West of this interpreted structure, the ultramafic unit appears to have been rotated to a more northerly trend.

Faulting in the area clearly post dates the Thuya Batholith (Early Jurassic?) as all the main rock units have been displaced to varying degrees. Brecciated quartz veins along some structures indicated (reactivation) more than one period of deformation and post mineralization faulting".

Alteration and Mineralization:

"Detailed mapping on the Dum Lake grid by I. Mitchell distinguished a number of alteration zones within the intrusive rocks. Alteration is to a large extent controlled by the structures described in the previous section and in some cases is closely related to base and precious metal mineralization.

Propylitic alteration is widespread. Generally, in the less fractured intrusives, it is very weak with epidote or chlorite alteration of mafic minerals and local introduction of carbonate. Stronger propylitic alteration with significant chlorite, epidote and carbonate, pyrite and hematite, tends to occur along north to northwesterly trending structural zones and as haloes to quartz veins or silicified zones.

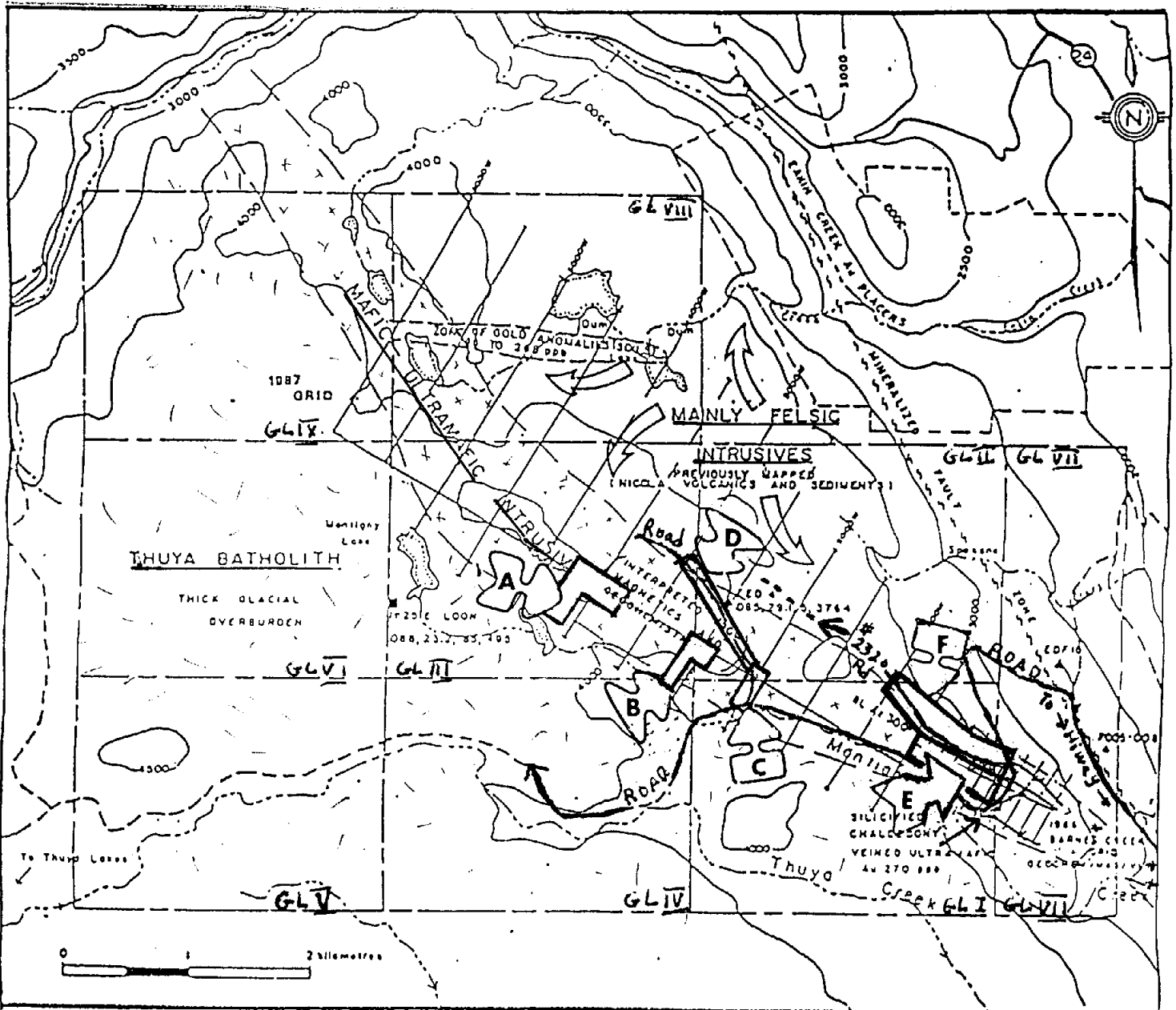
The most prominent zones of propylitic alteration are said by Evans and Bellamy to occur along Dum Creek and on the baseline at 800E. Within these propylitic zones are structures referred to by them as "core zones" that are either:

- 1. Strongly silicified (units) with weak quartz vein stockworks, pyrite, hematite (specular) and local disseminated or veinlet chalcopryrite and galena; or*
- 2. Quartz veined with local galena, chalcopryrite and pyrite.*

East and south of Dum Creek, milky quartz veins were found by Corona along northerly and easterly trending structures. The veins cut monzonitic and dioritic rocks and are gold bearing where they are mineralized with galena and pyrite, and/or chalcopryrite. Propylitic alteration related to these veins extends outward for many metres and commonly contains areas with K-spar veinlets. Narrow silicified zones adjacent to the vein contain disseminated pyrite, local magnetite and K-feldspar.

The other prominent alteration type, in the Dum Lake area, is strong chloritization of east and northwest-trending structures. These zones may be tens of metres wide and rarely contain gold values where there is no strong accompanying alteration of epidote, carbonate, and pyrite."

During the present (1999) sampling program, no attempt was made to establish the presence of zoning (including possible "layering") such as would entail a succession of less basic rock types outwards from a dunite core, such as is clearly the case with other "Alaska" types such as "Grasshopper" on the Tulameen River. With the exception of gabbro, which the writer did not see in-place, the Golden Loon ultramafic appears largely composed of dunite (or derived serpentine) with a pyroxenite associate (peridotite) more common near the western exposed limits. Except on ridges and roadcuts, outcrop is rare due to extensive drift and forest cover and contacts are probably best exposed near the southeast border of the map area.



LEGEND





-  ULTRAMAFIC INTRUSIVE
-  THUYA BATHOLITH
-  ROCK SAMPLE AREAS/99
-  GOLDEN LOON PROPERTY
(NORTHERN CLAIMS NOT SHOWN)
J. J. McDougall & Associates
Ltd.
7720 Sunnyside Rd.
Richmond, B.C.
V6Y 1H1

FIG 4

| | |
|--|-----------------|
| <u>LOCAL GEOLOGY</u> (AFTER WELLS 1988) | |
| <u>& SAMPLE AREAS (1999)</u> | |
| LITTLE FORT AREA, KAMLOOPS M.D. | |
| Drawn by JM | N.T.S. 92-P-8 |
| | Fig. 4 Nov 1999 |

ROCK SAMPLE PROGRAM 1999

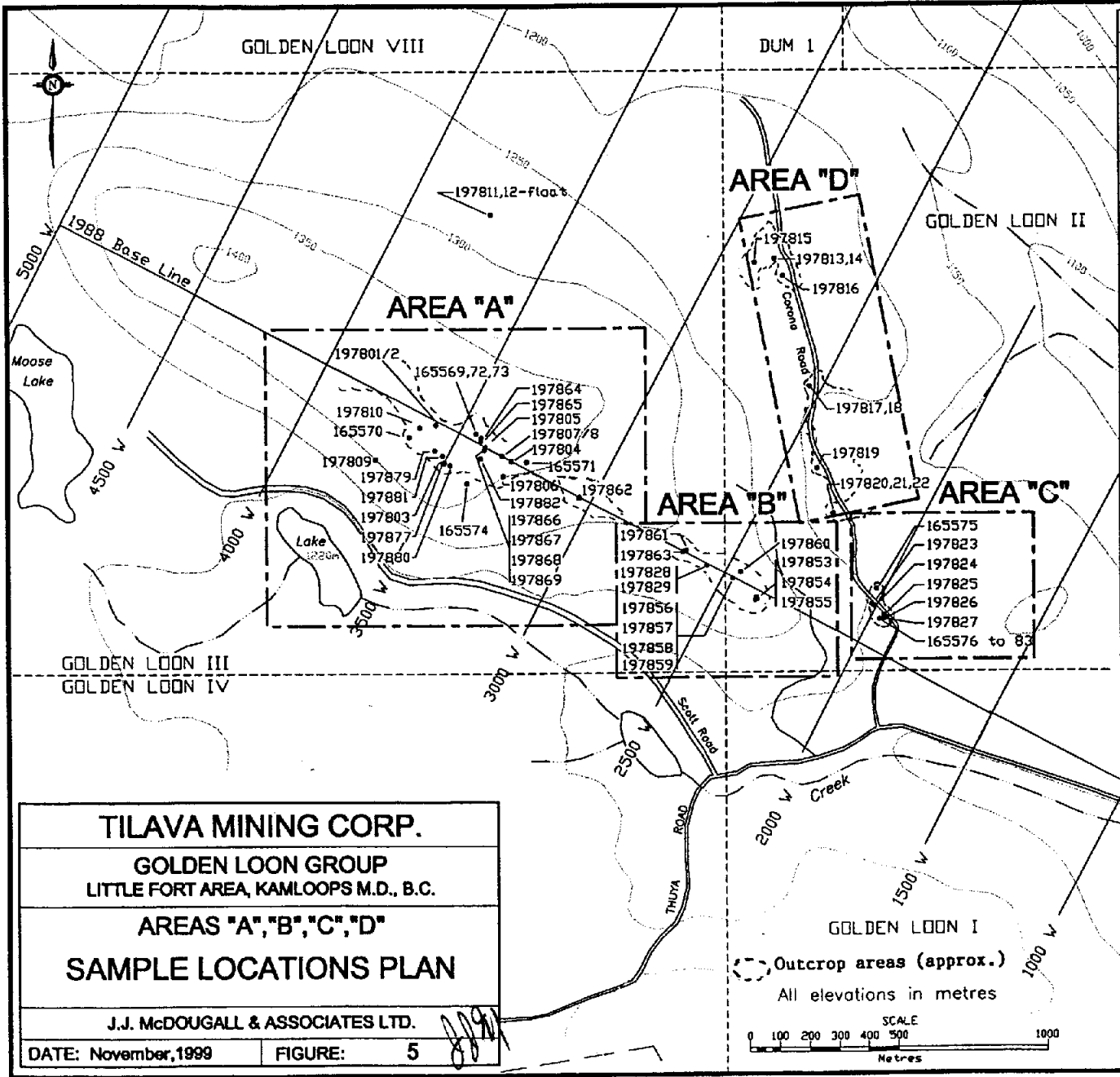
Six local areas, all tied into an original (1988) base line and/or related cross lines still identifiable, served as a basis for follow-up rock sampling on Golden Loon Claims GL I, GL II, and GL III. These areas were chosen mostly in an effort to expand on the higher Pt, Pd (PGE) values obtained in 1988 rock sampling. These Areas are designated "A, B, C, D, E & F" generally from northwest to southeast. Four "A, B, C, and E" centered along the original 1988 base line while "D and F" were intersected by earlier crosslines seldom located. All areas are shown on Figures 4, 5, 6 and 7. Samples collected weighed an average 1 kg and were picked, where possible, due to features which might suggest anomalous PGE mineralization such as proximity to earlier, weakly anomalous sample sites, the presence of chromite, oxides suggesting the weathering product of sulphides, and anomalous or unusual features such as magnetics, rare textures, etc. Several soil samples were also taken. All samples were submitted to Acme Laboratories in Vancouver for "32 element ICP analysis" and a special "gold, platinum, palladium analysis" required to assure proper solution of these currently investigated elements. A number of chemical chromium analyses were done to establish the true chromium present which ICP analyses are notorious for underestimating (e.g. solution problems); the true content of which (based on six 1999 sample checks) is about 70 times that reported by ICP. This may vary depending on solution characteristics due to oxidization or iron content but the "understated ICP technique problems" are paramount although cautioned by most (but not all) assayers. A total of 150 samples were assayed and the results plotted on Figures 4 - 7. A few of the resultant values are considered distinctly anomalous, especially in area "F".

SUMMARY AND CONCLUSIONS

About 20 rock samples collected in 1999 showed anomalous Pt and Pd (i.e. greater than a predicted background of 50 ppb) including three, which exceed 100 ppb. Of interest in the latter group were two samples, one showing 13,798 ppb Pt, 25 ppb Pd, and the other 483 ppb Pt, 10 ppb Pd.

Although the highly anomalous value of the oxidized sample (about 0.4 oz/t PGE) was largely confirmed by re-assay in the lab, the writer could not relocate the sample site within an oxide-littered area with numerous blasted (?) loose rock 'look-alikes', given the time available. The source could be underneath and paralleling the present substantial road surface. The second sample, taken solely from a large number of similar but less chromitiferous slide rock near an old quarry about 1 Km to the north along the road, assayed 3.15% chromium and nearly 0.5 gm PGE's.

