DIAMOND DRILLING REPORT

on the

NMG 26 MINERAL CLAIM

Keithley Creek Area
Cariboo Mining Division
British Columbia
93A, 14W
52°47'N - 121°29'W

for

NOBLE METAL GROUP INCORPORATED
801 - 409 Granville Street
Vancouver, British Columbia
V6C 1T2

by

WGT CONSULTANTS LTD.

September 2001

TABLE OF CONTENTS

FIGURES

APPENDICES

SUMMARY AND RECOMMENDATIONS

A diamond drill program was carried out by Noble Metal Group Incorporated during the months of August to November 2001.

Two vertical holes totalling 805.4 metres (2642.5 feet) were drilled to test coincident induced polarization-magnetic anomalies in proximity to fault intersections.

The drilling intersected quartzites, greywackes and phyllites intruded by dioritic dykes and altered mafic and ultramafic rocks. Concentrations of pyrite, pyrrhotite, chalcopyrite, magnetite, hematite and pentlandite occur throughout the core.

Anomalous values in nickel up to 1006 ppm, chromium up to 1553 ppm as well as elevated values in strontium and vanadium occur related to mafic zones in the core.

Further exploration of the property is warranted and an exploration program consisting of additional geological mapping, prospecting and geochemical soil sampling surveys is recommended.

Respectfully submitted,

W.G. Timmins, P.Eng.
WGT Consultants Ltd.

September 28, 2001.

1.1 INTRODUCTION

A diamond drill program was carried out on the Cariboo Gold Property between August 25 and November 4, 2000. The drill program was conducted by Adams Diamond Drilling of Princeton, B.C.

A John Deere ELC excavator and a Caterpillar D8N were used to build roads and drill sites, reclaim the roads and drill sites, ditch and assist in setting up the drill, as well as loading and unloading the equipment.

1.2 LOCATION AND ACCESS

The property (Figure 1) is located approximately 21 kilometres north-northeast of Likely, in the Cariboo region of central British Columbia. The property is centred at approximately 52°47' north latitude and 121°29' west longitude (NTS 93A-13E, 14W).

Access to the property is via the all weather, two wheel drive Keithley Creek logging road from Likely, B.C. At the old settlement of Keithley Creek, a logging road on the east side of Keithley Creek leads to the property.

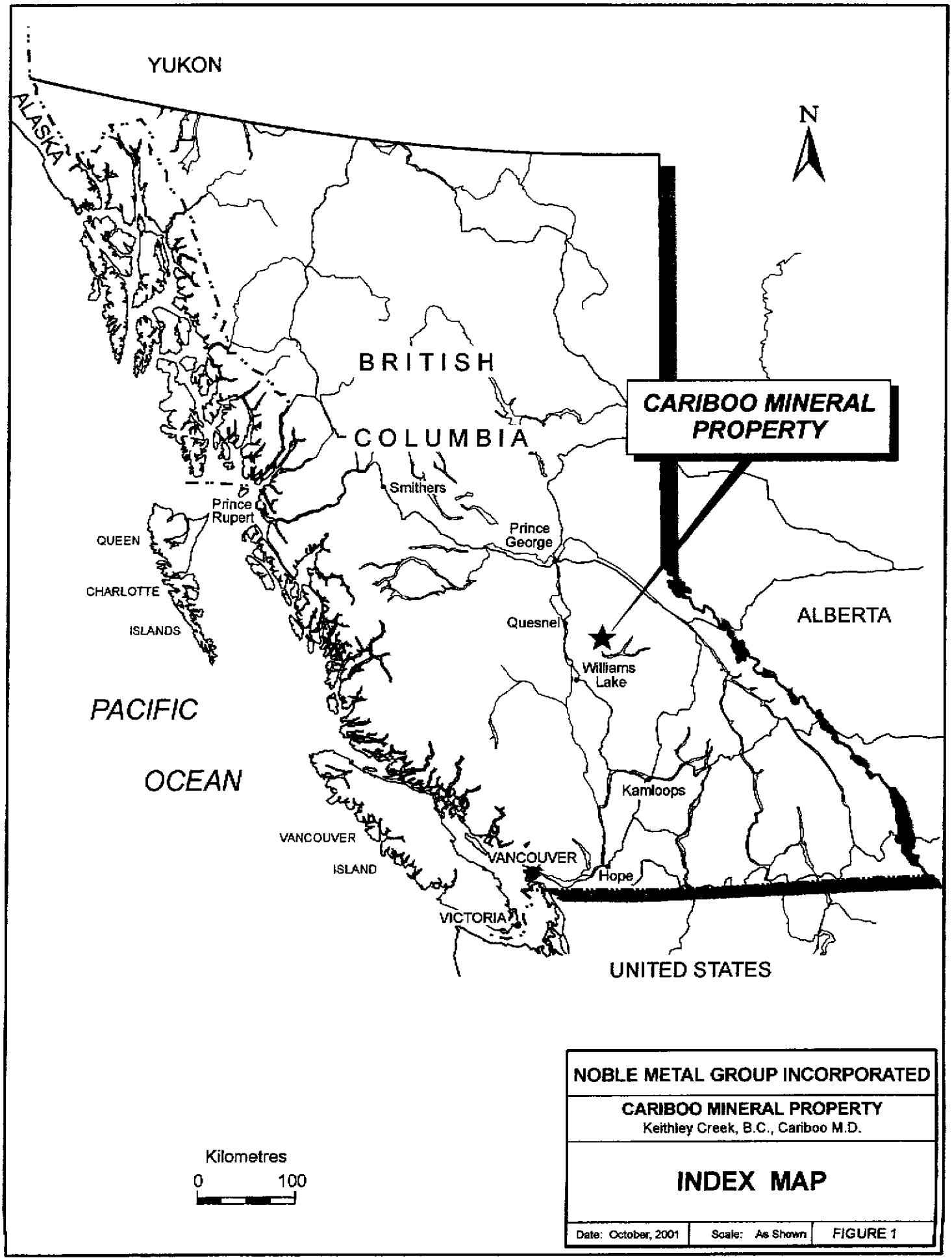
The camp is located approximately 12 kilometres from the main road. A network of old logging roads provides good access to all areas of the property.

1.3 PHYSIOGRAPHY

The property is located in the Quesnel Highlands of central British Columbia and the average elevation is approximately 1200 metres above sea level. Topography varies from steep along Keithley Creek and Snowshoe Creek to gentle at some higher elevations. Keithley Creek flows in a southeasterly direction through the centre of the property with many tributaries such as Donaldson, Honest John, Rabbit, Snowshoe, French Snowshoe and Weaver Creeks flowing into Keithley Creek.

The Keithley Creek area receives significant precipitation throughout the year as both rain and snow. Accumulations of snow may reach three metres or more during the winter months with extremely cold temperatures.

The natural vegetation is predominantly coniferous forest consisting of spruce, balsam, firs and cedar. Large portions of the property have been logged by clear cutting and most of these areas have been replanted. Many of the replanted areas have second growth timber ranging from three to ten metres in height.


YUKON
ALASKA
N
BRITISH
COLUMBIA
CARIBOO MINERAL PROPERTY
Smithers
Prince Rupert
Prince George
QUEEN
CHARLOTTE
ISLANDS
Quesnel
ALBERTA
Williams Lake
PACIFIC
OCEAN
Kamloops
VANCOUVER
ISLAND
VANCOUVER
Hope
VICTORIA
UNITED STATES
Kilometres
0
100
NOBLE METAL GROUP INCORPORATED
CARIBOO MINERAL PROPERTY
Keithley Creek, B.C., Cariboo M.D.
INDEX MAP
Date: October, 2001
Scale: As Shown
FIGURE 1

1.4 PROPERTY AND CLAIM STATUS

The mineral claims and placer leases making up the Cariboo Gold Property (Figure 2) are owned by Noble Metal Group Incorporated, 801 - 409 Granville Street, Vancouver, B.C. V6C 1T2. The mineral claims are located in the Cariboo Mining Division and consist of 17 four post claims covering 288 units and 37 two post claims for a total of 325 units as described below and shown on NTS Maps 93A 13E/14W.

TENURE NO.	CLAIM NAME	NO. UNITS	EXPIRY DATE
204123	J 1	20	2004/10/12
204184	STU 1	12	2004/08/17
204185	DD 2	6	2001/08/17
204351	CASCA 1	8	2002/10/02
204352	CASCA 2	20	2005/10/02
204363	CASCA 3	16	2001/10/23
204364	CASCA 4	16	2001/10/23
204756	CAC 1	20	2001/07/12
204757	CAC 2	20	2001/07/12
205123	CAC 3	20	2003/04/16
205124	CAC 4	20	2004/04/16
205125	CAC 5	20	2004/04/16
302656	J 2	18	2004/07/16
349094	DD 3	12	2001/07/14
349095	DD 4	20	2001/07/19
349096	DD 5	20	2001/07/19
349097	DD 6	20	2001/07/17
349098	DD 7	1	2001/07/16
349099	DD 8	1	2001/07/16
349100	DD 9	1	2001/07/16
313490	NMG 2	1	2005/09/24
313491	NMG 3	1	2005/09/24
313492	NMG 4	1	2005/09/24
313493	NMG 5	1	2005/09/24
313494	NMG 6	1	2005/09/24
313495	NMG 7	1	2005/09/24
313496	NMG 8	1	2005/09/24
313497	NMG 9	1	2001/09/25
313498	NMG 10	1	2001/09/25
313499	NMG 11	1	2001/09/25

TENURE NO.	CLAIM NAME	NO. UNITS	EXPIRY DATE
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320311	NMG 13	1	2006/08/07
320312	NMG 14	1	2006/08/07
320313	NMG 15	1	2006/08/07
320314	NMG 16	1	2006/08/07
320315	NMG 17	1	2006/08/07
320316	NMG 18	1	2006/08/07
320317	NMG 19	1	2006/08/07
320318	NMG 20	1	2006/08/07
320319	NMG 21	1	2006/08/07
320320	NMG 22	1	2006/08/07
320321	NMG 23	1	2006/08/08
320322	NMG 24	1	2006/08/08
320323	NMG 25	1	2006/08/08
320324	NMG 26	1	2006/08/08
320325	NMG 27	1	2006/08/08
320326	NMG 28	1	2006/08/08
320327	NMG 29	1	2006/08/09
320328	NMG 30	1	2006/08/09
320329	NMG 31	1	2006/08/09
320330	NMG 32	1	2006/08/09
320331	NMG 33	1	2006/08/09
320338	NMG 40	1	2001/08/10

The claims upon which work is being filed are listed below:

TENURE NO.	CLAIM NAME	NO. UNITS	EXPIRY DATE
204123	J 1	20	2004/10/12
302656	J 2	18	2004/07/06
204184	STU 1	12	2005/08/17
204756	CAC 1	20	2001/07/12
204757	CAC 11	20	2001/07/12
204185	DD 2	6	2001/08/07
349094	DD 3	12	2001/07/14
349095	DD 4	20	2001/07/19
349096	DD 5	20	2001/07/19
349097	DD 6	20	2001/07/17
349098	DD 7	1	2001/07/16

TENURE NO.	CLAIM NAME	NO. UNITS	EXPIRY DATE
349099	DD 8	1	2001/07/16
349100	DD 9	1	2001/07/16
313497	NMG 9	1	2001/09/25
313498	NMG 10	1	2001/09/25
313499	NMG 11	1	2001/09/25
313500	NMG 12	1	2001/09/25
320338	NMG 40	1	2001/08/10
204351	CASCA 1	8	2002/10/02
204363	CASCA 3	16	2001/10/23
204364	CASCA 4	16	2001/10/23

1.5 AREA AND PROPERTY HISTORY

The Cariboo region of British Columbia is very famous for the gold rush that began in 1860. Placer mining has continued throughout the Barkerville-Likely area from 1860 to present.

Prospecting for hard rock deposits started shortly after the Cariboo gold rush began. The three most significant gold producers have been the Mosquito Creek, Island Mountain and Cariboo Gold Quartz mines near Wells. Mining began in 1935 and has continued to recent times with periods of inactivity. Production from the three mines has been in the order of 1.3 million ounces of gold.

Placer gold was discovered on Keithley Creek in 1850, and significant production occurred for the next few decades. Placer gold was also discovered on Snowshoe, Little Snowshoe and French Snowshoe Creeks in 1860. Approximately $6 million in gold has been reported from Keithley Creek but the actual gold produced is probably much higher.

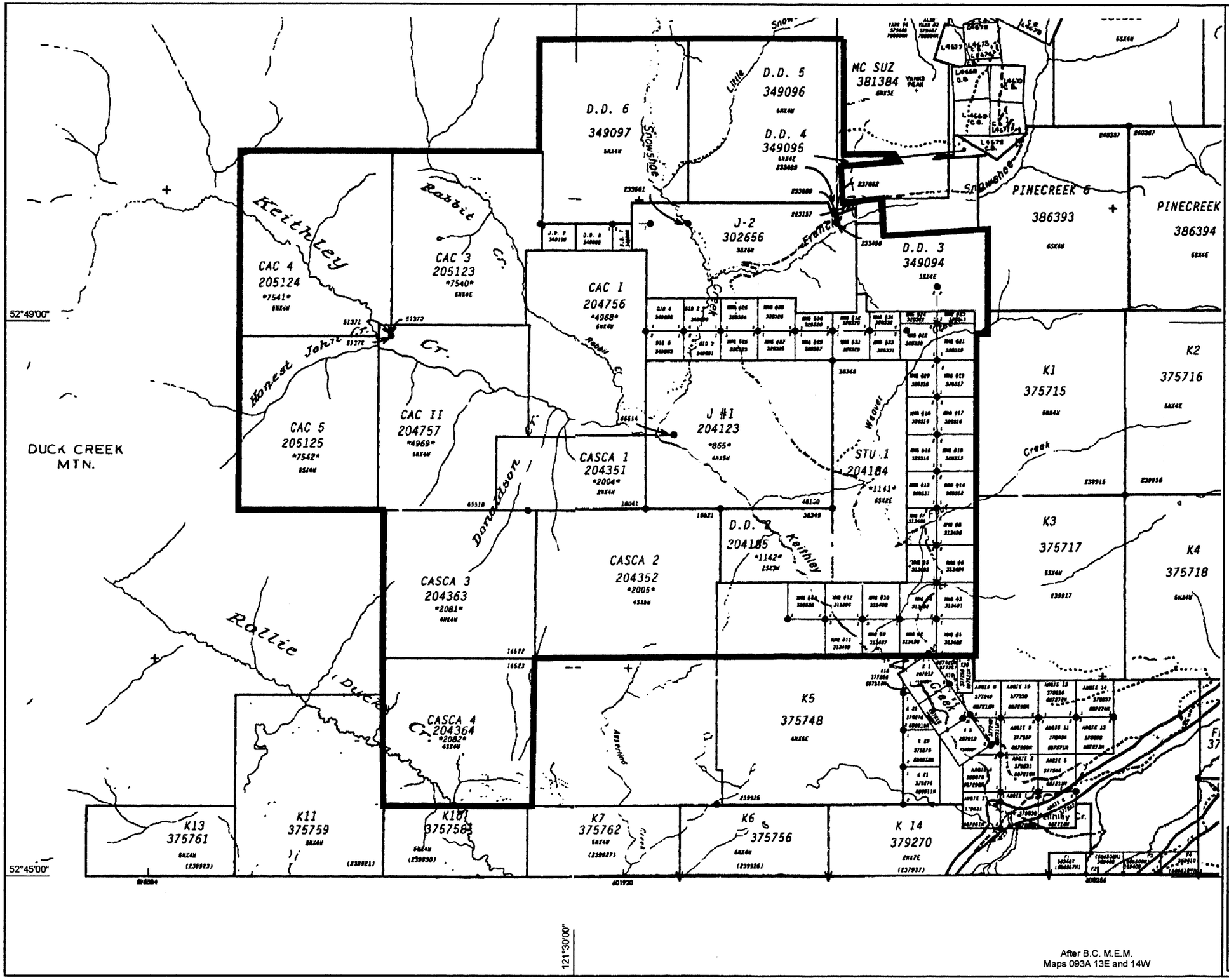
Prospecting for the lode gold deposits began shortly after the discovery of the placer gold on Keithley Creek in 1860. This resulted in the discovery of gold bearing quartz veins on the right bank of Little Snowshoe Creek in December of 1862. Additional discoveries were made in the area over the next year. These included the Douglas vein at the head of Luce Creek in April of 1863 and the showing upon which the Steele and Cunningham tunnel was driven in June of 1863.

In August 1864, the first claims were located on Yank's Peak by Thomas Haywood and Associates. Additional discoveries were made around Yank's Peak over the next few years and Yank's Peak because the most prominent location for lode gold deposits in the Keithley Creek - Snowshoe Creek area. the recorded lode gold production from Yank's Peak is 5,204 ounces.

Intermittent exploration activity has taken place in the Keithley Creek area from the 1860's to present.

Noble Metal Group Incorporated and its predecessor company Cascadia Mines and Resources Ltd. have been carrying out exploration for both placer and lode gold deposits since 1979. The work carried out on the hardrock claims includes grid preparation, soil geochemical surveying, magnetic and electromagnetic surveying, induced polarization surveying and diamond drilling.

In the year 2000, a diamond drill program totalling 805.4 metres (2642.5 feet) was carried out to test anomalous coincident I.P. and magnetic zones in areas of fault intersections.



NOBLE METAL GROUP INCORPORATED

CARIBOO MINERAL PROPERTY
Keithley Creek, B.C., Cariboo M.D.

CLAIM MAP

Date: October, 2001	Scale: 1:50000	FIGURE 2

2.0 GEOLOGY AND MINERALIZATION

2.1 REGIONAL GEOLOGY

The Cariboo mining district is divided into four tectonically and stratigraphically unique terrains. The rocks of the four terrains range in age from Proterozoic to Jurassic and were deposits into an ocean environment. From east to west, the terrains are Cariboo (continental shelf clastics and carbonates, Barkerville (continental shelf and slope clastics, carbonates and volcaniclastics), Slide Mountain (rift floor pillowed basalt and chert) and Quesnel (island arc volcaniclastics and fine grained clastics).

The Cariboo Terrain is of Precambrian to Permo Triassic age and is in fault contact with the western margin of the Precambrian North American Crater along the Rocky Mountain Trench. It can be divided into two successions, one Cambrian and older and the other Ordovician to Permo-Triassic. The older succession consists of grit, limestone, sandstone and shale and is unconformably overlain by the younger succession of basinal shale, dolostone, wacke, limestone and basalt.

The Barkerville Terrain consists of Precambrian and Palaeozoic rocks ranging in composition from grit, quartzite, and black and green pelite to lesser limestone and volcaniclastic rocks. The contact between the Barkerville and Cariboo terrains is the northwest trending, east dipping Pleasant Valley Thrust.

The Barkerville and Cariboo terrains are overthrust (Pundata Thrust) by the Slide Mountain Terrain. The Slide Mountain Terrain consists of Mississippian to Permian basalt in part pillowed, and chert pelite sequences intruded by diorite, gabbro and minor ultramafic rocks.

The Quesnel Terrain lies west of the Slide Mountain Terrain and consists of Upper Triassic and Lower Jurassic black shale and volcaniclastic greenstone.

2.2 CLAIM GEOLOGY

The rocks in the vicinity of Yank's Peak belong to the Barkerville Terrain and have been named the Snowshoe Group by Struik (1988). Struik has further divided the sedimentary and volcanic rocks of the Snowshoe Group into fourteen informal subdivisions, Ramos, Tregillus, Kee Khan, Keithley, Harvey's Ridge, Goose Peak, Agnes, Downey, Eaglenest, Bralco, Hardscrabble, Unnamed carbonate, Island Mountain, and Tom. Igneous intrusions of the terrain consist mainly of diorite and gabbro sills with quartz porphyry rhyolite. All rocks have been regionally metamorphosed to low and middle greenschist facies.

The following table summarizes the composition of each group, as well as the estimated thickness (from Struik 1988).

Island Mountain Amphibolite (<150m)	Amphibolite, tuff siliceous mylonite
Hardscrabble Mountain (≤150m)	Black sulphide, argillite and muddy granule conglomerate
Bralco (<100m)	Grey limestone, locally pelletal, commonly marble, includes undifferentiated phyllite
Eaglenest (≥150m)	Grey and olive micaceous feldspathic, poorly sorted quartzite and phyllite
Downey (≥150m)	Olive-grey micaceous feldspathic, poorly sorted quartzite and phyllite, marble, metabasaltic volcaniclastics
Agnes (<150m)	Light grey conglomerate in part with calcareous matrix
Goose Peak (<250m)	Light grey, poorly sorted quartzite, phyllite, minor black sulphide
Harvey's Ridge (<300m)	Black micaceous, poorly sorted quartzite, sulphide and phyllite, minor muddy conglomerate, limestone and basaltic metavolcanics
Keithley (<300m)	Light grey quartzite, olive micaceous, poorly sorted quartzite, sulphide and phyllite

Kee Khan (<750m)	Marble, olive phyllite, sandy marble
Tregillius (>400m)	Olive-grey micaceous, poorly sorted feldspathic quartzite and phyllite, conglomerate
Ramos (>300m)	Olive micaceous poorly sorted feldspathic quartzite and phyllite, black sulphide and phyllite, amphibolite, marble, minor basaltic and felsic volcanics
Tom (<175m)	Olive-grey micaceous poorly sorted feldspathic quartzite, phyllite and schist; quartzose mylonite

2.3 SNOWSHOE GROUP GEOLOGY

The successions range in age from Hadrynian (Ramos through Keithley) to Palaeozoic (Harvey's Ridge through Bralco) and Upper Palaeozoic (Hardscrabble Mountain and Island Mountain Amphibolite).

The claims of the Noble Metal property are underlain by rocks of the Ramos succession of which interbedded quartzite and phyllite are the most abundant. The age of the Ramos succession is believed to be Hadrynian.

The quartzite is olive to grey on fresh surfaces, is poorly sorted and generally medium to coarse grained. The quartz clasts are predominantly glass clear and grey with minor blue. The quartzite is usually micaceous and sericite, epidote, muscovite, chlorite and biotite occur along foliations. Some sections of the quartzite are weakly *calcareous*.

The phyllite varies from olive, grey to black with chlorite and accessory pyrite, and pyrrhotite. There is often rhythmic banding within the phyllite and contacts between the quartzite and phyllite are sharp.

The main structure in the area is the Keithley Creek Thrust that runs from Shoal's Bay on Quesnel Lake northwest up Keithley Creek and crosses Lightning Creek in the Wingdam area. A north-south fault that may be a continuation of the Antler Fault continues from the southern end of Bowron Lake southwards to Snowshoe Creek, and the lower portion of Rabbit Creek, towards the Keithley Creek Thrust.

A study of the current diamond drill data, combined with results of thin section analysis confirms that the area of exploration is more complex than originally thought.

The quartzites, phyllites and greywackes are intruded by dioritic rocks and several zones of mafic, ultramafic and altered ultramafic rocks.

Mineralization is related to a hydrothermal system. Gold is associated with quartz and silicification, and nickel, chromium, platinum group minerals as well as strontium and vanadium are related to altered mafics and ultramafics.

The ultramafic zones are considered to emanate from a singular magmatic mass at depth.

2.4 MINERALIZATION

The Barkerville Terrain hosts the principal gold occurrences of the Cariboo area. These include the Mosquito Creek, Island Mountain, Cariboo Gold quartz and Cariboo Hudson mines and the Snowshoe and Midas veins. Deposits of less economic importance include those of silver, tungsten, lead, zinc and copper.

The gold ore at the Mosquito Creek, Island Mountain and Cariboo Gold Quartz mines in the Cariboo Gold Belt occurs (1) auriferous pyrite in quartz veins and (2) stratabound, massive auriferous pyrite lenses, termed "replacement ore".

The location of the gold deposits correlates with elements of (1) stratigraphy, (2) structure and (3) metamorphism.

1. *Stratigraphic Controls:* Lode gold deposits are almost entirely confined to the Palaeozoic section of the Snowshoe group. In the Keithley Creek-Snowshoe Creek area, the Palaeozoic Harvey's Ridge succession contains a high density of auriferous quartz veins.

2. *Structural Controls:* The auriferous replacement pyrite in limestone lenses is located in the hinge zones and less commonly along the limbs of regional and minor folds. Orientation of quartz veins is in part controlled by the regional fault and fracture pattern.

3. *Metamorphic Controls:* Lode gold concentrations are confined to rocks in the chlorite grade of metamorphism. The auriferous quartz veins in the Yank's Peak area vary greatly in dimension, ranging in width from a few inches to tens of feet and in length from a few tens of feet to greater than 1000 feet. They can be grouped into three types based on their strike, northerly, northeasterly and easterly striking. The vein quartz is usually milky-white in appearance and massive or slightly fractured with small crystal lined vugs. Ankerite is a common gangue mineral. The quartz is sparsely to moderately mineralized with sulphides. The highest gold values appear to be associated with the highest concentrations of pyrite. Gold assays are highly variable, ranging from nil to 2 ounces gold per ton or more.

Gold is present in the placer deposits tested by Noble Metal Group Incorporated as both bench gravels of Keithley Creek and buried gulch-type channels from Snowshoe Creek, and preparations are being made for processing of gravels in 2001. Platinum group minerals have been reported from testing in the past.

The placer gravels are present to the south and southwest of the area being tested for lode gold mineralization. The gold in the placer gravels occurs from a source north and northeast of the placer operation.

Mineralization consisting of pyrite, chalcopyrite, pyrrhotite, pentlandite, magnetite and ilmenite are identified in varying concentrations through the drill core.

