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PROPERTY EVALUATION, ILE BIZARD CLAIMS

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PROPERTY EVALUATION

ILE BIZARD CLAIMS

Ile Bizard, Province of Quebec

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February 1993

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1.0 INTRODUCTION

Referred to in past literature as Pain de Sucre, or simply Ile Bizard, the Sugarloaf Hill kimberlite intrusion and accompanying diatreme breccia are located 25 kilometres due west of downtown Montréal. The four claims covering it comprise a total area of about 138 hectares. Most of the property is underlain by flat-lying, early Paleozoic sedimetary rocks. The diatreme breccia is a rounded pipe-like intrusion forming a prominent topographic high (Sugarloaf Hill) in the north-central part of the claims. The kimberlite intrusion is an elongated body stretching northward from the east side of the hill. Both are closely related in age and origin to the Monteregian Hills (Mount Royal, Mount Oka, etc.).

The Sugarloaf Hill occurence is one of the earliest recognized kimberlites in Canada. It was rediscovered and petrologically classified as a kimberlite by McGill University geologists in 1966. Follow-up exploration work in 1967-68 on the kimberlite yielded 10 micro-diamonds. In a subsequent sample taken in 1978, two small diamonds, one of which was a perfect octahedron weighing 0.15 ct., were found. No further work was undertaken until the present claims were staked in September 1992.

Two other diatreme breccias occur in the southwestern portion of the island. The most extensive crosses lot 150 and continues westward onto lot 4. It was bulk sampled in 1968 with negative results. The other is a small occurrence on lot 152 near the shore of Lac des Deux Montagnes.

Two groups of claims cover these two separate areas - the four (4) Sugarloaf Hill claims, and the nine (9) southwest area claims. This report describes each of these properties, their potential, and concludes with recommendations for a two phase work program, with a third phase pending results from the first two phases.

Estimated costs of proposed Phase I work are $35,800.00. Estimated costs of proposed Phase II work are $69,300.00. With good results from Phase I and II, a third phase would be required at an estimated cost of $180,000.00

2.0 LOCATION, ACCESS AND PROPERTY DESCRIPTION

The Sugarloaf Hill Property is situated near the northwest shore of Ile Bizard near Lac des Deux Montagnes and is 25 kilometres due west of downtown Montréal (see Fig. 2). It is jurisdictionally in the Seigneury of Ile Bizard, Parish of St-Raphael, in Robert Baldwin County. Consequent to the September 13 staking of the Sugarloaf Hill claims, this portion of Ile Bizard was annexed to the Montréal Urban Community.

The Sugarloaf Hill Property consists of four (4) contiguous claims (see Fig. 3) as follows:

Claim 5031008;	Lot 132;	71 hectares
Claim 5031009;	Lot 131;	23 hectares
Claim 5031010;	Lot 130;	22 hectares
Claim 5030966;	Lot 129;	22 hectares

Map coordinates are 73°53'30" west longitude and 45°29'30" north latitude.

Access to the Sugarloaf Hill property can be gained by Chemin de l'Église, which transects the centre of Ile Bizard and forms the east property boundary, and by Chemin Bord du Lac, which parallels the shore of the island and crosses the northwest portions of the four claims. Two residential streets access the lakeshore and respectively cut across the diatreme breccia (Terrasse Pagé) and over the kimberlite (Terrasse Martin).

The southwest claims consist of nine (9) contiguous claims (Fig. 2) as follows:

Claim 5098027;	Lot 2	33 hectares (approx.)
Claim 5098026;	Lot 3	20 hectares (approx.)
Claim 5098024;	Lot 152	25 hectares (approx.)
Claim 5098012;	Lot 4	31 hectares (approx.)
Claim 5098023;	Lot 151	17 hectares (approx.)
Claim 5098013;	Lot 150	7 hectares (approx.)
Claim 5098014;	Lot 11	3 hectares (approx.)
Claim 5098015;	Lot 10	4 hectares (approx.)
Claim 5098016;	Lot 12	37 hectares (approx.)

Access to the southwest claims can be gained by Chemin Bord du Lac in the north or via Chemin Cherrier and Montée Wilson.

With the exception of the Sugarloaf Hill diatreme, the topography is fairly flat and rises gently towards the centre of the island. The diatreme is a steep - sided hill which rises 20m. above the surroundings. The shoreline along Lac des Deux Montagnes is irregular, and has been extensively altered with landfill, but was, at one time, low and swampy.

Human activity has extensively altered the landscape on much of the Sugarloaf Hill Property. Surface rights are 100% privately held. The lakeshore is solidly residential. South of Chemin Bord du Lac a new golf course is under construction. The south boundary is on the Royal Montreal Golf Course. However, the surface area of the diatreme and kimberlite is largely still open (although privately owned). An exploration program on them would be somewhat inhibited by surface rights holders, but would not be seriously impaired.

3.0 PREVIOUS WORK

1) In 1955 inclinometer and scintillometer surveys were conducted on the southwest portion of Ile Bizard in conjuction with similar work across the lake on the Oka Intrusive Complex. The target was niobium and columbium mineralization analogous to that at Oka.

2) In 1966 four McGill University geology students sampled and identified the characteristic suite of kimberlite minerals - pyrope, ilmenite, and chrome diopside - and were, in fact, the first people to identifty it as a kimberlite. Previous geologists - Harvie (1910), Grimes - Graeme (1935) and Clark (1952) - had described the Sugarloaf Hill intrusives but had not identified the kimberlite.

3) Much of the island was staked by the McGill people and then optioned to the Southern Exploration and Development Corporation in 1967.

4) The Canadian Rock Company Ltd., a Canadian subsidiary of DeBeers Consolidated Mines Ltd., of South Africa, acquired an option to buy the property from Southern in 1967. The following work program was carried out in 1968 fulfilling part of their option agreement:

   a) An airborne magnetometer survey was completed over Ile Bizard and halfway across Lac des Deux Montagnes. Flight line spacings were 1/8 mile. The fluxgate magnetometer was towed in a bird at approximately 100' altitude by helicopter.

   b) A ground magnetometer survey covered both claim groups. It was found that the Sugarloaf kimberlite showed a greater magnetic susceptibility than the diatreme breccia. Magnetic signatures similar to that over the known kimberlite were present farther south on the claim group (south of Chemin Bord du Lac), as well as one located a couple of hundred metres into Lac des Deux Montagnes. An extensive magnetic high associated with a diatreme breccia crossing Montée Wilson on lots 4 and 150 was located on the southwest claims.

c) A 29 cu. yd. sample was taken from the Sugarloaf kimberlite. Another sample of the same size was taken from the diatreme on lots 4 and 150 on the southwest claims. These samples were crushed and concentrated by hand. The heavy mineral concentrates were examined for diamonds at the Central Metallurgical Laboratory and the Diamond Research Laboratory in Johannesburg, South Africa. The Sugarloaf kimberlite concentrate yielded ten microdiamonds having a total weight of 0.0605 carat. Five of these are in the National Mineral Collection in Ottawa. This represents the first discovery of diamonds from a bedrock source in Canada. Further work was done by the Canadian Rock Company Ltd. on the Sugarloaf kimberlite but any records of it were kept private and confidential by them. No diamonds were recovered from the southwest claims sample.

d) In 1969, Southern carried out a ground magnetometer survey over the western part of Ile Bizard where two other "diatremes" outcrop. The small diatreme outocrop found on lot 152 was thought to be just a large boulder transported southwestward by glacier from Sugarloaf Hill. The more extensive diatreme breccia on lots 4 and 150 is very similar to the Sugarloaf Hill breccia - however, an associated kimberlite has not yet been found with it.

e) The Canadian Rock Company Ltd. dropped the option in late 1969.

5) The properties were restaked in 1971 by a Mr. Wiggett - one of the McGill geology students. A ground magnetometer survey was carried out which indicated several anomalies which were previously undetected or did not correspond with previously detected anomalies. The recommendations of the geologist in charge were not carried out and the claims were abandoned.

6) In April, 1977, Mr. R. Plourde restaked the same claims. In May 1978 a 10 pound sample was taken from the kimberlite. In this sample two small diamonds were found, one of which weighed 0.15 carat and is a perfect octahedron (J.R. Frédéric, personal communication). These two small diamonds are in the possession of Mr. Plourde. For several years they were displayed at the Gemmological Laboratory on Place d'Armes in old Montréal.

7) In early 1979 a 150 pound sample was taken by Mr. Plourde - this sample was comprised of nine smaller samples from "kimberlitic material" on Ile Bizard. No diamonds were found in this sample. The claims were allowed to lapse.

8) No further work was done until the present claims were staked in September, 1992.

4.0 REGIONAL GEOLOGY

The Ile Bizard region is in the central part of the St-Lawrences Lowlands. The geology of the St-Lawrence Lowlands as described by Globensky (1987) and Clark (1972) is predominantly a succession of gently dipping to flat-lying Cambro-Ordovician sediments. From the Montreal area south, these sediments are slightly compressed into a series of gently-dipping, SW-striking synclines and anticlines. The sediments are composed of Cambrian sandstones and conglomerates of the Potsdam Group which succeed upwards into dolomites and minor sandstones of the lower Ordovician Beekmantown Group. Overlying these are the limestones, shales, and sandstones of the Chazy Group.

The regional tectonic history is of primary importance in the context of the later intrusion by rocks of alkaline and kimberlitic compositions. The sediments of the St-Lawrence Lowlands have filled in a large scale NE-SW trending crustal extension zone called the St-Lawrence Lowlands Half-Graben. This is the major structural feature of the region. It formed in the late PreCambrian and was active to the end of the Ordovician. The second major tectonic feature (which is probably most important in the present context) is formation of the E-W trending Ottawa-Bonnechère Graben which formed subsequent to the St-Lawrence Half-Graben.

