Geological and Geochemical Report
on the
Baker Project
Prospecting Permits 1325 to 1329

N.T.S. 55-M
District of Keewatin
Northwest Territories

December 1, 1993

Latitude 63°45'00" to 63°52'30"
Longitude 94°45'00" to 95°15'00"
- and -
Latitude 63°52'30" to 64°00'00"
Longitude 95°00'00" to 95°45'00"

prepared on behalf of
Leeward Capital Corp.
Calgary, Alberta

by
James W. Davis, M.Sc., P.Geol., F.GAC, P.Geo.
Claude H. Aussant, B.Sc., P.Geol., F.GAC, P.Geo.

Taiga Consultants Ltd.
#301, 1000 - 8th Avenue S.W.
Calgary, Alberta T2P 3M7

TABLE OF CONTENTS

INTRODUCTION

Taiga Consultants Ltd. was contracted to complete an evaluation of the diamond potential of the prospecting permits held by Leeward Capital Corp., located south of Baker Lake in the District of Keewatin in the Northwest Territories.

This exploration program consisted of geological mapping, ground magnetic surveying, and heavy mineral sampling of specific target pipes identified by a detailed review of available data for this area. This review consisted of assembly and interpretation of all geological and geophysical information from the Geological Survey of Canada and assessment data available from Indian and Northern Affairs Canada. This included aeromagnetic surveys completed by the federal government and by mining companies previously active in the area, along with both regional and detailed geological mapping. The result of this review was to focus on specific favourable areas for detailed diamond evaluation.

Since the discovery by Dia Met Minerals Ltd. and BHP Minerals Ltd. of a diamondiferous kimberlite at Lac de Gras, there has been a surge of exploration for diamonds in the Northwest Territories. Subsequently, a number of potentially diamondiferous kimberlites have been drilled, several of which are scheduled for underground bulk sampling based on initial highly favourable drilling results. The discoveries at Lac de Gras have precipitated renewed interest in diamond exploration elsewhere in the Northwest Territories, in western and central Canada.

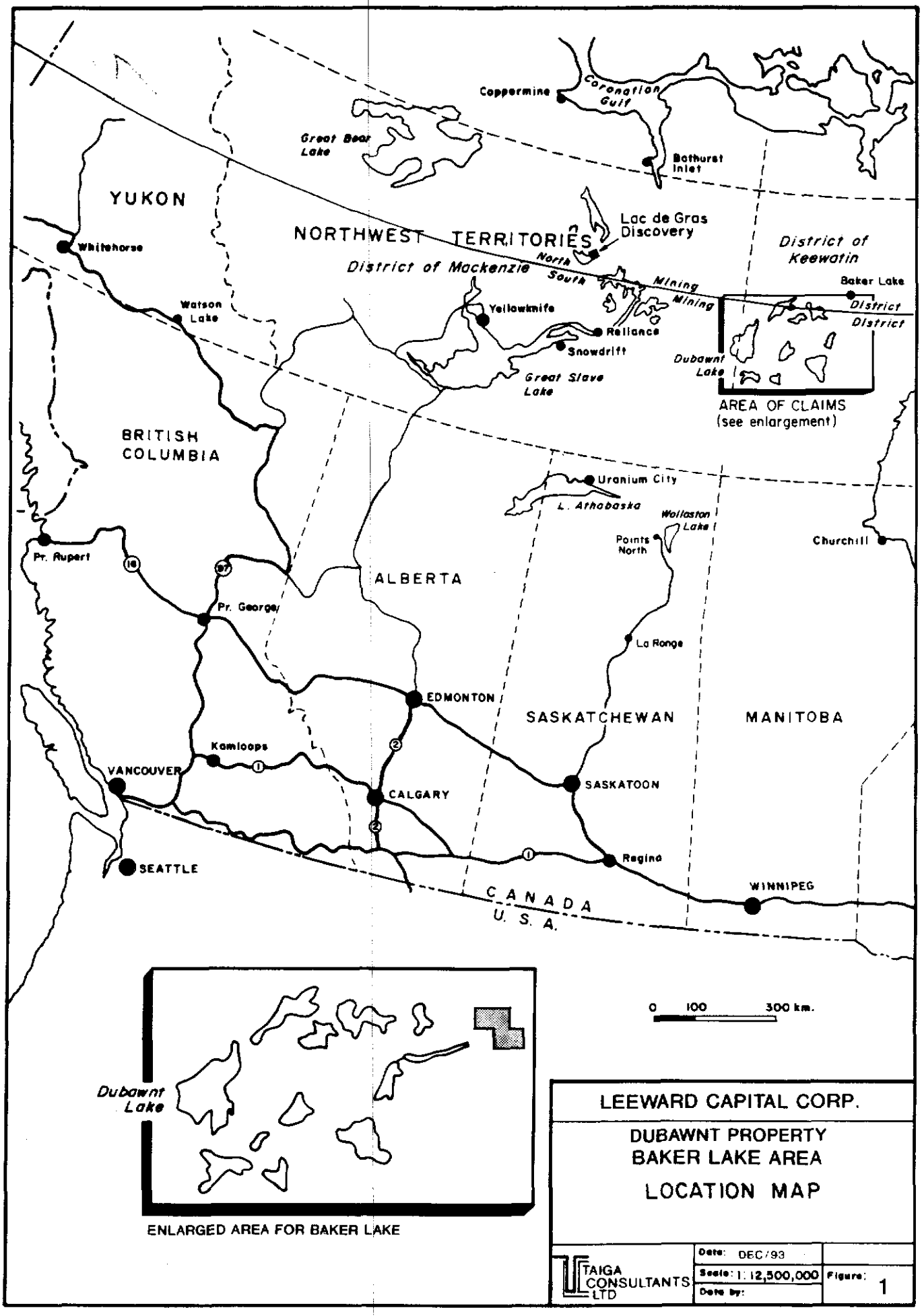
In 1992, Leeward Capital Corp. developed the concept for the discovery of diamonds in the Dubawnt Lake area of the Northwest Territories. Leeward, in conjunction with Skeena Resources Limited and Connecticut Development Corporation, discovered a diamondiferous breccia pipe at Outlet Bay on Dubawnt Lake. The pipe was drilled in the spring of 1993. Although a commercially significant diamond deposit was not delineated by this drilling, the occurrence of a microdiamond and a complete suite of diamond indicator minerals were identified. This technical success confirmed the diamond potential of the region and justified additional exploration to more fully evaluate the possibility that diamondiferous pipes may exist in this region. Since the geological environment in the Baker Lake area is similar to Outlet Bay, the current exploration program was commissioned by Leeward Capital.

Location and Access

The Baker Lake property (Figure 1) is located in the District of Keewatin in the Northwest Territories. The prospecting permits which constitute the property are centered at 63°48′ North latitude and 95°08′ West longitude in NTS area 55-M. The property is located 900 km east-northeast of Yellowknife and 610 km north-northwest of Churchill, Manitoba.

Access to the area is possible via float- or ski-equipped light aircraft or helicopter. Airstrips suitable for larger aircraft are located at the Baker Lake airstrip. The town of Baker Lake has regularly scheduled air freight service, 40 km northwest of the project area. Baker Lake is connected via Chesterfield Inlet to Hudson Bay, and small (<5,000-ton) ocean-going freighters and barges can supply the area during a brief summer shipping season.

The field season in this part of the Barren Lands extends from mid-June to mid-September. Drilling operations can be conducted year round.



LEEWARD CAPITAL CORP.

DUBAWNT PROPERTY
BAKER LAKE AREA

LOCATION MAP

TAIGA CONSULTANTS LTD	Date: DEC/93	
	Scale: 1: 12,500,000	Figure: 1
	Done by:	

Property

The Baker Lake property encompasses an area of approximately 85,619 ha (211,565 acres). The property consists of five prospecting permits situated southeast of Baker Lake (Figure 2), on NTS map-sheets 55-M/13,14,15 in the South Mining District. The permits are currently held in the name of Leeward Capital Corp. and Taiga Consultants Ltd. as an administrative convenience. A summary of the current property status is presented in Table 1.

Table 1 - Property Status

Permit	N.T.S. Map	Acreage	Ownership	Permittee
PP 1325	55-M/13 NE	42,313.00	100% Leeward	Taiga
PP 1326	55-M/14 NE	42,313.00	100% Leeward	Leeward
PP 1327	55-M/14 NW	42,313.00	100% Leeward	Leeward
PP 1328	55-M/14 SE	42,313.00	100% Leeward	Leeward
PP 1329	55-M/15 SW	42,313.00	100% Leeward	Leeward
	Total	211,565.00		

Assessment requirements to keep the prospecting permits in good standing are 10¢/acre in 1993; 20¢/acre in 1994; and 40¢/acre in 1995, the third and final year. Claims may be staked by the permit holder at any time during the term of the permit. Claims require expenditures of $2 per acre per year, but the first two years are combined into one period such that the first assessment filing is due at the end of the second year. This means that an exploration expenditure of $4 per acre must be filed at the end of the second year to keep the claims in good standing for the following year.