(Additional discussion was presented under the "Introduction and Summary" section)



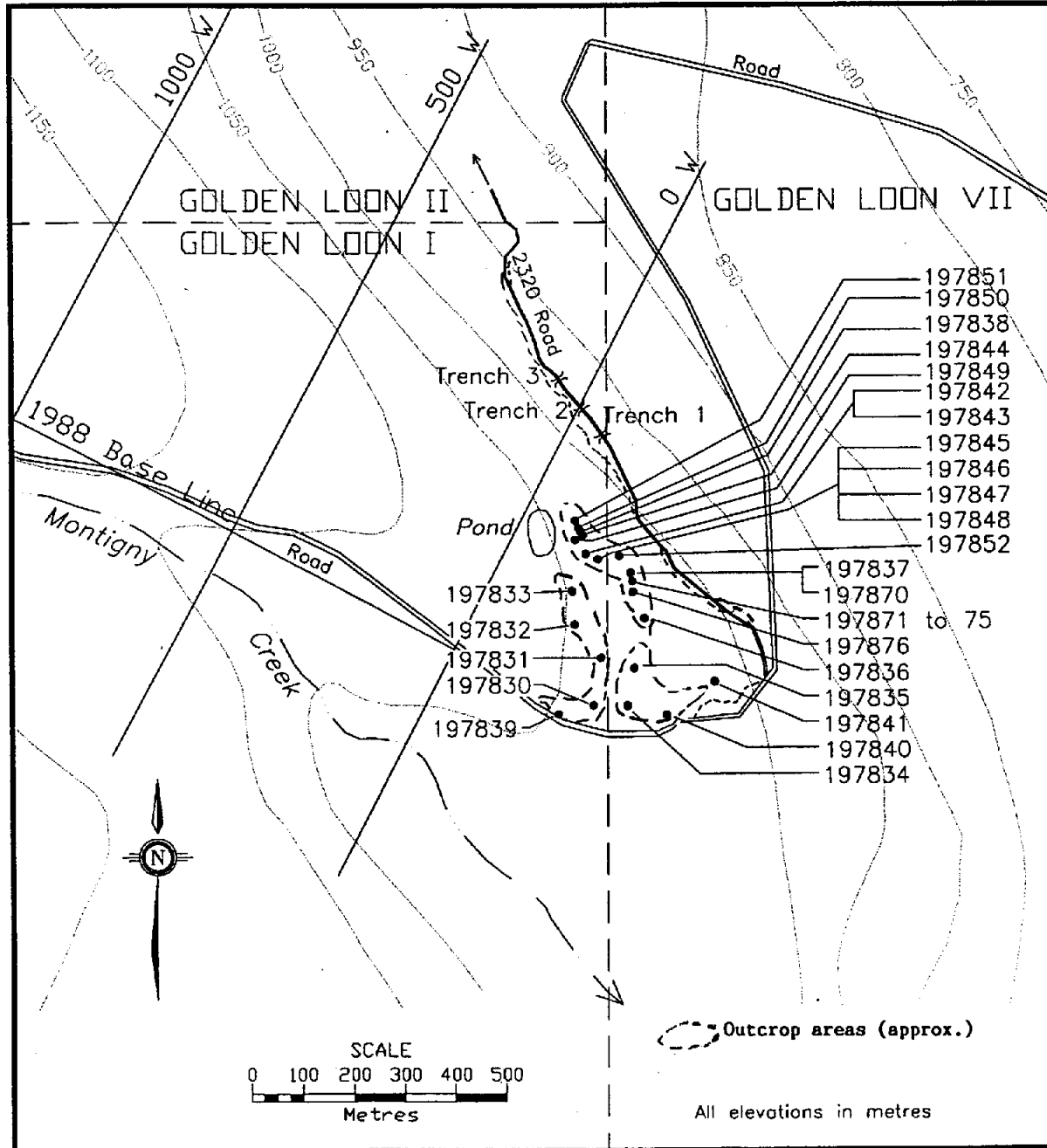
TILAVA MINING CORP.
GOLDEN LOON GROUP
LITTLE FORT AREA, KAMLOOPS M.D., B.C.

AREAS "A", "B", "C", "D"
SAMPLE LOCATIONS PLAN

J.J. McDOUGALL & ASSOCIATES LTD.

DATE: November, 1999 FIGURE: 5

| AREA "A" | | | | | | |
|-----------|----------|----------|---------------|-------------|----------|----------------------------|
| Assay No. | Pt (ppb) | Pd (ppb) | Cr (ppm) (CP) | Cr % (Chem) | Au (ppb) | Notes <1 ppb is shown as 1 |
| 185568 | 1 | 1 | 78 | | 1 | rock/clay |
| 185570 | 11 | 1 | 292 | | 3 | soil/rock |
| 185571 | 2 | 2 | 221 | | 4 | soil/rock |
| 185572 | 18 | 1 | 185 | | 1 | soil/rock |
| 185573 | 18 | 1 | 503 | | 1 | rock |
| 185574 | 2 | 1 | 264 | | 2 | |
| 187801 | 5 | 1 | 747 | | 1 | |
| 187802 | 5 | 1 | 538 | | 1 | |
| 187803 | 55 | 1 | 171 | | 1 | |
| 187804 | 31 | 2 | 102 | | 1 | |
| 187805 | 124 | 1 | 180 | | 1 | |
| 187806 | 32 | 1 | 185 | | 1 | |
| 187807 | 4 | 1 | 405 | | 1 | |
| 187808 | 48 | 1 | 240 | | 1 | |
| 187809 | 38 | 1 | 181 | | 1 | |
| 187810 | 25 | 1 | 102 | | 1 | |
| 187882 | 1 | 1 | 306 | | 2 | |
| 187864 | 25 | 5 | 188 | | 3 | |
| 187865 | 20 | 4 | 106 | | 1 | |
| 187866 | 101 | 3 | 123 | | 2 | |
| 187867 | 25 | 2 | 73 | | 1 | |
| 187868 | 53 | 3 | 145 | | 2 | |
| 187869 | 66 | 5 | 86 | | 3 | |
| 187877 | 5 | 1 | 835 | | 1 | |
| 187878 | 43 | 1 | 74 | | 3 | |
| 187879 | 18 | 1 | 115 | | 1 | |
| 187880 | 10 | 1 | 153 | | 1 | |
| 187881 | 24 | 1 | 82 | | 2 | |
| 187882 | 5 | 1 | 101 | | 1 | |
| AREA "B" | | | | | | |
| 187828 | | | | | | |
| 187829 | | | | | | |
| 187853 | 2 | 7 | 303 | | 1 | |
| 187854 | 5 | 2 | 139 | | 1 | |
| 187855 | 25 | 5 | 115 | | 2 | |
| 187856 | 1 | 1 | 201 | | 1 | |
| 187857 | 1 | 1 | 117 | | 1 | |
| 187858 | 1 | 3 | 659 | | 1 | |
| 187859 | 2 | 1 | 181 | | 2 | |
| 187860 | 3 | 6 | 613 | | 50 | |
| 187861 | 1 | 1 | 210 | | 3 | |
| 187863 | 8 | 3 | 90 | | 2 | |
| AREA "C" | | | | | | |
| 185575 | 4 | 1 | 894 | | 1 | Specimen Type Samples Only |
| 185576 | 1 | 1 | 819 | | 2 | |
| 185577 | 1 | 1 | 237 | | 1 | |
| 185578 | 1 | 1 | 506 | | 1 | |
| 185579 | 2 | 4 | 60 | | 6 | |
| 185580 | 17 | 27 | 7 | | 1 | |
| 185581 | 1 | 1 | 248 | | 1 | |
| 185582 | 5 | 1 | 357 | | 1 | |
| 185583 | 1 | 1 | 1837 | | 1 | |
| 187823 | 1 | 3 | 523 | | 1 | |
| 187824 | 9 | 1 | 356 | | 1 | |
| 187825 | 1 | 1 | 708 | | 1 | |
| 187826 | 1 | 2 | 281 | | 1 | |
| 187827 | 1 | 2 | 184 | | 1 | |
| AREA "D" | | | | | | |
| 187811 | 1 | 1 | 544 | | 1 | |
| 187812 | 8 | 12 | 299 | | 1 | |
| 187813 | 1 | 1 | 356 | | 37 | anomalous Pb, Ba, Ag |
| 187814 | 45 | 2 | 105 | | 4 | |
| 187815 | 1 | 1 | 140 | | 2 | |
| 187816 | 13 | 1 | 278 | | 8 | |
| 187817 | 18 | 4 | 851 | | 1 | |
| 187818 | 24 | 2 | 245 | | 1 | |
| 187819 | 3 | 1 | 58 | | 1 | |
| 187820 | 1 | 1 | 636 | | 1 | |
| 187821 | 1 | 1 | 344 | | 1 | |
| 187822 | 1 | 1 | 113 | | 1 | |



| AREA "E" | | | | | | |
|-----------|----------|----------|----------------|-------------|----------|----------------------------|
| Assay No. | Pt (ppb) | Pd (ppb) | Cr (ppm) (ICP) | Cr % (Chem) | Au (ppb) | Notes <1 ppb is shown as 1 |
| 197830 | 1 | 1 | 238 | | 1 | |
| 197831 | 2 | 4 | 380 | | 1 | |
| 197832 | 2 | 3 | 153 | | 1 | |
| 197833 | 4 | 1 | 349 | | 1 | |
| 197834 | 1 | 2 | 205 | | 1 | |
| 197835 | 8 | 3 | 464 | | 1 | |
| 197836 | 9 | 1 | 227 | | 1 | |
| 197837 | 76 | 1 | 58 | | 1 | |
| 197838 | 23 | 3 | 104 | | 1 | |
| 197839 | 1 | 2 | 342 | | 1 | |
| 197840 | 9 | 1 | 55 | | 1 | |
| 197841 | 22 | 5 | 95 | | 1 | |
| 197842 | 54 | 2 | 74 | | 2 | |
| 197843 | 29 | 3 | 53 | | 2 | |
| 197844 | 94 | 3 | 111 | | 2 | |
| 197845 | 21 | 4 | 42 | | 1 | |
| 197846 | 45 | 4 | 57 | | 1 | |
| 197847 | 60 | 1 | 89 | | 1 | |
| 197848 | 53 | 1 | 77 | | 1 | |
| 197849 | 67 | 2 | 48 | | 1 | |
| 197850 | 48 | 2 | 107 | | 1 | |
| 197851 | 33 | 4 | 202 | | 1 | |
| 197852 | 2 | 1 | 234 | | 1 | |
| 197870 | 82 | 4 | 44 | | 1 | |
| 197871 | 27 | 1 | 46 | | 1 | |
| 197872 | 68 | 1 | 54 | | 1 | |
| 197873 | 32 | 1 | 71 | | 2 | |
| 197874 | 55 | 1 | 147 | | 1 | |
| 197875 | 40 | 5 | 218 | | 2 | |
| 197876 | 33 | 1 | 194 | | 2 | |

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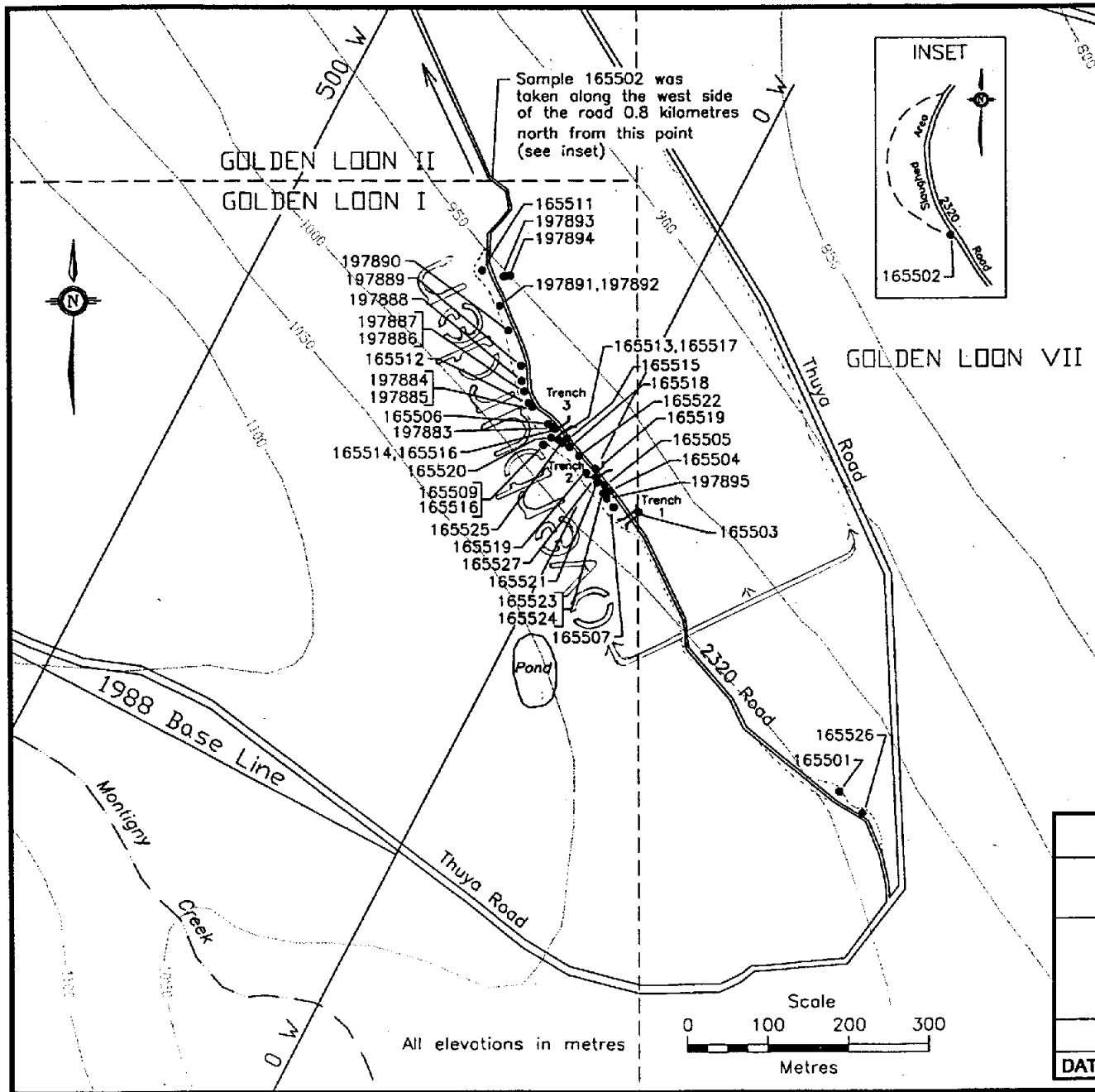
GOLDEN LOON GROUP
LITTLE FORT AREA, KAMLOOPS M.D., B.C.

AREA "E"

SAMPLE LOCATIONS PLAN

J.J. McDOUGALL & ASSOCIATES LTD.

DATE: November, 1999 FIGURE: 6



| Assay No. | Pt (ppb) | Pd (ppb) | Cr (ppm) (ICP) | Cr % (Chem) | Au (ppb) |
|-----------|----------|----------|----------------|-------------|----------|
| 165501 | 1 | 7 | 293 | | 3 |
| 165502 | 483 | 10 | 204 | 3.15 | 2 |
| 165503 | 19 | 1 | 297 | 1.13 | 2 |
| 165504 | 23 | 7 | 303 | | 3 |
| 165505 | 2 | 3 | 57 | 0.45 | 2 |
| 165506 | 1 | 3 | 40 | | 2 |
| 165507 | 7 | 15 | 373 | 3.30 | 4 |
| 165508 | 12 | 2 | 384 | 0.25 | 1 |
| 165509 | 13,798 | 25 | 149 | | 23 |
| 165511 | 5 | 1 | 186 | | 1 |
| 165512 | 44 | 1 | 68 | | 1 |
| 165513 | 23 | 1 | 225 | | 1 |
| 165514 | 25 | 1 | 512 | | 1 |
| 165515 | 7 | 2 | 608 | | 1 |
| 165516 | 5 | 1 | 84 | | 1 |
| 165517 | 11 | 2 | 526 | | 1 |
| 165518 | 15 | 2 | 111 | | 1 |
| 165519 | 4 | 1 | 240 | | 1 |
| 165520 | 1 | 1 | 47 | | 3 |
| 165521 | 5 | 1 | 439 | | 1 |
| 165522 | 5 | 2 | 206 | | 2 |
| 165523 | 4 | 3 | 990 | | 1 |
| 165524 | 8 | 1 | 284 | | 1 |
| 165525 | 18 | 2 | 73 | | 2 |
| 165526 | 8 | 3 | 223 | | 1 |
| 165527 | 4 | 3 | 69 | | 1 |
| 197883 | 6 | 1 | 47 | | 1 |
| 197884 | 24 | 1 | 115 | | 1 |
| 197885 | 1 | 1 | 352 | | 2 |
| 197886 | 1 | 1 | 89 | | 2 |
| 197887 | 19 | 10 | 99 | | 3 |
| 197888 | 1 | 3 | 48 | | 2 |
| 197889 | 20 | 3 | 110 | | 2 |
| 197890 | 80 | 2 | 118 | | 1 |
| 197891 | 3 | 2 | 94 | | 2 |
| 197892 | 1 | 1 | 61 | | 2 |
| 197893 | 11 | 1 | 91 | | 1 |
| 197894 | 5 | 1 | 115 | | 2 |
| 197895 | 89 | 2 | 451 | | 3 |
| 197896 | 2 | 2 | 213 | | 4 |

TILAVA MINING CORP.