This E-W trending graben probably controlled the intrusion of the much younger Monteregian Hills which occurred in the early Cretaceous (95 to 115 million years ago). The Monteregian Hills are an east-west trending series of differentiated alkaline complexes which extends from St-André Est (west of Oka) to the Québec-Maine border. There are 10 major plutons and 100 or more associated minor intrusives such as Sugarloaf Hill. The intrusions range in composition from gabbroic in the east (Mount Megantic) to nepheline-rich in the west (Mount Oka), with at least two of them of kimberlitic composition (Sugarloaf Hill and Ile Ste-Hélène). A series of E-W trending faults, including the Ile Bizard Fault, occur in the Montréal region. These are thought to

be related to a local reactivation of the older Ottawa-Bonnechère Graben possibly caused by the Monteregian intrusions

5.0 PROPERTY GEOLOGY

5.1 SUGARLOAF HILL PROPERTY

Beekmantown Group dolomites underly the western third of Ile Bizard and extend onto the west portion of the claim group. Chazy Group (Laval Formation) fossiliferous limestones underly most of the property and the central third of the island. These two units may have a total thickness of 350 metres. They are underlain by Potsdam Group sandstones and conglomerates with an estimated thickness of 500 metres. Beneath these sediments is a great (unestimated) thickness of PreCambrian gneisses and schists which were deformed during the Grenvillian Orogeny and a further undetermined thickness of PreCambrian crust.

This entire succession of rocks is represented by fragments in the Sugarloaf Hill diatreme breccia. The surficial expression of the diatreme is an oval shaped hill about 100m. (in a NE sense) by 50m (in a NW sense), topped by a 20m high steep-sided hill near the east side (see Fig 3). The diatreme breccia consists almost entirely of fragments. The fragments are representative of the entire succession of rocks described above (dolomite, limestone, shale, sandstone (quartzite), conglomerate, gneisses, schists, etc.). The fragments become successively less angular and more rounded depending upon the depth of origin. They range in size from sub-centimetre size to almost a metre, and have bleached rims. The matrix is of alnoitic composition.

The kimberlite is an elongate dyke-like body extending north from the east side of the diatreme. The contacts with enclosing sediments are brecciated and quite irregular. The known strike length of the kimberlite is 60m. It is described as a fissure intrusion (Marchand, 1970) of kimberlitic composition. It contains angular to rounded fragments of country rock and numerous ultramafic nodules (websterite, lherzolite). Compositionally made up mainly of an Fe-poor clear phlogopite, serpentine, calcite, olivine, and augite, plus magnetite, perovskite, apatite, chrome spinel, pyrope and hydrogrossular garnets, and rutile, the intrusion probably occurred along an opening produced when the adjacent diatreme formed. Garnets occur in the centres of the ultramafic nodules. Spinel/pyrope reaction rims indicate formation at pressures insufficient to result in diamond formation (Dr. D. Francis, personal communication).

The kimberlite intrusion has been age-dated at 117 m.y. coinciding with the earliest phase of Monteregian intrusive activity.

5.2 THE SOUTHWEST CLAIMS (see Fig. 5)

Two occurrences of diatreme breccia similar to that at Sugarloaf Hill are located on the southwest claims. One of these is located 200 m. due west of the right angle corner where Chemin bord du Lac and Montée Wilson meet. It consists of "large blocks of breccia in a pasture ... no definite exposures" (Clark, 1972). It could be very near to a subcropping breccia or could be glacially - transported blocks from Sugarloaf Hill. There is no associated magnetic high.

The other is a low ridge (a 2m. rise) striking southwesterly across Montée Wilson on lots 4 and 150. The rise is caused by a diatreme breccia which extends east and west of the road with a total estimated strike length of almost 200m. Several intense magnetic highs in an arcuate trend are associated with the diatreme. Although it appears to be compositionally very similar to Sugarloaf Hill, no known petrographic work exists and it has not been classified. It is undoubtedly of similar age and origin to Sugarloaf Hill and may stem from the same intrusive at depth.

6.0 ECONOMIC GEOLOGY AND POTENTIAL

6.1 Controversial Issues

Three issues of possible controversry have occurred with respect to the diamond potential of the Ile Bizard "kimberlite". The first is the origin of the 10 microdiamonds found in the 1968 bulk test by DeBeers (Canadian Rock Co. Ltd.). It has been suggested that the microdiamonds may have originated from another source and were a contaminant in the test plant in Johannesburg. Further testing on the microdiamonds themselves, ostensibly, indicated that they were not from any recent previous source to have been tested in that facility. Therefore, it must be accepted that the microdiamonds were from Ile Bizard.

The second issue in doubt is the source of the two 1978 diamonds found by Mr. Plourde in a small sample taken from the kimberlite ("blue ground"). Mr. Plourde owned the claims, owned the testing laboratory, and participated in the test. He still possesses the two small diamonds. Mr. J. R. Frédéric, a professional geologist with over twenty years experience supervised every step of this test and confirms that it is valid. However, the obvious conflict of interest on the part of Mr. Plourde cannot be discounted.

The third issue was provoked by a 1989 report by S. F. Mineral Research Ltd. (Fipke et. al.). It is stated in this report that the Ile Bizard intrusive is not a kimberlite, but is instead an alnoite and therefore is not diamondiferous. However, subsequent conversations with G.S.C. geologists responsible for sampling Ile Bizard for this report revealed that the samples used were taken from the prominent diatreme breccia and not from the kimberlite (which is recessive), ie. the kimberlite was not sampled. McGill University geologists continue to call it kimberlite, as they have since 1966.

6.2 Sugarloaf Hill Kimberlite

In view of these issues, the Sugarloaf Hill kimberlite fissure filling must be considered to be of kimberlitic composition until judged otherwise, and it must be considered as probably diamondiferous, although not conclusively so. Detailled petrographic work done in 1968-69 indicates insufficient pressure conditions for diamond formation. Recent advances in this field with particular regard to kimberlites and related rocks have been quite important and this issue can be addressed with greater certainty in 1993.

A consideration of the economic potential must address firstly, the small size (approx. 60m x 10m) of the Sugarloaf Hill kimberlite, and secondly, thes chances of similar bodies occurring in the immediate vicinity of Sugarloaf Hill. The small size is not an overwhelming negative. Several examples of kimberlites which are rich in diamonds and which may outcrop as only veinlets or small dykes do exist. The best examples are from Liaoning Province in China. They are described as "blind ores, rich in diamonds of gem type". The #51 kimberlite pipe from Liaoning Province (see Fig. 6) bears a striking geological similarity to the Sugarloaf Hill case. An associated diatreme breccia occurs beside and separate from but obviously genetically related to the #51 kimberlite. The kimberlite is described as a "half-concealed pipe, which outcrops as veinlets". At a vertical depth of about 180m. the #51 kimberlite expands quite significantly and becomes "comparatively rich in diamonds". The larger, mineable widths persist to depths of over 500m.

6.3 Other Targets on the Sugarloaf Hill Property

The detailled ground magnetometer survey done by Southern Exploration and Dev. Corp. in early 1968 reveals several small magnetic features on the property, of similar size and intensity to those related to the known Sugarloaf Hill kimberlite on the east side of the diatreme breccia. No public record exists of drilling, stripping, or trenching on any of these other magnetic features. The

most interesting of these targets is a set of parallel magnetic highs just northwest of the diatreme. One of these is apparently due to a steel pipe, the cause of the other is unknown.

Several (6 or 7) magnetic highs occur south of Chemin Bord du Lac and west of Chemin de L'Église (on lots 129 to 132). Some of these may indicate linear geological features (faults ?). Cultural contamination is also cause for skepticism. However, further work is warranted on these in view of the clustering nature of kimberlitic intrusions.

An isolated magnetic anomaly occurs about 400m. into Lac des Deux Montagnes, northwest of the lot 130 shoreline. Again, no evidence that it has been tested exists in public reports.

The ultimate economic potential of the Sugarloaf Hill Property is that the kimberlite be proven diamondiferous and exploitable and additionally that one or more of the magnetic anomalies noted above be tested and demonstrated to be diamondiferous kimberlite(s) of sufficient size and grade to warrant exploitation.

6.4 Southwest Claims

The validity of the "breccia blocks" on lot 152 representing outcrop must be demonstrated before any substantial work can be justified in this area. No breccia blocks were seen by the author in this area, although recent excavation and construction may have covered them. A detailled magnetometer survey should be definitive here.

The diatreme breccia which crosses lots 4 and 150 and the associated intense magnetic highs represents a very encouraging geological situation. Certainly, the Canadian Rock Co. Ltd. did much more work in this area than is recorded, however, the results are unknown. The fact that a 29 cu. yd. test sample was taken here (as at Sugarloaf Hill) indicates the degree of encouragement which they had in this area. The potential for a situation similar to that at Sugarloaf Hill (diatreme breccia with associated diamondiferous? kimberlite fissure filling) is obvious. An exploration program with this model in mind will be recommended.

7.0 CONCLUSIONS

7.1 Sugarloaf Hill Property

In consideration of the controversial issues involved in the exploration history, in the potential of the Sugarloaf Hill kimberlite to be diamondiferous, and in advances in the understanding of kimberlites and diamond formation over the past twenty years, something of a fresh start should be made in the future exploration of it and the surrounding terrain.

The Sugarloaf Hill diatreme breccia and associated kimberlitic fissure filling are contemporaneous, deep-seated, ultramafic intrusives which originate from sub-crustal depths (deeper than 60 km.). Considering the advances in petrographic methods and instrumentation such as electron microscopy, it should be possible to ascertain whether the kimberlitic rock originated at pressure and temperature coincident with that of the diamond stability field.

Is the kimberlitic fissure filling diamondiferous? Even now, this question cannot be answered with certainty. Probably, the microdiamonds came from there, and possibly, the two larger diamonds also originated from there. However, the significant lingering doubts will not go away until a new test is done. A brand new bulk test must be taken and carefully processed and examined - as if no previous testing had ever been done.