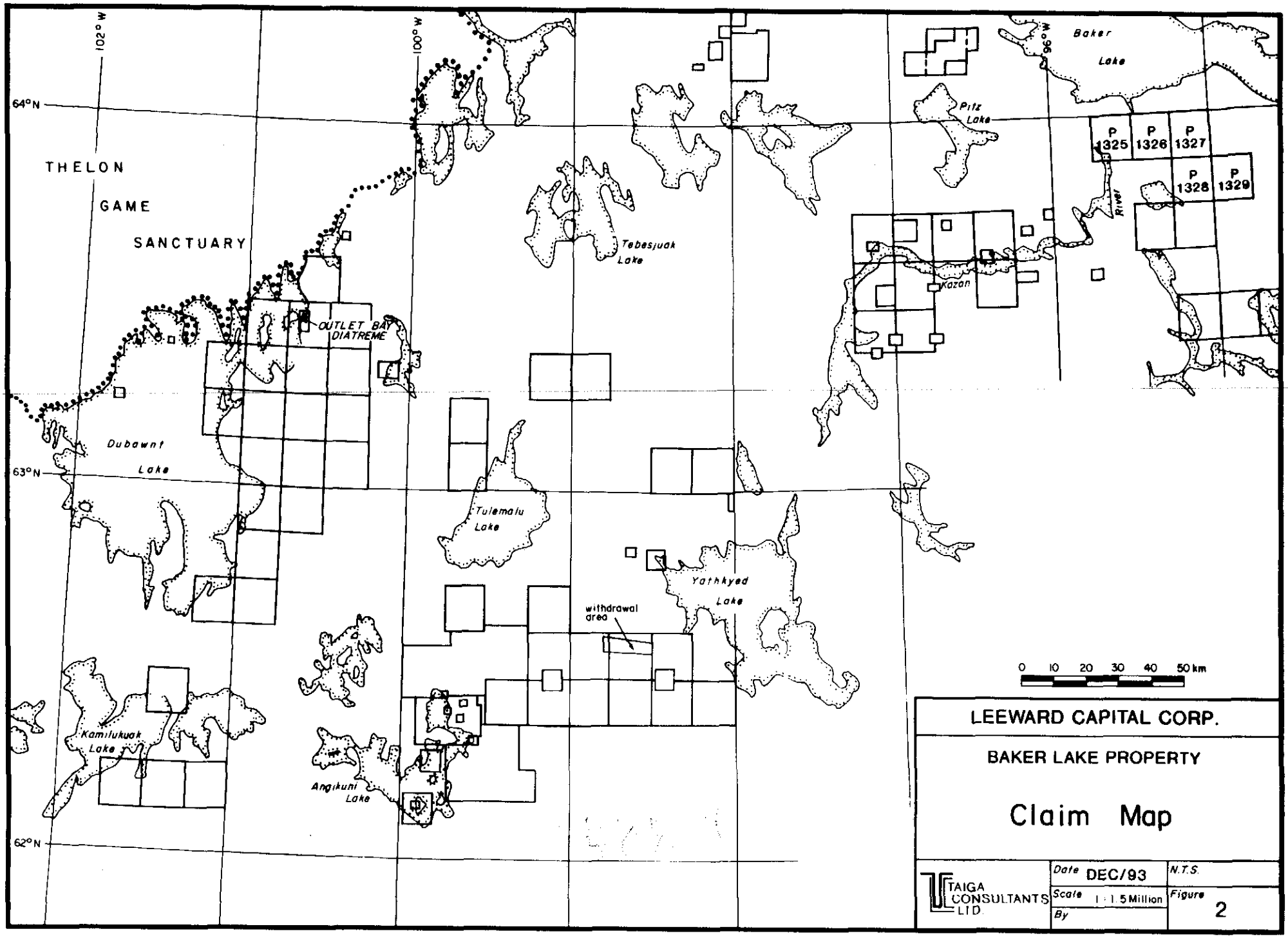
Physiography, Vegetation, Climate

The property is situated in a terrain typical of the Arctic tundra, or Barren Grounds. Sparse vegetation in this region consists of stunted willow, grasses, and sedges, with isolated patches of spruce occurring in sheltered areas. Topography consists of low rolling hills and abundant lakes with poorly integrated drainage. Elevations range from 22-155 m (75-520 feet) above sea level. Relief is low, seldom exceeding 20 m locally.

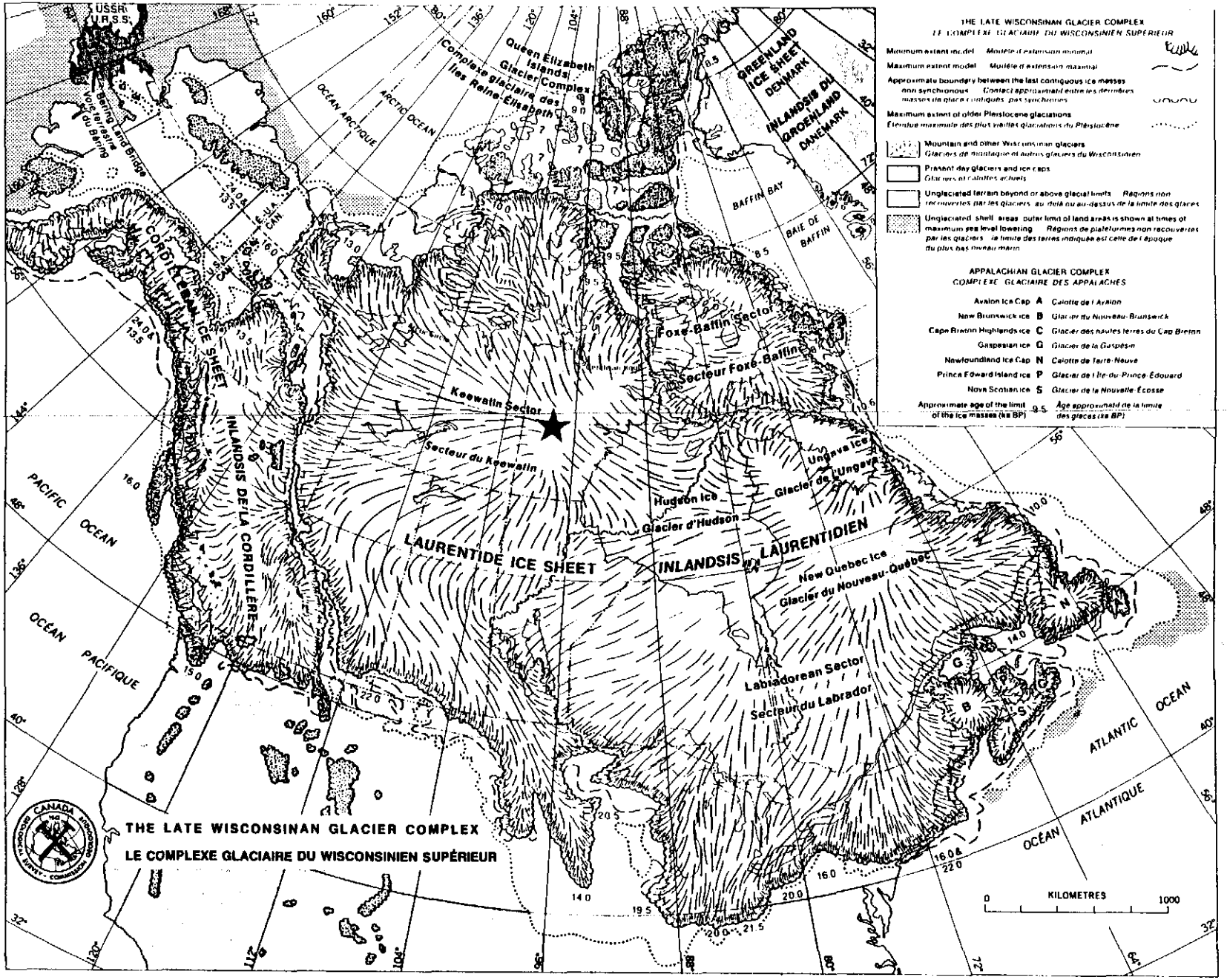
The climate of the region is dry and cold. Precipitation in low, typically less than one metre of snow accumulation in the winter and minimal rainfall the remainder of the year. Nevertheless, due to the poor drainage of the region, there is abundant water for exploration and development purposes from the numerous lakes in the area. The principal watercourse in the vicinity of the property is the Kazan River which flows out of Angikuni Lake to Yathkyed Lake and eventually to Baker Lake which connects to Hudson Bay.

Continental glaciation has affected the entire region. Glacial deposits are generally thin or absent, and consist of ground moraine, hummocky dead-ice moraine, eskers, and proglacial strandlines. Bedrock exposures and felsenmeer comprise between 10% and 15% of the area, making geological mapping quite effective. These exposures are generally confined to upland areas and adjacent to the Kazan River.

The property area lies along the Keewatin Ice Divide as illustrated in Figure 3. Thus, a nearly radial pattern of ice directions occurs. Since this was one of the final spreading centres of the continental ice sheet, glacial erosion rather than deposition predominates. This is the main factor that allows normally recessively weathering kimberlite or lamproite pipes to be occasionally exposed at surface. Proglacial strandlines occur throughout the area. The recent shoreline deposits reflect the gradual uplift of the area since the end of glaciation due to isostatic rebound.


102° W
100° W
96° W
64°N
63°N
62°N
THELON
GAME
SANCTUARY
Baker
Lake
Pitz
Lake
P
1325
P
1326
P
1327
P
1328
P
1329
River
Tebesjuak
Lake
Kazan
OUTLET BAY
DIATREME
Dubawnt
Lake
Tulemalu
Lake
Yathkyed
Lake
withdrawal
area
Kamilukuak
Lake
Angikuni
Lake
0 10 20 30 40 50 km
LEEWARD CAPITAL CORP.
BAKER LAKE PROPERTY
Claim Map
TAIGA
CONSULTANTS
LTD.
Date DEC/93
N.T.S.
Scale 1 : 1.5 Million
Figure
2
By

Energy, Mines and Resources Canada | Énergie, Mines et Ressources Canada



Canada

★ PROPERTY LOCATION

FIG.3

HISTORY OF EXPLORATION

The Baker Lake area has been extensively explored for uranium beginning in 1968 until the early 1980's. Companies involved included Pan Ocean, Cominco, Esperanza Oil, Union Oil, Noranda, and others. While a number of uranium occurrences were discovered, no viably economic deposits were located.

In addition to uranium, a gold occurrence was located on Christopher Island at the east end of Baker Lake. In the late 1980's continuing until the present, several gold exploration programs were carried out in the vicinity of Baker Lake. While a number of new gold occurrences were located, potentially economic deposits have not been located to date.