2.5 GENERAL INFORMATION ON NICKEL, CHROMIUM, STRONTIUM AND VANADIUM

A summary of the properties and uses of nickel, chromium, strontium and vanadium is provided the reader for general information purposes. The metals commonly occur in association with various types of ultramafic and mafic rocks.

a) Nickel

Nickel is a hard, malleable, ductile metal, capable of taking a high polish. It exists in five stable isotopic forms. Metallic nickel is not very active chemically. It is soluble in dilute nitric acid and becomes passive (nonreactive) in concentrated nitric acid; it does not react with alkalies. It has a specific gravity of 8.9. The atomic weight of nickel is 58.69.

Combined with other elements, it occurs in minerals such as garnierite, millerite, niccolite, pentlandite and pyrrhotite; the latter two minerals are the principal ores of nickel.

Nickel is used as a protective and ornamental coating for metals, particularly iron and steel, that are susceptible to corrosion.

Nickel is used chiefly in the form of alloys. It imparts great strength and corrosion resistance to steel. Nickel steel, containing about 2 to 4 percent nickel, is used in automobile parts such as axles, crankshafts, gears, valves, and rods; in machine parts; and in armour plate. Nickel is also a key component of nickel-cadmium batteries.

b) Chromium

More than half the production of chromium goes into metallic products, and about another third is used in refractories. It is an ingredient in several important catalysts. The chief use of chromium is to form alloys with iron, nickel, or cobalt. The addition of chromium imparts hardness, strength, and corrosion resistance to the alloy. In the stainless steels, chromium makes up 10 percent or more of the final composition. Because of its hardness, an alloy of chromium, cobalt and tungsten is used for high-speed metal-cutting tools. When deposited electrolytically, chromium provides a hard, corrosion-resistant, lustrous finish. For this reason it is widely used a body trim on automobiles and other vehicles. The extensive use of chromite as a refractory is based on its high melting point, its moderate thermal expansion, and the stability of its crystalline structure.

c) Strontium

Strontium commonly occurs in nature, averaging 0.034% of all igneous rocks, however only two minerals, celestite (strontium sulphate) and strontianite (strontium carbonate), contain strontium in sufficient quantities to make its recovery practical.

The principal end-use for strontium is in cathode ray tubes for colour monitors and televisions. Strontium metal also faces a healthy future with strong uptake from the automotive industry.

Mexico and Spain are currently the major producing countries, accounting for 36% and 30% of world production respectively. Output in other major producing countries - Turkey, Iran and the UK - has dropped sharply in recent years.

China is becoming an increasingly important producer of strontium carbonate with a production capacity now estimated at around 35,000 tpy. At the end of 1994 a new 15,000 tpy carbonate plant came into operation, intended to supply the Asian market with 12,000 tpy expected to be shipped to Japan.

The use of strontium carbonate in CRTs for televisions and computer monitors remains the main market for strontium, accounting for around 70% of demand.

Production of CRT glass is dominated by Asia, accounting for 70% of world output. Japan dominates production, but in recent years Japanese producers have shifted some television output overseas: this has resulted in growth in CRT glass production in South Korea and Taiwan.

The Solvay group in Belgium dominates production of strontium carbonate. The company operates a wholly owned plant in German and has majority interests in facilities in Italy, South Korea and Mexico, giving it over 40% of total world production capacity.

d) Vanadium

Vanadium occurs in about 65 different minerals among which are carnotite, roscoelite, vanadinite, and patronite, important sources of the metal. Vanadium is also found in phosphate rock and certain iron ores, and is present in some crude oils in the form or organic complexes.

Pure vanadium is a bright white metal, and is soft and ductile. It has good corrosion resistance to alkalis, sulphuric and hydrochloric acid, and salt water, but the metal oxidizes readily above 660°C.

The metal has good structural strength and a low fission neutron cross section, making it useful in nuclear applications.

Vanadium is used in producing rust-resistant and high-speed tools steels. It is an important carbide stabilizer in making steels.

About 80% of the vanadium now produced is used a ferrovanadium or as a steel additive. Vanadium foil is used as a bonding agent in cladding titanium to steel. Vanadium pentoxide is used in ceramics and as a catalyst.

2.6 ASSAYS

Fire assaying and I.C.P. analysis carried out by Loring Laboratories of Calgary, and check sampling by ALS Chemex of North Vancouver, show nickel values up to 1006 ppm and chromium values up to 1553 ppm.

Twenty-four samples were sent for neutron activation to test for platinum group metals, and although only low values were obtained, the drilling carried out in 1996 by Noble Metal Group produced platinum values of 1000 ppb in a sample with an average background of 30 ppb.

The 1996 and 2000 diamond drill programs and subsequent fire assay, I.C.P. and neutron activation analysis, have confirmed the presence of gold associated with quartz vein structures related to a hydrothermal system, and nickel, chromium, vanadium, strontium in altered ultramafic zones related to a magmatic mass at depth.

3.0 DIAMOND DRILL PROGRAM

The 2000 diamond drill program consisted of two vertical NQ to BQ diamond drilling holes totalling 805.4 m (2642.5 ft). The drill hole locations are shown on Figure 3, the drill logs are listed in Appendix I and the drill hole sections in Appendix II. The core is stored at the Noble Metal Group Incorporated camp at Keithley Creek.

Overall core recovery was good ranging from 85% to 90%.

DDH #00-1 was drilled to at depth of 235.8 m (772 ft) where a major fault was intersected necessitating a reduction to BQ sized core.

DDH #00-2 was drilled to a depth of 184.7 m (606 ft), then reduced to BQ size.

Drill holes 00-1 and 00-2 were drilled to test highly anomalous IP values with low resistivity, with or on the flank of strong magnetic anomalies and in proximity to fault structure intersections.

Both drill holes intersected variable thicknesses of interbedded quartzites and green to black phyllites intruded by dioritic dykes and sills and altered ultramafic sections.

Numerous intersections of weak to very strong sulphide enrichment up to 15% were intersected throughout the drill core. Sulphides consisted of pyrrhotite and pyrite on chloritic and graphitic lamella and shear planes, and disseminations.

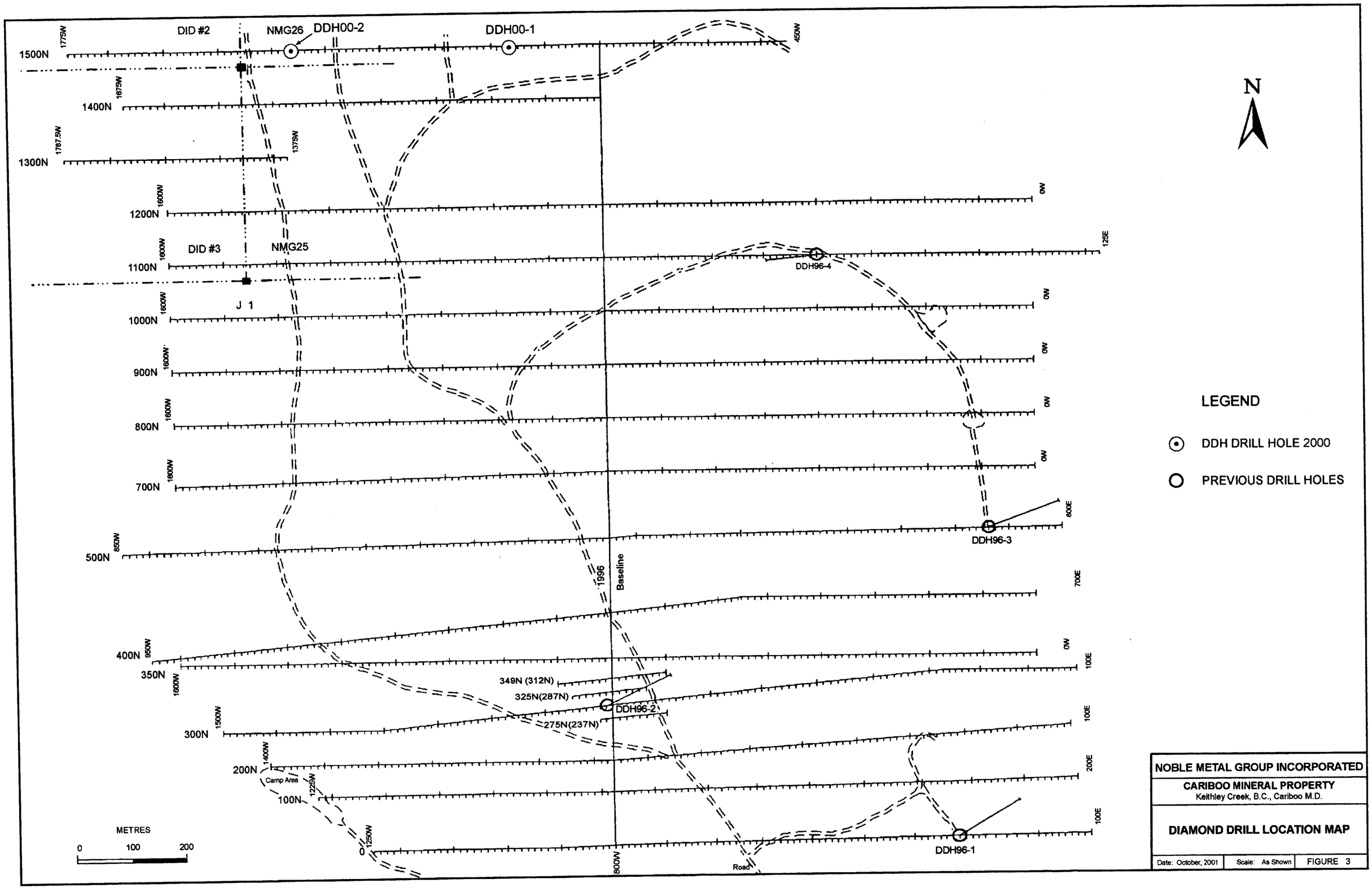
Pyrite filled micro fractures crosscut the quartzites and phyllites in many sections of the core which may be pressure injection of sulphides from a recent hydrothermal episode. Sulphides also occur in quartz veins and veinlets.

Sections of altered ultramafic rocks were intersected with thicknesses varying from approximately 0.5 m to 5.0 m. Anomalous chromium, nickel, strontium and vanadium assay values are present.

The altered ultramafics for the most part have been completely metamorphosed to a yellow-green, fine grained matrix with black augen-like ellipsoidal fine grained black phenocrysts at varying aligned orientations becoming mylonatized in parts.

Contorted micro folding was observed to be related to pressure injection of the ultramafic sills and other igneous intrusions. Many smoky-grey quartz veins and clots were encountered throughout the core defining a major hydrothermal event. The altered ultramafics contain minimal quartz and fractures.

It is postulated that the ultramafic sill-like zones emanate from a magmatic mass at depth, with the fault structures providing the necessary conduits.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DDH00-2
DDH00-1
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700E
100E
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800W
DDH96-4
DDH96-3
DDH96-2
DDH96-1
349N (312N)
325N(287N)
275N(237N)
Camp Area
Road
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0
100
200
N
LEGEND
DDH DRILL HOLE 2000
PREVIOUS DRILL HOLES
NOBLE METAL GROUP INCORPORATED
CARIBOO MINERAL PROPERTY
Keithley Creek, B.C., Cariboo M.D.
DIAMOND DRILL LOCATION MAP
Date: October, 2001
Scale: As Shown
FIGURE 3

4.0 CONCLUSIONS

The diamond drill program was successful in determining the presence of several zones of sulphide enrichment related to hydrothermal activity associated with magmatic intrusion. The more massive zones vary from 10% to 15% pyrrhotite with pyrite and chalcopyrite to 10% to 15% pyrite with lesser pyrrhotite and chalcopyrite. Magnetite, hematite and pentlandite also occur.

The drilling intersected quartzites, greywackes, and phyllites intruded by dioritic dykes or sills and altered mafic and ultramafic rocks emanating from a magmatic mass.

The program conducted in the year 2000 further supports the 1997 diamond drilling in that encouraging values in nickel up to 1006 ppm, chromium up to 1553 ppm, with anomalous values in strontium and vanadium were received.

Further exploration of the property is warranted and an exploration program consisting of additional geological mapping and geochemical soil sampling surveys and prospecting followed by diamond drilling of anomalous areas is recommended.

Respectfully submitted,

W.G. Timmins, P.Eng.
WGT Consultants Ltd.

September 28, 2001.

5.0 REFERENCES

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6.0 CERTIFICATE OF QUALIFICATIONS

I, William G. Timmins, of the City of Vancouver, in the Province of British Columbia, do hereby certify that:

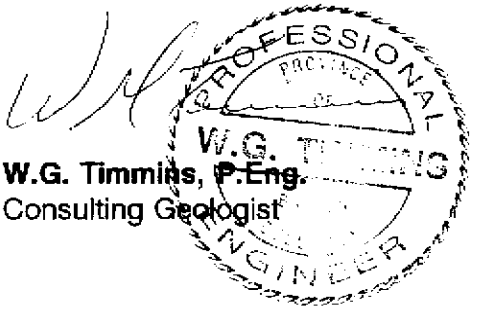
1. I am a consulting geologist, with offices at 410 - 455 Granville Street, Vancouver, British Columbia.

2. I have been practising my profession for the past 39 years, having been engaged in evaluation, exploration and development of mineral properties throughout Canada, the United States, Latin and South America, Australia and New Zealand. The projects focused mainly on gold, silver and base metals.

3. I am a registered Professional Engineer in the Province of British Columbia since 1969.

4. This report is based upon on-site core logging, sampling and drill related duties performed by myself from August to November, 2000.

5. I have no interest, nor do I expect to receive any interest in the property or securities of Noble Metal Group Incorporated.



W.G. Timmins, P.Eng.
Consulting Geologist

September 28, 2001

APPENDICES

Appendix I

DIAMOND DRILL LOGS

and

ASSAY INTERVALS

NOBLE METAL GROUP INCORPORATED
CARIBOO PROJECT
DIAMOND DRILL GEOLOGICAL LOG

DDH 00-1

Co-ordinates	-	L15N, 9+75W (I.P. Grid)
Claim	-	NMG 26
Inclination	-	Vertical
Started	-	August 29, 2000
Completed	-	September 25, 2000
Collar Elevation	-	1209.8 m (3959 ft)
Size	-	NQ, BQ (below 235.3 m - 772 ft)
Total Depth	-	412.1 m (1352 ft)

FROM M/(FT)	TO M/(FT)	DESCRIPTION
0	8.0 (25.0)	CASING
8.0 (25.0)	17.6 (58.0)	Badly broken, light to dark-grey phyllite banding 45° to core
17.6 (58.0)	24.4 (80.0)	Phyllite, light to dark-grey, fine grained, banding 60° to core, minor graphitic section, pyrite on slips, occasional pyrite stringers
24.4 (80.0)	28.3 (93.0)	Quartzite, medium grained, light to dark-grey, occasional quartz stringers, finely disseminated pyrite and pyrrhotite 1-2%, occasional interbedded phyllite
28.3 (93.0)	55.5 (182.0)	Greywacke, fine grained, dark grey-green to black, mainly siliceous, graphitic on slips, pyrite on slips, up to 5% cubic pyrite to 1 cm, occasional minor finely disseminated pyrrhotite, dark argillaceous bands - 60° to core, quartz-carbonate stringers common. At 47.2 (155): a 1.0 m section fine-grained quartzite, black quartz eyes, 2-5% pyrite, minor pyrite. At 48.3: 7.0 cm white quartz stringer, disseminated and cubic pyrite.
55.5 (182)	56.8 (186.5)	Phyllite, fine grained, grey to black, banded 80° to core, graphitic in places, minor pyrite and pyrrhotite.

FROM M/(FT)	TO M/(FT)	DESCRIPTION
56.8 (186.5)	67.1 (220.0)	Quartzite, fine grained, light to dark grey, white and blue quartz eyes, pyrite on slips, scattered quartz stringers. At 63.0-63.7: fault zone.
67.1 (220.0)	89.8 (294.5)	Quartzite, fine to medium-grained, light grey-green, massive appearance, random quartz-carbonate stringers, occasional specks of pyrite.
89.8 (294.5)	90.7 (297.5)	Phyllite, fine grained, grey to black, contorted, occasional quartz stringers.
90.7 (297.5)	107.4 (352.5)	Quartzite, fine to medium-grained, grey to light green, glass-white and smoky-grey quartz eyes, occasional interbedded grey to black phyllite, odd specks of pyrite.
107.4 (352.5)	116.6 (382.5)	Phyllite, fine grained, light to dark grey, contorted sections, pyrite smeared on slips.
116.6 (382.5)	124.7 (409.0)	Quartzite, medium to coarse-grained, grey to pale green, smoky-grey glassy quartz eyes up to 1 cm, occasional phyllite interbeds. At 116.9: 15 cm white quartz vein, additional fine specks pyrite and pyrrhotite.
124.7 (409.0)	141.7 (465.0)	Phyllite, fine grained, light grey-green to black, graphitic in places, sections highly altered with talc and chlorite, quartzite interbeds, white quartz veins and stringers, minor pyrite and pyrrhotite. At 140.5: 15 cm white and smoky quartz with stringers, clots, pyrite.
141.7 (465.0)	151.6 (497.5)	Quartzite, fine to medium-grained, grey to light green, numerous random narrow quartz-carbonate stringers, minor disseminated pyrite and clots and smears of pyrite. At 142.3-145.4: core fractured and broken.
151.6 (497.5)	157.6 (517.0)	Mafic dyke, very fine grained, pale green, dense, numerous carbonate stringers, finely disseminated pyrrhotite.
157.6 (517.0)	158.0 (518.0)	Quartzite, medium to coarse-grained, greenish-grey.

FROM M/(FT)	TO M/(FT)	DESCRIPTION
158.0 (518.0)	160.9 (528.0)	Quartzite, very fine grained, dark grey to black, schistose, sericite, foliation 60° to core, smears and clots of pyrite.
160.9 (528.0)	162.5 (533.0)	Phyllite, very fine grained, banding at 70° to core.
162.5 (533.0)	171.3 (562.0)	Quartzite, fine grained, light grey-green, occasional specks of pyrrhotite.
171.3 (562.0)	173.4 (569.0)	Phyllite, fine grained, grey to black, crenulated, disseminated pyrite and pyrrhotite - 1-2%.
173.4 (569.0)	180.1 (591.0)	Greywacke, fine grained, greyish-green, quartz and quartz-carbonate veinlets and stringers, smears and clots of pyrite.
180.1 (591.0)	180.4 (592.0)	Fault zone - gouge.
180.4 (592.0)	182.0 (597.0)	Limy sediment(?), light green, carbonate stringers, broken core, minor pyrite and pyrrhotite.
182.0 (597.0)	199.0 (653.0)	Phyllite, fine grained, dark grey to black, chloritic, graphite on slips, quartz-carbonate veinlets and stringers, minor pyrite and pyrrhotite.
199.0 (653.0)	201.0 (662.0)	Quartzite, fine grained, grey to greenish-grey.
201.0 (662.0)	204.2 (670.0)	Phyllite, very fine grained, greyish-green to black, crenulated, chlorite, graphitic, vuggy-quartz-carbonate, disseminated clots, stringers and fillings 5-10% pyrrhotite and minor pyrite.
204.2 (670.0)	204.5 (671.0)	Mafic band, fine grained, light yellow-green, contorted smoky quartz-carbonate bands and stringers, scattered minor pyrrhotite.
204.5 (671.0)	205.4 (674.0)	Phyllite, fine grained, greenish-grey to black, pyrrhotite 10-15%, minor pyrite.
205.4 (674.0)	206.3 (677.0)	Mafic dyke(?), fine grained, yellow-green, greasy, broken, quartz-carbonate veinlets and stringers, scattered minor pyrrhotite. Lost core - 0.6 m.
206.3 (677.0)	218.5 (717.0)	Greywacke, fine to medium-grained, grey-green to dark grey, numerous quartz veins, veinlets and stringers, minor scattered pyrite and cubic pyrite on fractures.

FROM M/(FT)	TO M/(FT)	DESCRIPTION
218.5 (717.0)	223.1 (732.0)	Phyllite, fine grained, grey to black, banding at 60° to core, chloritic.
223.1 (732.0)	228.9 (751.0)	Siltstone, fine grained, light green.
228.9 (751.0)	229.2 (752.0)	Fault gouge.
229.2 (752.0)	229.5 (753.0)	Phyllite, fine grained, grey to black.
229.5 (753.0)	235.3 (772.0)	Quartzite, fine to medium-grained, light grey. At 229.8-230.4: White broken quartz vein.
235.3 (772.0)	243.8 (800.0)	Major fault zone - gouge, broken, graphitic, greywacke. Reduce from NQ to BQ core.
243.8 (800.0)	266.4 (874.0)	Quartzite, fine to medium-grained, light greenish-grey, occasional interbedded phyllite.
266.4 (874.0)	271.0 (889.0)	Altered ultramafic, greasy, light to dark green, carbonate bands and fillings, occasional specks fine sulphide.
271.0 (889.0)	287.1 (942.0)	Interbedded greywacke, light to dark greyish-green, and phyllite-siltstone.
287.1 (942.0)	288.6 (947.0)	Diorite, coarse grained, grey to greenish-grey.
288.6 (947.0)	293.2 (962.0)	Quartzite, grey to greenish-grey. From 292.8: shatter zone, graphitic, chloritic and quartz remnants.
293.2 (962.0)	293.8 (964.0)	Altered ultramafic, green to grey-white talcy.
293.8 (964.0)	312.7 (1026.0)	Interbedded greywacke, phyllite.
312.7 (1026.0)	315.2 (1034.0)	Mafic dyke(?) soft, greasy, yellow-green, talcy, quartz-carbonate stringers.
315.2 (1034.0)	318.5 (1045.0)	Greywacke, fine grained, dark grey, minor cubic pyrite, specks pyrrhotite.
318.5 (1045.0)	321.0 (1053.0)	Phyllite-siltstone, fine grained, light green-grey, banded at 40° to core.
321.0 (1053.0)	327.2 (1073.5)	Greywacke, light grey, fine grained, occasional interbedded phyllite, graphitic on slips, minor smears of pyrrhotite.

FROM M/(FT)	TO M/(FT)	DESCRIPTION
327.2 (1073.5)	345.0 (1132.0)	Quartzite, light grey, fine to coarse grained, glassy grains, occasional narrow interbeds of phyllite or argillite, occasional carbonate stringers . At 332.8: Quartz vein, 20.0 cm.
345.0 (1132.0)	347.9 (1141.5)	Greywacke, light grey, fine grained, finely disseminated pyrrhotite, occasional narrow interbedded phyllite with minor disseminations of pyrrhotite.
347.9 (1141.5)	357.2 (1172.0)	Phyllite, grey to black, fine grained, banding and cortorta, at 50° to core, scattered clusters, smears and cubes pyrite up to 1.5 cm, black bands carbonaceous, slightly graphitic, some light bands contains greenish-yellow grains(?), minor yellowish-green limy sections.
357.2 (1172.0)	357.8 (1174.0)	Limestone, grey with narrow yellow-green bands, foliation 50° to core.
357.8 (1174.0)	367.3 (1205.0)	Highly hard altered quartz-sericite-carbonate-graphite black and white marble-like sediment in patches, stringers, clots and disseminated cubic pyrite 5-10%.
367.3 (1205.0)	370.9 (1217.0)	Graphitic schist, very broken, barely cemented white quartz fragments and veinlets.
370.9 (1217.0)	371.6 (1219.0)	More competent, harder, altered quartz-graphitic rock as before, 5-10% pyrite.
371.6 (1219.0)	372.0 (1220.5)	Quartzite, grey-green, fine grained, numerous random quartz-carbonate stringers, clots and stringers, cubic pyrite.
372.0 (1220.5)	373.2 (1224.5)	Graphitic schist.
373.2 (1224.5)	379.5 (1245.0)	Altered mafics, yellowish-green, fine grained, harder than before, numerous quartz-carbonate stringers, contains dark grey contorted phyllitic bands with stringers and cubic pyrite 5%.
379.5 (1245.0)	380.8 (1249.5)	Siltstone, pitted, soft, foliation 60° to core, mottled, light yellowish-grey.
380.8 (1249.5)	381.6 (1252.0)	Quartzite, dark grey, medium grained, two white quartz veinlets with minor pyrrhotite.

FROM M/(FT)	TO M/(FT)	DESCRIPTION
381.6 (1252.0)	386.0 (1266.5)	Phyllite, black to greenish-grey, fine grained, banded at 65° to core, dark bands contain 3-5% pyrite. At 393.7: 15.0 cm quartz vein.
386.0 (1266.5)	412.1 (1352)	Greywacke, dark grey, fine to medium grained, numerous random narrow carbonaceous stringers, occasional quartz veinlet, coarser grained intervals exhibit large glassy dark grey clasts of quartz giving mottled appearance.
END OF HOLE		

NOBLE METAL GROUP INCORPORATED
CARIBOO PROJECT
DIAMOND DRILL GEOLOGICAL LOG

DDH 00-2

Co-ordinates	-	L15N, 13+50W
Claim	-	NMG 26
Inclination	-	Vertical
Started	-	October 3, 2000
Completed	-	November 2, 2000
Collar Elevation	-	1183.2 m (3882 ft)
Size	-	NQ, BQ below 184.7 m (606 ft)
Total Depth	-	393.3 m (1290.5 ft)

FROM M/(FT)	TO M/(FT)	DESCRIPTION
0	10.4 (34.0)	CASING
10.4 (34.0)	13.1 (43.0)	Quartzite, light grey, fine to medium grained, core broken, rusty.
13.1 (43.0)	18.0 (59.0)	Argillite, black, fine grained, broken, stringers and patches cubic pyrite 1-2% At 16.0 m: white quartz stringers 10.0 cm. From 14.3 (47.0) to 18.0 (59.0): 1.5 m (5.0 ft) lost core.
18.0 (59.0)	25.0 (82.0)	Quartzite, light grey, fine to medium grained, numerous stringers white quartz, interbeds of black banded and contorta phyllite, fine disseminated and clots and stringers of pyrite 2-3%.
25.0 (82.0)	59.7 (196.0)	Greywacke, dark grey, fine grained, argillaceous, silty and phyllitic interbeds with stringers, clots and disseminated pyrite and pyrrhotite up to 5%, numerous quartz veinlets and stringers. At 25.0 (82.0): a 30.0 cm (12 in) quartz vein. At 28.3 (93): 45.0 cm (18 in) quartz vein.
59.7 (196.0)	61.3 (201.0)	Phyllite, grey to black.

