GM 53018

REPORT ON THE 1994 GEOLOGICAL MAPPING PROGRAM, MALARTIC 2M-5M PROJECTS (1713-1715)

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Énergie et Ressources naturelles
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MALARTIC 2M-5M PROJECTS (1713-1715)

Report on the 1994 geological mapping program

Malartic township (Québec)

NTS 32D/01

Ressources Naturelles
Secteur Mines
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Bureau régional Val d'Or

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C. M. LAPLANTE

95059004

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Geological map (1:5000)
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LAC NORTH AMERICA LTD
(BARRICK GOLD CORPORATION)
PROJECTS 1713-1715, MALARTIC 2M-5M PROPERTY
Report on the 1994 geological mapping program
Malartic township (Québec)

SUMMARY

The Malartic 2M-5M property is located in the Malartic township, approximately 5 km N-E of the town of Malartic, Québec. The aim of the survey was to define favorable stratigraphy and structural features indicating the presence of economic gold mineralization. Mapping and an I.P. survey were completed at a 1:5 000 scale. This report summarizes the work undertaken during the geological survey carried out during the fall of 1994.

The Malartic 2M-5M property is part of the Malartic gold district and is located approximately 4 km north of the Cadillac-Larder Lake Break. It is underlain by rocks of the Malartic Group (ultramafic to felsic volcanic and volcaniclastic rocks inflated by numerous gabbro-diorite sills), the Kewagama sedimentary Group and the Blake River Group (volcanic). In the Malartic Group, rocks previously interpreted as komatiites on the property, were found to be basalts strongly altered in chlorite and talc. A felsic stock is injected at the faulted contact between the Malartic and the Kewagama groups. Three important N-W faults hosts to economic gold deposits run across the property: the Norlartic-Norbenite, Marbanite and the newly discovered M faults. Mineralization associated with the structures has already been discovered on the property. The New Gold showing (a grab sample assayed 2,74 g/t Au) and the Burbank showing (recorded 6,2 g/t Au/1,55m) are spatially associated with the N-W trending M fault. The Audet showing, on the property enclosed within the 5M property, is set at the faulted contact between a felsic stock and volcanics.

Two exploration models based on characteristics observed at known gold deposits in the Malartic mining camp can apply to the Malartic 2M-5M property. The first model is that of a deposit set in a shear zone crossing a competent intrusive in volcanic or sedimentary rocks. Such a model applies to Camflo, East Malartic, Malartic Goldfields and Barnat-Sladen mines. On the 2M-5M property, an identical geological environment occurs near the faulted contact of the felsic stock in the vicinity of the Audet showing.

The second model consists of shear zones in volcanic rocks or synvolcanic intrusions such as diorite sills. Examples of similar models are found at the First Canadian, Malartic Hygrade and Black Cliff deposits. On the Malartic property, similar settings occur along the M, Norbenite-Norlartic, and Marbanite faults where they

intersect gabbro-diorite sills. The Burbank and the New Gold showings seem spatially associated with the M fault and are coincident with I.P. anomalies.

A third exploration model that may apply to the Malartic property is that of Harker-Holloway. Although rocks formerly described as komatiites on the 2M-5M property were in fact altered basalts, the possibility of such a deposit to occur on the property should not be ignored as some samples collected on the property show a combination of gains and losses in major elements characteristic of rocks surrounding the Harker-Holloway deposit. Ankeritized variolitic volcanic rocks were also discovered in areas where altered samples have been collected. Furthermore, real komatiites may exist on the property without cropping out.

A thorough compilation of all public data and assessment work should be completed prior to undertaking any further follow-up work. Mechanical stripping on the New Gold and Burbank showings is recommended. Valuable information about structures and mineralization associated with the M fault could be gained from such strippings. An I.P. survey over the Blake River Group and prospecting with V.L.F. and Beep Mat devices over the entire property are also recommended. Ten diamond drill hole targets have been outlined during the course of this study. Proposed drill holes total 4550 m and combine favorable structures, lithologies and geophysical anomalies.

1.0 INTRODUCTION

This report summarizes the results of a mapping program conducted on the Malartic 2M-5M property in the fall of 1994. The property consists of 53 claims totaling 1960 hectares located approximately 5 km northeast of the town of Malartic, Québec (Fig.). Claims are wholly owned and registered to LAC (Barrick Gold Corp). with a 1% net smelter return to Breakwater Resources Ltd. The exploration program is managed by LAC (Barrick.Gold). Mapping survey was carried out by geologists Caroline M. Laplante and Dennis Chénard assisted by technicians Patrice Laliberté and Sylvain Doire. Claude Bernier supervised the mapping program.

The main objectives of the geological survey were to recognize structural features such as faults and asymmetrical folds, which are key criteria for gold exploration in the Malartic gold district, as well as to define the stratigraphy and any alteration pattern which could require further investigation. The 1994 exploration program consisted of surface mapping at a 1:5000 scale and assay and Lithogeochemical sampling. Refer to table 1 for a summary of the work undertaken during 1994.

Work	Period	Superficy	Contractor	Details
Compilation geophysical data	July 1994	53 claims	Val d'Or Geophysics	Magnetic
Grid cutting	July 1994 to September 1994	141,5 km	R. Picard Géophysique Co. ltée	Lines at a 100 m spacing
Geophysical survey	July 19 th to September 22 nd 1994	127 km	Géola Conseil en exploration	I.P.
Compilation geophysical data	October 1994	53 claims	Lambert Geosciences Ltd.	I.P. reprocessing and interpretation
Surface mapping	September 1994 to November 1994	53 claims	Whole rock and assays analyzed by Chimitec.	-147 whole rock + Ni. -121 assays

Table 1. Summary of work undertaken during 1994 on the Malartic 2M-5M property.

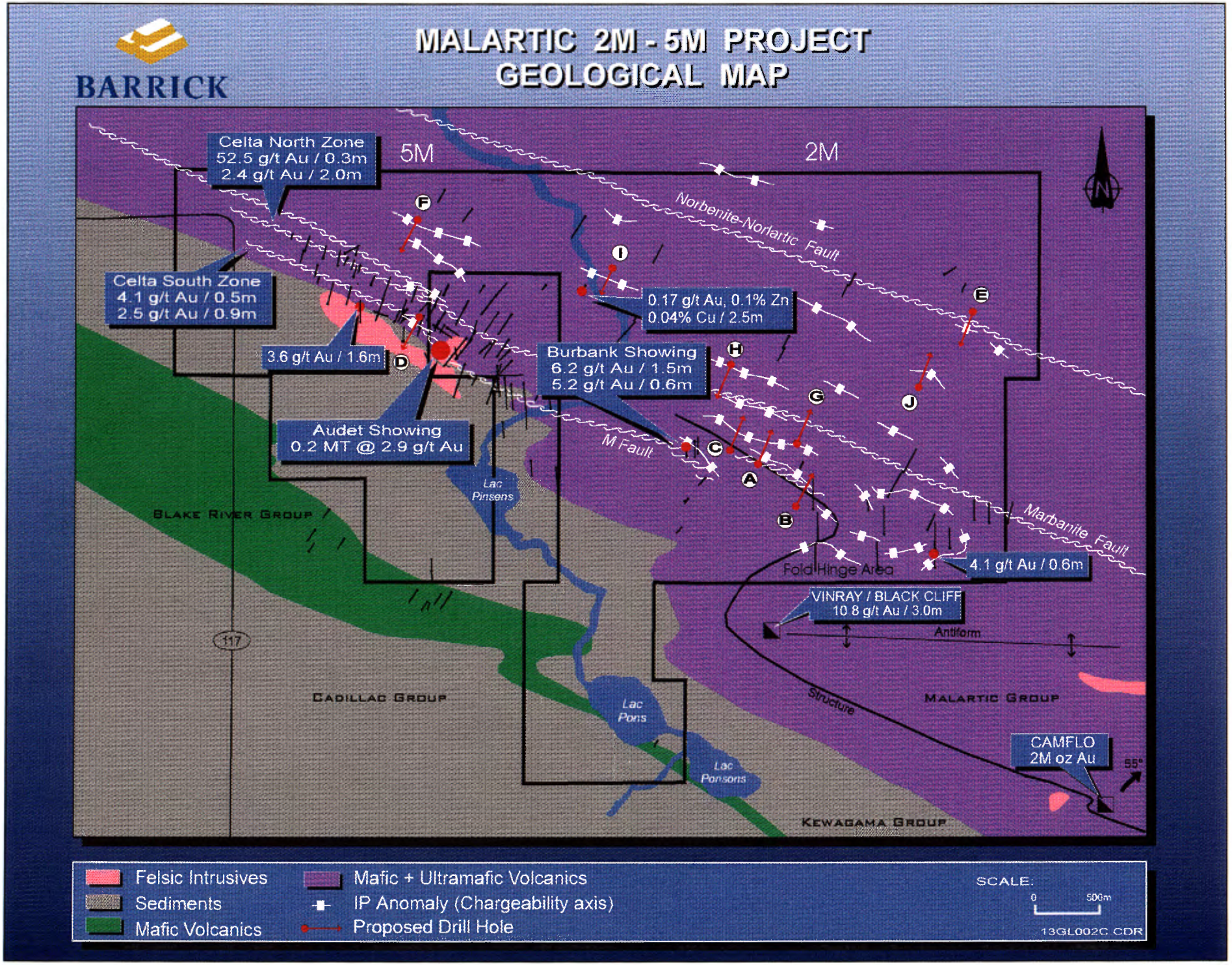

BARRICK
MALARTIC 2M - 5M PROJECT
GEOLOGICAL MAP
Celta North Zone
52.5 g/t Au / 0.3m
2.4 g/t Au / 2.0m
5M
2M
Norbenite-Norlartic Fault
Celta South Zone
4.1 g/t Au / 0.5m
2.5 g/t Au / 0.9m
0.17 g/t Au, 0.1% Zn
0.04% Cu / 2.5m
3.6 g/t Au / 1.6m
Burbank Showing
6.2 g/t Au / 1.5m
5.2 g/t Au / 0.6m
Audet Showing
0.2 MT @ 2.9 g/t Au
M Fault
Lac Pinsens
Blake River Group
Marbanite Fault
4.1 g/t Au / 0.6m
Fold Hinge Area
VINRAY / BLACK CLIFF
10.8 g/t Au / 3.0m
Antiform
117
Cadillac Group
Lac Pons
Structure
Malartic Group
CAMFLO
2M oz Au
55°
Lac Ponsons
Kewagama Group
Felsic Intrusives
Sediments
Mafic Volcanics
Mafic + Ultramafic Volcanics
IP Anomaly (Chargeability axis)
Proposed Drill Hole
SCALE:
0
500m
13GL002C.CDR

Figure 1

2.0 PROPERTY

2.1 LOCATION AND ACCESS:

The Malartic 2M-5M property is located approximately 5 km northeast of the town of Malartic in Malartic Township, Abitibi County, Québec (Fig 1.). The Malartic 2M property is accessible via Highway 117 then, approximately 6,4 km east of the town of Malartic, via a gravel road leading north to the Camflo mine. At 2,2 km north of the intersection, the gravel road forks. From the left road, a series of forest trails extends throughout the property. The Malartic 5M is easily accessible via Highway 117 then, at 5,2 km north of the town of Malartic, via a secondary road leading due east up to the Malartic River.

2.2 LAND STATUS:

The Malartic 2M-5M property comprises 53 contiguous claims totaling 1960 hectares and covers lots 37 to 40 and the southern half of lot 41 in Range II, lots 32 to 35, 38 to 51 and northern half of lots 29 to 31 in Range III and lots 26 to 33, 38 to 52 and northern half of 34 to 37 in Range IV of the Malartic township (Fig. 2). Claims were transferred to Lac North America in 1991 and are now registered to and wholly owned by Barrick Gold Corporation with a 1% net smelter return to Breakwater Resources Ltd. Seven claims were acquired since November 1994. Claims are located in Range II, lots 33 to 36 and Range IV, lots 23 to 25. A complete list of active claims is given in Appendix IV.

3.0 PREVIOUS WORK

The Malartic 2M-5M property has been explored for gold since the 1950's when several gold showings were discovered throughout the Malartic district. Besides the numerous geological campaigns, several geophysical surveys have been conducted on parts of the Malartic 2M-5M property. The reader is referred to the appended compilation maps of magnetic and I.P. anomalies for details on geophysical surveys.

3.1 SHOWINGS DISCOVERY:

The **Burbank showing**, discovered in 1961 by Burbank Minerals LTD, consists of white quartz veins in a mineralized schist. Mineralization in veins is chiefly composed of pyrite, pyrrhotite and chalcopyrite. Values up to 5,2g/tAu/0,76m were obtained from drill hole #1 (GM 12527). Schist contains stringers and patches of quartz with a fair

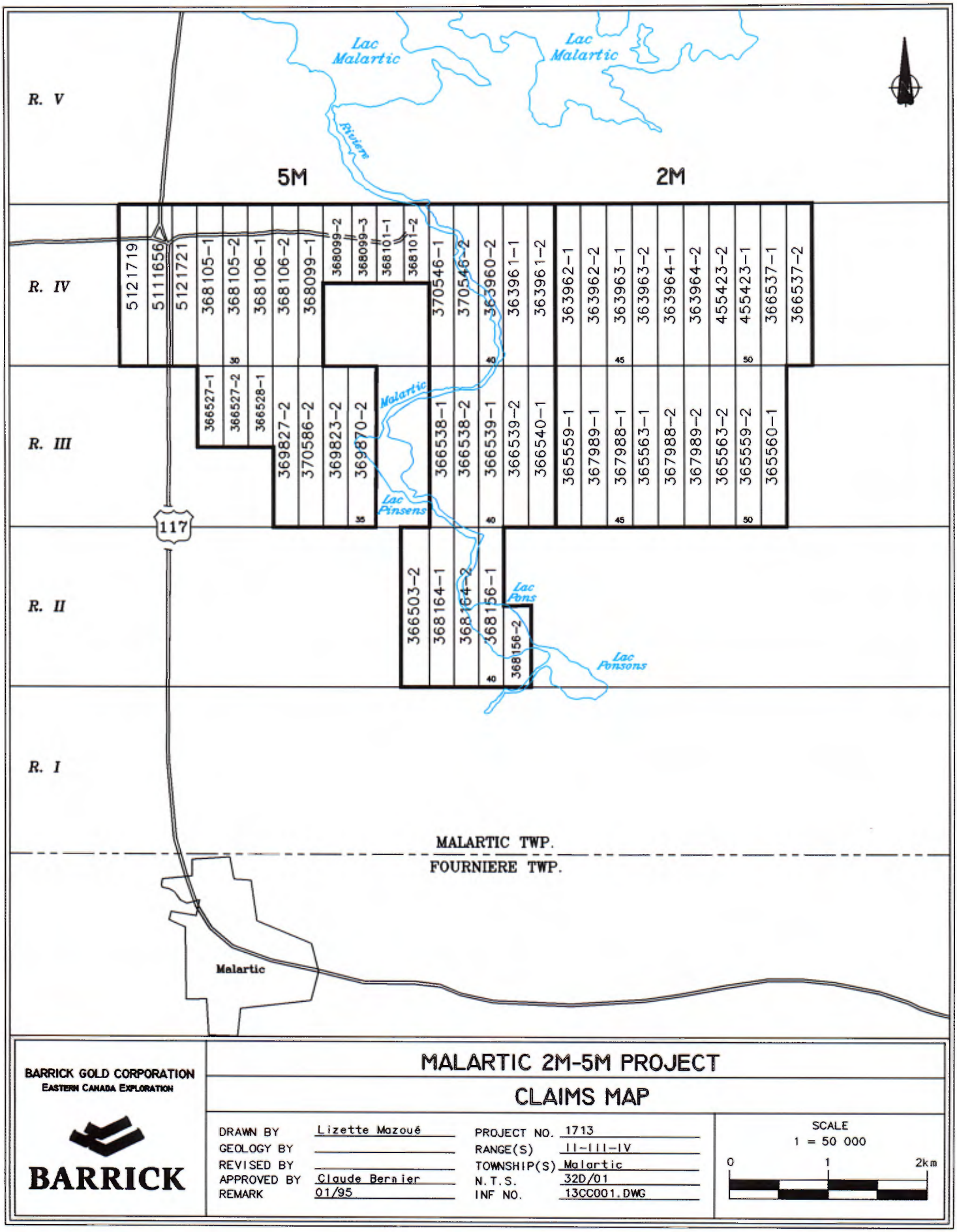

Lac Malartic
Lac Malartic
Rivière
5M
2M
R. V
R. IV
R. III
R. II
R. I
117
Malartic
Lac Pinsens
Lac Pons
Lac Ponsons
MALARTIC TWP.
FOURNIERE TWP.
5121719
5111656
5121721
368105-1
368105-2
368106-1
368106-2
368099-1
368099-2
368099-3
368101-1
368101-2
370546-1
370546-2
363960-2
363961-1
363961-2
363962-1
363962-2
363963-1
363963-2
363964-1
363964-2
455423-2
455423-1
366537-1
366537-2
366527-1
366527-2
366528-1
369827-2
370586-2
369823-2
369870-2
366538-1
366538-2
366539-1
366539-2
366540-1
365559-1
367989-1
367988-1
365563-1
367988-2
367989-2
365563-2
365559-2
365560-1
366503-2
368164-1
368164-2
368156-1
368156-2
BARRICK GOLD CORPORATION
EASTERN CANADA EXPLORATION
BARRICK
MALARTIC 2M-5M PROJECT
CLAIMS MAP
DRAWN BY Lizette Mazoué
GEOLOGY BY
REVISED BY
APPROVED BY Claude Bernier
REMARK 01/95
PROJECT NO. 1713
RANGE(S) II-III-IV
TOWNSHIP(S) Malartic
N.T.S. 32D/01
INF NO. 13CC001.DWG
SCALE
1 = 50 000
0
1
2km

Figure 2

amount of pyrite. A sulfide zone with disseminated massive pyrite and chalcopyrite stringers was also intersected in the same drill hole. This zone is 21,6m thick along drill hole and yielded small gold and copper values (0,2g/t Au, 0,05% Cu). A third intersection of interest is 1,5m wide, along hole, and consists of quartz veinlets with strong pyritization. A 1,5m long sample assayed 6,2g/t Au. Drill hole #2 intersected a zone of mineralized schist with quartz veins over 23,8m (along hole). Values up to 0,5g/t Au/0,76m were obtained from this zone.

The **Audet zone**, located on the few claims between Malartic 2M and 5M, was discovered in 1974 by Huronian and Belore Mines Ltd. Mineralization is set in quartz stringers with pyrite in a silicified and fractured granodiorite containing sparse pyrite (GM 30477). In hole H.B.-2., the zone extends over 49m and yielded values up to 0,3g/tAu/12,2m. Mineralization occurs along fracture plans as well. Deeper in the same hole, a sheared and silicified banded tuff (really a tuff ??) containing 5-10% pyrite yielded 2,2g/t Au/3,7m. Drill hole H.B.-3 intersected mineralization as well, assaying up to 2,7g/tAu/8,5m in a sheared chloritic tuff injected with quartz veins. Pyrite accounts for up to 15% within veins and up to 15% in the tuff horizon. Drill hole H.B.-5 yielded a gold value of 8,2g/tAu/0,61m from a sheared tuff containing up to 15% pyrite. Drill hole H.B.-6 intersected another sheared chloritic tuff horizon yielding up to 9,6g/tAu/0,9m within a zone containing common gold values up to 13,7g/tAu. According to Breakwater's reports, the Audet zone contains 0,22 Mt@ 2,9g/t Au.

3.2 GENERAL COMPILATION

Malartic 2M:

1944-1947: Vinray Malartic ML drilled 10 holes on their property located on lots 43 to 51 in Range II in Malartic township. Claims are just south-east of the Malartic 2M property. One of the holes intersected a diorite injected with quartz-carbonate stringers with minor pyrite which yielded 1,37 g/tAu/1,83m. Another hole intersected 2,3 m of silicified and carbonated volcanics assaying 1,03 g/t Au. A 85,3m shaft was sunk and 95,4m of lateral work was done on the first level and 70,4m on the second (76m) prior to suspension in August 1947. The property was reopened in December and 30,5m of raising was completed before closing again in Marsh 1948. According to company records, face sampling on the 38m level drift gave an average of 6,86 g/tAu/0,76 m over an explored length of 47 m. The same grade and width were reported for the 76,2 level for a length of 21 m. The shaft area was subsequently acquired by Baranouri Minerals (GM 272-273).

1947-1980: Numerous geological, geophysical and drilling campaigns were carried out by several companies. Very little encouragement is reported besides for a hole done by Chimo GML in 1963 which intersected a mineralized shear zone assaying 1,35 g/t Au/4,0m.

1980-1990: Breakwater Resources and Bond Gold Inc. carried out several mapping, geophysical (I.P., magnetometer and V.L.F.) and drilling campaigns. Novamin also undertook geophysical surveys.

Malartic 5M:

1936-1937: Celta Development and Mining Co. LTD conducted extensive work on their property, located in Range IV, lots 29 to 35 and Range III, north halves of lots 33 to 36, with thirteen holes totaling 1245,7m. Visible gold was found in one hole where values of 15,8g/tAu/1,1m and 30g/t Au/1,5m were obtained. Other less significant assay results were obtained from other holes.

1945-1946: Celta drilled a further forty-five holes totaling 6623,6m. A pyritiferous iron formation assayed 4,1g/tAu/0,5m and a fragmental andesitic rock yielded 52,6g/t Au/0,3m.

1945-1946: Malartic River ML conducted a surface work campaign and three drill holes were done on strike with the Celta zone (Range IV, lots 36 to 43). Two assays of 3,8g/t Au/0,46m and 3,4g/t Au/0,3m were intersected in massive silicified andesites.

1946-1980: Several companies performed geological, geophysical and drilling campaigns with little success except for Huronian-Belore ML which drilled seven holes in Range IV, lot 34 in 1974. Best reported assay was 6,9g/t Au/2,4m from a silicified chloritic tuff (associated with the Audet zone).

1977-1980: Darius Gold Mine Inc. Conducted few geological, magnetometer and geochemical surveys on Ranges IV and V, lots 28 to 37.

1981-1990: Darius Joint Venture (Sulpetro Minerals Limited, Breakwater Resources and Darius Gold Mine Inc.) conducted extensive work on the 5M property. Work includes geological mapping, prospecting, rock sampling, diamond drilling and geophysical surveys (magnetometer, I.P., V.L.F. and, HLEM). In 1990, Darius Joint Venture drilled 4 holes (totaling 773,57m) on I.P. anomalies in the fold hinge area and near the Burbank showing. No significant gold values were intersected.

4.0 REGIONAL GEOLOGY

Rocks of the Malartic gold district belong to the Archean Abitibi greenstone belt of the Superior Province, Québec. On the basis of different tectonic, plutonic and volcanic histories, the Abitibi belt has been divided into a Northern Volcanic Zone (NVZ) and a Southern Volcanic Zone (SVZ; Ludden and Hubert, 1986). The southern volcanic

zone is composed of several fault-bounded metavolcanic blocks such as the Malartic Composite Block (MCB) in which is set the Malartic gold district. The block is constituted by allochthonous, komatiitic to tholeiitic volcanic suites that are interpreted to have been derived from volcanic plateaus and volcanic islands that have been juxtaposed during Late Archean (Jackson and Fyon 1991; Ludden et al., 1986). Rocks of intermediate composition are rare.

A controversy still persists as to the origin of these blocks. They have long been regarded as a collage of volcanic arcs (Jackson and Fyon 1991; Thurston and Chivers 1990; Card and Ciesielski 1986), but recently it has been suggested that they consist of accreted allochthonous fragments of oceanic plateaus (Desrochers et al. 1993). Each of these tectonic panels have its own lithological assemblage, structure and geochemical signature. In this scheme, calc-alkaline magmatism is triggered by extension following the period of convergence and is superimposed upon the amalgamation of oceanic plateau fragments. Narrow east-west and northwest-southeast trending metasedimentary troughs subsequently developed along the wrench faults responsible for the juxtaposition of the volcanic panels (Ludden and Hubert 1986).

Proterozoic diabase dykes strike across all previous lithologies in a north-south to east-northeast-west-southwest direction. Segments of the dykes have been displaced by late faulting. North-south dykes are traceable over hundreds of kilometers in thickness ranging from 15 cm to 50 m.

The **Malartic gold camp** comprises important gold deposits such as the East-Malartic, Camflo-Malartic Hygrade, Malartic Gold Fields, Barnat-Sladen, Canadian Malartic and Black Cliff. From 1935 to 1984, these mines have yielded 212 403 kg of gold. Although mineralization in these deposits is found in various settings, these ore deposits share many similarities as they occur within a band of highly sheared and faulted volcanic and sedimentary rocks. This tectonic band, named the Malartic tectonic zone by Sansfaçon and Hubert (1990), is 900 m wide and separates two lithostratigraphic domains: the Cadillac and the Pontiac, to the north and to the south respectively. Gold-bearing structures are generally found to the south of the Cadillac Break (part of the MTZ) which separates the Cadillac metasediments and the komatiites and basalts of the Piché Group. The MTZ is composed of sheared and altered lozenge-shaped blocks of metavolcanic and metasedimentary rocks rimed by anastomosed bands of schists. Blocks and surrounding schists were subsequently intruded by mafic and felsic sills, dykes and stocks.

To the north of the MTZ run two other faults striking northwest and dipping northeast; the Norbenite-Norlartic and Marbanite faults. The former one is a structural controlling key factor of the Gold Hawk, First Canadian, Norlartic, Shawkie, Mine Ecole Provinciale, Kiena (Kiena-Norlartic fault) and Wissik mines and showings whereas the Marbanite fault is the host to the Marbanite mine. At this latter mine, mineralization occurs in en échelon zones injected with quartz-carbonate-pyrite-pyrrhotite stringers. The fault is responsible for a ductile deformation and a strong foliation within mafic volcanics

and brittle deformation of the felsic intrusion. Strain (shearing and fracturing) are key features for gold exploration at the Marban mine (Méthot and Trudel, 1987).

Stratigraphic units in the area of the Malartic district generally strike N300°. Units will be described herein as a coherent stratigraphic succession although their contacts are generally sheared and faulted. Furthermore, in the Piché and Pontiac groups, bedding strikes oblique to the contacts between lithostratigraphic units (Sansfaçon, 1986). Consequently, structure hampered stratigraphic correlations in the vicinity of the Malartic camp. From south to north, the lithostratigraphic units are as follows.

The **Pontiac Group** is located south of the MTZ. It mainly consists of graywackes, black pelites, sandy conglomerate and minor chemical sediments. Bouma sequences and several erosional structures indicate that sediments were deposited by turbidity currents. Rocks of the Pontiac Group exhibit mineral assemblages characteristic of the upper greenschist or lower amphibolite metamorphic grade.

The **Piché Group** is characterized by serpentinized komatiitic lava flows and basalt. In high strain zones, ultramafic rocks have been transformed into talc and talc-chlorite schists. The volcanic rocks were intruded by numerous diorites and felsic porphyry dykes and sills. Rocks in the Piché Group are deformed and probably folded.

The **Cadillac Group** consists of metasediments similar to that of the Pontiac Group. The former ones, however contain more polymictic conglomerate lenses. Graywackes, the prominent lithology, are massive or faintly bedded. Other lithologies include significant amount of pelite, minor magnetite-bearing iron formations and rare felsic tuff. Intrusions are very rare in the Cadillac Group.

In the Malartic district, the **Blake River Group** forms a narrow band less than 275 m and pinches out rapidly eastward. Prominent lithologies are basaltic and dacitic flows.

Metasediments of the **Kewagama Group** are very similar to that of the Cadillac Group. Discriminating features where the two groups are not separated by the Blake River are the more common intrusions and the less significant amount of conglomeratic lenses within the Kewagama Group.