Of particular note from an exploration perspective were a number of explosive breccias noted during the coarse of uranium exploration in this area. In addition, a number of discrete circular magnetic anomalies were identified during an interpretation of aeromagnetic survey data. These geological and geophysical features appear to have potential of being kimberlitic diatremes, and as such, of interest from a diamond exploration perspective.

EXPLORATION TARGET

The regional geologic analysis completed by Leeward in the spring of 1992 indicated a diamond potential should exist in this region. This conclusion was based on the existence of mantle-derived rock, a diabase dyke swarm, and diatremes in the area. Dr. Tony Peterson of the GSC recognized that the Dubawnt region contained the world's largest accumulation of deep-mantle derived ultrapotassic rock. Geological mapping by Dr. Peterson established the composition of these rocks as lamproitic. A review of the regional gravity map revealed that there existed a major regional gravity low through the area, indicating a thicker Archean crust. This is an important criterium for the formation of diamond-bearing rocks deep in the mantle lithosphere. The presence of a diabase dyke swarm, which occurs associated with most diamond fields in the world, was considered another favourable indicator. Finally, the presence of several ultramafic diatremes in the region reported by Dr. Ken Eade and Dr. Tony Peterson further enhanced the diamond potential.

As previously mentioned, the analyses led to the acquisition of large tracts of mineral rights throughout this region, including the permits held by Leeward Capital. The exploration and drilling confirmed the existence of at least one diamond-bearing pipe with appropriate heavy mineral chemistry which justified the further search for additional pipes in this region.

EXPLORATION APPROACH

Given the large area to be evaluated, a comprehensive review of all available geological and geophysical data was undertaken in order to define specific target areas for detailed follow-up in the field. In addition to the geological data available from the GSC and the Earth Physics branch of Energy Mines and Resources, a thorough evaluation of all relevant assessment data was undertaken. This data included

detailed eighth-mile spaced airborne magnetic surveys over much of the property, the interpretation of which revealed a number of magnetic anomalies for examination in the field. The geological and magnetic targets are illustrated on Figure 4. Thus, during the field exploration of this property, specific target areas were defined for detailed evaluation.

With targets identified and prioritized, the field evaluation was undertaken. Where diatremes were found to be exposed, a grid was established for control of geological mapping and ground magnetic surveying. One or more 70-kg rock samples were then taken for analysis of indicator minerals and diamonds, and petrographic studies. In areas where pipes were suspected, a grid was established, a magnetic survey was completed, several till samples were taken, and the geology was mapped where possible.

Rock, core, and till samples were then forwarded to TerraMin Research Labs in Calgary, Alberta, for heavy mineral concentration, magnetic separation, and sorting of heavy minerals. Once this was completed, the heavy mineral separates were forwarded to Robert Barnett for microprobe analysis, which was utilized to determine the exact chemistry of the various indicator mineral species and the identification of diamonds.

REGIONAL GEOLOGY

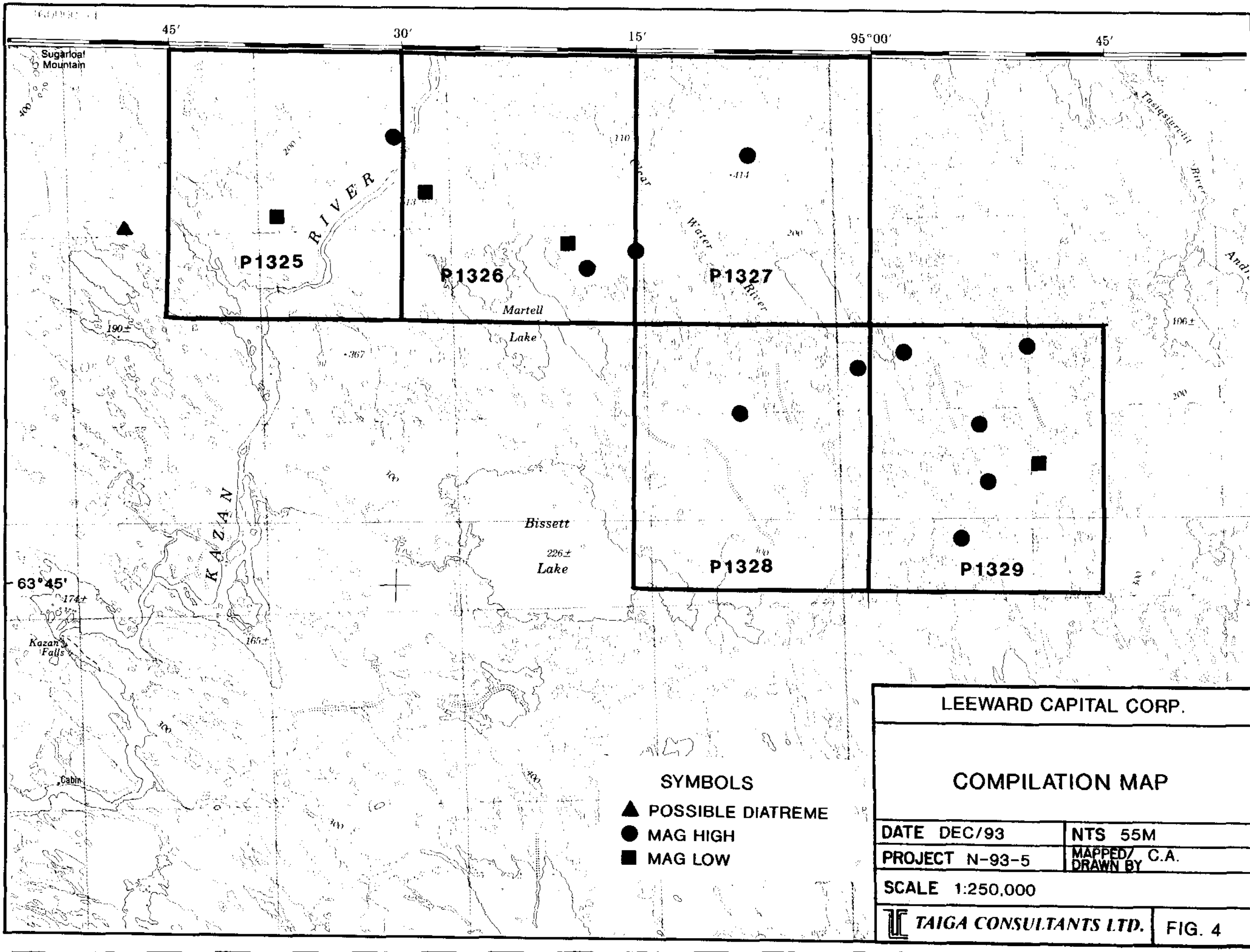
The regional geology is shown in Figure 5; the table of formations for this region is in Table 2.

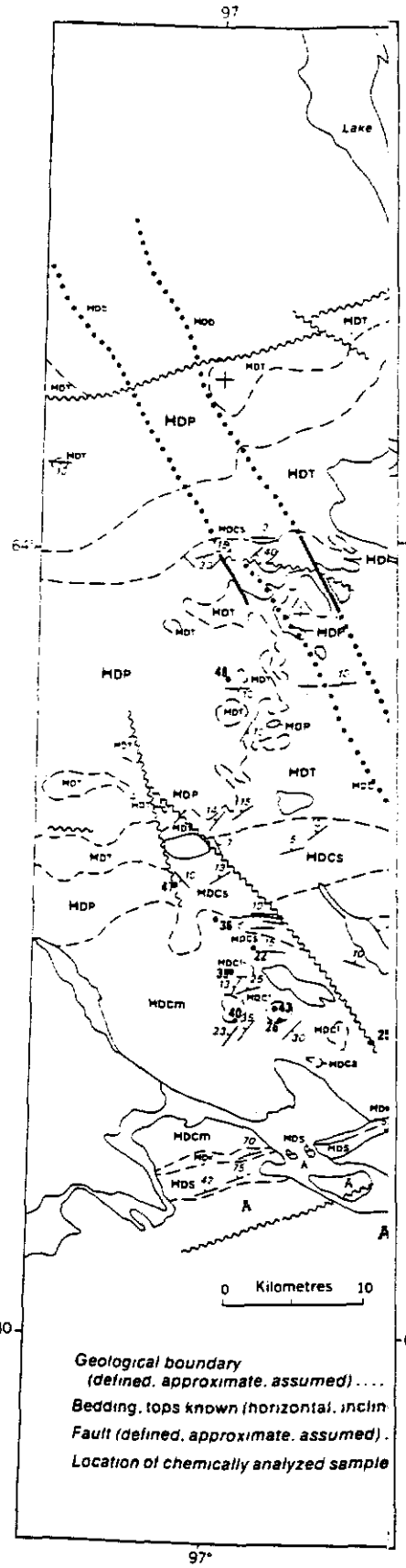
Archean crystalline basement rock units which underlie the Baker Lake area belong to the Rae and Hearne subprovinces of the Churchill structural province. These units consist of granitoid gneisses, migmatite, amphibolite, anorthosite, and granulite.

The early Aphebian Hurwitz Group overlies Archean basement, and consists of quartzite, arkose, iron formation, and dolomite.

These early Aphebian rocks were folded and faulted prior to the deposition of the later Aphebian Dubawnt Supergroup. The formations which comprise the Dubawnt Supergroup are composed of intermixed continental clastics and subaerial volcanics deposited in fault-controlled intercratonic basins. The basal formation consists of the South Channel conglomerate which is succeeded by and in part the lateral equivalent of the Kazan sandstone. This lower clastic succession is overlain by Christopher Island volcanics and minor interbedded sedimentary rock units. The intrusive equivalent of the Christopher Island Formation is the Martell syenite which is locally exposed as pipes and dykes in this region.

Locally present above the Christopher Island rocks are the conglomerates, sandstones, and siltstones of the fluvial Kunwak Formation. The Kunwak is succeeded by the Pitz volcanics which are composed of rhyolitic quartz-feldspar porphyries, and associated interflow sedimentary rocks. The intrusive equivalent of the Pitz Formation is a series a granite stocks. A thin paleo-regolith locally marks the boundary between the Pitz Formation and the overlying Thelon Formation sandstone and conglomerate. The Thelon is the youngest formation of the Dubawnt Supergroup. While locally faulted and tilted, there is little structural deformation of the Dubawnt succession.