GOLDEN LOON GROUP
LITTLE FORT AREA, KAMLOOPS M.D., B.C.

AREA "F"

SAMPLE LOCATIONS PLAN

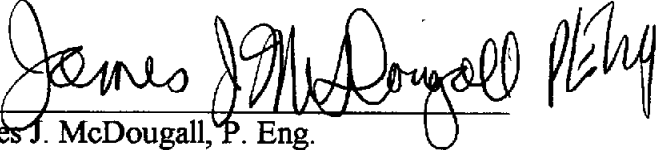
J.J. McDOUGALL & ASSOCIATES LTD.

DATE: November, 1999 FIGURE: 7

RECOMMENDATIONS

Careful prospecting should continue in areas shown to contain anomalous PGE samples, preferably utilizing pick, shovel and stumping powder followed by a small drill to penetrate beyond the oxide zone. As with most Alaskan Type Ultramafics, the presence of chromite as an indicator is most important based on hundreds of samples taken here and elsewhere by the writer. A few soil geochemical chromium anomalies are present near the western termination of "crossline 3700" in Area "A" – a good location although overgrown, to try stumping powder. Also several values of +1000 ppb chromium were taken earlier in the central and western vicinity of crossline 500 E (\pm) but not plotted (personal communication W. Kovacevic 1999). As at Grasshopper Mountain (Tulameen), some chromite occurrences may be present in cross fractures, numerous in Area F.

Prior to any additional work, the rejects from samples #165509, although oxidized and finely ground, should be subjected to a thorough mineralogical examination, preferably of the small amount of heavies macroscopically visible with "panning". Chromite appears present, but any amount of sulphides could help further search. When dealing with "ICP – generated" chromium analyses (based on the 6 samples properly assayed in ppb units, for chromium) the ICP value should be multiplied 67 or 70 times to arrive more closely at a true value (in ppb). This correction may not be applicable everywhere, however, depending on solubility of the chromitite, but should not be overlooked.


James J. McDougall, P. Eng.

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STATEMENT OF EXPENDITURES

Salaries and Wages 1999

Field Personnel – J.J. McDougall & Associates Ltd.

Overall Field Period – August 9, 1999 to October 19, 1999

| | |
|---|---------------------|
| J. McDougall, P. Eng (Geol) – 98 hours @ \$40/hr | \$ 3,920.00 |
| J. McDougall, P.Eng (Geol) Nov. 12 – 19 – Office compilation 30 hours @ \$40/hr | 1,200.00 |
| Belmont Resources Inc. Word Processing & Compiling 32 hours \$15 | 480.00 |
| (1) W. Wilkinson (P.Geo) Aug. 9 – 18, Aug. 31 – Sept. 6 – 12 days @ \$350/day | 4,200.00 |
| D. Crellin (Prospector) 3 days @ \$150.00/day | <u>450.00</u> |
| Total Wages | <u>\$ 10,250.00</u> |

Travel

| | |
|--|--------------------|
| 3 trips, Vancouver – field return (JM) (4 x 4 vehicle) | 977.30 |
| 2 trips, Pentiction – field return (WW) (4 x 4 camper) | 580.70 |
| 1 trip, Kamloops - field return (DC) | <u>58.30</u> |
| Total Travel Expenses | <u>\$ 1,616.30</u> |

Lodging – Aug, Sept, Oct. (including meals) – Motel plus extra meals \$ 839.45

Field Supplies – (Flagging, etc.) \$ 128.31

Assays – 150 samples (ICP, Cr, Pt, Pd, Au) \$ 3,337.75

Phone/Fax \$ 48.63

Typing and Drafting Supplies \$ 50.00

Total Expenditures on Property \$ 16,270.44

- (1) W.J. Wilkinson (P.Geo) – Employed for many years as mine and exploration geologist for Granby Mining, etc., the most recent being as Chief Geologist for a number of years at the Hedley operations of Homestake Canada Inc.

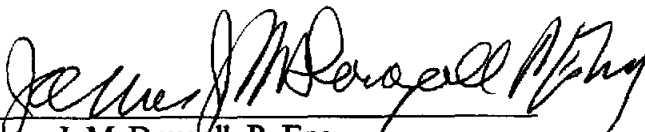
Mr. Wilkinson conducted survey orientation and much of the rock sampling at the Golden Loon project, 1999, under the direction of J.J. McDougall.

STATEMENT OF QUALIFICATIONS

I, James J. McDougall do hereby certify:

1. That I am a consulting geologist with a business office at 7720 Sunnydene Road, Richmond, B.C. V6Y 1H1 and President of J.J. McDougall & Associates, Consulting Geologists.
2. That I am a graduate in geology of University of British Columbia (M.Sc. 1954)
3. That I am a Registered Professional Engineer (Geological) in good standing with the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Canada.
4. That I have practiced my profession as a geologist for forty-seven years.
5. That the information, opinions and recommendations in the attached report are based on studies of the available literature on the area being reviewed by Belmont Resources Inc., through public and private reports and on visits to the Golden Loon property during August, September and October of 1999, during which time I supervised the work project which is the subject of this report.
6. That I own no interest in the securities or the mineral claim holdings of Belmont Resources Inc. or Tilava Mining Corp., nor do I expect to obtain any such interest.
7. This report may be used for assessment purposes or other releases pertaining to the current program of Belmont Resources Inc. and Tilava Mining Corp.

DATED at Vancouver, B.C. this 29th day of November, 1999.


James J. McDougall, P. Eng.

APPENDIX I

Description of Selected Samples

APPENDIX I

Sample Descriptions

Sample descriptions, particularly those showing elevated PGE content, are summarized as follows:

Area "A" - (Figure 5)

Most of the 28 samples collected consisted of rock chips from well exposed ridge-top outcrops of 'monotonous' dunite-pyroxenite mixtures best termed peridotite. All dunitic material is surface-weathered to a depth of 1 to 10 metres resulting in a common brownish discolouration whose limits are sharply displayed against fresh light grey bedrock. Minor serpentinization is evident along fractures. Rock surfaces exposed "dip" steeply both west and east and the true dip of the northwesterly striking system is difficult to ascertain. Folding is suspected.

Sampling in most project areas (A to E) was generally along a southeasterly trending Baseline (Figure 4) established in 1988. Several of the earlier rock samples had returned low but slightly anomalous platinum (Pt) or palladium (Pd) values along a chosen route which contained some of the few natural rock exposures in the area, and more detailed rock sampling in the vicinity of these earlier values offered the only possibility of the initial overall appraisal requested of the writer in 1999.

In Area "A", several values were obtained earlier (maximum 70 ppb Pt, 5 ppb Pd) which were considered slightly anomalous and these were expanded upon in 1999 as shown in Figure 5. Those of most interest are shown below, the remainder in Appendix III.

| <u>Sample #'s</u> | |
|-------------------|---|
| 165569, '70, '71 | - Soil samples near 1988 anomalies |
| 165572, '73, '74 | - Slightly color stained or oxidized dunitic pyroxenite |
| 197801 | - Peridotite on cliff face below surface oxidation. Contains minor semi-layered schlieren of disseminated chromite, apparently dipping at a low angle easterly. |
| 197805 | - Coarser grained peridotite containing disseminated chromite – assay value 126 ppb Pt. This was the only 1999 sample containing anomalous PGE's. All other samples collected in Area "A", Figure 5, consisted of weakly chromitiferous peridotite, some weakly serpentinized. Soil samples returned no anomalous values. |

Area "B" – (Figure 5)
(Assay Sheets Appendix II)

Sampling of Area "B", as with Area "A", was an attempt to expand on an earlier (1988) rock assay, which ran 40 ppb Pt, 5 ppb Pd. Weathered peridotite rock types as described in Area "A", and some more pyroxinite types, were sampled (Figure 5).

| | |
|----------------|---|
| Sample #197855 | - Described as a "coarse to fine grained pyroxenite, possibly layered" assayed 25 ppb Pt, 5 ppm Pd (the highest value obtained of 12 rock (local) samples taken). |
|----------------|---|

Area "C" - (Figure 5)

This area was restricted to a fresh but short rock cut on the "Corona Road" not present during earlier surveys. The fresh rock types were mixed with rubble and exact in place locations of the 8 specimens sampled not determined in most cases. Selective sampling by rock type including visible mineralization (chromite) was closely adhered to. (No distinction between chromite and chromitite except the latter usually contains magnetite and is more magnetic).

| Sample #'s | |
|------------|---|
| 165575 | - Dark pyroxenite, dunite sample showing 3 cm wide band of chromitite |
| 165576 | - Sample of serpentinized dunite, minor chromitite stringers |
| 165577 | - Brown dunite showing 3% disseminated chromite. |
| 165578 | - Whitish altered serpentinized peridotite or dunite with disseminated and larger clusters of chromitite, some banding. |
| 165579 | - Small 5mm vein of pyrite (?) in dense peridotite. |
| 165580 | - Several clumps of coarse-grained black gabbro (?) pyroxenite grains to 1.5 cm; possible weakly disseminated chromite (May be an "erratic"). |
| 165581 | - Dense, surface altered black pyroxenite gradational to gabbro. |
| 165582 | - Fine grained greenish weakly altered dunite, minor pyroxene. |
| 165583 | - Weakly disseminated chromite in serpentinized dunite, layered. |

Additional samples (#197823-27) are similar to the above, dunite with minor pyroxenite. The best assay obtained showed only 17 ppb Pt, 27 ppb Pd. (Sample 165580) Chromite assays very unreliable (low) due ICP method for detection of fresh material, which requires a stronger solvent than used for required solution. Checks of Golden Loon chromite based on 6 analyses report only 2 – 3% of actual chromium present.

Chemical comparison checks of Golden Loon chromite (6 samples) suggest that "ICP Chromium" detected should be multiplied by a factor of 70 to arrive at a truer chromium content. Thus the highest PGE assay obtained in this investigation (Approx. 14 grams) showed only 149 ppm Cr but if the derived calculation is relatively consistent the true Cr content should be about 1% (2% ± converted to "true" chromite).

Area "D" – (Figure 5)
 (Assay Sheets Appendix II)

Samples (12) resulted from a Recce trip north on the Corona Road where no previous sampling of ultramafics had been recorded and outcrop is rare. Ultramafic rocks appear more altered as the Thuya intrusive is approached – i.e. more asbestiform minerals, etc.

| Sample #'s | |
|------------|---|
| 197811, 12 | - Pyroxenitic float. Overburdened, possible contact area. |
| 197813 | - Altered schistose fine-grained ultramafic (?) weak gold, silver, lead, barium values plus moderate chromium |
| 197814, 15 | - Peridotite – Pt 45ppb, Pd 2ppb (highest value collected in Area "D") |
| 197816 | - Pyroxenite (strongly magnetic) |
| 197817 | - Serpentinized dunite |
| 197818 | - Biotite – pyroxenite |
| 197819 | - Biotite – pyroxenite |
| 197820 | - Quartz and serpentine veinlets in dunite (?) |
| 197821 | - Serpentine |
| 197822 | - Chalcedonic silica – coated serpentine and peridotite |

Area "E" – (Figure 6)
 (Assay Sheets Appendix II)

Additional sampling was completed in two stages in this area where the 1988 work recorded a value of 18ppb Pt, 55ppb Pd. First stage sampling in 1999 established that a weak but discernable mineralized trend of weakly anomalous PGE values, in an east-west direction, might be present, but a second stage sampling could not confirm this. 31 bedrock samples were taken (Figure 6) composed largely of peridotite, pyroxenite, dunite and rare gabbro plus serpentinized varieties of most dunitic rocks. Some weak layering (?) was reported in the peridotites.

The following sample values were the highest recorded:

| Sample #'s | |
|------------|--|
| 197837 | - 76ppb Pt, described as a "rusty stained peridotite". |
| 197838 | - 23ppb Pt, 3ppb Pd, serpentine. |
| 197840 | - 22ppb Pt, 5ppb Pd, chalcedonic (silica coated) serpentinized dunitic (?) "picture rock". |

Platinum values were slightly higher in a group of samples (#197842 – 852) ranging from 21 to 94 ppb Pt and between #197870 - 875 ranging from 25 to 82ppb Pt.

Area "F" – (Figure 7)
(Assay Sheets Appendix II)

This area along the \pm 2m high west bank of Road #2320 contains, through a length of about 350 metres, the best and freshest ultramafic rock exposures reported on the Golden Loon property.

Forty-one samples, some repeats, were taken of what appeared to be 'interesting rock' as determined by colour (oxidation), structure (faults and cross fractures) areas of chromite mineralization and differing rock textures than observed in other locations described on the property. An additional sample was collected 1km further north along the road. First stage assays revealed two highly anomalous (but surprising) PGE values and subsequent trips were necessary to carry out additional sampling.

Rock of similar interest is probably present downhill to the east along the main Thuya road but would be largely concealed by overburden slough in this steeper area. Rock types present along the Road #2320 include dunite and dunite-pyroxenite combinations (peridotite). Serpentine alteration is present along the myriad of fractures and fault surfaces. Areas containing brilliant green asbestiform picrolite as well as occasional chrysotile slip fibre are present. Glacially transported, but fresh appearing – roadfill includes gabbro, mica schists, and granitic rocks (quartz monzonite, etc.) whose source is probably to the north. Of unusual academic interest is a "graphic chromo-dunite" described under "Description of Complete Samples" (Appendix III).

All ultramafic rock types noted in the Golden Loon area are represented along the #2320 Road cut, with the exception of a true gabbro, which may have been glacially transported from several kilometers north where it has been reported. Of particular note are the following with respect to mineralization of interest:

| Sample #'s | |
|------------|--|
| 165509 | <ul style="list-style-type: none"> - A highly oxidized rock (football-sized sample) of probable pyroxenite or peridotite derivation, which assayed 13,798 ppb Pt, 25ppb Pd; cut by thin chromite stringers. - Taken from a local area anomalous in gossanous iron (?) oxides, probably derived from weathering of ultramafics. - Believed to be approximately in place in highly "machine disrupted" area. - Some orange tint to oxides (not uncommon locally) |
| 165501 | <ul style="list-style-type: none"> - Chalcedonic 20cm wide CO₃ (?) vein in gossanous dunitic rock near start of Road#2320. Related to "Picture Rocks". Cuts <u>across</u> NW trend of ultramafic complex. No values of interest. |
| 165502 | <ul style="list-style-type: none"> - Dark peridotite rock in small quarry 1km \pm north of #165509 sample, shows Cr veining. Pt – 483ppb, Pd – 10ppb, Cr 3.15% |
| 165505 | <ul style="list-style-type: none"> - "Graphic Chromo Dunite" Pt – 2ppb, Pd – 3ppb, Cr 0.45% |
| 165520 | <ul style="list-style-type: none"> - "C" horizon 20cm deep soil sample taken 20 feet west of #165501. Pt – 3ppb, Pd- 1ppb, Cr (ICP) – 40ppm |

All remaining samples taken in Area F are variations of dunitic rocks with no macroscopic differences.