The **Malartic Group** is divided into an upper Malartic (Heva Formation) and a lower Malartic (Jacola and Dubuisson Formations). The former formation mainly consists of calc-alkalic to tholeiitic mafic to intermediate lava flows. Pyroclastic and gabbro-diorite sills are also ubiquitous. The Jacola and Dubuisson Formations are characterized by prominent tholeiitic basaltic lava flows and lesser ultramafites. Rocks of the Malartic Group strike N120° and dip at a very steep angle. The first tectonic increment is responsible for the upturning of the strata whereas the second increment folded the rocks into asymmetrical E-W trending folds. The E-W foliation also developed during this

second phase of deformation. The syenite stock host to the Camflo deposit was intruded in such an asymmetrical fold.

4.1 ECONOMIC DEPOSITS OF THE MALARTIC GOLD DISTRICT

Gold deposits of the Malartic district have a distinct association of hydrothermal minerals. These deposits are characterized by the presence of K-feldspar, hematite, magnetite, fluorite and in some cases anhydrite. The high abundance of telluride minerals in some of these deposits and their spatial and temporal relationships with intrusive alkalic rocks suggest a genetic link between gold and intrusive rocks (Robert, 1990).

However, although, ore shoots may be associated with metasedimentary rocks (Canadian Malartic, East Malartic and Barnat-Sladen), ultramafic schists (minor host at East Malartic), deformed and altered diorite and monzonite sills and dykes (Malartic Gold Fields, East Malartic, Black Cliff) and quartz syenite stock (Camflo), mineralization is structurally controlled. Structures renown to host economic gold deposits will be described in the economic geology section.

A brief description of each deposits is given in order to illustrate different types of gold settings that may be expected on the Malartic property. Table 2 lists gold production from economic deposits and future gold producers Black Cliff and First Canadian of the Malartic district.

At the **Malartic Gold Fields (Goldfields) mine**, ore occurs in stockwerk veins and stringers in pyritized and altered tholeiitic diorite sills and dykes. Mineralization was structurally controlled as high grade ore bodies are cigar-shaped and parallel to the regional subvertical stretching lineation. Individual lens' size range between 150 m * 10 m and, less commonly, 150 m * 30 m whereas mineralized zones may extend over up to 300-500 meters in length, 100 meters wide and 800 meters deep. Dykes less than 10 m wide yielded higher grades as they were more intensely fractured. Veins are subparallel within a network. Although, several vein networks strike N30°E and dip at 45° to the NW, networks orientation is aleatory as they have been affected by subsequent phases of deformation (Sansfaçon and Trudel, 1988).

Veins consist of bluish or white quartz with a common significant quantity of tourmaline with lesser amount pyrite, traces of arsenopyrite, chalcopyrite and galena plus rare visible gold. A strong hydrothermal alteration occurs in the host diorite over a few decimeters from the veins. It consists of intense silicification (especially near major faults and breccias), biotization (<30%), chloritization (1-20%), carbonatization (5-20%) and pyritization (5-20%). Hornblend is less common. Gold is associated with pyrite.

The **East-Malartic mine** was the largest producer of the Malartic mining camp with 88 239,1 kg of gold and 17 404,3 kg of silver (Trudel and Sansfaçon, 1987). Most of the ore occurs along the Sladen fault (N090° dips at 75°S) at the contact between the

Piché and Pontiac Groups and at its intersection with the Barnat fault (N320° dips at 80° NE). The shear has been intruded by diorite dykes and syenite. Various lithologies have been intensely sheared and metamorphosed and contain gold values. Ultramafites became talc-chlorite schists whereas diorite sills and dykes were partially or completely transformed into biotite-carbonate-actinolite schists. Gold occurs as disseminated in altered halos that contain pyrite, biotite, carbonate, sericite, chlorite or hematite and as visible grains along the margins and in the center of quartz-carbonate veins. The main mineralized zone extended over up to 610 in length by 7 meters wide. Percentage of secondary minerals varies from one lithology to another. Grades also varies from one protolithology to another (Trudel and Sansfaçon, 1987). Best grades were obtained from diorite (5,8 to 7,9 g/t Au), syenite (3,8 to 5,8 g/t Au) and from graywacke (3,1 to 4,6 g/t Au).

Mineralization at the **Canadian Malartic and Barnat-Sladen mines** occurs along the Sladen fault at the contact between sediments (graywacke) of the Pontiac Group and a syenite pluton. Two types of mineralization occur at these deposits: disseminated pyrite and locally traces of chalcopyrite, sphalerite, galena and tellurides in brecciated graywackes and minor quartz veins in a diorite (Canadian Malartic) and a porphyry (Barnat-Sladen). In the sediments, ore occurs in three lenses approximately 3 m * 70 m containing recrystallized, pyritized and silicified fragments of graywackes and syenite. In the syenite, mineralization chiefly consists of veins 15 to 60 cm thick, discontinuous lenses and stringers networks of chloritized pegmatitic-looking material with a center of quartz. Chlorite, biotite, tourmaline, pyrite and gold are common with the pegmatitic veins (Sansfaçon et al. 1987). Mineralization took place during two mineralizing events. The first event corresponds to the mineralization in the graywacke whereas the second one is responsible for mineralized veins in the syenite and a gold enrichment of the graywackes.

Gold at the **Malartic Hygrade mine** is found in quartz veins with minor pyrite and in a carbonated basaltic shear zones with sulfurs and quartz stringers. Shear zones have locally been intruded by felsic porphyry dykes. At the **Black Cliff deposit**, gold-bearing quartz veins occur in a gabbro sill rich in magnetite and ilmenite. Veins are preferentially set in the hinge zone of a late asymmetrical EW antiform. At both mines, structural control is reflected by the presence of quartz veins subparallel to the axial plan (discordant to strata) in the hinge zone. Veins along the fold limb are concordant and, at Black Cliff, close to the axial plan. The antiform is responsible for the emplacement of the auriferous mineralization. Other mineralized veins (N025° subvertical) could be Rieddle fractures associated with main shear zones. Other mineralized shear zones run at N060° and dip at 75°N. Ore zones average approximately 100 long by 2 meters wide.

Host gabbro sills at Black Cliff are altered in biotite (<20%) and chlorite and enriched in H2O, K2O, CO2, S and possibly Si and Na. At Malartic Hygrade, alteration consists of chlorite, carbonate, and pyrrhotite

Mineralization occurrences at **the Camflo mine** are more various than at other mines. 90% of the gold was extracted from an alkalic porphyritic quartz syenite pipe-like stock injected along the axial plan of an asymmetrical E-W trending fold. The stock is fractured and contains a multitude of quartz stringers with traces of fine-grained pyrite. Ore is located where quartz veins are more important in number and in size and contain more coarser-grained pyrite. Gold is associated with pyrite but gold background throughout the stock average 250 ppb. Stock emplacement and gold-bearing mineralization are controlled by the late EW antiform that also affected rocks at the Black Cliff and Malartic Hygrade mines.

Ore shoots have variable sizes, shapes and attitude. However, they tend to occur within two parallel zones striking EW, dipping steeply to the north and plunging NE similarly to the plunge of the whole stock. These zones are approximately 15-25 meters wide but tend to converge and form a more important mineralized zone. Monzonite is altered in pyrite and calcite throughout the stock. Albitization is local. Ferromagnesian minerals have been replaced by carbonate, biotite and pyrite or carbonate, biotite and magnetite (Sauvé and Makila, 1987).

Mine	Kg Au produced	Kg Ag produced	Average g/t Au	Total tonnage
East Malartic [1]	88 239,1	17 404,3	4,92	17 948 457
Malartic Gold Fields [2]	52 952,1	-	5,91	8 957 789
Camflo* [3]	48 200			
Barnat-Sladen [4]	37 742,5	9 324,6	4,46	8 454 032
Canadian Malartic [5]	33 468,3	19 998,1	3,37	9 931 376
Marban [6]	10 264,6	1 049,3	5,27	1 983 112
Malartic Hygrade** [3]	6 500		3,5	
Total of producers	277 366,6	47 776,3		
Average of producers	39 623,8	9 555,3		
Black Cliff*** [7]			8,23	130 000
First Canadian**** [7]			6,8	635 000

Table 2 Gold production from mines of the Malartic gold district. *As at 1989-01-01, with proven and probable reserves of 1 070 000, 3,5 g/t Au. ** As at 1989-01-01. *** As at Mars 1987. **** As at January 1986. From: 1 Trudel and Sansfaçon, 1987; 2 Sansfaçon and Trudel, 1988; 3 Sauvé and Makila, 1990; 4 Sansfaçon et al. 1987; 5 Sansfaçon et al. 1987; 6 Méthot and Trudel, 1987; 7 Trudel and Sauvé, 1992.

Late faults host 8% of the gold extracted at the Camflo mine. Faults are highly sericitized and pyritized and are commonly injected with quartz veins. They are lightly mineralized over their entire length but have significant grades only where they intersect favorable structures (brittle) or lithologies (magnetite-rich) such as the granophyre and ferrodiorite. Gold is directly associated with pyrite which commonly replaces magnetite. This chemical control is reflected in that the ore found in magnetite-rich iron formations accounts for more than 1 % of the gold production of the Camflo mine.

5.0 PROPERTY GEOLOGY

The Malartic 2M property is underlain by rocks of the Malartic Group whereas the 5M property is underlain by the Malartic Group (northeastern half), the Kewagama sediments (southwestern half) and the Blake River Group (the southwesternmost end). A small felsic intrusion is set at the sheared contact between the Malartic Group and the Kewagama sediments (Fig.1). The following description is based on the rocks of the Malartic Group only since the Kewagama and Blake River Groups do not crop out on the property.

5.1 LITHOLOGY:

Basalt is the prominent lithology on the property. Horizons can be as thick as 250m. Flows are generally pillowed with minor flow breccia. Massive and porphyric flows have also been encountered. Pillows have sizes that range between 0,2 m in diameter to more than 2 * 2 * 1m wide. Locally, pillows have a whitish chilled margin. Basalt locally exhibits vesicular texture and quartz-calcite amygdules up to 2 cm in diameter. Grain-size varies from fine to coarse suggesting that individual flows were probably very thick. Variolitic flows have been encountered on the western half of the property. Vesicules generally account for up to 15 % of the rock but locally constitute up to 90 % of the rock. Mean vesicules diameter is approximately 4 mm but vesicules can be as big as 2 cm in diameter. Vesicular flows commonly contain traces of pyrite. Pyrite and pyrrhotite content increases with strong alteration in carbonate.

Some strongly altered basalt outcrops have been described by all previous workers as ultramafic rocks. However, geochemical evidences strongly suggest that they are basalts that have undergone significant dilution, silica depletion, alteration in chlorite and talc and probable important volume change (see rock geochemistry section). They are highly magnetic and chloritized. Discrimination between flows and intrusion is awkward since some horizons are perfectly massive with a medium to coarse grain whereas others exhibit flow textures. They are, however reported to be extrusive rocks. Serpentine fibers have developed along small shear zones. Carbonatization is common on these outcrops as well as traces of pyrite and pyrrhotite. These rocks are easily distinguished geochemically from other units by their high Ni content (>600 ppm).

Diorite-gabbro sills range in thickness from 10m to 100m except near the fold hinge where thickness can reach 175m. Rock is generally medium-grained. Individual sill may be differentiated as their composition varies along with the grain size from a fine-grained gabbro to a medium-grained diorite. Sills are commonly magnetic and shows up as high magnetic linear anomalies on magnetic maps.

Tuff beds generally occur as thin horizons that are inferred to rapidly pinch out laterally. Tuff beds commonly contain intermediate to basaltic lapilli which may, in some

places, have a white color owing to the strong surface alteration. Feldspar crystals are also common and can account for up to 30% of the rock. Tuff are matrix-supported and lapilli and blocks are generally well sorted. Blocks seldom exceed 10 cm in diameter. In some places, fine-grained tuff grades into a cherty tuff, suggesting a distal facies of deposition. Rarer felsic blocks tuffs occur in close spatial association with mafic tuffs to the west of the Burbank showing. Blocks mean diameter is approximately 4 cm but few blocks are as big as 25 cm in diameter.

Sediments horizons are intercalated with basaltic flows in the northeastern portion of the property. Sediments mainly consist of graywackes and argillites with minor thin cherty horizons. Up to 5% pyrite and sphalerite have been observed within the cherty horizons.

A **felsic body** has intruded the faulted contact between the Kewagama sediments and the Malartic Group. Where exposed, the medium-grained granitoid stock is of a pinkish gray color and exhibits a saccaroidal texture. Biotite accounts for 2% of the rock and pyrite for up to 2%. The pluton has a calc-alkaline to transitional affinity.

QFP and FP dykes are common in zones of high strain. They are characterized by a greenish-gray, fine-grained groundmass with quartz and feldspar phenocrysts. Locally, groundmass contains traces of pyrite. Dykes are concordant to slightly discordant with respect to the foliation.

5.2 STRUCTURAL ELEMENTS:

Important structural elements occur on the Malartic 2M-5M property. These structures, known to host gold deposits in the Malartic gold district, include the Norlartic-Norbenite fault, the Marbanite fault and an asymmetrical Z-shaped synform. Bedding and foliation generally strike N300°

Most of the Malartic 2M-5M property is part of a homoclinal sequence that faces south. Stratigraphic top was determined in several locations from pillow morphology, grading within tuff beds and geochemistry (see rock geochemistry section). Rocks in the southeastern corner of the 2M property are folded into an asymmetrical z-shaped synform plunging westward. Stretching lineations measured from slightly elongated vesicules and quartz amygdules in a pillowed basalt horizon at the fold hinge plunge steeply (80-85°) westward. Although vesicules were slightly stretched, strain does not seem to be high in the basalt horizon. At this location, stratigraphic top is to the west and bedding is perpendicular to the foliation (284/90). The next hinge to the south of this Z-shaped fold is the host to the Black Cliff-Vinray deposit (10,8g/t Au/3m). Farther southeast, on the long limb occurs the Camflo Mine (1,8M oz Au). Other stretching lineations were measured from well exposed deformed pillows and from vesicules in basaltic flows. All mineral lineations were plunging steeply westward to northwestward.

The Norlartic fault runs northwest across the northeast corner of the 2M property. On the property, the fault probably runs in a linear topographic low along a ridge of highly strained, heavily sheared and boudinaged pillowed basalt horizon traceable over at least 500 m. At this locality, basalt is slightly silicified. Several QFP dykes up to 1 meter wide are sub-parallel to the foliation. The side of the ridge closer to the inferred location of the fault is composed of a diorite sill. The high strain zone is probably coincident with the northern side of the Norbenite-Norlartic fault.

The Marbanite and M faults runs parallel to the Norlartic-Norbenite fault and dissect the northern limb of the Z-shaped fold. The New Gold and Burbank gold showings are spatially associated with the M fault. The faults have not been observed on the field and their subconcordant attitude makes it very difficult to detect by geophysical means at the property scale. They are better located on a regional magnetic map.

6.0 ROCK GEOCHEMISTRY

During the exploration program, geochemical samples have been systematically collected in order to define stratigraphic characteristics and alteration trends which could require further investigation. A total of 147 samples were collected across the property. A whole rock package (major oxide, trace elements and Ni) was carried out by Chimitec on all samples. Trace elements include Ba, Cr, Sr, Cu, Zn, Ag, Zr, Y and Ni. All analysis were performed by the induced coupling plasma method except Au, Cu, Zn, Ag and Ni which were analyzed by atomic absorption and Zr and Y by X-ray fluorescence. All lithogeochemical results are listed in Appendix II. Results used in all calculations are normalized on a LOI-free basis.

6.1 PRIMARY LITHOLOGIES:

Primary lithologies can be separated into two groups: the tholeiitic suite comprising all mafic to felsic volcanic rocks and gabbro-diorite sills, and the transitional to calc-alkaline suite which includes QFP dykes, rare felsic volcaniclastic rocks and the rhyolitic stock. Geochemical affinity was defined using Zr/Y ratios (fig. 3), tholeiitic rocks have a Zr/Y ranging between 3 and 5 whereas, calc-alkaline rocks, have a ratio exceeding 7 (Barrett et al. 1991). In order to avoid misinterpretation of primary composition due to subsequent alteration, the Al2O3/TiO2 ratio was used to discriminate between mafic and felsic rocks. That is, a Al2O3/TiO2 ratio less than 30 is characteristic of a basaltic to dacitic suite whereas a ratio greater than 40 implies a felsic composition. Stratigraphic correlations were verified by lithogeochemistry using Ni values (see appended maps).

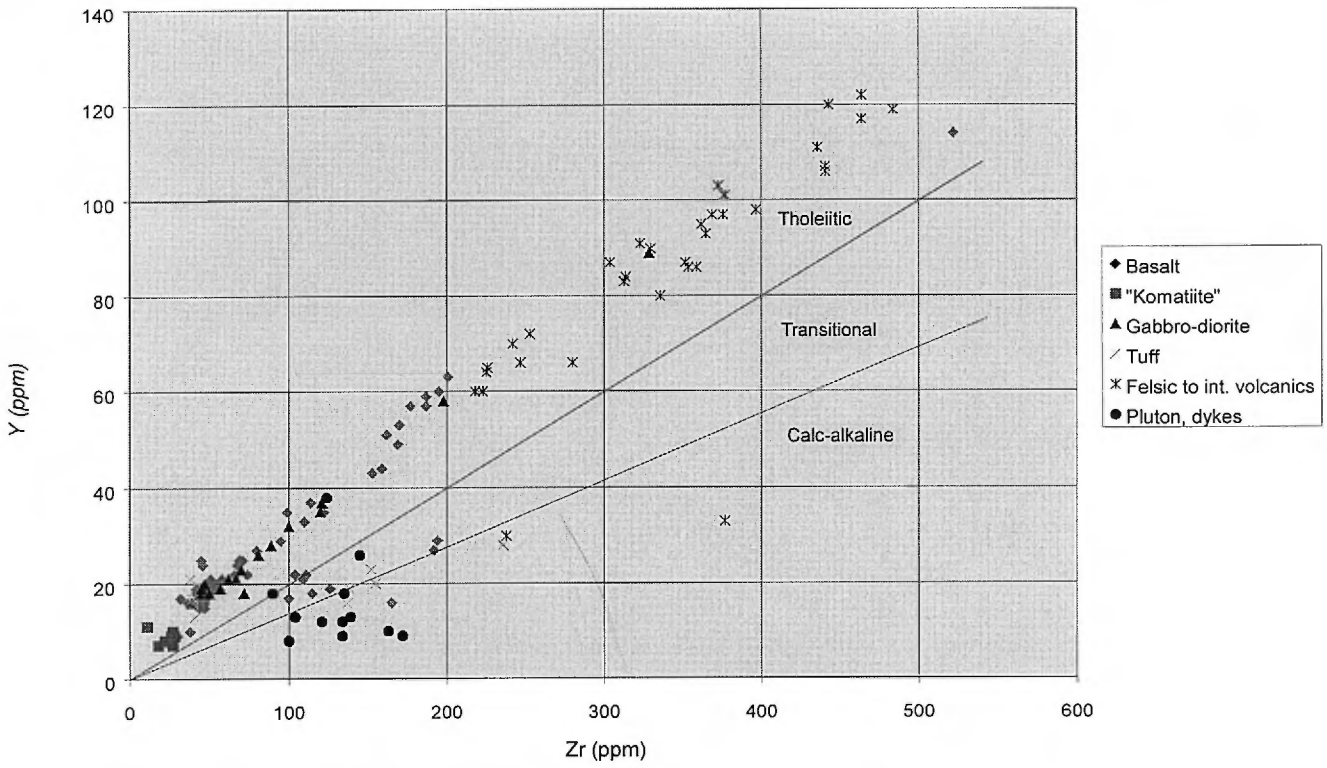


Fig. 3. Geochemical affinity of all rocks of the Malartic 2M-5M property.

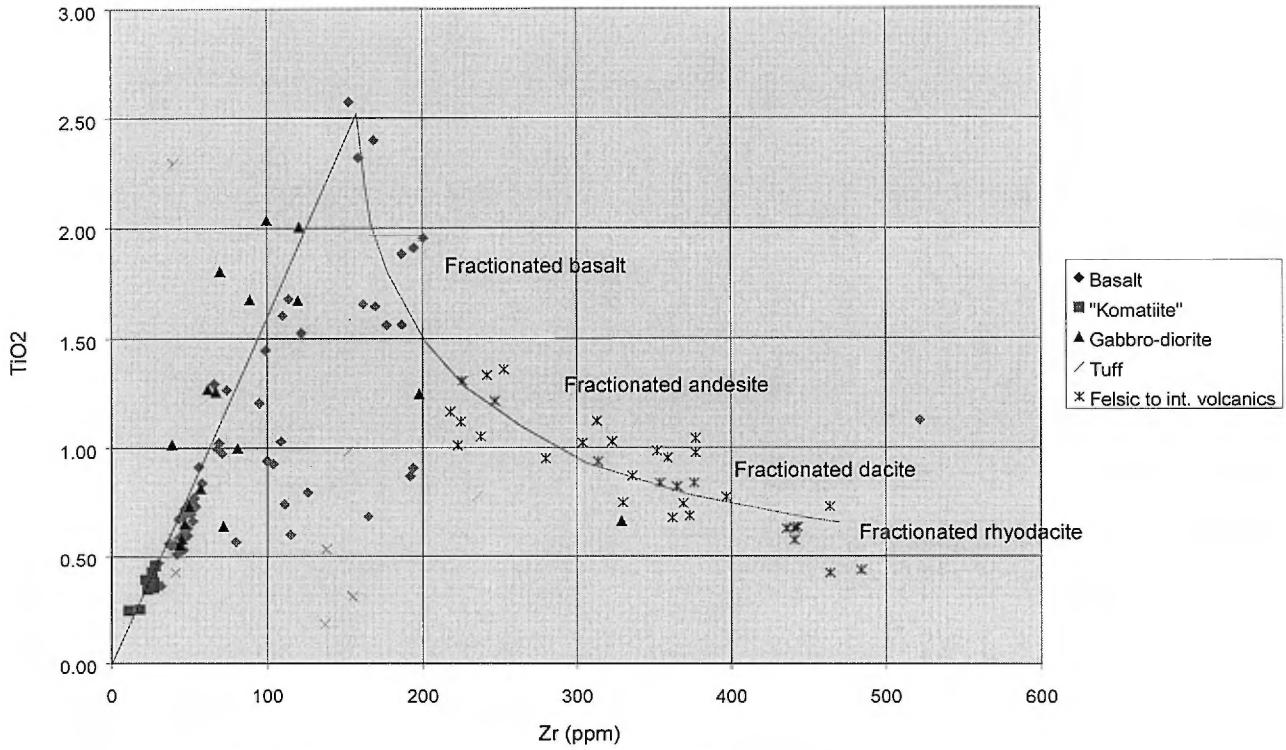


Fig. 4. Diagram showing rock types and fractionation trend. TiO2 becomes compatible at a certain degree of fractionation.

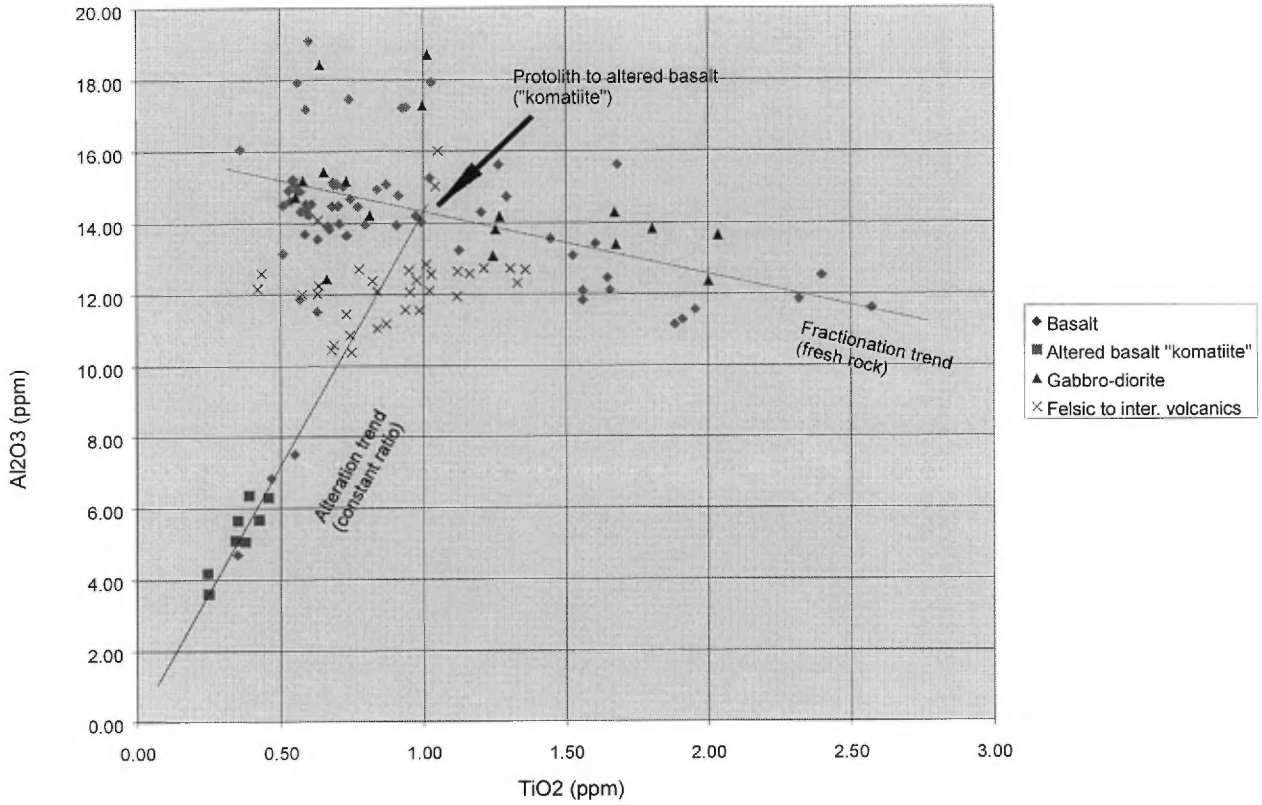


Fig. 5. Diagram showing fractionation and alteration trends. The straight alteration line will result in an horizontal trend on figure 6.

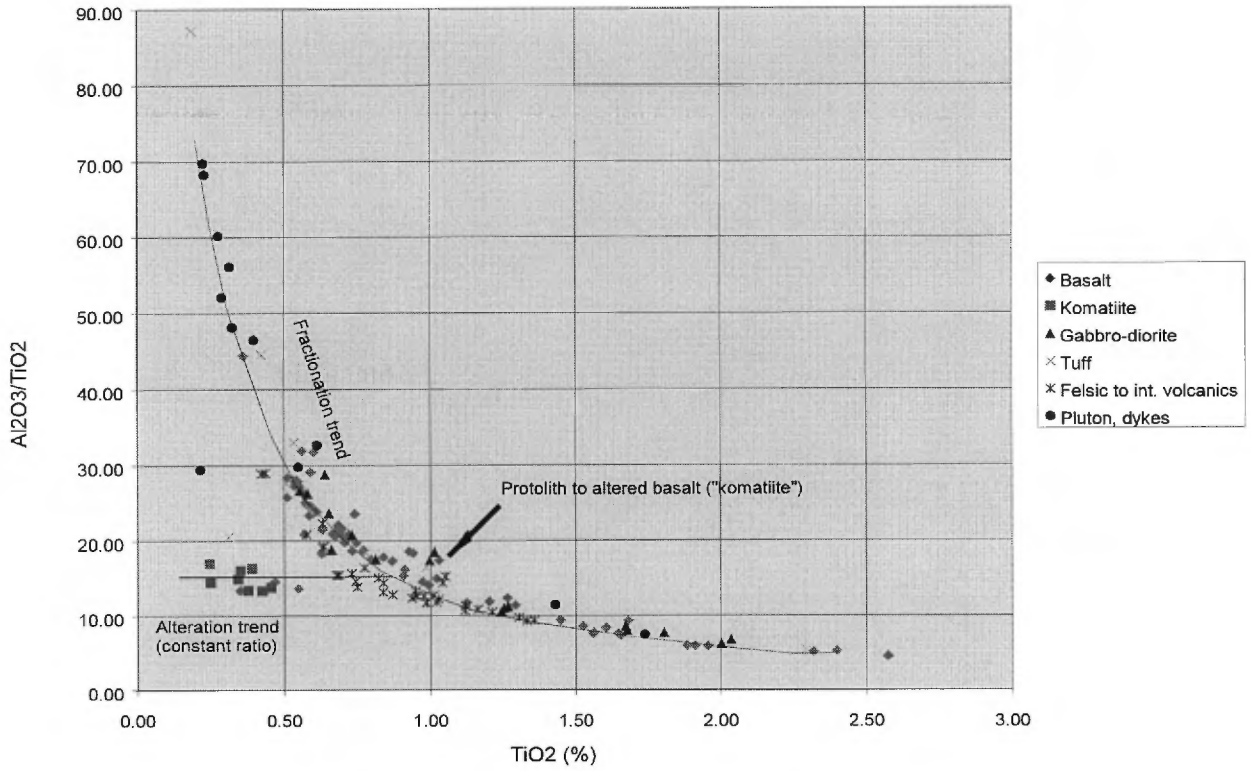


Fig. 6. Fractionation trends of all rocks of the Malartic 2M-5M property. Altered basalt ("komatiite") depart from the trend and plot along the horizontal alteration line.