45′
30′
15′
95°00′
45′
Sugarloaf Mountain
63°45′
P1325
P1326
P1327
P1328
P1329
RIVER
KAZAN
Clear Water River
Martell Lake
Bissett Lake
226±
190±
174±
165±
106±
Kazan Falls
Cabin
Tasiqsiurvik River
SYMBOLS
POSSIBLE DIATREME
MAG HIGH
MAG LOW
LEEWARD CAPITAL CORP.
COMPILATION MAP
DATE DEC/93
NTS 55M
PROJECT N-93-5
MAPPED/ DRAWN BY C.A.
SCALE 1:250,000
TAIGA CONSULTANTS LTD.
FIG. 4



LEEWARD CAPITAL CORP.

GEOLOGY

TAIGA CONSULTANTS LTD.

Date: DEC/93

Scale:

Data by:

Figure: 5

TABLE OF FORMATIONS

EON	ERA	GROUP, FORMATION OR MAP UNIT	LITHOLOGY
	Helikian	Hdb Mackenzie Dykes	Diabase dykes
			intrusive contact
PROTEROZOIC	Aphebian	Ag, Agpr, Agp	Granite, in part with rapakivi texture or porphyritic and fluorite-bearing
			intrusive contact
		Dubawnt Group AD	
		ADM Martell inrusives	Syenite, monzonite; lamprophyre, syenite, syenodiorite dykes
		ADC Christopher Island Formation	Mafic and felsic trachyte, rhyolite, pyrociastic rocks, vent breccia agglomerate, volcaniclastic sedimentary rocks
		ADS South Channel Formation	Conglomerate, sandstone, siltstone, mudstone
		ADA Angikuni Formation	Arkosic sandstone, siltstone, mudstone, and sandstone
		Aqm, Ay	Quartz monzonite, granite, syenite, granodiorite
			intrusive contact
		Ango, Ann, Anl	Orthogneiss, nebulitic and swirled gneiss, layered gneiss with sills, dykes and irregular bodies of quartz monzonite
		Hurwitz Group AH	
		AHT Tavani Formation	Arkose, meta-arkose, impure quartzite, schists
		AHW, AHW' Watterson Formation	Dolomite, phyllite, argillite; calc-silicate and quartz-mica schist
		AHK Kinga Formation	Orthoquartzite
		Adb Tulemalu Dykes	Diabase, gabbro
			intrusive contact
ARCHEAN		Ādb, Ādb' Kazan Dykes	Metagabbro, amphibolite; hornblendite
		Āb, Āb'	Gabbro, metagabbro, diorite
		Āqm, Āgg	Quartz monzonite, granodiorite
			intrusive contact
		Āng, Āng', Āngo, Āngr Ānga, Āngm, Āngb	Granodiorite gneiss; quartz diorite gneiss; orthogneiss; pyroxene-bearing granodiorite gneiss; augen gneiss; granodiorite gneiss with abundant amphibolite inclusions; granodiorite gneiss cut by dykes and irregular masses of gabbro
		Ānl	Layered to irregularly layered gneiss, migmatite, banded or nebulitic gneiss
		Henik Group	
		Āsn, Āsn', Āsnt, Āsnr	Migmatized paragneiss, migmatized ampnibolite, migmatized paragneiss derived from tuffs, pyroxene-bearing migmatized paragneiss
		Āmm	Amphibolite, amphibolitic greenstone, amphibole schist and gneiss
		Ās	Metagreywacke, metatuff
		Ācif, Āmtp, Āmtm	Carbonate iron formation, chert-pyrite iron formation, chert-magnetite iron formation
		Ālm	Limestone
		Āq	Arkose, quartzite, quartz pebble conglomerate, black slate
		Āmf	Mixed basic and intermediate metavolcanics and gabbro
		Āf	Intermediate to felsic metavolcanics
		Ām	Basic metavolcanics

Table 2 - Table of Formations

The region is cut by a series of gabbro and diabase dykes. These intrusives belong to the Hadrynian Mackenzie Dyke Swarm. These dykes are oriented consistently toward the northwest. Individual dykes have been mapped for up to 250 km across this region.

Structurally, this region is dominated by northeast to east trending faults and folds. The most prominent fault is the Snowbird/Tulemalu tectonic zone which forms the boundary between the Archean Rae and Hearne subprovinces. Most of the movement along this zone was Archean, with minor reactivations extending to late Aphebian time. Movement along the fault is predominantly dip-slip but there is also a strike-slip component. The deposition of Dubawnt Supergroup sedimentary and volcanic rocks was controlled fundamentally by faulting which resulted in the development of a series of karsts and grabens. The northeast to east trending faults acted in part as conduits for volcanism, and the intercratonic basins created by this faulting were filled by continental clastic and volcaniclastic debris.

The northwest trending diabase dykes indicate a tensional regime existed in late Proterozoic time through this region.

PROPERTY GEOLOGY

The property under investigation is underlain by the basal clastic and volcanic succession of the Dubawnt Supergroup. The South Channel conglomerates and Kazan sandstones are the principal rock types in this area with erosional outliers of Christopher Island volcanics, and locally its intrusive equivalent, the Martell syenite. Bedrock exposures are confined to upland areas and along the Kazan River channel.

Of particular interest are several reported diatremes or volcanic centres which occur in this area. These have been interpreted as possible kimberlite pipes, based on similarities in the geology of this region and the Dubawnt/Angikuni Lakes area. In addition, a number of aeromagnetic anomalies of the right size and shape to be the magnetic expression of pipes have bene recognized from both federal government regional magnetic surveys and a much more detailed survey completed for Pan Ocean. This detailed aeromagnetic survey data was previously filed for assessment purposes and now resides in the public domain.

1993 PROPERTY EXPLORATION

The exploration of the property was completed between September 19 and 26, 1993. Map 1 depicts the areas investigated along with geology, sample locations, and geophysical anomalies. Microprobe analysis of heavy mineral separates from samples collected are presented in the Appendix.

PP 1325

This permit is underlain primarily by Kazan sandstone which has been intruded by Martell Syenite plugs. Christopher Island volcanics underlie the northwest corner of the permit, with several erosional outliers of Christopher Island volcanics in the northeast permit area.

Two aeromagnetic anomalies have been recognized from detailed magnetic data generated for Pan Ocean and filed for assessment credit. Reconnaissance prospecting was conducted over both of these target areas. Scattered outcrops of Martell Syenite intruding Kazan Formation sedimentary rock were located in the vicinities of both anomalies. A till sample (J-77) was collected northwest of one of these targets, a weak magnetic low near the centre of the permit. No outcrop was found in the immediate area. Microprobe analysis of selected heavy mineral separates yielded no diamond indicator minerals.

PP 1326

This permit is underlain by Kazan sandstone which has been intruded by Martell Syenite plugs. A Questor aeromagnetic anomaly has been recognized in the area of one of these plugs, from detailed magnetic data generated for Pan Ocean.

Reconnaissance prospecting was completed over this area. Scattered outcrops of Martell Syenite were located. One till sample (A-62) was collected southwest of the magnetic high; however, this sample was probably from a raised beach (fairly numerous in this area). Microprobe analysis of selected heavy mineral grains yielded five G-5 garnets.

PP 1327

This permit is underlain by Kazan sandstone which has been intruded by Martell syenite plugs. Elsewhere, these plugs have been found to be lamproitic breccia pipes. Reconnaissance prospecting was conducted over two of the Martell intrusions. These areas were found to be as indicated.

A cluster of three weak Questor aeromagnetic anomalies have been recognized in the southeast quadrant of the permit, from detailed aeromagnetic data generated for Pan Ocean. Till samples (A-60, A-61) were collected from this area. Sample A-60 yielded two clinopyroxenes with elevated chrome content (0.50%, 0.38%), while no significant grains were recovered from A-61.

PP 1328

This permit is underlain primarily by Kazan sandstone which has been intruded by Martell Syenite plugs. Several erosional outliers of Christopher Island volcanics occur within the Kazan Formation. The southeast corner of the permit is underlain by Archean granitic rocks and gneisses. A thin belt of South Channel Formation polymictic conglomerate occurs along the intrusive contact. Reconnaissance prospecting within the permit boundaries found the geology to be generally as indicated.

Two aeromagnetic anomalies have been recognized from government regional aeromagnetic coverage of this area. One of these anomalies was briefly examined and found to coincide with a Martell Syenite plug intruding Kazan sandstone.

One esker sample (A-65) was collected from within the permit area. It yielded one chrome diopside and one low-chrome (0.05%) clinopyroxene upon microprobe analysis of selected heavy mineral separates.

PP 1329

The northern part of this permit is underlain by Kazan Formation sandstone which has been intruded by Martell Syenite plugs. The southern part is underlain by Archean to Aphebian granitic rocks and gneisses. Several erosional outliers of Kazan and South Channel sedimentary rocks occur in the southeast corner of the permit. A thin belt of South Channel polymictic conglomerate occurs along the intrusive contact. Reconnaissance prospecting within the permit boundaries found the geology to be generally as indicated.

Several aeromagnetic anomalies have been recognized from government regional aeromagnetic coverage and detailed aeromagnetic data generated for Pan Ocean (filed for assessment credit). All of these targets were briefly investigated. No outcrop was found in the vicinity of three of these targets.One strong questor magnetic high was found to coincide with a Martell syenite plug intruding Kazan sandstone. The final aeromagnetic target was found to be related to an Archean pyroxenite intruded granite gneiss.

Four esker samples (A-63, A-64, J-75, J-76) were collected from the permit area. Sample A-63 was found to contain eleven G-5 garnets and one low-chrome (0.16%) clinopyroxene. Sample A-64 yielded 15 G-5 garnets and one elevated chrome (0.71%) clinopyroxene. Sample J-75 yielded three G-5 garnets. Twelve G-5 garnets were recovered from sample J-76.