APPENDIX II

Analytical Results of Samples

P. 20/91

RM4 253 1/16 10 27/8433

SEP 17 '99 16:26 FR ACME LABS

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

J.J. McDougall & Associates File # 9903338 Page 1
7720 Sunnydane Road, Richmond BC V6V 1H1 Submitted by: J.J. McDougall

AA

| SAMPLE# | AREA | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr | Ni | Ba | Ti | B | Al | Na | K | W | Au** | Pt** | Pd** |
|-------------------|------|-----|-----|-----|-----|-----|------|-----|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-------|--------|-----|------|------|------|-----|-----|------|------|------|
| | | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm | ppm | % | ppm | % | % | % | % | % | ppm | ppb | ppb | ppb |
| D 197842 | | <1 | 6 | <3 | 11 | <3 | 1005 | 88 | 679 | 5.23 | 3 | <8 | <2 | <2 | 24 | .6 | <3 | <3 | 6 | 10 | .003 | <1 | 74 | 18.80 | 10<.01 | 48 | .01 | .01 | .01 | <2 | 2 | 54 | 2 | |
| D 197843 | | <1 | <1 | <3 | 27 | <3 | 906 | 85 | 1115 | 5.45 | 2 | <8 | <2 | <2 | 39 | .6 | <3 | <3 | 1 | 19 | .006 | <1 | 53 | 18.92 | 21<.01 | 36 | <.01 | .01 | .01 | <2 | 2 | 29 | 3 | |
| D 197844 | | <1 | 5 | <3 | 11 | <3 | 1204 | 88 | 884 | 4.40 | 3 | <8 | <2 | <2 | 9 | .5 | <3 | <3 | 5 | 06 | .003 | <1 | 111 | 20.71 | 11<.01 | 37 | .02 | <.01 | <.01 | <2 | 2 | 94 | 3 | |
| D 197845 | | <1 | <1 | <3 | 28 | <3 | 920 | 81 | 952 | 5.47 | <2 | <8 | <2 | <2 | 87 | .7 | <3 | <3 | 1 | 44 | .006 | <1 | 42 | 18.40 | 27<.01 | 37 | <.01 | <.01 | <.01 | <2 | <1 | 21 | 4 | |
| D 197846 | | <1 | 2 | <3 | 19 | <3 | 920 | 82 | 988 | 5.34 | 3 | <8 | <2 | <2 | 14 | .5 | <3 | <3 | 4 | 12 | .006 | <1 | 57 | 16.25 | 9<.01 | 28 | <.01 | <.01 | <.01 | <2 | 1 | 45 | 6 | |
| D 197847 | E | <1 | 6 | <3 | 17 | <3 | 733 | 73 | 961 | 4.96 | <2 | <8 | <2 | <2 | 105 | .5 | <3 | <3 | 15 | 47 | .005 | <1 | 69 | 17.57 | 12<.01 | 17 | <.01 | <.01 | .01 | <2 | 1 | 60 | 1 | |
| D 197848 | | <1 | 2 | <3 | 23 | <3 | 843 | 82 | 823 | 5.53 | 3 | <8 | <2 | <2 | 195 | .7 | <3 | <3 | 4 | 48 | .005 | <1 | 77 | 14.49 | 26<.01 | 22 | <.01 | <.01 | .01 | <2 | 1 | 53 | 1 | |
| D 197849 | | <1 | <1 | <3 | 37 | <3 | 923 | 88 | 928 | 5.52 | 3 | <8 | <2 | <2 | 18 | .6 | <3 | <3 | 1 | 11 | .009 | <1 | 48 | 16.29 | 19<.01 | 36 | <.01 | <.01 | .01 | <2 | 1 | 67 | 2 | |
| D 197850 | | <1 | <1 | <3 | 30 | <3 | 983 | 87 | 1049 | 6.09 | 2 | <8 | <2 | <2 | 26 | 1.0 | <3 | <3 | 1 | 73 | .006 | <1 | 107 | 15.92 | 23<.01 | 31 | <.01 | <.01 | .01 | <2 | 1 | 49 | 2 | |
| D 197851 | | <1 | 4 | <3 | 26 | <3 | 957 | 93 | 1169 | 5.90 | 3 | <8 | <2 | <2 | 21 | .9 | <3 | <3 | 4 | 28 | .006 | 1 | 202 | 13.88 | 37<.01 | 28 | .02 | <.01 | .01 | <2 | 1 | 33 | 4 | |
| D 197852 | | <1 | 1 | <3 | 27 | <3 | 1687 | 76 | 1056 | 5.73 | <2 | <8 | <2 | <2 | 7 | 1.3 | <3 | <3 | 4 | 93 | .007 | <1 | 239 | 19.49 | 8<.01 | 30 | .02 | <.01 | <.01 | <2 | 1 | 2 | <1 | |
| D 197853 | | <1 | 4 | <3 | 11 | <3 | 1987 | 97 | 941 | 4.16 | 4 | <8 | <2 | <2 | 3 | .2 | <3 | <3 | 7 | 04 | .006 | <1 | 303 | 16.76 | 4<.01 | 41 | .04 | <.01 | <.01 | <2 | 1 | 2 | 7 | |
| D 197854 | | <1 | <1 | <3 | 20 | <3 | 1629 | 90 | 925 | 5.14 | 2 | <8 | <2 | <2 | 2 | .7 | <3 | <3 | 4 | 07 | .006 | <1 | 139 | 21.33 | 2<.01 | 21 | .01 | <.01 | .01 | <2 | <1 | 5 | 2 | |
| D 197855 | | <1 | 2 | <3 | 17 | <3 | 1760 | 92 | 695 | 4.20 | 3 | <8 | <2 | <2 | 4 | .4 | <3 | <3 | 4 | 12 | .009 | <1 | 115 | 20.05 | 7<.01 | 29 | .01 | <.01 | <.01 | <2 | 2 | 25 | 5 | |
| D 197856 | | <1 | 2 | <3 | 8 | <3 | 2156 | 69 | 497 | 3.07 | 2 | <8 | <2 | <2 | 6 | <2 | <3 | <3 | <1 | 09 | .004 | <1 | 201 | 22.25 | 1<.01 | 16 | .01 | <.01 | <.01 | <2 | <1 | 1 | 1 | |
| D 197857 | | <1 | 1 | <3 | 8 | <3 | 1932 | 80 | 459 | 3.28 | <2 | <8 | <2 | <2 | 11 | .4 | <3 | <3 | 2 | 12 | .002 | <1 | 117 | 18.87 | 1<.01 | 24 | <.01 | <.01 | <.01 | <2 | 1 | <1 | <1 | |
| D 197858 | | <1 | 11 | <3 | 6 | <3 | 2095 | 73 | 506 | 3.20 | 2 | <8 | <2 | <2 | 15 | <2 | <3 | <3 | 1 | 15 | .004 | <1 | 602 | 19.75 | 3<.01 | 35 | .01 | <.01 | <.01 | <2 | 1 | 1 | 3 | |
| D 197859 | B | <1 | 4 | 4 | 4 | <3 | 2263 | 87 | 489 | 2.55 | 3 | <8 | <2 | <2 | 7 | <2 | <3 | <3 | 2 | 07 | .002 | <1 | 181 | 18.74 | 3<.01 | 40 | <.01 | <.01 | <.01 | <2 | 2 | 2 | 1 | |
| D 197860 | | <1 | 7 | 5 | 7 | <3 | 2128 | 60 | 335 | 2.65 | 2 | <8 | <2 | <2 | 35 | <2 | <3 | <3 | 5 | 34 | .002 | <1 | 613 | 14.59 | 7<.01 | 29 | .03 | <.01 | <.01 | <2 | 3 | 3 | 6 | |
| RE D 197860 | | <1 | 7 | 6 | 7 | <3 | 2147 | 61 | 337 | 2.64 | 2 | <8 | <2 | <2 | 35 | <2 | <3 | <3 | 5 | 34 | .002 | <1 | 614 | 14.72 | 7<.01 | 29 | .03 | <.01 | <.01 | <2 | 2 | 2 | 6 | |
| D 197861 | | <1 | 5 | <3 | 8 | <3 | 2357 | 77 | 423 | 2.85 | 3 | <8 | <2 | <2 | 4 | <2 | <3 | <3 | <1 | 06 | .004 | <1 | 210 | 23.16 | 2<.01 | 39 | <.01 | <.01 | <.01 | <2 | 3 | 1 | 1 | |
| D 197862 | | <1 | 14 | 4 | 8 | <3 | 1648 | 64 | 1010 | 3.27 | 2 | <8 | <2 | <2 | 3 | .3 | <3 | <3 | 6 | 05 | .005 | <1 | 396 | 18.49 | 15<.01 | 6 | .01 | <.01 | .01 | <2 | 2 | 1 | 1 | |
| D 197863 | | <1 | 2 | <3 | 27 | <3 | 1244 | 91 | 939 | 5.25 | <2 | <8 | <2 | <2 | 3 | .9 | <3 | <3 | 1 | 13 | .006 | <1 | 90 | 20.77 | 4<.01 | 15 | <.01 | <.01 | <.01 | <2 | 2 | 6 | 3 | |
| D 197864 | | <1 | 2 | <3 | 14 | <3 | 1055 | 92 | 648 | 5.02 | 3 | <8 | <2 | <2 | 9 | .6 | <3 | <3 | 4 | 09 | .005 | <1 | 168 | 18.76 | 2<.01 | 38 | <.01 | <.01 | <.01 | <2 | 3 | 25 | 3 | |
| D 197865 | | <1 | 14 | <3 | 12 | <3 | 618 | 51 | 682 | 3.87 | <2 | <8 | <2 | <2 | 2 | .2 | <3 | <3 | 15 | 03 | .008 | <1 | 106 | 14.21 | 19<.01 | 11 | .01 | <.01 | <.01 | <2 | 1 | 20 | 4 | |
| X D 197866 | A | <1 | 6 | <3 | 13 | <3 | 1135 | 92 | 795 | 4.73 | 2 | <8 | <2 | <2 | 9 | .6 | <3 | <3 | 8 | 05 | .006 | <1 | 123 | 16.31 | 7<.01 | 25 | <.01 | <.01 | <.01 | <2 | 2 | 101 | 3 | |
| D 197867 | | <1 | 11 | <3 | 12 | <3 | 1189 | 89 | 1177 | 5.10 | 3 | <8 | <2 | <2 | 25 | .6 | <3 | <3 | 5 | 10 | .006 | <1 | 73 | 20.25 | 14<.01 | 38 | <.01 | <.01 | <.01 | <2 | 1 | 25 | 1 | |
| D 197868 | | <1 | 6 | <3 | 12 | <3 | 1093 | 94 | 707 | 4.40 | 3 | <8 | <2 | <2 | 15 | .4 | <3 | <3 | 8 | 06 | .006 | <1 | 145 | 17.89 | 11<.01 | 32 | .01 | <.01 | <.01 | <2 | 2 | 53 | 3 | |
| D 197869 | | <1 | 3 | <3 | 20 | <3 | 1098 | 90 | 993 | 5.07 | <2 | <8 | <2 | <2 | 22 | .8 | <3 | <3 | 2 | 13 | .004 | <1 | 85 | 22.60 | 2<.01 | 21 | <.01 | <.01 | <.01 | <2 | 3 | 66 | 5 | |
| D 197870 | | <1 | 1 | <3 | 27 | <3 | 1018 | 85 | 989 | 5.53 | <2 | <8 | <2 | <2 | 13 | .6 | <3 | <3 | 4 | 13 | .006 | <1 | 49 | 16.87 | 10<.01 | 32 | <.01 | <.01 | <.01 | <2 | 1 | 82 | 4 | |
| D 197871 | | <1 | <1 | <3 | 28 | <3 | 1089 | 88 | 968 | 5.44 | 3 | <8 | <2 | <2 | 19 | .7 | <3 | <3 | 1 | 19 | .006 | <1 | 46 | 15.93 | 22<.01 | 33 | <.01 | <.01 | <.01 | <2 | 1 | 27 | <1 | |
| D 197872 | | <1 | 2 | <3 | 21 | <3 | 986 | 78 | 935 | 5.19 | <2 | <8 | <2 | <2 | 64 | .8 | <3 | <3 | 1 | 33 | .006 | <1 | 54 | 16.91 | 30<.01 | 22 | <.01 | <.01 | <.01 | <2 | 1 | 48 | <1 | |
| D 197873 | E | <1 | 3 | <3 | 25 | <3 | 1180 | 91 | 936 | 5.46 | 3 | <8 | <2 | <2 | 16 | .6 | <3 | <3 | 2 | 12 | .007 | <1 | 71 | 15.39 | 24<.01 | 37 | <.01 | <.01 | .03 | <2 | 2 | 32 | 4 | |
| D 197874 | | <1 | 7 | <3 | 14 | <3 | 986 | 78 | 1002 | 4.79 | 2 | <8 | <2 | <2 | 93 | .4 | <3 | <3 | 5 | 54 | .008 | <1 | 147 | 12.61 | 18<.01 | 16 | .01 | <.01 | <.01 | <2 | 1 | 55 | 1 | |
| D 197875 | | <1 | 5 | <3 | 24 | <3 | 867 | 73 | 737 | 5.40 | 2 | <8 | <2 | <2 | 22 | .9 | <3 | <3 | 7 | 22 | .004 | <1 | 218 | 11.92 | 17<.01 | 13 | .03 | <.01 | <.01 | <2 | 2 | 40 | 5 | |
| STANDARD C3/FA100 | | 28 | 69 | 38 | 170 | 5.9 | 43 | 11 | 802 | 3.59 | 59 | 23 | 3 | 23 | 33 | 25.9 | 18 | 24 | 85 | .61 | .092 | 20 | 188 | .69 | 168 | .09 | 20 | 1.97 | .04 | .18 | 15 | 49 | 47 | 50 |
| STANDARD G-2 | | 2 | 2 | 4 | 44 | <3 | 8 | 3 | 581 | 2.18 | <2 | <8 | <2 | 2 | 81 | <2 | <3 | <3 | 44 | .73 | .101 | 8 | 89 | .68 | 254 | .14 | <3 | 1.05 | .08 | .54 | 3 | 1 | <1 | 3 |

GROUP 10 -- 0.50 GN 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, U = 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 PPM
- SAMPLE TYPE: ROCK AU** PT** PD** GROUP 39 BY FIRE ASSAY & ANALYSIS BY ULTRA/ICP. (39 88)
SAMPLES BEGINNING '88' ARE REPEATS AND '89' ARE REJECT REPEATS.