FROM M/(FT)	TO M/(FT)	DESCRIPTION
61.3 (201.0)	70.7 (232.0)	Quartzite, light to dark grey, fine to coarse grained, occasional narrow phyllite interbeds, smoky grey elongated quartz grains up to 1.0 cm. At 69.2 (227.0): Fault gouge 6.0 cm.
70.7 (232.0)	73.6 (241.5)	Diorite dyke, light grey, fine to medium grained.
73.6 (241.5)	73.9 (242.3)	Limestone, light green, calcite stringers.
73.9 (242.3)	75.9 (249.0)	Quartzite, dark grey, fine grained.
75.9 (249.0)	83.1 (272.8)	Phyllite, grey-green to black, fine grained, occasional quartzite interbeds, several narrow quartz and quartz-carbonate stringers, occasional smear of pyrite on slips. At 76.5 (251.0): a 25.0 cm white and smoky quartz vein with occasional specks of pyrrhotite Quartz veins and stringers common from 76.5 to 83.1m
83.1 (272.8)	93.3 (306.2)	Quartzite, light grey, fine to coarse grained, random narrow carbonate stringers common.
93.3 (306.2)	94.2 (309.0)	Limestone, light to dark green, very fine grained, numerous random calcite stringers.
94.2 (309.0)	95.1 (312.0)	Phyllite, grey to black, fine grained, occasional quartz-carbonate stringers, pyrite smears on slips, occasional speck of pyrrhotite.
95.1 (312.0)	99.7 (327.0)	Quartzite, dark grey, fine grained. At 95.7 (314.0) to 96.0 (315.0): quartz vein, occasional short phyllite interbeds and limy sections.
99.7 (327.0)	101.0 (331.5)	Phyllite, dark greenish-black, very fine grained, numerous quartz stringers and veinlets and hairline quartz-carbonate stringers, pyrrhotite on slips.
101.0 (331.5)	101.7 (333.5)	Chert, dark greenish-grey, quartz veinlets and carbonaceous stringers.
101.7 (333.5)	102.7 (337.0)	Quartzite, light grey, fine grained, quartz stringers, minor pyrite in slips.

FROM M/(FT)	TO M/(FT)	DESCRIPTION
102.7 (337.0)	107.3 (352.0)	Greywacke, dark grey to black, broken core to 105.9 (247.5), clots and smears pyrite 1% very fine pyrrhotite. Lost core - 1 metre.
107.3 (352.0)	113.4 (372.0)	Phyllite and interbedded quartzite, random quartz and quartz-carbonate stringers, finely disseminated and hairline stringers, pyrite and pyrrhotite - 1%.
113.4 (372.0)	114.3 (375.0)	Greywacke, dark grey, fine to medium grained, minor finely disseminated pyrrhotite.
114.3 (375.0)	119.8 (393.0)	Phyllite, grey to black, very fine grained, contorta and foliation at 80° to core, clots and stringers pyrrhotite 5-10%, pyrite in smears on slips, graphite on slips, occasional narrow quartzite interbeds, last 1.7 metres pyrrhotite 10%.
119.8 (393.0)	120.8 (396.5	Greywacke, dark grey, fine to medium grained, minor disseminated pyrrhotite and pyrite.
120.8 (396.5	123.6 (405.5)	Phyllite, black, very fine grained, minor grey bands, quartz-carbonate fillings, foliation, graphitic, contorta, some vuggy calcite stringers, blebs, fillings, stringers pyrrhotite 15%.
123.6 (405.5)	125.9 (413.0)	Greywacke, dark grey, medium grained, occasional quartz stringers, minor dissemination or stringers cubic pyrite.
125.9 (413.0)	126.6 (415.5)	Phyllite, black, very fine grained, sericitic, some quartz veining, pyrrhotite 5%.
126.6 (415.5)	149.5 (490.5)	Greywacke, light to dark grey, fine to medium grained, black phyllitic or siltstone interbeds in the quartz-carbonate stringers, blebs, patches, stringers and disseminated pyrrhotite 2-4%.
149.5 (490.5)	151.8 (498.0)	Quartzite, light grey, coarse grained, contains smoky quartz grains and occasional blue quartz eye.
151.8 (498.0)	161.7 (530.5)	Greywacke, light to dark grey, interbeds of grey to black phyllite, sericitic, some quartz and quartz-carbonate stringers, odd bleb pyrite and pyrrhotite.

FROM M/(FT)	TO M/(FT)	DESCRIPTION
161.7 (530.5)	165.5 (543.0)	Phyllite-mudstone, dark grey to black, fine grained, quartz carbonate stringers giving marbleized appearance, narrow stringers, blebs and patches pyrrhotite and pyrite.
165.5 (543.0)	178.0 (584.0)	Greywacke, light grey, fine to coarse grained, occasional narrow quartz or carbonate stringers. At 171.9: 1.2 metres very coarse grained section with smoky grey-black and blue quartz grains 2-3 mm.
178.0 (584.0)	182.6 (599.0)	Phyllite or mudstone, grey to black, very fine grained, banding in places 60° to core, contorta, minor quartz stringers, minor disseminated pyrrhotite.
182.6 (599.0)	188.4 (618.0)	Greywacke, light to dark grey, fine to medium grained, minor pyrite as smears, last 0.6 metre white quartz vein and veining, no sulphides.
188.4 (618.0)	189.3 (621.0)	Quartz vein structures, yellow-green matrix.
189.3 (621.0)	192.6 (632.0)	Greywacke, dull grey to dark grey, fine to medium grain.
192.6 (632.0)	197.7 (648.5)	Mudstone, dark grey to black, very fine grained, occasional hairline stringers of pyrrhotite.
197.7 (648.5)	240.6 (789.5)	Quartz wacke, fine to very coarse grained, light to dark grey, occasional narrow interbed mudstone, occasional quartz vein up to 20 cm, minor scattered finely disseminated pyrrhotite, occasional splash pyrite on slips.
240.6 (789.5)	243.8 (800.0)	Fault gauge and broken core, Lost core - 1.5 metres
243.8 (800.0)	246.9 (810.0)	Phyllite, grey to black, fine grained, occasional speck of pyrrhotite.
246.9 (810.0)	253.0 (830.0)	Quartz wacke, grey, fine to medium grain.
253.0 (830.0)	256.0 (840.0)	Mudstone, grey to black, very fine grained, minor pyrrhotite.
256.0 (840.0)	261.8 (859.0)	Mudstone as above, badly broken. Lost core - 1.5 metres. Quartz wacke rubble mixed in lower interval.
261.8 (859.0)	280.4 (920.0)	Greywacke, dull grey, fine to medium grain, somewhat broken.

FROM M/(FT)	TO M/(FT)	DESCRIPTION
280.4 (920.0)	291.7 (957.0)	Greywacke and carbonaceous sediments, graphitic in part, badly broken and crumbly sections.
291.7 (957.0)	302.1 (991.0)	Phyllite-mudstone, grey to black, very fine grain, core broken in discs, occasional quartz-carbonate stringers, blebs and hairline stringers pyrrhotite 5%.
302.1 (991.0)	305.0 (1000.6)	Limy sediments, yellow-green to black, banded and contorted at 75° to core, numerous carbonate and quartz-carbonate stringers, minor blebs and patches pyrrhotite.
305.0 (1000.6)	314.9 (1033.0)	Greywacke, light to dark grey, fine to medium grain, with interbeds of very fine grained black phyllite or mudstone, hairline seams and disseminated pyrrhotite, occasional pyrite stringers, chloritic sections.
314.9 (1033.0)	320.6 (1052.0)	Greywacke, light grey, fine to coarse grained.
320.6 (1052.0)	334.8 (1098.5)	Mixed sequence light grey wackes and black phyllites, fine to very fine grained, graphitic in places, minor pyrrhotite and pyrite.
334.8 (1098.5)	356.5 (1169.5)	Graphitic schist, hard to soft, black and white zebra appearance, whitish carbonaceous bands, patches, stringers and disseminated cubic pyrite 15%.
356.5 (1169.5)	380.5 (1248.5) Lost Core	Fault shatter zone, mixture of gouge, greywacke shards, graphitic, sections of greywacke. 356.5 - 360.9: 1.0 metre 360.9 - 362.7: 1.4 metres 362.7 - 364.2: 0.5 metres 372.4 - 374.9: 1.0 metre 374.9 - 376.5: 0.3 metre 376.5 - 379.6: 1.2 metres 379.6 - 380.5: 0.5 metres
380.5 (1248.5)	382.5 (1255.0)	Graphitic schist, pyrite 2%.
382.5 (1255.0)	388.9 (1276.0)	Greywacke.
388.9 (1276.0)	393.3 (1290.5)	Greywacke with mudstone interbeds, silicified, some quartz-carbonate stringers, sections with minor cubic pyrite.
END OF HOLE		

NOBLE METAL GROUP INCORPORATED
CARIBOO PROJECT - ASSAYS

DDH 00-1

SAMPLE No.	FROM FT	TO FT	WIDTH FT	CO PPM	NI PPM	CR PPM	CU PPM	SR PPM	V PPM
91557	93.5	97.0	3.5	25	42	144	18	84	5
91551	97.0	102.0	5.0	53	108	26	101	17	5
91552	102.0	107.0	5.0	37	65	83	35	46	8
91553	107.0	112.0	5.0	48	84	40	36	40	8
91554	112.0	117.0	5.0	35	63	36	35	27	5
91555	123.5	127.0	3.5	59	109	79	51	24	9
91556	127.0	130.0	3.0	54	101	124	37	18	14
91558	155.0	158.5	3.5	57	103	97	45	15	11
91559	158.5	159.0	0.5	45	87	119	35	11	9
91560	290.0	293.0	3.0	33	61	133	27	23	14
91561	432.0	434.0	2.0	55	103	85	38	24	116
91562	434.0	434.3	0.3	30	57	299	16	33	24
91563	434.3	437.0	2.7	54	99	128	41	36	29
91564	437.0	442.5	5.5	52	102	63	53	47	10
91565	442.5	444.0	1.5	64	128	134	99	59	25
91566	447.0	451.0	4.0	58	109	139	48	45	20
91567	451.0	454.0	3.0	65	126	103	55	20	15
91568	454.0	457.0	3.0	45	83	89	28	34	12
91569	457.0	459.0	2.0	58	110	158	58	58	20
91570	459.0	461.0	2.0	58	43	90	23	40	13
91571	461.0	461.7	0.7	18	30	203	15	138	11
91572	461.7	465.0	3.3	53	94	71	28	27	15
91573	497.5	502.0	4.5	109	185	203	96	218	226
91574	502.0	507.0	3.0	109	183	219	91	237	225
91575	507.0	512.0	5.0	110	176	178	106	222	224
91576	512.0	517.0	5.0	88	145	141	87	201	179
91577	562.0	565.0	3.0	56	111	39	55	9	8
91578	565.0	569.0	4.0	51	99	41	51	32	8
91589	602.0	607.5	5.5	54	103	113	59	39	19
91579	607.5	612.0	4.5	59	111	43	39	9	12
91580	612.0	617.0	5.0	58	108	83	42	13	14
91581	617.0	622.0	5.0	66	122	58	41	13	16
91582	622.0	626.0	4.0	70	129	55	43	15	16
91583	626.0	627.0	1.0	74	140	104	59	41	23
91584	627.0	632.0	5.0	64	119	51	43	14	14
91585	632.0	637.0	5.0	50	82	48	51	28	9
91586	637.0	641.0	4.0	35	63	82	18	59	11

SAMPLE NO.	FROM FT	TO FT	WIDTH FT	CO PPM	NI PPM	CR PPM	CU PPM	SR PPM	V PPM
91587	641.0	647.0	6.0	59	108	73	38	9	18
91588	647.0	653.0	6.0	61	116	73	46	19	19
91590	662.0	667.0	4.0	55	105	76	45	45	18
91591	667.0	670.0	3.0	68	128	59	68	56	20
91592	670.0	671.0	1.0	85	62	892	71	215	139
91593	671.0	674.0	3.0	69	131	84	76	34	27
91594	674.0	677.5	3.5	37	70	341	41	17	13
91595	677.5	678.0	0.5	34	70	243	27	31	12
91596	678.0	680.0	2.0	32	59	131	9	97	19
91597	680.0	680.5	0.5	27	50	199	2	50	21
91598	711.5	712.0	0.5	22	41	223	17	62	10
91599	712.0	714.0	2.0	64	125	100	74	43	20
91600	714.0	715.5	1.5	50	95	139	43	38	24
91601	715.5	717.0	1.5	53	103	111	66	57	17
91602	754.0	756.0	2.0	10	18	93	3	50	5
91603	839.0	840.0	1.0	52	70	133	23	143	152
91607	872.0	874.0	2.0	35	43	94	167	107	40
91604	874.0	879.0	5.0	64	1006	1453	54	465	117
					461	1380		341	107
91605	879.0	884.0	5.0	63	950	1553	69	416	120
					379	1280		260	104
91606	884.0	889.0	5.0	75	892	1376	44	346	116
					416	1230		279	103
91608	889.0	891.0	2.0	29	43	94	167	25	11
91609	902.0	905.0	3.0	48	77	58	92	15	10
91610	912.0	917.0	5.0	48	86	52	33	47	20
91611	917.0	922.0	5.0	46	82	49	38	43	16
91612	960.5	962.0	1.5	43	215	477	50	116	52
91613	962.0	964.0	2.0	71	587	1042	47	349	91
					481	868			
91614	964.0	968.0	4.0	30	46	52	22	23	11
91645	1027.0	1031.0	-	-	-	-	-	-	-
91646	1031.0	1034.0	3.0	67	142	252	44	150	80
91647	1034.0	1038.0	4.0	44	70	102	42	51	16
91648	1038.0	1042.0	4.0	37	59	89	26	43	13
91649	1042.0	1045.0	3.0	55	93	84	51	50	18
91650	1045.0	1050.0	5.0	74	149	280	32	187	91
91615	1050.0	1055.0	5.0	52	101	162	30	111	56
91616	1092.5	1093.4	0.9	24	28	102	24	60	5
91617	1131.5	1136.5	5.0	41	64	78	32	23	12
91618	1136.5	1141.5	5.0	41	63	63	30	26	12
91619	1141.5	1147.0	5.5	56	101	47	60	10	8
91620	1147.0	1152.0	5.0	64	222	198	81	44	16
91621	1152.0	1157.0	5.0	67	129	42	64	12	11

SAMPLE No.	FROM FT	TO FT	WIDTH FT	CO PPM	NI PPM	CR PPM	CU PPM	SR PPM	V PPM
91622	1157.0	1162.0	5.0	48	85	86	46	43	13
91623	1162.0	1167.0	5.0	63	106	95	50	68	47
91624	1167.0	1172.0	5.0	49	83	100	45	38	21
91626	1172.0	1174.0	2.0	69	378	1200	72	136	75
91627	1174.0	1177.0	3.0	43	114	126	75	65	64
91628	1177.0	1182.0	5.0	43	135	109	108	53	67
91629	1182.0	1187.0	5.0	34	151	234	88	58	164
91630	1187.0	1192.0	5.0	34	134	98	52	60	98
91631	1192.0	1197.0	5.0	39	156	106	84	67	82
91632	1197.0	1202.0	5.0	39	140	168	118	64	93
91633	1202.0	1205.0	3.0	37	101	50	98	89	27
91634	1205.0	1212.0	7.0	24	121	86	114	94	85
91635	1212.0	1217.0	5.0	36	141	77	105	68	77
91636	1217.0	1219.0	2.0	24	165	113	78	25	166
91637	1219.0	1220.5	1.5	54	95	85	90	61	101
91638	1220.5	1224.5	3.0	40	112	92	42	42	34
91639	1224.5	1228.0	3.5	34	67	104	30	32	9
91640	1228.0	1232.0	4.0	51	93	70	41	89	41
91641	1232.0	1235.0	3.0	61	222	228	63	97	35
91642	1235.0	1238.0	3.0	69	300	332	64	132	63
91643	1238.0	1242.0	4.0	60	213	347	42	69	58
91644	1242.0	1245.0	3.0	54	130	114	75	49	35
91676	1245.0	1249.5	4.5	70	531	856	112	173	69
91677	1249.5	1252.0	2.5	18	35	119	22	14	7
91678	1252.0	1256.0	5.0	48	103	145	40	48	30
91679	1256.0	1259.0	3.0	32	56	58	25	36	10
91680	1259.0	1259.5	0.5	16	30	221	11	28	9
91681	1259.5	1263.0	3.5	51	77	84	35	44	36
91682	1263.0	1266.5	3.5	40	66	65	31	14	7
91683	1277.0	1282.0	5.0	40	60	89	89	62	32
91684	1302.0	1307.0	5.0	30	45	93	15	55	10
91685	1322.0	1327.0	5.0	50	68	98	19	42	68

END OF DRILL HOLE 00-1

NOBLE METAL GROUP INCORPORATED
CARIBOO PROJECT - ASSAYS

DDH 00-2

SAMPLE NO.	FROM FT	TO FT	WIDTH FT	CO PPM	NI PPM	CR PPM	CU PPM	SR PPM	V PPM
91686	42.0	47.0	5.0	47	78	79	50	5	9
91687	52.0	53.0	1.0	24	38	98	20	15	8
91688	53.0	59.0	6.0	49	83	61	53	14	6
91689	59.0	62.0	3.0	32	48	91	16	41	8
91690	62.0	67.0	5.0	41	65	56	30	22	8
91691	67.0	72.0	5.0	50	84	51	39	28	9
91692	72.0	77.0	5.0	34	54	83	20	38	10
91693	77.0	82.0	5.0	35	51	47	17	49	11
91694	82.0	83.0	1.0	26	45	125	19	31	7
91695	83.0	88.0	5.0	48	75	63	30	5	11
91696	88.0	93.0	1.0	52	88	74	45	12	8
91697	93.0	94.5	1.5	23	40	77	28	7	4
91698	94.5	100.0	5.5	49	83	72	44	16	9
91699	100.0	105.0	5.0	43	74	76	27	31	16
91700	105.0	110.0	5.0	40	70	56	27	31	12
91701	110.0	115.0	5.0	42	67	75	24	31	10
91702	122.0	127.0	5.0	49	80	67	39	23	10
91703	142.0	147.0	5.0	26	43	107	12	114	11
91704	162.0	167.0	5.0	29	47	115	16	50	15
91705	167.0	172.0	5.0	31	50	58	16	35	14
91706	196.0	201.0	5.0	44	75	46	47	7	8
91713	227.0	232.0	5.0	43	60	111	43	39	64
91707	247.0	249.0	2.0	37	55	75	31	45	10
91708	249.0	251.0	2.0	41	74	33	27	11	9
91709	251.0	251.8	0.8	22	43	108	21	15	7
91710	251.8	252.8	1.0	40	70	53	35	22	8
91711	252.8	256.6	3.8	43	70	55	27	27	11
91712	256.6	259.0	2.4	27	42	140	24	33	8
91714	259.0	262.0	3.0	49	77	73	45	10	12
91715	262.0	267.0	5.0	52	83	38	83	11	12
91716	267.0	272.8	5.8	49	83	66	34	23	15
91717	282.0	287.0	5.0	19	27	60	8	59	7
91718	302.0	306.2	4.2	26	41	85	20	57	10
91719	306.2	309.0	2.8	53	106	190	50	114	17
91720	309.0	312.0	3.0	43	72	74	32	16	34
91721	327.0	331.5	4.5	39	66	71	26	19	11
91722	331.5	333.5	2.0	30	43	64	16	50	11
91735	337.0	342.0	5.0	39	29	34	39	12	86
91736	342.0	347.0	5.0	61	82	57	25	64	52
91737	347.0	352.0	5.0	59	92	65	34	46	22
91738	352.0	355.0	3.0	55	85	70	26	59	27
91739	355.0	258.0	3.0	38	57	102	25	30	14
91740	358.0	361.0	2.0	80	129	39	30	36	71

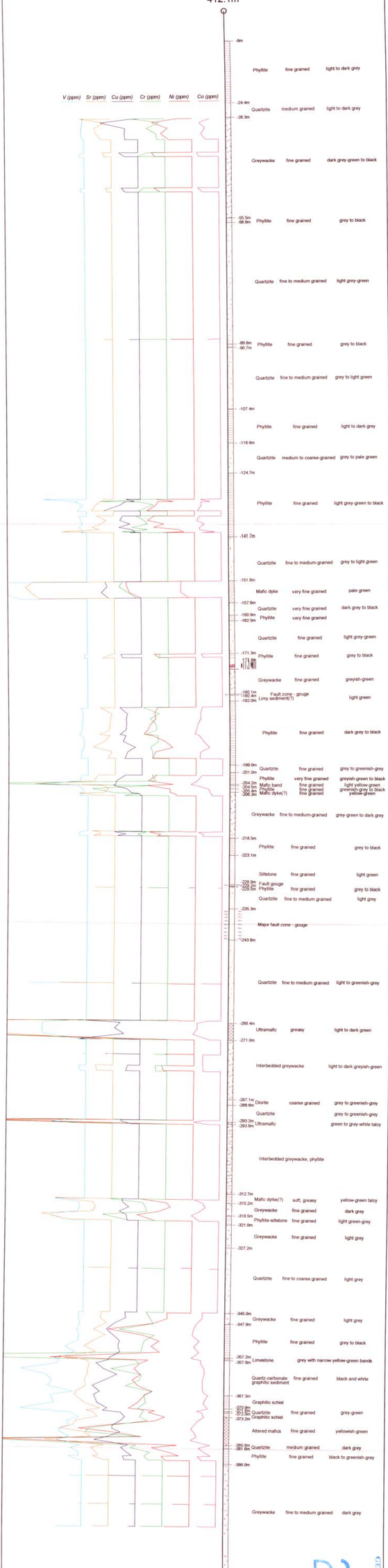
SAMPLE No.	FROM FT	TO FT	WIDTH FT	Co PPM	Ni PPM	Cr PPM	Cu PPM	Sr PPM	V PPM
91741	361.0	364.0	3.0	74	136	57	43	31	20
91742	364.0	367.0	3.0	72	135	62	48	34	22
91743	367.0	370.0	3.0	59	116	53	32	35	16
91744	370.0	372.0	2.0	63	117	51	31	27	21
91745	372.0	375.0	3.0	32	57	78	10	17	14
91746	375.0	377.0	2.0	60	108	51	41	33	11
91734	377.0	379.5	2.5	68	125	46	61	11	9
91729	379.5	383.0	3.5	59	103	75	44	27	16
91730	383.0	386.0	3.0	61	130	27	56	17	8
91731	386.0	389.0	3.0	70	143	28	45	19	8
91732	389.0	393.0	4.0	68	136	26	67	27	7
91733	393.0	396.5	3.5	55	135	25	32	29	9
91723	396.5	400.0	3.5	49	85	38	43	48	7
91724	400.0	403.0	3.0	51	86	28	62	14	5
91725	403.0	405.5	2.5	51	86	52	70	14	7
91726	405.5	408.0	2.5	35	53	64	27	11	12
91727	408.0	411.0	3.0	53	83	71	26	58	26
91728	411.0	413.0	2.0	23	33	46	37	64	67
91747	413.0	415.0	2.0	68	125	46	61	22	21
91748	454.0	457.0	3.0	73	151	74	50	54	15
91749	476.0	479.0	3.0	27	51	101	10	100	9
91750	479.0	482.0	3.0	28	51	106	12	44	13
91751	506.0	509.0	3.0	56	110	73	41	17	8
91752	509.0	512.5	3.5	60	118	33	42	17	8
91753	530.5	534.0	3.5	74	144	40	52	22	11
91754	534.0	537.0	3.0	63	125	46	39	15	9
91755	537.0	540.0	3.0	65	123	55	49	19	10
91756	540.0	543.0	3.0	75	147	66	56	24	13
91757	616.0	618.0	2.0	32	60	129	12	27	18
91758	618.0	621.0	3.0	55	99	121	3	66	35
91759	830.0	835.0	5.0	57	105	39	42	8	7
91760	920.0	925.0	5.0	33	57	78	14	51	12
91761	957.0	960.0	3.0	55	96	111	34	16	12
91762	960.0	965.0	5.0						
91763	965.0	968.0	3.0						
91764	968.0	971.0	3.0						
91765	971.0	974.0	3.0						
91766	974.0	977.0	3.0						
91767	977.0	980.0	3.0	44	127	241	20	38	29
91768	980.0	985.0	2.0	66	119	58	40	9	12
91769	985.0	988.0	3.0	52	93	97	33	14	14
91770	988.0	991.0	2.0	58	98	78	53	13	19
91771	991.0	993.0	2.0	58	80	133	35	34	141
91772	993.0	996.0	3.0						
91773	996.0	998.0	2.0	39	192	466	23	122	130
91774	998.0	1000.6	2.6	22	60	181	16	94	81
91775	1000.6	1004.0	3.4	39	71	100	23	18	15
91776	1004.0	1007.0	3.0	49	86	104	27	8	15
91777	1007.0	1010.0	3.0	46	79	65	20	15	10
91778	1010.0	1013.0	3.0	49	90	62	21	16	13