CONCLUSIONS AND RECOMMENDATIONS

A group of five prospecting permits (PP 1325 to 1329) in the Baker Lake area were evaluated on a reconnaissance basis in order to locate potential diamond-bearing diatremes. One such diatreme was located just to the west of PP 1325; however, none were found exposed within the permits themselves. The recently announced discovery of the "Thirsty Lake" diamond from a 1.5 m wide dyke near Gibson Lake is ample demonstration that a diamond potential exists in this region.

The most intriguing results were obtained from PP 1329 on which a number of diamond indicator minerals were recovered from esker samples. Four regionally significant samples from the property yielded an abundance of G-5 eclogitic garnets and chrome-enriched clinopyroxenes. Sample A-63 contained eleven G-5 garnets along with a low-chrome clinopyroxene from the northwest part of the permit. Sample A-64 had fifteen G-5 garnets and one high-chrome clinopyroxene. Samples J-75 and J-76 had three and twelve G-5 garnets respectively. Taken together, they indicate diamond source rock exists on or near PP 1329. Thus, additional geological and geophysical exploration is warranted on and adjacent to this permit.

Similarly, in the north-central part of PP 1328, esker sample A-65 returned a chrome diopside and a low-chrome clinopyroxene. Since clinopyroxenes do not survive mechanical transport for any great distance, a nearby source is indicated which most likely lies either within the permit or in the southwestern part of PP 1329. Again, this result justifies further exploration on this permit.

Immediately north of this permit, on PP 1326, a raised-beach sand sample (A-62) was taken from which five G-5 garnets were recovered. Prospecting in this area revealed that bedrock exposures were confined exclusively to the upland areas of the permit. The lowlands are mantled with lacustral and marine sediments. One Questor aeromagnetic anomaly was investigated, and found to be the magnetic signature of a Martell Syenite stock.

Of the two heavy mineral samples collected from PP 1327, only one (A-60) returned any interesting results. Two elevated-chrome clinopyroxenes were recovered with chrome values of 0.38% and 0.50%. Since the program on these permits was completed late in the field season, only one of the three weak magnetic low anomalies was investigated. This anomaly was found to be related to a Martell Syenite plug.

On PP 1325, two Questor magnetic anomalies were evaluated, and one till sample was acquired. Scattered exposures of Martell Syenite and Kazan Sandstone were observed near both magnetic anomalies. These anomalies are therefore interpreted as a susceptibility contrast between these two rock types. No heavy minerals were recovered from the till sample.

The results from the reconnaissance exploration of these five permits are mildly encouraging from the standpoint of the heavy mineral chemistry, and from their general regional setting. The presence of a diatreme immediately west of PP 1325 and the discovery of a microdiamond by the GSC toward the southeast, would suggest that additional field work is warranted.

CERTIFICATE - J.W.Davis

I, James Wilson Davis, of 116 MacEwan Drive N.W. in the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 301, 1000 - 8th Avenue S.W., Calgary, Alberta.

2. I am a graduate of St.Louis University, B.Sc. Geology (1967) and M.Sc. Geology (1969), and I have practised my profession continuously since graduation.

3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and I am a Fellow of the Geological Association of Canada; and I am a member in good standing of the Association of Professional Engineers and Geoscientists of B.C.

4. I am the co-author of the report entitled "Geological and Geochemical Report on the Baker Lake Project, Prospecting Permits 1325 to 1329, District of Keewatin, Northwest Territories" dated December 1, 1993.

DATED at Calgary, Alberta, this 1st day of December, A.D. 1993.

Respectfully submitted,

James W. Davis, M.Sc., P.Geol., F.GAC, P.Geo.

GEOLOGICAL ASSOCIATION OF CANADA FELLOW

PROFESSIONAL GEOLOGIST ALBERTA JAMES W. DAVIS

PROFESSIONAL GEOSCIENTIST PROVINCE OF BRITISH COLUMBIA J.W. DAVIS

PERMIT TO PRACTICE
TAIGA CONSULTANTS LTD.
Signature
Date March 16, 1994
PERMIT NUMBER: P 2399
The Association of Professional Engineers, Geologists and Geophysicists of Alberta

CERTIFICATE - C.H.Aussant

I, Claude Henry Aussant, of 31 Templebow Way N.E. in the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 301, 1000 - 8th Avenue S.W., Calgary, Alberta.

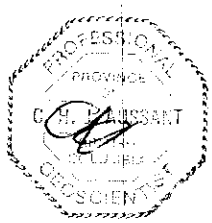
2. I am a graduate of the University of Calgary, B.Sc. Geology (1976), and I have practised my profession continuously since graduation.

3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; I am a Fellow of the Geological Association of Canada; and I am a member in good standing of the Association of Professional Engineers and Geoscientists of B.C.

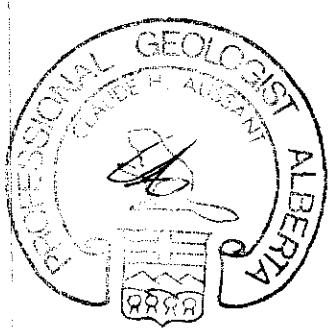
4. I am the co-author of the report entitled "Geological and Geochemical Report on the Baker Lake Project, Prospecting Permits 1325 to 1329, District of Keewatin, Northwest Territories" dated December 1, 1993.

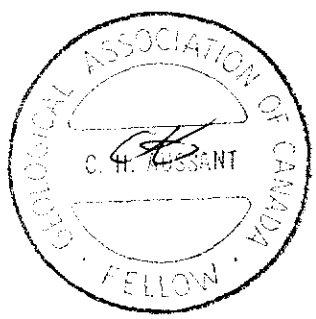
DATED at Calgary, Alberta, this 1st day of December, A.D. 1993.

Respectfully submitted,



Claude H. Aussant, B.Sc., P.Geol., F.GAC, P.Geo.





BIBLIOGRAPHY

Surficial Geology of NTS 55-M; Geol.Surv.Cda., Map 11-1980

Boydell, A.N. (1974): Surficial Geology, geomorphology maps, District of Keewatin, N.W.T. (55-J,K,M, N,O) (scale 1:125,000); Geol.Surv.Cda., Open File 192

Donaldson, J.A. (1965): The Dubawnt Group, Districts of Keewatin and Mackenzie; Geol.Surv.Cda., Paper 64-20

Geological Survey of Canada: geophysical papers

7300G	NTS 55-M	MacQuoid Lake
3540G	55-M/06	
3541G	55-M/07	
6803G	55-M/11	
6778G	55-M/13	
6779G	55-M/14	
6780G	55-M/15	

Lecheminant, A.N.; et al. (1976): MacQuoid Lake (55-M west half) and Thirty-Mile Lake (65-P east half) map-areas, District of Keewatin; in Report of Activities, Part A; Geol.Surv.Cda., Paper 76-1A

Miller, A.R. (1980): Uranium Geology of the Eastern Baker Lake Basin, District of Keewatin, Northwest Territories; Geol.Surv.Cda., Bulletin 330

Northwest Territories: assessment files:

060641	060642	060643	061179	061539
081083	081084	081085	081191	081372
081389	081395	081461	081553	081558
081608	081650	081693	081703	081903

Reinhardt, E.W.; Chandler, F.W. (1972): Gibson-MacQuoid Lakes Map-Area, District of Keewatin; in Report of Activities, Part A; Geol.Surv.Cda., Paper 72-1A

Reinhardt, E.W.; et al. (1980): Gibson-MacQuoid Lakes (NTS 55-M E½, 55-N W½) Geology Map (scale 1:125,000); Geol.Surv.Cda., Open File 703

APPENDIX

Summary of Personnel

Statement of Expenditures

Analytical Results

Summary of Personnel

Name / Address	Position	Dates Worked	Man Days
C.H. Aussant, P.Geol. Calgary, Alberta	Project Geologist	Sep.19-Sep.26	3.30
M.D. Jamieson, P.Geol. Calgary, Alberta	Assistant Geologist	Sep.19-Sep.26	3.55
T. Bojczyszyn, P.Geol. Calgary, Alberta	Assistant Geologist	Sep.19-Sep.26	3.55
D. Potts	Helicopter Pilot	Sep.19-Sep.26	3.50
		TOTAL	13.90

Permit 1325 - Statement of Expenditures

Assessment data compilation		$ 650.00
Pre-field (logistics, reproductions)		75.00
Mob/demob expenses		254.51
Field personnel		
C.J.Aussant	240.00	
M.D.Jamieson	210.00	
T.Bojczyszyn	210.00	660.00
Camp support		332.00
Miscellaneous (expediting, freight, equipment rentals)		128.10
Fixed-wing support		1,172.02
Helicopter support		1,013.40
Fuel (Jet-B, propane, gas)		197.10
Geochemical analyses (1 sample)		395.00
Post-field		977.31
	SUB-TOTAL	5,854.44
10% Administration		585.44
	GRAND TOTAL	$6,439.88

I, Claude H. Aussant, hereby certify the above Statement of Expenditures to be true and accurate.

Sworn before me at Calgary, Alberta
this _____ day of March, 1994

_____
Edward N. Vink, Notary Public

_____
Claude H. Aussant, P.Geol.

Permit 1326 - Statement of Expenditures

Assessment data compilation		$ 650.00
Pre-field (logistics, reproductions)		75.00
Mob/demob expenses		254.51
Field personnel		
C.J.Aussant	240.00	
M.D.Jamieson	210.00	
T.Bojczyszyn	210.00	660.00
Camp support		332.00
Miscellaneous (expediting, freight, equipment rentals)		128.10
Fixed-wing support		1,172.02
Helicopter support		675.60
Fuel (Jet-B, propane, gas)		131.40
Geochemical analyses (1 sample)		580.00
Post-field		977.31
	SUB-TOTAL	5,635.94
10% Administration		563.59
	GRAND TOTAL	$6,199.53

I, Claude H. Aussant, hereby certify the above Statement of Expenditures to be true and accurate.