DATE RECEIVED: SEP 9 1999 DATE REPORT MAILED: Sept 17/99 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only. Date: FA

AREAS "A,B,E" APPENDIX II



GEOCHEMICAL ANALYSIS CERTIFICATE



J.J. McDougall & Associates File # 9902965

7720 Sunnyside Road, Richmond BC V6Y 1H1 Submitted by: J.J. McDougall

| SAMPLE# | Area | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Au** | Pt** | Pd** |
|-------------------|------|-----|-----|------|-----|------|------|-----|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|------|------|-----|-----|-------|--------|-----|---------|---------|------|------|-----|------|------|------|
| | | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm | ppm | % | ppm | % | % | % | % | % | ppm | ppb | ppb | ppb |
| D 197811 | | <1 | 50 | <3 | 13 | <.3 | 1030 | 70 | 364 | 3.79 | 2 | <8 | <2 | <2 | 54 | .2 | <3 | <3 | 43 | .41 | .038 | 1 | 564 | 8.27 | 210 | .03 | 8 | 1.18 | .04 | .53 | <2 | 1 | <1 | <1 |
| D 197812 | | <1 | 80 | 3 | 31 | <.3 | 155 | 25 | 409 | 2.64 | <2 | <8 | <2 | <2 | 48 | .3 | <3 | <3 | 89 | 1.16 | .097 | 3 | 299 | 2.59 | 311 | .14 | <3 | 1.90 | .04 | 1.24 | <2 | <1 | 6 | 12 |
| D 197813 | | <1 | 6 | 4468 | 13 | 11.4 | 36 | 9 | 679 | .46 | <2 | <8 | <2 | <2 | 158 | 1.0 | <3 | 42 | 42 | 4.68 | .004 | 2 | 356 | .77 | 1700 | .05 | <3 | .26 | .04 | .23 | <2 | 37 | <1 | 1 |
| D 197814 | | <1 | 2 | 24 | 23 | <.3 | 867 | 132 | 1010 | 5.44 | 14 | <8 | <2 | <2 | 2 | .2 | <3 | <3 | <1 | .07 | .007 | <1 | 105 | 23.34 | 15<.01 | 35 | .03 | .01 | .01 | <2 | 4 | 45 | 2 | |
| D 197815 | | <1 | 4 | 6 | 10 | <.3 | 86 | 23 | 281 | 1.86 | <2 | <8 | <2 | <2 | 3 | <.2 | <3 | <3 | 12 | .55 | .010 | <1 | 140 | 2.04 | 12 | .02 | <3 | .21 | .01 | .01 | <2 | 2 | <1 | 1 |
| D 197816 | D | <1 | 34 | 3 | 4 | <.3 | 982 | 122 | 621 | 5.06 | 80 | <8 | <2 | <2 | 28 | <.2 | <3 | <3 | 10 | .83 | .007 | 1 | 278 | 16.93 | 12 | .03 | 145 | .26 | .01 | .02 | <2 | 8 | 13 | <1 |
| D 197817 | | <1 | 6 | <3 | 11 | <.3 | 1146 | 116 | 736 | 5.32 | 5 | <8 | <2 | <2 | 5 | .2 | <3 | 4 | 21 | .29 | .004 | <1 | 851 | 15.54 | 49 | .02 | 20 | .22 | .01 | .03 | <2 | 1 | 19 | 4 |
| D 197818 | | <1 | 4 | <3 | 24 | <.3 | 163 | 26 | 325 | 1.97 | <2 | <8 | <2 | <2 | 4 | <.2 | <3 | <3 | 11 | .58 | .004 | <1 | 245 | 3.38 | 26 | .01 | <3 | .16 | .01 | .01 | <2 | <1 | 24 | 2 |
| D 197819 | | 1 | 2 | <3 | 25 | <.3 | 1177 | 109 | 928 | 4.82 | 5 | <8 | <2 | <2 | 1 | <.2 | <3 | <3 | <1 | .08 | .003 | <1 | 58 | 25.39 | 2<.01 | 13 | .01<.01 | <.01 | <.01 | <2 | <1 | 3 | <1 | |
| D 197820 | | <1 | 22 | 4 | 1 | <.3 | 2075 | 110 | 412 | 2.52 | 5 | <8 | <2 | <2 | 1 | .7 | <3 | <3 | 1 | .01 | .003 | <1 | 636 | 19.50 | 9<.01 | 38 | .05 | .01 | <.01 | <2 | <1 | <1 | <1 | |
| D 197821 | | <1 | 4 | <3 | 5 | <.3 | 1872 | 92 | 588 | 2.92 | 5 | <8 | <2 | <2 | 1 | .4 | <3 | <3 | <1 | .01 | .007 | <1 | 344 | 20.37 | 16<.01 | 34 | .07<.01 | <.01 | <.01 | <2 | <1 | 1 | 1 | |
| D 197822 | | <1 | 10 | 49 | 6 | <.3 | 1765 | 91 | 517 | 2.45 | 5 | <8 | <2 | <2 | 2 | .6 | <3 | <3 | <1 | .02 | .005 | <1 | 113 | 20.27 | 20<.01 | 26 | .08 | .01 | <.01 | <2 | <1 | <1 | <1 | |
| D 197823 | | <1 | 14 | 8 | <1 | <.3 | 1803 | 88 | 194 | 1.95 | 7 | <8 | <2 | <2 | 7 | .7 | <3 | <3 | 4 | .05 | .004 | <1 | 523 | 19.27 | 2<.01 | 54 | .03 | .01 | <.01 | <2 | <1 | 1 | 3 | |
| D 197824 | | <1 | 5 | 5 | 6 | <.3 | 1796 | 90 | 543 | 3.11 | 8 | <8 | <2 | <2 | 3 | .6 | 4 | <3 | <1 | .04 | .006 | <1 | 236 | 22.54 | 6<.01 | 36 | .02 | .01 | <.01 | <2 | <1 | 9 | <1 | |
| D 197825 | C | <1 | 21 | 9 | <1 | <.3 | 1659 | 95 | 306 | 3.21 | 11 | <8 | <2 | <2 | 10 | .3 | <3 | 3 | 6 | .08 | .006 | <1 | 708 | 19.62 | 6<.01 | 66 | .07 | .01 | <.01 | <2 | <1 | <1 | <1 | |
| D 197826 | | <1 | 10 | 52 | 2 | <.3 | 1501 | 93 | 379 | 2.88 | 7 | <8 | <2 | <2 | 6 | .5 | <3 | <3 | 6 | .08 | .008 | <1 | 291 | 16.18 | 5<.01 | 23 | .07<.01 | <.01 | <.01 | <2 | <1 | 1 | 2 | |
| D 197827 | | 1 | 4 | 6 | 7 | <.3 | 1798 | 101 | 666 | 3.88 | 5 | <8 | <2 | <2 | <1 | .4 | <3 | <3 | <1 | .03 | .005 | <1 | 184 | 24.35 | 5<.01 | 23 | .03<.01 | <.01 | <.01 | <2 | <1 | 1 | 2 | |
| D 197828 | B | <1 | 4 | 5 | 1 | <.3 | 1660 | 59 | 423 | 2.56 | 3 | <8 | <2 | <2 | 15 | .5 | <3 | <3 | <1 | .20 | .007 | <1 | 717 | 20.31 | 6<.01 | 28 | .02<.01 | <.01 | <.01 | <2 | <1 | <1 | <1 | |
| D 197829 | | 1 | 4 | 4 | 4 | <.3 | 1768 | 77 | 516 | 2.90 | 4 | <8 | <2 | <2 | 11 | .2 | <3 | <3 | <1 | .16 | .008 | <1 | 468 | 24.85 | 5<.01 | 20 | .01<.01 | <.01 | <.01 | <2 | <1 | <1 | <1 | |
| D 197830 | | 1 | 7 | <3 | 31 | <.3 | 1194 | 123 | 887 | 6.54 | 6 | <8 | <2 | <2 | 13 | .4 | <3 | <3 | 3 | .45 | .012 | <1 | 238 | 16.70 | 23<.01 | 42 | .05<.01 | <.01 | <.01 | <2 | <1 | 1 | 1 | |
| RE D 197830 | | 1 | 7 | <3 | 30 | <.3 | 1195 | 123 | 886 | 6.55 | 6 | <8 | <2 | <2 | 13 | .5 | <3 | <3 | 3 | .45 | .011 | <1 | 238 | 16.71 | 23<.01 | 43 | .05<.01 | <.01 | <.01 | <2 | <1 | <1 | <1 | |
| D 197831 | | <1 | 5 | <3 | 16 | <.3 | 1351 | 113 | 800 | 5.94 | 6 | <8 | <2 | <2 | 18 | .3 | <3 | <3 | 3 | .12 | .005 | <1 | 380 | 17.13 | 14<.01 | 45 | .05<.01 | .01 | <.01 | <2 | 1 | 2 | 4 | |
| D 197832 | | <1 | 2 | <3 | 28 | <.3 | 1178 | 117 | 1034 | 6.39 | 5 | <8 | <2 | <2 | 44 | .3 | <3 | <3 | <1 | .40 | .007 | <1 | 153 | 18.67 | 24<.01 | 44 | .03 | .01 | <.01 | <2 | <1 | 2 | 3 | |
| D 197833 | | <1 | 2 | 3 | 48 | <.3 | 1499 | 107 | 1195 | 6.80 | 6 | <8 | <2 | <2 | 10 | .5 | <3 | <3 | 1 | .74 | .008 | <1 | 349 | 18.36 | 26<.01 | 24 | .05<.01 | <.01 | <.01 | <2 | <1 | 4 | <1 | |
| D 197834 | | <1 | 2 | <3 | 9 | <.3 | 1235 | 90 | 631 | 4.13 | 6 | <8 | <2 | <2 | 22 | <.2 | <3 | <3 | <1 | .38 | .009 | <1 | 205 | 16.42 | 9<.01 | 14 | .03 | .01 | <.01 | <2 | <1 | 1 | 2 | |
| D 197835 | E | <1 | 16 | 9 | 14 | <.3 | 1289 | 97 | 506 | 4.66 | 7 | <8 | <2 | <2 | 82 | <.2 | <3 | <3 | 8 | 1.01 | .005 | <1 | 464 | 12.31 | 28 | .01 | 14 | .09<.01 | <.01 | <.01 | <2 | 1 | 8 | 3 |
| D 197836 | | <1 | 17 | <3 | 19 | <.3 | 1265 | 117 | 884 | 5.86 | 5 | <8 | <2 | <2 | 25 | .6 | <3 | <3 | 5 | .48 | .007 | <1 | 227 | 13.54 | 20<.01 | 30 | .05<.01 | <.01 | <.01 | <2 | <1 | 9 | <1 | |
| D 197837 | | <1 | 3 | 5 | 37 | <.3 | 1038 | 114 | 981 | 5.80 | 7 | <8 | <2 | <2 | 14 | .2 | <3 | <3 | <1 | .17 | .008 | <1 | 58 | 18.66 | 16<.01 | 35 | .01<.01 | <.01 | <.01 | <2 | <1 | 76 | <1 | |
| D 197838 | | <1 | 3 | 4 | 23 | <.3 | 1005 | 112 | 841 | 5.33 | 6 | <8 | <2 | <2 | 45 | .3 | <3 | <3 | <1 | .38 | .005 | <1 | 109 | 15.32 | 27<.01 | 11 | .02 | .01 | <.01 | <2 | <1 | 23 | 3 | |
| D 197839 | | <1 | 3 | <3 | 39 | <.3 | 932 | 120 | 1220 | 7.29 | 12 | <8 | <2 | <2 | 12 | .5 | <3 | <3 | 7 | .54 | .009 | <1 | 342 | 14.21 | 46 | .01 | 41 | .07<.01 | .01 | <.01 | <2 | <1 | <1 | 2 |
| D 197840 | | <1 | 9 | 3 | 17 | <.3 | 1395 | 110 | 649 | 4.97 | 5 | <8 | <2 | <2 | 3 | <.2 | <3 | <3 | <1 | .28 | .007 | <1 | 55 | 17.54 | 5<.01 | 24 | .02<.01 | <.01 | <.01 | <2 | <1 | 9 | <1 | |
| D 197841 | | <1 | 1 | <3 | 14 | <.3 | 1353 | 111 | 826 | 4.81 | 5 | <8 | <2 | <2 | 11 | <.2 | <3 | <3 | <1 | .16 | .006 | <1 | 95 | 18.67 | 13<.01 | 34 | .01<.01 | <.01 | <.01 | <2 | <1 | 22 | 5 | |
| STANDARD C3/FA100 | | 27 | 68 | 37 | 179 | 6.0 | 38 | 13 | 821 | 3.43 | 56 | 19 | 2 | 22 | 31 | 26.0 | 17 | 23 | 82 | .61 | .094 | 19 | 177 | .62 | 154 | .08 | 20 | 1.94 | .04 | .18 | 16 | 47 | 46 | 46 |
| STANDARD G-2 | | 2 | 2 | 3 | 43 | <.3 | 7 | 5 | 554 | 2.05 | <2 | <8 | <2 | 4 | 79 | <.2 | <3 | <3 | 40 | .68 | .100 | 8 | 79 | .60 | 226 | .13 | <3 | .99 | .08 | .50 | 2 | <1 | <1 | <1 |

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND MASSIVE SULFIDE AND LIMITED FOR NA K AND AL. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: ROCK AU** PT** PD** BY FIRE ASSAY & ANALYSIS BY ULTRA/ICP. (30 gm) Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

ACME ANALYTICAL LABORATORIES LTD.
(ISO 9002 Accredited Co.)