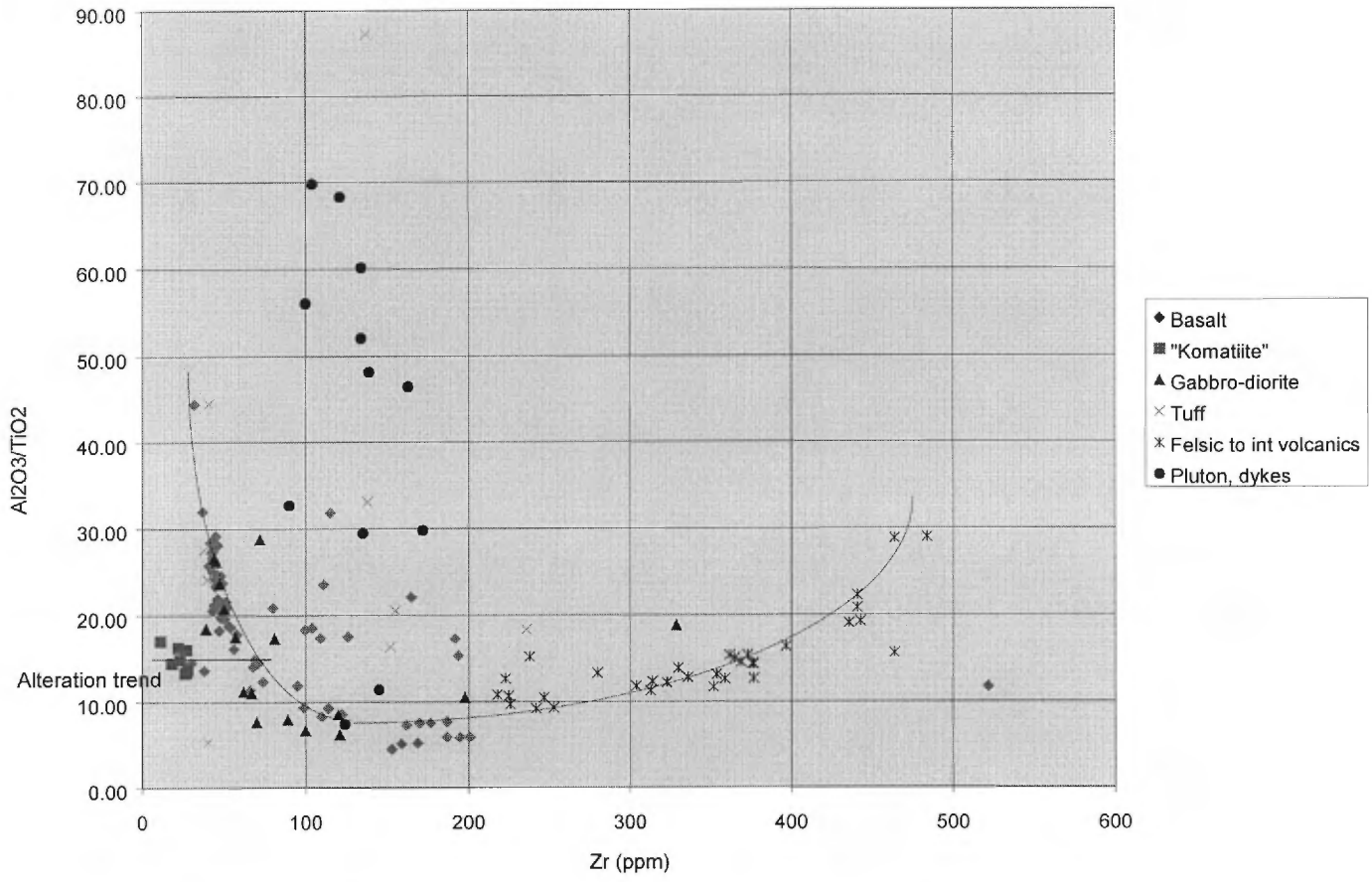


Fig. 7. Fractionation trend of all rocks and alteration trends.

All volcanic rocks and gabbro-diorite sills are comagmatic in origin as they all plot along identical trends on various diagrams (Fig. 3 to 6). However, volcanic rocks are progressively more fractionated going southwestward. With increased fractionation, TiO2 becomes compatible and its content in fractionated rocks becomes lesser as shown on figure 4. The breaking point occurs at Zr =150 ppm. The southwesternmost volcanic rocks on the property were extruded during this advanced fractionation phase. The fractionation trend observable among volcanic rocks from northeast to southwest, corroborates the stratigraphic top to the southwest deduced from field relationships.

The granitoid stock has a transitional geochemical affinity. Background in Au and Ba is high compared to surrounding host rocks. Gold and barium backgrounds in the pluton are 56 ppb and 1010 ppm, respectively, which are high compared to 5 ppb and 123 ppm in the host rocks. In the Malartic gold district, a Ba and Au enrichment has been observed in rocks surrounding economic gold deposits (for instance, the Camflo stock, to which the granitoid stock is similar).

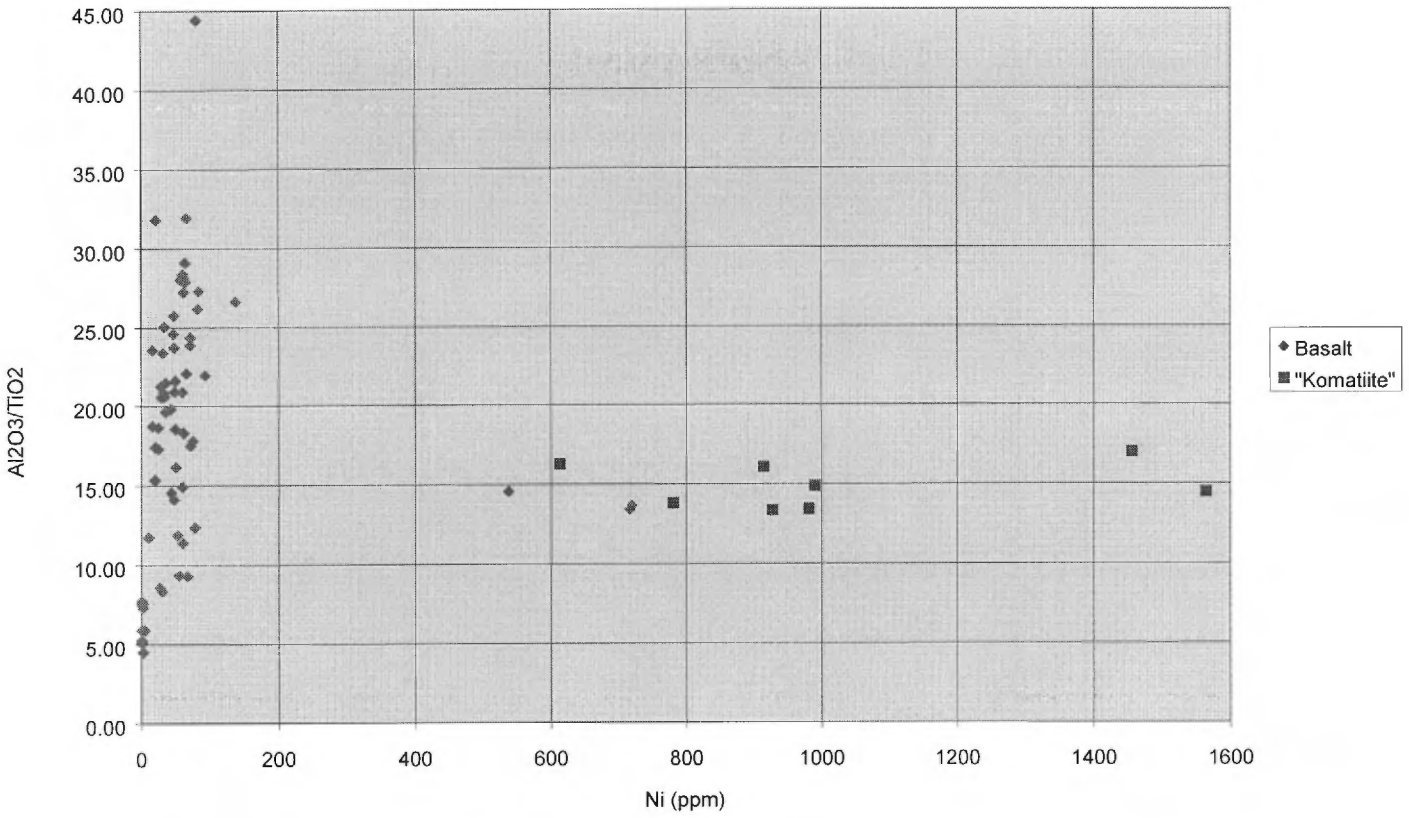
Rocks exposed and described by previous workers as komatiites are in fact deeply altered basalts. On figures 3 to 7, all volcanic rocks and synvolcanic gabbro-diorite sills plot on very coherent trends suggesting that all rocks belong to the same fractionation suite. On figure 5, "komatiitic" volcanics plot along the alteration trend of a mafic protolith, outside the fractionation trend. On this diagram, the Al2O3/TiO2 ratio of the alteration trend is constant and will result in an horizontal alteration trend on diagrams 6 and 7. Inferred protoliths on all diagrams correspond to a basalt with an original composition similar to that of samples 937, 2204 and 2211 (see appendix II). Note that on fig. 4, fractionation and alteration trends are superimposed.

Nickel and chromium contents in these altered basalt are anomalous high (even komatiites generally have less than 300 ppm Ni) and are much higher than in the protolith and all other basalt samples. Figures 8 and 9 show that both elements behave in a very similar way; which is not expected because of their very different nature; Ni being a metal and Cr and oxide. Their different nature should have forced them to behave in dissimilar ways during alteration. Ni and Cr were thus probably immobile during alteration and their content was thus probably increased solely by a volume decrease. Note that silica is also strongly depleted in these altered basalts, supporting the hypothesis of an important volume decrease.

The high MgO concentration with the low SiO2 and Al2O3 percentages suggest that rocks are altered in chlorite and talc. Chlorite can account for the high MgO content but talc is needed to explain the low Al2O3 concentration.

6.2 ALTERATION

General alteration trends did not show up clearly using traditional alteration indices such as Hashimoto or Sericite. Only a slightly sericitized area in the north of the



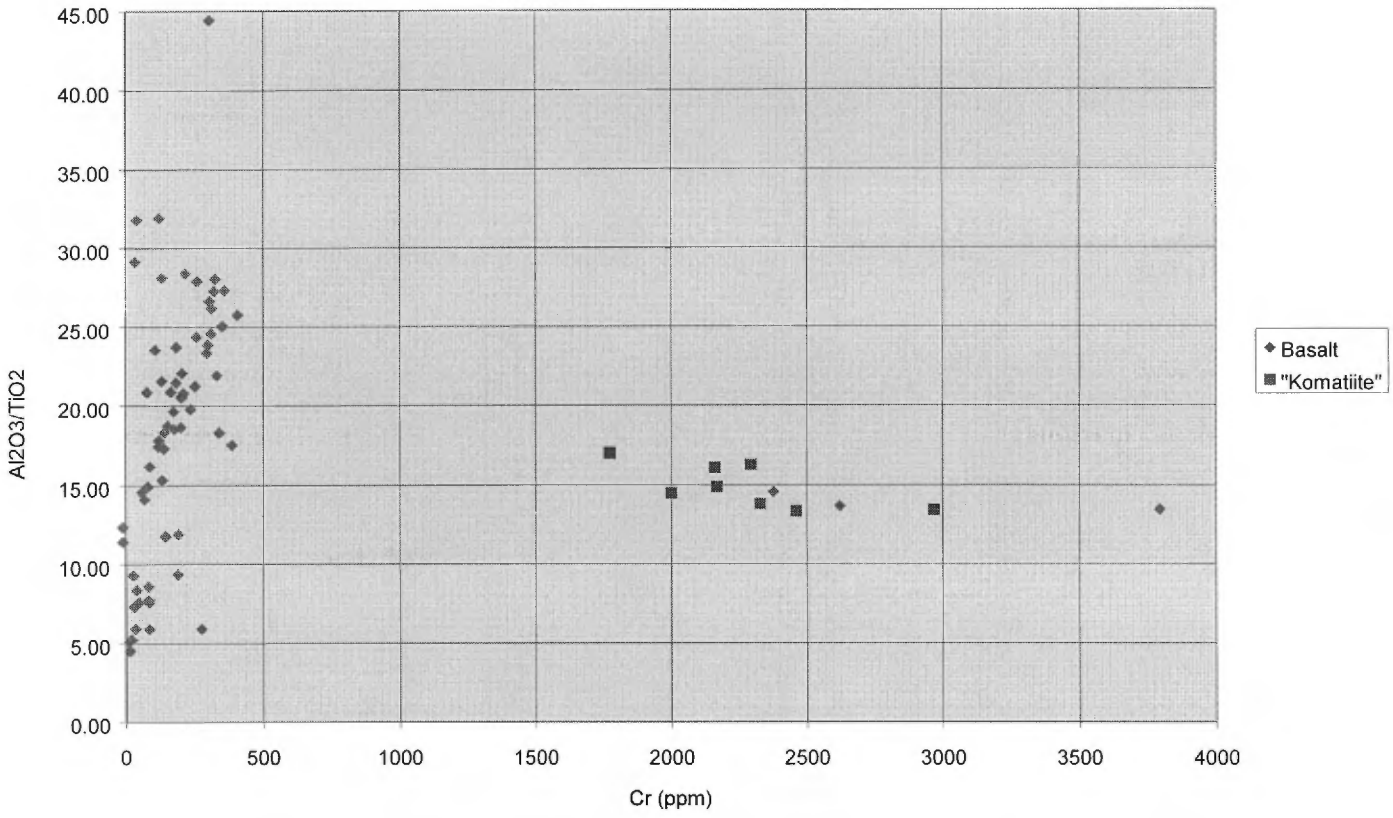


Fig. 8. Comparison between behavior of Cr and Ni. Although their different nature, both elements behave in similar way, suggesting that their high content is not an effect of alteration.

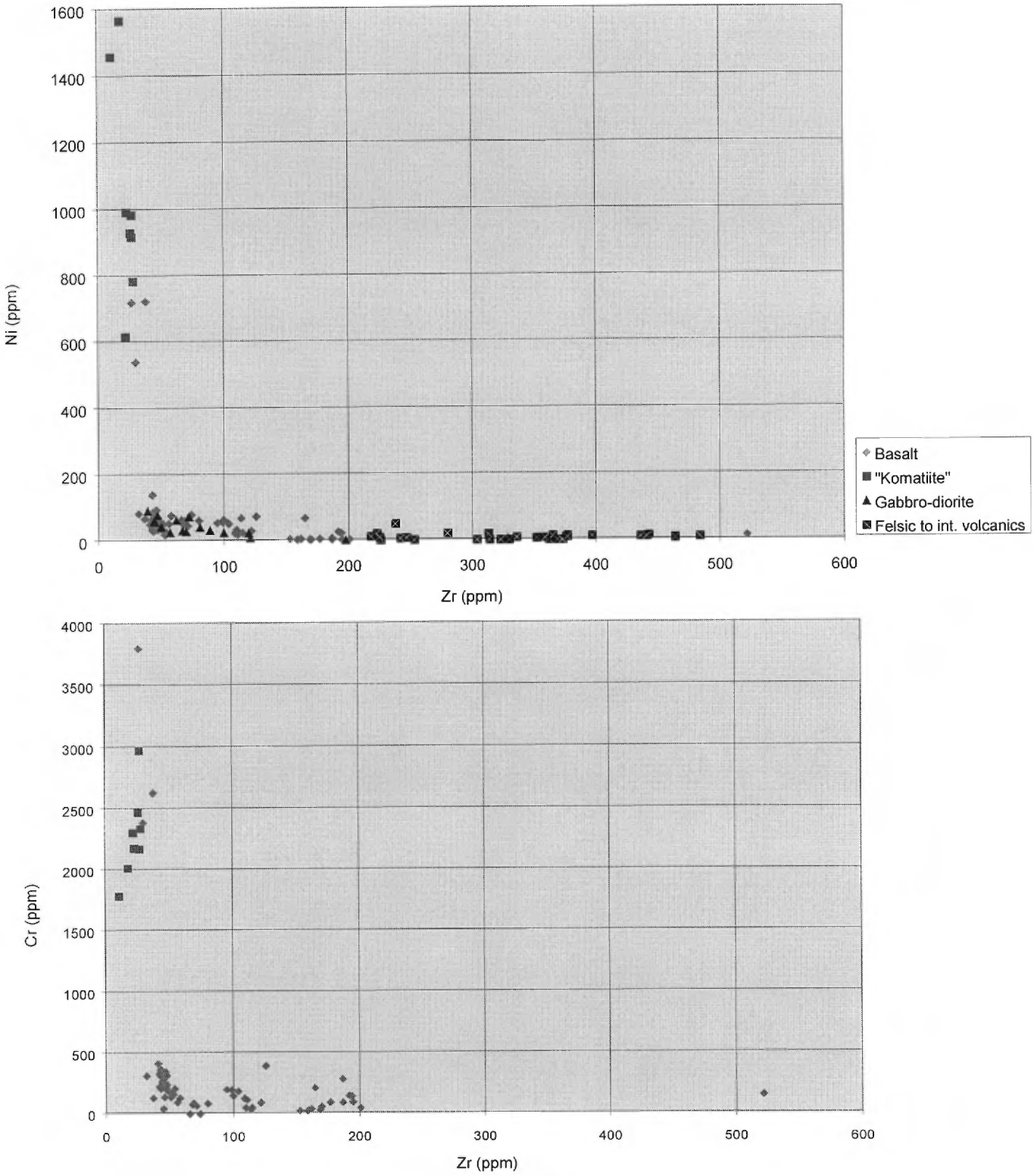


Fig. 9. Comparison between behavior of Cr and Ni. Although their different nature, both elements behave in similar way, suggesting that their high content is no effect of alteration.

property has been outlined. Alteration distribution is thus, better understood using megascopic descriptions. Furthermore, the scale of alteration halos around gold deposits in the Malartic district is generally smaller than the spacing at which samples were collected. Lithogeochemistry was thus less useful in describing alteration patterns than in understanding the stratigraphy.

Carbonatization is fairly common on the Malartic 2M-5M property. Calcite is the dominant carbonate mineral and is locally associated with minor amount of ankerite. Carbonatization seems to be randomly distributed and does not follow any recognized structure. Calcite locally occurs as carbonate or quartz-carbonate amygdules in vesicular basaltic flows. A light silicification is also common on the western half of the property.

Mass change calculations were performed in order to evaluate the possibility of Harker-Holloway-type alteration on the 2M-5M property. This alteration consists of a strong gain in K2O and Na2O, a slight addition of silica and a depletion in MgO, CaO, FeO and CO2 (Wakeford and Atkinson, 1991). Few samples from the Malartic property show a combination of these gains and losses and alteration is generally very low. Graphs are presented at the end of Appendix II. Samples showing the typical combination of gains and losses in major oxides are mainly located in the northwestern portion of the 2M-5M property (see appended map of the location of samples). Alteration is not pervasive anywhere as altered and unaltered samples were commonly collected in close proximity.

7.0 GEOPHYSICS

An I.P. survey and a compilation of all magnetic maps from previous surveys covering the whole Malartic 2M-5M property were completed. The reader is referred to the appended maps for details.

Several I.P. anomalies of varying intensity were outlined during the geophysical survey. Many of these anomalies are spatially associated with the N-W faults. The corridor between the M and the Marbanite fault is covered with slightly discordant I. P. anomalies. The M fault is observable on the I.P. pseudo-sections from L.0+00 to L.13+00W. These anomalies represent very interesting gold targets since some are associated with mineralization; the Burbank showing occurs on a medium intensity anomaly whereas the new gold showing occurs on a low one. Several anomalies remain untested despite their favorable combination of geophysical, geological and structural parameters.

8.0 ECONOMIC GEOLOGY

8.1 DESCRIPTION OF POTENTIAL ECONOMIC ELEMENTS:

The Malartic 2M-5M property holds exceptional potential for gold owing to the presence of several structural and geological features recognized throughout the Malartic gold district as hosts to gold deposits. For instance, the N-W trending Norlartic fault; going eastward, the Norlartic fault is the setting of the Gold Hawk, First Canadian, Norlartic, Shawkie and Mine Ecole Provinciale deposits. On the Malartic property, outcrops adjacent to the inferred fault's surface trace are highly deformed, sheared and injected with several QFP and mafic dykes. Rock is slightly more chloritized than surrounding rocks and contains traces of pyrite. There are few quartz veins and stringers with minute amount of ankerite within the shear zones. The diorite sill, along which runs the fault, underwent a certain deformation and is slightly foliated. This sill represents an important gold target as it compares in terms of setting, deformation and lithology to the gabbro sill at the Malartic Hygrade deposit. The Marbanite fault runs parallel to the Norlartic fault. As the later one, it is the host structure to gold deposits, such as the Marban mine.

The new gold showing (discussed in next paragraph), the Burbank showing and the Audet showing occur along strike and seem spatially associated to another N-W trending fault, hereafter referred to as the M-fault. This fault thus represents a primary gold target, especially where associated with strong I.P. anomalies as discussed later.

The **new gold showing** located at 1+30E, 8+20S, assayed 2,74 g/t Au and 0,34 g/t Au (samples 2310 and 2311). It consists of quartz-calcite-ankerite veins up to 10 cm wide in an ankeritized magnetic gabbro-diorite sill. The host gabbro contains pyrite and pyrrhotite in amount of up to 5%. Pyrite accounts for up to 8% of the veins and strangely seems laminated within the veins. The limited outcrop exposure did not allow a complete description of the showing.

The **Burbank showing** consists of a quartz vein generally 60 to 70 cm wide but its width locally increases up to 1,5 m. The vein strikes 260/80 and is traceable over 50 m. Mineralogy of the vein includes 5-7% tourmaline, 1-3% chlorite and traces to 1% pyrite. Host rock is a porphyric basalt horizon. The lateral extension of the vein may be displaced along a NE fault. The showing is located on L. 10+15W, 11+20S and is reported to assay up to 6,2 g/t Au/ 1,55m (Breakwater's compilation).

It is interesting to note that the Norlartic-Norbenite, Marbanite and M faults trend parallel to the "K shear" on Breakwater's Malartic H property. This shear is the setting of the Discovery zone where gold values such as 95g/tAu/0,35m, 30,5g/tAu/0,34m and 20,6g/tAu/0,6m were obtained (Breakwater compilation map).

Of equal structural relevance is the hinge zone of a **Z-shaped synform**. Although no significant mineralization has been discovered yet at this locality, potential for gold in the fold hinge exists since the next hinge of the fold to the south, is the host to the Black Cliff-Vinray deposit (10,8g/t Au/3m). Farther southeast, on the longer limb of the same fold occurs the Camflo Mine (1,8M oz Au).

A **zinc-rich lapilli tuff** horizon has also been discovered. The tuff is intensely altered in calcite and ankerite. Disseminated mineralization may account for up 5% of the rock and consists of pyrite, pyrrhotite, sphalerite and specks of chalcopyrite. Accicular amphiboles crystal are locally important. A smoky chert horizon yielded other high zinc values. In this horizon, mineralization chiefly consists of pyrite which may account for up to 2% of the rock.

Showing	Sample	Location Easting	Location Northing	Au	Cu	Zn	Description.
New gold	2310	1+40E	8+20S	2,74 g/t	9 ppm	11 ppm	Qz+CC+AK, 5% Py in I3G
New gold	2311	1+65E	7+75S	0,35 g/t	5 ppm	17 ppm	Qz+CC+AK, 8% Py in I3G
Zinc-rich tuff	2323	20+70W	6+25N	7 ppb	250 ppm	0,4%	T(2) L, 3% Py+Po, Sp, -AK, Amphiboles.
Zinc-rich tuff-	115775			19	325 ppm	0,13%	Chert, 1-2% Py
Zinc-rich tuff	115776			55	570	0,25%	Smoky chert,<2% Py
Zinc-rich chert-	115777			27	363	0,12%	Smoky chert,<1% Py
Zinc-rich chert	115778			35	530	0,15%	Smoky chert,<1% Py
Audet	115802			0,07 g/t	25	29	BIF, 35% Py, fly rock
Audet	115803			0,25 g/t	31	53	Qz vein, 15% Py, boulder
Audet	115807			0,05 g/t	69	154	BIF, Py, Qz

Table 3. Best assay results from grab samples from 1994 exploration campaign..

8.2 EXPLORATION MODELS:

All geological and structural elements described in the section above constitute geological environments that have been recognized in several gold deposits throughout the Malartic camp. Based on geological settings of known deposits, two main exploration models can apply to the Malartic 2M-5M property. A third model, based on the Harker-Holloway deposit is also discussed.

The first preconized exploration models for an economic gold deposit is that of a deposit set in a shear zone crossing competent intrusive in volcanic or sedimentary rocks. Such a model applies to East Malartic, Malartic Goldfields and Barnat-Sladen mines. On the 2M-5M property, a similar geological environment is encountered near the faulted contact of the felsic stock in the vicinity of the Audet showing. Table 4 lists geological

characteristics observed at these mines and compares them to features observed on the Malartic property.

The second model consists of shear zones in volcanic rocks or synvolcanic intrusions such as diorite sills. Examples of similar models are found at the First Canadian, Malartic Hygrade and Black Cliff deposits. On the Malartic property, a similar setting occurs along the M fault, at the Burbank showing and at the New Gold showing. Similar settings also occur along the Norlartic and Marbanite faults where they intersect gabbro-diorite sills. Table 5 compares geological features found on the Malartic property to the mines mentioned above.

For both models, major characteristics are shared by known economic gold deposits and the Malartic 2M-5M property. Consequently, potential for a gold deposit of more than one million ounces do exist on the property.

A third model, the Harker-Holloway-type deposit (reserves as of Dec 31, 1992: 1,27 M oz Au), could also apply to the 2M-5M property. This type of deposit, and more specifically the Lightning zone, is set in Mg-rich tholeiitic mafic flows enclosed or adjacent to peridotitic komatiites (Wakeford and Atkinson, 1991). The ore is generally concordant to subconcordant and confined to a variolitic basaltic hyaloclastite. Ore mainly consists of pyrite with minor arsenopyrite and chalcopyrite. The mineralized zone has a strike length of 800 m and an average true thickness of 8 m. The zone is silicified and albitized. Alteration in footwall ultramafics generally consists of talc, chlorite, ankerite and fucshite. Approaching the Lightning zone, K2O, CaO and CO2 show a gradual increase before dropping in the zone whereas FeO and MgO decrease steadily.