Sworn before me at Calgary, Alberta
this _____ day of March, 1994

_____
Edward N. Vink, Notary Public

_____
Claude H. Aussant, P.Geol.

Permit 1327 - Statement of Expenditures

Assessment data compilation			$ 650.00
Pre-field (logistics, reproductions)			75.00
Mob/demob expenses			254.51
Field personnel			
C.J.Aussant		240.00	
M.D.Jamieson		210.00	
T.Bojczyszyn		210.00	660.00
Camp support			332.00
Miscellaneous (expediting, freight, equipment rentals)			128.10
Fixed-wing support			1,172.02
Helicopter support			675.60
Fuel (Jet-B, propane, gas)			131.40
Geochemical analyses (2 samples)			900.00
Post-field			977.31
	SUB-TOTAL		5,955.94
10% Administration			595.59
	GRAND TOTAL		$6,551.53

I, Claude H. Aussant, hereby certify the above Statement of Expenditures to be true and accurate.

Sworn before me at Calgary, Alberta
this _____ day of March, 1994

_____
Edward N. Vink, Notary Public

_____
Claude H. Aussant, P.Geol.

Permit 1328 - Statement of Expenditures

Assessment data compilation		$ 650.00
Pre-field (logistics, reproductions)		75.00
Mob/demob expenses		254.51
Field personnel		
C.J.Aussant	300.00	
M.D.Jamieson	262.50	
T.Bojczyszyn	262.50	825.00
Camp support		332.00
Miscellaneous (expediting, freight, equipment rentals)		128.10
Fixed-wing support		1,172.02
Helicopter support		1,126.00
Fuel (Jet-B, propane, gas)		219.00
Geochemical analyses (1 sample)		545.00
Post-field		977.31
	SUB-TOTAL	6,303.94
10% Administration		630.39
	GRAND TOTAL	$6,934.33

I, Claude H. Aussant, hereby certify the above Statement of Expenditures to be true and accurate.

Sworn before me at Calgary, Alberta
this _____ day of March, 1994

_____
Edward N. Vink, Notary Public

_____
Claude H. Aussant, P.Geol.

Permit 1329 - Statement of Expenditures

Assessment data compilation		$ 650.00
Pre-field (logistics, reproductions)		75.00
Mob/demob expenses		254.51
Field personnel		
C.J.Aussant	300.00	
M.D.Jamieson	350.00	
T.Bojczyszyn	350.00	1,000.00
Camp support		332.00
Miscellaneous (expediting, freight, equipment rentals)		128.10
Fixed-wing support		1,172.02
Helicopter support		1,520.10
Fuel (Jet-B, propane, gas)		295.65
Geochemical analyses (4 samples)		2,745.00
Post-field		977.31
	SUB-TOTAL	9,149.69
10% Administration		914.97
	GRAND TOTAL	$10,064.66

I, Claude H. Aussant, hereby certify the above Statement of Expenditures to be true and accurate.

Sworn before me at Calgary, Alberta
this _____ day of March, 1994

_____
Edward N. Vink, Notary Public

_____
Claude H. Aussant, P.Geol.

MASTER MINERAL RESOURCE SERVICES LTD.

MINERALOGICAL EXAMINATION - INDICATOR MINERALS

SAMPLE ID.: 1325 - J77 **JOB #: 93-126-24**	**DATE: January 6, 1994**
SAMPLE DESCRIPTION: -7+35 mesh, HNM,HPM and HWM	**CONCLUSIONS:**
WEIGHTS OF FRACTIONS: **HWM: HPM: HNM:**	**EXAMINED BY: P.Master** **MINERAL PICKING BY: P.Master** **MOUNTING FOR SEM BY: R.L.Barnett**

MINERAL	NO. OF GRAINS/FRAGS. IN FRACTION OF:						
	WM	PM	NM	Probe: Garnet Group	Probe: Cr rich Chromite[1], [2]Picroilmenite[3]	[P] No. of grains confirm by SEM/ Probe	No. of Diamonds confirmed by SEM
Fe BEARING MINERALS	signifi cant no.	lots of grains	3		37(S) id as magnetite-hematite -Ti magnetite		
GARNET Ruby red							
GARNET Other			some grains				
Bright Orange GARNET							
Lilac Purple GARNET							
CHROME-DIOPSIDE [P]							
PYROXENE[P] (OPX &/OR CPX)							
OLIVINE[P]							
DIAMOND							
OTHER:							

(S) : number of grains/ fragments sent for SEM/ PROBE. WM = weakly magnetic, PM = paramagnetic NM = non magnetic

[1] definite Cr-rich chromite Cr_2O_3 > 60%. [2] possible Cr-rich chromite Cr_2O_3 >45%

[3] MgO = 2 - 18%, maybe as high as 28%

N B : Master Mineral Resource Services Ltd. is not responsible for the choice, supervision and results of the SEM/microprobe

MASTER MINERAL RESOURCE SERVICES LTD.
MINERALOGICAL EXAMINATION - INDICATOR MINERALS

SAMPLE ID.: 1326 - A62 **JOB #: 93-126-25**	**DATE: January 5, 1994**
SAMPLE DESCRIPTION: -7+35 mesh, HNM,HPM and HWM	**CONCLUSIONS: G5 garnets detected**
WEIGHTS OF FRACTIONS: **HWM: HPM: HNM:**	**EXAMINED BY: P.Master** **MINERAL PICKING BY: P.Master** **MOUNTING FOR SEM BY: R.L.Barnett**

MINERAL	NO. OF GRAINS/FRAGS. IN FRACTION OF:						
	WM	PM	NM	Probe: Garnet Group	Probe: Cr rich Chromite[1], [2] Picroilmenite[3]	(P) No. of grains confirm by SEM/ Probe	No. of Diamonds confirmed by SEM
Fe BEARING MINERALS	lots of grains	13			38(S): 37 id as magnetite-hematite, 1 Ti-magnetite		
GARNET Ruby red							
GARNET Other	lots of grains	several grains					
Bright Orange GARNET	5	2		7(S):6 G5,1 almand., 1 spessart			
Lilac Purple GARNET							
CHROME-DIOPSIDE (P)							
PYROXENE(P) (OPX &/OR CPX)							
OLIVINE(P)							
DIAMOND							
OTHER:							

(S) : number of grains/ fragments sent for SEM/ PROBE. WM = weakly magnetic, PM = paramagnetic NM = non magnetic

[1] definite Cr-rich chromite Cr_2O_3 > 60%. [2] possible Cr-rich chromite Cr_2O_3 >45%

[3] MgO = 2 - 18%, maybe as high as 28%

N.B.: Master Mineral Resource Services Ltd. is not responsible for the choice, supervision and results of the SEM/microprobe

	93-126-25 1326-A62 GARNET	93-126-25 1326-A62 GARNET	93-126-25 1326-A62 GARNET	93-126-25 1326-A62 GARNET	93-126-25 1326-A62 GARNET
SiO2	36.72	39.13	38.18	38.09	39.62
TiO2	0.17	0.04	0.06	0.00	0.01
Al2O3	21.36	22.96	22.60	22.28	22.85
Cr2O3	0.04	0.02	0.11	0.04	0.09
FeO	12.56	24.44	24.64	29.50	20.09
MgO	1.09	8.52	6.65	5.90	11.40
MnO	24.74	0.18	0.70	0.91	0.40
CaO	3.54	4.31	7.12	3.67	5.60
Sum	100.22	99.60	100.06	100.39	100.00

	93-126-25 1326-A62 GARNET	93-126-25 1326-A62 GARNET
SiO2	38.05	38.55
TiO2	0.08	0.01
Al2O3	22.64	22.78
Cr2O3	0.11	0.02
FeO	27.28	24.88
MgO	8.82	7.62
MnO	0.51	0.75
CaO	2.04	5.61
Sum	99.54	100.42

	93-126-25 1326-A62 ILMENITE
SiO2	0.19
TiO2	8.10
Al2O3	0.32
Cr2O3	0.00
FeO	86.78
MgO	0.04
MnO	0.25
ZnO	0.15
NiO	0.08
Sum	95.86

MASTER MINERAL RESOURCE SERVICES LTD.
MINERALOGICAL EXAMINATION - INDICATOR MINERALS

SAMPLE ID.: 1327 - A60 **JOB #: 93-126-26**	**DATE: January 5, 1994**
SAMPLE DESCRIPTION:-7+35 mesh, HNM,HPM and HWM	**CONCLUSIONS:**
WEIGHTS OF FRACTIONS: **HWM: HPM: HNM:**	**EXAMINED BY: P.Master** **MINERAL PICKING BY: P.Master** **MOUNTING FOR SEM BY: R.L.Barnett**

MINERAL	NO. OF GRAINS/FRAGS. IN FRACTION OF:						
	WM	PM	NM	Probe: Garnet Group	Probe: Cr rich Chromite[1]· [2]Picroilmenite[3]	(P) No. of grains confirm by SEM/ Probe	No. of Diamonds confirmed by SEM
Fe BEARING MINERALS	signifi cant no.	lots of grains	3		102(S) id 1 rutile, 1 amphibole, 100 magnetite-hematite		
GARNET Ruby red							
GARNET Other	sever al grains	sever al grains					
Bright Orange GARNET	1	3		4(S):1 staurolite, 3 almand.			
Lilac Purple GARNET							
CHROME-DIOPSIDE (P)							
PYROXENE(P) (OPX &/OR CPX)		2	1			3(S):3 CPX, 2with .5,.38 Cr	
OLIVINE(P)							
DIAMOND							
OTHER:							

(S) : number of grains/ fragments sent for SEM/ PROBE. WM = weakly magnetic, PM = paramagnetic NM = non magnetic

[1] definite Cr-rich chromite Cr_2O_3 > 60%. [2] possible Cr-rich chromite Cr_2O_3 >45%

[3] MgO = 2 - 18%, maybe as high as 28%

N.B.. Master Mineral Resource Services Ltd. is not responsible for the choice, supervision and results of the SEM/microprobe