If the Sugarloaf Hill kimberlite is proven to be diamondiferous in this test and/or if it is thought (following the appropriate geoscientific studies) to have originated from within or near the diamond stability field, then:

1) The Sugarloaf Hill kimberlite must be bulk tested in large quantity in order to determine grade.
2) The Sugarloaf Hill kimberlite must be drilled with large diameter core initially to depths of 500m., the tonnage and grade potential must be assessed and a preliminary feasibility study completed.
3) The outlying magnetic anomalies described above must be tested (preferably by diamond drill) and assessed on their individual merits and/or as contributors to a larger mining plan.

Future exploration done on the property will be restricted and possibly delayed by local residents and surface rights holders. It is feasible to do the recommended work, it just requires more time and patience.

7.2 Southwest Claims

There is good potential for a geological situation such as at Sugarloaf Hill to exist on the southwest claims, most obviously in the area of the known diatreme on lots 4 and 150. Approximately 80% of the area of these claims is open fields, making possible a less restricted work program. The best potential is not on the diatreme itself, where the previous non-diamondiferous 29 cu. yd. sample was taken, but around the periphery of it and coincident with a good magnetic response.

A blanket magnetic survey is recommended for the property - with detail (10m. centres) over anomalous areas including the "breccia blocks" in northern lot 152, and the diatreme area on lots 4 and 150. Drilling and sample testing for microdiamonds would follow; coupled with stripping (if allowed).

8.0 RECOMMENDATIONS

8.1 Exploration Programme

A two phase program is proposed to test the diamond-bearing potential of the two claim groups, with a third phase pending results from Phases I and II.

PHASE I

1) A re-compilation of all available geological and geophysical information on both groups onto conformably scaled maps is necessary preparatory work for future exploration.

2) An examination of the property and data by a recognized expert on diamond exploration is recommended.

3) A ground magnetometer survey using the GEM continuous readout system is recommended for the southwest claims. Half of this survey will be on 10 metre spacing detail over anomalous zones such as the area on lots 4 and 150. A grid will have to be laid out to cover the claims. This type of survey is possible on the southwest claims but not on the Sugarloaf Hill Property due to the combination of comparative ease of access (mainly fields as opposed to residences and golf courses) and comparative lack of cultural contamination. The GEM system should be effective in winnowing out cultural contamination to a large extent.

4) All samples and sample data, particularly Microprobe data, still available from the 1970 Marchand Thesis on ultramafic nodules in the Sugarloaf Hill kimberlite should be re-assessed in order to judge the validity of these data for accurately gauging pressure and temperature of formation with relation to the diamond stability field. Advances during the past twenty years in this field may have rendered these data obsolete, in which case, some new samples of the ultramafic nodules would have to be taken from the kimberlite while it is being sampled for diamonds (see below).

5) At this stage, it is recommended to re-expose the only accessible portion of the Sugarloaf Hill kimberlite. Two (2) one hundred (100 +) plus kilogram samples of selected material should be taken from the kimberlite. They should be shipped to separate laboratories and tested for diamond (& microdiamond) content by the caustic dissolution procedure. The sample area would have to be restored subsequently. Compensation will have to be made

to the surface rights holder. Sampling should be done by hand if possible. Due to local residents and special permitting it is desirable to avoid blasting at this early stage.

PHASE II

With the exception of the ground magnetometer survey results, Phase II work is not dependent upon Phase I results.

1) It is estimated that 1500 feet (450m.) of NQ (1.8" diameter drilling will be required on anomalous zones on the southwest claims following the completion of the ground mag survey. Most of this drilling will be inclined holes in the area of the diatreme breccia on lots 4 and 150. These will be inclined holes exploring for the existence of kimberlite.

2) There exist four (4) outside magnetic anomalies on the Sugarloaf Hill Property which are accessible (out of seven (7) total). Three are not accessible because they are in the middle of a golf course. It is recommended to drill two (2), of these with inclined, NQ size holes to test for the existence of kimberlite as cause for the magnetic anomalies. A total of 800' (250m.) is recommended.

PHASE III

Recommendations in Phase III will be dependent upon results from both Phase I and II.

1) If no other kimberlite bodies are found, it would be recommended to test the Sugarloaf Hill kimberlite with two (2) HQ diameter drill holes to depths of 1500' (460m) each. This drilling would be recommended pending results from the Phase I bulk test and pressure /temperature determinations.

2) If other kimberlites are located in Phase I and II, it would be necessary in Phase III to test them by large diameter core drilling and/or surface bulk sampling.

3) The kimberlite(s) to be tested by drilling and/or bulk sampling in Phase III would require sampling and testing for diamonds by the caustic dissolution process of a large (1000 to 2000 kg.) sample.

8.2 Cost Estimate

Phase I: $35,800.00

1)	re-compilation (2 weeks):	$ 3,000.00
2)	consulting (2 days following (1)):	2,000.00
3)	ground mag. on southwest claims, including grid layout: (2 weeks)	6,500.00
4)	McGill microprobe & sample data and/or microprobe analyses from fresh Sugarloaf kimberlite:	3,000.00
5)	(a) re-exposing and restoration of part of kimberlite:	2,000.00
	(b) taking two (2) 100+ kg. samples by hand:	2,500.00
	(c) testing by caustic dissolution for microdiamonds: ($350.00/8 kg sample - Lakefield Research quote) (2 labs to be used - Lakefield and Saskatchewan?)	12,000.00
	(d) compensation to surface rights holder:	1,500.00
	Total Phase I cost:	$32,500.00
	+ 10% contingency	3,300.00
	Total	**$35,800.00**

PHASE II: $69,300.00

1)	1500' NQ (1.8" diameter) drilling (all inclusive) on southwest claims: - includes supervision, logging, boxes, report.	$30,000.00
2)	800' NQ drilling (all inclusive) on Sugarloaf Hill Property outside mag anomalies:	16,000.00
3)	testing 300 kg. selected core samples " $350.00/8kg sample by caustic dissolution for diamonds	14,000.00
4)	compensation to surface rights holders	3,000.00

Total Phase II cost:	$63,000.00
+ 10% contingency	6,300.00
Total	**$69,300.00**

PHASE III: $180,000.00

Work to be done in Phase III will be entirely dependent upon results from the first two phases. It would likely include larger diameter (HQ - 2.5" diameter) drilling and/or a large bulk test on the best kimberlite indicated in Phases I & II. Total cost for Phase III work is projected at $180,000.00.

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10.0 CERTIFICATE OF QUALIFICATION

I, Christian Derosier, of the Municipality of Saint-Lazare, Province of Quebec, do hereby certify that :

1. I am a Senior Geologist with a business address at :
   1957, Montée Harwood, Saint-Lazare, J0P 1V0, Quebec.

2. I have graduated and obtained a D.Sc. degree in geological sciences at the University of Paris, France, in 1971.

   I have practiced my profession since that time and have worked for SNC inc. during ten years, Rio Algom Ltd from 1982 to 1986 and then as consulting geologist for my own Company and administrator for several junior mining companies.

3. I am a member of:
   The Canadian Institute of Mines and Metallurgy since 1976;
   The Prospectors and Developers Association of Canada since 1973,
   Quebec Geologists and Geophysicists Professional Association since 1976,
   Quebec Prospectors Association (President from 1985 to 1987)

4. I have no interest, either direct or indirect, in the properties described in the present report and I do not expect to receive any interest. I have no shares of Yank's Peak Ltd., or Strike Minerals Inc., nor do I expect to receive any interest in the securities those companies.

5. That the present report is based on study of data available on the properties, obtained from the owners, from the Governement files and Universities ' libraries.

6. This report is also based on my experience in the Montreal area, Ile Bizard and the intrusive complex. I have visited the present properties several times during the last ten years.

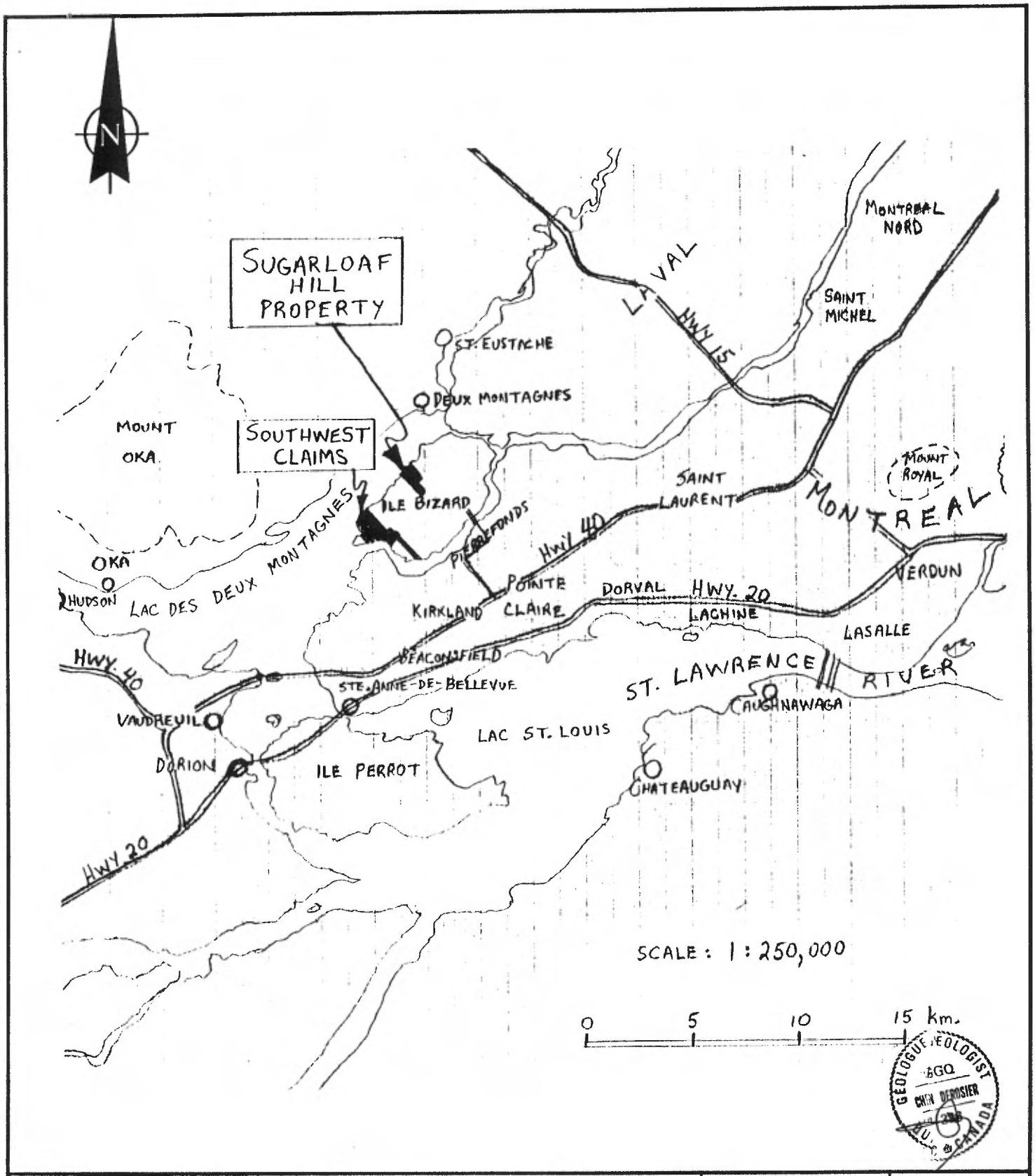
7. The writer consents to the use of this report in any filing statement of other documents required by the Regulatory Bodies of Canada .