562 E. HASTINGS ST. VANCOUVER BC V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716



GEOCHEMICAL ANALYSIS CERTIFICATE

J.J. McDougall & Associates File # 9902872

7720 Sunnydene Road, Richmond BC V6V 1N1 Submitted by: J.J. McDougall

| SAMPLE# Area | Major Elements | | | | | | | | | | | | | | Trace Elements | | | | | | | | | | | Total PGE's | | | | | | | | |
|-------------------|----------------|-----|-----|-----|-----|------|-----|------|------|-----|-----|-----|-----|-----|----------------|-----|-----|-----|------|------|-----|------|-------|--------|-----|----------------|------|------|------|----|-----|------|------|------|
| | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr | Hg | Ba | Tl | | B | Al | Na | K | W | Au** | Pt** | Pd** |
| | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm | ppm | % | ppm | % | ppm | % | % | % | % | ppm | ppb | ppb | ppb |
| All B 165569 | <1 | 4 | 18 | 27 | <.3 | 135 | 10 | 67 | 1.28 | <2 | <8 | <2 | <2 | 10 | <.2 | <3 | <3 | 22 | .05 | .024 | 4 | 78 | 1.69 | 111 | .09 | <3 | 1.43 | .01 | .02 | <2 | 1 | 1 | 1 | 2 |
| B 165570 A | 1 | 15 | 38 | 38 | <.3 | 984 | 99 | 806 | 4.37 | 2 | <8 | <2 | 2 | 15 | <.2 | <3 | <3 | 46 | .19 | .030 | 6 | 292 | 6.96 | 82 | .06 | 7 | 1.22 | .01 | .06 | <2 | 3 | 11 | 1 | 12 |
| B 165571 | <1 | 60 | 90 | 58 | .3 | 1182 | 35 | 1747 | 3.67 | 4 | <8 | <2 | 3 | 24 | <.2 | 6 | <3 | 70 | .22 | .042 | 9 | 221 | 1.89 | 236 | .13 | 3 | 3.12 | .03 | .14 | <2 | 3 | 2 | 2 | 6 |
| RE B 165571 | <1 | 60 | 88 | 56 | .3 | 1136 | 36 | 1753 | 3.69 | 5 | <8 | <2 | 3 | 24 | <.2 | 5 | <3 | 70 | .22 | .043 | 10 | 222 | 1.90 | 238 | .12 | 4 | 3.16 | .03 | .13 | <2 | 6 | 4 | 3 | 6 |
| B 165572 A | <1 | 10 | 6 | 12 | <.3 | 1064 | 105 | 709 | 3.43 | 6 | <8 | <2 | <2 | 20 | .2 | <3 | <3 | 8 | .22 | .006 | 2 | 185 | 18.87 | 5<.01 | 34 | .04 | .02 | .01 | <2 | 1 | 18 | 1 | 14 | |
| B 165573 | 1 | 29 | 22 | 26 | <.3 | 708 | 61 | 706 | 3.19 | 7 | <8 | <2 | <2 | 22 | <.2 | <3 | <3 | 15 | .14 | .010 | 1 | 563 | 14.42 | 29 | .01 | 12 | .17 | .02 | .01 | <2 | <1 | 16 | <1 | 16 |
| B 165574 | <1 | 26 | <3 | 13 | <.3 | 1827 | 95 | 766 | 4.15 | 5 | <8 | <2 | 2 | 4 | <.2 | 5 | <3 | 2 | .08 | .017 | <1 | 264 | 25.79 | 8<.01 | 33 | .02 | .01 | .01 | <2 | 2 | 2 | <1 | 2 | |
| B 165575 | 1 | 4 | <3 | 7 | <.3 | 1394 | 59 | 265 | 1.59 | 7 | <8 | <2 | 1 | <.2 | 3 | <3 | <3 | 13 | .01 | .004 | <1 | 894 | 13.82 | 3<.01 | 26 | .03 | .01 | <.01 | <2 | 1 | 4 | 1 | 5 | |
| B 165576 | <1 | 6 | 5 | 10 | .3 | 1167 | 65 | 485 | 2.35 | 4 | <8 | <2 | 2 | 1 | <.2 | <3 | <3 | 20 | .01 | .004 | <1 | 819 | 17.15 | 16<.01 | 11 | .07 | .01 | .01 | <2 | 2 | <1 | 1 | 1 | |
| B 165577 C | 1 | 11 | <3 | 19 | <.3 | 1817 | 98 | 741 | 4.07 | 5 | <8 | <2 | <2 | 1 | <.2 | 4 | <3 | 3 | .03 | .006 | <1 | 237 | 27.42 | 16<.01 | 23 | .01 | .01 | .01 | <2 | <1 | 1 | 1 | 2 | |
| B 165578 | 1 | 9 | <3 | 15 | <.3 | 1230 | 63 | 169 | 3.21 | 6 | <8 | <2 | <2 | 1 | <.2 | <3 | <3 | 11 | .01 | .005 | <1 | 506 | 17.07 | 5<.01 | 29 | .04 | .01 | <.01 | <2 | 1 | <1 | 1 | 1 | |
| B 165579 | 3 | 109 | 7 | 35 | .8 | 107 | 53 | 246 | 5.50 | 12 | <8 | <2 | <2 | 37 | <.2 | <3 | <3 | 66 | 1.17 | .076 | 11 | 69 | 1.33 | 58 | .33 | 4 | 1.21 | .11 | .15 | 4 | 6 | 2 | 4 | 4 |
| B 165580 | <1 | 36 | <3 | 57 | <.3 | 49 | 46 | 849 | 5.73 | <2 | <8 | <2 | <2 | 52 | .4 | <3 | <3 | 290 | 1.56 | .044 | 9 | 7 | 3.75 | 696 | .42 | 4 | 3.94 | .15 | 2.65 | <2 | 1 | 17 | 27 | 4 |
| B 165581 | 1 | 6 | <3 | 16 | <.3 | 2095 | 105 | 508 | 3.71 | 6 | <8 | <2 | 2 | 5 | <.2 | <3 | <3 | 6 | .09 | .008 | <1 | 248 | 28.75 | 12 | .01 | 40 | .06 | .01 | .03 | <2 | 1 | <1 | 1 | 1 |
| B 165582 | 1 | 4 | <3 | 5 | <.3 | 87 | 16 | 135 | 1.34 | <2 | <8 | <2 | <2 | 3 | <.2 | 5 | <3 | 12 | .60 | .005 | 4 | 357 | 1.41 | 5 | .02 | <3 | .18 | .02 | .01 | 2 | 1 | 5 | 1 | 6 |
| B 165583 | <1 | 5 | 3 | 29 | <.3 | 1549 | 83 | 487 | 3.08 | 4 | <8 | <2 | <2 | 3 | <.2 | <3 | <3 | 11 | .03 | .015 | <1 | 1537 | 25.76 | 35 | .01 | 13 | .15 | .01 | .01 | <2 | <1 | <1 | <1 | 1 |
| D 197801 | <1 | 18 | <3 | 14 | <.3 | 1035 | 94 | 590 | 4.04 | 4 | <8 | <2 | <2 | 65 | .2 | 3 | <3 | 26 | .57 | .007 | 4 | 747 | 19.55 | 18 | .01 | 27 | .21 | .01 | .01 | <2 | 1 | 5 | 1 | 6 |
| D 197802 | <1 | 12 | <3 | 9 | <.3 | 1004 | 91 | 720 | 3.80 | 2 | <8 | <2 | <2 | 67 | .2 | 4 | <3 | 17 | .66 | .005 | 4 | 538 | 20.56 | 13 | .01 | 24 | .14 | .01 | .02 | <2 | <1 | 5 | <1 | 5 |
| D 197803 | <1 | 10 | 4 | 12 | <.3 | 1137 | 127 | 446 | 6.41 | 8 | <8 | <2 | <2 | 3 | <.2 | 4 | <3 | 4 | .05 | .013 | <1 | 171 | 18.78 | 15<.01 | 77 | .04 | .01 | .01 | <2 | <1 | 55 | <1 | 55 | |
| D 197804 A | <1 | 4 | <3 | 21 | .3 | 1411 | 112 | 790 | 4.92 | 3 | <8 | <2 | <2 | 6 | <.2 | 6 | <3 | 3 | .26 | .008 | 1 | 102 | 21.15 | 6<.01 | 39 | .01 | .01 | <.01 | <2 | 1 | 31 | 2 | 35 | |
| D 197805 | <1 | 25 | <3 | 5 | <.3 | 1021 | 116 | 596 | 4.63 | 4 | <8 | <2 | <2 | 11 | <.2 | <3 | <3 | 12 | .06 | .006 | <1 | 177 | 18.43 | 8<.01 | 33 | .03 | <.01 | <.01 | <2 | 1 | 122 | 13 | 12 | |
| RE D 197805 | <1 | 26 | <3 | 7 | <.3 | 1055 | 120 | 614 | 4.77 | 4 | <8 | <2 | <2 | 12 | <.2 | <3 | <3 | 13 | .07 | .005 | <1 | 183 | 19.22 | 9<.01 | 34 | .03 | .01 | <.01 | <2 | 1 | 126 | <13 | 12 | |
| D 197806 | <1 | 31 | 3 | 15 | <.3 | 794 | 106 | 575 | 4.73 | 11 | <8 | <2 | <2 | 5 | <.2 | <3 | <3 | 15 | .02 | .007 | <1 | 185 | 16.60 | 38<.01 | 34 | .02 | .01 | .02 | <2 | 1 | 52 | <1 | 32 | |
| D 197807 | <1 | 3 | 3 | 10 | <.3 | 1078 | 88 | 1158 | 4.46 | 6 | <8 | <2 | <2 | 20 | <.2 | 4 | <3 | 6 | .16 | .005 | 1 | 605 | 20.12 | 7<.01 | 14 | .02 | .01 | <.01 | <2 | 1 | 4 | <1 | 4 | |
| D 197808 | <1 | 10 | <3 | 11 | <.3 | 1351 | 134 | 1129 | 4.91 | 10 | <8 | <2 | <2 | 11 | <.2 | 11 | <3 | 6 | .12 | .012 | <1 | 260 | 21.96 | 13<.01 | 55 | .04 | <.01 | .01 | <2 | 1 | 60 | <1 | 48 | |
| D 197809 | <1 | 5 | 4 | 16 | <.3 | 976 | 104 | 702 | 3.75 | 3 | <8 | <2 | <2 | 22 | <.2 | <3 | <3 | 8 | .25 | .007 | 2 | 161 | 19.06 | 5<.01 | 37 | .04 | .01 | <.01 | <2 | 1 | 38 | <1 | 38 | |
| D 197810 | <1 | 3 | <3 | 19 | <.3 | 1257 | 109 | 817 | 4.50 | <2 | <8 | <2 | <2 | 2 | <.2 | 5 | <3 | 5 | .03 | .008 | <1 | 102 | 20.95 | 6<.01 | 15 | .02 | .01 | <.01 | <2 | <1 | 25 | 1 | 26 | |
| STANDARD CS/FA100 | 26 | 63 | 39 | 167 | 5.8 | 36 | 11 | 765 | 3.42 | 57 | 21 | <2 | 21 | 31 | 23.8 | 19 | 23 | 82 | .59 | .091 | 22 | 177 | .60 | 154 | .09 | 21 | 1.96 | .04 | .18 | 16 | 47 | 68 | 37 | |
| STANDARD G-2 | 1 | 3 | 5 | 41 | <.3 | 8 | 4 | 520 | 2.03 | <2 | <8 | <2 | 4 | 76 | .2 | 3 | <3 | 41 | .66 | .094 | 13 | 77 | .58 | 226 | .12 | <3 | .98 | .08 | .48 | 3 | 2 | <1 | 2 | |

1CP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA Tl B W AND MASSIVE SULFIDE AND LIMITED FOR NA K AND AL.
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
 - SAMPLE TYPE: ROCK AU** PT** PO** BY FIRE ASSAY & ANALYSIS BY ULTRA/1CP. (30 gm)
 Samples beginning 'RE' are Retruns and 'RRE' are Reject Returns.

DATE RECEIVED: AUG 13 1999 DATE REPORT MAILED: *Aug 20/99* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

APPENDIX II
AREAS "A,C"