	93-126-26 1327-A60 GARNET	93-126-26 1327-A60 GARNET	93-126-26 1327-A60 GARNET
SiO2	37.53	37.47	37.84
TiO2	0.06	0.05	0.12
Al2O3	21.07	21.20	22.03
Cr2O3	0.04	0.02	0.01
FeO	24.24	26.25	29.26
MgO	0.75	1.02	4.19
MnO	3.84	2.09	1.54
CaO	11.96	12.06	5.39
Sum	99.49	100.16	100.38

	93-126-26 1327-A60 CLINO-PYROXENE	93-126-26 1327-A60 CLINO-PYROXENE	93-126-26 1327-A60 CLINO-PYROXENE
SiO2	54.59	53.75	53.60
TiO2	0.09	0.01	0.17
Al2O3	0.62	0.49	1.48
Cr2O3	0.50	0.00	0.38
FeO	2.69	8.29	8.99
MgO	18.12	13.54	17.07
MnO	0.12	0.31	0.10
CaO	23.89	22.49	22.94
K2O	0.00	0.00	0.00
Na2O	0.20	1.38	0.50
Sum	100.82	100.36	100.03

MASTER MINERAL RESOURCE SERVICES LTD.
MINERALOGICAL EXAMINATION - INDICATOR MINERALS

SAMPLE ID.: 1327 - A61 **JOB #: 93-168- 12**	**DATE: January 11, 1994**
SAMPLE DESCRIPTION: -7+35 mesh, HNM,HPM and HWM	**CONCLUSIONS:**
WEIGHTS OF FRACTIONS: **HWM: HPM: HNM:**	**EXAMINED BY: P.Master** **MINERAL PICKING BY: P.Master** **MOUNTING FOR SEM BY: R.L.Barnett**

MINERAL	NO. OF GRAINS/FRAGS. IN FRACTION OF:						
	WM	PM	NM	Probe: Garnet Group	Probe: Cr rich Chromite[1], [2]Picroilmenite[3]	(P) No. of grains confirm by SEM/ Probe	No. of Diamonds confirmed by SEM
Fe BEARING MINERALS	lots of grains	sever al grains			39(S): id 38 as magnetite, 1 as Ti-magnetite		
GARNET Ruby red							
GARNET Other							
Bright Orange GARNET							
Lilac Purple GARNET							
CHROME-DIOPSIDE (P)							
PYROXENE(P) (OPX &/OR CPX)							
OLIVINE(P)							
DIAMOND							
OTHER:							

(S) : number of grains/ fragments sent for SEM/ PROBE. WM = weakly magnetic, PM = paramagnetic
NM = non magnetic

[1] definite Cr-rich chromite Cr_2O_3 > 60%. [2] possible Cr-rich chromite Cr_2O_3 >45%
[3] MgO = 2 - 18%, maybe as high as 28%

N.B.: Master Mineral Resource Services Ltd. is not responsible for the choice, supervision and results of the SEM/microprobe

MASTER MINERAL RESOURCE SERVICES LTD.
MINERALOGICAL EXAMINATION - INDICATOR MINERALS

SAMPLE ID.: 1328 - A65 **JOB #: 93-168 - 13**	**DATE: January 11, 1994**
SAMPLE DESCRIPTION: -7+35 mesh,HNM,HPM and HWM	**CONCLUSIONS: Cr-Diopside detected**
WEIGHTS OF FRACTIONS: **HWM: HPM: HNM:**	**EXAMINED BY: P.Master** **MINERAL PICKING BY: P.Master** **MOUNTING FOR SEM BY: R.L.Barnett**

MINERAL	NO. OF GRAINS/FRAGS. IN FRACTION OF:						
	WM	PM	NM	Probe: Garnet Group	Probe: Cr rich Chromite[1], [2]Picroilmenite[3]	(S) No. of grains confirm by SEM/ Probe	No. of Diamonds confirmed by SEM
Fe BEARING MINERALS	17				17(S):id as magnetite hematite		
GARNET Ruby red							
GARNET Other		several grains					
Bright Orange GARNET							
Lilac Purple GARNET							
CHROME-DIOPSIDE (P)							
PYROXENE(P) (OPX &/OR CPX)		3				3(S):1 Cr-Diopside with1.06 Cr, 1 low-Cr-CPX, 1 id as andradite	
OLIVINE(P)							
DIAMOND							
OTHER:							

(S) : number of grains/ fragments sent for SEM/ PROBE. WM = weakly magnetic, PM = paramagnetic NM = non magnetic

[1] definite Cr-rich chromite Cr_2O_3 > 60%. [2] possible Cr-rich chromite Cr_2O_3 >45%

[3] MgO = 2 - 18%, maybe as high as 28%

N B Master Mineral Resource Services Ltd. is not responsible for the choice, supervision and results of the SEM/microprobe

	93-168-13 1328-A65 CLINO-PYROXENE	93-168-13 1328-A65 CLINO-PYROXENE	
SiO2	53.57	53.97	
TiO2	0.15	0.07	
Al2O3	0.97	1.45	
Cr2O3	0.05	1.06	elevated Cr
FeO	5.67	3.78	
MgO	16.43	18.38	
MnO	0.16	0.07	
CaO	22.42	21.48	
K2O	0.00	0.00	
Na2O	0.48	0.47	
Sum	99.90	100.73	

MASTER MINERAL RESOURCE SERVICES LTD.
MINERALOGICAL EXAMINATION - INDICATOR MINERALS

SAMPLE ID.: 1329 - A63 **JOB #: 93-168 - 14**	**DATE: January 11, 1994**
SAMPLE DESCRIPTION: -7+35 mesh, HNM, HPM and HWM	**CONCLUSIONS: G5 garnets detected**
WEIGHTS OF FRACTIONS: **HWM: HPM: HNM:**	**EXAMINED BY: P.Master** **MINERAL PICKING BY: P.Master** **MOUNTING FOR SEM BY: R.L.Barnett**

MINERAL	NO. OF GRAINS/FRAGS. IN FRACTION OF:						
	WM	PM	NM	Probe: Garnet Group	Probe: Cr rich Chromite[1], [2]Picroilmenite[3]	[P] No. of grains confirm by SEM/ Probe	No. of Diamonds confirmed by SEM
Fe BEARING MINERALS	signifi cant no.	signifi cant no.	31		91(S): id 89 as magnetite, 1 as ilmenite, 1 lost		
GARNET Ruby red							
GARNET Other		sever al grains					
Bright Orange GARNET	4	8	2	14(S): 11 G5, 3 almand.			
Lilac Purple GARNET							
CHROME-DIOPSIDE [P]							
PYROXENE[P] (OPX &/OR CPX)			4			4(S):1 low-Cr-CPX, 3 id as amph.	
OLIVINE[P]							
DIAMOND							
OTHER:							

(S) : number of grains/ fragments sent for SEM/ PROBE. WM = weakly magnetic, PM = paramagnetic NM = non magnetic

[1] definite Cr-rich chromite Cr_2O_3 > 60%. [2] possible Cr-rich chromite Cr_2O_3 >45%

[3] MgO = 2 - 18%, maybe as high as 28%

N.B : Master Mineral Resource Services Ltd. is not responsible for the choice, supervision and results of the SEM/microprobe

	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET
SiO2	39.06	38.87	38.28	37.38	38.70
TiO2	0.13	0.13	0.12	0.00	0.20
Al2O3	22.28	22.21	22.10	21.54	22.12
Cr2O3	0.00	0.14	0.07	0.03	0.05
FeO	18.97	24.01	27.53	33.17	25.30
MgO	9.54	9.01	7.51	5.50	9.33
MnO	0.64	0.61	0.55	0.81	0.60
CaO	8.41	4.94	3.94	2.09	3.79
Na2O	0.00	0.02	0.00	0.00	0.00
Sum	99.03	99.94	100.10	100.52	100.09

	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET
SiO2	37.22	39.19	38.65	38.82	39.33
TiO2	0.12	0.14	0.12	0.15	0.15
Al2O3	21.55	22.31	22.15	22.28	22.09
Cr2O3	0.11	0.08	0.04	0.16	0.08
FeO	30.66	24.11	24.52	21.82	18.32
MgO	5.76	11.50	8.89	9.51	10.62
MnO	0.48	0.23	0.38	0.51	0.50
CaO	3.73	2.63	4.68	6.04	8.20
Na2O	0.00	0.00	0.00	0.00	0.01
Sum	99.63	100.19	99.43	99.29	99.30

	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET	93-168-14 1329-A63 GARNET
SiO2	36.50	37.62	35.97	37.70
TiO2	0.13	0.09	0.05	0.12
Al2O3	20.92	21.81	20.64	21.61
Cr2O3	0.02	0.00	0.04	0.15
FeO	27.15	30.57	27.47	26.74
MgO	0.73	6.93	0.92	5.45
MnO	10.99	0.30	13.25	1.01
CaO	3.45	2.13	0.80	6.56
Na2O	0.00	0.00	0.00	0.00
Sum	99.89	99.45	99.14	99.34

	93-168-14 1329-A63 CLINO- PYROXENE
SiO2	53.01
TiO2	0.15
Al2O3	1.66
Cr2O3	0.16
FeO	5.35
MgO	17.55
MnO	0.16
CaO	21.56
K2O	0.00
Na2O	0.38
Sum	99.98

MASTER MINERAL RESOURCE SERVICES LTD.