Saint Lazare

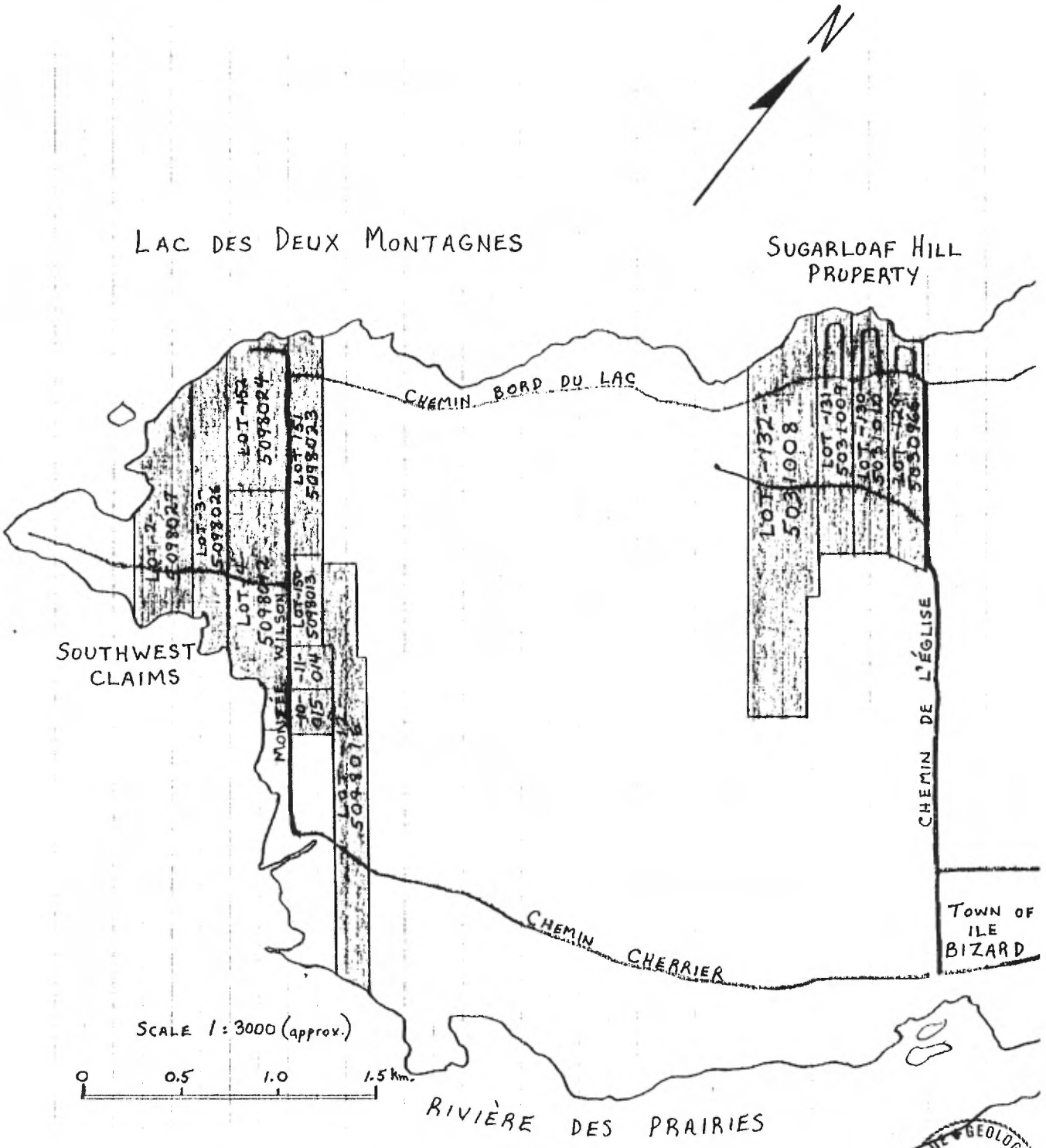
Dated: February 8, 1993

GEOLOGIST APGGQ CHRISTIAN DEROSIER N° 336 QUEBEC CANADA

CHRISTIAN DEROSIER
Senior Geologist, M.SC., D.Sc.

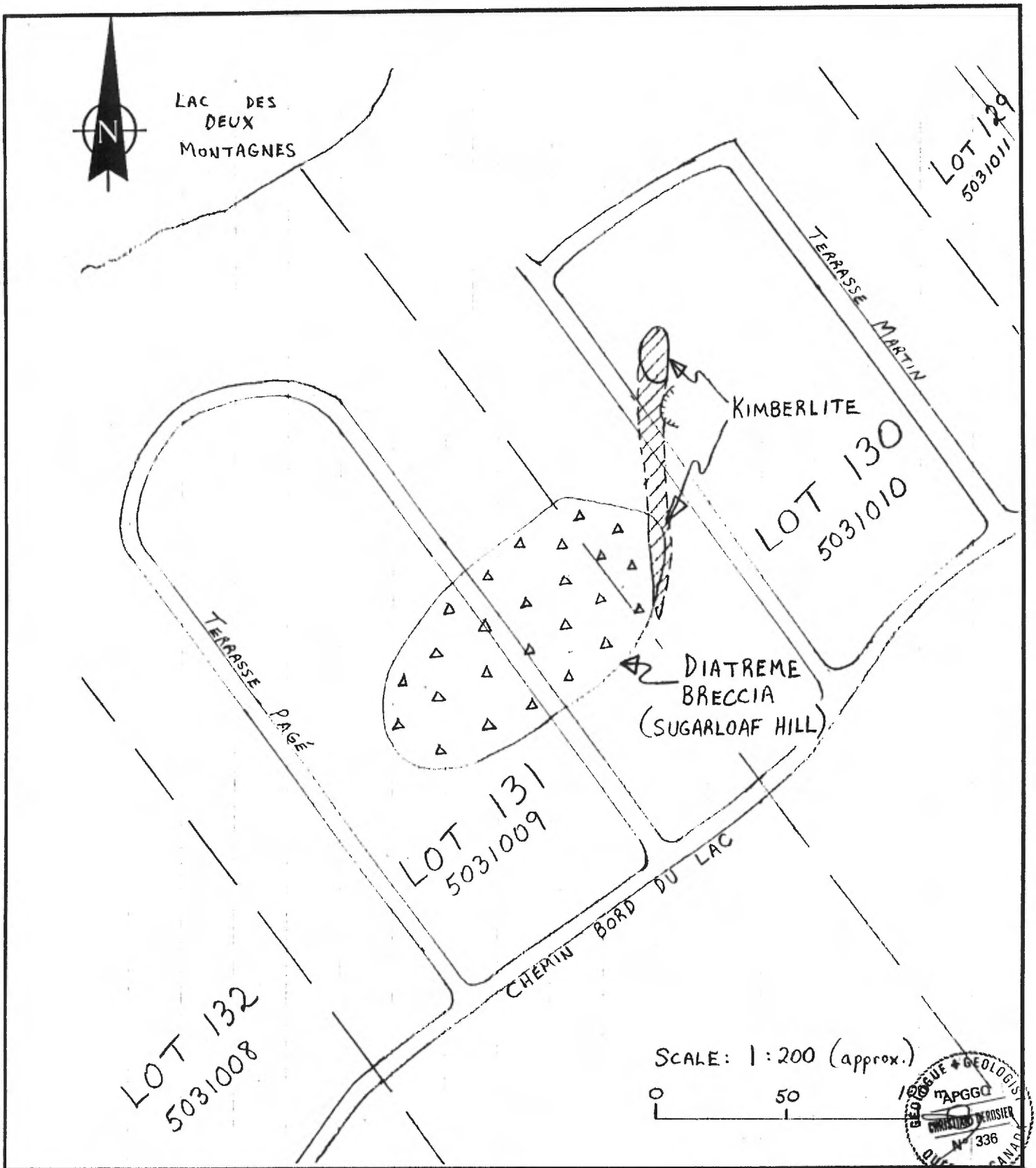


CLIENT: YANK'S PEAK RESOURCES LTD.	FAIT/ MADE C. DEROSIER	DATE Feb.1993	
PROJET/ PROJECT SUGARLOAF HILL PROPERTY	APPR.	SCALE/ ECHELLE 1: 250 000 approx	
LOCATION MAP AND ACCESS	CONTR. 93-92	SUBDIV. 0000	No 2