The possibility to find a Harker-Holloway type of deposit on the Malartic 2M-5M property is difficult to evaluate. That is, neither the characteristic komatiite-basalt association nor a significant number of samples showing the combination of losses and gains in major elements were found on the property. However, as alteration in Holloway-type deposits is varying and that real komatiites may be present but not exposed on the malartic 2M-5M property (Holloway komatiites may also be similar to the altered basalts formerly referred to as komatiites on the Malartic property), the possibility of a gold deposit in the northwestern portion of the Malartic 2M-5M property and to the east of the Burbank showing should not be ignored. These parts of the 2M-5M property are underlain by thick variolitic and slightly ankeritized basalt horizons. Pseudo-komatiite, altered in talc and chlorite occur stratigraphically lower than the alteration zone in the northwester part of the property. Most of the samples showing characteristic Holloway-type alteration were collected at this locality as well. Note that a zone similar in description on the neighbor Malartic H property assayed 2,7 g/t Au/6m and 1,3 g/t Au/1,5m. Table 6 lists some important characteristics of Harker-Holloway-type deposits and similar geological elements occurring on the Malartic 2M-5M-property.

Mine	Ore	Host rock	Controlling structure	Attitude	Mineralized zone size	Alteration	Alteration halo size	Other
East Malartic	Disseminated in halos. Minor. Quartz veins + Py, Mo and Au.	Diorite sills (mainly < 5 m thick) and syenite stock injected in shear zone and graywacke.	Sladen fault (09075), Barnat fault (32080). At contact between Piché and Pontiac Group.	Along fault plan, plunges at 60° east; approximately parallel to the intersection between two faults.	Main zone is 610 m in length * 7 m wide.	SI+CC+MI stringers, locally +/-BO	Not recorded	Surrounding komatiites are amphibole-rich (40-90%), serpentine (0-40%) and magnetite (10-15%).
Malartic Goldfields	Quartz veins and stockwerk + Py, tr. Asp, Mo, Au.	Diorite sills (sills < 10 m thick yielded best grade).	Talc-chlorite schist, near the Cadillac tectonic zone.	Cigar-shaped, parallel to regional subvertical lineation.	300-500 m long * 100 m wide and 800 m deep. Individual lenses are 150 m * 10 to 30 m.	SI, BO, CL, CC, Py.	< 1 m from veins	
Canadian Malartic and Barnat-Sladen	In graywacke: disseminated Py. In diorite and porphyry: quartz veins.	Syenitic stock (felsic porphyry)	Sladen fault, at contact between Pontiac sediments and syenitic stock.	Ore shoots strike EW and plunge app. 30^{o}	Sladen: in sed. 110 m hor. *250 m vert * 14 m thick. In diorite: 250 m long * 100 m thick * 225 m deep. In stock: cylinder 100 m in diameter * 450 m long.	CC, BO, CL, MU, MI	Strong alteration within 10 cm from the veins, slight alteration extends to a few meters from the veins.	
MALARTIC 2M-5M, model 1 (extension of Audet showing)	**From drilling records, mineralized quartz veins and disseminated pyrite within the stock.**	**Possibility of ore in felsic stock and host volcanics, diorite sills and sediments.**	**M fault. Sheared contact between Kewagama And Malartic groups. injected with a felsic stock.**	**Probably parallel to lineation within the fault zone.**	**Possible mineralized zone of 10 m * 200m..**	**Observed secondary mineralogy includes CC, AK, Py**	**Not defined.**	**Locally associated with I.P anomalies.**

Table 4. Comparison of important characteristics of known economic deposits to geological elements observed on the Malartic 2M-5M property. Model 1.

Mine	Ore	Host rock	Controlling structure	Attitude	Mineralized zone size	Alteration	Alteration halo size	Other
Malartic Hygrade	Quartz veins and pockets + Py, Po, Mo, Pn, Au	Brecciated and sheared basalt bordered with dykes.	SE subconcor-dant shear zone on long limb of a EW fold.	Highly variable. Dip generally steep to the north.	Between 50 m and 350 m in length and 1 m and 5 m wide.	CC, CL, AB	Not recorded.	
Black Cliff	Quartz veins +Py, Po and Au	Gabbro-diorite	Hinge zone of an asymetrical Z-shaped fold	Subparallel to axial plan in hinge zone, subconcordant along fold limb and close to fold axis.	Not recorded.	CC, BO, CL	Not recorded.	
First Canadian	Diss.Py and Au in quartz stockwerk. Tr. Mo..	Sills and altered basalt.	Norlartic fault (ESE).	Generally parallel to fault plan.	Not recorded.	CL, CC, AB	Not recorded.	
Malartic 2M, model 2 (Burbank and new showing)	**Qz-carb. veins. +Py, Po.**	**Altered basalt, ankeritized gabbro-diorite sill.**	**The M fault, and corridore between the M and the Marbanite faults. Faults cross the fold hinge zone. Norlartic fault.**	**Veins appear subconcor-dant**	**Still unknown.**	**CC, AK, Py, Po**	**Still unknown.**	**Both showings are associated with I.P. anomalies. Other I.P. anomalies remain untested.**

Table 5. Comparison of important characteristics of known economic deposits to geological elements observed on the Malartic 2M-5M property. Model 2.

Locality	Host rock	Geochemistry	Secondary mineralogy	Alteration	First order structure
Harker-Holloway	Fe-Mg-rich tholeiite and sediments. Variolitic basaltic hyaloclastite	At tholeiitic-komatiite contact	Footwall: Talc, chlorite, ankerite, fucshite. Zone: Silica, albite, ankerite, pyrite, minor sericite and chlorite.	Increase: Na, Si, K, Ca Decrease: Al, Mg, Fe	Porcupine-Destor fault zone
Malartic 5M, model 3 (northern portion of the 5M property).	**Tholeiitic variolitic basalt to rhyodacite. Thin sediments horizons locally intercalated with volcanics.**	**Tholeiitic, presence of pseudo komatiite stratigraphically lower**	**Pseudokomatiite: Talc, chlorite, magnetite. Variolitic volcanics: Ankerite, quartz-carbonate amygdules in basalt**	**Few samples: Increase: Na, Si, K, Ca Decrease: Mg, Fe. No sample have all favorable major elements losses or gains but a few ones have 4 elements.**	**Cadillac-Larder Lake fault zone**

Table 6. Comparison of important characteristics of Harker-Holloway-type gold deposits and geological elements on the Malartic 5M property. Model 3.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The Malartic 2M-5M property is underlain by tholeiitic basaltic to tholeiitic fractionated felsic volcanic rocks inflated by numerous synvolcanic gabbro-diorite sills. Alteration is generally very light except for few scattered basalt outcrops strongly altered in chlorite and talc. These later basalts have been described by previous workers as komatiites but are demonstrated in this study to be of tholeiitic basaltic composition. Some samples from the northern portion of the 5M property show an alteration similar to that of Harker-Holloway-type deposits. The 2M-5M property holds exceptional potential for economic gold deposits owing to its tectonic setting and the presence of several structures typically associated to gold deposits within the Malartic district. Note that numerous mines in the Malartic camp have produced more than 1 million ounces of gold (Table 2). Several areas on the property share important characteristics with other known deposits and deserve a sound investigation (Tables 4 and 5). Significant mineralization occurs on the property. Grab samples from the new gold showing assayed up to 2,74g/tAu, whereas the Burbank showing is recorded to have yielded up to 6,2g/tAu/1,55m. Table 7 summarizes recommendations for further follow-up work and Table 8 the proposed drilling targets. A thorough compilation of all public data and assessment work should be completed before any more field work is undertaken on the property.

Showings along the M fault deserve more detailed work. Two stripped areas are recommended. The first one is located on the New gold showing. Mechanical stripping on the showing would be an inexpensive way to gain valuable information about the M fault, the nature of the I. P. anomalies and the gold mineralization. With grab samples from the showing assaying up to 2,74 g/t Au, a strong ankeritization of the host gabbro-diorite sill and the associated I.P. anomaly, the New Gold showing represents a very interesting target. At this location, overburden is generally thin and access is easy. The second recommended stripped area is on the Burbank showing and follows the same main objectives. Although grab samples from this year's survey did not yield important results, significant gold values are reported in Breakwater's reports.

The Blake River Group is also deemed attention as it is the host to several deposits farther west. This portion of the property ought to be investigated by geophysical means due to the lack of outcrop exposure. Consequently, an I.P. survey should be carried out on the southern portion of the Malartic 2M-5M property.

Some I. P. anomalies deserve investigation by drilling. These anomalies include the subconcordant I. P. anomaly (strong polarization increase accompanied by a strong decrease in apparent resistivity) set between the M and Marbanite faults. Other anomalies with segments of medium to high intensity in the same sector, should also be investigated. An I. P. anomaly in the gabbro-diorite sill along the Norlartic-Norbenite fault represents another good target as it is very similar to the deposit at the Malartic Hygrade mine (see table 5). Extension of the Audet zone along the M fault deserves to be tested by drilling as well, especially where coincident with an I.P. anomaly. Table 8 summarizes the proposed drilling targets. Targets may also be located on appended geological map.

Target	Recommended work	Location Easting	Location Northing	Structure	Host rock	Mineralization/ Assays	Geophysical anomaly
Whole 2M-5M property	Thorough compilation						
New gold showing	Mechanical stripping, detailed mapping, channel sampling. Blasting?	1+40E to 1+65 E	7+75S to 8+20S	Along the M fault, close to fold hinge zone.	Strongly ankeritized and pyrrhotized gabbro-diorite sill	Py, Po <2,74 g/t Au	Coincident with an I.P. anomaly.
Burbank showing	Mechanical stripping, detailed mapping, channel sampling. Blasting?	10+60W	11S	Along the M fault.	Altered basalt or mafic ash tuff.	Py, +To, +Cl <281 ppb Au, <259 ppm Cu. Recorded 6,2 g/t Au/1,55m and 5,3 g/t Au/ 0,8m.	Coincident with an I.P. anomaly. (polarization increase with no significant decrease in resistivity).
Blake River Group	I.P. survey	Southern tip of 2M and 5M			Volcanics	No outcrop exposure	
Whole 2M-5M property	Prospecting with V.L.F. and BeepMat.						

Table 7. Summary of recommended follow-up work

Target #	Location Easting	Location Northing	App. azimuth	App. dip	Length	Purpose
A	L.6+00W	10+35S	Grid north	-65	450	Test a strong I.P. anomaly and a medium anomaly in the gabbro-diorite sill host to the New Gold showing. Test the M fault. Exploration model 2.
B	L.1+00W	12+25S	Grid north	-60	550	Test strong and medium anomalies. Test the upper portion of the gabbro-diorite sill host to the New Gold showing. Test the M fault. Exploration model 2. Test ankeritized variolitic basalt close to high I.P. anomaly. Exploration model 3.
C	8+50W	9+75S	Grid north	-65	450	Test the intersection of I.P. anomalies and the NE Burbank fault (Riedel to M fault?)
D	L.36+00W	9+80S	Grid south	-65	500	Test I.P. anomaly associated with the M fault. Find lateral extension of Audet showing. Understand the relationship between M fault, Kewagama Gp, felsic stock and associated mineralization. Alteration in stock. Exploration model 1.
E	L.6+00E	7+80N	Grid south	-65	500	Test I.P. anomaly associated with the Norlartic fault. I.P. in a gabbro sill. Exploration model 2.
F	39+40W	2+50S	Grid south	-65	400	Test I.P. anomalies in Holloway-type alteration. Exploration model 3.
G	3+50W	7+50S	Grid north	-60	500	Test two I.P. anomalies within gabbro-diorite sill. Test Marbanite fault. Exploration model 2.
H	L.11+00W	3+25S	Grid south	-60	500	Test med. I.P. anomaly in gabbro sill and I.P. anomaly coincident with the Marbanite fault. Test the Marbanite fault. Test other gabbro sill in which there are I.P. anomalies.
I	L23+00W	0+00	Grid south	-55	350	Test med. I.P. anomaly in corridor between Norlartic and Marbanite faults.
J	L.4+00E	0+50N	Grid north	-55	350	Test I.P. anomaly in gabbro sill. Understand stratigraphy in area of poor bedrock exposure.
Total: 10 DDH					4550 m	

Table 8. Proposed drilling targets.

9.1 BUDGET PROPOSAL

The recommended follow-up exploration program consists of 4550 m of diamond drilling, mechanical stripping, prospecting and limited I.P. surveying. Proposed budget for the oncoming exploration program is as follows.

Compilation		4500$
Mechanical stripping: 12 working days @ app. 2000 $/days		24 000
Prospecting with VLF and BeepMat : 4 prospectors * 15 days @ 1000/day		15 000
Grid cutting: 20 km @ 220$/km		4 400
I.P. survey: 20 km @ app. 440$/Km		12 000
Diamond drilling: 4550 m @ app. 50 $/m Assay: 1500 samples @ 15$/sample Geochemistry: 170 samples @ 30 $/sample	 227 500$ 22 500 5 100	255 100
Total		315 000$

Table 9. Budget proposal for follow-up work.

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APPENDICES

Appendix I. Certificate of qualifications
Appendix II. Legend
Lithogeochemical results
Alteration diagrams
Appendix III. Assay results
Appendix IV. List of claims

APPENDIX I. CERTIFICATE OF QUALIFICATIONS

This is to certify that:

I currently reside at 218-A, 5th street, Rouyn-Noranda, Québec, J9X 1Y4.

I obtained a Master's Degree in Sciences (Geology) from the Université de Montréal in 1994 and a Bachelor's Degree in Sciences (Geology) from the same University in 1992.

I am a member of the "Association Professionelle des Géologues et Géophysiciens du Québec" (APGGQ) and of the "Association des Prospecteurs du Québec" (APQ).

This report is based upon my own observations made while working on the Malartic 2M-5M property and on the study of assessment records and published geological maps and records on the relevant area at the "Ministère des Richesses Naturelles".

I have no interest, direct or indirect, in the property described herein nor do I anticipate any such interest.

Preissac, Québec, November 1994

Caroline Michèle Laplante, geol., M. Sc.

LAC NORTH AMERICA LIMITED
EASTERN CANADA EXPLORATION

GEOLOGICAL LEGEND

LAC

FELSIC ROCKS (1)

INTRUSIVE ROCKS		VOLCANIC ROCKS		DYKES	
I1G	Granite	V1R	Rhyolite	D1	Aphanitic felsic dyke
I1D	Granodiorite	V1H	Rhyodacite	QFP	Quartz-feldspar porphyry
I1T	Tonalite	V1D	Dacite	FP	Feldspar porphyry
I1J	Trondhjemite			QP	Quartz porphyry
I1A	Aplite				
I1Y	Granophyre				
I1P	Pegmatite				

INTERMEDIATE ROCKS (2)

INTRUSIVE ROCKS		VOLCANIC ROCKS		DYKES	
I2S	Syenite	V2T	Trachyte	D2	Intermediate dyke
I2M	Monzonite	V2L	Latite		
I2O	Monzodiorite	V2A	Andesite		
I2D	Diorite				

MAFIC ROCKS (3)

INTRUSIVE ROCKS		VOLCANIC ROCKS		DYKES	
I3D	Diabase	V3K	Komatiitic basalt	D3	Mafic dyke
I3G	Gabbro	V3B	Basalt		

VOLCANICLASTIC ROCKS

T( )B	Blocky tuff
T( )K	Block and lapilli tuff
T( )I	Lapilli and block tuff
T( )L	Lapilli tuff
T( )A	Ash tuff
T( )CRX	Crystal tuff
T( )C	Cherty tuff
T( )G	Graphitic tuff

MATRIX COMPOSITION

(1)	Felsic
(2)	Intermediate
(3)	Mafic
(4)	Ultramafic
Monomicte	: TM
Polymicte	: TP

SEDIMENTS (S)

S1C	Conglomerate
S1G	Sandy conglomerate
S1A	Argillaceous conglomerate
S2K	Arkose
S2G	Mature sandstone
S3G	Greywacke
S4A	Argillite

CHEMICAL SEDIMENTS (S)

S6*	Iron formation
S6O*	Oxidized
S6L*	Silicate
S6B*	Carbonate
S6S*	Sulfur
S7*	Chert
S8*	Exhalite

METAMORPHIC ROCKS (M)

MG	Gneiss
MS	Schiste
MY	Mylonite
MA	Amphibolite

MINERAL ABBREVIATIONS

Actinote	Ac
Albite	Ab
Amphibole	Am
Andalusite	An
Ankerite	Ak
Anthophyllite	Al
Apatite	Ap
Arsenopyrite	Asp
Augite	At
Barytine	Ba
Beryl	Be
Biotite	Bo
Bornite	Bn
Calcite	Cc
Carbonate	Cb
Chalcopyrite	Cp
Chalcosine	Cs
Chert	Ch
Chlorite	Cl
Chloritoïde	Ct
Cobalt	Co
Copper	Cu
Cordierite	Cor
Covellite	Cv
Dolomite	Do
Epidote	Ep
Feldspath	Fp
Fuchsite	Fu
Galena	Gn
Garnet	Gt
Goethite	Go
Gold	Au
Graphite	Gp
Hematite	Hm
Hornblende	Hb
Ilmenite	Im
Lead	Pb
Leucoxene	Lc
Limonite	Li
Magnetite	Mt
Malachite	Ma
Marcasite	Mc
Microcline	Mi
Molybdenite	Mo
Muscovite	Mu
Nickel	Ni
Olivine	Ol
Pechblende	Pc
Pentlandite	Pn
Phlogopite	Ph
Platinum	Pt
Pyrite	Py
Pyroxene	Px
Pyrrhotite	Po
Pyrophylite	Pp
Quartz	Qz
Scheelite	Sc
Sericite	Se
Serpentinite	Sr
Siderose	Sd
Silice	Si
Sillimanite	Sm
Silver	Ag
Sphalerite	Sp
Sphene	Sn
Staurotide	St
Talc	Tc
Tourmaline	Tm
Tremolite	Tr
Zinc	Zn

ALTERATION MINERALOGY

Albite	AB
Ankerite	AK
Calcite	CC
Carbonate	CB
Chlorite	CL
Dolomite	DO
Epidote	EP
Fuchsite	FU
Hematite	HM
Potassium	K
Sericite	SE
Serpentinite	SR
Silica	SI
Talc	TC

Preceded by + :	Strong alteration
Preceded by - :	Light alteration

STRUCTURAL SYMBOLS

Geologic contact, inferred
Fault or shear zone
S-shaped fold, with plunge
Z-shaped fold, with plunge
Stretching lineation
Vertical stretching lineation