SAMPLE NO.	FROM FT	TO FT	WIDTH FT	Co PPM	Ni PPM	Cr PPM	Cu PPM	Sr PPM	V PPM
91779	1013.0	1016.0	3.0	44	80	85	20	18	14
91780	1016.0	1020.0	4.0	53	100	67	32	8	10
91781	1020.0	1023.0	3.0	46	88	89	28	23	11
91782	1023.0	1026.0	3.0	42	81	114	32	26	17
91783	1026.0	1029.0	3.0	56	106	64	34	19	10
91784	1029.0	1033.0	4.0	57	106	64	31	24	14
91785	1052.0	1055.0	3.0	53	163	226	116	43	29
91786	1055.0	1058.0	3.0	62	363	254	48	31	40
91787	1058.0	1061.0	3.0	56	141	100	44	26	17
91788	1061.0	1063.0	2.0	61	152	97	43	35	24
91789	1063.0	1066.0	3.0	56	122	119	32	22	18
91790	1066.0	1070.0	3.0	54	105	76	37	31	32
91791	1070.0	1073.0	3.0	57	110	77	27	44	26
91792	1073.0	1076.0	3.0	63	116	48	38	36	44
91793	1076.0	1079.0	3.0	67	126	68	37	34	38
91794	1079.0	1082.0	3.0	52	102	77	30	33	12
91795	1082.0	1085.0	3.0	51	96	70	35	30	12
91796	1085.0	1088.0	3.0	51	106	78	29	42	15
91797	1088.0	1091.0	3.0	53	113	96	23	33	16
91798	1091.0	1094.0	3.0	41	83	83	46	61	23
91799	1094.0	1098.5	4.5	52	99	73	50	35	14
91800	1098.5	1102.0	3.5	53	151	107	85	79	10
91801	1102.0	1105.0	3.0	19	100	74	47	126	55
91802	1105.0	1108.0	3.0	27	138	119	99	125	333
91803	1108.0	1111.0	3.0	24	90	74	47	746	96
91804	1111.0	1114.0	3.0	21	110	83	72	143	89
91805	1114.0	1117.0	3.0	28	148	304	13	146	96
91806	1117.0	1120.0	3.0	19	122	79	62	152	89
91807	1120.0	1123.0	3.0	21	90	68	51	122	26
91808	1123.0	1126.0	3.0	22	122	80	78	151	47
91809	1126.0	1129.0	3.0	47	150	100	72	85	81
91810	1129.0	1132.0	3.0	42	135	94	104	73	61
91811	1132.0	1135.0	3.0	44	161	118	112	56	109
91812	1135.0	1138.0	3.0	49	149	129	118	79	101
91813	1138.0	1141.0	3.0	51	163	154	99	85	77
91814	1141.0	1143.0	2.0	43	113	139	53	83	39
91815	1143.0	1147.0	4.0	42	140	137	89	76	76
91816	1147.0	1151.0	4.0	50	145	164	130	106	61
91817	1151.0	1154.0	3.0	43	99	77	58	59	22
91818	1154.0	1157.0	3.0	29	86	89	59	98	47
91819	1157.0	1160.0	3.0	22	62	80	18	93	12
91820	1160.0	1163.0	3.0	85	172	76	44	93	45
91821	1163.0	1166.0	3.0	39	121	119	46	80	16
91822	1166.0	1169.0	3.0	73	210	203	107	113	77
91823	1214.5	1218.0	2.5	41	105	83	107	78	76
91824	1243.5	1245.5	2.0	84	199	119	111	96	52
91825	1248.5	1251.0	2.5	17	59	131	92	91	43
91826	1251.0	1253.0	2.0	50	101	67	114	101	47
91827	1253.0	1255.0	2.0	84	143	64	109	59	68

END OF DRILL HOLE 00-2

Appendix II

DIAMOND DRILL SECTIONS



NOBLE METAL GROUP INCORPORATED

CARIBOO MINERAL PROPERTY
Keithley Creek, B.C., Cariboo M.D.

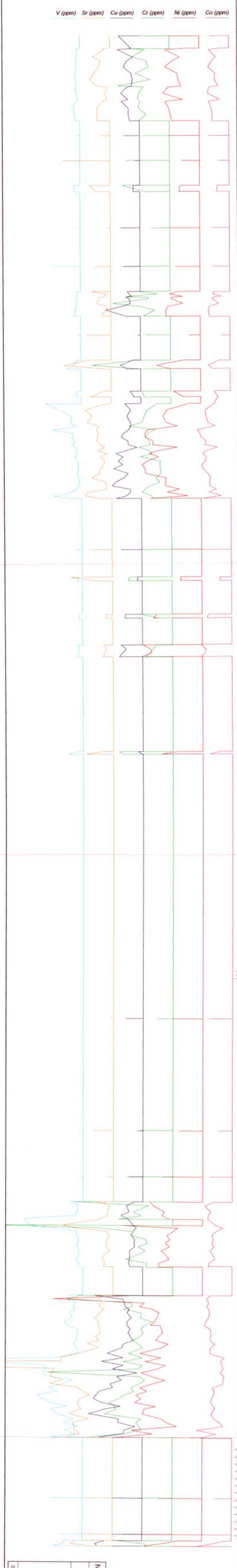
DIAMOND DRILL HOLE DDH 00-1
Geology and Selected Elements

Date: October 2001 | Scale: 1:400 | APPENDIX 2

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

26,659

DDH 00-2
393.3m



-10.4m	Quartzite	fine to medium grained	light grey
-13.1m	Argillite	fine grained	black
-18.0m	Quartzite	fine to medium grained	light grey
-25.0m	Greywacke	fine grained	dark grey
-59.7m	Phyllite		grey to black
-61.3m	Quartzite	fine to coarse grained	light to dark grey
-70.7m	Diorite	fine to medium grained	light grey
-73.6m	Limestone		light green
-73.9m	Quartzite	fine grained	dark grey
-75.9m	Phyllite	fine grained	grey-green to black
-83.1m	Quartzite	fine to coarse grained	light grey
-93.3m	Limestone	fine grained	light to dark green
-94.8m	Phyllite	fine grained	grey to black
-95.1m	Quartzite	fine grained	dark grey
-99.7m	Phyllite	very fine grained	dark greenish-black
-101.0m	Chert		dark greenish-black
-101.7m	Quartzite	fine grained	light grey
-102.2m	Greywacke		dark grey to black
-107.3m	Phyllite and interbedded quartzite		finely disseminated
-113.4m	Greywacke	fine to medium grained	dark grey
-114.3m	Phyllite	very fine grained	grey to black
-119.8m	Greywacke	fine to medium grained	dark grey
-120.8m	Phyllite	very fine grained	black
-123.6m	Greywacke	medium grained	dark grey
-125.9m	Phyllite	very fine grained	black
-126.6m	Greywacke	fine to medium grained	light to dark grey
-149.5m	Quartzite	coarse grained	light grey
-151.8m	Greywacke interbedded phyllite		light to dark grey
-161.7m	Phyllite or mudstone	fine grained	dark grey to black
-165.5m	Greywacke	fine to coarse grained	light grey
-178.0m	Phyllite or mudstone	very fine grained	grey to black
-182.6m	Greywacke	fine to medium grained	light to dark grey
-188.4m	Quartz vein structure		yellow-green matrix
-189.3m	Greywacke	fine to medium grained	dull grey to dark grey
-192.6m	Mudstone	very fined grained	dark grey to black
-197.7m	Quartz wacke	fine to very coarse grained	light to dark grey
-240.6m	Fault gouge		
-243.8m	Phyllite	fine grained	grey to black
-246.9m	Quartz wacke	fine to medium grained	grey
-253.0m	Mudstone	very fine grained	grey to black
-261.9m	Greywacke	fine to medium grained	dull grey
-291.7m	Phyllite-mudstone	very fine grained	grey to black
-302.1m	Limy sediments		yellow-green to black
-305.0m	Greywacke	fine to medium grained	light to dark grey
-320.6m	Light greywackes and black phyllites	fine to very fine grained	
-334.8m	Graphitic schist	hard to soft	black and white (zebra)
-356.5m	Fault shatter zone, mixture of gouge		
-380.5m	Graphitic schist		
-382.5m	Greywacke		
-393.3m			

NOBLE METAL GROUP INCORPORATED

CARIBOO MINERAL PROPERTY
Keithley Creek, B.C., Cariboo M.D.

DIAMOND DRILL HOLE DDH 00-2
Geology and Selected Elements

Date: October 2001 | Scale: 1:400 | APPENDIX 2

Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541

TO:W.G.T. CONSULTANTS
410 - 455 Granville Street
Vancouver, B.C.
V6C 1T1

Attn: Bill Timmins

FILE:43364

DATE: Oct.13, 2000

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91551	<0.5	1.22	31	<1	17	48	<1	0.21	2	53	26	101	4.98	0.27	24	0.67	206	4	0.01	108	0.024	24	7	17	<1	<0.01	<1	5	12	99
91552	<0.5	1.08	5	<1	17	38	<1	1.04	1	37	83	35	3.59	0.21	24	0.75	501	2	0.02	65	0.148	14	5	46	<1	<0.01	<1	8	6	54
91553	<0.5	1.41	2	<1	20	30	<1	0.97	1	48	40	36	4.46	0.13	21	1.22	739	1	0.01	84	0.040	32	4	40	<1	<0.01	<1	8	3	73
91554	<0.5	0.81	12	<1	19	22	<1	0.51	<1	35	36	35	3.13	0.11	20	0.64	342	2	0.01	63	0.066	16	3	27	<1	<0.01	<1	5	2	39
91555	<0.5	1.86	15	<1	19	63	<1	0.38	2	59	79	51	5.78	0.30	27	1.26	505	2	0.02	109	0.031	30	6	24	<1	<0.01	<1	9	2	72
91556	<0.5	2.09	10	<1	25	68	<1	0.24	2	54	124	37	5.30	0.32	30	1.36	458	2	0.02	101	0.029	14	5	18	<1	<0.01	<1	14	1	65
91557	<0.5	0.71	6	<1	21	41	<1	1.73	<1	25	144	18	2.45	0.22	21	0.41	673	1	0.03	42	0.018	11	3	84	<1	<0.01	<1	5	2	25
91558	<0.5	2.14	<1	<1	21	77	<1	0.23	2	57	97	45	5.94	0.35	29	1.33	456	1	0.02	103	0.034	13	5	15	<1	<0.01	<1	11	1	71
91559	<0.5	1.81	<1	<1	11	63	<1	0.18	1	45	119	35	4.39	0.28	28	1.16	395	2	0.02	87	0.028	14	4	11	<1	<0.01	<1	9	<1	56
91560	<0.5	1.61	<1	<1	15	54	<1	0.57	<1	33	133	27	3.34	0.28	31	0.87	360	1	0.02	61	0.032	19	4	23	<1	0.10	<1	14	3	41
91561	<0.5	2.45	7	<1	21	42	<1	0.60	2	55	85	38	5.31	0.20	50	1.42	688	1	0.02	103	0.051	23	5	24	<1	0.01	<1	16	<1	65
91562	<0.5	1.73	<1	<1	21	62	<1	0.91	<1	30	299	16	3.13	0.32	36	0.88	492	2	0.04	57	0.037	11	4	33	<1	<0.01	<1	24	2	39
91563	<0.5	2.54	<1	<1	21	60	<1	1.26	2	54	128	41	5.72	0.33	51	1.48	841	2	0.02	99	0.047	14	5	36	<1	<0.01	<1	29	<1	65
91564	<0.5	1.79	<1	<1	22	34	<1	1.65	2	52	63	53	5.16	0.17	60	1.24	830	1	0.02	102	0.039	39	4	47	<1	<0.01	<1	10	<1	64
91565	<0.5	2.19	<1	<1	23	39	<1	1.83	2	64	134	99	6.23	0.19	61	1.58	921	2	0.02	128	0.019	115	5	59	<1	<0.01	<1	25	<1	191
91566	<0.5	2.58	<1	<1	23	74	<1	1.34	2	58	139	48	5.96	0.39	50	1.67	931	2	0.03	109	0.042	26	6	45	<1	<0.01	<1	20	2	67
91567	<0.5	2.43	<1	<1	22	71	<1	0.52	2	65	103	55	6.93	0.35	67	1.57	647	2	0.02	126	0.038	30	6	20	<1	<0.01	<1	15	<1	79
91568	<0.5	1.87	<1	<1	21	60	<1	0.85	1	45	89	28	4.35	0.29	56	1.16	587	2	0.02	83	0.034	10	3	34	<1	<0.01	<1	12	1	54
91569	<0.5	1.74	6	<1	19	55	<1	1.63	2	58	158	58	5.30	0.27	64	0.94	731	2	0.02	110	0.019	15	5	58	<1	<0.01	<1	20	1	45
91570	<0.5	1.15	<1	<1	16	25	<1	1.22	<1	25	90	23	2.42	0.13	39	0.66	537	<1	0.02	43	0.020	22	3	40	<1	<0.01	<1	13	2	35

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Attn: Bill Timmins

FILE:43364

DATE: Oct.13, 2000

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91571	<0.5	0.73	<1	<1	20	21	<1	3.95	<1	18	203	15	1.70	0.15	27	0.33	1050	1	0.03	30	0.013	26	3	138	<1	<0.01	<1	11	<1	19
91572	<0.5	2.35	3	<1	22	46	<1	0.66	2	53	71	28	5.23	0.19	54	1.42	577	1	0.02	94	0.047	17	5	27	<1	0.01	<1	15	<1	73
91573	<0.5	5.49	7	<1	24	35	2	5.74	3	109	203	96	11.36	0.04	45	4.77	1800	3	0.02	185	0.133	19	11	218	<1	0.52	<1	226	4	66
91574	<0.5	5.67	10	<1	23	31	2	5.18	3	109	219	91	11.50	0.03	43	4.98	1740	3	0.02	183	0.133	20	10	237	<1	0.47	<1	225	2	65
91575	<0.5	5.52	11	<1	24	33	<1	5.22	3	110	178	106	11.56	0.03	46	4.71	1890	3	0.02	176	0.137	16	10	222	<1	0.48	<1	224	4	66
91576	<0.5	4.46	7	<1	25	66	1	4.90	3	88	141	87	9.64	0.07	43	3.48	1700	3	0.02	145	0.116	15	8	201	<1	0.57	<1	179	1	61
91577	<0.5	1.71	<1	<1	19	70	<1	0.25	2	56	39	55	5.29	0.33	69	1.11	318	<1	0.02	111	0.035	14	3	9	<1	0.11	<1	8	<1	66
91578	<0.5	1.67	<1	<1	21	52	<1	1.01	2	51	41	51	4.92	0.26	79	0.99	451	1	0.02	99	0.048	15	4	32	<1	0.08	<1	8	<1	65
91579	<0.5	2.06	<1	<1	19	38	<1	0.23	2	59	43	39	5.40	0.15	66	1.31	453	1	0.01	111	0.043	17	5	9	<1	0.01	<1	12	<1	75
91580	<0.5	2.28	<1	<1	18	57	<1	0.43	2	58	83	42	5.62	0.27	64	1.33	449	2	0.02	108	0.044	53	4	13	<1	0.06	<1	14	<1	82
91581	<0.5	2.43	<1	<1	21	42	<1	0.45	2	66	58	41	7.10	0.16	65	1.61	573	1	0.01	122	0.046	21	5	13	<1	0.08	<1	16	<1	81
91582	<0.5	2.33	<1	<1	20	41	<1	0.47	2	70	55	43	7.31	0.16	69	1.48	604	1	0.01	129	0.056	18	4	15	<1	<0.01	<1	16	<1	80
91583	<0.5	2.78	<1	<1	24	56	<1	1.16	2	74	104	59	8.08	0.27	80	1.70	840	2	0.02	140	0.050	38	5	41	<1	<0.01	<1	23	<1	94
91584	<0.5	2.46	<1	<1	20	52	<1	0.39	2	64	51	43	6.84	0.24	85	1.46	572	2	0.02	119	0.045	28	4	14	<1	<0.01	<1	14	<1	81
91585	<0.5	1.56	<1	<1	21	32	<1	1.12	1	50	48	51	4.07	0.14	55	0.90	773	1	0.02	82	0.031	16	3	28	<1	0.01	<1	9	<1	46
91586	<0.5	1.56	<1	<1	19	40	<1	2.12	1	35	82	18	3.48	0.19	43	0.87	1280	<1	0.02	63	0.023	20	3	59	<1	0.02	<1	11	<1	42
91587	<0.5	2.91	<1	<1	18	52	<1	0.21	2	59	73	38	6.44	0.21	52	1.76	590	1	0.02	108	0.048	11	4	9	<1	0.01	<1	18	<1	91
91587-R	<0.5	2.01	<1	<1	17	54	<1	0.42	1	52	88	47	5.04	0.26	59	1.26	549	2	0.02	103	0.032	29	4	17	<1	<0.01	<1	12	<1	65
STD	1.9	5.63	109	<1	23	62	3	1.91	4	52	124	122	5.82	0.19	42	2.16	1060	7	0.50	254	0.047	142	45	87	<1	0.19	<1	134	<1	182
91588	<0.5	2.84	<1	<1	21	68	<1	0.41	2	61	73	46	6.34	0.31	73	1.67	561	2	0.03	116	0.046	16	5	19	<1	0.01	<1	19	<1	87

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Vancouver, B.C.
V6C 1T1

FILE:43364

DATE: Oct.13, 2000

Attn: Bill Timmins

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91589	<0.5	2.86	<1	<1	25	61	<1	0.99	2	54	113	59	5.79	0.29	77	1.57	737	2	0.03	103	0.048	29	5	39	<1	0.01	<1	19	<1	72
91590	<0.5	2.68	<1	<1	22	49	<1	1.07	2	55	76	45	5.77	0.21	61	1.71	906	1	0.02	105	0.045	31	4	45	<1	0.01	<1	18	<1	74
91591	<0.5	3.28	<1	<1	25	50	<1	1.15	2	68	59	68	7.72	0.19	81	2.22	731	2	0.02	128	0.057	41	4	56	<1	0.01	<1	20	<1	91
91592	<0.5	5.70	80	<1	22	42	<1	4.45	3	85	892	71	9.22	0.09	53	5.50	1850	3	0.01	362	0.074	47	12	215	<1	0.01	<1	139	<1	76
91593	<0.5	3.57	<1	<1	24	58	<1	0.74	2	69	84	78	8.00	0.22	69	2.67	693	2	0.02	131	0.057	15	4	34	<1	0.01	<1	27	<1	81
91594	<0.5	2.17	<1	<1	23	110	<1	0.24	1	37	341	41	3.79	0.54	47	0.98	283	2	0.03	70	0.036	12	5	17	<1	<0.01	<1	13	<1	39
91595	<0.5	1.56	<1	<1	23	36	<1	0.76	1	34	243	27	3.75	0.18	17	0.89	405	2	0.01	62	0.028	9	4	31	<1	<0.01	<1	12	<1	42
91596	<0.5	1.88	2	<1	20	53	<1	2.31	1	32	131	9	3.30	0.25	42	1.09	982	2	0.03	59	0.030	14	4	97	<1	0.01	<1	19	<1	42
91597	<0.5	1.67	<1	<1	19	44	<1	1.93	<1	27	199	2	3.03	0.17	27	0.92	727	2	0.03	50	0.014	7	3	50	<1	<0.01	<1	21	<1	38
91598	<0.5	1.01	6	<1	20	44	<1	1.73	<1	22	223	17	2.03	0.17	27	0.42	537	<1	0.02	41	0.015	44	3	62	<1	0.01	<1	10	<1	26
91599	<0.5	2.99	6	<1	24	53	<1	1.07	2	64	100	74	6.30	0.24	71	1.67	794	2	0.02	125	0.045	48	4	43	<1	0.08	<1	20	<1	81
91600	<0.5	2.60	<1	<1	24	66	<1	1.08	2	50	139	43	5.08	0.31	50	1.32	946	2	0.03	95	0.036	19	5	38	<1	0.11	<1	24	<1	66
91601	<0.5	2.42	<1	<1	21	38	<1	1.79	2	53	111	66	5.60	0.17	67	1.38	1160	2	0.02	103	0.072	32	5	57	<1	0.05	<1	17	<1	67
91602	<0.5	0.44	1	<1	21	41	<1	1.44	<1	10	93	3	0.93	0.14	27	0.17	412	<1	0.02	18	0.018	14	2	50	<1	<0.01	<1	5	<1	13
91603	<0.5	3.03	<1	<1	23	27	2	7.12	2	52	133	23	5.68	0.13	27	2.29	2060	1	0.02	70	0.024	26	4	143	<1	0.23	<1	152	<1	39
91604	<0.5	2.96	32	<1	20	66	<1	4.64	2	64	1380	54	5.22	0.00	20	5.17	1520	1	0.01	461	0.044	8	12	341	<1	0.03	<1	107	<1	25
91605	<0.5	2.82	39	<1	15	15	<1	3.24	1	63	1280	69	5.01	0.00	19	5.47	1200	<1	0.01	379	0.037	9	12	260	<1	0.01	<1	104	<1	22
91606	<0.5	3.53	90	<1	18	23	1	3.68	2	75	1230	44	6.12	0.00	20	6.04	1500	1	0.01	416	0.041	14	12	279	<1	0.01	<1	103	<1	43
91626	<0.5	2.67	52	<1	16	37	2	5.05	2	69	1200	72	6.18	0.15	45	3.91	2610	1	0.01	378	0.037	11	11	136	<1	<0.01	<1	75	<1	19
91627	<0.5	1.83	24	<1	18	43	<1	3.06	1	43	126	75	4.37	0.20	42	2.55	1420	7	0.01	114	0.080	20	4	65	<1	<0.01	<1	64	<1	25

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91628	<0.5	1.33	36	<1	20	32	<1	2.39	1	43	109	108	4.26	0.17	37	1.35	987	8	0.02	135	0.077	27	3	53	<1	<0.01	<1	67	<1	21
91629	<0.5	1.46	30	<1	21	42	<1	2.60	1	34	234	88	3.58	0.22	33	1.31	925	17	0.02	151	0.129	23	4	58	<1	<0.01	<1	164	<1	28
91630	<0.5	1.04	44	<1	17	27	<1	2.71	1	34	98	52	3.45	0.15	32	1.15	928	15	0.01	134	0.104	38	4	60	<1	<0.01	<1	98	2	20
91631	<0.5	0.90	45	<1	19	30	<1	3.14	1	39	106	84	3.81	0.17	29	1.39	1190	14	0.01	156	0.120	41	3	67	<1	<0.01	<1	82	1	16
91632	<0.5	1.03	28	<1	21	36	<1	3.03	1	39	168	118	3.67	0.21	25	1.25	1050	13	0.02	140	0.126	33	4	64	<1	<0.01	<1	93	<1	14
91633	<0.5	0.55	12	<1	19	17	<1	4.48	1	37	50	98	3.65	0.09	21	2.44	2000	8	0.01	101	0.103	10	3	89	<1	<0.01	<1	27	<1	16
91634	<0.5	0.48	26	<1	18	25	<1	4.10	<1	24	86	114	2.27	0.15	19	1.11	1140	16	0.01	121	0.106	11	3	94	<1	<0.01	<1	85	<1	29
91635	<0.5	0.60	53	<1	19	41	<1	3.14	1	36	77	105	3.67	0.20	19	1.33	831	15	0.01	141	0.091	21	3	68	<1	<0.01	<1	77	<1	30
91636	<0.5	0.34	75	<1	18	53	<1	1.03	5	24	113	78	2.44	0.19	16	0.28	188	37	0.01	165	0.084	19	3	25	<1	<0.01	<1	166	<1	360
91637	<0.5	1.72	33	<1	18	37	<1	3.23	2	54	85	90	5.80	0.12	17	2.73	1000	7	0.02	95	0.047	16	6	61	<1	<0.01	<1	101	<1	88
91638	<0.5	1.16	14	<1	17	43	2	1.98	2	40	92	42	3.75	0.18	22	1.56	595	6	0.01	112	0.037	11	3	42	<1	<0.01	<1	34	<1	75
91639	<0.5	1.04	<1	<1	17	39	<1	1.45	<1	34	104	30	3.08	0.21	33	0.83	527	1	0.01	67	0.036	8	4	32	<1	<0.01	<1	9	<1	25
91640	<0.5	1.62	<1	<1	17	46	1	3.73	1	51	70	41	5.06	0.21	38	1.21	1120	1	0.01	93	0.042	17	3	89	<1	<0.01	<1	41	<1	21
91641	<0.5	1.85	8	<1	16	46	<1	4.32	2	61	228	63	5.82	0.18	34	3.24	1410	1	0.01	222	0.049	8	5	97	<1	<0.01	<1	35	<1	17
91642	<0.5	2.58	24	<1	16	27	1	5.23	2	69	332	64	6.47	0.08	30	4.03	1660	1	0.01	300	0.051	8	8	132	<1	<0.01	<1	63	<1	31
91643	<0.5	2.96	22	<1	17	48	<1	2.59	2	60	347	42	5.60	0.20	44	3.15	908	2	0.01	213	0.054	30	7	69	<1	<0.01	<1	58	<1	88
91644	<0.5	2.47	<1	<1	16	30	<1	1.81	2	54	114	75	5.27	0.09	45	2.21	826	2	0.01	130	0.046	19	4	49	<1	<0.01	<1	35	<1	65
STD	1.7	5.28	102	<1	21	60	3	1.91	4	52	117	109	5.74	0.18	39	2.04	945	6	0.47	243	0.046	135	46	87	<1	0.17	<1	130	<1	177
91632-R	<0.5	0.89	27	<1	15	30	<1	2.95	1	37	143	102	3.40	0.17	23	1.13	902	12	0.01	125	0.114	29	4	60	<1	<0.01	<1	79	<1	14

0.500 Gram sample is digested with Aqua Regia at 95 C for one hour and bulked to 10 ml with distilled water.
Partial dissolution for Al, B, Ba, Ca, Cr, Fe, K, La, Mg, Mn, Na, P, Sr, Ti, and W.