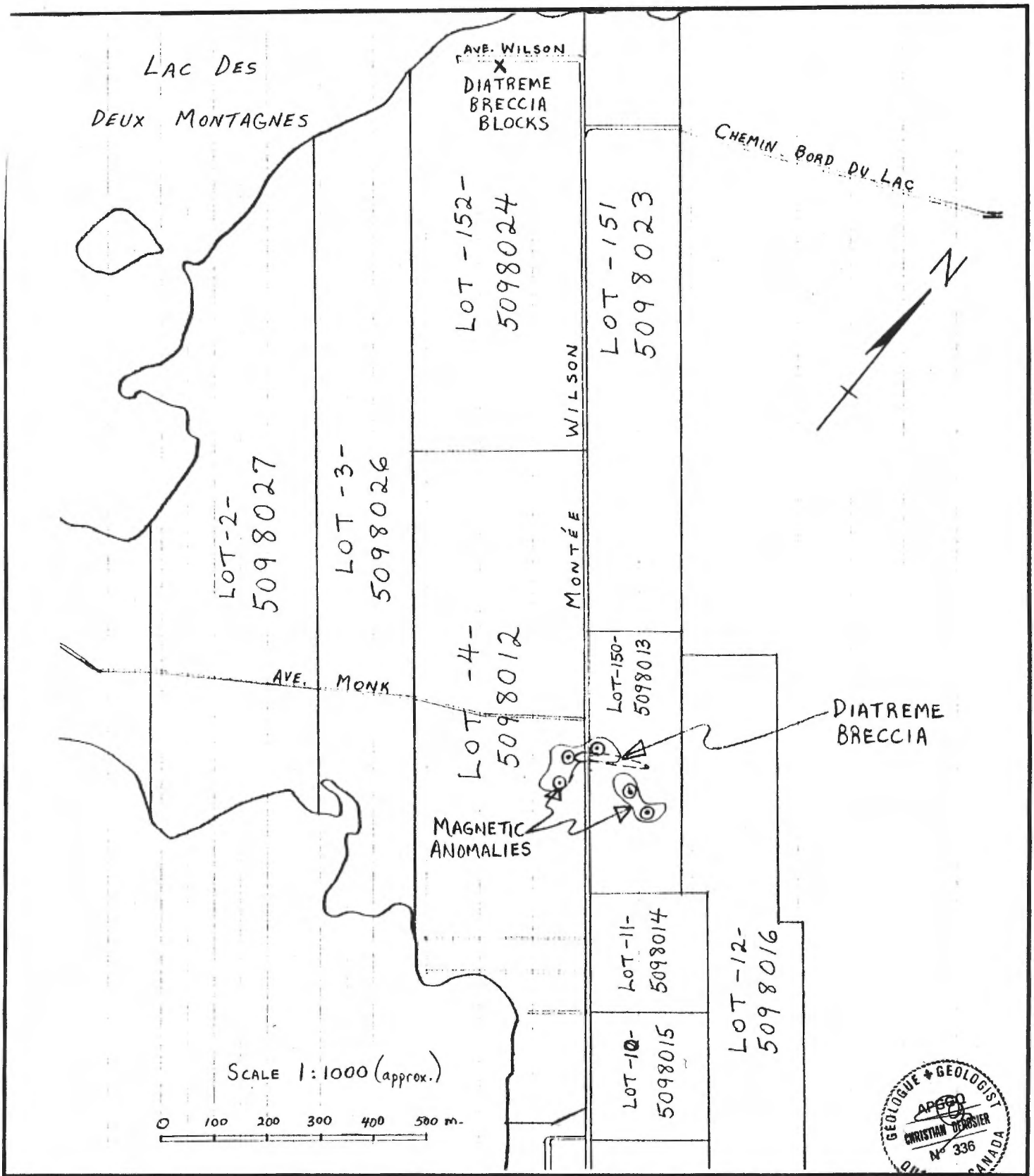


GÉOLOGUE ✦ GEOLOGIST APGGQ CHRISTIAN DEROSIER No 336 QUÉBEC ✦ CANADA

CLIENT: YANK'S PEAK RESOURCES LTD.	FAIT/ MADE C. DEROSIER	DATE Feb.1993	
PROJET/ PROJECT SUGARLOAF HILL PROPERTY	APPR.	SCALE/ ECHELLE 1: 3 000 approx.	
PROPERTY MAP	CONTR. 93-92	SUBDIV. 0000	No 3

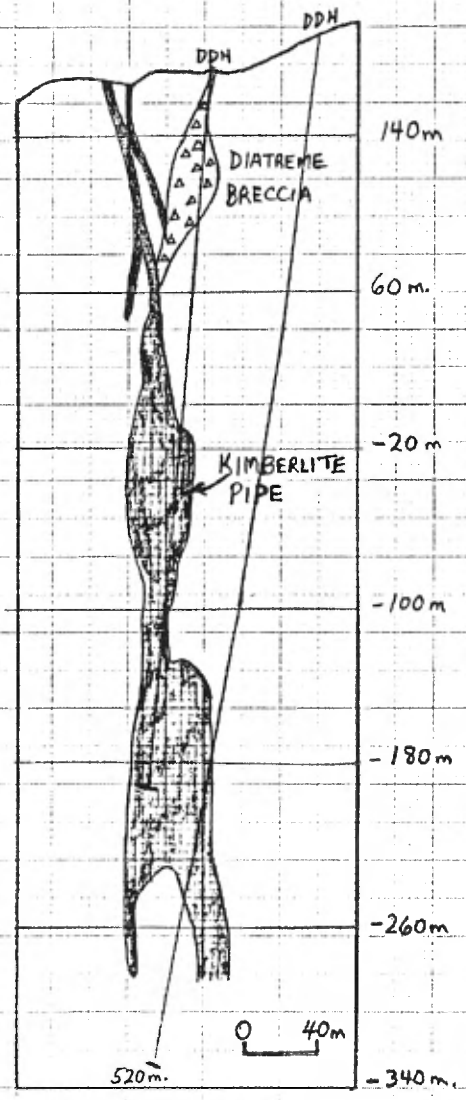


CLIENT: YANK'S PEAK RESOURCES LTD.	FAIT/ MADE C. DEROSIER	DATE Feb.1993	
PROJET/ PROJECT SUGARLOAF HILL PROPERTY	APPR.	SCALE/ ECHELLE 1: 200 approx	
GENERAL GEOLOGY AND LOCAL FEATURES AT SUGARLOAF HILL, ILE BIZARD	CONTR. 93-92	SUBDIV. 0000	No 4



GEOLOGUE ✦ GEOLOGIST
APGQ
CHRISTIAN DEROSIER
N° 336
QUÉBEC ✦ CANADA

CLIENT: YANK'S PEAK RESOURCES LTD.	FAIT/ MADE C. DEROSIER	DATE Feb.1993	
PROJET/ PROJECT SOUTHWEST PROPERTY	APPR.	SCALE/ ECHELLE 1: 1 000 approx.	
GENERAL GEOLOGY AND LOCAL FEATURES OF THE SOUTHWEST CLAIMS (ILE BIZARD)	CONTR. 93-92	SUBDIV. 0000	No 5



This figure demontrates similarities to the Ile Bizard Kimberlite-Diatreme breccia pair

Source S. Sue and L. Jimin (1989):
A geochemical method for the exploration of Kimberlite,
Geochem. Expl. (33),p. 188)

GEOLOGUE + GEOLOGIST APGGQ CHRISTIAN DEROSIER 336 QUEBEC CANADA

CLIENT: YANK'S PEAK RESOURCES LTD.	FAIT/ MADE J.D. CHARLTON	DATE Feb.1993	
PROJET/ PROJECT SUGARLOAF HILL PROPERTY	APPR.	SCALE/ ECHELLE As shown	
CROSS-SECTION OF No 51 KIMBERLITE PIPE, LIAONING PROVINCE, NORTHEASTERN CHINA	CONTR. 93-92	SUBDIV. 0000	No 6

INVOICE # 93-003

TO: YANK'S PEAK RESOURCES LTD.,
P.O. BOX 94586,
RICHMOND, BRITISH COLUMBIA
V6Y 2V6

ATTENTION: MR. FRANK ANDRUSKO

PROJECT: ILE BIZARD PROPERTY EVALUATION

WORK CHARGED:

1) Research, written report (incl. expenses)..... $3150.00
2) Preparation, qualification (C. Derosier)..... $ 500.00

TOTAL: $3650.00

Please make cheque payable to: Jack Charlton

$3150.00 paid to Jack Charlton → June 23/93

signed:

J.D.Charlton B.Sc.,FGAC

March 1, 1993

Report

ON THE DIAMOND POTENTIAL THREE SAMPLES FROM THE ILE BIZARD PARAKIMBERLITE, QUEBEC

By

John J Gurney and Paul Zweistra

Prepared for:

Orex Laboratories Ltd
6331 Beresford St.
Burnaby, BC
CANADA
V5E 1B3

25 October 1993

Introduction
Three samples from the Ile Bizard "parakimberlite" were received in September for the selection of potential kimberlitic indicators and their subsequent analyses and interpretation. The samples were processed in October 1993 as outlined below.

Laboratory Procedure
The samples are weighed on arrival and the various fractions, beginning with the KP fraction, examined by an experienced analyst under a binocular microscope to select a representative number of kimberlitic indicators for microprobe analyses.

Details of sample weights and indicators recovered are given in Tables 1 and 2, respectively. Note that all of the fractions submitted were examined due to the absence / scarcity of indicators.