BEDDING S0

Bedding, with dip, vertical bedding

FOLIATION S1

Stratigraphic top
Foliation, with dip, vertical foliation

FOLIATION S2

Foliation, with dip, vertical foliation

DIACLASE

Joint with dip
Joint with vertical dip
Quartz vein

AXIAL PLANS

Synform
Antiform
Overturned synform
Overturned antiform

GENERAL

Outcrop < 2m
Outcrop > 2m
Drill hole
Claim picket
Trench
ATV trails

GEOPHYSICS

I.P. anomaly
Input anomaly

APPENDIX II. LITHOGEOCHEMICAL RESULTS

Normalized on a LOI-free basis

#	Description	Northing	Easting	Northing	Easting	Au	Cu	Zn	Ag	Ni	SiO2	TiO2	Al2O3	Fe2O3	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Ba	Cr	Sr	Zr	Y	Al/Ti	Seri.In.	Zr/Y
	Basalt:																													
854	Bleached V3B/V2A	2+40S	43+96W	5340904	407855	3	50	113	-0.1	17	59.15	0.74	17.46	5.91	0.07	2.54	5.81	3.86	0.46	0.06	2.04	99.2	150	107	225	111	22	23.57	10.66	5.05
856	Sheared V3B variolitic	1+85S	43+00W	5340917	407968	3	76	101	-0.1	27	50.94	1.53	13.09	15.05	0.20	4.07	8.96	3.13	0.28	0.09	1.43	99.75	34	83	258	122	35	8.58	8.09	3.49
857	Brecciated V3B	2+92S	43.03W	5340822	407920	3	12	73	-0.1	11	50.39	1.13	13.24	13.19	0.19	4.93	9.61	2.55	1.05	0.02	2.07	99.7	506	145	301	522	114	11.75	29.16	4.58
858	Sheared V3B?, tr. Py	6+90S	42+00W	5340415	407855	3	75	105	-0.1	60	66.81	0.57	11.88	5.77	0.04	1.63	1.72	5.28	0.09	0.06	3.93	100.68	10	78	40	80	27	20.89	1.61	2.96
861	V2D/Tc, bedded, 1-3% Py	3+05S	40+45W	5340705	408150	6	327	806	-0.1	20	64.15	0.91	13.95	6.93	0.04	1.60	2.39	4.45	1.75	0.15	1.24	98.14	610	134	104	194	29	15.36	28.18	6.69
865	Sheared V3B Am? Fraction.	4+60S	39+25W	5340515	408194	3	12	107	-0.1	-2	53.38	1.56	12.10	17.19	0.26	2.00	6.03	2.65	0.52	0.61	0.94	97.61	52	84	89	187	57	7.75	16.51	3.28
866	Contact S3G, V3B+Sl	4+75S	38+71W	5340474	408240	3	85	215	-0.1	50	52.57	0.93	17.22	8.89	0.13	5.14	5.30	2.90	0.39	0.14	3.89	99.87	89	177	232	104	22	18.57	11.95	4.73
869	Sheared V3B, fractionated	38+76W	5+10S	5340449	408225	3	36	145	-0.1	3	54.57	1.56	11.84	17.61	0.25	2.37	6.28	1.87	0.33	0.55	1.25	99.25	18	85	156	177	57	7.58	14.86	3.11
871	V3B, amygdules, +CL	0+00	17+61W	5340120	410360	3	117	38	-0.1	47	50.39	0.59	14.54	10.33	0.18	7.43	10.15	3.06	0.13	0.09	1.79	99.9	16	312	2	48	19	24.60	4.00	2.53
872	Komatiitic basalt	0+45S	17+75W	5340080	410334	20	32	94	-0.1	62	51.06	0.63	11.53	10.97	0.24	8.93	7.06	0.63	4.39	0.07	2.03	98.9	904	340	-1	47	15	18.31	87.50	3.13
873	Brecciated V3B, T3L +/- Sl	0+30S	17+95W	5340100	410320	3	91	38	-0.1	48	53.50	0.51	13.16	9.00	0.17	6.41	12.68	1.47	0.08	0.05	1.39	99.33	10	408	1	41	16	25.78	5.10	2.56
875	Brecciated V3B/V2A	0+63N	18+15W	5340195	410330	3	89	71	-0.1	138	46.29	0.56	14.92	10.49	0.18	9.13	5.70	4.02	0.19	0.05	4.92	99.58	44	306	84	43	18	26.64	4.51	2.39
876	Komatiitic basalt	1+19N	18+56W	5340260	410310	3	91	63	-0.1	25	54.63	0.87	15.08	9.16	0.14	5.06	6.37	4.49	0.36	0.46	1.64	99.24	415	139	249	192	27	17.32	7.49	7.11
877	V3B porphyric	1+19N	18+56W	5340260	410310	3	79	42	-0.1	62	49.98	0.55	15.07	10.46	0.18	7.59	8.90	3.35	0.20	0.11	2.09	99.84	65	323	120	42	18	27.28	5.52	2.33
879	V3B, Mt	15+96W	0+50N	5340105	410536	3	11	33	-0.1	717	45.95	0.35	4.69	8.88	0.14	22.13	7.90	0.10	0.06	0.02	4.99	99.4	17	3794	-1	27	7	13.42	35.29	3.86
880	V3B pillowed	0+50N	15+96W	5340105	410536	3	95	28	-0.1	34	50.06	0.57	14.34	9.57	0.18	6.70	13.61	1.10	0.09	0.05	2.25	100.11	5	353	32	43	17	25.05	7.38	2.53
881	V3B pillowed, sheared, -Sl	2+60S	22+70W	5340052	409770	3	60	41	-0.1	25	52.37	0.73	13.66	11.92	0.19	6.30	7.59	4.33	0.17	0.07	1.46	99.78	63	201	30	54	20	18.65	3.73	2.70
888	V3B pillowed, locally varioles	3+70S	25+50W	5340053	409465	3	95	81	-0.1	34	49.47	0.70	14.49	11.18	0.22	6.98	10.20	1.59	0.11	0.04	2.73	99.49	41	203	93	47	17	20.62	6.29	2.76
890	V3B pill.? local pheno, 2-3% Py	4+67S	24+25W	5340923	409540	3	100	40	-0.1	43	50.81	0.71	13.99	11.36	0.21	7.02	8.34	3.76	0.24	0.04	1.77	99.38	189	236	116	48	17	19.80	5.90	2.82
892	V3B near sediments	0+85S	28+14W	5340410	409365	8	207	38	-0.1	29	51.55	0.68	14.48	10.27	0.18	6.73	9.33	3.68	0.44	0.02	1.48	99.81	288	252	158	44	17	21.25	10.74	2.59
894	V3B +/- sheared, locally brecci.	1+40S	27+60W	5340335	409388	3	23	34	-0.1	30	51.44	0.67	13.84	11.01	0.18	7.71	7.40	4.03	0.40	0.04	1.88	99.9	201	203	79	43	17	20.56	9.07	2.53
895	V3B pill.	0+10S	29+40W	5340360	409400	3	62	51	-0.1	36	49.58	0.75	14.68	11.70	0.18	6.60	9.38	2.21	0.08	0.04	2.24	98.72	31	174	36	50	18	19.67	3.42	2.78
896	V3B pill.	0+50S??	29+57W??	5339537	410950	7	25	48	-0.1	33	48.97	0.72	15.02	11.24	0.19	7.61	9.07	2.65	0.16	0.02	2.43	99.58	40	211	79	47	16	20.86	5.56	2.94
898	V3B pill. +/- sheared	12.87S	6+35W	5338515	410971	6	115	64	-0.1	53	49.93	1.20	14.31	12.60	0.18	6.18	8.32	3.14	0.03	0.07	2.04	99.19	27	192	61	95	29	11.89	0.93	3.28
900	V3B pill.	1+85S	3+75W	5339460	411595	7	132	30	-0.1	17	51.64	0.77	14.46	10.87	0.17	5.81	10.97	2.75	0.11	0.07	1.32	99.85	41	153	-1	53	19	18.75	3.79	2.79
904	V3B var.,-CL, CC, AK? Fraction.	1+95W	10+00S	5338642	411432	3	8	56	-0.1	5	54.98	1.88	11.15	15.61	0.23	2.09	8.87	1.76	0.35	0.49	0.64	98.29	24	276	308	187	59	5.92	16.51	3.17
905	V3B, EP	0+00	0+95S	5339405	412013	3	162	81	-0.1	55	53.01	1.45	13.57	13.04	0.17	3.42	9.19	1.72	0.07	0.09	1.78	98.49	24	190	210	99	35	9.37	3.85	2.83
909	V3B pill.	9+80S	12+86W	5339030	410455	3	83	95	-0.1	78	44.84	1.26	15.62	13.42	0.20	5.43	8.30	2.45	0.07	0.02	4.42	98.47	55	79	45	74	22	12.35	2.66	3.36
911	V3B pill.	9+70S	11+65W	5339000	410572	3	123	69	-0.1	61	46.10	1.29	14.74	13.40	0.20	6.40	8.71	2.57	0.07	0.11	2.85	98	29	10	95	66	22	11.40	2.57	3.00
915	V3B not magnetic, fractionated	35+22W	5+30S	5340295	408515	3	7	93	-0.1	3	53.58	1.66	12.12	17.15	0.27	2.27	6.64	2.83	0.32	0.63	0.73	98.54	38	32	49	162	51	7.31	10.09	3.18
916	V3B not magnetic	35+40W	5+60S	5340270	408485	3	8	88	-0.1	3	53.07	2.57	11.62	16.10	0.23	3.39	6.35	2.57	0.10	0.19	1.58	98.68	17	16	54	153	43	4.51	3.69	3.56
927	V3B, fractionated	4+60S	48+55W	5340887	407347	3	9	107	-0.1	1	49.93	2.40	12.53	16.43	0.23	3.08	6.79	2.92	0.23	0.27	2.41	98.69	48	23	40	169	49	5.22	7.43	3.45
930	V3B, +Mt, +CC, fractionated	35+45W	2+45S	5340560	408630	3	14	91	-0.1	1	51.63	1.65	12.46	15.34	0.16	2.88	4.03	3.50	1.58	0.37	3.43	99.31	354	49	121	170	53	7.56	31.12	3.21
932	V2A, fractionated	34+02W	5+45S	5340230	408627	3	14	111	-0.1	1	54.95	1.96	11.56	15.71	0.22	2.56	5.91	2.89	0.21	0.64	1.03	98.15	30	37	54	201	63	5.91	6.71	3.19
933	V2A, fractionated	5+45S	34+00W	5340226	408635	3	4	106	-0.1	1	55.02	2.32	11.86	9.57	0.18	2.51	5.76	3.18	0.03	0.31	5.04	99	23	14	42	159	44	5.11	0.89	3.61
937	V3B, pill. brecciated	1+20S	32+10W	5340537	408990	3	131	71	-0.1	51	47.35	0.91	14.77	11.53	0.19	6.61	7.77	2.55	0.10	0.13	3.87	98.03	31	88	219	56	19	16.17	3.62	2.95
944	V2A+CL	2+85S	48+70W	5340995	407550	8	70	50	-0.1	72	51.69	0.80	13.97	9.05	0.13	7.18	7.91	5.16	0.45	0.36	1.7	99.62	149	387	264	126	19	17.53	8.06	6.63
946	V3B, fractionated	48+67W	4+26S	5340929	407350	3	5	107	-0.1	1	56.47	1.91	11.29	15.10	0.25	1.79	7.00	3.17	0.16	0.63	1	98.33	32	87	80	195	60	5.91	4.76	3.25
2202	V3B/V2A pill.-CL	13+05E	8+90S	5338240	412875	16	38	46	-0.1	31	49.58	1.60	13.42	15.80	0.21	4.48	7.62	2.75	0.48	0.13	1.21	97.79	140	40	112	110	33	8.36	14.98	3.33
2203	V3Bmass and pill.-Sl-CC string.	12+10E	2+25S	5338875	413065	16	144	112	-0.1	67	50.58	1.68	15.62	13.95	0.18	4.13	5.38	3.91	0.13	0.16	2.13	99.04	15	28	-1	114	37	9.29	3.15	3.08
2204	V3B pill. -CC, tr. Py	12+00E	1+75S	5338926	413072	3	85	53	-0.1	60	49.49	1.02	15.27	10.84	0.16	6.08	9.61	2.25	0.03	0.02	2.19	97.98	5	80	1	69	25	14.93	1.29	2.76
2206	V3B/V2A pill.-CC-EP-CL-AK, Py	11+00E	2+75S	5338865	412950	9	75	45	-0.1	44	54.30	0.98	14.20	9.50	0.16	5.26	8.09	2.89	0.05	0.05	1.79	98.19	18	59	-1	71	25	14.56	1.67	2.84
2208	V2A	6+90E	11+00S	5338285	412210	3	44	62	-0.1	22	54.04	0.60	19.11	6.68	0.09	3.17	5.72	4.18	0.44	0.09	2.26	97.15	244	42	93	115	18	31.81	9.51	6.39
2210	V3B pill. in hinge zone	+/-15+10	8+15S	5338217	413125	3	86	44	-0.1	75	49.24	0.84	14.95	9.96	0.17	6.61	10.07	2.05	0.12	0.08	2.41	97.73	20	122	-1	58	21	17.81	5.41	2.76
2211	V3B-CC, tr. AK, tr. Py+Po diss.	5+00E	1+25S	5339220	412435	9	109	48	-0.1	48	50.60	0.99	14.03	9.57	0.17	3.39	13.62	0.08	0.14	0.06	3.29	97.81	5	69	2	68	24	14.11	63.64	2.83
2213	V3B/V2A, pill?? tr. AK	3+05E	3+43S	5339065	412182	3	6	30	-0.1	21	51.59	1.03	17.93	7.76	0.16	4.38	9.19	4.54	0.33	0.17	1.69	99.73	161	119	126	109	21	17.41	6.85	5.19
2216	V3B sheared. Norbenite Fault?	10+15E	7+30N	5339840	413210	3	-1	38	-0.1	66	56.89	0.69	15.14	5.88	0.11	5.69	5.40	6.35	0.27	0.29	1.65	99.39	278	205	2	165	16	22.09	4.01	10.31
2218	V3K pill. +CL+CC	0+90E	8+80N	5340385	412385	3	62	31	-0.1	538	41.83	0.47	6.82	12.05	0.18	22.45	7.24	0.07	0.03	0.02	3.64	97.52	5	2377	-1	30	9	14.57	30.00	3.33
2219	V3B pill. Qz amyg. tr. Py	0+95E	4+18N	5340875	412245	3	65	50	-0.1	72	51.21	0.59	14.42	10.11	0.16	8.25	6.31	3.66	0.16	0.02	2.45	98.78	34	258	-1	44	17	24.37	4.09	2.59
2221	V3B pill.	6+90E	4+85N	5340725	412815	6	55	54	-0.1	66	46.25	0.56	17.94	9.81	0.17	7.95	9.37	3.19	0.13	0.04	1.87	98.05	23	123	126	37	16	31.94	3.85	2.31
2222	Flow breccia, basaltic,<2% Py	2+05E	7+50N	5340010	412395	3	56	63	-0.1	64	44.69	0.59	17.19	13.01	0.21	6.74	7.63	3.28	0.06	0.02	3.01	97.86	22	35	39	45	25	29.13	1.74	1.80
2223	V3B pill. hyaloc. rims	0+40W	4+15N	5339905	412135	3	74	13	-0.1	32	50.46	0.59	13.71	9.58	0.20	6.50	14.24	0.95	0.07	0.07	1.52	98.76	20	296	11	45	18	23.39	6.80	2.50
2224	Sheared V3B pill.Qz stringers	10+30W	6+50N	5340470	411283	3	33	56	-0.1	50	46.91	0.70	15.08	12.03	0.16	7.29	9.12	1.70	0.03	0.02	2.94	97.44	11	132	10	51	21	21.61	1.69	2.43
2225	Altered v3B pill.-Sl, tr. Py	10+95W	5+35N	5340390	411172	3	70	88	-0.1	61	49.24	0.94	17.24	9.60	0.14	5.09	7.76	4.08	0.03	0.18	2.71	98.41	99	140	253	100	17	18.33	0.71	5.88
2226	Sheared V3B, pill. ?+CL	11+90W	6+50N	5340530	411110	3	80	48	-0.1	48	48.28	0.60	14.24	11.23	0.17	6.49	12.38	1.76	0.15	0.08	2.12	98.81	27	183	51	49	20	23.72	7.69	2.45
2230	V3B, -Sl	13+00W	10+40N	5340926	411151	12	83	68	-0.1	62	48.93	0.53	14.92	12.52	0.19	5.91	9.21	1.95	0.22	0.02	2.82	98.96	43	132	46	46	24	28.12	10.27	1.92
2231	V3B pill. High strain	14+00W	11+37N	5341050	411100	3	53	48	0.2	81	48.59	0.36	16.06	9.52	0.16	7.11	10.78	2.11	0.16	0.05	2.98	99.86	13	306	88	32	17	44.43	6.84	1.88
2232	Sheared V3B pill.	14+00W	7+00N	5340645	410950	11	97	46	-0.1	71	46.82	0.61	14.55	10.83	0.18	7.55	12.17	2.34	0.03	0.04	2.55	99.31	13	299	40	47	18	23.86	1.23	2.61
2233	Sheared V3B pill.	14+00W	6+50N	5340570	410923	3	24	45	-0.1	58	48.24	0.54	15.21	10.02	0.15	7.22	12.49	2.18	0.03	0.08	2.32	100.06	5	326	38	44	15	28.04	1.33	2.93
2234	V3B, foliated, -Sl, tr. Py	15+00W	6+50N	5340635	410823	3	94	52	-0.1	49	50.78	0.67	13.93	10.89	0.15	6.75	10.43	2.19	0.10	0.10	2.42	100.1	52	165	101	52	20	20.92	4.27	2.60
2235	V3B, pil.? med. strain	15+00W	8+75N	5340865	410795	3	54	53	-0.1	64	46.20	0.55	15.23	11.74	0.16	7.86	10.75	2.65	0.11	0.04	2.76	99.92	40	260	68	44	18	27.91	3.87	2.44
2237	V3B pill. rusty borders, -CC	17+10W	7+13N	5340767	410628	8	83	60	-0.1	83	47.78	0.57	14.89	10.51	0.16	7.51	9.96	3.21	0.11	0.08	2.91	99.62	41	313	82	43	18	26.18	3.22	2.39
2239	V3B big pill. low strain	17+15W	3+50N	5340435	410520	6	56	43	-0.1	61	47.90	0.51	14.51	10.17	0.17	7.41	11.93	1.76	0.03	0.03	2.49	98.37	18	218	33	42	19	28.39	1.63	2.21
2240	V3B -Sl, CC stringers	19+00W	7+50N	5340800	410556	3	91	35	-0.1	84	49.64	0.54	14.63	9.56	0.17	6.21	10.95	3.91	0.03	0.03	2.21	99.28	33	360	42	43	18	27.31	0.74	2.39
2241	V3B pill. +CC, <1% diss. Py	21+10W	5+25N	5340735	410197	3	95	49	-0.1	93	48.60	0.69	15.09	9.62	0.15	6.07	8.94	3.10	0.20	0.07	3.45	98.06	182	332	130	46	18	21.94	6.12	2.56
2243	V3B pill. local Qz amygdules	21+05W	7+80N	5340970	410305	3	89	44	-0.1	36	51.69	0.63	13.56	10.49	0.17	6.20	12.15	0.24	0.11	0.10	2.12	98.8	12	183	60	49	18	21.49	30.56	2.72
2248	V3B pill. +CL	22+90W	8+50N	5341110	410145	3	102	35	-0.1	720	41.57	0.55	7.51	11.55	0.20	19.66	7.04	0.25	0.08	0.08	5.48	98.61	36	2622	9	38	10	13.67	25.00	3.80

APPENDIX II. LITHOGEOCHEMICAL RESULTS

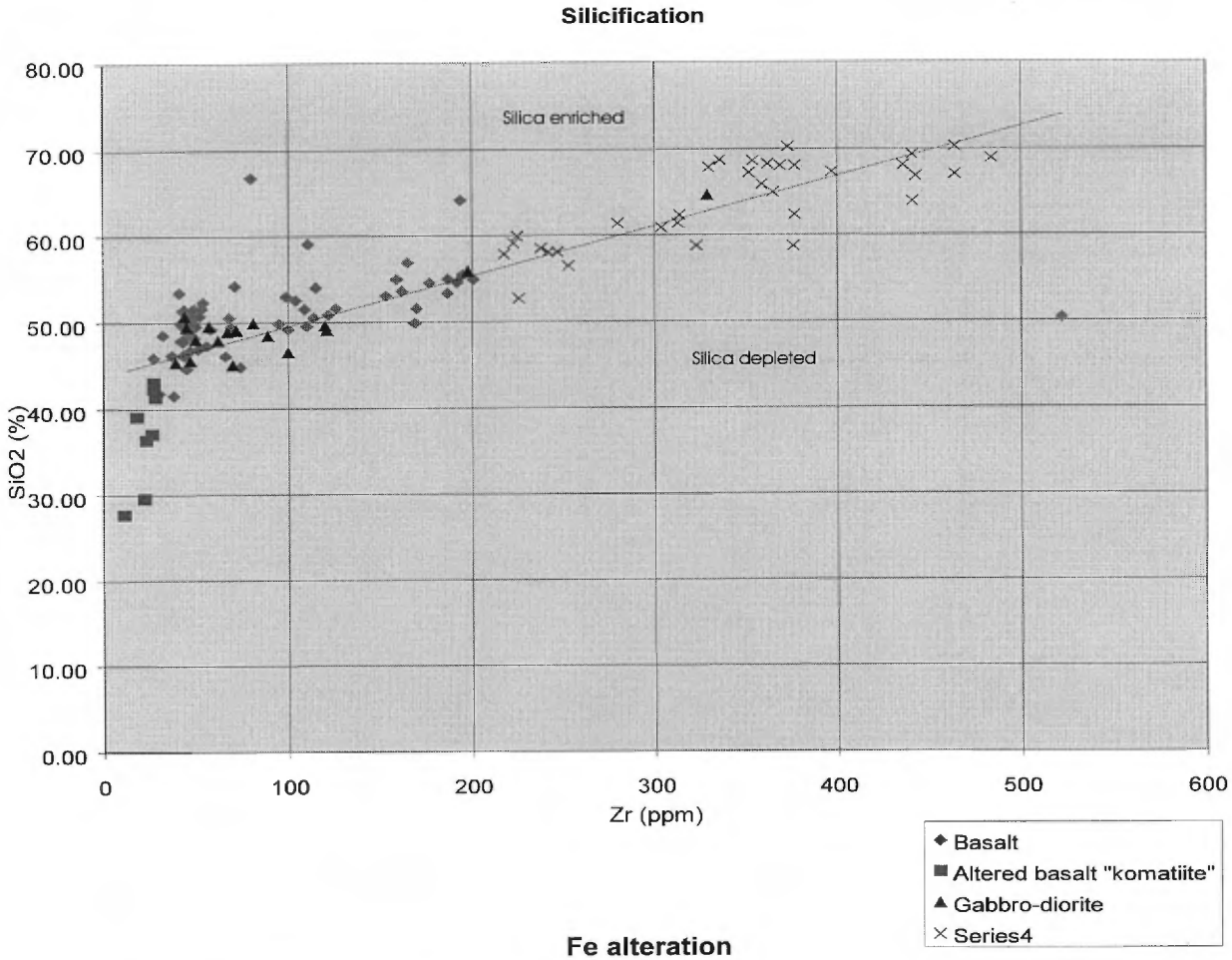
Normalized on a LOI-free basis

#	Description	Northing	Easting	Northing	Easting	Au	Cu	Zn	Ag	Ni	SiO2	TiO2	Al2O3	Fe2O3	MnO	MgO	CaO	Na2O	K20	P2O5	LOI	Total	Ba	Cr	Sr	Zr	Y	Al/Ti	Seri.In.	Zr/Y
	Altered basalt ("komatiite"):																													
874	Sheared V4K	18+20W	0+70N	5340325	410325	3	48	60	-0.1	915	43.04	0.35	5.65	10.27	0.15	21.30	8.17	0.13	0.08	0.02	5.74	99.59	5	2160	-1	27	7	16.06	39.13	3.86
2220	I4K fine-grained, magnetic	7+05E	1+75N	5340428	412730	5	87	17	-0.1	981	42.31	0.38	5.05	9.89	0.13	23.30	7.29	0.00	0.03	0.02	5.49	98.33	5	2967	-1	27	10	13.40	85.71	2.70
2229	V4K, highly magnetic, +CL	13+05W	5+80N	5340505	410992	3	75	29	-0.1	613	29.54	0.39	6.35	9.58	0.15	20.73	7.90	0.00	0.03	0.03	13.36	98.12	5	2294	151	22	8	16.27	85.71	2.75
2244	Sheared V4K,Sr+CC-AK, tr. Py	21+50W	8+70N	5341055	410295	3	36	29	-0.1	1456	27.72	0.25	4.17	6.91	0.22	20.41	9.23	0.00	0.09	0.04	16.45	98.11	5	1773	283	11	11	17.00	95.65	1.00
2245	Massive V4K -CC, highly mag.	21+55W	8+60N	5341050	410285	3	26	39	-0.1	1564	39.06	0.25	3.60	8.52	0.12	27.17	1.47	0.00	0.05	0.02	9.71	98.24	5	2002	2	18	7	14.45	92.31	2.57
2246	V4K/D4+CL+CC, highly mag.	21+60W	11+30N	5341130	410365	3	72	25	-0.1	990	36.39	0.34	5.09	8.66	0.18	21.19	7.23	0.00	0.03	0.04	10.79	98.67	5	2167	67	23	8	14.87	85.71	2.88
2249	V4K-AK, tr. Py	24+05W	6+50N	5340945	409985	3	63	41	-0.1	781	41.30	0.46	6.28	10.65	0.19	20.21	8.13	0.05	0.06	0.03	5.9	98.33	5	2328	6	28	9	13.79	54.55	3.11
2250	V4K/D4, Sr	24+10W	3+75N	5340663	409878	3	53	28	-0.1	927	37.04	0.42	5.67	10.57	0.16	22.72	5.75	0.03	0.03	0.02	8.76	98.38	5	2462	8	26	9	13.34	50.00	2.89
	Gabbro-diorite:																													
878	I3G	17+50W	1+35N	5340240	410414	3	99	48	-0.1	58	50.74	0.55	14.73	11.08	0.19	7.28	8.81	2.43	0.08	0.09	2.35	99.92	15	286	31	44	18	26.61	3.11	2.44
882	I3G, Px??	22+97W	2+95S	5340034	409734	3	60	78	-0.1	39	49.94	1.00	17.28	11.52	0.17	4.49	8.29	2.70	0.19	0.12	2.5	99.68	53	185	115	81	26	17.31	6.42	3.12
883	Gabbro/pyroxinite	26+55W	2+48S	5340650	409645	3	75	54	-0.1	71	49.12	0.64	18.43	7.42	0.12	6.59	4.93	5.70	0.07	0.06	4.03	99.33	78	205	95	72	18	28.79	1.16	4.00
884	I2D, Mt +CL host to Qz veins	28+58W	4+03S	5340030	409443	3	4	121	-0.1	2	64.64	0.66	12.45	10.71	0.14	0.58	2.13	5.25	0.06	0.15	1.79	99.84	51	152	19	329	89	18.78	1.11	3.70
885	I4, Mt	25+80W	4+10S	5340040	409424	3	7	59	-0.1	6	49.09	2.00	12.36	18.40	0.23	3.44	7.26	3.28	0.30	0.17	1.45	98.81	70	52	77	121	37	6.17	8.26	3.27
886	I3G, -CC-Mt	25+86W	3+80S	5340060	409426	9	335	96	-0.1	23	46.54	2.04	13.65	18.96	0.23	4.77	6.00	2.15	0.20	0.12	2.68	98.94	34	36	64	100	32	6.70	8.68	3.13
887	I2D, Qz pheno ??, +Mt+/-CC	25+68W	4+20S	5340015	409425	3	8	152	-0.1	1	55.86	1.25	13.08	15.82	0.22	1.49	4.06	3.16	0.06	0.21	2.01	98.37	52	79	118	198	58	10.50	1.82	3.41
889	I4, Py +CC	25+14W	4+31S	5339985	409470	3	12	34	-0.1	24	49.57	0.81	14.22	12.92	0.18	6.20	9.10	2.28	0.06	0.05	2.64	99.76	32	79	72	57	19	17.48	2.50	3.00
891	I4P/I3G	26+50W	1+52S	5340287	409470	8	96	64	-0.1	30	48.46	1.68	13.39	15.68	0.20	4.31	7.02	4.00	0.34	0.15	2.82	99.96	76	143	71	89	28	7.98	7.83	3.18
893	I3G/V3B/S3G	27+70W	1+60S	5340325	409372	3	106	58	-0.1	41	48.02	0.73	15.17	11.60	0.17	7.52	8.46	2.10	0.17	0.03	2.94	98.62	35	206	68	50	18	20.74	7.69	2.78
899	I4P, <1% sulfide	7+15W	11+34S	5338682	410967	3	121	63	-0.1	61	47.91	1.27	14.18	14.27	0.20	6.07	9.47	1.97	0.23	0.08	2.2	99.17	49	164	118	62	21	11.18	10.67	2.95
908	I3G	13+92W	11+67S	5338880	410324	3	97	65	-0.1	26	45.08	1.81	13.83	16.95	1.15	5.87	8.78	0.21	0.21	0.15	3.41	97.7	56	10	208	70	23	7.66	50.00	3.04
922	I3G porphyric, tr. Po	47+90W	2+46S	5341060	407493	3	83	88	-0.1	21	49.63	1.67	14.30	14.82	0.21	3.75	7.23	2.51	0.22	0.23	2.14	97.76	32	95	107	120	35	8.54	7.89	3.43
2201	I3G, med.-gr.-CL-CC-EP,tr. Py	13+00E	8+95S	5338230	412878	8	167	42	-0.1	29	48.93	1.25	13.83	12.95	0.20	5.86	9.78	1.80	0.21	0.13	2.44	98.9	42	293	135	67	21	11.02	10.63	3.19
2212	I2D, Fp, Cl, 5% Ep, 5% Qz	8+70E	14+60S	5337890	412190	14	81	56	-0.1	89	45.37	1.01	18.69	10.08	0.14	6.08	9.80	2.32	0.22	0.02	3.54	99.1	35	64	106	39	16	18.42	8.71	2.44
2217	I3G/I2D, tr. Py in sheared ridge	5+00E	7+80N	5340070	412750	3	29	39	-0.1	56	49.47	0.58	15.19	10.63	0.17	7.34	9.06	2.43	0.18	0.05	2.59	99.25	67	178	10	45	19	26.21	6.74	2.37
2227	I2D/D2 -CL	13+05W	5+25N	5340442	410970	6	94	63	-0.1	76	45.60	0.65	15.43	11.34	0.18	7.77	9.37	3.10	0.09	0.04	2.59	97.57	72	347	87	47	20	23.63	2.74	2.35
	Tuff:																													
903	T(3) crx, south to Burbank	10+72W	11+88S	5338772	410560	3	51	89	-0.1	68	52.92	0.98	16.12	7.89	0.12	5.67	5.69	2.08	0.81	0.11	3.82	98.33	152	277	175	152	23	16.38	28.00	6.61
906	T(3)K, local cherty frgments,-CL	10+60W	13+83S	5338616	410410	6	107	79	-0.1	28	45.18	2.29	12.25	20.57	0.22	6.03	8.82	2.04	0.16	0.05	1.34	99.86	5	60	70	40	16	5.34	7.17	2.50
907	T(3) Bl, fractionated	11+90W	15+10S	5338510	410358	3	66	59	-0.1	40	63.35	0.78	14.28	4.88	0.10	2.88	4.38	3.83	0.61	0.18	2.01	98.42	166	291	170	236	28	18.36	13.69	8.43
2207	T(3)V3B+CC-CL, tr. AK	11+00E	1+25S	5339005	413000	3	3	45	-0.1	233	39.98	0.42	18.83	7.15	0.11	11.18	4.36	3.08	0.18	0.05	8.79	98.86	52	957	86	41	13	44.58	6.59	3.15
2236	T(3)Bl matrix, -CC, tr. Py	15+85W	3+80N	5340424	410665	3	44	73	-0.1	63	47.19	0.51	14.07	11.21	0.21	5.60	8.47	3.19	0.35	0.06	5.12	99.38	90	81	352	38	21	27.63	9.89	1.81
2238	T(2) ash, +CC	17+00W	4+70N	5340535	410572	7	19	46	-0.1	3	68.44	0.19	16.15	1.85	0.05	0.68	1.28	4.30	2.69	0.14	2.2	99.5	926	75	179	137	16	87.22	38.46	8.56
2242	Brecciated T(3) -CL, tr. Py+Po	20+50W	6+35N	5340810	410323	3	50	49	-0.1	144	49.38	0.59	14.19	11.44	0.19	8.76	7.05	3.53	0.15	0.05	2.55	99.68	34	431	100	40	17	24.16	3.97	2.35
918	Chert	35+35W	4+40S	5340382	408545	3	9	34	-0.1	10	85.76	0.31	6.41	1.72	0.03	0.25	1.26	3.03	0.03	0.16	0.54	99.89	19	224	3	155	20	20.55	0.97	7.75
2214	T cherty locally Fp crx, -CC-AK	1+00E	8+35S	5338694	411784	3	-1	35	-0.1	21	62.94	0.53	17.67	4.39	0.05	2.00	1.51	7.40	0.06	0.09	1.49	98.87	58	69	28	138	19	33.10	0.79	7.26
	Felsic to int. volcanics:																													
851	V1H, variolitic, Fractionated	2+90S	43+87W	5340855	407844	3	42	60	-0.1	8	68.12	0.63	12.03	6.78	0.05	1.76	3.40	4.83	0.20	0.12	0.79	99.21	87	116	115	436	111	19.10	3.94	3.93
852	Brecciated V1D, Fractionated	2+85S	44+05W	5340870	407830	3	58	47	-0.1	10	64.99	0.82	12.39	8.37	0.07	2.31	3.66	5.13	0.14	0.10	0.85	99.3	28	88	83	365	93	15.06	2.64	3.92
853	V2A, phenocrysts, Fractionated	2+65S	43+96W	5340883	707883	3	75	59	-0.1	19	59.15	1.01	12.85	10.36	0.12	3.44	6.28	3.33	0.07	0.11	1.73	99.6	5	87	133	223	60	12.71	2.02	3.72
859	Sheared V1H, Mt, Fract.	2+75S	42+35W	5340810	407985	3	25	40	-0.1	9	63.89	0.63	14.09	7.77	0.05	2.07	5.26	3.68	0.05	0.04	1.03	99.18	140	73	922	441	106	22.31	1.33	4.16
860	Sheared vario. V1H, Frac.	2+50S	40+55W	5340800	408070	3	37	69	-0.1	10	66.83	0.64	12.27	6.80	0.05	1.67	3.77	4.34	0.21	0.12	1.33	98.83	52	123	126	443	120	19.29	4.56	3.69
862	V1D variolitic/T1L, Fractionated	3+20S	40+70W	5340701	408122	3	32	114	-0.1	1	68.27	0.68	10.46	10.66	0.13	0.93	2.56	3.51	0.45	0.10	1.1	99.66	90	79	49	362	95	15.39	11.47	3.81
863	Variolitic V1D, Fractionated	3+00S	40+35W	5340703	408164	3	8	52	-0.1	4	68.63	0.84	11.06	8.19	0.09	1.38	3.55	4.46	0.26	0.13	0.55	99.46	38	172	97	354	86	13.18	5.49	4.12
864	V1D, amphiboles, Fractionated	4+55S	39+60W	5340535	408155	16	13	118	-0.1	1	62.32	0.94	11.57	13.19	0.22	0.95	4.30	3.32	0.37	0.23	1.14	99.28	36	89	98	314	84	12.35	9.92	3.74
867	V2A variolitic, Fractionated	5+40S	38+90W	5340425	408199	3	38	427	-0.1	5	58.10	1.21	12.74	12.91	0.19	2.43	4.90	3.55	0.39	0.40	0.99	98.26	54	141	45	247	66	10.50	9.80	3.74
870	V1D amphiboles Qz amyg.Frac.	4+87S	38+60W	5340463	408246	3	3	210	-0.1	1	60.93	1.02	12.11	13.76	0.23	1.47	2.23	3.90	0.50	0.29	1.94	99.74	164	57	110	304	87	11.84	11.36	3.49
897	V2A pill. variolitic. Fractionated	10+18S	8+12W	5338835	410885	3	21	80	-0.1	9	57.86	1.16	12.59	12.05	0.15	3.29	6.32	2.66	0.91	0.27	1.16	99.12	227	186	208	218	60	10.82	25.48	3.63
901	V1D variol., shea.-CL,EP, frac.	4+40W	13+60S	5338420	411137	3	15	49	-0.1	6	58.74	0.84	12.10	8.58	0.10	1.13	9.93	1.50	0.03	0.17	3.36	98.64	36	187	586	376	97	14.41	1.90	3.88
902	V2A host to Burbank, fractiona.	10+62W	11+30S	5338821	410590	20	92	93	0.2	47	58.57	1.05	16.01	7.36	0.08	3.83	3.00	5.93	0.08	0.11	1.72	98.67	144	155	304	238	30	15.22	1.31	7.93
912	V1R, <3% Py, boulder??	13+95W	13+40S	5338720	410260	3	56	46	-0.1	10	68.04	1.04	15.02	2.53	0.06	0.48	4.02	5.84	0.12	0.20	0.97	98.77	57	140	119	377	33	14.40	1.99	11.42
914	Slightly sheared V1D,fractionat.	6+00S	35+00W	5340223	408509	10	47	119	-0.1	15	61.43	1.12	12.66	9.72	0.12	2.28	2.96	4.02	0.07	0.18	2.69	98.99	94	58	93	313	83	11.29	1.67	3.77
917	V2A, fractionated	35+30W	4+45S	5340375	408546	3	6	91	-0.1	3	58.09	1.33	12.32	14.22	0.21	2.22	4.75	3.27	0.11	0.42	1.18	98.79	38	11	55	242	70	9.25	3.22	3.46
919	V1D variolitic, +Sl,fractionated	4+20S	34+98W	5340380	408587	11	17	147	-0.1	1	68.08	0.75	10.88	10.60	0.18	0.60	4.24	1.28	0.03	0.16	1.63	99.52	26	81	283	369	97	14.59	2.26	3.80
920	V1D, amphiboles, fractionated	4+10S	35+35W	5340410	408555	3	7	49	-0.1	3	67.27	0.99	11.56	9.09	0.09	1.38	2.91	4.42	0.11	0.16	0.62	98.91	94	68	62	352	87	11.71	2.41	4.05
921	V1D- Sl, fractionated	48+00W	2+60S	5341052	407479	3	28	37	-0.1	9	67.34	0.78	12.72	7.27	0.07	1.89	3.20	4.92	0.12	0.13	1.18	100.49	25	100	63	397	98	16.40	2.35	4.05
923	V1R/V2A+Sl	47+09W	3+40S	5340940	407530	3	8	22	-0.1	5	68.71	0.87	11.18	7.03	0.09	1.07	3.71	4.58	0.19	0.17	0.29	97.84	16	279	51	336	80	12.84	3.97	4.20
924	V1D variolitic, +CL+Sl,fractiona.	3+40S	47+10W	5340942	407519	3	5	64	-0.1	4	65.92	0.95	12.07	9.25	0.12	1.41	3.91	4.18	0.20	0.15	0.67	99.24	36	252	66	359	86	12.66	4.54	4.17
925	V2A, +CL, +CC, - Mt, fractiona.	46+90W	3+67S	5340910	407535	3	5	136	-0.1	1	52.74	1.31	12.73	12.73	0.19	2.15	5.09	3.25	0.16	0.28	5.41	99.62	53	45	64	226	65	9.75	4.71	3.48
926	V1D, +Mt, fractionated	4+25S	48+87W	5340936	407334	3	6	69	-0.1	1	67.89	0.75	10.38	11.22	0.15	0.59	3.54	3.73	0.18	0.15	0.29	99.02	38	199	43	330	90	13.85	4.59	3.67
928	V1D variolitic, + Mt,+Sl,fraction.	3+25S	36+55W	5340530	408495	3	17	86	-0.1	1	70.27	0.69	10.60	9.89	0.15	0.70	3.32	4.15	0.20	0.18	0.15	100.49	30	210	3	373	103	15.41	4.59	3.62
929	V2A+CL, +/- CC, fractionated	36+55W	3+25S	5340500	408510	3	3	124	-0.1	1	56.48	1.36	12.70	14.92	0.21	2.51	4.00	3.36	0.18	0.42	1.72	98.9	37	29	81	253	72	9.35	5.00	3.51
931	V1D, fractionated	4+67S	34+68W	5340330	408600	3	23	66	-0.1	6	62.37	0.98	12.40	8.71	0.09	1.89	2.71	4.41	0.03	0.26	3.36	99.44	42	82	49	377	101	12.68	0.65	3.73
934	V1D, fractionated	34+30W	5+60S	5340230	408600	3	4	133	-0.1	1	58.79	1.03	12.57	14.92	0.22	1.11	4.17	3.44	0.12	0.35	1.05	98.28	27	41	102	323	91	12.22	3.33	3.55
936	V1H altered, fractionated	4+55S	33+42W	5340285	408727	3	33	68	-0.1	8	69.36	0.58	12.03	5.84	0.05	1.30	2.03	4.81	0.40	0.11	1.15	98.28	259	152	132	441	107	20.86	7.59	4.12
938	V1D porph,-CL,Mt,Am,Py,Po,fr.	2+30S	39+45W	5340735	408270	3	41	51	-0.1	18	61.42	0.95	12.68	8.55	0.09	2.98	4.19	3.39	0.03	0.12	2.32	98.01	22	79	22	280	66	13.34	0.86	4.24
941	V1H +EP, fractionated	7+70S	21.81W	5339555	409625	3	13	20	-0.1	7	68.92	0.43	12.61	4.04	0.03	1.00	4.12	4.55	0.03	0.11	1.38	98.02	34	174	427	484	119	29.00	0.65	4.07