Certified by:

Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541

TO:**W.G.T. CONSULTANTS**
410 - 455 Granville Street
Vancouver, B.C.
V6C 1T1

FILE:43410

DATE: November 02, 2000

Attn: Bill Timmins

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91607	<0.5	1.87	14	<1	13	83	15	2.58	<1	35	78	643	3.46	0.10	30	1.66	709	1	0.01	51	0.03	64	4	107	<1	0.01	<1	40	<1	38
91608	<0.5	1.40	<1	<1	14	55	<1	0.60	<1	29	94	167	2.82	0.16	31	0.93	365	1	0.02	43	0.03	819	3	25	10	0.01	<1	11	<1	33
91609	<0.5	1.98	<1	<1	15	49	1	0.36	1	48	58	92	4.58	0.25	66	1.20	649	1	0.01	77	0.03	27	3	15	47	0.03	<1	10	<1	53
91610	<0.5	2.43	2	<1	17	61	1	1.32	1	48	52	33	4.90	0.27	53	1.49	1560	1	0.01	86	0.05	124	3	47	11	0.09	<1	20	<1	60
91611	<0.5	2.46	<1	<1	16	57	<1	1.23	1	46	49	38	4.67	0.27	55	1.65	1490	1	0.01	82	0.05	27	3	43	12	0.07	<1	16	<1	63
91612	<0.5	1.87	9	<1	17	41	<1	3.14	<1	43	[illegible]	50	3.59	0.13	23	2.56	961	<1	0.02	215	0.03	118	4	116	<1	0.03	<1	52	<1	31
91613	<0.5	2.75	20	<1	16	26	2	7.30	2	71	868	47	6.00	0.01	20	6.26	2420	1	<0.01	481	0.04	29	9	349	<1	0.01	<1	91	<1	30
91614	<0.5	1.40	<1	<1	15	22	<1	0.65	<1	30	52	22	3.07	0.09	32	0.85	493	<1	0.01	46	0.03	195	2	23	7	<0.01	<1	11	<1	36
91615	<0.5	2.74	6	<1	14	37	<1	3.25	1	52	162	30	5.25	0.06	32	2.55	905	2	0.01	101	0.06	24	5	111	<1	<0.01	<1	56	<1	49
91616	<0.5	0.64	2	<1	12	18	<1	2.30	<1	17	102	24	1.45	0.08	27	0.34	1040	<1	0.01	28	0.05	143	2	60	<1	<0.01	<1	5	<1	14
91617	<0.5	1.81	<1	<1	15	45	<1	0.79	<1	41	78	32	4.16	0.13	31	1.11	528	1	0.01	64	0.04	18	3	23	19	<0.01	<1	12	<1	44
91618	<0.5	1.79	<1	<1	15	32	<1	1.04	<1	41	63	30	3.97	0.15	43	1.02	541	1	0.01	63	0.03	46	1	26	16	<0.01	<1	12	<1	38
91619	<0.5	1.69	<1	<1	15	44	<1	0.34	1	56	47	60	5.37	0.20	48	1.13	1030	2	0.01	101	0.04	26	4	10	69	<0.01	<1	8	<1	32
91620	<0.5	1.93	34	<1	17	30	<1	1.64	1	64	198	81	5.97	0.12	41	2.25	2700	<1	0.01	222	0.04	24	4	44	49	<0.01	<1	16	<1	26
91621	<0.5	2.24	2	<1	19	37	2	0.55	2	67	42	64	6.88	0.15	52	1.64	1120	1	0.01	129	0.03	13	2	12	62	<0.01	<1	11	<1	22
91622	<0.5	1.89	<1	<1	17	41	2	1.84	1	48	86	46	4.52	0.19	36	1.40	1500	1	0.01	85	0.03	36	4	43	26	<0.01	<1	13	<1	17
91623	<0.5	2.69	<1	<1	19	25	1	2.94	2	63	95	50	6.29	0.08	31	2.57	1480	1	0.01	106	0.07	15	4	68	<1	<0.01	<1	47	<1	27
91624	<0.5	2.13	<1	<1	17	31	<1	1.63	1	48	100	45	4.80	0.13	36	1.67	879	1	0.01	83	0.08	25	4	38	9	<0.01	<1	21	<1	18
91646	<0.5	3.97	16	<1	18	27	1	4.86	2	67	252	44	6.83	0.06	33	3.56	1710	2	0.01	142	0.08	22	6	150	<1	0.01	<1	80	<1	70
91647	<0.5	1.58	<1	<1	14	46	<1	1.54	1	44	102	42	4.34	0.17	19	1.24	822	<1	0.01	70	0.03	27	2	51	<1	<0.01	<1	16	<1	41
91648	<0.5	1.55	<1	<1	15	47	<1	1.18	<1	37	89	26	3.80	0.14	18	1.13	615	1	0.01	59	0.02	19	4	43	<1	<0.01	<1	13	<1	45
91649	<0.5	2.30	<1	<1	17	68	2	1.63	1	55	84	51	5.40	0.19	23	1.62	725	2	0.01	93	0.03	21	5	50	<1	<0.01	<1	18	<1	51
91650	<0.5	3.77	17	<1	19	34	2	5.07	2	74	280	32	7.21	0.05	29	3.83	1670	2	0.01	149	0.09	18	6	187	<1	0.01	<1	91	<1	51
91676	<0.5	2.37	66	<1	16	21	2	5.24	1	70	[illegible]	112	5.51	0.02	17	6.04	1360	<1	<0.01	531	0.04	12	8	173	<1	<0.01	<1	69	<1	29
91677	<0.5	0.74	<1	<1	16	31	<1	0.57	<1	18	119	22	1.54	0.12	24	0.56	242	<1	0.01	35	0.02	7	1	14	12	<0.01	<1	7	<1	13

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FILE:43410

DATE: November 02, 2000

Attn: Bill Timmins

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91678	<0.5	2.30	<1	<1	17	34	1	1.89	1	48	145	40	4.79	0.15	42	1.75	803	1	0.01	103	0.04	24	3	48	18	<0.01	<1	30	<1	49
91679	<0.5	1.31	<1	<1	17	33	<1	1.72	<1	32	88	25	3.05	0.18	39	0.90	602	1	0.01	56	0.03	11	2	36	18	<0.01	<1	10	<1	16
91680	<0.5	0.68	<1	<1	15	40	<1	1.32	<1	16	221	11	1.46	0.15	49	0.36	311	<1	0.01	30	0.02	18	2	28	3	<0.01	<1	9	<1	9
91681	<0.5	2.33	<1	<1	16	35	1	2.22	1	51	84	35	5.14	0.19	38	1.78	765	1	0.01	77	0.04	19	3	44	10	<0.01	<1	36	<1	33
91682	<0.5	1.12	<1	<1	16	38	<1	0.58	<1	40	65	31	3.43	0.21	51	0.65	287	1	0.01	66	0.03	14	2	14	33	<0.01	<1	7	<1	18
91683	<0.5	2.11	<1	<1	18	28	<1	2.84	1	40	89	89	4.13	0.14	35	1.91	1250	1	0.01	60	0.03	14	3	62	<1	<0.01	<1	32	<1	24
91684	<0.5	1.53	<1	<1	16	32	<1	2.21	<1	30	93	15	3.07	0.20	37	0.93	728	1	0.01	45	0.02	17	3	55	4	<0.01	<1	10	<1	18
91685	<0.5	2.62	4	<1	18	27	<1	3.16	1	50	98	19	4.89	0.18	28	1.95	876	1	0.01	68	0.03	9	5	42	<1	0.09	<1	68	<1	34
91686	<0.5	1.40	3	<1	19	43	<1	0.12	1	47	79	50	4.20	0.20	14	0.86	334	2	0.01	78	0.02	23	3	5	29	<0.01	<1	9	<1	60
91687	<0.5	0.75	4	<1	17	29	<1	0.33	<1	24	98	20	2.24	0.13	20	0.55	281	<1	0.02	38	0.03	14	2	15	18	<0.01	<1	8	<1	24
91688	<0.5	1.38	21	<1	18	44	1	0.26	1	49	61	53	4.81	0.22	17	0.87	351	2	0.01	83	0.03	24	3	14	54	<0.01	<1	6	<1	64
91689	<0.5	0.90	<1	<1	16	41	<1	0.97	<1	32	91	16	3.23	0.22	19	0.75	673	<1	0.03	48	0.03	10	2	41	7	<0.01	<1	8	<1	41
91624R	<0.5	2.15	<1	<1	18	29	<1	1.61	1	47	101	43	4.75	0.13	38	1.69	889	1	0.01	82	0.08	25	2	38	14	<0.01	<1	21	<1	18
STD	1.7	4.71	104	<1	21	53	4	1.81	3	49	104	97	5.45	0.17	27	1.84	777	6	0.40	215	0.05	113	46	75	<1	0.12	13	123	<1	149
91690	<0.5	1.20	<1	<1	18	37	<1	0.52	<1	41	56	30	4.04	0.16	16	0.90	464	<1	0.02	65	0.05	19	3	22	17	<0.01	<1	8	<1	56
91691	<0.5	1.52	<1	<1	18	50	<1	0.78	1	50	51	39	4.90	0.24	18	1.15	634	1	0.01	84	0.04	14	4	28	22	<0.01	<1	9	<1	63
91692	<0.5	1.33	<1	<1	17	43	<1	1.10	<1	34	83	20	3.54	0.21	29	0.82	653	<1	0.02	54	0.03	14	2	38	14	<0.01	<1	10	<1	37
91693	<0.5	1.24	<1	<1	19	28	1	1.71	<1	35	47	17	3.36	0.13	26	0.81	866	<1	0.01	51	0.03	14	2	49	2	<0.01	<1	11	<1	40
91694	<0.5	0.97	2	<1	19	31	<1	0.73	<1	26	125	19	2.56	0.16	15	0.63	383	<1	0.02	45	0.07	34	2	31	5	<0.01	<1	7	<1	32
91695	<0.5	1.76	<1	<1	20	35	1	0.13	1	48	63	30	4.61	0.14	13	1.26	309	1	0.01	75	0.02	10	3	5	16	<0.01	<1	11	<1	60
91696	<0.5	1.69	4	<1	20	50	<1	0.31	1	52	74	45	5.25	0.24	17	1.12	422	1	0.01	88	0.04	17	2	12	42	<0.01	<1	8	<1	56
91697	<0.5	0.58	5	<1	16	20	<1	0.19	<1	23	77	28	2.07	0.10	9	0.32	182	1	0.01	40	0.02	25	2	7	20	<0.01	<1	4	<1	22
91698	<0.5	1.68	<1	<1	18	50	<1	0.46	1	49	72	44	4.82	0.24	18	1.15	523	1	0.01	83	0.05	14	2	16	25	<0.01	<1	9	<1	63
91699	<0.5	1.78	3	<1	17	32	1	0.88	1	43	76	27	4.38	0.13	21	1.19	660	<1	0.01	74	0.03	13	2	31	18	<0.01	<1	16	<1	56
91700	<0.5	1.68	4	<1	18	32	<1	0.95	<1	40	56	27	4.14	0.13	20	1.15	710	1	0.01	70	0.03	14	2	31	8	<0.01	<1	12	<1	50

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30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91701	<0.5	1.54	5	<1	19	49	<1	0.81	<1	42	75	24	3.99	0.22	21	0.94	565	1	0.02	67	0.03	15	3	31	5	<0.01	<1	10	<1	47
91702	<0.5	1.86	<1	<1	19	59	<1	0.68	1	49	67	39	4.99	0.30	20	1.15	538	1	0.01	80	0.04	18	3	23	14	<0.01	<1	10	<1	55
91703	<0.5	0.99	4	<1	19	60	<1	2.25	<1	26	107	12	2.40	0.28	24	0.68	759	<1	0.02	43	0.02	15	2	114	<1	0.04	<1	11	<1	28
91704	<0.5	1.17	2	<1	19	85	<1	0.79	<1	29	115	16	2.82	0.48	26	0.78	420	<1	0.02	47	0.02	33	2	50	<1	0.08	11	15	<1	35
91705	<0.5	1.19	3	<1	21	72	<1	0.56	<1	31	58	16	3.02	0.53	22	0.80	312	<1	0.01	50	0.03	23	2	35	12	0.09	14	14	<1	39
91706	<0.5	1.68	<1	<1	19	34	<1	0.23	1	44	46	47	4.02	0.15	20	1.01	310	1	0.01	75	0.04	22	2	7	26	0.02	<1	8	<1	56
91707	<0.5	1.43	<1	<1	19	27	<1	1.92	<1	37	75	31	3.96	0.14	20	0.88	1170	<1	0.01	55	0.08	11	2	45	<1	<0.01	<1	10	<1	36
91708	<0.5	1.89	2	<1	19	27	<1	0.78	1	41	33	27	4.19	0.12	23	1.18	590	<1	0.01	74	0.05	11	3	11	25	<0.01	<1	9	<1	54
91709	<0.5	0.92	<1	<1	16	20	<1	0.44	<1	22	108	21	2.08	0.09	18	0.56	258	<1	0.01	43	0.03	11	2	15	5	<0.01	<1	7	<1	31
91710	<0.5	1.52	<1	<1	16	18	<1	1.41	<1	40	53	35	3.76	0.09	18	0.94	990	<1	0.01	70	0.03	15	2	22	11	<0.01	<1	8	<1	45
91711	<0.5	1.74	4	<1	18	24	<1	0.56	1	43	55	27	4.51	0.10	24	1.19	510	1	0.01	70	0.04	12	2	27	8	<0.01	<1	11	<1	53
91712	<0.5	1.07	3	<1	17	39	<1	0.53	<1	27	140	24	2.63	0.20	29	0.61	431	1	0.02	42	0.04	73	2	33	6	<0.01	<1	8	<1	28
91713	<0.5	2.02	5	<1	19	24	1	2.21	1	43	111	43	3.97	0.10	19	1.67	669	1	0.02	60	0.03	10	4	39	<1	0.11	7	64	<1	29
91714	<0.5	2.34	8	<1	19	50	<1	0.19	1	49	73	45	5.03	0.23	39	1.26	422	1	0.01	77	0.05	15	4	10	16	<0.01	<1	12	<1	61
91715	<0.5	2.41	12	<1	19	38	2	0.22	1	52	38	83	5.31	0.12	43	1.37	462	2	0.01	83	0.06	14	2	11	21	<0.01	<1	12	<1	65
91716	<0.5	2.29	4	<1	20	47	2	0.47	1	49	66	34	5.21	0.21	28	1.38	590	1	0.01	83	0.05	13	3	23	12	<0.01	<1	15	<1	60
91717	<0.5	0.72	4	<1	17	28	<1.00	1.18	<1	19	60	8	1.82	0.14	22	0.39	535	<1	0.01	27	0.03	11	1	59	<1	0.01	<1	7	<1	23
91718	<0.5	1.21	2	<1	16	56	<1	1.03	<1	26	85	20	2.43	0.25	30	0.66	418	1	0.02	41	0.03	11	2	57	<1	0.04	<1	10	<1	28
91719	<0.5	2.90	14	<1	19	41	<1	3.62	1	53	190	50	5.39	0.18	35	2.18	1290	1	0.01	106	0.06	20	4	114	<1	0.19	36	70	<1	46
91720	<0.5	2.01	<1	<1	19	58	<1	0.52	1	43	74	32	4.43	0.21	24	1.25	468	<1	0.01	72	0.03	20	2	16	24	0.14	34	17	<1	56
91721	<0.5	2.05	2	<1	18	55	<1	0.56	1	39	71	26	4.20	0.22	47	1.02	481	<1	0.01	66	0.05	16	2	19	23	0.08	10	11	<1	52
91722	<0.5	1.38	4	<1	19	22	<1	1.73	<1	30	64	16	2.91	0.09	27	0.79	789	<1	0.01	43	0.02	24	2	50	<1	0.03	<1	11	<1	33
91723	<0.5	1.29	<1	<1	17	38	<1	1.57	1	49	38	43	5.03	0.19	43	0.77	542	2	0.01	85	0.36	31	1	48	28	<0.01	<1	7	<1	43
91724	<0.5	1.17	<1	<1	17	28	1	0.31	1	51	28	62	4.83	0.12	31	0.83	359	1	0.01	86	0.03	35	2	14	50	<0.01	<1	5	<1	66
91725	<0.5	1.67	<1	<1	19	47	<1	0.36	1	51	52	70	5.26	0.21	50	0.98	386	2	0.01	86	0.03	19	4	14	59	<0.01	<1	7	<1	57

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30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91726	<0.5	1.68	<1	<1	18	23	2	0.44	<1	35	64	27	4.20	0.08	27	1.00	404	1	0.01	53	0.03	6	3	11	14	<0.01	<1	12	<1	49
91707R	<0.5	1.36	1	<1	16	26	<1	1.86	<1	36	72	30	3.83	0.13	20	0.84	1110	<1	0.01	53	0.07	10	2	43	<1	<0.01	<1	11	<1	34
STD	1.8	4.81	105	<1	20	58	3	1.82	3	51	104	102	5.59	0.18	28	1.87	789	6	0.42	219	0.05	112	48	77	<1	0.12	7	125	<1	156
90727	<0.5	2.55	2	<1	19	26	2	1.88	1	53	71	26	5.95	0.11	27	1.61	1120	<1	0.01	83	0.04	13	4	58	<1	0.01	<1	26	<1	73
90728	<0.5	2.05	14	<1	31	296	<1	0.03	<1	23	46	27	2.42	0.47	15	0.27	46	2	0.05	33	0.05	24	2	64	11	<0.01	<1	67	<1	55
91735	<0.5	1.77	<1	<1	17	18	4	1.51	<1	39	34	39	2.95	0.01	12	1.20	552	<1	0.01	29	0.05	5	2	12	16	0.41	117	86	11	32
91736	<0.5	2.73	3	<1	19	23	1	2.66	2	61	57	25	6.67	0.09	26	1.74	1420	1	0.01	82	0.05	15	4	64	<1	0.01	<1	52	<1	71
91737	<0.5	2.61	6	<1	19	35	2	1.79	1	59	65	34	5.99	0.15	34	1.62	1160	1	0.01	92	0.05	21	4	46	10	0.01	<1	22	<1	73
91738	<0.5	2.66	1	<1	19	27	<1	1.92	1	55	70	26	6.10	0.11	27	1.65	1150	1	0.01	85	0.04	12	4	59	<1	0.01	<1	27	<1	76
91739	<0.5	1.67	<1	<1	18	37	<1	1.05	<1	38	102	25	4.05	0.18	25	0.97	666	1	0.02	57	0.03	17	3	30	15	0.01	<1	14	<1	52

"R" Denotes duplicate sample analyzed.
0.500 Gram sample is digested with Aqua Regia at 95 C for one hour and bulked to 10 ml with distilled water.
Partial dissolution for Al, B, Ba, Ca, Cr, Fe, K, La, Mg, Mn, Na, P, Sr, Ti, and W.

Certified by:

Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541

TO:**W.G.T. CONSULTANTS**
410 - 455 Granville Street
Vancouver, B.C.
V6C 1T1

FILE:43464

DATE: November 20, 2000

Attn: Bill Timmins

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91729	<0.5	1.61	4	<1	24	54	<1	0.73	3	59	75	44	5.18	0.25	34	0.84	454	1	0.02	103	0.04	761	3	27	4	<0.01	<1	16	<1	628
91730	<0.5	1.75	<1	<1	25	72	<1	0.30	<1	61	27	56	4.99	0.34	60	0.83	332	7	0.02	130	0.03	28	4	17	27	<0.01	<1	8	<1	65
91731	<0.5	1.70	<1	<1	26	39	<1	0.38	<1	70	28	45	6.20	0.14	58	0.93	465	8	0.01	143	0.05	26	4	19	20	<0.01	<1	8	<1	72
91732	<0.5	1.65	<1	<1	25	67	<1	0.53	<1	68	26	67	5.75	0.32	67	0.80	391	5	0.02	136	0.03	40	4	27	23	<0.01	<1	7	<1	93
91733	<0.5	1.18	<1	<1	27	26	<1	0.80	<1	55	25	32	4.97	0.10	47	0.70	535	18	0.01	135	0.04	19	3	29	4	<0.01	<1	9	<1	58
91734	<0.5	1.85	1	<1	34	56	<1	0.22	<1	72	23	43	6.11	0.23	40	1.07	399	14	0.02	154	0.05	46	4	11	7	<0.01	<1	9	<1	81
91740	<0.5	2.75	3	<1	28	64	<1	1.38	<1	80	39	30	7.24	0.25	40	1.46	815	1	0.02	129	0.05	35	5	36	<1	0.01	<1	71	<1	82
91741	<0.5	2.48	6	<1	26	61	<1	0.91	<1	74	57	43	6.53	0.26	33	1.33	679	<1	0.02	136	0.06	25	5	31	2	<0.01	<1	20	<1	81
91742	<0.5	2.52	<1	<1	26	61	<1	1.03	<1	72	62	48	6.34	0.25	43	1.35	647	1	0.02	135	0.13	86	4	34	8	<0.01	<1	22	<1	90
91743	<0.5	2.23	5	<1	30	66	<1	0.84	<1	59	53	32	5.25	0.27	52	1.18	523	1	0.02	116	0.05	27	4	35	5	<0.01	<1	16	<1	59
91744	<0.5	2.10	61	<1	31	59	<1	0.62	<1	63	51	31	5.51	0.15	44	1.22	526	<1	0.02	117	0.04	43	4	27	5	<0.01	<1	21	<1	72
91745	<0.5	1.10	<1	<1	22	20	<1	0.47	<1	32	78	10	3.03	0.08	17	0.60	373	1	0.02	57	0.02	25	2	17	4	<0.01	<1	14	<1	43
91746	<0.5	1.65	2	<1	24	51	<1	0.73	<1	60	51	41	5.11	0.23	46	0.85	490	<1	0.02	108	0.04	41	4	33	8	<0.01	<1	11	<1	57
91747	<0.5	1.78	<1	<1	31	53	<1	0.61	<1	68	46	61	5.57	0.24	56	1.04	382	2	0.01	125	0.04	34	4	22	20	<0.01	<1	21	<1	67
91748	<0.5	2.06	<1	<1	24	80	<1	1.04	<1	73	74	50	5.80	0.28	56	1.23	487	<1	0.01	151	0.03	39	4	54	<1	<0.01	<1	15	<1	75
91749	<0.5	0.56	4	<1	23	34	<1	1.86	<1	27	101	10	2.19	0.16	38	0.43	738	1	0.03	51	0.02	20	3	100	<1	<0.01	<1	9	<1	27
91750	<0.5	0.94	2	<1	23	46	<1	0.96	<1	28	106	12	2.23	0.18	29	0.43	338	<1	0.03	51	0.02	27	2	44	<1	<0.01	<1	13	<1	31
91751	<0.5	1.52	<1	<1	22	59	<1	0.39	<1	56	73	41	4.55	0.25	27	0.76	352	2	0.02	110	0.03	27	5	17	13	<0.01	<1	8	<1	64
91752	<0.5	1.44	<1	<1	30	59	<1	0.30	<1	60	33	42	4.72	0.26	24	0.80	297	<1	0.01	119	0.05	20	3	17	18	<0.01	<1	8	<1	66
91753	<0.5	2.02	<1	<1	25	55	<1	0.49	<1	74	40	52	6.41	0.24	26	1.16	514	1	0.01	144	0.05	30	4	22	15	<0.01	<1	11	<1	96

Loring Laboratories Ltd.