Table 1: Breakdown of Sample Weights

Sample Number	Weight KN Fraction (g)	Weight K+600 Fraction (g)	Weight KP Fraction (g)
SGL-01	1.87	122.05	575.00
SGL-02	3.31	156.51	585.00
SGL-03	0.85	90.21	245.00

Breakdown of Indicators Recovered

Sample Number	Fraction	Garnets	Ilmenites	Chromites	Chrome Diopside
SGL-01	KN	7			
	K+600	1		1	6
	KP				5
SGL-02	K+600	6	2	1	2
	KP		18	1	10
SGL-03	K+600			>55	3

INDICATOR MINERAL CHEMISTRY

Full analyses and the relevant XY plots are appended. Analyses were undertaken on the Cameca Camebax electron microprobe at the University of Cape Town.

Seven of the garnets from sample SGL-01 are unidentified phases. One garnet from sample SGL-02 is non-kimberlitic. All of the mantle derived ("kimberlitic") **garnets** (Fig. 1) are Cr-poor varieties of probable websteritic parageneses. The **chromites** define a signature typical of barren parakimberlitic sources (Fig. 2). One of the **ilmenites** analysed is non-kimberlitic, the remainder having compositions consistent with fragmented kimberlitic megacrysts. The **clinopyroxenes** have compositions consistent with derivation from the mantle.

Overall, the absence of diamond inclusion type garnets, chromites and clinopyroxenes indicates that the Ile Bizard locality is **barren of diamonds.** This is **reinforced** by the compositions of the garnets and chromites recovered and the scarcity of garnets.

Ile Bizard is not a kimberlite but a hybrid alnoite-melilitite ("parakimberlite"). Such rocks are overwhelmingly barren, and when rarely diamondiferous, contain only traces of diamonds.

JJ Gurney
25 October 1993

P Zweistra
25 October 1993

SCIENTIFIC SERVICES MICROPROBE ANALYSES

OREX LABS (#93/005) FULL ANALYSES

	SAMPLE NUMBER	SIO2	TIO2	AL2O3	CR2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL
1	SGL-01-KN GT/1	32.60	nd	nd	nd	nd	nd	nd	nd			32.60
2	SGL-01-KN GT/2	33.36	nd	nd	nd	nd	nd	nd	nd			33.36
3	SGL-01-KN GT/3	33.35	nd	nd	nd	nd	nd	nd	nd			33.35
4	SLG-01-KN GT/4	33.09	nd	nd	nd	nd	nd	nd	nd			33.09
5	SGL-01-KN GT/5	32.78	nd	nd	nd	nd	nd	nd	nd			32.78
6	SGL-01-KN GT/6	33.01	nd	nd	nd	nd	nd	nd	nd			33.01
7	SGL-01-KN GT/7	32.65	nd	nd	nd	nd	nd	nd	nd			32.65
8	SGL-01-K+600-1	40.79	nd	22.56	1.10	9.49	0.36	18.84	5.09			98.23
9	SGL-01-K+600-2	53.45	0.15	3.33	1.23	3.31	nd	15.78	19.87	1.87	nd	98.99
10	SGL-01-K+600-3	53.30	0.11	2.67	1.10	3.45	nd	16.08	19.92	1.73	nd	98.36
11	SGL-01-K+600-4	55.42	0.15	2.85	1.07	3.48	nd	16.53	19.91	1.77	nd	101.18
12	SGL-01-K+600-5	54.23	0.12	2.89	1.09	3.44	nd	16.23	19.88	1.84	nd	99.72
13	SGL-01-K+600-6	55.17	0.11	0.41	1.60	3.33	nd	16.34	22.00	1.42	nd	100.38
14	SGL-01-K+600-7	54.65	0.14	0.93	2.96	4.47	nd	15.03	19.23	2.65	nd	100.06
15	SGL-01-KP CD/1	54.77	0.12	2.27	1.75	3.85	nd	15.42	19.31	2.45	nd	99.94
16	SGL-01-KP CD/2	55.08	0.12	0.95	3.11	4.09	0.17	15.87	19.44	2.12	nd	100.95
17	SGL-01-KP CD/3	54.48	0.15	1.27	2.85	4.46	0.16	14.95	18.83	2.61	nd	99.76
18	SGL-01-KP CD/4	53.78	0.23	2.88	2.78	3.06	nd	15.50	19.37	1.97	nd	99.57
19	SGL-01-KP CD/5	53.98	0.14	1.05	2.11	4.54	nd	15.60	19.55	1.87	nd	98.84
20	SGL-02-K CD/1	54.83	0.13	1.19	1.75	3.45	nd	16.77	20.63	1.38	nd	100.13
21	SGL-02-K CD/2	54.74	0.17	1.19	2.79	4.47	nd	15.41	19.41	2.27	nd	100.45
22	SGL-02-KP CD/3	54.52	nd	2.36	2.37	3.08	nd	15.88	19.72	2.01	nd	99.94
23	SGL-02-KP CD/4	54.89	nd	0.87	2.71	3.50	nd	16.28	19.99	1.69	nd	99.93
24	SGL-02-KP CD/5	54.63	0.21	2.34	3.06	2.90	nd	15.85	19.24	2.18	nd	100.41
25	SGL-02-KP CD/6	54.71	nd	1.13	2.34	3.48	0.16	16.22	20.09	1.65	nd	99.78
26	SGL-02-KP CD/7	54.69	0.13	0.72	2.84	4.45	nd	15.01	19.25	2.50	nd	99.59
27	SGL-02-KP CD/8	54.18	0.15	2.26	1.63	3.60	0.17	15.75	19.37	2.10	nd	99.21
28	SGL-02-KP CD/9	54.80	0.19	1.14	2.75	4.95	0.20	15.08	18.88	2.44	nd	100.43
29	SGL-02-KP CD/10	54.75	0.15	1.76	3.13	3.88	nd	15.10	18.76	2.51	nd	100.04
30	SGL-02-KP CD/11	54.97	0.18	1.51	2.08	3.87	nd	16.18	19.93	1.73	nd	100.45
31	SGL-02-KP CD/12	54.36	0.13	0.91	2.44	4.53	nd	15.62	19.38	2.14	nd	99.51
32	SGL-03-K+600-1	54.63	nd	2.17	3.76	2.83	nd	15.18	18.24	2.68	nd	99.49
33	SGL-03-K+600-2	54.98	nd	2.11	2.29	3.00	nd	15.90	19.60	2.06	nd	99.94
34	SGL-03-K+600-3	53.37	0.15	3.99	2.09	2.91	nd	16.05	20.00	1.54	nd	100.10
35	SGL-03-K+600-4	nd	2.96	23.68	33.25	26.63	nd	13.87	nd			100.39
36	SGL-03-K+600-5	nd	0.54	17.38	48.49	18.25	0.21	14.20	nd			99.07
37	SGL-03-KP CR/1	nd	1.24	26.28	36.63	19.13	nd	15.70	nd			98.98
38	SGL-03-KP CR/2	nd	1.42	29.37	32.86	18.77	nd	16.40	nd			98.82
39	SGL-03-KP CR/3	nd	3.44	24.75	30.38	25.49	nd	14.44	nd			98.50
40	SGL-03-KP CR/4	nd	2.53	26.54	31.51	23.50	nd	15.03	nd			99.11
41	SGL-03-KP CR/5	nd	3.03	26.11	30.13	24.84	nd	14.61	nd			98.72
42	SGL-03-KP CR/6	nd	1.35	29.78	33.36	17.84	nd	16.67	nd			99.00
43	SGL-03-CR/7	nd	2.54	27.08	30.27	23.88	nd	14.85	nd			98.62
44	SGL-03-KP CR/8	nd	1.34	27.98	33.12	21.37	nd	15.22	nd			99.03
45	SGL-03-KP CR/9	nd	1.28	26.70	34.52	20.67	nd	15.05	nd			98.22
46	SGL-03-KP CR/10	nd	1.36	28.97	33.98	18.13	nd	17.08	nd			99.52
47	SGL-03-KP CR/11	nd	4.24	22.99	29.71	28.41	nd	13.65	nd			99.00
48	SGL-03-KP CR/12	nd	2.24	27.72	30.75	23.59	nd	14.62	nd			98.92
49	SGL-03-KP CR/13	nd	1.25	27.19	35.91	18.60	nd	15.95	nd			98.90
50	SGL-03-KP CR/14	nd	2.46	26.84	31.43	23.54	nd	14.68	nd			98.95
51	SGL-03-KP CR/15	nd	1.53	27.62	31.99	22.56	nd	14.28	nd			97.98
52	SGL-03-KP CR/16	nd	1.48	28.65	33.37	19.65	nd	16.04	nd			99.19
53	SGL-03-KP CR/17	nd	3.96	23.86	29.70	27.77	0.23	13.92	nd			99.44
54	SGL-03-KP CR/18	nd	2.73	25.89	30.81	25.23	0.22	14.35	nd			99.23
55	SGL-03-KP CR/19	nd	2.83	26.84	29.68	24.60	nd	14.54	nd			98.49
56	SGL-03-KP CR/20	nd	1.51	27.18	32.95	23.18	nd	14.51	nd			99.33
57	SGL-03-KP CR/21	nd	1.41	28.31	32.71	21.61	nd	15.47	nd			99.51
58	SGL-03-KP CR/22	nd	1.37	28.51	33.03	20.80	nd	15.57	nd			99.28
59	SGL-03-KP CR/23	nd	4.87	19.76	30.04	31.29	nd	12.70	nd			98.66
60	SGL-03-KP CR/24	nd	4.01	24.41	29.70	26.83	nd	14.39	nd			99.34