APPENDIX II. LITHOGEOCHEMICAL RESULTS

Normalized on a LOI-free basis

#	Description	Northing	Easting	Northing	Easting	Au	Cu	Zn	Ag	Ni	SiO2	TiO2	Al2O3	Fe2O3	MnO	MgO	CaO	Na2O	K20	P2O5	LOI	Total	Ba	Cr	Sr	Zr	Y	Al/Ti	Seri.In.	Zr/Y
942	V1H +Sl, fractionated	7+70S	21+81W	5339555	409625	3	38	16	-0.1	5	70.31	0.42	12.18	4.22	0.02	1.03	2.55	5.81	0.03	0.11	1.02	98.24	38	149	91	464	122	28.88	0.51	3.80
943	V1H +CC+EP-Sl-CL, fraction.	9+40S	21+48W	5339386	409586	30	7	35	-0.1	3	67.08	0.73	11.46	6.87	0.07	2.08	2.97	4.89	0.28	0.17	1.02	98.2	63	160	61	464	117	15.68	5.36	3.97
945	V2A +CL, <1% Py, fractionated	5+65S	48+75W	5340806	407290	3	19	80	-0.1	7	59.93	1.12	11.95	12.47	0.17	2.03	7.33	3.00	0.39	0.35	0.64	99.9	53	170	113	225	64	10.68	11.44	3.52
	Pluton, dykes:																													
855	D2, amphiboles ??	43+96W	2+40S	5340904	407855	3	27	104	-0.1	14	51.51	1.74	12.91	17.41	0.22	3.81	6.97	2.87	0.25	0.21	1.46	100.41	42	25	104	124	38	7.43	7.91	3.26
868	I2	38+80W	5+35S	5340425	408211	3	82	118	-0.1	36	50.01	1.43	16.36	9.93	0.15	5.59	6.36	1.63	0.30	0.23	4.34	98.76	56	164	238	145	26	11.44	15.35	5.58
910	D1	11+90W	9+80S	5338997	410546	3	84	122	-0.1	14	82.75	0.21	6.31	2.99	0.03	0.82	1.98	1.96	0.03	0.03	1.26	99.31	42	228	37	135	18	29.48	1.49	7.50
913	D1	37+85W	2+10S	5340685	408426	22	4	19	-0.1	5	69.45	0.29	15.05	1.41	0.02	0.54	1.08	6.39	2.13	0.02	1.19	98.06	1275	59	869	134	9	52.07	25.03	14.89
935	D1	33+45W	4+51S	5340290	408725	29	7	49	-0.1	4	69.29	0.32	15.63	1.80	0.02	0.62	1.57	5.28	2.99	0.08	1.48	100.08	1270	70	1288	139	13	48.16	36.11	10.69
939	I1G, < 2% Py, felsic stock	40+00W	13+40S	5339734	407785	30	5	30	-0.1	5	67.73	0.23	15.58	1.21	0.01	0.38	1.10	6.44	3.03	0.12	1.42	97.89	892	85	760	121	12	68.32	31.95	10.08
940	I1G, felsic stock	38+82W	13+30S	5339702	407877	82	5	36	-0.1	1	70.29	0.22	15.69	1.20	0.01	0.51	1.01	5.36	3.00	0.03	1.11	99.02	1127	130	1294	104	13	69.82	35.86	8.00
2205	D2, foliated	11+05E	9+12S	5338281	412679	10	85	55	-0.1	65	51.51	0.61	19.99	5.20	0.11	6.17	5.01	3.68	0.70	0.13	3.58	98.37	264	48	291	90	18	32.67	16.04	5.00
2209	I1, BQE-CC, massive	6+30E	13+10S	5338100	412045	3	5	33	-0.1	55	62.12	0.32	17.69	3.04	0.03	2.91	2.39	4.98	0.74	0.07	2.14	97.27	206	50	340	100	8	56.10	12.99	12.50
2215	QFP dykes, tr. Py. High strain	10+35E	7+35N	5339839	413225	3	12	67	-0.1	8	63.50	0.55	16.33	2.83	0.03	1.09	3.82	6.38	1.05	0.25	1.76	98.47	452	75	1250	172	9	29.79	14.13	19.11
2228	QFP, 1 m wide, (10790)	12+60W	6+50N	5340555	411055	3	9	68	-0.1	8	66.59	0.28	16.65	1.90	0.03	0.79	3.66	5.22	1.71	0.14	1.12	98.91	753	122	870	134	12	60.19	24.64	11.17
2247	QFP host to tens. Qz v+Py+CC	21+80W	11+70N	5341155	410370	3	15	101	-0.1	8	64.67	0.40	18.48	1.68	0.02	0.71	1.30	8.41	1.39	0.12	1.41	99.58	569	92	592	163	10	46.46	14.17	16.30



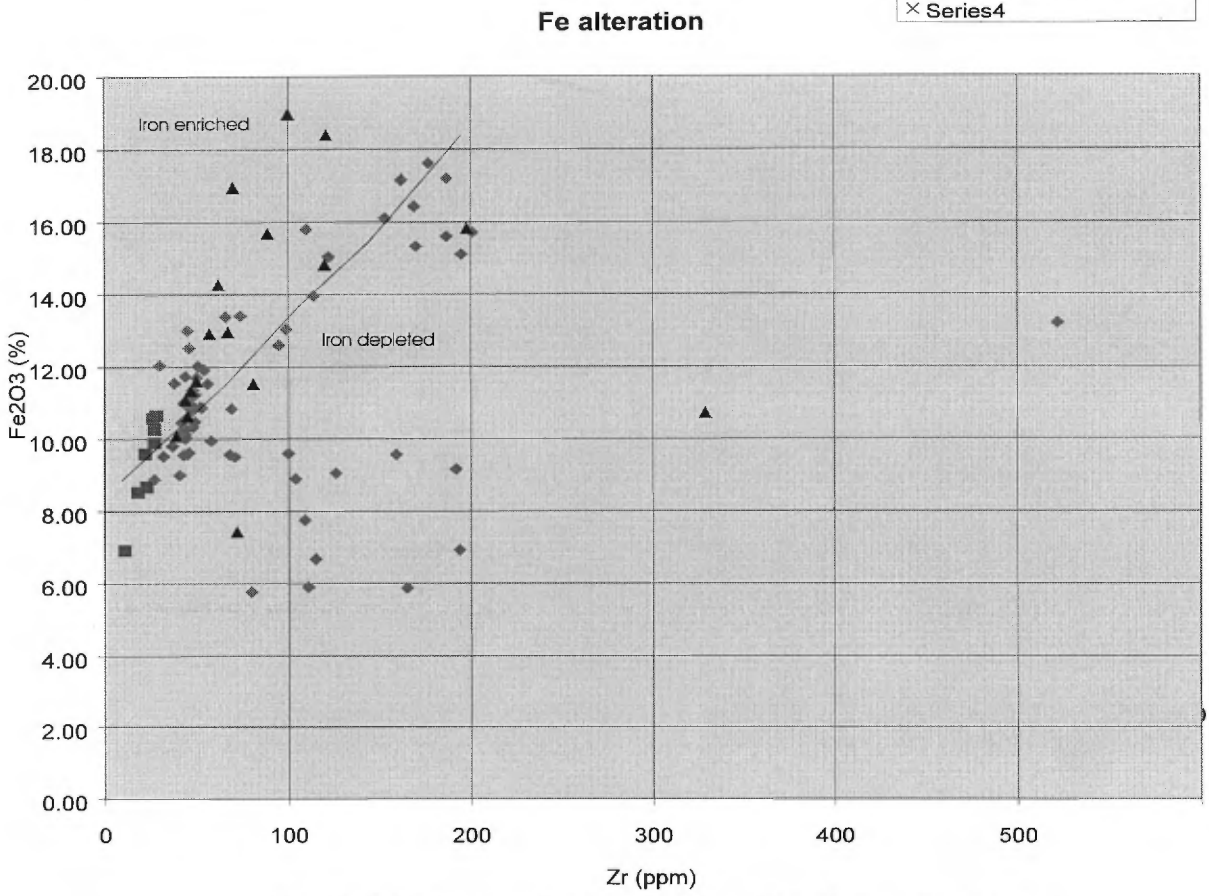
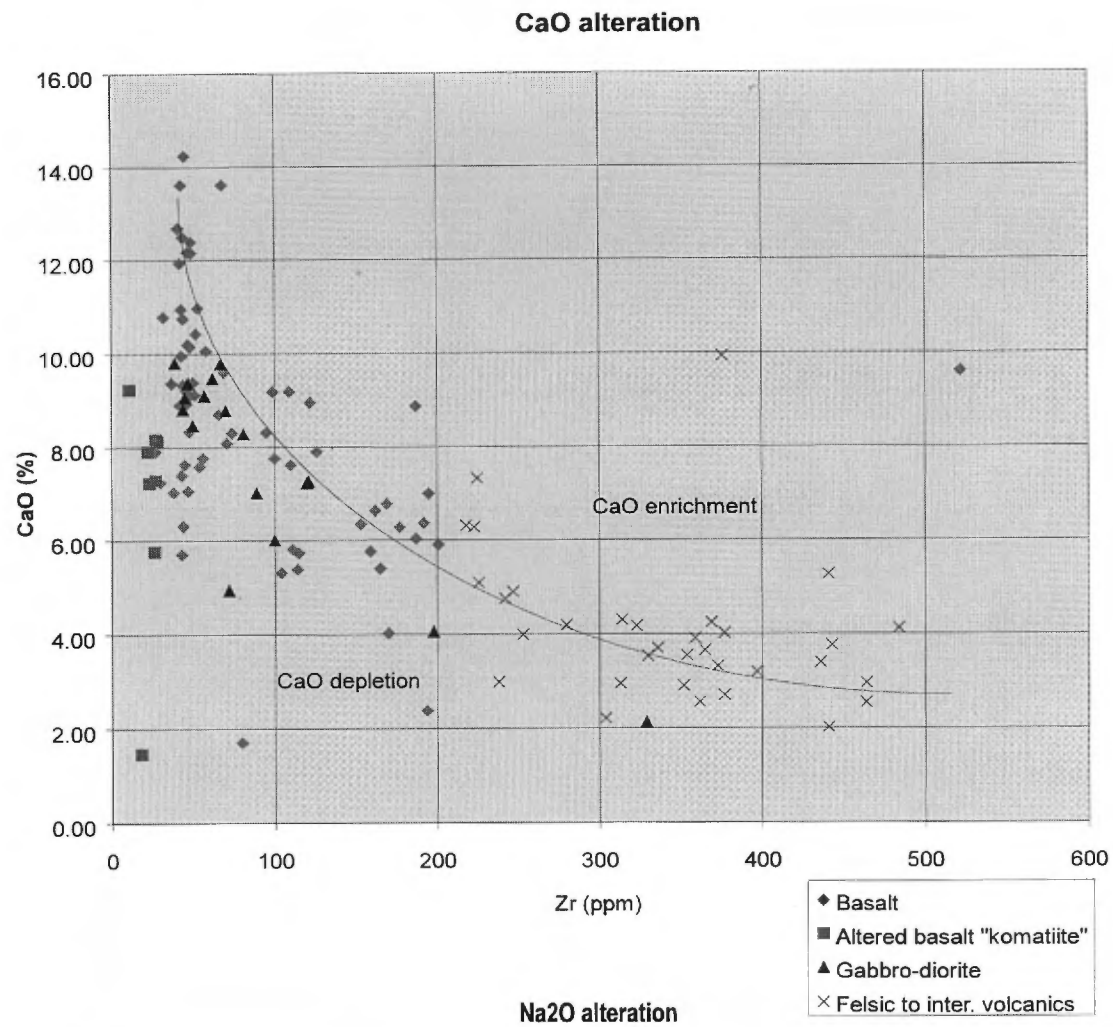


Fig. A1. SiO2 fractionation trend and position of altered samples.
Fig. A2. Fe fractionation trend and position of altered samples.



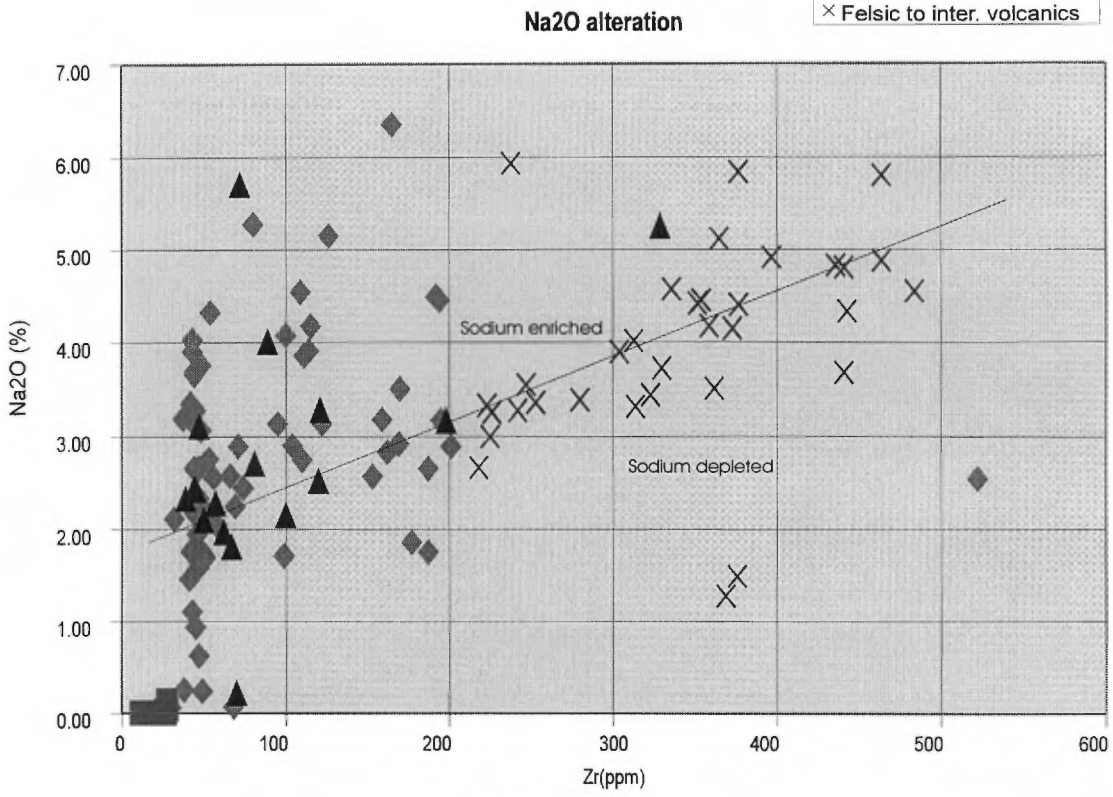
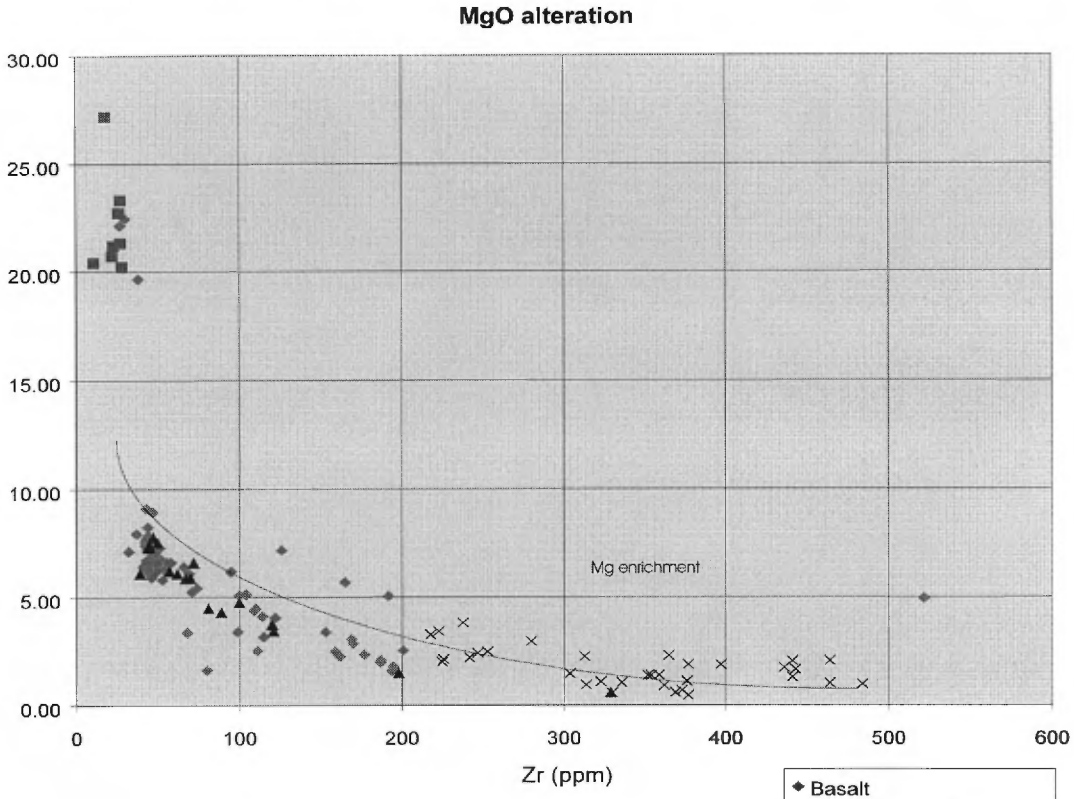


Fig. A3. Ca fractionation trend and position of altered samples.
Fig. A4. Na fractionation trend and position of altered samples.

APPENDIX II. ALTERATION DIAGRAMS



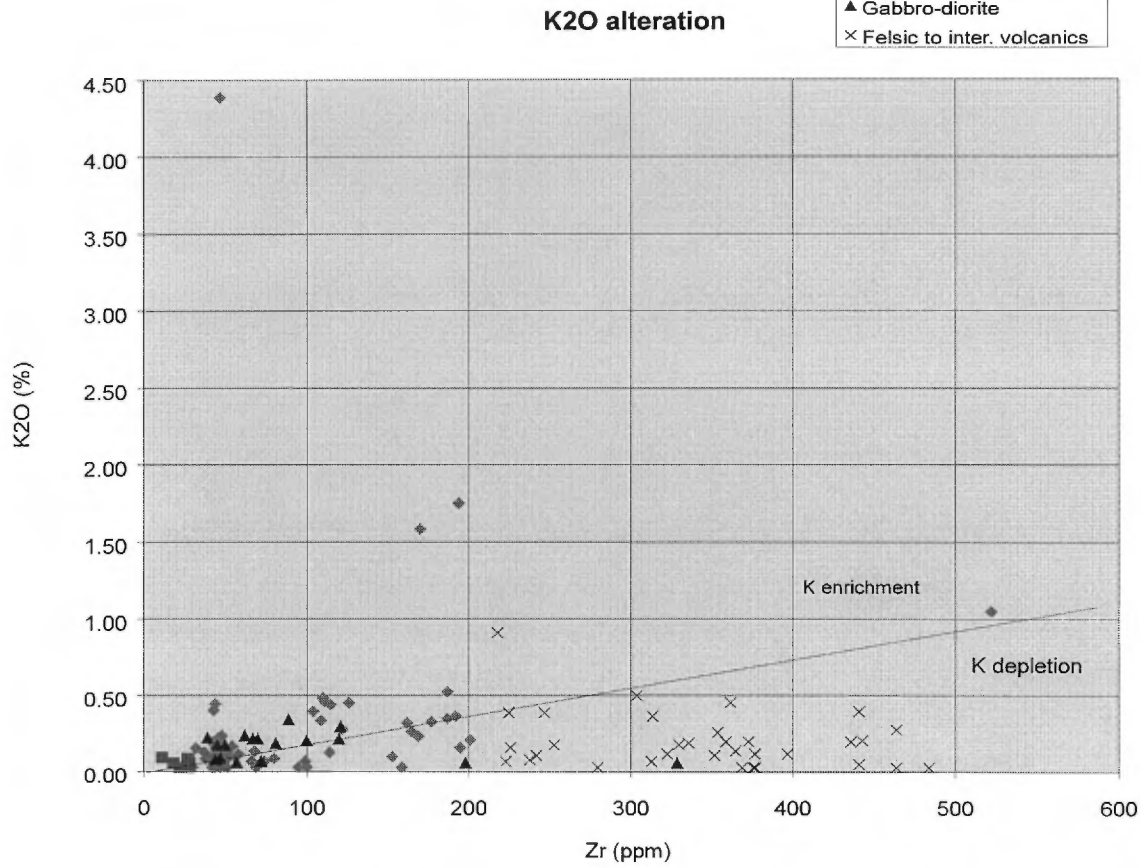


Fig. 5A. Mg fractionation trend and position of altered samples.
Fig 6A. K fractionation trend and position of altered samples.