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Vancouver, B.C.
V6C 1T1

FILE:43464

DATE: November 20, 2000

Attn: Bill Timmins

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91754	<0.5	1.87	<1	<1	28	50	<1	0.36	<1	63	46	39	5.27	0.22	29	1.06	334	<1	0.01	125	0.04	24	4	15	12	<0.01	<1	9	<1	69
91755	<0.5	1.97	<1	<1	28	55	<1	0.67	<1	65	55	49	5.83	0.25	29	0.94	439	<1	0.01	123	0.04	28	4	19	16	<0.01	<1	10	<1	76
91756	<0.5	2.09	<1	<1	31	54	<1	0.66	<1	75	66	56	6.50	0.23	28	1.17	454	1	0.01	147	0.06	29	4	24	8	<0.01	<1	13	<1	75
91757	<0.5	1.24	3	<1	29	39	<1	0.81	<1	32	129	12	2.60	0.20	29	0.64	329	<1	0.02	60	0.02	17	4	27	<1	0.01	<1	18	<1	33
91758	<0.5	2.19	8	<1	31	43	<1	2.22	<1	55	121	3	4.70	0.21	35	1.41	792	2	0.02	99	0.03	22	5	66	<1	<0.01	<1	35	<1	58
91759	<0.5	1.82	21	<1	29	42	<1	0.18	<1	57	39	42	4.57	0.22	65	1.07	788	<1	0.01	105	0.04	17	4	8	34	0.07	<1	7	<1	69
91760	<0.5	1.30	4	<1	22	58	<1	1.65	<1	33	78	14	2.58	0.33	49	0.55	621	2	0.01	57	0.04	20	4	51	6	0.01	<1	12	<1	38
91761	<0.5	1.31	<1	<1	24	44	<1	0.58	<1	55	111	34	4.71	0.20	44	0.78	372	2	0.01	96	0.03	32	5	16	20	0.02	<1	12	<1	45
91767	<0.5	1.94	6	<1	21	47	<1	2.22	<1	44	241	20	3.63	0.14	45	1.55	654	2	0.01	127	0.02	45	5	38	11	0.02	<1	29	<1	48
91768	<0.5	1.97	<1	<1	26	57	<1	0.22	<1	66	58	40	5.42	0.23	41	1.21	524	1	0.01	118	0.03	17	4	9	20	0.07	<1	12	<1	77
91769	<0.5	1.66	<1	<1	28	45	<1	0.63	<1	52	97	33	4.35	0.18	37	0.91	575	2	0.01	93	0.02	20	4	14	17	0.11	<1	14	<1	55
91770	<0.5	1.85	<1	<1	23	46	<1	0.64	<1	58	78	53	4.77	0.17	34	1.22	563	<1	0.01	98	0.03	21	5	13	12	0.15	<1	19	<1	48
91775	<0.5	1.43	<1	<1	28	46	<1	1.11	<1	39	100	23	3.27	0.22	31	0.79	497	2	0.02	71	0.03	20	4	20	11	0.05	<1	13	<1	46
91776	<0.5	1.53	<1	<1	31	51	<1	0.96	<1	49	104	27	4.04	0.24	47	0.83	538	<1	0.02	86	0.05	25	4	18	8	0.05	<1	15	<1	56
91777	<0.5	1.41	<1	<1	30	30	<1	0.74	<1	46	65	20	3.91	0.13	38	0.84	512	<1	0.02	79	0.02	17	4	13	15	0.09	<1	10	<1	56
91778	<0.5	1.58	<1	<1	28	37	<1	1.09	<1	49	62	21	4.22	0.15	41	0.91	484	<1	0.02	90	0.09	21	4	17	16	0.08	<1	13	<1	59
91779	<0.5	1.64	<1	<1	29	36	<1	1.06	<1	44	85	20	3.67	0.17	39	0.93	490	2	0.02	80	0.06	20	3	18	7	0.11	<1	14	<1	55
91749-R	<0.5	0.50	4	<1	29	29	<1	1.76	<1	25	101	11	2.06	0.14	34	0.40	698	2	0.03	47	0.02	19	2	94	<1	<0.01	<1	9	<1	25
STD	1.7	4.89	115	<1	34	55	<1	1.92	3	61	108	99	5.76	0.17	39	1.69	861	5	0.41	240	0.04	138	37	84	<1	0.16	<1	125	<1	179
91780	<0.5	1.60	<1	<1	20	45	<1	0.35	<1	53	67	32	4.31	0.22	50	1.09	375	<1	0.02	100	0.04	26	4	8	27	0.13	<1	10	<1	56

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V6C 1T1

FILE:43464

DATE: November 20, 2000

Attn: Bill Timmins

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91781	<0.5	1.48	<1	<1	20	43	<1	1.06	<1	46	89	28	3.90	0.20	48	0.89	479	2	0.02	88	0.03	30	4	23	16	0.07	<1	11	<1	47
91782	<0.5	1.71	3	<1	23	40	<1	1.19	<1	42	114	32	3.65	0.18	41	1.14	556	1	0.02	81	0.03	24	4	26	3	0.02	<1	17	<1	53
91783	<0.5	1.53	<1	<1	20	36	<1	0.94	<1	56	64	34	4.95	0.19	56	1.07	440	<1	0.01	106	0.03	41	4	19	11	0.01	<1	10	<1	63
91784	<0.5	1.71	<1	<1	19	34	<1	1.07	<1	57	64	31	4.75	0.17	53	1.13	479	<1	0.01	106	0.04	16	5	24	11	0.01	<1	14	<1	66
91785	<0.5	2.38	4	<1	19	39	<1	1.65	<1	53	226	116	4.19	0.14	45	2.13	722	1	0.01	163	0.03	20	5	43	5	<0.01	<1	29	<1	91
91786	<0.5	2.80	8	<1	21	51	<1	1.28	<1	62	254	48	4.92	0.18	50	2.36	665	1	0.01	363	0.04	41	5	31	13	<0.01	<1	40	<1	86
91787	<0.5	2.23	<1	<1	19	40	<1	0.97	<1	56	100	44	4.69	0.18	57	1.67	542	2	0.01	141	0.03	22	4	26	24	<0.01	<1	17	<1	53
91788	<0.5	2.29	2	<1	22	35	<1	1.40	<1	61	97	43	5.22	0.15	52	1.74	656	2	0.01	152	0.04	26	5	35	21	<0.01	<1	24	<1	62
91789	<0.5	2.28	<1	<1	22	43	<1	0.92	<1	56	119	32	4.87	0.20	51	1.59	508	2	0.01	122	0.13	19	5	22	18	<0.01	<1	18	<1	66
91790	<0.5	2.08	<1	<1	20	35	<1	1.47	<1	54	76	37	4.61	0.18	47	1.48	701	<1	0.01	105	0.04	17	3	31	13	<0.01	<1	32	<1	62
91791	<0.5	2.38	<1	<1	20	39	<1	2.09	<1	57	77	27	5.13	0.20	51	1.53	1070	1	0.01	110	0.04	17	5	44	2	<0.01	<1	26	<1	26
91792	<0.5	2.46	<1	<1	23	39	<1	1.81	<1	63	48	38	5.70	0.20	65	1.41	805	<1	0.01	116	0.06	18	4	36	11	<0.01	<1	44	<1	30
91793	<0.5	2.34	<1	<1	21	45	<1	1.70	<1	67	68	37	5.74	0.22	61	1.38	805	1	0.01	126	0.05	19	4	34	<1	<0.01	<1	38	<1	28
91794	<0.5	1.58	<1	<1	20	38	<1	1.61	<1	52	77	30	4.25	0.21	50	0.91	742	<1	0.01	102	0.03	12	3	33	7	<0.01	<1	12	<1	15
91795	<0.5	1.76	<1	<1	19	45	<1	1.53	<1	51	70	35	4.49	0.24	58	1.18	668	2	0.01	96	0.05	12	4	30	16	<0.01	<1	12	<1	16
91796	<0.5	1.75	<1	<1	20	43	<1	2.14	<1	51	78	29	4.17	0.20	50	1.39	938	<1	0.01	106	0.03	13	4	42	<1	<0.01	<1	15	<1	15
91797	<0.5	1.64	<1	<1	19	53	<1	1.55	<1	53	96	23	4.19	0.20	46	1.26	641	2	0.01	113	0.04	14	5	33	9	<0.01	<1	16	<1	17
91798	<0.5	1.72	<1	<1	21	45	<1	2.78	<1	41	83	46	3.68	0.15	45	1.51	970	<1	0.01	83	0.03	12	4	61	<1	<0.01	<1	23	<1	19
91799	<0.5	1.49	<1	<1	19	66	<1	1.30	<1	52	73	50	4.25	0.23	37	1.17	516	1	0.01	99	0.04	13	3	35	16	<0.01	<1	14	<1	23
91800	<0.5	1.58	<1	<1	19	46	<1	3.65	<1	53	107	85	4.34	0.21	43	1.46	1010	9	0.01	151	0.12	13	5	79	<1	<0.01	<1	101	<1	17

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30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
91809	<0.5	0.87	46	<1	21	56	<1	3.62	<1	47	100	72	4.02	0.24	46	1.25	1060	12	0.01	150	0.14	25	7	85	10	<0.01	<1	81	<1	10
91810	<0.5	0.79	32	<1	21	32	<1	3.45	<1	42	94	104	3.66	0.16	43	1.36	1160	10	0.01	135	0.11	20	6	73	12	<0.01	<1	61	<1	10
91811	<0.5	0.65	45	<1	21	39	<1	2.73	<1	44	118	112	4.00	0.20	36	0.93	972	18	0.01	161	0.11	22	7	56	27	<0.01	<1	109	<1	8
91812	<0.5	0.71	38	<1	23	37	<1	3.76	<1	45	129	118	4.21	0.19	41	1.41	1360	14	0.01	149	0.12	23	6	79	20	<0.01	<1	101	<1	9
91813	<0.5	1.07	40	<1	17	43	<1	3.84	<1	51	154	99	4.63	0.21	38	1.54	1250	8	0.01	163	0.13	26	8	85	4	<0.01	<1	77	<1	12
91814	<0.5	0.84	29	<1	18	41	<1	3.61	<1	43	139	53	3.66	0.22	44	1.32	1140	7	0.01	113	0.10	31	5	83	4	<0.01	<1	39	<1	18
91815	<0.5	1.01	33	<1	22	51	<1	3.16	<1	42	137	89	3.83	0.18	43	1.19	997	8	0.01	140	0.14	31	6	76	15	<0.01	<1	76	<1	14
91816	<0.5	1.13	34	<1	16	42	<1	4.40	<1	50	164	130	4.49	0.18	43	1.15	1170	7	0.01	145	0.13	27	6	106	<1	<0.01	<1	61	<1	11
91817	<0.5	0.79	20	<1	20	48	<1	2.60	<1	43	77	58	3.64	0.17	43	0.76	867	3	0.01	99	0.12	13	4	59	20	<0.01	<1	22	<1	8
91818	<0.5	0.99	12	<1	19	38	<1	4.34	<1	29	89	59	2.60	0.16	46	1.07	1200	7	0.01	86	0.12	13	3	98	<1	<0.01	<1	47	<1	10
91819	<0.5	1.09	2	<1	16	62	<1	4.06	<1	22	80	18	1.93	0.22	60	0.88	1120	<1	0.01	62	0.04	8	2	93	<1	<0.01	<1	12	<1	8
91820	<0.5	2.59	49	<1	23	57	<1	4.18	1	85	76	44	7.65	0.22	68	2.77	1560	2	0.01	172	0.26	26	4	93	<1	<0.01	<1	45	<1	21
91821	<0.5	0.43	32	<1	19	21	<1	4.07	<1	39	119	46	3.43	0.10	33	1.37	1540	<1	0.01	121	0.04	6	4	80	<1	<0.01	<1	16	<1	11
91822	<0.5	1.02	67	<1	16	43	<1	5.92	<1	73	203	107	5.82	0.18	45	1.46	1890	9	0.01	210	0.40	17	7	113	<1	<0.01	<1	77	<1	23
91823	<0.5	0.96	6	<1	15	144	<1	4.15	1	41	83	107	3.42	0.28	33	1.14	390	14	0.01	105	0.69	14	5	78	<1	<0.01	<1	76	<1	75
91824	<0.5	1.00	116	<1	19	46	<1	5.57	2	84	119	111	8.36	0.12	31	2.42	1530	6	0.04	199	0.10	72	4	96	<1	<0.01	<1	52	<1	94
91825	<0.5	0.50	22	<1	11	113	<1	3.54	<1	17	131	92	1.46	0.20	26	0.76	324	4	0.01	59	0.70	12	3	91	<1	<0.01	<1	43	<1	26
91826	<0.5	1.31	39	<1	15	79	<1	4.39	<1	50	67	114	4.37	0.15	31	1.87	602	3	0.01	101	0.72	15	5	101	<1	<0.01	<1	47	<1	45
91827	<0.5	2.37	8	<1	21	109	<1	3.72	<1	84	64	109	7.29	0.16	31	2.47	899	3	0.02	143	0.18	14	5	59	<1	<0.01	<1	68	<1	60
91795-R	<0.5	1.89	<1	<1	16	48	<1	1.55	<1	55	72	35	4.56	0.25	63	1.20	727	2	0.01	106	0.06	14	4	32	9	<0.01	<1	12	<1	18
STD	1.8	4.95	121	<1	21	60	1	2.13	3	68	103	110	5.93	0.19	44	1.77	873	5	0.46	271	0.05	143	45	93	<1	0.18	<1	143	<1	200

"R" Denotes duplicate sample analyzed.
0.500 Gram sample is digested with Aqua Regia at 95 C for one hour and bulked to 10 ml with distilled water.
Partial dissolution for Al, B, Ba, Ca, Cr, Fe, K, La, Mg, Mn, Na, P, Sr, Ti, and W.

Certified by:

BONDAR CLEGG

Geochemical Lab Report

WGT CONSULTANTS LTD.
T: V01-00648.2 (COMPLETE)

PROJECT: BC NORTH
DATE RECEIVED: 05-JUN-01 DATE PRINTED: 11-JUN-01 PAGE 1 OF 3

SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe Tot PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM	S PCT
91592		<.5	57	34	115	8	253	50	<1.0	<5	91	<5	7.10	1411	<25	380	756	157	<20	<20	34	7.38	4.75	4.79	0.57	1.32	283	14	<10	62	21	19	<5	0.92	60	0.153
91594																																				
91604		<.5	75	6	98	<1	1006	107	<1.0	<5	113	<5	8.87	1501	<25	10	1453	117	<20	<20	10	3.45	>10.00	5.90	0.02	0.01	485	6	<10	12	9	14	<5	0.42	21	0.271
91605		<.5	78	14	93	7	950	83	<1.0	<5	55	<5	8.85	1398	<25	6	1553	120	<20	20	9	3.55	>10.00	4.65	0.02	<.01	416	<5	<10	12	10	15	<5	0.35	19	0.114
91606		<.5	54	16	131	2	892	91	<1.0	<5	142	<5	9.15	1538	<25	7	1376	116	<20	<20	8	4.17	>10.00	4.55	0.02	0.01	346	6	<10	17	9	13	<5	0.39	23	0.117
91613		<.5	65	5	75	8	587	63	<1.0	<5	23	<5	6.74	2659	<25	50	1042	108	<20	<20	11	3.64	7.35	>10.00	0.02	0.03	486	10	<10	16	10	15	<5	0.46	30	0.350
91636		<.5	69	24	417	42	145	8	4.5	<5	100	<5	2.36	193	<25	505	287	1346	<20	<20	21	2.68	0.47	0.98	0.16	1.41	46	10	<10	4	121	<5	<5	0.19	47	2.070
91637		<.5	88	23	133	8	42	25	<1.0	<5	50	<5	5.64	986	<25	374	113	439	<20	20	6	6.01	2.82	3.60	1.14	1.47	139	8	<10	26	36	19	<5	0.60	11	2.141
91676		<.5	130	6	88	6	771	79	<1.0	<5	104	<5	7.44	1539	<25	222	1280	115	<20	<20	15	4.86	>10.00	7.26	0.04	0.60	251	7	<10	17	12	14	<5	0.60	36	0.321
91723		<.5	48	48	93	<1	62	28	<1.0	<5	6	<5	5.14	559	<25	1012	133	93	21	<20	83	7.76	1.20	1.41	1.07	2.50	151	20	18	30	18	8	<5	0.55	127	1.980
91724		<.5	62	44	122	<1	57	25	<1.0	<5	12	<5	4.99	387	<25	865	111	75	<20	<20	77	9.79	1.23	0.37	0.92	2.31	104	10	15	30	14	8	<5	0.46	80	1.832
91771		<.5	77	35	119	2	80	58	<1.0	<5	21	6	7.88	1138	<25	411	133	141	<20	<20	6	5.62	2.44	2.31	0.73	1.61	34	16	<10	36	12	11	<5	0.55	32	1.819
91773		<.5	22	23	159	3	192	39	<1.0	<5	90	<5	7.79	1440	<25	323	466	130	<20	21	44	8.07	5.99	3.50	0.24	1.23	122	21	<10	64	18	13	<5	0.86	95	0.167
91774		<.5	57	16	73	2	60	22	<1.0	<5	25	<5	4.32	602	<25	622	181	91	<20	<20	45	6.32	1.66	1.55	0.36	2.24	94	18	<10	26	10	7	<5	0.41	74	0.691
91805		<.5	100	13	21	11	148	28	<1.0	<5	35	11	4.27	1240	<25	581	304	467	<20	<20	27	5.96	2.45	4.66	0.08	1.85	151	15	<10	25	49	11	<5	0.59	83	2.073

BONDAR CLEGG

Geochemical Lab Report

CLIENT: WGT CONSULTANTS LTD.
PROJECT: BC NORTH
REPORT: V01-00648.0 (COMPLETE)
DATE RECEIVED: 12-APR-01
DATE PRINTED: 29-MAY-01

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Pt PPB	Pd PPB	Rh PPB	Os PPB	Ir PPB	Ru PPB
R2 19629		8	<20	<20	<5	<10	<1	<50
R2 91590		3	<20	<20	<5	<10	<1	<50
R2 91592		3	<20	<20	<5	<10	<1	<50
R2 91593		3	<20	<20	<5	<10	<1	<50
$0 91594								
R2 91604		3	<20	<20	<5	<10	<1	<50
R2 91605		2	<20	<20	<5	<10	<1	<50
R2 91606		<1	<20	<20	<5	<10	<1	<50
R2 91613		2	<20	<20	<5	<10	<1	<50
$0 91629								
R2 91630		6	<20	<20	<5	<10	<1	<50
R2 91636		10	31	<20	<5	<10	<1	<50
R2 91637		6	<20	<20	<5	<10	<1	<50
R2 91676		2	<20	<20	<5	<10	2	<50
R2 91723		6	<20	<20	<5	<10	<1	<50
R2 91724		8	<20	<20	<5	<10	<1	<50
R2 91763		7	<20	<20	<5	<10	<1	<50
R2 91764		3	<20	<20	<5	<10	<1	<50
R2 91768		7	<20	<20	<5	<10	<1	<50
R2 91771		5	<20	<20	<5	<10	<1	<50
R2 91773		4	<20	<20	<5	<10	<1	<50
R2 91774		3	<20	<20	<5	<10	<1	<50
R2 91787		4	<20	<20	<5	<10	<1	<50
R2 91805		4	<20	<20	<5	<10	<1	<50
R2 91808		11	<20	<20	<5	<10	<1	<50

Bondar Clegg Canada Limited
130 Pemberton Avenue, North Vancouver, BC, V7P 2R5, Canada
Tel: (604) 985-0681, Fax: (604) 985-1071

ALS Chemex

Aurora Laboratory Services Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: W. G. T. CONSULTANTS LTD. **

410 - 455 GRANVILLE ST.
VANCOUVER, BC
V6C 1T1

Project :
Comments: ATTN: BILL TIMMINS

Page Number :1-A
Total Pages :2
Certificate Date: 02-AUG-2001
Invoice No. :I0121092
P.O. Number :
Account :RJV

CERTIFICATE OF ANALYSIS A0121092

SAMPLE	PREP CODE	Weight Kg	Au ppb ICP-MS	Pt ppb ICP-MS	Pd ppb ICP-MS	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm
69576 (9801)	94139402	0.44	-----	-----	-----	< 5	0.2	1.31	46	< 10	40	< 0.5	< 2	3.97	< 0.5
69577 (9804)	94139402	0.54	-----	-----	-----	< 5	0.4	1.99	40	< 10	50	0.5	2	3.81	< 0.5
69578 9803	94139402	0.54	-----	-----	-----	< 5	< 0.2	1.55	18	< 10	60	< 0.5	< 2	4.23	< 0.5
69579 9804	94139402	0.50	-----	-----	-----	20	0.2	1.59	36	< 10	50	< 0.5	< 2	4.59	< 0.5
69580 9805	94139402	0.46	-----	-----	-----	< 5	0.2	1.62	28	< 10	40	< 0.5	< 2	4.88	< 0.5
69581 9806	94139402	0.56	-----	-----	-----	10	0.4	1.19	42	< 10	40	< 0.5	< 2	4.76	< 0.5
69582 9807	94139402	0.52	-----	-----	-----	15	0.2	0.76	50	< 10	50	< 0.5	< 2	3.88	< 0.5
69583 9809	94139402	0.60	-----	-----	-----	10	0.2	1.20	40	< 10	40	< 0.5	< 2	4.87	< 0.5
69584 9809	94139402	0.38	-----	-----	-----	20	0.6	0.83	62	< 10	60	< 0.5	< 2	2.80	< 0.5
91626	94139402	0.12	-----	-----	-----	< 5	0.2	2.46	56	< 10	60	0.5	< 2	6.12	0.5
91627	94139402	0.36	-----	-----	-----	5	0.2	1.67	28	< 10	40	< 0.5	< 2	3.29	< 0.5
91628	94139402	0.56	-----	-----	-----	5	0.2	1.21	50	< 10	30	< 0.5	< 2	2.38	< 0.5
91631	94139402	0.50	-----	-----	-----	< 5	0.4	0.82	52	< 10	30	< 0.5	< 2	3.32	< 0.5
91632	94139402	0.46	-----	-----	-----	5	0.2	0.86	34	< 10	30	< 0.5	< 2	3.09	< 0.5
91633	94139402	0.18	-----	-----	-----	< 5	0.2	0.76	12	< 10	40	< 0.5	< 2	5.15	< 0.5
91634	94139402	0.40	-----	-----	-----	< 5	0.4	0.47	34	< 10	30	< 0.5	< 2	4.88	< 0.5
91635	94139402	0.44	-----	-----	-----	15	0.6	0.51	66	< 10	40	< 0.5	< 2	3.44	< 0.5
91638	94139402	0.16	-----	-----	-----	< 5	< 0.2	1.33	16	< 10	70	< 0.5	< 2	2.07	0.5
91639	94139402	0.28	-----	-----	-----	< 5	< 0.2	1.33	< 2	< 10	70	< 0.5	< 2	1.36	< 0.5
91640	94139402	0.34	-----	-----	-----	< 5	< 0.2	2.67	30	< 10	40	< 0.5	< 2	6.17	0.5
91642	94139402	0.40	-----	-----	-----	10	< 0.2	1.75	< 2	< 10	70	< 0.5	< 2	3.84	< 0.5
91643	94139402	0.30	-----	-----	-----	< 5	< 0.2	2.83	26	< 10	50	0.5	< 2	2.74	0.5
91644	94139402	0.36	-----	-----	-----	< 5	< 0.2	2.90	2	< 10	70	0.5	< 2	2.08	< 0.5
91800	94139402	0.34	-----	-----	-----	< 5	0.2	1.82	< 2	< 10	60	< 0.5	< 2	3.56	< 0.5
91809	94139402	0.32	-----	-----	-----	20	0.4	0.90	58	< 10	60	< 0.5	< 2	3.40	< 0.5
91810	94139402	0.36	-----	-----	-----	15	0.4	0.89	38	< 10	40	< 0.5	< 2	3.25	< 0.5
91811	94139402	0.34	-----	-----	-----	15	0.6	0.61	56	< 10	40	< 0.5	< 2	2.65	< 0.5
91812	94139402	0.30	-----	-----	-----	15	0.6	0.76	50	< 10	40	< 0.5	< 2	3.66	< 0.5
91851	94139402	0.78	1	1.0	< 1	-----	< 0.2	2.53	< 2	< 10	70	0.5	< 2	0.59	< 0.5
91852	94139402	0.42	1	0.5	< 1	-----	< 0.2	2.38	< 2	< 10	60	0.5	< 2	0.64	< 0.5
91853	94139402	0.46	1	0.5	< 1	-----	< 0.2	2.55	2	< 10	60	0.5	< 2	0.37	< 0.5
91854	94139402	0.64	< 1	0.5	< 1	-----	< 0.2	3.65	< 2	< 10	30	< 0.5	< 2	2.17	0.5
91855	94139402	0.56	< 1	0.5	< 1	-----	< 0.2	2.72	< 2	< 10	40	< 0.5	< 2	0.47	< 0.5
91856	94139402	0.66	1	0.5	< 1	-----	< 0.2	2.35	< 2	< 10	40	< 0.5	< 2	0.34	< 0.5
91857	94139402	0.72	1	< 0.5	< 1	-----	0.2	1.75	< 2	< 10	20	< 0.5	< 2	14.45	< 0.5
91858	94139402	0.80	< 1	< 0.5	< 1	-----	0.4	0.85	< 2	< 10	20	< 0.5	< 2	>15.00	< 0.5
91859	94139402	0.72	1	< 0.5	< 1	-----	0.6	0.40	< 2	< 10	10	< 0.5	2	>15.00	< 0.5
91860	94139402	0.62	< 1	0.5	< 1	-----	0.4	0.81	< 2	< 10	10	< 0.5	< 2	>15.00	< 0.5
91861	94139402	0.74	< 1	1.0	1	-----	< 0.2	2.29	16	< 10	60	< 0.5	< 2	4.82	< 0.5
91862	94139402	0.88	1	0.5	< 1	-----	< 0.2	2.90	6	< 10	20	< 0.5	< 2	4.75	0.5

CERTIFICATION: _____

ALS Chemex

Aurora Laboratory Services Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: W. G. T. CONSULTANTS LTD. **

410 - 455 GRANVILLE ST.
VANCOUVER, BC
V6C 1T1

Project :
Comments: ATTN: BILL TIMMINS

Page Number :1-B
Total Pages :2
Certificate Date: 02-AUG-2001
Invoice No. : I0121092
P.O. Number :
Account : RJV