| SAMPLE# | Area | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Au** | Pt** | Tc** |
|-------------------|------|-----|-----|-----|-----|-----|------|-----|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|------|------|-----|-----|-------|-----|------|----|------|------|------|-----|------|------|------|
| | | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm | ppm | % | ppm | % | % | % | % | % | ppm | ppb | ppb | ppb |
| D 197876 | E | <1 | 2 | <3 | 32 | <3 | 910 | 80 | 1030 | 5.44 | <2 | <8 | <2 | <2 | 15 | .8 | <3 | <3 | 5 | .67 | .005 | <1 | 194 | 13.03 | 17 | <.01 | 25 | .01 | <.01 | <.01 | <2 | 2 | 33 | <1 |
| D 197877 | | <1 | 15 | 42 | 7 | <3 | 1622 | 105 | 470 | 5.95 | 6 | <8 | <2 | <2 | 1 | 1.0 | <3 | <3 | 1 | .01 | .007 | 1 | 635 | 19.14 | 3 | <.01 | 26 | .07 | <.01 | .01 | <2 | 1 | 5 | <1 |
| D 197878 | | <1 | 3 | <3 | 13 | <3 | 1513 | 81 | 681 | 4.09 | 4 | <8 | <2 | <2 | 3 | .5 | <3 | <3 | 1 | .07 | .004 | <1 | 74 | 22.25 | 4 | <.01 | 44 | <.01 | <.01 | .01 | <2 | 3 | 43 | <1 |
| D 197879 | | <1 | 6 | <3 | 14 | <3 | 1042 | 90 | 868 | 5.17 | 3 | <8 | <2 | <2 | 13 | .8 | <3 | <3 | 8 | .21 | .009 | <1 | 115 | 17.56 | 13 | .01 | 24 | .09 | <.01 | .05 | <2 | 2 | 19 | <1 |
| D 197880 | A | <1 | 6 | <3 | 4 | <3 | 1166 | 53 | 833 | 3.44 | 5 | <8 | <2 | <2 | 24 | .4 | <3 | <3 | 3 | .36 | .004 | <1 | 153 | 18.57 | 8 | <.01 | 37 | .19 | <.01 | .09 | <2 | 1 | 10 | <1 |
| D 197881 | | <1 | 3 | <3 | 22 | <3 | 955 | 83 | 994 | 5.52 | 2 | <8 | <2 | <2 | 6 | 1.6 | <3 | <3 | 2 | .14 | .004 | 1 | 82 | 20.21 | 3 | <.01 | 32 | <.01 | <.01 | .01 | <2 | 2 | 24 | 1 |
| D 197882 | | <1 | 2 | <3 | 20 | <3 | 1001 | 82 | 911 | 5.03 | <2 | <8 | <2 | <2 | 4 | 1.3 | <3 | <3 | 2 | .09 | .007 | <1 | 101 | 20.32 | 7 | <.01 | 15 | .02 | <.01 | .01 | <2 | <1 | 5 | <1 |
| D 197883 | | <1 | 1 | <3 | 16 | <3 | 1700 | 73 | 621 | 3.81 | <2 | <8 | <2 | <2 | 20 | .4 | <3 | <3 | 1 | .10 | .005 | <1 | 47 | 18.41 | 11 | <.01 | 23 | <.01 | <.01 | <.01 | <2 | 1 | 6 | <1 |
| D 197884 | | <1 | 3 | <3 | 18 | <3 | 1076 | 69 | 1414 | 4.97 | <2 | <8 | <2 | <2 | 45 | 1.0 | <3 | <3 | 1 | .15 | .003 | <1 | 115 | 16.92 | 24 | <.01 | 13 | <.01 | .01 | <.01 | <2 | 1 | 24 | <1 |
| D 197885 | | <1 | 7 | 3 | 5 | <3 | 1206 | 67 | 415 | 4.00 | 3 | <8 | <2 | <2 | 22 | .3 | <3 | <3 | 17 | .17 | .002 | <1 | 353 | 15.07 | 3 | <.01 | 22 | .05 | <.01 | <.01 | <2 | 2 | 1 | <1 |
| D 197886 | | <1 | 3 | <3 | 17 | <3 | 1416 | 57 | 1008 | 2.71 | 2 | <8 | <2 | <2 | 30 | .4 | <3 | <3 | <1 | .13 | .002 | <1 | 89 | 22.81 | 16 | <.01 | 34 | <.01 | .01 | <.01 | <2 | 2 | <1 | <1 |
| D 197887 | | <1 | 28 | <3 | 17 | <3 | 46 | 9 | 323 | 3.60 | <2 | <8 | <2 | <2 | 36 | <.2 | <3 | <3 | 160 | 2.21 | .017 | 3 | 99 | .79 | 55 | .28 | <3 | .75 | .08 | .06 | <2 | 3 | 19 | 10 |
| D 197888 | | <1 | 2 | <3 | 17 | <3 | 1304 | 81 | 734 | 4.59 | 2 | <8 | <2 | <2 | 4 | .8 | <3 | <3 | 4 | .13 | .003 | <1 | 48 | 17.63 | 4 | <.01 | 21 | <.01 | <.01 | <.01 | <2 | 2 | <1 | 3 |
| D 197889 | | <1 | 11 | 6 | 8 | <3 | 1252 | 82 | 542 | 4.67 | 2 | <8 | <2 | <2 | 30 | .5 | <3 | <3 | 16 | .18 | .002 | <1 | 110 | 13.76 | 4 | <.01 | 18 | .02 | <.01 | <.01 | <2 | 2 | 20 | 3 |
| D 197890 | F | <1 | 6 | <3 | 6 | <3 | 1378 | 86 | 462 | 4.99 | 3 | <8 | <2 | <2 | 8 | .4 | <3 | <3 | 21 | .11 | .001 | <1 | 118 | 11.35 | 5 | <.01 | 14 | .02 | <.01 | <.01 | <2 | 1 | 75 | <1 |
| RE D 197890 | | <1 | 6 | <3 | 6 | <3 | 1383 | 85 | 456 | 4.84 | 3 | <8 | <2 | <2 | 9 | .5 | <3 | <3 | 19 | .11 | .001 | <1 | 116 | 11.14 | 4 | <.01 | 16 | .02 | <.01 | <.01 | <2 | 2 | 86 | 3 |
| D 197891 | | <1 | 2 | <3 | 7 | <3 | 1246 | 50 | 1282 | 3.08 | 2 | <8 | <2 | <2 | 52 | .2 | <3 | <3 | 5 | .23 | .001 | <1 | 94 | 16.37 | 17 | <.01 | 11 | <.01 | <.01 | <.01 | <2 | 2 | 3 | 2 |
| D 197892 | | <1 | 1 | <3 | 18 | <3 | 2184 | 85 | 503 | 4.35 | <2 | <8 | <2 | <2 | 6 | .7 | <3 | <3 | 1 | .10 | .006 | <1 | 61 | 20.06 | 12 | <.01 | 30 | <.01 | <.01 | <.01 | <2 | 2 | <1 | <1 |
| D 197893 | | <1 | 3 | <3 | 11 | <3 | 979 | 76 | 1397 | 4.96 | 6 | <8 | <2 | <2 | 7 | .9 | <3 | <3 | 5 | .14 | .004 | <1 | 91 | 18.88 | 8 | <.01 | 32 | <.01 | <.01 | <.01 | <2 | 1 | 11 | <1 |
| D 197894 | | <1 | 3 | <3 | 18 | <3 | 1337 | 84 | 976 | 5.18 | 11 | <8 | <2 | <2 | 6 | 1.0 | <3 | <3 | 4 | .11 | .006 | <1 | 115 | 18.55 | 6 | <.01 | 36 | <.01 | <.01 | <.01 | <2 | 2 | 5 | <1 |
| D 197895 | | <1 | 3 | <3 | 9 | <3 | 910 | 51 | 568 | 3.03 | 4 | <8 | <2 | <2 | 24 | <.2 | <3 | <3 | <1 | .14 | .002 | <1 | 151 | 12.66 | 3 | <.01 | 19 | .02 | <.01 | <.01 | <2 | 3 | 89 | 2 |
| D 197896 | | <1 | 16 | <3 | 10 | <3 | 994 | 76 | 505 | 3.28 | 3 | <8 | <2 | <2 | 204 | .6 | <3 | <3 | 24 | 2.01 | .003 | <1 | 213 | 16.41 | 29 | .01 | 19 | .19 | <.01 | .04 | <2 | 4 | 2 | 2 |
| STANDARD C3/FA100 | | 27 | 70 | 35 | 164 | 5.8 | 41 | 10 | 825 | 3.48 | 57 | 24 | 2 | 22 | 33 | 25.1 | 17 | 24 | 83 | .60 | .090 | 19 | 175 | .63 | 158 | .08 | 22 | 1.98 | .04 | .15 | 13 | 47 | 50 | 40 |
| STANDARD G-2 | | 1 | 3 | 4 | 41 | <3 | 10 | 3 | 537 | 2.02 | <2 | <8 | <2 | 4 | 75 | <.2 | <3 | <3 | 40 | .67 | .094 | 8 | 79 | .61 | 235 | .12 | <3 | .95 | .08 | .51 | 2 | 2 | <1 | <1 |

Sample type: ROCK. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

AREAS "A,E,F" APPENDIX II



GEOCHEMICAL ANALYSIS CERTIFICATE



J.J. McDougall & Associates File # 9903286
 7720 Sunnydene Road, Richmond BC V6Y 1H1 Submitted by: J.J. McDougall

| SAMPLE# | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W Au** | Pt** | Pd** | Cr* | |
|----------------|-----|-----|-----|-----|-----|------|-----|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|------|------|-----|-----|-------|-----|------|-----|------|------|------|--------|------|-------|-----|------|
| | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppb | ppb | ppb | % |
| B 165501 | 2 | 12 | <3 | 4 | <3 | 907 | 60 | 444 | 4.00 | 5 | <8 | <2 | <2 | 111 | .5 | <3 | <3 | 21 | 1.53 | .002 | <1 | 293 | 9.53 | 26 | <.01 | <3 | .01 | .01 | .01 | 8 | 3 | <1 | 7 | - |
| B 165502 | <1 | 3 | <3 | 22 | <3 | 1324 | 67 | 797 | 4.68 | <2 | <8 | <2 | <2 | 3 | .7 | <3 | <3 | 2 | .21 | .003 | <1 | 204 | 14.56 | 2 | <.01 | 4 | <.01 | .01 | <.01 | <2 | 2 | 483 | 10 | 3.15 |
| B 165503 | <1 | 9 | <3 | 5 | <3 | 1116 | 74 | 627 | 4.45 | 2 | <8 | <2 | <2 | 3 | .3 | <3 | <3 | 14 | .03 | .004 | <1 | 297 | 9.10 | 13 | <.01 | 10 | .03 | <.01 | <.01 | <2 | 2 | 19 | <1 | 1.13 |
| B 165504 | <1 | 9 | <3 | 6 | <3 | 1241 | 82 | 604 | 3.53 | 3 | <8 | <2 | <2 | 3 | <.2 | <3 | <3 | 12 | .02 | .003 | <1 | 303 | 12.29 | 11 | <.01 | 15 | .04 | <.01 | <.01 | <2 | 3 | 23 | 7 | - |
| B 165505 | <1 | 1 | <3 | 14 | <3 | 1580 | 75 | 753 | 3.83 | <2 | <8 | <2 | <2 | 10 | .5 | <3 | <3 | 2 | .07 | .003 | <1 | 57 | 20.24 | 5 | <.01 | 30 | <.01 | <.01 | <.01 | <2 | 2 | 2 | 3 | .45 |
| B 165506 | <1 | 16 | 7 | 6 | .8 | 1288 | 52 | 2424 | 2.75 | 4 | <8 | <2 | <2 | 11 | .3 | <3 | <3 | 8 | .03 | .007 | 4 | 40 | 20.61 | 150 | <.01 | 8 | .26 | <.01 | .01 | <2 | 2 | <1 | 3 | - |
| B 165507 | <1 | 6 | <3 | 8 | <3 | 1672 | 66 | 562 | 3.73 | 3 | <8 | <2 | <2 | 1 | .4 | <3 | <3 | 3 | .01 | .004 | <1 | 373 | 17.09 | 4 | <.01 | 24 | .02 | <.01 | <.01 | <2 | 4 | 7 | 15 | 3.30 |
| RE B 165507 | <1 | 5 | <3 | 9 | <3 | 1696 | 67 | 558 | 3.80 | 2 | <8 | <2 | <2 | 1 | .4 | <3 | <3 | 3 | .01 | .004 | <1 | 380 | 17.23 | 4 | <.01 | 26 | .02 | <.01 | <.01 | <2 | 1 | 4 | 4 | 3.12 |
| B 165508 | <1 | 9 | <3 | 7 | <3 | 1284 | 88 | 547 | 5.12 | 3 | <8 | <2 | <2 | 3 | .6 | <3 | <3 | 31 | .04 | .002 | <1 | 384 | 11.27 | 1 | <.01 | 15 | .01 | <.01 | <.01 | <2 | <1 | 12 | 2 | .25 |
| B 165509 | <1 | 10 | <3 | 15 | <3 | 984 | 103 | 942 | 4.53 | 4 | <8 | <2 | <2 | 7 | .4 | <3 | <3 | 15 | .01 | .012 | 1 | 149 | 9.53 | 49 | <.01 | 5 | .13 | <.01 | <.01 | <2 | 23 | 13798 | 25 | - |
| STANDARD C3/FA | 27 | 70 | 35 | 164 | 5.8 | 41 | 10 | 825 | 3.48 | 57 | 24 | 2 | 22 | 33 | 25.1 | 17 | 24 | 83 | .60 | .090 | 19 | 175 | .63 | 158 | .08 | 22 | 1.98 | .04 | .18 | 13 | 44 | 44 | 43 | .76 |
| STANDARD G-2 | 1 | 3 | 4 | 41 | <.3 | 10 | 3 | 537 | 2.02 | <2 | <8 | <2 | 4 | 75 | <.2 | <3 | <3 | 40 | .67 | .094 | 8 | 79 | .61 | 235 | .12 | <3 | .95 | .08 | .51 | 2 | 2 | <1 | <1 | - |

| Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W Au** | Pt** | Pd** | | |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|------|-----|----|-----|-----|-----|----|------|-----|--------|------|------|-----|----|
| ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppb | ppb | ppb | |
| soil B 165520 | <1 | 16 | 10 | 50 | <.3 | 261 | 17 | 437 | 2.79 | <2 | <8 | <2 | 2 | 22 | <.2 | <3 | <3 | 51 | .23 | .104 | 6 | 47 | .76 | 118 | .11 | <3 | 2.87 | .02 | .07 | <2 | 3 | 1 | <1 |

| SAMPLE# | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W Au** | Pt** | Pd** | |
|-------------|-----|-----|-----|-----|-----|------|-----|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|------|------|-----|-----|-------|-----|------|-----|------|------|------|--------|------|------|-----|
| | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppb | ppb | ppb |
| B 165511 | 2 | 8 | 5 | 13 | .9 | 1388 | 94 | 1081 | 5.18 | 5 | <8 | <2 | <2 | 192 | <.2 | 5 | <3 | 12 | 2.33 | .002 | <1 | 186 | 14.68 | 19 | <.01 | 15 | .01 | .01 | <.01 | <2 | <1 | 5 | <1 |
| B 165512 | <1 | 5 | 5 | 33 | .6 | 1402 | 129 | 1002 | 5.56 | <2 | <8 | <2 | <2 | 54 | .6 | 6 | <3 | 5 | .16 | .004 | <1 | 68 | 16.06 | 28 | <.01 | 36 | .03 | <.01 | <.01 | <2 | <1 | 44 | 1 |
| B 165513 | <1 | 9 | <3 | 14 | .6 | 1347 | 123 | 970 | 5.02 | <2 | <8 | <2 | <2 | 15 | <.2 | 3 | <3 | 9 | .05 | .004 | <1 | 225 | 15.22 | 38 | <.01 | 38 | .05 | .01 | <.01 | <2 | <1 | 23 | 1 |
| B 165514 | 1 | 13 | 4 | 5 | .9 | 1469 | 112 | 830 | 5.62 | <2 | <8 | <2 | <2 | 15 | <.2 | 5 | <3 | 23 | .07 | .002 | <1 | 512 | 15.76 | 19 | <.01 | 32 | .04 | <.01 | <.01 | <2 | <1 | 25 | 1 |
| B 165515 | <1 | 11 | 43 | 9 | .8 | 1146 | 95 | 429 | 4.88 | <2 | <8 | <2 | <2 | 6 | <.2 | 3 | <3 | 26 | .02 | .006 | <1 | 608 | 15.69 | 34 | <.01 | 16 | .05 | .01 | <.01 | <2 | <1 | 7 | 2 |
| B 165516 | 1 | 3 | <3 | 24 | .6 | 1615 | 109 | 875 | 5.16 | <2 | <8 | <2 | <2 | 11 | .6 | <3 | <3 | 3 | .09 | .004 | <1 | 84 | 21.11 | 19 | <.01 | 45 | .01 | .01 | <.01 | <2 | <1 | 5 | <1 |
| B 165517 | <1 | 11 | 3 | 12 | .3 | 1056 | 108 | 692 | 3.46 | <2 | <8 | <2 | <2 | 4 | .2 | <3 | <3 | 23 | .01 | .012 | <1 | 526 | 13.24 | 40 | <.01 | 16 | .09 | <.01 | <.01 | <2 | <1 | 11 | 2 |
| B 165518 | 1 | 6 | <3 | 20 | .6 | 1264 | 102 | 944 | 5.43 | 3 | <8 | <2 | <2 | 262 | .6 | 5 | <3 | 5 | .82 | .003 | <1 | 111 | 17.16 | 13 | <.01 | 34 | .03 | <.01 | <.01 | <2 | 1 | 15 | 2 |
| B 165519 | 1 | 10 | 4 | 25 | .7 | 1554 | 127 | 930 | 5.20 | <2 | <8 | <2 | <2 | 22 | <.2 | <3 | <3 | 10 | .19 | .007 | 2 | 240 | 14.09 | 60 | <.01 | 31 | .05 | .01 | .02 | <2 | <1 | 4 | 1 |
| B 165521 | <1 | 17 | <3 | 10 | .5 | 1411 | 105 | 755 | 3.92 | <2 | <8 | <2 | <2 | 12 | .2 | 4 | <3 | 22 | .04 | .008 | 1 | 439 | 13.75 | 41 | <.01 | 21 | .05 | .01 | <.01 | <2 | <1 | 5 | 1 |
| B 165522 | 1 | 10 | 5 | 5 | .5 | 1366 | 106 | 797 | 4.77 | <2 | <8 | <2 | <2 | 9 | <.2 | 4 | <3 | 11 | .07 | .004 | <1 | 206 | 12.77 | 17 | <.01 | 12 | .01 | .01 | <.01 | <2 | 2 | 5 | 2 |
| RE B 165522 | <1 | 9 | <3 | 4 | .5 | 1339 | 95 | 782 | 4.66 | 3 | <8 | <2 | <2 | 9 | <.2 | <3 | <3 | 11 | .07 | .003 | <1 | 197 | 12.45 | 11 | <.01 | 13 | .02 | .01 | <.01 | <2 | 2 | 7 | <1 |
| B 165523 | 1 | 15 | 3 | 13 | .4 | 1329 | 84 | 538 | 3.26 | 2 | <8 | 2 | <2 | 5 | .3 | <3 | <3 | 20 | .04 | .003 | <1 | 990 | 12.24 | 5 | <.01 | 8 | .04 | .01 | <.01 | <2 | 1 | 4 | 3 |
| B 165524 | <1 | 11 | 12 | 7 | .6 | 1288 | 98 | 921 | 4.74 | <2 | <8 | <2 | <2 | 8 | <.2 | 3 | <3 | 21 | .03 | .004 | <1 | 284 | 12.66 | 35 | <.01 | 11 | .03 | .01 | <.01 | <2 | <1 | 8 | 1 |
| B 165525 | 1 | 10 | <3 | 22 | .8 | 1160 | 106 | 1235 | 5.09 | <2 | <8 | <2 | <2 | 41 | <.2 | 8 | <3 | 10 | .11 | .011 | 2 | 73 | 17.84 | 51 | <.01 | 41 | .19 | <.01 | .01 | <2 | 2 | 18 | 2 |
| B 165526 | 1 | 10 | 3 | 7 | .7 | 1451 | 98 | 724 | 4.97 | <2 | <8 | <2 | <2 | 13 | <.2 | 4 | 3 | 19 | .17 | .004 | <1 | 223 | 12.89 | 17 | <.01 | 21 | .06 | .01 | <.01 | <2 | 1 | 8 | 3 |
| B 165527 | 1 | 3 | <3 | 14 | .5 | 1056 | 90 | 959 | 4.44 | <2 | <8 | <2 | <2 | 88 | <.2 | 5 | <3 | 2 | .33 | .002 | <1 | 69 | 17.28 | 20 | <.01 | 19 | .01 | .01 | <.01 | <2 | <1 | 4 | 3 |
| STANDARD | 28 | 62 | 36 | 171 | 5.9 | 39 | 9 | 819 | 3.50 | 55 | 26 | 3 | 20 | 29 | 24.2 | 16 | 27 | 80 | .61 | .089 | 18 | 180 | .62 | 150 | .09 | 21 | 1.94 | .04 | .17 | 14 | 67 | 47 | 48 |
| STANDARD | 2 | 4 | <3 | 44 | <.3 | 7 | 3 | 579 | 2.16 | <2 | <8 | <2 | 4 | 79 | .5 | <3 | <3 | 42 | .69 | .102 | 8 | 84 | .62 | 247 | .14 | <3 | 1.06 | .08 | .52 | 3 | <1 | <1 | 2 |