APPENDIX III. ASSAY RESULTS

#	Easting	Northin	Easting	Norting	Au30	Cu	Zn	Ag	Description
2301	13+00E	7+25S	412961	5338378	-5	35	89	-0.1	V3B/I3G-EP-CL-AK, <1% Py
2302	8+00E	0+25S	412775	5339195	-5	73	55	-0.1	T(2)L-CC-AK, 1% Py
2303	6+15E	0+60S	412630	5339205	6	81	56	-0.1	Qz stringers in sheared I3G, tr. Py
2304	6+00E	12+00S	412075	5338244	-5	13	3	-0.1	Qz stringers-HM in I3G-CC
2305	6+30E	13+10S	412050	5338095	-5	13	98	-0.1	Massive I1, BQE, -CC
2306	7+50E	14+60S	412190	5337885	6	108	70	-0.1	Qz -AK stringers in shear+CL
2307	7+40E	14+05S	412115	5337983	-5	47	150	-0.1	Composite, sheared I3G+CL-AK
2308b	Boulder				16	67	45	-0.1	15%Py medium-corse grained
2309	2+00E	5+60S	412085	5339132	-5	9	4	-0.1	Qz veins+HM, tr. Py in I3G-CC
2310	1+40E	8+20S	411825	5338700	3250	9	11	-0.1	Qz veins+CC+AK, 5%Py in I3G-AK
2311	1+65E	7+75S	411825	5338700	812	5	17	-0.1	Qz veins+CC, tr.AK, 8% Py in I3G
2312	1+50E	8+20S	411825	5338700	58	13	25	-0.1	Host I3G to 2310, 3% Py, Qz stringers+CC+AK
2313	1+00E	7+90S	411825	5338700	27	13	14	-0.1	Qz veins-CC-AK, 5%Py in magnetic I3G
2314	8+00E	6+75N	413000	5339850	-5	6	22	-0.1	Qz veinlets in sheared V3B-AK
2315	6+00E	cl-99	412850	5340085	-5	6	10	-0.1	Qz vein 5-30 cm wide, -HM in highly strained I3G
2316	1+00E	6+25N	412305	5340050	7	65	69	-0.1	V3B pill.sheared-AK-Sl
2317	0+00	0+60S	412130	5339515	-5	37	25	0.1	Qz vein, 10 cm wide, -CC-AK, tr. Py. (30072)
2318A	10+95W	5+50N	411180	5340410	6	24	70	-0.1	I3G/V3B+CL, strongly altered, rusty
2318B	11+00W	5+50N	411180	5340410	6	35	35	-0.1	I3G, highly fractured, rusty, magnetic, altered
2319	13+00W	11+85N	411214	5341064	-5	104	66	-0.1	Highly strained V3B pill.Qz-carb. stringers, tr. Py
2320	19+00W	7+50N	410390	5340935	6	23	16	-0.1	Extensional Qz vein (N194°) in I2D
2321	21+00W	0+50N	410258	5340838	-5	18	73	-0.1	QFP -CC, tr. Py
2322	22+05W	0+50N	410164	5340862	6	253	79	-0.1	5-7% Py+Po stringers, -AK in V3B bordering QFP
2323	20+70W	6+25N	410280	5340815	7	250	3985	-0.1	T(2)L, 3% Py+Po, tr. Sp.-AK. Accicular amphiboles
2324	20+70W	6+25N	410280	5340815	7	147	81	-0.1	Idem 2323. -Sl-CL-AK, tr. Cp
2325	20+40W	6+25N	410295	5340800	7	227	45	-0.1	T(2)L, 5% Py+Po,.-AK. Accicular amphiboles
2326	20+40W	6+25N	410295	5340800	11	862	159	0.2	Idem 2323. -Sl-CL-AK, tr. Cp??
2327	21+60W	11+30N	410355	5341300	17	47	58	-0.1	Exten. Qz veins in a QFP, <4% Py+CC-AK
2328	21+60W	11+30N	410335	5341300	25	99	44	0.3	Exten. Qz veins in a QFP, <4% Py+CC-AK
2329	22+85W	7+85N	410145	5341030	-5	32	11	-0.1	Smokey extens. Qz vein. To??-CC (00248) in I2D
2330	22+85W	7+85N	410145	5341030	6	700	102	-0.1	I2D-AK, <2% Po (host to 2329)
115751	12+58w	14+60s	410225	5338820	-5	61	99	-0.1	T(3)L
115752	15+40w	18+40s	409735	5338636	19	33	276	0.1	T(3)L
115753b	16+00w	15+95s	409960	5338550	-5	87	132	0.3	Boulder
115754	37+44w	2+00s	408465	5340684	10	441	126	0.2	I3G, 1-3% Po, tr. Py
115755	37+80w	2+10s	408427	5340684	-5	11	13	-0.1	Qz v., 1,5 cm wide, tr. Py in I1
115756	37+45w	3+15s	408415	5340576	13	83	122	0.3	S4A/S3G, tr. Py
115757	37+15w	10+15s	408161	5439925	133	54	72	-0.1	V3B??, +AK, tr. Py
115758	35+00w	4+20s	408586	5340386	12	319	455	0.5	Chert, 1-3% Py stringers
115759	36+90w	2+80s	408344	5340585	10	52	40	-0.1	V3B variolitic, tr. Py (nodules). Western limit to showing
115760	36+90w	2+80s	408344	5340585	8	42	74	-0.1	V3B variolitic, 5-10% Py stringers
115761	36+36w	2+75s	408390	5340570	7	143	42	-0.1	Sed-V3B var. contact, 10-20% Py nodules and stringers
115762	36+36w	2+75s	408390	5340570	-5	180	48	-0.1	Sed-V3B var. contact, 15-25% diss. Py
115763	36+85w	2+65s	408490	5340595	-5	26	33	-0.1	Sed. tr. Py and Sed/I3G
115764	36+25w	2+80s	408541	5340562	-5	33	130	-0.1	V3B var. 2-5% Py
115765	36+15w	2+75s	408551	5340560	-5	60	804	-0.1	V3B var. ?+Sl, 2-3% diss. Py
115766	35+45w	2+72s	408590	5340545	7	195	44	-0.1	V3B var. 5-10% diss. and Py nodules
115767b	35+80w	2+90s	408565	5340540	-5	282	40	-0.1	V3B porphyric, 15-20% Py
115768	35+45w	2+80s	408588	5340540	-5	171	42	-0.1	V3B var. 5-10% Py
115769	35+50w	2+75s	408610	5340535	-5	108	66	-0.1	V3B var. +Sl+CL, 1-5% diss. Py
115770	35+55w	2+80s	408606	5340530	7	106	55	-0.1	V3B var. 5% Py diss. and nodules
115771	35+57w	2+85s	408525	5340525	-5	80	750	-0.1	V3B var. +Sl, 10-20% diss. Py
115772	49+22w	3+15s	407345	5341042	10	119	391	0.1	S4A/chert, tr. Py
115773	49+15w	2+35s	407360	5341077	9	143	56	-0.1	Qz stringers in old trench
115774	48+76w	5+15s	407305	5340852	7	119	130	0.2	V3B, Am?, -Sl, tr. Py, rusty
115775	50+00w	3+55s	407255	5341042	19	325	1260	0.3	Chert, 1-2% Py
115776	32+90w	4+85s	408760	5340225	55	570	2500	0.7	Smokey chert, 1-2% Py, rusty
115777	32+90w	4+85s	407760	5340225	27	363	1150	0.4	Smokey chert, <1% Py, rusty
115778	32+90w	4+85s	408760	5340225	35	530	1500	0.7	Smokey chert, <1% Py, rusty
115779	33+65w	4+75s	408697	5340276	6	131	67	-0.1	V3B var. +Sl, 1-2% Py
115780	34+16w	5+60s	408610	5340220	-5	7	9	-0.1	Qz vein
115781	34+35w	5+60s	408595	5340220	-5	49	135	0.1	V4K? 1-3% Py diss. and stringers
115782	34+00w	5+46s	408625	5340230	-5	64	99	-0.1	V4K, <1% Py diss.
115783	34+03w	5+20s	408630	5340253	6	133	187	-0.1	V3B var. +Sl, AK??, <2% diss. Py
115784	33+80w	5+05s	408675	5340253	-5	5	2	-0.1	Flat Qz vein
115785	38+50w	4+85s	408255	5340460	-5	97	69	-0.1	V4K?, Mt, tr. Py+Po
115786	39+40w	6+95s	408088	5340308	-5	4	32	-0.1	Qz vein

APPENDIX III. ASSAY RESULTS

#	Easting	Northin	Easting	Norting	Au30	Cu	Zn	Ag	Description
115787	40+00w	13+40s	407785	5340732	178	9	6	1.9	Qz vein, tr. Py, 1 m wide
115788	40+00w	13+40s	407785	5340732	487	20	8	5.1	Qz vein, tr. Py, 50 cm wide
115789	23+00w	9+00s	409470	5339490	6	180	115	-0.1	Sed, tr. sulfide
115790	45+55w	2+98s	407690	5340920	-5	41	54	-0.1	V3B porphyric +Sl, tr. Py
115791	20+21w	1+75s	410060	5340040	-5	105	31	-0.1	I3?, 5-7% Po
115801	43+00w	2+90s	407920	5340822	-5	55	15	-0.1	Qz vein in shear zone, tr. Py
115802b	42+25w	3+10s	407985	5340775	1848	25	29	0.9	BIF, 35% Py, Audet showing
115803b	52+20w	3+05s	407990	5340775	6210	31	53	1.7	V3B?, 15% Py, Qz vein, Audet showing
115804	40+45w	3+05s	408150	5340705	15	375	861	0.4	Chert? 3-5% Py, Audet showing
115805	39+40w	5+40s	408148	5340405	8	8	13	-0.1	Qz vein fragments in foliation, Audet showing
115806	showing audet		409170	5339755	288	31	72	0.9	Audet showing, Sed. 15-20% Py, AK, CC
115807	showing audet		409170	5339755	1456	69	154	0.5	Audet showing, BIF, Py, Qz
115808b	showing audet		409170	5339755	6	3	6	0.9	Qz vein
115809	24+25w	2+55s	409630	5340110	6	291	63	-0.1	I3G, 1-2% Py diss.
115810	25+75w	4+10s	409422	5340030	-5	12	152	-0.1	Qz vein, <5% Py
115811	25+75w	4+10s	409422	5340030	-5	47	62	-0.1	I4, 20% Qz injections, 5-10% Py
115812	25+60w	3+95s	409440	5340038	-5	63	45	-0.1	Qz vein, 3-5% Py from old trench
115813	25+32w	4+50s	409445	5339976	-5	18	32	-0.1	Qz vein, tr. Py from old trench
115814	26+98w	4+05s	409340	5340070	-5	46	10	-0.1	Qz vein, To, 5% Py
115815	24+35w	4+55s	409534	5339935	-5	43	71	-0.1	Qz veinlets in I3G
115816	26+50w	1+55s	409480	5340280	-5	5	5	-0.1	Qz vein, tr. Py
115817	26+62w	1+86s	409460	5340255	-5	3	17	-0.1	White Qz vein
115818	27+14w	1+90s	409410	5340271	-5	8	71	-0.1	Qz vein, Bo
115819	26+95w	1+95s	409425	5340260	10	62	63	-0.1	Qz vein, +CL, tr. Py
115820	27+00w	2+00s	409420	5340262	51	26	30	-0.1	Qz vein, +CL, tr. Py
115821	27+60w	1+10s	409400	5340365	-5	737	32	-0.1	Brecciated V3B, 5% Py+Po, Cp
115822	27+55w	1+20s	409400	5340355	6	277	42	-0.1	V3B, 5-7% Py+Po
115823	27+75w	1+02s	409390	5340370	-5	126	14	-0.1	Brecciated V3B, -Sl, 5% Po
115824	28+40w	1+00s	409330	5340405	-5	11	6	-0.1	Smokey Qz vein, barren
115825	29+50w	0+40s	409260	5340508	7	194	32	-0.1	I3G? 2-3% Po, tr. Py
115826	29+36w	0+10s	409282	5340525	6	176	35	-0.1	V3B, locally brecciated, tr. Py+Cp
115827	33+42w	0+10s	408915	5340695	254	75	138	-0.1	V4K/V3B, 1-2% Py
115828	9+10w	13+20s	410690	5338585	6	19	18	0.5	Qz vein, 10% To, 1-2% Py, CL in intrusive
115829	9+10w	13+20s	410690	5338585	8	12	19	0.3	Qz vein, 10% To, 2-5% Py, CL in intrusive
115830	8+00w	10+25s	410895	5338825	39	72	144	0.7	V3B var. <1% Py
115831	5+00w	15+34s	410995	5338245	-5	6	17	-0.1	Qz vein
115832	9+90w	10+90s	410676	5338835	59	13	107	-0.1	Host to Qz vein, +CL, <1% Py
115833	9+75w	10+88s	410690	5338832	17	15	30	-0.1	Qz vein, +CL, <1% Py, Burbank showing
115834	10+26w	11+15s	410630	5338820	235	29	10	-0.1	Qz vein, To, CL, <1% Py, Burbank showing
115835	10+26w	11+15s	410633	5338820	62	259	32	1.6	Qz vein, To, CL, <1% Py, Burbank showing
115836	10+26w	11+15s	410630	5338820	281	53	23	0.2	Qz vein, To, CL, <1% Py, Burbank showing
115837	10+10w	11+10s	410650	5338820	-5	94	124	0.2	S3G/S4A, locally cherty, <1% Po, tr. Cp, Burbank showing
115838	2+44w	10+15s	410405	5338646	8	200	126	0.7	Stringers in V3B var. 5-7% diss. Py, tr. Po
115839	13+16w	13+25s	410300	5338720	-5	16	9	-0.1	Qz vein, tr. sulfide
115840	13+55w	12+25s	410300	5338830	-5	73	122	0.2	T(3), cherty fragments, Py, Po
115841	13+11w	11+55s	410365	5338875	-5	22	102	-0.1	Qz vein in FP
115842	12+75w	12+15s	410383	5338806	-5	59	46	-0.1	Chert
115843	13+15w	12+70	410320	5338773	6	9	16	-0.1	Qz vein, To, near old trench
115844	13+15w	12+70s	410324	5338770	116	226	98	0.3	V3B, <1% Cp near old trenches
115845b	13+14w	12+55s	410328	5338785	9	385	120	0.2	V3B, 5% Po near trenches
115846	13+45w	11+85s	410328	5338861	99	630	102	0.4	Qz vein in sheared V3B, tr. Py
115847	13+15w	11+50s	410370	5338885	-5	42	118	0.2	Qz vein, tr. Po
115848	12+42w	10+65s	410468	5338936	-5	8	9	-0.1	Qz vein, To
115849	12+42w	10+65s	410468	5338936	36	843	285	1.1	Fractured V3B, Po, Cp
115850	14+35w	12+90s	410243	5338780	-5	90	112	-0.1	T(3) with V1R clasts, 2-5% Py
Sample ID					Au				
2310	1+40E	8+20S	411825	5338700	2.74				
2311	1+65E	7+75S	411825	5338700	0.34				
115802	42+25w	3+10s	407985	5340775	0.072				
115803	52+20w	3+05s	407990	5340775	0.25				
115807	showing audet		409170	5339755	0.048				

APPENDIX IV. LIST OF ACTIVE CLAIMS

Claim No.	Staking date	Exp. date	Hectares	Township	Ran.	Lot
5121719	13/03/94	01/05/96	40.00	MALARTIC	4	26
5111656	13/03/94	01/05/96	40.00	MALARTIC	4	27
5121721	13/03/94	01/05/96	40.00	MALARTIC	4	28
3639621	13/01/77	24/12/96	40.00	MALARTIC	4	43
3639622	13/01/77	24/12/96	40.00	MALARTIC	4	44
3639631	13/01/77	26/12/96	40.00	MALARTIC	4	45
3639632	13/01/77	26/12/96	40.00	MALARTIC	4	46
3639641	13/01/77	26/12/96	40.00	MALARTIC	4	47
3639642	13/01/77	26/12/96	40.00	MALARTIC	4	48
3655591	15/07/77	29/06/95	40.00	MALARTIC	3	43
3655592	15/07/77	29/06/95	40.00	MALARTIC	3	50
3655601	15/07/77	29/06/95	40.00	MALARTIC	3	51
3655631	15/07/77	29/06/95	40.00	MALARTIC	3	46
3655632	15/07/77	29/06/95	40.00	MALARTIC	3	49
3665371	13/01/77	27/12/96	40.00	MALARTIC	4	51
3665372	13/01/77	27/12/96	40.00	MALARTIC	4	52
3679881	15/07/77	29/06/95	40.00	MALARTIC	3	45
3679882	15/07/77	29/06/95	40.00	MALARTIC	3	47
3679891	15/07/77	29/06/95	40.00	MALARTIC	3	44
3679892	15/07/77	29/06/95	40.00	MALARTIC	3	48
4554231	02/03/87	29/01/97	40.00	MALARTIC	4	50
4554232	02/03/87	29/01/97	40.00	MALARTIC	4	49
3639602	13/01/77	24/12/96	40.00	MALARTIC	4	40
3639611	13/01/77	24/12/96	40.00	MALARTIC	4	41
3639612	13/01/77	24/12/96	40.00	MALARTIC	4	42
3665032	13/01/77	20/12/96	40.00	MALARTIC	2	37
3665271	13/01/77	23/12/96	20.00	MALARTIC	3-N	29 1/2N
3665272	13/01/77	23/12/96	20.00	MALARTIC	3-N	30 1/2N
3665281	13/01/77	23/12/96	20.00	MALARTIC	3-N	31 1/2N
3665381	13/01/77	25/12/96	40.00	MALARTIC	3	38
3665382	13/01/77	25/12/96	40.00	MALARTIC	3	39
3665391	13/01/77	25/12/96	40.00	MALARTIC	3	40
3665392	13/01/77	25/12/96	40.00	MALARTIC	3	41
3665401	13/01/77	25/12/96	40.00	MALARTIC	3	42
3680991	09/08/77	23/07/95	40.00	MALARTIC	4	33
3680992	09/08/77	23/07/95	20.00	MALARTIC	4-N	34 1/2N
3680993	09/08/77	23/07/95	20.00	MALARTIC	4-N	35 1/2N
3681011	09/08/77	23/07/95	20.00	MALARTIC	4	36 1/2N
3681012	09/08/77	23/07/95	20.00	MALARTIC	4-N	37 1/2N
3681051	09/08/77	23/07/95	40.00	MALARTIC	4	29
3681052	09/08/77	23/07/95	40.00	MALARTIC	4	30
3681061	09/08/77	23/07/95	40.00	MALARTIC	4	31
3681062	09/08/77	23/07/95	40.00	MALARTIC	4	32
3681561	09/09/77	23/08/95	40.00	MALARTIC	2	40
3681562	09/09/77	23/08/95	20.00	MALARTIC	2-S	41 1/2S
3681641	09/09/77	23/08/95	40.00	MALARTIC	2	38
3681642	09/09/77	23/08/95	40.00	MALARTIC	2	39
3698232	26/04/78	08/04/95	40.00	MALARTIC	3	34
3698272	26/04/78	08/04/95	40.00	MALARTIC	3	32
3698702	26/04/78	08/04/95	40.00	MALARTIC	3	35
3705461	15/11/77	27/10/96	40.00	MALARTIC	4	38
3705462	15/11/77	27/10/96	40.00	MALARTIC	4	39
3705862	26/04/78	08/04/95	40.00	MALARTIC	3	33
5121647	10/12/94	29/01/97	40.00	MALARTIC	2	33
5121648	10/12/94	29/01/97	40.00	MALARTIC	2	34
5121649	10/12/94	29/01/97	40.00	MALARTIC	2	35
5121650	10/12/94	29/01/97	40.00	MALARTIC	2	36
5138346	28/01/95	27/02/97	40.00	MALARTIC	4	24
5138347	28/01/95	27/02/97	40.00	MALARTIC	4	25
5138348	28/01/95	27/02/97	40.00	MALARTIC	4	23

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-62646.0 (COMPLET) RÉFÉRENCE: 139849

CLIENT: BARRICK GOLD CORPORATION SOUMIS PAR: CB

PROJET: 1715 DATE DE L'IMPRESSION: 31-JAN-95

COMMANDE	ÉLÉMENT		NOMBRE D'ANALYSES	LIMITE INFÉRIEURE DE DETECTION	EXTRACTION	MÉTHODE
1	Au30	Or	5	5 PPB	Pyro Analyse de 30g	30g Pyroanalyse - AA
2	Cu	Cuivre	5	1 PPM	HCL:HNO3 (3:1)	ABSORPTION ATOMIQUE
3	Zn	Zinc	5	1 PPM	HCL:HNO3 (3:1)	ABSORPTION ATOMIQUE
4	Ag	Argent	5	0.1 PPM	HCL:HNO3 (3:1)	ABSORPTION ATOMIQUE
5	SiO2	Silica (SiO2)	5	0.01 PCT	FUSION BORATE	INDUC. COUP. PLASMA
6	TiO2	Titane (TiO2)	5	0.01 PCT	FUSION BORATE	INDUC. COUP. PLASMA
7	Al2O3	Alumine (Al2O3)	5	0.01 PCT	FUSION BORATE	INDUC. COUP. PLASMA
8	Fe2O3*	Fer Total (Fe2O3)	5	0.01 PCT	FUSION BORATE	INDUC. COUP. PLASMA
9	MnO	Manganese (MnO)	5	0.01 PCT	FUSION BORATE	INDUC. COUP. PLASMA
10	MgO	Magnesium (MgO)	5	0.01 PCT	FUSION BORATE	INDUC. COUP. PLASMA
11	Ni	Nickel	5	2 PPM	HCL:HNO3 (3:1)	ABSORPTION ATOMIQUE
12	CaO	Calcium (CaO)	5	0.01 PCT	FUSION BORATE	INDUC. COUP. PLASMA
13	Na2O	Sodium (Na2O)	5	0.01 PCT	FUSION BORATE	INDUC. COUP. PLASMA
14	K2O	Potassium (K2O)	5	0.05 PCT	FUSION BORATE	INDUC. COUP. PLASMA
15	P2O5	Phosphore (P2O5)	5	0.03 PCT	FUSION BORATE	INDUC. COUP. PLASMA
16	LOI	Perte au feu	5	0.05 PCT	Ignition 1000 Deg. C	GRAVIMETRIE
17	Total	Elements majeurs Tot	5	0.01 PCT		
18	Zr	Zirconium	5	1 PPM		XRAY FLUORESCENCE
19	Y	Yttrium	5	1 PPM		XRAY FLUORESCENCE
20	Ba	Baryum	5	10 PPM	FUSION BORATE	INDUC. COUP. PLASMA
21	Cr	Chrome	5	10 PPM	FUSION BORATE	INDUC. COUP. PLASMA
22	Sr	Strontium	5	1 PPM	FUSION BORATE	INDUC. COUP. PLASMA

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 28-OCT-94

RAPPORT: C94-61950.0 (COMPLET) PROJET: 1713 PAGE 1A

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM	Ni PPM	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT
00851		<5	42	60	<0.1	8	68.67	0.62	11.84	6.84	0.05	1.77	3.43
00852		<5	58	47	<0.1	10	65.53	0.81	12.20	8.44	0.07	2.33	3.69
00853		<5	75	59	<0.1	19	60.19	0.99	12.58	10.54	0.12	3.50	6.39
00854		<5	50	113	<0.1	17	60.39	0.72	16.97	6.03	0.07	2.59	5.93
00855		<5	27	104	<0.1	14	52.26	1.72	12.78	17.67	0.22	3.87	7.07
00856		<5	76	101	<0.1	27	51.69	1.50	12.87	15.27	0.20	4.13	9.09
00857		<5	12	73	<0.1	11	51.44	1.10	12.93	13.47	0.19	5.03	9.81
00858		<5	75	105	<0.1	60	69.53	0.55	11.49	6.00	0.04	1.70	1.79
00859		<5	25	40	<0.1	9	64.57	0.62	13.83	7.85	0.05	2.09	5.32
00860		<5	37	69	<0.1	10	67.74	0.62	11.96	6.89	0.05	1.69	3.82
00861		6	327	806	<0.1	20	64.97	0.88	13.52	7.02	0.04	1.62	2.42
00862		<5	32	114	<0.1	<2	69.03	0.67	10.31	10.78	0.13	0.94	2.59
00863		<5	8	52	<0.1	4	69.00	0.83	10.94	8.23	0.09	1.39	3.57

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Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 28-OCT-94

RAPPORT: C94-61950.0 (COMPLET) PROJET: 1713

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Y PPM
00851		4.87	0.20	0.12	0.79	99.21	87	116	115	436	111
00852		5.17	0.14	0.10	0.85	99.30	28	88	83	365	93
00853		3.39	0.07	0.11	1.73	99.60	<10	87	133	223	60
00854		3.94	0.47	0.06	2.04	99.20	150	107	225	111	22
00855		2.91	0.25	0.21	1.46	100.41	42	25	104	124	38
00856		3.18	0.28	0.09	1.43	99.75	34	83	258	122	35
00857		2.60	1.07	<0.03	2.07	99.70	506	145	301	522	114
00858		5.49	0.09	0.06	3.93	100.68	10	78	40	80	27
00859		3.72	0.05	0.04	1.03	99.18	140	73	922	441	106
00860		4.40	0.21	0.12	1.33	98.83	52	123	126	443	120
00861		4.51	1.77	0.15	1.24	98.14	610	134	104	194	29
00862		3.55	0.46	0.10	1.10	99.66	90	79	49	362	95
00863		4.48	0.26	0.13	0.55	99.46	38	172	97	354	86

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-61949.0 (COMPLET)

DATE DE L'IMPRESSION: 28-OCT-94

PROJET: 1713

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM	Ni PPM	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT
00864		16	13	118	<0.1	<2	63.04	0.92	11.36	13.34	0.22	0.96	4.35
00865		<5	12	107	<0.1	<2	53.90	1.51	11.70	17.36	0.26	2.02	6.09
00866		<5	85	215	<0.1	50	54.71	0.89	16.53	9.25	0.14	5.35	5.52
00867		<5	38	427	<0.1	5	58.69	1.18	12.39	13.04	0.19	2.45	4.95
00868		<5	82	118	<0.1	36	52.31	1.35	15.45	10.39	0.16	5.85	6.65
00869		<5	36	145	<0.1	3	55.26	1.53	11.60	17.83	0.25	2.40	6.36
00870		<5	3	210	<0.1	<2	62.14	1.00	11.84	14.03	0.23	1.50	2.27
00871		<5	117	38	<0.1	47	51.31	0.58	14.27	10.52	0.18	7.57	10.34
00872		20	32	94	<0.1	62	52.13	0.61	11.17	11.20	0.24	9.12	7.21
00873		<5	91	38	<0.1	48	54.26	0.50	12.89	9.13	0.17	6.50	12.86
00874		<5	48	60	<0.1	915	45.66	0.33	5.30	10.90	0.16	22.60	8.67
00875		<5	89	71	<0.1	138	48.70	0.53	14.12	11.04	0.19	9.60	6.00
00876		<5	91	63	<0.1	25	55.55	0.85	14.72	9.31	0.14	5.14	6.48
00877		<5	79	42	<0.1	62	51.05	0.54	14.73	10.68	0.18	7.75	9.09
00878		<5	99	48	<0.1	58	51.97	0.54	14.37	11.35	0.19	7.46	9.02
00879		<5	11	33	<0.1	717	48.37	0.33	4.43	9.35	0.15	23.29	8.32
00880		<5	95	28	<0.1	34	51.22	0.56	14.03	9.79	0.18	6.86	13.93

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-61949.0 (COMPLET)

DATE DE L'IMPRESSION: 28-OCT-94

PROJET: 1713

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Y PPM
00864		3.36	0.37	0.23	1.14	99.28	36	89	98	314	84
00865		2.68	0.53	0.62	0.94	97.61	52	84	89	187	57
00866		3.02	0.41	0.15	3.89	99.87	89	177	232	104	22
00867		3.59	0.39	0.40	0.99	98.26	54	141	45	247	66
00868		1.71	0.31	0.24	4.34	98.76	56	164	238	145	26
00869		1.89	0.33	0.56	1.25	99.25	18	85	156	177	57
00870		3.98	0.51	0.30	1.94	99.74	164	57	110	304	87
00871		3.12	0.13	0.09	1.79	99.90	16	312	2	48	19
00872		0.64	4.48	0.07	2.03	98.90	904	340	<1	47	15
00873		1.49	0.08	0.05	1.39	99.33	10	408	1	41	16
00874		0.14	0.09	<0.03	5.74	99.59	<10	2160	<1	27	7
00875		4.23	0.20	0.05	4.92	99.58	44	306	84	43	18
00876		4.57	0.37	0.47	1.64	99.24	415	139	249	192	27
00877		3.42	0.20	0.11	2.09	99.84	65	323	120	42	18
00878		2.49	0.08	0.09	2.35	99.92	15	286	31	44	18
00879		0.11	0.06	<0.03	4.99	99.40	17	3794	<1	27	7
00880		1.13	0.09	0.05	2.25	100.11	<10	353	32	43	17