CERTIFICATE OF ANALYSIS A0121092

SAMPLE	PREP CODE	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm
69576	94139402	19	74	47	3.50	< 10	< 1	0.16	10	1.25	925	8	< 0.01	100	2230
69577	94139402	27	119	99	4.48	< 10	< 1	0.21	10	2.11	1105	3	< 0.01	138	2030
69578	94139402	24	74	47	3.71	< 10	< 1	0.24	20	1.67	1100	3	0.01	90	1140
69579	94139402	21	83	72	4.34	< 10	< 1	0.19	10	1.66	1035	9	< 0.01	110	1710
69580	94139402	22	107	122	3.85	< 10	< 1	0.18	10	2.26	1230	9	< 0.01	137	1940
69581	94139402	19	79	62	3.78	< 10	< 1	0.17	10	1.61	1175	14	< 0.01	122	1850
69582	94139402	21	68	51	3.27	< 10	< 1	0.22	< 10	1.55	1030	4	0.01	90	1580
69583	94139402	22	80	78	3.80	< 10	< 1	0.18	< 10	1.89	1210	6	0.01	122	2180
69584	94139402	17	83	81	3.40	< 10	< 1	0.24	10	0.95	700	15	0.01	110	2220
91626	94139402	33	781	58	4.43	10	< 1	0.31	10	2.91	1805	< 1	0.01	245	420
91627	94139402	15	79	65	3.46	< 10	< 1	0.23	10	2.00	1095	6	0.01	68	920
91628	94139402	18	74	90	3.58	< 10	< 1	0.17	10	1.10	725	8	0.01	94	930
91631	94139402	13	83	70	3.01	< 10	< 1	0.20	< 10	1.10	910	14	0.01	101	1400
91632	94139402	15	91	93	2.91	< 10	< 1	0.16	< 10	1.00	780	13	0.01	93	1380
91633	94139402	14	71	93	3.04	< 10	< 1	0.27	< 10	2.00	1505	7	0.01	64	1150
91634	94139402	10	95	115	2.15	< 10	< 1	0.16	< 10	1.02	980	18	0.01	100	1450
91635	94139402	12	99	88	3.15	< 10	< 1	0.20	< 10	1.17	695	15	0.01	102	1130
91638	94139402	15	80	36	3.12	< 10	< 1	0.31	< 10	1.33	520	6	0.01	70	490
91639	94139402	14	108	30	2.60	< 10	< 1	0.40	20	0.73	455	< 1	0.01	37	390
91640	94139402	36	272	66	4.92	10	< 1	0.21	< 10	3.30	1310	< 1	0.01	219	590
91642	94139402	20	44	39	3.94	< 10	< 1	0.34	10	0.99	880	1	0.01	48	490
91643	94139402	28	258	42	4.36	10	< 1	0.27	20	2.51	745	1	0.01	141	620
91644	94139402	25	120	84	4.58	10	< 1	0.32	30	2.02	760	1	0.01	91	550
91800	94139402	19	98	91	3.57	< 10	< 1	0.26	10	1.51	885	11	0.01	104	1350
91809	94139402	15	83	82	3.36	< 10	< 1	0.25	10	1.23	890	12	0.01	104	1610
91810	94139402	11	97	115	2.95	< 10	< 1	0.19	10	1.36	955	9	0.01	92	1470
91811	94139402	9	96	111	3.25	< 10	< 1	0.18	10	1.00	850	17	< 0.01	110	1270
91812	94139402	11	103	112	3.42	< 10	< 1	0.21	< 10	1.42	1115	13	0.01	102	1470
91851	94139402	18	43	29	3.86	< 10	< 1	0.39	40	1.08	510	< 1	0.03	34	360
91852	94139402	19	39	46	3.77	< 10	< 1	0.33	30	1.03	470	1	0.03	35	360
91853	94139402	20	41	24	3.91	< 10	< 1	0.38	30	1.05	445	1	0.02	35	360
91854	94139402	26	82	12	5.11	10	< 1	0.19	< 10	2.44	835	1	0.03	50	510
91855	94139402	20	46	17	4.36	< 10	< 1	0.25	20	1.34	470	1	0.02	42	360
91856	94139402	18	44	14	3.76	< 10	< 1	0.25	20	1.11	480	1	0.03	30	330
91857	94139402	14	61	40	2.39	< 10	< 1	0.13	10	1.25	645	< 1	0.01	32	320
91858	94139402	7	16	14	1.73	< 10	< 1	0.14	20	0.48	470	< 1	< 0.01	14	310
91859	94139402	4	7	8	0.81	< 10	< 1	0.14	10	0.33	325	< 1	< 0.01	10	280
91860	94139402	11	18	55	1.53	< 10	< 1	0.09	< 10	0.60	730	< 1	0.01	18	250
91861	94139402	23	111	27	3.30	< 10	< 1	0.17	< 10	1.82	585	< 1	0.03	52	340
91862	94139402	25	176	47	3.97	10	< 1	0.08	< 10	2.57	760	< 1	0.03	77	470

CERTIFICATION: David Lee

ALS Chemex

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To: W. G. T. CONSULTANTS LTD. **

410 - 455 GRANVILLE ST.
VANCOUVER, BC
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Project :
Comments: ATTN: BILL TIMMINS

Certificate Date: 02-AUG-2001
Invoice No. : I0121092
P.O. Number :
Account : RJV

CERTIFICATE OF ANALYSIS A0121092

SAMPLE	PREP CODE	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
69576	94139402	20	2.71	< 2	1	126	< 0.01	< 10	< 10	55	< 10	16
69577	94139402	16	3.12	< 2	3	113	< 0.01	< 10	< 10	48	< 10	20
69578	94139402	12	2.43	< 2	2	125	< 0.01	< 10	< 10	33	< 10	12
69579	94139402	62	3.10	< 2	2	143	< 0.01	< 10	< 10	89	< 10	12
69580	94139402	18	2.39	< 2	3	146	< 0.01	< 10	< 10	96	< 10	14
69581	94139402	36	3.00	< 2	1	152	< 0.01	< 10	< 10	89	< 10	10
69582	94139402	20	2.66	< 2	1	122	< 0.01	< 10	< 10	26	< 10	8
69583	94139402	20	2.96	2	2	151	< 0.01	< 10	< 10	47	< 10	12
69584	94139402	28	3.35	4	1	91	< 0.01	< 10	< 10	64	< 10	10
91626	94139402	2	0.48	< 2	13	204	< 0.01	< 10	< 10	63	< 10	26
91627	94139402	16	1.55	< 2	1	93	< 0.01	< 10	< 10	60	< 10	30
91628	94139402	26	2.32	< 2	1	71	< 0.01	< 10	< 10	58	< 10	26
91631	94139402	38	2.11	< 2	1	91	< 0.01	< 10	< 10	74	< 10	16
91632	94139402	26	1.74	< 2	1	82	< 0.01	< 10	< 10	72	< 10	16
91633	94139402	10	1.16	< 2	2	128	< 0.01	< 10	< 10	42	< 10	20
91634	94139402	14	1.17	< 2	1	136	< 0.01	< 10	< 10	71	< 10	46
91635	94139402	24	2.39	2	2	96	< 0.01	< 10	< 10	58	< 10	42
91638	94139402	10	1.18	< 2	1	60	< 0.01	< 10	< 10	38	< 10	104
91639	94139402	6	0.81	< 2	1	42	< 0.01	< 10	< 10	12	< 10	32
91640	94139402	< 2	0.36	< 2	8	196	< 0.01	< 10	< 10	63	< 10	44
91642	94139402	14	1.53	< 2	4	116	< 0.01	< 10	< 10	42	< 10	26
91643	94139402	22	0.67	< 2	6	100	< 0.01	< 10	< 10	53	< 10	118
91644	94139402	14	0.79	< 2	4	80	< 0.01	< 10	< 10	43	< 10	98
91800	94139402	10	1.61	< 2	2	109	< 0.01	< 10	< 10	96	< 10	22
91809	94139402	30	3.10	2	1	108	< 0.01	< 10	< 10	67	< 10	10
91810	94139402	22	2.38	2	1	95	< 0.01	< 10	< 10	57	< 10	12
91811	94139402	26	3.11	4	1	75	< 0.01	< 10	< 10	83	< 10	8
91812	94139402	26	3.00	2	1	106	< 0.01	< 10	< 10	86	< 10	10
91851	94139402	6	0.01	< 2	2	45	0.07	< 10	< 10	13	< 10	76
91852	94139402	16	0.02	< 2	2	57	0.06	10	< 10	14	< 10	72
91853	94139402	10	0.01	< 2	2	33	0.04	< 10	< 10	11	< 10	72
91854	94139402	16	0.01	< 2	7	113	0.10	< 10	< 10	116	< 10	82
91855	94139402	10	0.04	< 2	3	36	0.05	< 10	< 10	22	< 10	76
91856	94139402	4	< 0.01	< 2	2	26	0.06	< 10	< 10	16	< 10	76
91857	94139402	26	0.27	< 2	4	534	0.05	< 10	< 10	39	< 10	32
91858	94139402	2	0.38	< 2	1	1130	0.03	< 10	< 10	6	< 10	22
91859	94139402	4	0.32	< 2	1	1480	0.01	< 10	< 10	3	< 10	10
91860	94139402	2	0.40	< 2	1	816	0.04	< 10	< 10	10	< 10	14
91861	94139402	< 2	0.24	< 2	7	121	0.10	< 10	< 10	70	< 10	48
91862	94139402	4	0.06	< 2	9	152	0.13	< 10	< 10	107	< 10	52

CERTIFICATION: _____

Appendix IV

PETROGRAPHIC THIN SECTION DESCRIPTIONS

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001-1199: STRONGLY ALTERED, FOLIATED, KINK-BANDED, QUARTZ-SERICITE-CARBONATE-PYRITE-GRAPHITE RICH ROCK (MINOR CHLORITE)

Hand sample is a dark grey to blackish, quartz-, pyrite- and graphite-rich rock with crenulated foliation defined by wispy laminae richer in the graphite. Certain layers up to several mm thick are enriched in coarse, euhedral pyrite, and associated with or cut by irregular white veining. The rock is not magnetic and shows no stain for K-feldspar in the etched slab, but reacts to cold dilute HCl. Modal mineralogy in polished thin section is approximately:

Quartz (?largely secondary)	70%
Sericite	10%
Carbonate (?mainly calcite)	10%
Pyrite	5%
Carbon (graphite)	3-5%
Chlorite	1-2%
Chalcopyrite	tr

This slide is made up mostly of fine-grained quartz, with some areas richer in sericite and others in carbonate. Both these areas and areas enriched in carbon (?graphite) have irregular, lensey outlines that suggest they are remnants of wallrock in a quartz-flooded rock, and that thus a large proportion of the quartz may be secondary.

Quartz forms mainly tightly interlocked, anhedral crystals less than about 0.1 mm in diameter, with a secondary appearance. In places almost 100% of the rock appears to be quartz, although what portion of this has been replaced by quartz is not clear (if the rock originally was a metasiltstone, for instance, only part of the quartz is secondary but all appears to be recrystallized). In these parts of the rock, only minor carbonate occurs with the quartz. Carbonate is likely mostly calcite, mostly forming subhedral crystals up to about 0.25 mm in diameter (but could include areas of fine-grained ?dolomite or ankerite).

Sericite forms subhedral, bent flakes mostly <0.25 mm in diameter in the sericite-rich portions of the rock, with foliation following the mineralogical layering (partly defined by concentrations of carbon) but subsequently cut by a second foliation due to kink banding (also partly defined by concentrations of carbon).

The carbon in the rock is probably graphite (seen on slip faces in the hand specimen), but is not coarse enough in the body of the rock to have the high reflectivity or anisotropism of graphite. Most particles are about 10 microns in diameter, but aggregates up to 0.1 mm in size occur. In places minor chlorite is found in the carbon-rich areas; chlorite characteristics are as for the samples from 001-619 to 913.5.

Veins are composed of anhedral quartz and subhedral carbonate up to 0.35 mm in size, with carbonate commonly oriented perpendicular to vein walls. The veins are offset in places along slips in graphite.

Pyrite forms large euhedra up to 4 mm in size with common fine silicate inclusions arranged in zonal patterns indicative of the large crystals having overgrown or replaced earlier crystals. The pyrite also contains rare inclusions of anhedral chalcopyrite up to 0.1 mm across, in places along grain boundaries between pyrite crystals, and traces of ?pyrrhotite <20 microns across. Pyrite crystals are in places surrounded by fibrous quartz or chlorite crystals up to 0.5 mm long that have grown perpendicular to the pyrite crystal face, in a pressure shadow.

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PETROGRAPHIC REPORT ON 14 SAMPLES

Report for: Bill Timmins
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Invoice 000570

Oct. 20, 2000.

SUMMARY:

The 14 samples in this suite, apparently collected at increasing depths in a drill hole from about 100 to 1200 foot depth, appear to record a transition downward from somewhat coarser metasedimentary rocks to finer-grained metasedimentary rocks and altered gabbro, followed by metasedimentary rock? so strongly altered that it is of uncertain type. Kink-banding, which cuts and re-orients foliation, is seen in 6 of the samples (126, 186, 619, 913.5, and 1199). The samples, including altered gabbro, are similar to rock types in the Aldridge Formation of southeastern B.C.; almost all the metasedimentary rocks contain traces of tourmaline (intermediate dravite-schorl) as 0.1-0.2 mm long ?detrital euhedra, and minor rutile and ?carbonaceous matter. Note: the prefix meta- is understood in all the following descriptions.

From 113 to 156, the samples are mainly weakly foliated to foliated, quartz-plagioclase wacke with maximum average grain size of detrital quartz and feldspar about 1.5 mm. Plagioclase appears to be ?andesine; the rocks range from quartz veined with silicified and sericitized envelopes at 113 to sericitized at 126 (both samples contain significant coarse euhedaral pyrite) to weakly sericitized at 156 (with minor pyrrhotite). Only traces of carbonate, possibly dolomite or ankerite, are found.

The sample from 186 represents interlaminated mudstone and fine quartz wacke, and is the first sample that chlorite is noted in the drillhole. From 530 and 589, the samples appear to be fine-grained quartz-plagioclase wacke similar to that from 113-156 but of finer grain size. These samples are possibly sericite-chlorite altered and contain minor pyrhotite; plagioclase may be albite in the sample from 589.

Samples from 619, 632 and 661 appear to be finely laminated siltstone and mudstone, in places with disrupted bedding and/or fragmental textures (especially 632). These samples appear to be altered to sericite, chlorite, calcite, and locally quartz; albite is present in 661. Minor sulfides are pyrrhotite.

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The samples from 674.5, 874, and 913.5 are hard to determine a protolith for; given the presence of altered gabbro at 947 and the abundance of both chlorite and sphene/rutile in 674.5 and 874, it is possible they are strongly calcite-sericite-chlorite-quartz altered and deformed gabbros. An increase in quartz content and relict (kink-banded) foliation in 913.5 may indicate that this sample represents sericite-chlorite-calcite altered siltstone, possibly between two gabbro sills. Alteration in the gabbro at 947 is strong ?actinolitic amphibole, chlorite, calcite, zoisite, sphene and patchy albite with quartz-calcite veins.

The sample from 1199 may be a strongly altered, recrystallized sediment, composed mainly of quartz-sericite-calcite-pyrite and graphite, and also cut by quartz-calcite veins.

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001-113: QUARTZ VEINED, SILICIFIED, SERICITIZED, PYRITIZED QUARTZ-PLAGIOCLASE WACKE

Hand sample is a dark grey-green, fine-grained rock containing scattered pyrite crystals The rock is not magnetic and shows no reaction to cold dilute HCl, and no stain for K-feldspar in the etched slab. Modal mineralogy in polished thin section is approximately:

Quartz (partly secondary)	65%
Sericite, muscovite	20%
Plagioclase (?andesine)	10%
Pyrite	3%
?Carbonaceous matter	1-2%
Carbonate	<1%
Rutile	<1%
?Zircon, tourmaline	tr

In thin section, this sample is composed mainly of anhedral to subhedral, likely detrital, grains of quartz and lesser plagioclase in a matrix of fine-grained quartz, sericite, plagioclase, rutile, carbonate and ?carbonaceous matter. A weak foliation is defined by sub-parallel orientation of the narrow (<20 micron thick) ?stylolitic carbonaceous matter seams, and crude sub-parallel orientation of the sericite flakes. Coarse euhedral pyrite crystals up to 2 mm across appear to be superposed on the original detrital fabric, but are not obviously related to a major quartz vein about 4 mm thick cutting the slide. Pyrite crystals contain minor inclusions of silicates and rutile. The vein is composed of subhedral interlocking crystals up to about 1.5 mm in diameter, cut by narrow zones of fine-grained (recrystallized) quartz <0.1 mm in diameter, and appears to be flanked by zones of silicification (alteration envelopes up to about 2 mm wide). Outside these silicified envelopes, sericite content may increase slightly toward the vein but this is not certain.

Detrital quartz and plagioclase grains or clasts have subangular outlines up to 1.5 mm in diameter. Quartz clasts are commonly aggregates of several crystals, with undulose extinction and minor suturing of grain boundaries indicating strain; some have narrow overgrowth rims up to 50 microns thick, suggesting silicification. Plagioclase clasts are commonly partly altered to sericite (5-25% replaced); composition appears to be either ?andesine based on extinction angles Y^010 = 15 degrees, X^001 = 6 degrees (this lacks confirmation by comparing the refractive index of the plagioclase with quartz, since a thin film of sericite always occurs between the two minerals). Scattered relatively coarse flakes of sericite (muscovite) up to 0.75 mm in diameter could also be detrital. Rare euhedral ?zircon crystals up to 100 microns long and pale green tourmaline up to 0.2 mm long (intermediate dravite-schorl) could be relict detrital.

In the matrix, smaller clasts of quartz and lesser plagioclase mainly <0.25 mm in diameter are embedded in fine flakey sericite (mainly <50 microns), minor rutile (brown euhedra mainly <0.1 mm but aggregating in places to 0.2 mm) and ?carbonaceous matter mostly <5 microns, and rare carbonate subhedra to 0.15 mm. The carbonate may be ?dolomite or ankerite to judge by the lack of reaction in hand sample, or it may be too little to show any reaction.

In summmary, this sample appears to represent a medium-grained sandstone or quartz wacke (significant feldspar content) cut by quartz veins with silicified envelopes, partly altered to sericite, carbonate, pyrite and rutile (?carbonaceous matter may be primary; it is not clear how much of the matrix sericite is primary and how much is secondary).

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001-126: SERICITIZED AND PYRITIC, IN PLACES ?CARBON-RICH, PYRRHOTITE-BEARING, QUARTZ-PLAGIOCLASE WACKE

Hand sample is very similar to 001-113: dark grey, fine-grained quartz wacke with scattered coarse euhedral pyrite crystals and foliated black ?carbonaceous zones. The rock is weakly magnetic but shows no reaction to cold dilute HCl, and no stain for K-feldspar in the etched slab. Modal mineralogy in polished thin section is approximately:

Quartz (partly secondary)	65%
Sericite, muscovite	20%
Plagioclase (sericitized)	7%
Pyrite	3%
?Carbonaceous matter	2-3%
Carbonate (?dolomite-ankerite)	1%
Pyrrhotite	1%
Rutile	<1%
Tourmaline (dravite-schorl)	tr

This sample is a little more foliated than 001-113 and contains slightly less/more altered plagioclase, but otherwise is very similar in thin section; in order to save repetition, please refer to the description above for more details than given below.

Detrital quartz and lesser plagioclase feldspar grains have subrounded to subangular outlines up to 1.5 and 1.2 mm in diameter respectively, and are set in a matrix of fine-grained (roughly 0.25 mm or less in diameter) quartz, sericite and lesser plagioclase. Most feldspar grains are partly altered to fine-grained sericite. Narrow foliae of black ?carbonaceous matter mainly wrap around the quartz clasts but appear to partly replace the feldspar clasts. Overgrowth rims on quartz are very narrow (<25 microns thick). Scattered coarse flakes of sericite (muscovite up to 0.5 mm in diameter) may also be relict detrital. Rare tourmaline (intermediate dravite-schorl, as described for 001-113) are also likely detrital. Coarse pyrite euhedra up to 0.5 cm across contain common inclusions of sericitized plagioclase, quartz and rutile

In the matrix, sericite flakes mostly <0.1 mm in diameter are mixed with abundant very fine ?carbonaceous matter and rutile, and scattered subhedra of carbonate up to 0.2 mm in diameter. Lack of reaction in hand sample suggests this carbonate may be ?dolomite or ankerite. At one end of the slide, a 1 cm thick strongly foliated zone consists mainly of sericite as coarser flakes up to 0.25 mm in diameter commonly mixed with abundant microscopic ?carbonaceous matter, and contains irregular blebs of pyrrhotite up to 1 mm across. This zone shows strong kink banding oblique to the foliation. The pyrrhotite crystals are subhedral and mostly <0.15 mm in diameter, intergrown with quartz that may be secondary; narrow lenses up to 0.25 mm thick of secondary quartz and minor carbonate are also associated with this zone.

In summary, this example of quartz wacke is likely sericitized (at least in part) as in 001-113, but silicification and quartz veining is not so evident. The presence of a reduced, carbon-rich zone (containing pyrrhotite rather than pyrite) is also distinctive, compared to the coarse pyrite-bearing rocks adjacent to it.

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001-156: FOLIATED, FINE-GRAINED QUARTZ-PLAGIOCLASE WACKE WITH ACCESSORY PYRRHOTITE, CARBONATE, ?CARBONACEOUS MATTER, RUTILE AND TOURMALINE

Dark grey, very fine-grained wacke similar to 001-113 and 126 but lacking the coarse euhedral pyrite crystals and generally much more strongly foliated. The rock is weakly magnetic but shows no reaction to cold dilute HCl, and no stain for K-feldspar in the etched slab. Modal mineralogy in polished thin section is approximately:

Quartz (mainly detrital)	45%
Sericite	40%
Plagioclase	5%
Carbonate (?dolomite-ankerite)	3%
Pyrrhotite	3%
?Carbonaceous matter	2%
Rutile	<1%
Tourmaline (dravite-schorl)	<1%

In this slide, the large detrital clasts of quartz and feldspar are rare (a few are up to 1.5 mm in maximum dimension, elongate parallel to the foliation). Most of the slide consists of fine-grained, well-foliated, sericite and quartz with abundant dark foliae of ?carbonaceous matter, pyrrhotite, and minor rutile plus scattered tourmaline.

Sericite forms subhedral flakes mostly <0.15 mm in diameter, defining the foliation. Quartz mostly occurs as elongate to lensey grains under 0.7 mm long with length:width ratios about 3:1 or 4:1, implying significant flattening and elongation of original detrital grains. In places lenses and layers up to 1 mm thick, parallel to foliation, of finer-grained quartz may be secondary, or could represent a primary quartz-rich, clay-poor lithology. Feldspar grains are sparse and generally not as flattened as the quartz, although sericitized examples appear to grade into aggregates of sericite and quartz that may have replaced former plagioclase detritus.

Carbonate is slightly more abundant than in the slides from 001-113 and 126, forming subhedral crystals to 0.25 mm that in places aggregate to 0.5 mm in the plane of foliation; they may be ?dolomite or ankerite to judge by the lack of reaction in hand sample.

Pyrrhotite occurs as fine-grained (<0.2 mm) subhedra in lensey aggregates or blebs up to 2 mm long parallel to foliation.

Very fine opaques (mainly 10 microns or less in diameter), with very low reflectivity, are interspersed with sericitic foliae in the rock. They probably represent ?carbonaceous matter that has not been sufficiently metamorphosed to form graphite. Rutile forms small aggregates up to 0.15 mm across composed of small (50 micron) dark brown subhedra. Tourmaline is medium green, intermediate dravite-schorl, forming euhedral ?detrital crystals up to 0.25 mm long.

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001-186: INTERLAMINATED META-SILTSTONE/MUDSTONE AND FINE QUARTZ WACKE WITH BLEBS/VEINLETS OF PYRRHOTITE-QUARTZ-CHLORITE

Hand sample is a very fine-grained, finely interlaminated meta-siltstone and fine wacke with narrow fractures that contain minor pyrrhotite. The rock is weakly magnetic in places but shows no reaction to cold dilute HCl, and no stain for K-feldspar in the etched slab. Modal mineralogy in polished thin section is approximately:

Sericite	45%
Quartz	40%
Chlorite	10%
Pyrrhotite	2-3%
Rutile, ilmenite	1%
?Carbonaceous matter	1%
Carbonate	<1%
Tourmaline (dravite-schorl)	tr
Apatite	tr

There are two basic variants, or rock types, in this slide: the major one is very fine silt- or mudstone, composed almost entirely of sericite (likely after clays), and the other is fine quartz wacke with lesser but still significant sericite.

In the sericite-rich rock, sericite forms mainly euhedral flakes mostly <50 microns in diameter that define a strong foliation. Quartz is minor, probably <20% of this part of the rock. Narrow kink bands <0.25 mm thick cross the rock oblique to the foliation, and narrow (<0.1 mm thick) quartz-trace carbonate ?veinlets are either planar, parallel to foliation (syn-metamorphic) or ptygmatically folded (pre-metamorphic). Pyrrhotite also occurs in the folded veins, forming elongate crystals up to 0.35 mm long parallel to the veinlet that are fractured or altered at their margins. Euhedral brown rutile crystals commonly form aggregates up to 0.25 mm long, parallel to the foliation (some are cored by ilmenite, and tabular ilmenite up to 0.1 mm long are also present in places). Narrow lenses or veinlets of quartz-pyrrhotite are rare. Scattered pale green tourmaline crystals are euhedral, up to 50 microns long.

In the more quartz-rich wacke, fine flattened ?detrital quartz mainly <0.1 mm in size makes up about 50% and sericite about 30-40% of the rock, with the remainder being chlorite mixed with the sericite, ?carbonaceous matter, and rutile. Blebs of pyrrhotite mostly <0.2 mm long but in places aggregating up to 2 mm long are associated with lenses of quartz containing (and peripherally associated with) minor chlorite (flakes up to 0.1 mm diameter, so intimately mixed with sericite that they are difficult to distinguish). Rare traces of chalcopyrite (subhedra <20 microns in diameter) are associated with the pyrrhotite.

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001-530: FINE QUARTZ-PLAGIOCLASE WACKE WITH SERICITE-CHLORITE-CARBONATE ± PYRRHOTITE-RUTILE-?CARBONACEOUS MATTER FOLIAE

Hand sample is a dark grey, very fine-grained, laminated meta-siltstone or fine wacke with minor blebs of pyrrhotite and rare narrow white fractures parallel to the core axis. The rock is slightly magnetic and shows trace reaction to cold dilute HCl, but no stain for K-feldspar in the etched slab. Modal mineralogy in thin section is approximately:

Quartz (largely detrital)	50%
Plagioclase (?oligoclase)	20%
Sericite	15%
Chlorite	10%
Carbonate (partly calcite)	2-3%
Opaque (?pyrrhotite)	1-2%
Rutile	<1%
?Carbonaceous matter	<1%

Although finer-grained, the mineralogy of this sample is similar to that of 001-113: detrital quartz, significant plagioclase feldspar, with foliae of sericite and ?carbonaceous matter, rutile and minor pyrrhotite. However, in this sample there is significant chlorite intimately mixed with the sericite.