MINERALOGICAL EXAMINATION - INDICATOR MINERALS

SAMPLE ID.: 1329 - A64 **JOB #: 93-168 - 15**	**DATE: January 12, 1994**
SAMPLE DESCRIPTION: -7+35 mesh, HNM,HPM and HWM	**CONCLUSIONS: G5 garnets and CPX with elevated Cr detected**
WEIGHTS OF FRACTIONS: **HWM: HPM: HNM:**	**EXAMINED BY: P.Master** **MINERAL PICKING BY: P.Master** **MOUNTING FOR SEM BY: R.L.Barnett**

MINERAL	NO. OF GRAINS/FRAGS. IN FRACTION OF:						
	WM	PM	NM	Probe: Garnet Group	Probe: Cr rich Chromite[1]. [2]Picroilmenite[3]	[P] No. of grains confirm by SEM/ Probe	No. of Diamonds confirmed by SEM
Fe BEARING MINERALS	signifi cant no.	sever al grains	1		34(S).id as magnetite-hematite		
GARNET Ruby red							
GARNET Other	sever al grains	sever al grains					
Bright Orange GARNET	15	4		19(S):16 G5, 4 almand.			
Lilac Purple GARNET							
CHROME-DIOPSIDE [P]							
PYROXENE[P] (OPX &/OR CPX)		few grains				1(S):CPX with .71 Cr.	
OLIVINE[P]							
DIAMOND							
OTHER:							

(S) : number of grains/ fragments sent for SEM/ PROBE. WM = weakly magnetic, PM = paramagnetic NM = non magnetic

[1] definite Cr-rich chromite Cr_2O_3 > 60%. [2] possible Cr-rich chromite Cr_2O_3 >45%

[3] MgO = 2 - 18%, maybe as high as 28%

N.B. Master Mineral Resource Services Ltd. is not responsible for the chr... supervision and results of the SEM/microprobe

	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET
SiO2	38.18	38.48	39.04	38.58	38.96
TiO2	0.07	0.15	0.09	0.14	0.10
Al2O3	21.88	22.12	22.35	21.93	21.55
Cr2O3	0.01	0.03	0.06	0.04	0.05
FeO	28.27	25.69	24.15	25.29	27.53
MgO	8.03	8.77	8.18	6.88	4.98
MnO	0.37	0.38	0.43	0.68	0.59
CaO	2.58	3.69	6.54	6.13	7.14
Na2O	0.00	0.00	0.05	0.00	0.01
Sum	99.39	99.31	100.89	99.67	99.91

	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET
SiO2	36.91	39.18	38.47	38.43	39.30
TiO2	0.04	0.10	0.09	0.14	0.07
Al2O3	21.27	22.40	21.90	22.12	22.58
Cr2O3	0.00	0.10	0.08	0.03	0.02
FeO	34.44	24.44	25.38	25.43	23.70
MgO	3.41	10.20	7.89	7.52	9.44
MnO	3.44	0.45	0.49	0.48	0.59
CaO	0.54	2.85	4.89	5.89	4.20
Na2O	0.00	0.01	0.00	0.00	0.00
Sum	100.05	99.73	99.19	100.04	99.90

	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET
SiO2	38.41	38.18	38.13	38.86	37.80
TiO2	0.15	0.06	0.12	0.04	0.06
Al2O3	21.97	21.99	22.19	22.06	21.43
Cr2O3	0.07	0.06	0.09	0.07	0.03
FeO	24.95	26.46	26.49	27.04	9.50
MgO	7.82	8.49	9.46	9.83	6.23
MnO	0.33	0.62	0.45	0.62	20.37
CaO	6.13	3.95	2.11	1.44	4.47
Na2O	0.00	0.00	0.00	0.00	0.00
Sum	99.83	99.81	99.04	99.96	99.89

	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET	93-168-15 1329-A64 GARNET
SiO2	38.66	37.36	38.41
TiO2	0.20	0.06	0.22
Al2O3	22.09	21.29	22.01
Cr2O3	0.08	0.10	0.05
FeO	24.59	30.60	25.37
MgO	9.66	2.77	7.61
MnO	0.48	1.59	0.50
CaO	3.42	6.28	6.04
Na2O	0.02	0.00	0.01
Sum	99.20	100.05	100.22

	93-168-15 1329-A64 CLINO- PYROXENE
SiO2	53.25
TiO2	0.20
Al2O3	1.11
Cr2O3	0.71
FeO	3.53
MgO	17.05
MnO	0.09
CaO	24.10
K2O	0.00
Na2O	0.35
Sum	100.39

MASTER MINERAL RESOURCE SERVICES LTD.

MINERALOGICAL EXAMINATION - INDICATOR MINERALS

SAMPLE ID.: 1329 - J75 **JOB #: 93-168 - 16**	**DATE: January 12, 1994**
SAMPLE DESCRIPTION: -7+35 mesh, HNM,HPM and HWM	**CONCLUSIONS: G5 garnets detected**
WEIGHTS OF FRACTIONS: **HWM: HPM: HNM:**	**EXAMINED BY: P.Master** **MINERAL PICKING BY: P.Master** **MOUNTING FOR SEM BY: R.L.Barnett**

MINERAL	NO. OF GRAINS/FRAGS. IN FRACTION OF:						
	WM	PM	NM	Probe: Garnet Group	Probe: Cr rich Chromite[1], [2]Picroilmenite[2]	(P) No. of grains confirm by SEM/ Probe	No. of Diamonds confirmed by SEM
Fe BEARING MINERALS	sever al grains	few grains	1		25(S):id 23 as magnetite-hematite, 1 as rutile, 1 lost?		
GARNET Ruby red							
GARNET Other	sever al grains						
Bright Orange GARNET	3	1	1	5(S):3 G5, 1 almand., 1 id as staurolit			
Lilac Purple GARNET							
CHROME-DIOPSIDE (P)							
PYROXENE(P) (OPX &/OR CPX)							
OLIVINE(P)							
DIAMOND							
OTHER:							

(S) : number of grains/ fragments sent for SEM/ PROBE. WM = weakly magnetic, PM = parmagnetic NM = non magnetic

[1] definite Cr-rich chromite Cr_2O_3 > 60% [2] possible Cr-rich chromite Cr_2O_3 >45%

[3] MgO = 2 - 18%, maybe as high as 28%

N.B. Master Mineral Resource Services Ltd. is not responsible for the choice, supervision and results of the SEM/microprobe

	93-168-16 1329-J75 GARNET	93-168-16 1329-J75 GARNET	93-168-16 1329-J75 GARNET	93-168-16 1329-J75 GARNET
SiO2	38.69	38.43	37.83	37.84
TiO2	0.18	0.14	0.15	0.12
Al2O3	21.74	21.93	22.02	21.74
Cr2O3	0.00	0.17	0.04	0.05
FeO	22.84	24.88	28.89	30.41
MgO	8.82	7.77	7.77	5.77
MnO	0.68	0.56	0.62	0.31
CaO	6.25	5.28	2.40	4.07
Na2O	0.00	0.01	0.02	0.00
Sum	99.20	99.17	99.74	100.31

MASTER MINERAL RESOURCE SERVICES LTD.

MINERALOGICAL EXAMINATION - INDICATOR MINERALS

SAMPLE ID.: 1329 - J76 **JOB #**: 93-168 - 17	**DATE:** January 12, 1994
SAMPLE DESCRIPTION: -7+35 mesh, HNM, HPM and HWM	**CONCLUSIONS:** G5 garnets detected
WEIGHTS OF FRACTIONS: HWM: HPM: HNM:	**EXAMINED BY:** P.Master **MINERAL PICKING BY:** P.Master **MOUNTING FOR SEM BY:** R.L.Barnett

MINERAL	NO. OF GRAINS/FRAGS. IN FRACTION OF:						
	WM	PM	NM	Probe: Garnet Group	Probe: Cr rich Chromite[1], [2] Picroilmenite[3]	[P] No. of grains confirm by SEM/ Probe	No. of Diamonds confirmed by SEM
Fe BEARING MINERALS							
GARNET Ruby red							
GARNET Other	signifi cant no.						
Bright Orange GARNET	8	5		13(S):12 G5, 1 andrad.			
Lilac Purple GARNET							
CHROME-DIOPSIDE [P]							
PYROXENE[P] (OPX &/OR CPX)							
OLIVINE[P]							
DIAMOND							
OTHER:							

(S) : number of grains/ fragments sent for SEM/ PROBE. WM = weakly magnetic, PM = paramagnetic NM = non magnetic

[1] definite Cr-rich chromite Cr_2O_3 > 60%. [2] possible Cr-rich chromite Cr_2O_3 >45%

[3] MgO = 2 - 18%, maybe as high as 28%

N.B.: Master Mineral Resource Services Ltd. is not responsible for the choice, supervision and results of the SEM/microprobe

	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET
SiO2	38.25	38.56	38.47	38.82	38.07
TiO2	0.07	0.22	0.07	0.09	0.17
Al2O3	21.80	21.87	22.13	22.49	22.07
Cr2O3	0.02	0.12	0.00	0.01	0.10
FeO	26.54	25.49	26.92	23.59	25.83
MgO	7.19	7.69	9.10	10.78	8.64
MnO	0.30	0.36	0.56	0.54	0.33
CaO	5.68	5.78	2.24	2.93	4.20
Na2O	0.00	0.00	0.00	0.00	0.01
Sum	99.85	100.09	99.49	99.25	99.42

	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET
SiO2	39.25	39.30	38.89	38.70	38.65
TiO2	0.05	0.13	1.07	0.24	0.15
Al2O3	22.62	22.22	20.22	22.11	21.80
Cr2O3	0.18	0.00	0.07	0.08	0.04
FeO	22.19	20.03	3.97	22.99	23.56
MgO	13.10	11.24	0.05	8.69	8.80
MnO	0.26	0.52	0.44	0.35	0.52
CaO	1.88	5.75	34.36	6.04	5.39
Na2O	0.00	0.02	0.00	0.00	0.01
Sum	99.53	99.21	99.07	99.20	98.92

	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET	93-168-17 1329-J76 GARNET
SiO2	38.64	39.48	38.86
TiO2	0.12	0.07	0.17
Al2O3	22.01	22.61	22.54
Cr2O3	0.07	0.06	0.07
FeO	24.09	22.43	23.22
MgO	8.84	12.83	8.84
MnO	0.34	0.39	0.46
CaO	4.87	1.66	6.02
Na2O	0.00	0.00	0.00
Sum	98.98	99.53	100.18