	SAMPLE NUMBER	SIO2	TIO2	AL2O3	CR2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL
61	SGL-03-KP CR/25	nd	2.66	25.28	30.68	23.21	nd	15.28	nd			97.11
62	SGL-03-KP CR/26	nd	1.25	26.94	35.80	19.03	nd	15.86	nd			98.88
63	SGL-03-KP CR/27	nd	1.34	26.37	35.45	20.22	0.20	15.44	nd			99.02
64	SGL-03-KP CR/28	nd	48.69	0.74	0.18	39.96	0.30	9.03	nd			98.90
65	SGL-03-KP CR/29	nd	0.79	26.70	36.94	19.43	nd	15.31	nd			99.17
66	SGL-03-KP CR/30	nd	1.38	26.69	36.03	19.68	0.21	15.16	nd			99.15
67	SGL-03-KP CR/31	nd	1.71	27.57	33.73	19.80	nd	15.41	nd			98.22
68	SGL-03-KP CR/32	nd	1.45	26.20	35.86	20.32	nd	15.29	nd			99.12
69	SGL-03-KP CR/33	nd	1.67	29.96	29.96	22.76	nd	14.91	nd			99.26
70	SGL-03-KP CR/34	nd	3.77	24.46	29.30	26.57	nd	14.17	nd			98.27
71	SGL-03-KP CR/35	nd	1.54	25.48	35.57	21.79	nd	14.62	nd			99.00
72	SGL-03-KP CR/36	nd	1.39	26.33	35.77	19.37	nd	15.86	nd			98.72
73	SGL-03-KP CR/37	nd	1.47	28.73	33.88	18.60	0.23	16.35	nd			99.26
74	SGL-03-KP CR/38	nd	1.89	25.00	34.19	23.48	nd	14.29	nd			98.85
75	SGL-03-KP CR/39	nd	1.45	29.90	32.04	18.96	nd	16.40	nd			98.75
76	SGL-03-KP CR/40	nd	1.86	30.17	29.87	21.16	nd	15.89	nd			98.95
77	SGL-03-KP CR/41	nd	1.47	27.95	34.14	19.30	nd	15.83	nd			98.69
78	SGL-03-KP CR/42	nd	1.46	29.21	33.23	18.36	nd	16.69	nd			98.95
79	SGL-03-KP CR/43	nd	3.40	23.89	30.46	27.11	0.23	13.72	nd			98.81
80	SGL-03-KP CR/44	nd	1.44	29.99	31.62	19.57	nd	15.95	nd			98.57
81	SGL-03-KP CR/45	nd	3.38	24.93	30.94	25.37	nd	14.36	nd			98.98
82	SGL-03-KP CR/46	nd	0.86	25.61	38.50	18.70	nd	15.44	nd			99.11
83	SGL-03-KP CR/47	nd	2.90	26.21	29.50	26.36	nd	14.21	nd			99.18
84	SGL-03-KP CR/49	nd	3.77	22.92	31.20	26.44	0.21	14.10	nd			98.64
85	SGL-03-KP CR/50	nd	1.24	29.40	33.57	17.41	nd	16.68	nd			98.30
86	SGL-02-KP IL/11	nd	0.60	42.12	19.36	19.09	nd	17.07	nd			98.24
87	SGL-02-KP IL/12	nd	49.55	0.64	0.25	39.33	0.24	8.48	nd			98.49
88	SGL-02-KP IL/13	nd	47.42	0.28	0.15	42.91	0.31	7.25	nd			98.32
89	SGL-02-KP IL/14	nd	47.37	0.52	0.21	41.80	0.25	8.05	nd			98.20
90	SGL-02-KP IL/15	nd	47.54	0.56	0.15	41.87	0.22	8.10	nd			98.44
91	SGL-02-KP IL/16	nd	47.26	0.64	nd	42.00	0.22	8.37	nd			98.49
92	SGL-02-KP IL/17	nd	48.34	0.70	0.24	40.89	0.29	8.67	nd			99.13
93	SGL-02-KP IL/18	nd	49.07	0.89	0.15	37.78	0.36	10.28	nd			98.53
94	SGL-02-KP IL/19	nd	49.12	0.77	0.18	39.70	0.23	9.40	nd			99.40
95	SGL-02-KP IL/20	nd	49.57	0.49	0.14	39.70	0.32	8.68	nd			98.90
96	SGL-02-KP IL/21	nd	49.46	0.48	0.20	39.78	0.27	8.89	nd			99.08
97	SGL-02-KP IL/22	nd	48.88	0.35	nd	40.20	0.28	8.25	nd			97.96
98	SGL-02-KP IL/23	nd	48.36	0.84	nd	41.81	0.29	7.58	nd			98.88
99	SGL-02-KP IL/24	nd	48.10	0.66	0.19	42.87	0.25	7.99	nd			100.06
100	SGL-02-KP IL/25	nd	52.87	0.66	nd	34.59	0.23	11.87	nd			100.22
101	SGL-02-KP IL/26	nd	48.40	0.52	0.17	41.98	0.23	8.02	nd			99.32
102	SGL-02-KP IL/27	nd	47.02	0.52	nd	42.98	0.27	7.26	nd			98.05
103	SGL-02-KP IL/28	nd	47.52	0.37	nd	43.39	0.30	7.23	nd			98.81
104	SGL-02-KP IL/29	nd	45.01	0.64	nd	44.49	0.27	7.44	nd			97.85
105	SGL-02-K+600-3	nd	46.53	0.66	0.19	43.54	0.25	7.60	nd			98.77
106	SGL-02-K+600-4	nd	46.76	0.28	2.00	41.05	4.13	3.65	nd			97.87
107	SGL-02 K+600-5	nd	1.17	36.84	25.13	18.41	nd	16.86	nd			98.41
108	SGL-01-K+600-8	nd	1.10	22.39	41.16	19.22	nd	15.23	nd			99.10
109	SGL-02-K+600-1	40.21	nd	22.15	nd	21.08	0.74	10.94	5.68	nd		100.80
110	SGL-02-K+600-2	42.49	nd	22.57	1.52	9.31	0.39	19.25	5.12			100.65
111	SGL-02-K+600-3	42.52	0.14	22.51	1.41	9.11	0.39	19.59	5.09			100.76
112	SGL-02-K+600-4	42.23	nd	22.58	1.50	9.54	0.46	18.76	5.12			100.19
113	SGL-02-K+600-5	42.16	nd	22.43	1.56	9.06	0.39	19.25	5.29			100.14
114	SGL-02-K+600-6	42.80	nd	22.39	1.44	9.09	0.36	19.21	5.02			100.31