Quartz- and feldspar-rich laminae are about 1-2 mm thick and contain subangular to subrounded detrital grains about 0.3 mm in diameter in a matrix of sericite and chlorite, minor carbonate, rutile, pyrrhotite and ?carbonaceous matter. Quartz grains are commonly composite or recrystallized, but do not display overgrowths; feldspar grains are commonly twinned and partly sericitized. Extinction Y^010 about 10 degrees and lack of significant relief against quartz suggests calcic oligoclase, about An_{27}.

Sericite- and chlorite-rich laminae are mainly <0.5 mm thick and contain 0.1 to 0.3 mm flakes of sericite and lesser chlorite, with irregular blebs of pyrrhotite mainly <0.1 mm in diameter and elongate rutile aggregates up to 0.2 mm long, plus microscopic (5 micron) ?carbonaceous matter. Chlorite has optical characteristics (pale green pleochroism, anomalous blue length-slow birefringence) typical of a moderately Fe-rich variety. Carbonate, likely mostly calcite?, forms irregular subhedra to 0.15 mm diameter.

This sample of fine-grained quartz-plagioclase wacke does not show clear indications of alteration apart from the sericite replacing plagioclase. However, it is possible that part of the sericite in the matrix also replaces feldspar, and therefore the rock has undergone more significant alteration than is readily apparent. Chlorite may also be an alteration product, or simply a product of regional metamorphism.

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001-589: FINE QUARTZ-PLAGIOCLASE WACKE WITH SERICITE-CHLORITE MATRIX, ±?PYRRHOTITE-RUTILE-?CARBONACEOUS MATTER-TOURMALINE

Hand sample is a fine-grained, grey, weakly foliated ?siltstone or wacke with minor pyrrhotite. The rock is weakly magnetic and shows trace reaction to cold dilute HCl, but no stain for K-feldspar in the etched slab. Modal mineralogy in thin section is approximately:

Quartz (mainly detrital)	55%
Sericite, muscovite	15%
Plagioclase (albitized, sericitized)	10%
Chlorite	10%
Opaque (?pyrrhotite)	1-2%
Rutile	1-2%
?Carbonaceous matter	<1%
Tourmaline	<1%

In this slide, elongated (likely flattened detrital) quartz and lesser, partly sericitized, feldspar grains plus rare euhedral muscovite flakes are set in a matrix of fine-grained sericite, chlorite, quartz, rutile, and ?carbonaceous matter containing scattered pyrrhotite blebs and rare tourmaline crystals. Proportions of sericite to chlorite vary from about 80:20 to 50:50. Elongate lenses of fine-grained quartz occur parallel to foliation.

Quartz and plagioclase feldspar form detrital grains mostly <0.5 mm in maximum dimension (composite grains of both quartz and plagioclase are up to 1.25 mm long), elongated in the plane of flattening or foliation. Minor overgrowth rims are denoted on quartz by minute inclusions near the rims. Plagioclase is vaguely twinned, with spindle-shaped twins characteristic of albitization that may have accompanied sericitization. Relief compared to quartz inclusions is negative, confirming that the plagioclase is albitic.

In the matrix, sericite is intimately mixed with chlorite, both forming sub- to euhedral flakes up to 0.1 mm diameter. Chlorite optical properties are as described above for 001-530. Quartz grains are generally <0.1 mm in diameter. Rutile and opaque (?pyrrhotite) form elongate aggregates up to about 0.2 mm long aligned parallel to the foliation. Minor amounts of sub-microscopic opaque, likely ?carbonaceous matter, are found within sericitic foliae. Tourmaline crystals <0.1 mm long are medium khaki-green (intermediate dravite-schorl, possibly slightly more Fe-rich than in previous samples). Although traces of calcite are indicated in hand specimen, no carbonate was seen in the thin section.

Although it is not possible to be sure, not knowing what the protolith was and what part of the sericite formation is due to the metamorphism, this sample may represent sericite-chlorite-albite alteration of a fine-grained quartz-plagioclase wacke.

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001-619: LAMINATED, FOLIATED, KINK BANDED META-SILTSTONE OR MUDSTONE COMPOSED OF SERICITE, MINOR QUARTZ, ?CARBON, PYRRHOTITE, RUTILE

Hand sample is a dark grey to black, very fine-grained, finely laminated ?meta-siltstone with alternating dark and light laminae displaying intricate ?isoclinal folding or disruption, cut by a ptygmatically folded pyrrhotite vein. The rock is weakly magnetic but shows only trace reaction to cold dilute HCl, and no stain for K-feldspar in the etched slab. Modal mineralogy in polished thin section is approximately:

Sericite	75%
Quartz	15%
Pyrrhotite	5%
?Carbonaceous matter	2-3%
Rutile, ilmenite	1-2%
Carbonate (?calcite, in vein)	<1%
Tourmaline	tr

This slide appears to be a meta-mudstone, composed principally of very fine-grained sericite (probably after detrital clays and micas) and lesser quartz (probably mainly detrital), with abundant narrow foliae enriched in submicroscopic ?carbonaceous matter, pyrrhotite, and rutile. The slide is roughly divisible into a silty part, with appreciable quartz, and a muddy part, with virtually no quartz.

In the former, quartz grains making up about 20% of the rock are mainly <25 microns in diameter but in places form composite grains up to 75 microns across. Sericite flakes are subhedral, up to 0.1 mm in diameter and define a strong foliation. Abundant, pervasively distributed narrow foliae (mostly <10 microns thick, but commonly in groups up to 50 microns thick) are enriched in 5-10 micron opaques, most likely ?carbonaceous matter, rutile (aggregates up to 0.25 mm long composed of minute brown subhedra mostly <20 microns in diameter) and pyrrhotite (blebs elongated parallel to foliation up to 0.15 mm long). Rare tourmaline forms scattered euhedra, likely detrital, up to 60 microns long.

In the latter, sericite, pyrrhotite, and rutile seem to be the only minerals present. Sericite, which forms subhedral to commonly bent flakes mostly <0.1 mm in diameter, displays strongly developed kink banding subparallel to the foliation, in which sericite flakes are rotated up to 90 degrees from the plane of foliation. Rutile occurs in slender elongate aggregates up to 0.15 mm long that are likely after former tabular ?ilmenite crystals, some of which remain in the slide. Pyrrhotite blebs are irregular and up to 0.75 mm across, except in the folded vein where masses up to several mm thick are composed of intergrown anhedra mostly <0.2 mm in diameter. Minor carbonate, likely calcite, forms subhedra to 0.35 mm in diameter included in the pyrrhotite vein.

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001-632: ?FRAGMENTAL META-SILTSTONE (DETRITAL QUARTZ-PLAGIOCLASE IN MATRIX OF SERICITE-CHLORITE-CALCITE-PYRRHOTITE-?CARBONACEOUS MATTER-RUTILE

Hand sample is a dark grey to blackish, very fine-grained ?meta-siltstone with a distinctly disrupted or possibly fragmental texture. The rock is magnetic and shows minor reaction to cold dilute HCl, but no stain for K-feldspar in the etched slab. Modal mineralogy in polished thin section is approximately:

Quartz (detrital, ?secondary)	40%
Sericite	25%
Chlorite	10%
Plagioclase (?albite-oligoclase)	10%
Carbonate (?mainly calcite)	5%
Pyrrhotite	5%
?Carbonaceous matter	2-3%
Rutile, trace ?allanite	1-2%
Tourmaline (dravite-schorl)	<1%

In this slide, vague clasts (or ?isoclinally folded and disrupted rock) are defined by distinctly quartz-rich areas up to 1 cm across. Although the boundaries are relatively sharp, they follow the folds in foliation or are lensey areas infolded with the foliation. The possibility exists that this represents a fragmental rock, with disruption either prior to folding or during folding.

In detail, the "clasts" either are enriched in quartz (silts or fine sands) relative to the matrix, or consist mainly of quartz as jigsaw interlocking anhedral to subhedral crystals up to 0.3 mm diameter, plus minor chlorite and sericite as subhedral flakes to 0.15 mm and pyrrhotite blebs up to 0.25 mm across. In places, relict ?fragments within the "clasts" are marked by concentrations of ?carbonaceous matter with feathery, disrupted shapes.

The rest of the rock consists of detrital quartz and lesser feldspar grains embedded in a matrix of fine-grained sericite, chlorite and carbonate plus variable amounts of opaques (pyrrhotite, rutile, ?carbonaceous matter). Quartz grains up to 0.2 mmgenerally have elongate shapes (length:width ratio about 2:1 in composite grains) subparallel to the foliation defined by the intervening micaceous minerals. Plagioclase feldspar grains tend to be smaller (0.1 mm) and subhedral, rarely displaying twinning with extinction on 010 about 12 degrees suggestive of composition either albite or oligoclase (not possible to see relief against quartz due to intervening sericite). The feldspar shows minor sericitization.

Sericite and chlorite in the matrix are intimately mixed subhedral flakes mostly <0.1 mm in size (rare 0.2 mm flakes of sericite could be detrital). Sericite-rich areas of the rock display minor kink-banding that defines a weak foliation oblique to the main foliation. Chlorite optical properties (very pale green pleochroism, anomalous green, length-fast birefringence) indicate lower Fe content than in previously described samples. Carbonate, likely mostly calcite, forms interlocking subhedra mostly <0.1 mm in diameter. Scattered 0.1 mm long tourmaline euhedra are also likely detrital; they have khaki-brown pleochroism suggesting moderately Fe-rich composition. Aggregates of rutile up to 0.2 mm long may be after former tabular ?ilmenite crystals; pyrrhotite blebs are irregular in shape, up to 0.7 mm long. Very fine opaques forming minute (5-10 micron) dusty particles and intergranular films may be ?carbonaceous matter. Rarely, small aggregates of ?allanite (REE-U/Th-bearing epidote) are marked by pleochroic haloes in adjacent chlorite, due to radiation damage.

Appendix III

CERTIFICATES OF ANALYSIS

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001-661: WEAKLY ALTERED (SERICITE-CHLORITE-CALCITE-ALBITE-PYRRHOTITE) META-SILTSTONE

Hand sample is fine-grained, grey, faintly laminated meta-siltstone with a faint green cast possibly due to pervasive sericite (±chlorite?) and minor pyrrhotite alteration. The rock is weakly magnetic and shows major reaction to cold dilute HCl, but no stain for K-feldspar in the etched slab. Modal mineralogy in thin section is approximately:

Quartz (detrital)	45%
Carbonate (mostly calcite)	20%
Plagioclase (?albite)	15%
Sericite	10%
Chlorite	7%
Opaque (?pyrrhotite)	1-2%
Rutile	<1%
?Allanite	tr

This slide is composed of a framework of detrital quartz and plagioclase feldspar grains, mostly <0.5 mm in diameter, in a matrix of carbonate, lesser sericite, chlorite, and minor pyrrhotite and rutile. Scattered coarser sericite flakes (muscovite, up to 0.2 mm) and yellow-brown to green (dreavite-schorl) tourmaline crystals up to 0.2 mm long are also likely detrital.

Quartz grains are mainly subangular, with minor overgrowths at the rims generally <25 microns thick. Plagioclase grains are subhedral to subrounded, commonly partly altered to fine flakes of sericite; composition could be albite (extinction Y^010 = 14 degrees, relief against quartz appears to be negative, but is uncertain due to intervening film of sericite).

Carbonate forms abundant interlocking subhedra mostly <0.15 mm in diameter, likely calcite to judge by the strong reaction to HCl in hand sample. Sericite flakes are mostly <50 microns in diameter, and are mixed in places with chlorite up to 0.1 mm in diameter (optical properties of chlorite are as for 001-619). Chlorite also forms aggregates up to 0.25 mm in size of 0.1 mm flakes, locally with pleochroic haloes surrounding tiny (20 micron) subhedra of ?allanite. Rutile crystals to 50 microns long are commonly intergrown with opaques (?pyrrhotite or less commonly ?carbonaceous matter). Pyrrhotite forms aggregates up to 0.5 mm long composed of smaller subhedral crystals

In summary, it is not clear whether the carbonate, sericite and chlorite entirely or partly represent an alteration assemblage. If these rocks were from the Aldridge Formation in southeastern B.C., which they greatly resemble, the lack of biotite would suggest that they have been weakly sericite-chlorite altered (not enough to destroy the albitic plagioclase). It is also not clear whether the carbonate content is a function of a primary lithology change or due to alteration; more sampling and field relations would be required to determine this.

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001-674.5: STRONGLY CALCITE-CHLORITE-QUARTZ-RUTILE-?PYRITE ALTERED ?METASEDIMENTARY ROCK

Hand sample is composed of mixed, swirled areas of pale green, soft rock and darker green, harder rock with a strongly disrupted texture; in the etched slab, the major dark green area is cored by what appears to be a white to grey, 1-3 mm wide fracture envelope that is also mainly harder than steel. Both areas react vigorously to cold dilute HCl, but show no stain for K-feldspar in the etched slab; the rock is slightly magnetic. Modal mineralogy in thin section is approximately:

Carbonate (?mostly calcite)	45%
Chlorite	30%
Quartz (secondary)	20%
Rutile	1-2%
Opaque (sulfide, ?pyrite)	1-2%
(?hematite-magnetite)	<1%

In thin section, the dark greenish areas (corresponding to the soft, yellow-green areas in hand specimen) are mostly chlorite with lesser carbonate, and the paler coloured areas (corresponding to the dark areas inhand specimen) are mostly carbonate with lesser but significant quartz. Although the whitish ?vein zone seen in the etched offcut is not visible in thin section, it seems likely that it represents a quartz-rich zone at the center of a carbonate-rich zone.

Carbonate, likely mostly calcite, forms tightly interlocking anhedra to subhedra mostly <0.1 mm but in places up to 0.35 mm in diameter. Quartz intergrown with the calcite forms anhedral to subhedral polygonal crystals generally <0.2 mm in diameter (but in places up to 0.7 mm) with a distinctly secondary look, and commonly strained and sutured. The quartz is commonly found in irregular-shaped patches up to several mm across that locally form an irregular network with veinlet-like distribution within the strongly carbonate-altered areas. Minor chlorite is found in the carbonate-rich areas. Fine irregular-shaped opaques appear to be mostly sulfide, likely pyrite, forming subhedra rarely over 0.1 mm in diameter but aggregating in blebs up to 0.25 mm long.

Chlorite forms subhedral flakes up to about 0.1 mm in diameter, with optical properties as described for 001-619 (virtually no pleochroic colour, weak anomalous green, length-fast birefringence) indicating slightly Mg-rich composition (Fe:Fe+Mg, or F:M, ratio possibly about 0.4-0.5). Minute needles of rutile up to 25 microns long are common in the chlorite (these can be seen in the etched slab as yellowish areas). Scattered opaques with rounded outlines up to 0.3 mm diameter are transparent red-brown at thin edges and may be ?hematized magnetite.

This sample, if derived from a metasedimentary rock like the others in this suite, likely represents strong quartz-carbonate-chlorite alteration (note the absence of any sericite, a characteristic mineral of the metasedimentary rocks). Pyrite, suspected in the section but not confirmable lacking a polished surface, is typical of the chlorite-carbonate alteration facies at the Sullivan deposit in the Aldridge Formation of southeastern B.C.

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001-874: ?STRONGLY (SERICITE-CALCITE-CHLORITE-?UARTZ-SULFIDE-SPHENE/RUTILE) ALTERED ?METASEDIMENTARY ROCK

Hand sample is a friable, strongly foliated grey-green rock, with lensey white layers that are softer than steel. The rock is magnetic and shows strong reaction to cold dilute HCl; there is no offcut left to check for stain for K-feldspar. Modal mineralogy in thin section and a polished slab is approximately:

Sericite	40%
Carbonate (?mainly calcite)	25%
Chlorite	25%
Quartz (?detrital or secondary)	5%
Pyrrhotite, pyrite, chalcopyrite	2-3%
Sphene, trace rutile	1-2%
?Hematite	<1%

This slide is somewhat similar to 001-674.5 in mineralogy (abundant calcite, chlorite, pyrite) but contains significant sericite and no quartz, and the Ti mineral consists of sphene as well as rutile.

The bulk of this rock is made up of fine-grained, finely foliated sericite (subhedral flakes mostly <0.15 mm in diameter, but in places with coarser carbonate, euhedral flakes of "muscovite" up to 0.6 mm in diameter). In many layers the sericite is intimately mixed with carbonate, lesser chlorite, and in some places, minor quartz. Quartz, which is very minor in this rock, occurs as flattened elongate crystals or aggregates up to 0.5 mm long, oriented in the plane of foliation; it could be relict detrital or ?secondary. Chlorite tends to be concentrated in narrow foliae between layers of sericite-carbonate rich rock. Lensey blebs of sulfide (pyrrhotite, pyrite, rare chalcopyrite), mostly <0.5 mm long, are found in the plane of foliation in sericite-carbonate-chlorite rich rock.

Carbonate, likely mostly calcite to judge by the reaction in hand sample, forms elongate (flattened) subhedral crystals up to 0.75 mm long in the plane of the well-developed foliation. In places it is concentrated into lenses or layers up to 1 mm thick.

Chlorite, with optical properties as for 001-674.5, forms fine subhedral flakes mostly less than about 0.1 mm in diameter. Most chlorite is concentrated in lensey or flattened ovoid areas about 3 mm long parallel to the foliation; these could represent chloritization and deformation of former ?mafic mineral crystals in a sheared and altered rock, but this is speculative. The ovoid areas contain subhedral opaque crystals in places like the ones in 001-674.5; it is not possible to identify these precisely, but they appear to be altered to limonite at the rims. Fine-grained (20-40 micron) euhedral rutile needles, locally forming aggregates to 0.2 mm, and locally intergrown with subhedral sphene crystals to 35 microns in diameter, are common within the chlorite-rich areas of the rock.

In summary, it is not clear what the protolith was for this rock: metasedimentary or possibly metaigneous, such as gabbro sill. Therefore, it is not clear what the extent of sericite-calcite-chlorite-?quartz-sulfide-sphene/rutile alteration is. However, the high Ti mineral and chlorite content in both this sample from 874 and the sample from 674.5 is suggestive of a metaigneous origin for the two samples; the ?albite akteration in the metasedimentaray sample from 661 is typical of the margins of altered gabbros in the Aldridge Formation.

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001-913.5: STRONGLY KINK-BANDED, ?QUARTZ-SERICITE-CHLORITE±CALCITE ALTERED ?META-SILTSTONE WITH TRACES OF SULFIDES, SPHENE/RUTILE, ?ALLANITE

Hand sample is pale greenish-grey, weakly foliated, with a weakly developed laminated texture, distinctly softer than steel. The rock is only slightly magnetic and shows no stain for K-feldspar in the etched slab, but shows minor reaction to cold dilute HCl. Modal mineralogy in polished thin section is (very approximately):

Quartz	40-50%
Sericite	40-50%
Chlorite	7-10%
Carbonate (mainly calcite)	2-3%
Pyrrhotite, trace chalcopyrite	<1%
Sphene, trace rutile	<1%
?Allanite	tr
Tourmaline (dravite-schorl)	tr

This slide consists mainly of quartz and sericite, plus minor amounts of chlorite, carbonate, and accessory sulfides and Ti-minerals; traces of ?allanite are suggested by pleochroic haloes around them in adjacent chlorite. The prominent fabric (foliation and lamination) seen in hand specimen appears to be kink-banding, at a high angle to the original foliation defined by alignment of sericite flakes. Original mineralogical layering from quartz-, sericite- to chlorite-rich appears to have been on a millimeter scale and to have been closely folded by the kink-banding. Ptygmatically folded quartz-minor sulfide ?layers or veins up to 0.5 mm thick are also affected by the event that produced the kink banding.

Quartz forms subhedral crystals mostly <50 microns in diameter that appear to be thoroughly recrystallized and to have lost their original ?detrital character. The crystals are commonly elongated with length:width ratios about 2:1, and long axes oriented sub-parallel to adjacent sericite flakes in the kink bands. Sericite flakes are mainly euhedral, up to 0.1 mm in diameter. Minor amounts of chlorite are intimately intergrown with the sericite as euhedral flakes of similar size, but there are also narrow laminae <0.1 mm thick (following the original, folded foliation and parallel to the quartz ?layers or veins) in which chlorite is more concentrated. Chlorite is characterized by very weak green pleochroism and near-zero birefringence, suggesting a F:M ratio of ?0.4-0.5. Commonly associated with the chlorite, sphene forms small subhedra mostly <50 microns in diameter, generally cored by minute crystals of rutile to 25 microns. Possible ?allanite forms minute subhedra to 15 microns diameter also associated with chlorite.

Carbonate, likely mostly calcite, is most commonly found in the folded quartz ?layers or veins, where it forms subhedra up to 0.25 mm in diameter intergrown with quartz and rare sulfides. Sulfides are mainly pyrrhotite and traces of intergrown chalcopyrite, forming irregular elongated blebs up to 0.5 mm long. Rare tourmaline (khaki-brown, intermediate dravite-schorl) forms euhedra up to 0.1 mm long.

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001-947: STRONGLY AMPHIBOLE-CHLORITE-CALCITE-ZOISITE-SPHENE ALTERED GABBRO (WITH ALBITIZED PATCHES, QUARTZ-CALCITE VEINS)

Hand sample is a fine- to medium-grained, altered gabbroic rock composed of sub-equal amounts of white relict plagioclase and two mafic minerals: pale green and lesser, dark green. The rock is cut by narrow white calcite veins (strong reaction to cold dilute HCl) containing traces of magnetic sulfide (?pyrrhotite); there is no stain for K-feldspar in the etched slab. Modal mineralogy in thin section is approximately:

Amphibole (?actinolitic)	35%
(?hornblende)	20%
Relict plagioclase (albitized)	10%
Carbonate (?mainly calcite)	10%
Chlorite	10%
Epidote (?zoisite)	7%
Quartz (?mainly secondary)	5%
Sphene, rutile	2-3%
Sericite	<1%
Opaques (?pyrrhotite)	<1%

This slide consists of strongly altered relict mafic minerals and strongly altered relict plagioclase, probably with an original grain size of about 1.5 mm average and a gabbroic texture.

Relict mafics, likely originally pyroxene, are replaced by two apparently distinct varieties of amphibole: one dark olive-green, likely hornblende, and the other pale green, likely actinolitic. Both form subhedral to ragged crystals up to about 0.7 mm long, pseudomorphing the original mafic crystals in various proportions. In places significant chlorite appears to replace the amphibole, forming subhedral flakes up to 0.1 mm in diameter. Chlorite optical properties, as for samples 001-619 to 913.5, are indicative of moderate F:M perhaps around 0.4-0.5.

Relict plagioclase crystals are less easily recognized, being mostly almost completely replaced, especially at the cores, by aggregates of fine-grained epidote-group mineral (?zoisite), carbonate (likely calcite, forming subhedral crystals up to 0.2 mm diameter), and quartz (subhedra to 0.15 mm; could be partly primary, interstitial). In a rounded patch about 1.2 cm in diameter, plagioclase is replaced by vaguely twinned or untwinned, cloudy ?albite in subhedra mostly <0.75 mm long, and minor sericite (euhedral flakes to 0.1 mm)

Small crystals of subhedral sphene, mostly <0.2 mm in diameter, are common throughout the rock, likely after former ?ilmenite. Quartz-carbonate veins are up to about 0.75 mm thick, composed of subhedral crystals up to that size (0.75 mm) that commonly are oriented across the vein (perpendicular to vein walls). Rare opaques in the veins and rarely in the wallrock are possibly sulfides, mostly <0.35 mm in diameter.

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Statement of Expenditures

Noble Metal Group Incorporated
801 – 409 Granville Street
Vancouver BC
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Cariboo Mineral Claims – August 20 – November 5, 2000
Diamond Drill Program

Contract Drilling 2642.5 ft (805.4 m)		$ 50,729.28
Construct loading ramp, unload and load drill rig, Rods, pumps and equipment		
JD 992 Excavator	20 hrs @200/hr.	$ 4,000.00
D8N Caterpillar	10 hrs @ $200/hr	$ 2,000/00
On site supervisor		$ 15,000.00
Geologist		$ 22,000.00
Core cutter & sampler		$ 6,248.00
Cook		$ 6,000.00
Accommodation & board		
3 men – 66 days @$75/day		$ 14,850.00
2 men – 45 days @$75/day		$ 6,750.00
Assays		$ 8,783.50
Service Truck – 66 days @ $50/day		$ 3,300.00
Ambulance on standby – 66 days @ $50/day		$ 3,300.00
Supplies ie., sample bags, saw blades, etc.		$ 1,000.00
Transport & travel @ 20%		$ 28,792.16
TOTAL		**$ 172,752.94**

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Statement of Expenditures

Noble Metal Group Incorporated
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Cariboo Mineral Claims – May 1 - November 5, 2000

Physical Work

Road rehabilitation, upgrading and ditching, road construction to drill sites, also construction, excavation of sumps and reclamation

John Deer 992 Excavator 16 hrs. @ $200/hr	$ 3200
D&N Caterpillar 20 hrs @ $200/hr	$ 4000
Supervision 4 days	$ 1600
Accommodation & Board 3 men – 4 days@ $75/day	$ 900
4 x 4 Rental 4 days @ $50/day	$ 200
TOTAL	$9900