AREA "F"

| | | |
|-------------|----------|-----------|
| SAMPLE# | Pt** | Pd** |
| | oz/t | oz/t |
| RERUN CHECK | B 165509 | .341 .001 |

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

AREA "F"

APPENDIX II

Handwritten signature/initials

APPENDIX III

Description of Complete Samples

APPENDIX III

Sample Description - (Area "A")

| <u>Sample #'s</u> | |
|-------------------|--|
| 197801 | Peridotite – banded red and green, poss layering, diss chromite |
| 197802 | Peridotite – serpentinized, chromite in fine fractures |
| 197803 | Peridotite – reddish oxide coated fractures |
| 197804 | Peridotite – coarse grained, red brown oxidation, dark |
| 197805 | Peridotite – light to medium grey, coarser grained, diss chromitite |
| 197806 | Peridotite (?) – aphanitic blue-grey, hard, magnetic. Chromitite on fractures. |
| 197807 | Serpentinized peridotite (?) – hard grains magnetite |
| 197808 | Peridotite – red brown oxide in fractures, magnetic |
| 197809 | Peridotite – dark grey, magnetic, weak layering serpentinized |
| 197810 | Peridotite – dark grey, serpentinized, chromitite in fractures |

| <u>Sample #'s</u> | |
|-------------------|---|
| 197864 | Pyroxenite – serpentinized, black chromitite grains |
| 197865 | Gabbro ?? – buff coloured, dark (spotty) gains, possible altered feldspar |
| 197866 | Pyroxenite – dark grey, coarse grained |
| 197867 | Peridotite (?) – platy (layered), brown & black layering @ 265°/90° |
| 197868 | Peridotite – serpentinized, platy, colour banded, banding 350°/60°E |
| 197869 | Pyroxenite – dark, colour banded, medium grained, magnetic |

| <u>Sample #'s</u> | |
|-------------------|---|
| 165569 | Silt – clay sample from depression near earlier weak Pt anomaly |
| 165570 | Soil – (gravelly) on southwest slope of ridge |
| 165571 | Soil – (C Horizon) sample @ O + 10 N, 3250 W near Baseline |
| 165572 | Dunite – tannish weathered, diss chromitite |
| 165573 | Very hard (Jade-like) white coated "float"; minor diss Cr, minor oxide (red-yellow) |
| 165574 | Peridotite – reddish-yellow stained oxidation, weakly magnetic |

| <u>Sample #'s</u> | |
|-------------------|--|
| 197877 | Talus – pyroxenite (?) – serpentinized (picrolite, etc) |
| 197878 | Pyroxenite – fine to medium grained, dark grey green, hard |
| 197879 | Pyroxenite – coarse grained black slight layering, strongly magnetic |
| 197880 | Pyroxenite – serpentinized along fault |
| 197881 | Serpentine – fault zone |
| 197882 | Pyroxenite – dark grey, strongly magnetic |

Sample Description - (Area "B")

| Sample #'s | |
|------------|--|
| 197828 | Peridotite – brick red, red orange oxidation, magnetic |
| 197829 | Peridotite – fine grained, dark, bleached on fractures, magnetic |
| 197853 | Peridotite – fine grained, dark, bleached on fractures, magnetic |
| 197854 | Peridotite – coarser grained, magnetic, possibly layered |
| 197855 | Peridotite – coarser grained, magnetic, possibly layered |
| 197856 | Pyroxenite – fine to coarse grained, dark grey, magnetic |
| 197857 | Pyroxenite – fine to coarse grained, dark grey, serpentinized |
| 197858 | Pyroxenite – fine to coarse grained, yellow orange oxidation, magnetic |
| 197859 | Pyroxenite – fine to coarse grained, planar fault picrolite, greenish grey, magnetic |
| 197860 | Pyroxenite (?) – red oxide, magnetic |
| 197861 | Peridotite – fine to coarse grained, planar fault picrolite, greenish grey, magnetic |
| 197862 | Peridotite – layered (?), pale grey, diss black crystals (chromite?) |
| 197863 | Pyroxenite – (talus block) – banded (light & dark), fractured, strongly magnetic |

Sample Description - (Area "C", "D") Corona Road

| Sample #'s | |
|------------|---|
| 165575 | Pyroxenite – semi-layered, 3 – 5 cm chromite “vein” |
| 165576 | Pyroxenite – serpentinized dunite – pyroxenite (peridotite) – 2cm chromite vein |
| 165577 | Pyroxenite – serpentinized dunite – pyroxenite (peridotite) (diss chromitite) |
| 165578 | Dunite – brown, 2% diss chromitite |
| 165579 | Peridotite – (float??) – possible very fine pyrite (?) content in 0.5 cm vein (?) |
| 165580 | Pyroxenite – (gradational to gabbro - - 5% altered feldspar (?)) |
| 165581 | Pyroxenite – as above but weathered; weak chromite |
| 165582 | Dunite – partially oxidized, 2 – 3% disseminated chromite, tr pyrite (?) |
| 165583 | Dunite – weakly diss chromite in serpentinized dunite, layered (?) |

| Sample #'s | |
|------------|--|
| 197823 | Serpentine – opaline, dark green, magnetite or chromite grains |
| 197824 | Peridotite (?) – fine grained, black; chromitite grains; serpentinized fractures |
| 197825 | Serpentine – diss chromitite or magnetite, pinkish alteration |
| 197826 | Serpentine – diss chromitite or magnetite, pinkish alteration |
| 197827 | Peridotite – buff coloured, fine grained with large ‘patch’ of dark brown chromitite (?) showing subhedral crystalline aggregate |

Sample Description - (Area "D")

| <u>Sample #'s</u> | |
|-------------------|--|
| 197811 | Pyroxenite – green groundmass, biotitic (float ??) |
| 197812 | Pyroxenite – (float?) altered, non-magnetic, fine black grains (chromite?) |
| 197813 | Peridotite (?) – altered, schistose, grey-green, calcite and/or quartz veining |
| 197814 | Peridotite – contains amber grains (sphalerite), magnetic, buff orange weathered |
| 197815 | Peridotite + (?) – grey/green, sl magnetic, granular texture. A band within peridotite near obscure granitic contact (?) |
| 197816 | Pyroxenite – contains minor serpentine veinlets, strongly magnetic, tr chromitite (?) |
| 197817 | Dunite – serpentinized with small veinlets chromitite or magnetite (?) |
| 197818 | Biotitic pyroxenite (as above?) |
| 197819 | Pyroxenite (?) – small magnetic grains (crystals?) |
| 197820 | Peridotite (?) – small veins of silica (?) and serpentine; oxidized |
| 197821 | Peridotite (?) – red and black surface stains on ditch rock (?), serpentinized |
| 197822 | Peridotite – opaline or chalcedonic silica with serpentine, oxidized magnetic |

Sample Description - (Area "E")

| <u>Sample #'s</u> | |
|-------------------|--|
| 197830 | Dark dunite, serpentine bands |
| 197831 | Dark dunite, oxidized fractures |
| 197832 | Dark dunite, serpentinized, crystalline chromitite |
| 197833 | Dark dunite, fresh, magnetic |
| 197834 | Dark dunite, bleached light grey, mod magnetic, chromitite grains |
| 197835 | Serpentinized peridotite, fine grained, magnetic, oxidized along fractures |
| 197836 | Serpentinized pyroxenite, fine grained, magnetic, oxidized fractures |
| 197837 | Peridotite, grey green, red/brown oxide on fractures |
| 197838 | Serpentinized dunite, grey, magnetic |
| 197839 | Fresh dunite (peridotite?) dark, magnetic |
| 197840 | Oxidized vein material, chalcedonic serpentine ("Picture Rock") |
| 197841 | Medium grained, grey dunite, red oxide on fractures |
| 197842 | Fine grained peridotite, hard, well fractured, magnetic, serpentinized fractures |
| 197843 | Fine grained pyroxenite |
| 197844 | Fine grained pyroxenite, thin banding, sheared, oxidized, magnetic |
| 197845 | Peridotite – pebbly texture on weathered surface, sl layering, fractured |
| 197846 | Dunite – fine grained, hard, grey |
| 197847 | Peridotite (?) – white and pink colour banding, altered |
| 197848 | Peridotite – dark, fine grained |
| 197849 | Peridotite – highly fractured, oxidized, fine grained |
| 197850 | Peridotite – dark, serpentinized along fractures |
| 197851 | Peridotite – dark, serpentinized along fractures |
| 197852 | Pyroxenite – (black), reddish brown, orange tinted oxidation along fractures |

Sample Description - (Area "E") - continued

| <u>Sample #'s</u> | |
|-------------------|--|
| 197870 | Pyroxenite – (black), reddish brown, magnetic; picrolite along fractures |
| 197871 | Peridotite – brown fine grained, magnetic, orange tinted oxidation |
| 197872 | Peridotite – brown fine grained, magnetic, orange tinted oxidation |
| 197873 | Peridotite – brown fine grained, magnetic, orange tinted oxidation |
| 197874 | Gabbro (??) – feldspars altered, strongly magnetic |
| 197875 | Peridotite – prominent oxides in fractures, strongly magnetic |
| 197876 | Pyroxenite – coarse grained, black, strongly magnetic, layered? |

Sample Description - (Area "F")

| <u>Sample #'s</u> | <u>First Trip – September 6, 1999</u> |
|-------------------|---|
| 165501 | Chalcedonic – (silica) saturated vein, brown oxide (Ca or Mg Carbonate) |
| 165502 | Brown, fine grained dunite, mod magnetic, 2 – 5% chromite |
| 165503 | Oxidized dunite, well defined net texture around crystalline chromite |
| 165504 | Serpentine whitish altered, weak coating chromite |
| 165505 | Grey "graphic" dunite, numerous thin paralleling veins of chromite |
| 165506 | Amorphous black material resembling manganese oxide in dunite |
| 165507 | Dunite (coarser grained) containing areas of fine grained crystalline chromite |
| 165508 | 1 cm wide chromite band in dunite |
| 165509 | 20cm wide-reddish (hematitic?) stain in oxidized peridotite or dunite, weak Cr on fractures |

| <u>Sample #'s</u> | <u>Second Trip – September 22, 1999</u> |
|-------------------|---|
| 165511 | Yellow stained fragmental dunite |
| 165512 | Yellow weathering peridotite, brown oxide |
| 165513 | Grab sample of several oxidized, occasionally orangish, dunite |
| 165514 | As 513 but more oxidized |
| 165515 | Limonitic, white coated serpentized dunite, weak chrysotile |
| 165516 | Fresh (unoxidized net textured) flattish dunite ledge at road level |
| 165517 | Reddish (hematitic) weathered dunite |
| 165518 | As 517 |
| 165519 | Oxidized dunite near 'picture rock' |
| 165520 | Soil sample (C horizon) taken 5m west above #165509 |
| 165521 | Yellowish-brown weathering dunite – silica stringers to 1cm wide |
| 165522 | Chromite patch in oxidized dunite showing minor chrysotile |
| 165523 | Carbonate veined rusty weathering dunite |
| 165524 | As 523, weak chromite |
| 165525 | Yellow oxide 5cm wide 'vein' in dunite |
| 165526 | Oxidized dunite |
| 165527 | Oxidized dunite |

Sample Description - (Area "F") - continued

| <u>Sample #'s</u> | |
|-------------------|---|
| 197882 | Peridotite – fine grained, layered with coarse grained pyroxenite, magnetic |
| 197883 | Dunite – pale olive-yellow-green, fine grained chromitite, magnetic |
| 197884 | Dunite – serpentine on fractures, red-orange oxide on weathered surface |
| 197885 | Dunite – as above |
| 197886 | Chalcedonic (opaline) silica coated, (magnesite?) on “graphic dunite” |
| 197887 | Peridotite (float?) – mod magnetic |
| 197888 | Pyroxenite – fine grained, dark grey, strongly magnetic |
| 197889 | Serpentinized dunite – light and dark orange oxidation |
| 197890 | Pyroxenite? – dark, oxidized fractures, strongly magnetic |
| 197891 | Pyroxenite? – dark, oxidized fractures, strongly magnetic |
| 197892 | Dunite – fine grained magnetic, oxidation as above |
| 197893 | Dunite – black fracture coatings |
| 197894 | Dunite (?) – as above, with brown and orange coatings |
| 197895 | Dunite – chromite lens (2cm thick), magnetic |
| 197896 | Dunite – serpentinized, disseminated magnetite or chromitite |