Fig. 1: Garnet Compositions

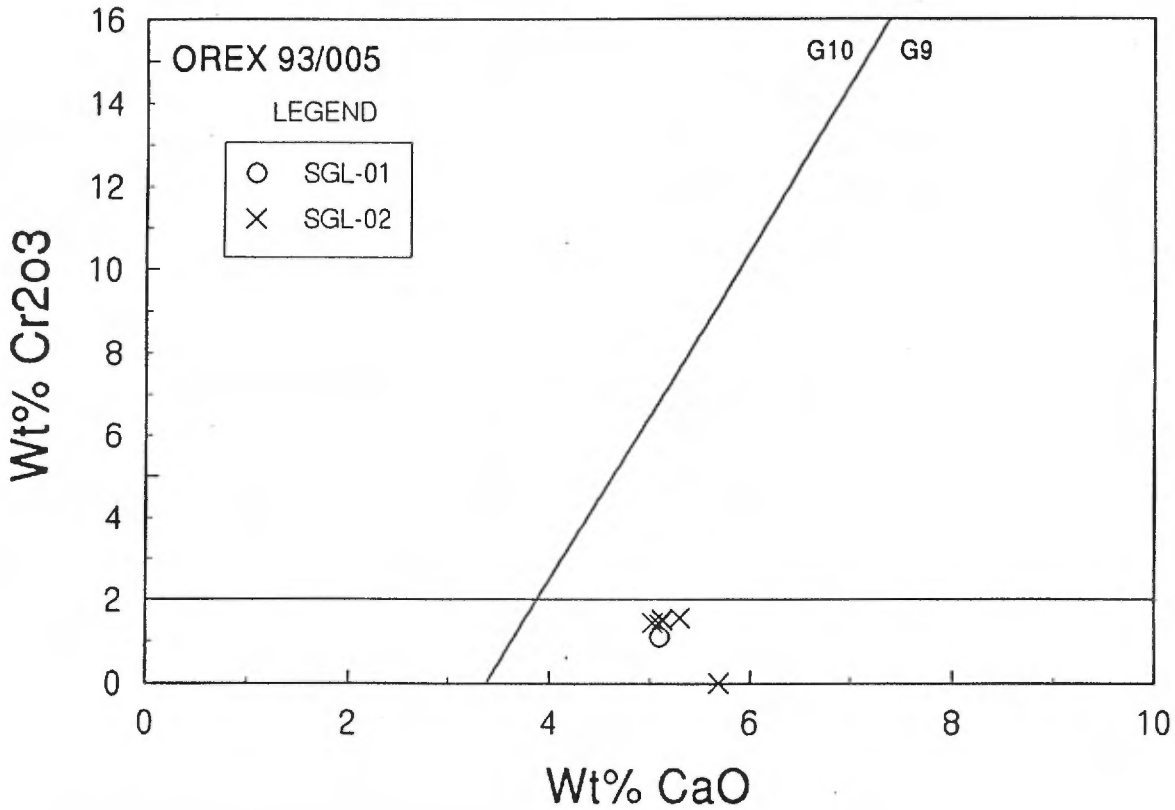


Fig.2: Chromite Compositions

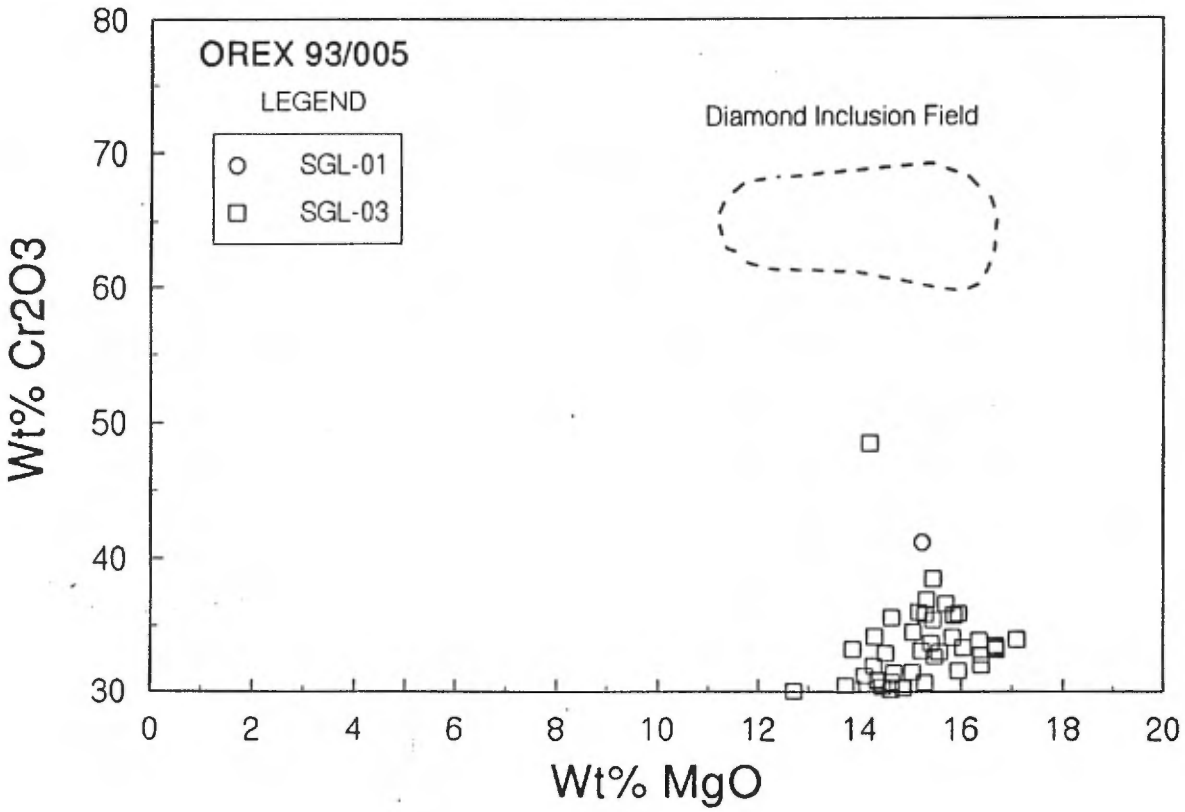
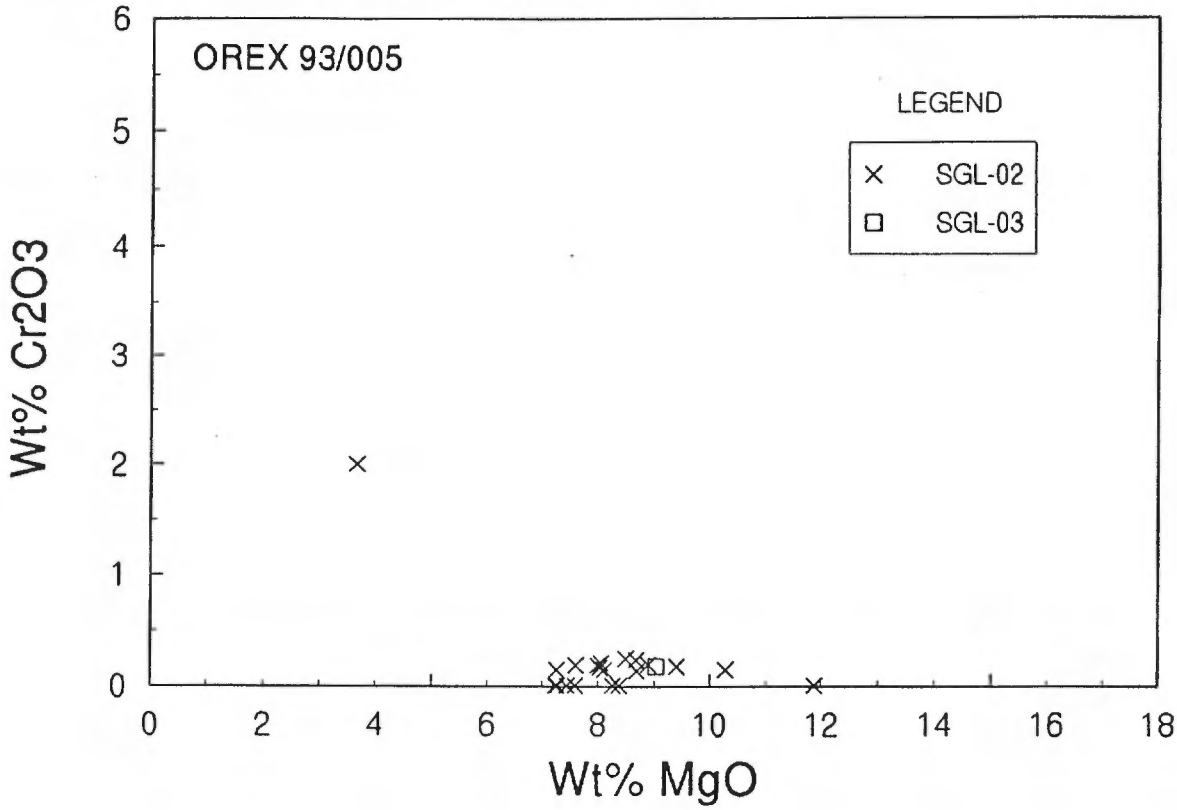
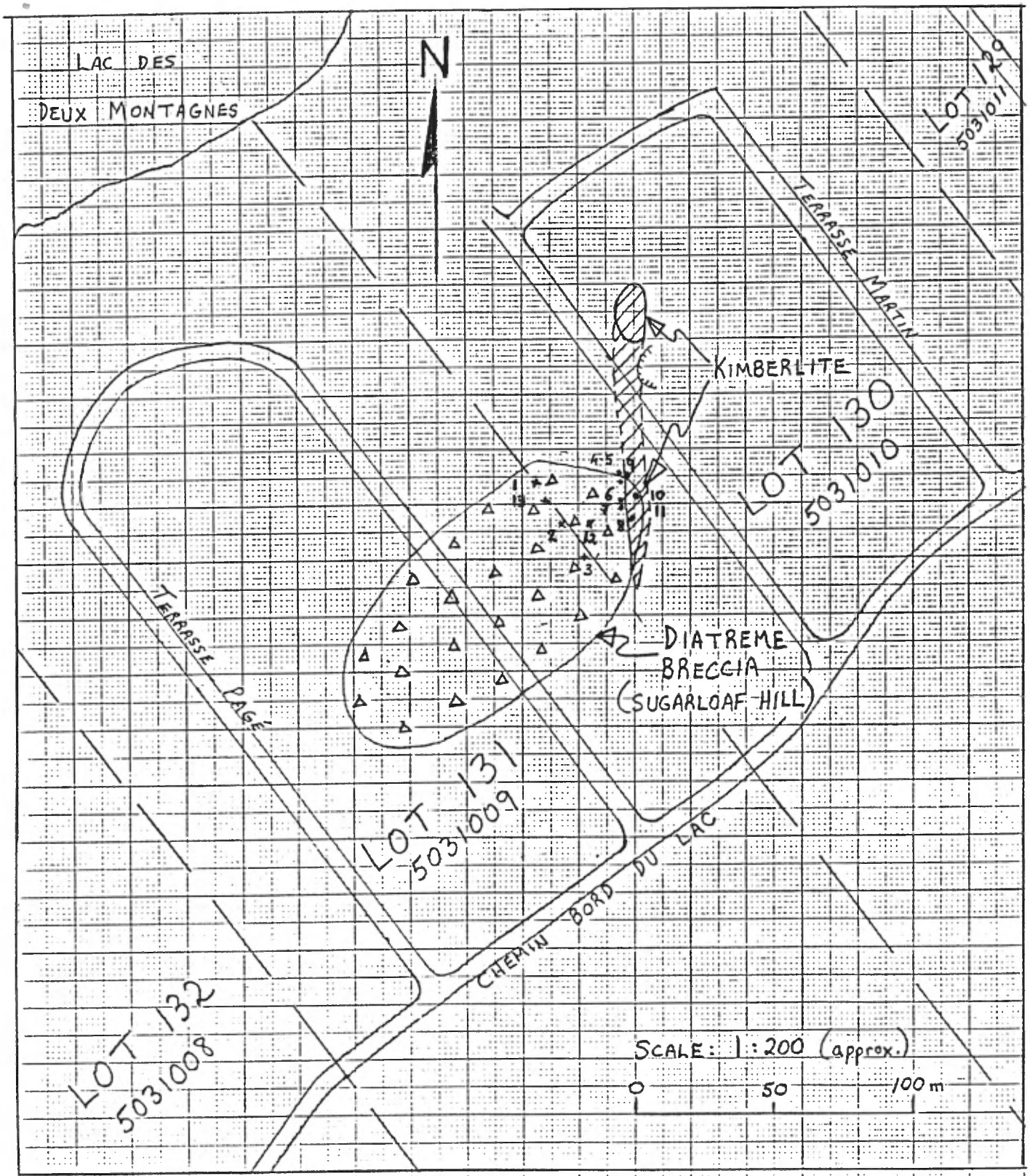


Fig.3: Ilmenite Compositions





LOCATION OF BLASTING AND SAMPLING.

FIGURE 3: GENERAL GEOLOGY AND LOCAL FEATURES AT SUGARLOAF HILL, ILE BIZARD.

Total Sampling 2210 lbs.

22-7-93