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 9-NOV-94

RAPPORT: C94-62010.0 (COMPLET) PROJET: 1715 PAGE 1A

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT
881		<5	53.15	0.72	13.43	12.10	0.19	6.39	7.70	4.39	0.17	0.07	1.46
882		<5	51.23	0.97	16.79	11.82	0.17	4.61	8.50	2.77	0.19	0.12	2.50
883		<5	51.20	0.61	17.56	7.73	0.12	6.87	5.14	5.94	0.07	0.06	4.03
884		<5	65.82	0.65	12.21	10.91	0.14	0.59	2.17	5.35	0.06	0.15	1.79
885		<5	49.82	1.95	12.03	18.67	0.23	3.49	7.37	3.33	0.30	0.17	1.45
886		9	47.83	1.96	13.14	19.49	0.24	4.90	6.17	2.21	0.21	0.12	2.68
887		<5	57.03	1.20	12.60	16.15	0.22	1.52	4.14	3.23	0.06	0.21	2.01
888		<5	50.87	0.68	14.02	11.50	0.23	7.18	10.49	1.64	0.11	0.04	2.73
889		<5	50.91	0.79	13.81	13.27	0.18	6.37	9.35	2.34	0.06	0.05	2.64
890		<5	51.73	0.69	13.66	11.57	0.21	7.15	8.49	3.83	0.24	0.04	1.77

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-62010.0 (COMPLET)

DATE DE L'IMPRESSION: 9-NOV-94

PROJET: 1715

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Cu PPM	Zn PPM	Ag PPM	Y PPM	Ni PPM
881		99.78	63	201	30	54	60	41	<0.1	20	25
882		99.68	53	185	115	81	60	78	<0.1	26	39
883		99.33	78	205	95	72	75	54	<0.1	18	71
884		99.84	51	152	19	329	4	121	<0.1	89	2
885		98.81	70	52	77	121	7	59	<0.1	37	6
886		98.94	34	36	64	100	335	96	<0.1	32	23
887		98.37	52	79	118	198	8	152	<0.1	58	<2
888		99.49	41	203	93	47	95	81	<0.1	17	34
889		99.76	32	79	72	57	12	34	<0.1	19	24
890		99.38	189	236	116	48	100	40	<0.1	17	43

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-62131.0 (COMPLET)

DATE DE L'IMPRESSION: 9-NOV-94
PROJET: 1715-1713 PAGE 1A

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM	Ni PPM	SiO2 PCT	Al2O3 PCT	TiO2 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT
891		8	96	64	<0.1	30	49.87	13.01	1.63	16.14	0.21	4.44	7.22
892		8	207	38	<0.1	29	52.32	14.24	0.67	10.42	0.18	6.83	9.47
893		<5	106	58	<0.1	41	49.49	14.52	0.70	11.96	0.18	7.75	8.72
894		<5	23	34	<0.1	30	52.43	13.57	0.66	11.22	0.18	7.86	7.54
895		<5	62	51	<0.1	36	50.73	14.16	0.72	11.97	0.18	6.75	9.60
896		7	25	48	<0.1	33	50.18	14.60	0.70	11.52	0.19	7.80	9.29
897		<5	21	80	<0.1	9	58.55	12.33	1.14	12.19	0.15	3.33	6.39
898		6	115	64	<0.1	53	50.96	13.91	1.17	12.86	0.18	6.31	8.49
899		<5	121	63	<0.1	61	48.99	13.75	1.23	14.59	0.20	6.21	9.68
900		7	132	30	<0.1	17	52.34	14.25	0.76	11.02	0.17	5.89	11.12
901		<5	15	49	<0.1	6	60.79	11.53	0.80	8.88	0.10	1.17	10.28
902		20	92	93	0.2	47	59.63	15.52	1.02	7.49	0.08	3.90	3.05
903		<5	51	89	<0.1	68	55.07	15.23	0.93	8.21	0.13	5.90	5.92
904		<5	8	56	<0.1	5	55.34	10.89	1.84	15.71	0.23	2.10	8.93
905		<5	162	81	<0.1	55	53.99	13.12	1.40	13.28	0.17	3.48	9.36
906		6	107	79	<0.1	28	45.79	12.07	2.26	20.85	0.22	6.11	8.94

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-62131.0 (COMPLET)

DATE DE L'IMPRESSION: 9-NOV-94

PROJET: 1715-1713

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Y PPM
891		4.12	0.35	0.15	2.82	99.96	76	143	71	89	28
892		3.74	0.45	<0.03	1.48	99.81	288	252	158	44	17
893		2.16	0.18	0.03	2.94	98.62	35	206	68	50	18
894		4.11	0.41	0.04	1.88	99.90	201	203	79	43	17
895		2.26	0.08	0.04	2.24	98.72	31	174	36	50	18
896		2.72	0.16	<0.03	2.43	99.58	40	211	79	47	16
897		2.69	0.92	0.27	1.16	99.12	227	186	208	218	60
898		3.20	<0.05	0.07	2.04	99.19	27	192	61	95	29
899		2.01	0.24	0.08	2.20	99.17	49	164	118	62	21
900		2.79	0.11	0.07	1.32	99.85	41	153	<1	53	19
901		1.55	<0.05	0.18	3.36	98.64	36	187	586	376	97
902		6.04	0.08	0.11	1.72	98.67	144	155	304	238	30
903		2.16	0.84	0.11	3.82	98.33	152	277	175	152	23
904		1.77	0.35	0.49	0.64	98.29	24	276	308	187	59
905		1.75	0.07	0.09	1.78	98.49	24	190	210	99	35
906		2.07	0.16	0.05	1.34	99.86	<10	60	70	40	16

1322 rue Harricana
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Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 31-JAN-95

RAPPORT: C94-62646.0 (COMPLET) PROJET: 1715 PAGE 1A

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	Ni PPM	CaO PCT
0907		<5	66	59	<0.1	64.68	0.75	13.77	4.98	0.10	2.94	40	4.47
0908		<5	97	65	<0.1	46.22	1.72	13.18	17.38	0.18	6.02	26	9.00
0909		<5	83	95	<0.1	46.93	1.19	14.70	14.04	0.21	5.68	78	8.69
0910		<5	84	122	<0.1	83.77	0.21	6.19	3.03	0.03	0.83	14	2.00
0911		<5	123	69	<0.1	47.49	1.23	14.02	13.80	0.21	6.59	61	8.97

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-62646.0 (COMPLET)

DATE DE L'IMPRESSION: 31-JAN-95

PROJET: 1715

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Zr PPM	Y PPM	Ba PPM	Cr PPM	Sr PPM
0907		3.91	0.62	0.18	2.01	98.48	236	28	166	291	170
0908		0.22	0.22	0.15	3.41	97.73	70	23	56	<10	208
0909		2.56	0.07	<0.03	4.42	98.49	74	22	55	79	45
0910		1.98	<0.05	<0.03	1.26	99.34	135	18	42	228	37
0911		2.65	0.07	0.11	2.85	98.01	66	22	<29	<10	95

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: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 23-NOV-94

RAPPORT: C94-62430.0 (COMPLET) PROJET: 1715

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Y PPM	Zr PPM
912		0.12	0.20	0.97	98.77	57	140	119	33	377
913		2.16	<0.03	1.19	98.06	1275	59	869	9	134
914		0.07	0.19	2.69	98.99	94	58	93	83	313
915		0.32	0.63	0.73	98.54	38	32	49	51	162
916		0.10	0.19	1.58	98.68	17	16	54	43	153
917		0.11	0.42	1.18	98.79	38	11	55	70	242
918		<0.05	0.16	0.54	99.89	19	224	3	20	155
919		<0.05	0.16	1.63	99.52	26	81	283	97	369
920		0.11	0.16	0.62	98.91	94	68	62	87	352

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 22-DEC-94

RAPPORT: C94-62430.1 (COMPLET) PROJET: 1715 PAGE 1

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Ni PPM
912		10
913		5
914		15
915		3
916		3
917		<2
918		10
919		<2
920		3

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Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 10-NOV-94

RAPPORT: C94-62185.0 (COMPLET) PROJET: 1713 PAGE 1A

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM	Ni PPM	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT
2201		8	167	42	<0.1	29	50.17	1.21	13.34	13.28	0.21	6.01	10.03
2202		16	38	46	<0.1	31	50.20	1.55	12.96	16.00	0.21	4.54	7.72
2203		16	144	112	<0.1	67	51.69	1.63	15.14	14.26	0.18	4.22	5.50
2204		<5	85	53	<0.1	60	50.60	0.98	14.63	11.08	0.16	6.22	9.82
2205		10	85	55	<0.1	65	53.46	0.58	18.95	5.40	0.11	6.40	5.20
2206		9	75	45	<0.1	44	55.30	0.94	13.69	9.68	0.16	5.36	8.24
2208		<5	44	62	<0.1	22	55.33	0.57	18.13	6.84	0.09	3.25	5.86
2209		<5	5	33	<0.1	55	63.52	0.30	16.83	3.11	0.03	2.98	2.44
2210		<5	86	44	<0.1	75	50.49	0.80	14.25	10.21	0.17	6.78	10.32
2211		9	109	48	<0.1	48	52.36	0.94	13.26	9.90	0.18	3.51	14.09
2212		14	81	56	<0.1	89	47.04	0.97	17.87	10.45	0.14	6.30	10.16

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Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 10-NOV-94

RAPPORT: C94-62185.0 (COMPLET) PROJET: 1713

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Y PPM
2201		1.85	0.22	0.13	2.44	98.90	42	293	135	67	21
2202		2.78	0.49	0.13	1.21	97.79	140	40	112	110	33
2203		4.00	0.13	0.16	2.13	99.04	15	28	<1	114	37
2204		2.30	<0.05	<0.03	2.19	97.98	<10	80	1	69	25
2205		3.82	0.73	0.13	3.58	98.37	264	48	291	90	18
2206		2.94	0.05	0.05	1.79	98.19	18	59	<1	71	25
2208		4.28	0.45	0.09	2.26	97.15	244	42	93	115	18
2209		5.09	0.76	0.07	2.14	97.27	206	50	340	100	8
2210		2.10	0.12	0.08	2.41	97.73	20	122	<1	58	21
2211		0.08	0.14	0.06	3.29	97.81	<10	69	2	68	24
2212		2.41	0.23	<0.03	3.54	99.10	35	64	106	39	16

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Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 23-NOV-94

RAPPORT: C94-62431.0 (COMPLET) PROJET: 1713 PAGE 1A

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Ag PPM	Zn PPM	Ni PPM	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT
2213		<5	6	<0.1	30	21	52.47	1.01	17.58	7.89	0.16	4.46	9.35
2214		<5	<1	<0.1	35	21	63.91	0.52	17.21	4.46	0.05	2.03	1.53
2215		<5	12	<0.1	67	8	64.66	0.53	15.79	2.88	0.03	1.11	3.89
2216		<5	<1	<0.1	38	66	57.86	0.67	14.80	5.98	0.11	5.79	5.49
2217		<5	29	<0.1	39	56	50.79	0.56	14.68	10.91	0.17	7.54	9.30
2218		<5	62	<0.1	31	538	43.43	0.44	6.41	12.51	0.19	23.31	7.52
2219		<5	65	<0.1	50	72	52.50	0.57	13.89	10.37	0.16	8.46	6.47
2220		5	87	<0.1	17	981	44.79	0.35	4.69	10.47	0.14	24.67	7.72
2221		6	55	<0.1	54	66	47.15	0.54	17.25	10.00	0.17	8.10	9.55

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Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-62431.0 (COMPLET)

DATE DE L'IMPRESSION: 23-NOV-94

PROJET: 1713

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Y PPM
2213		4.62	0.34	0.17	1.69	99.73	161	119	126	109	21
2214		7.51	0.06	0.09	1.49	98.87	58	69	28	138	19
2215		6.50	1.07	0.25	1.76	98.47	452	75	1250	172	9
2216		6.46	0.27	0.30	1.65	99.39	278	205	2	165	16
2217		2.49	0.18	0.05	2.59	99.25	67	178	10	45	19
2218		0.07	<0.05	<0.03	3.64	97.52	<10	2377	<1	30	9
2219		3.75	0.16	<0.03	2.45	98.78	34	258	<1	44	17
2220		<0.01	<0.05	<0.03	5.49	98.33	<10	2967	<1	27	10
2221		3.25	0.13	0.04	1.87	98.05	23	123	126	37	16

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 24-NOV-94

RAPPORT: C94-62476.0 (COMPLET) PROJET: 1715

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Y PPM
921		4.98	0.12	0.13	1.18	100.49	25	100	63	397	98
922		2.57	0.22	0.24	2.14	97.76	32	95	107	120	35
923		4.59	0.19	0.17	0.29	97.84	16	279	51	336	80
924		4.21	0.20	0.15	0.67	99.24	36	252	66	359	86
925		3.44	0.17	0.30	5.41	99.62	53	45	64	226	65
926		3.74	0.18	0.15	0.29	99.02	38	199	43	330	90
927		2.99	0.24	0.28	2.41	98.69	48	23	40	169	49
928		4.16	0.20	0.18	0.15	100.49	30	210	3	373	103
929		3.42	0.18	0.43	1.72	98.90	37	29	81	253	72
930		3.63	1.64	0.38	3.43	99.31	354	49	121	170	53
931		4.56	<0.05	0.27	3.36	99.44	42	82	49	377	101
932		2.92	0.21	0.65	1.03	98.15	30	37	54	201	63
933		3.35	<0.05	0.33	5.04	99.00	23	14	42	159	44
934		3.48	0.12	0.35	1.05	98.28	27	41	102	323	91
935		5.36	3.03	0.08	1.48	100.08	1270	70	1288	139	13
936		4.87	0.40	0.11	1.15	98.28	259	152	132	441	107
937		2.66	0.10	0.14	3.87	98.03	31	88	219	56	19
938		3.47	<0.05	0.12	2.32	98.01	22	79	22	280	66
939		6.54	3.07	0.12	1.42	97.89	892	85	760	121	12
940		5.42	3.03	0.03	1.11	99.02	1127	130	1294	104	13
2222		3.38	0.06	<0.03	3.01	97.86	22	35	39	45	25
2223		0.96	0.07	0.07	1.52	98.76	20	296	11	45	18
2224		1.75	<0.05	<0.03	2.94	97.44	11	132	10	51	21

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Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 14-DEC-94

RAPPORT: C94-62580.0 (COMPLET) PROJET: 1713 PAGE 1A

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Ag PPM	Cu PPM	Zn PPM	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT
2207		<5	<0.1	3	45	43.94	0.38	16.94	7.86	0.12	12.29	4.79	3.38

Ni = 233 ppm

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 14-DEC-94

RAPPORT: C94-62580.0 (COMPLET) PROJET: 1713

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Y PPM
2207		0.20	0.05	8.79	98.86	52	957	86	41	13

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Val d'Or, Québec J9P 3X6
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Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 22-DEC-94

RAPPORT: C94-62580.1 (COMPLET) PROJET: 1713 PAGE 1

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Ni PPM
2207		233

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 14-DEC-94

RAPPORT: C94-62529.0 (COMPLET) PROJET: 1713 PAGE 1A

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Ag PPM	Zn PPM	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	Ni PPM	MgO PCT	CaO PCT
941		<5	13	<0.1	20	69.93	0.42	12.18	4.10	0.03	7	1.01	4.18
942		<5	38	<0.1	16	71.05	0.41	11.84	4.26	0.02	5	1.04	2.58
943		30	7	<0.1	35	67.81	0.71	11.13	6.94	0.07	3	2.10	3.00
944		8	70	<0.1	50	52.62	0.78	13.67	9.21	0.13	72	7.31	8.05
945		<5	19	<0.1	80	60.34	1.11	11.86	12.56	0.17	7	2.04	7.38
946		<5	5	<0.1	107	56.06	1.86	10.99	15.26	0.25	<2	1.81	7.07
2225		<5	70	<0.1	88	50.64	0.90	16.50	9.87	0.14	61	5.24	7.98
2226		<5	80	<0.1	48	49.35	0.58	13.76	11.48	0.17	48	6.63	12.66
2227		6	94	<0.1	63	46.87	0.62	14.65	11.66	0.18	76	7.99	9.63
2228		<5	9	<0.1	68	67.47	0.27	16.25	1.93	0.03	8	0.80	3.71
2229		<5	75	<0.1	29	34.28	0.33	5.37	11.12	0.17	613	24.05	9.17
2230		12	83	<0.1	68	50.37	0.51	14.34	12.89	0.20	62	6.08	9.48
2231		<5	53	0.2	48	50.11	0.35	15.55	9.82	0.16	81	7.33	11.12
2232		11	97	<0.1	46	48.06	0.59	14.08	11.12	0.18	71	7.75	12.49
2233		<5	24	<0.1	45	49.40	0.53	14.86	10.26	0.15	58	7.39	12.79
2234		<5	94	<0.1	52	52.05	0.65	13.60	11.16	0.15	49	6.92	10.69
2235		<5	54	<0.1	53	47.53	0.53	14.79	12.08	0.16	64	8.09	11.06
2236		<5	44	<0.1	73	49.78	0.48	13.26	11.82	0.22	63	5.91	8.94
2237		8	83	<0.1	60	49.23	0.55	14.40	10.83	0.17	83	7.74	10.26
2238		7	19	<0.1	46	70.07	0.18	15.70	1.89	0.05	3	0.70	1.31
2239		6	56	<0.1	43	49.15	0.49	13.91	10.44	0.17	61	7.60	12.24
2240		<5	91	<0.1	35	50.78	0.52	14.20	9.78	0.17	84	6.35	11.20

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 14-DEC-94

RAPPORT: C94-62529.0 (COMPLET) PROJET: 1713

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Y PPM
941		4.62	<0.05	0.11	1.38	98.02	34	174	427	484	119
942		5.87	<0.05	0.11	1.02	98.24	38	149	91	464	122
943		4.94	0.28	0.17	1.02	98.20	63	160	61	464	117
944		5.25	0.46	0.37	1.70	99.62	149	387	264	126	19
945		3.02	0.39	0.35	0.64	99.90	53	170	113	225	64
946		3.20	0.16	0.64	1.00	98.33	32	87	80	195	60
2225		4.20	<0.05	0.18	2.71	98.41	99	140	253	100	17
2226		1.80	0.15	0.08	2.12	98.81	27	183	51	49	20
2227		3.19	0.09	0.04	2.59	97.57	72	347	87	47	20
2228		5.29	1.73	0.14	1.12	98.91	753	122	870	134	12
2229		<0.01	<0.05	0.04	13.36	98.12	<10	2294	151	22	8
2230		2.01	0.23	<0.03	2.82	98.96	43	132	46	46	24
2231		2.18	0.16	0.05	2.98	99.86	13	306	88	32	17
2232		2.40	<0.05	0.04	2.55	99.31	13	299	40	47	18
2233		2.23	<0.05	0.08	2.32	100.06	<10	326	38	44	15
2234		2.24	0.10	0.10	2.42	100.10	52	165	101	52	20
2235		2.73	0.11	0.04	2.76	99.92	40	260	68	44	18
2236		3.37	0.37	0.06	5.12	99.38	90	81	352	38	21
2237		3.31	0.11	0.08	2.91	99.62	41	313	82	43	18
2238		4.40	2.75	0.14	2.20	99.50	926	75	179	137	16
2239		1.81	<0.05	0.03	2.49	98.37	18	218	33	42	19
2240		4.00	<0.05	0.03	2.21	99.28	33	360	42	43	18

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Val d'Or, Québec J9P 3X6
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Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 12-DEC-94

RAPPORT: C94-62544.0 (COMPLET) PROJET: 1715 PAGE 1A

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM	Ni PPM	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT
2241		<5	95	49	<0.1	93	50.41	0.65	14.26	9.98	0.16	6.30	9.27
2242		<5	50	49	<0.1	144	50.71	0.57	13.77	11.75	0.20	9.00	7.24
2243		<5	89	44	<0.1	36	52.83	0.61	13.11	10.72	0.17	6.34	12.42
2244		<5	36	29	<0.1	1456	33.39	0.20	3.40	8.32	0.26	24.59	11.12
2245		<5	26	39	<0.1	1564	43.43	0.22	3.18	9.47	0.13	30.21	1.63
2246		<5	72	25	<0.1	990	40.94	0.30	4.46	9.74	0.20	23.84	8.14
2247		<5	15	101	<0.1	8	65.69	0.39	18.12	1.71	0.02	0.72	1.32
2248		<5	102	35	<0.1	720	44.14	0.51	6.97	12.26	0.21	20.87	7.47
2249		<5	63	41	<0.1	781	44.05	0.42	5.79	11.36	0.20	21.56	8.67
2250		<5	53	28	<0.1	927	40.75	0.38	5.07	11.63	0.18	25.00	6.33

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 12-DEC-94

RAPPORT: C94-62544.0 (COMPLET) PROJET: 1715 PAGE 1B

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Ba PPM	Cr PPM	Sr PPM	Zr PPM	Y PPM
2241		3.22	0.21	0.07	3.45	98.06	182	332	130	46	18
2242		3.63	0.15	0.05	2.55	99.68	34	431	100	40	17
2243		0.25	0.11	0.10	2.12	98.80	12	183	60	49	18
2244		<0.01	0.11	0.05	16.45	98.11	<10	1773	283	11	11
2245		<0.01	0.06	<0.03	9.71	98.24	<10	2002	2	18	7
2246		<0.01	<0.05	0.04	10.79	98.67	<10	2167	67	23	8
2247		8.54	1.41	0.12	1.41	99.58	569	92	592	163	10
2248		0.27	0.09	0.08	5.48	98.61	36	2622	9	38	10
2249		0.05	0.06	0.03	5.90	98.33	<10	2328	6	28	9
2250		0.03	<0.05	<0.03	8.76	98.38	<10	2462	8	26	9

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 19-OCT-94

.: C94-62168.0 (COMPLET)

PROJET: 1713 PAGE 1

MÉRO DE ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
2301		<5	35	89	<0.1
2302		<5	73	55	<0.1
2303		6	81	56	<0.1
2304		<5	13	3	<0.1
2305		<5	13	98	<0.1
2306		6	108	70	<0.1
2307		<5	47	150	<0.1

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 10-NOV-94

RAPPORT: C94-62428.0 (COMPLET) PROJET: 1713 PAGE 1

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
2308		16	67	45	<0.1
2309		<5	9	4	<0.1
2310		3250	9	11	<0.1
2311		812	5	17	<0.1
2312		58	13	25	<0.1
2313		27	13	14	<0.1
2314		<5	6	22	<0.1
2315		<5	6	10	<0.1
2316		7	65	69	<0.1

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CERTIFICAT D'ANALYSE

DATE DE L'IMPRESSION: 10-NOV-94

RAPPORT: C94-62428.5 (COMPLET) PROJET: 1713

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au G/T
2310		2.74
2311		0.34

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 10-NOV-94

PORT: C94-62429.0 (COMPLET) PROJET: 1715 PAGE 1

ÉRO DE CHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
115751		<5	61	99	<0.1
115752		19	33	276	0.1
115753		<5	87	132	0.3
115754		10	441	126	0.2
115755		<5	11	13	<0.1
115756		13	83	122	0.3
115757		133	54	72	<0.1
115758		12	319	455	0.5
115850		<5	90	112	<0.1

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r, Québec J9P 3X6
: (819) 825-0178
ax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 4-NOV-94

PPORT: C94-62376.0 (COMPLET) PROJET: 2M-5M PAGE 1

MÉRO DE ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
115759		10	52	40	<0.1
115760		8	42	74	<0.1
115761		7	143	42	<0.1
115762		<5	180	48	<0.1
115763		<5	26	33	<0.1
115764		<5	33	130	<0.1
115765		<5	60	804	<0.1
115766		7	195	44	<0.1
115767		<5	282	40	<0.1
115768		<5	171	42	<0.1
115769		<5	108	66	<0.1
115770		7	106	55	<0.1
115771		<5	60	750	<0.1

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: (819) 825-0178
x: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 16-NOV-94

RAPPORT: C94-62475.0 (COMPLET) PROJET: 1715 PAGE 1

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Ag PPM	Zn PPM
2317		<5	37	0.1	25
2318		6	24	<0.1	70
115772		10	119	0.1	391
115773		9	143	<0.1	56
115774		7	119	0.2	130
115775		19	325	0.3	1260
115776		55	570	0.7	2500
115777		27	363	0.4	1150
115778		35	530	0.7	1500
115779		6	131	<0.1	67
115780		<5	7	<0.1	9
115781		<5	49	0.1	135
115782		<5	64	<0.1	99
115783		6	133	<0.1	187
115784		<5	5	<0.1	2
115785		<5	97	<0.1	69
115786		<5	4	<0.1	32
115787		178	9	1.9	6
115788		487	20	5.1	8

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-62581.0 (COMPLET)

DATE DE L'IMPRESSION: 1-DEC-94

PROJET: 1715

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
2318		6	35	35	<0.1
2319		<5	104	66	<0.1
2320		6	23	16	<0.1
115789		6	180	115	<0.1
115790		<5	41	54	<0.1

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-62543.0 (COMPLET)

DATE DE L'IMPRESSION: 24-NOV-94

PROJET: 1715 PAGE 1

NUMÉRO DE ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
2321		<5	18	73	<0.1
2322		6	253	79	<0.1
2323		7	250	3985	<0.1
2324		7	147	81	<0.1
2325		7	227	45	<0.1
2326		11	862	159	0.2
2327		17	47	58	<0.1
2328		25	99	44	0.3
2329		<5	32	11	<0.1
2330		6	700	102	<0.1
115791		<5	105	31	<0.1

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 17-OCT-94

RAPPORT: C94-62009.0 (COMPLET) PROJET: 1715

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
115801		<5	55	15	<0.1
115802		1848	25	29	0.9
115803		6210	31	53	1.7
115804		15	375	861	0.4
115805		8	8	13	<0.1
115806		288	31	72	0.9
115807		1456	69	154	0.5
115808		6	3	6	0.9
115809		6	291	63	<0.1
115810		<5	12	152	<0.1
115811		<5	47	62	<0.1
115812		<5	63	45	<0.1
115813		<5	18	32	<0.1

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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CERTIFICAT D'ANALYSE

DATE DE L'IMPRESSION: 24-OCT-94

RAPPORT: C94-62009.5 (COMPLET) PROJET: 1715 PAGE 1

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au G/T
115802		2.46
115803		8.56
115807		1.64

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19) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 14-OCT-94

ORT: C94-62129.0 (COMPLET) PROJET: 1715 PAGE 1

UMÉRO DE 'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
115814		<5	46	10	<0.1
115815		<5	43	71	<0.1
115816		<5	5	5	<0.1
115817		<5	3	17	<0.1
115818		<5	8	71	<0.1
115819		10	62	63	<0.1
115820		51	26	30	<0.1
115821		<5	737	32	<0.1
115822		6	277	42	<0.1
115823		<5	126	14	<0.1
115824		<5	11	6	<0.1
115825		7	194	32	<0.1
115826		6	176	35	<0.1
115827		254	75	138	<0.1

1322 rue Harricana
Val d'Or, Québec J9P 3X6
Tél: (819) 825-0178
Fax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

DATE DE L'IMPRESSION: 14-OCT-94

RAPPORT: C94-62132.0 (COMPLET) PROJET: 1715-1713 PAGE 1

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
115828		6	19	18	0.5
115829		8	12	19	0.3
115830		39	72	144	0.7
115831		<5	6	17	<0.1
115832		59	13	107	<0.1
115833		17	15	30	<0.1
115834		235	29	10	<0.1
115835		62	259	32	1.6
115836		281	53	23	0.2
115837		<5	94	124	0.2
115838		8	200	126	0.7

rue Harricana
or, Québec J9P 3X6
: (819) 825-0178
ax: (819) 825-0256

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RAPPORT D'ANALYSE GÉOCHIMIQUE

RAPPORT: C94-62321.0 (COMPLET)

DATE DE L'IMPRESSION: 31-OCT-94

PROJET: 1715 PAGE 1

NUMÉRO DE L'ÉCHANTILLON	ÉLÉMENT UNITÉS	Au30 PPB	Cu PPM	Zn PPM	Ag PPM
115839		<5	16	9	<0.1
115840		<5	73	122	0.2
115841		<5	22	102	<0.1
115842		<5	59	46	<0.1
115843		6	9	16	<0.1
115844		116	226	98	0.3
115845		9	385	120	0.2
115846		99	630	102	0.4
115847		<5	42	118	0.2
115848		<5	8	9	<0.1
115849		36	843	285	1.1