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REPORT
on
**KIMBERLITE EXPLORATION,
VICTORIA ISLAND PROPERTIES
Yankee Property**

VICTORIA ISLAND, NUNAVUT

NTS 1:250,000 SHEETS 77C,77D,77F
110 -107'30 W
69 30 - 70 15' N

| Claims | tags |
|---------------|------------------|
| CA 1 to CA 38 | F68431 to F68468 |

Reported by
MAJOR GENERAL RESOURCES LTD

Work period
Aug 24 to Sept 23, 2000

- VOL 1** Till sampling, by P.C.LeCouteur
- VOL 2** Ground magnetic geophysics, by J.L.LeBel
- VOL 3** Airborne magnetic geophysical survey, by C.St-Hilaire

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Vancouver, BC
28 Feb,2001

REPORT
on
MAGNETIC GEOPHYSICAL SURVEYS
on the
YANKEE PROPERTY
Claims CA 1 – CA 38
NTS 77F
VICTORIA ISLAND
NUNAVUT
(September 5 – September 19, 2000)
for
MAJOR GENERAL RESOURCES LTD.

J. L. Lebel, P. Eng.
Orequest Consultants Ltd.
February 15, 2001

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INTRODUCTION

This report presents the results of ground magnetic geophysical surveys conducted for diamond exploration on the Yankee Property located on Victoria Island in Nunavut.

The surveys were done to locate and characterize magnetic anomalies, initially picked by the author in consultation with Major General Resources and Dia Met Minerals, from a fixed-wing airborne magnetic survey conducted by Aeroquest in 1993 for Major General Resources (LeBel, 2000).

The ground surveys were conducted by the author between September 5 to September 19, 2000, in conjunction with a glacial till, kimberlite indicator mineral sampling program in the area.

LOCATION AND ACCESS

The properties are located in the south central part of Victoria Island in Nunavut (Figure 1) on NTS map 77F. Appendix I lists the claims involved and figure 2 shows their location.


Base of operations for the ground surveys was a tent camp, called Fred's Camp, located about 100 km northwest of Cambridge Bay, Nunavut that is leased and operated by Discovery Mining Services of Yellowknife. Fred's Camp is one of a few suitable sites in the area where wheeled, fixed-wing aircraft can land on an adjacent esker. Local access to the survey sites was by helicopter.

EQUIPMENT AND SURVEY PROCEDURES

The ground surveys were done with a Gem GSM-19 magnetometer and a GSM-19 base station magnetometer. The base station magnetometer was located at Fred's Camp and was set to record every 5 seconds with a datum value set at 59,000 nT. Diurnal geomagnetic variations during the period were quite active, and with some of the surveys located tens of kilometers from the base camp exact diurnal compensation using the base station was not achieved.

Control for the surveys was provided by hip-chain chained, picket grids comprised of five 200 m long lines, spaced at 50 m intervals with stations every 25 m centred on the UTM coordinate of the anomaly. Readings were taken at 5 m intervals by pacing between the stations. Some grids were composed of sample location flags. The metal shaft of the sample flags produced noisy results, particularly when the flags were flapping in the wind, even when several metres away from the station with the magnetometer sensor on a 2 m long staff.



| | | |
|--|--|--|
|  MAJOR GENERAL RESOURCES LTD. | | |
| Victoria Island Diamond Project | | |
| Figure 1 Project Location Map | | |
| February 28, 2001 | | |
| wcnada.dwg | | |

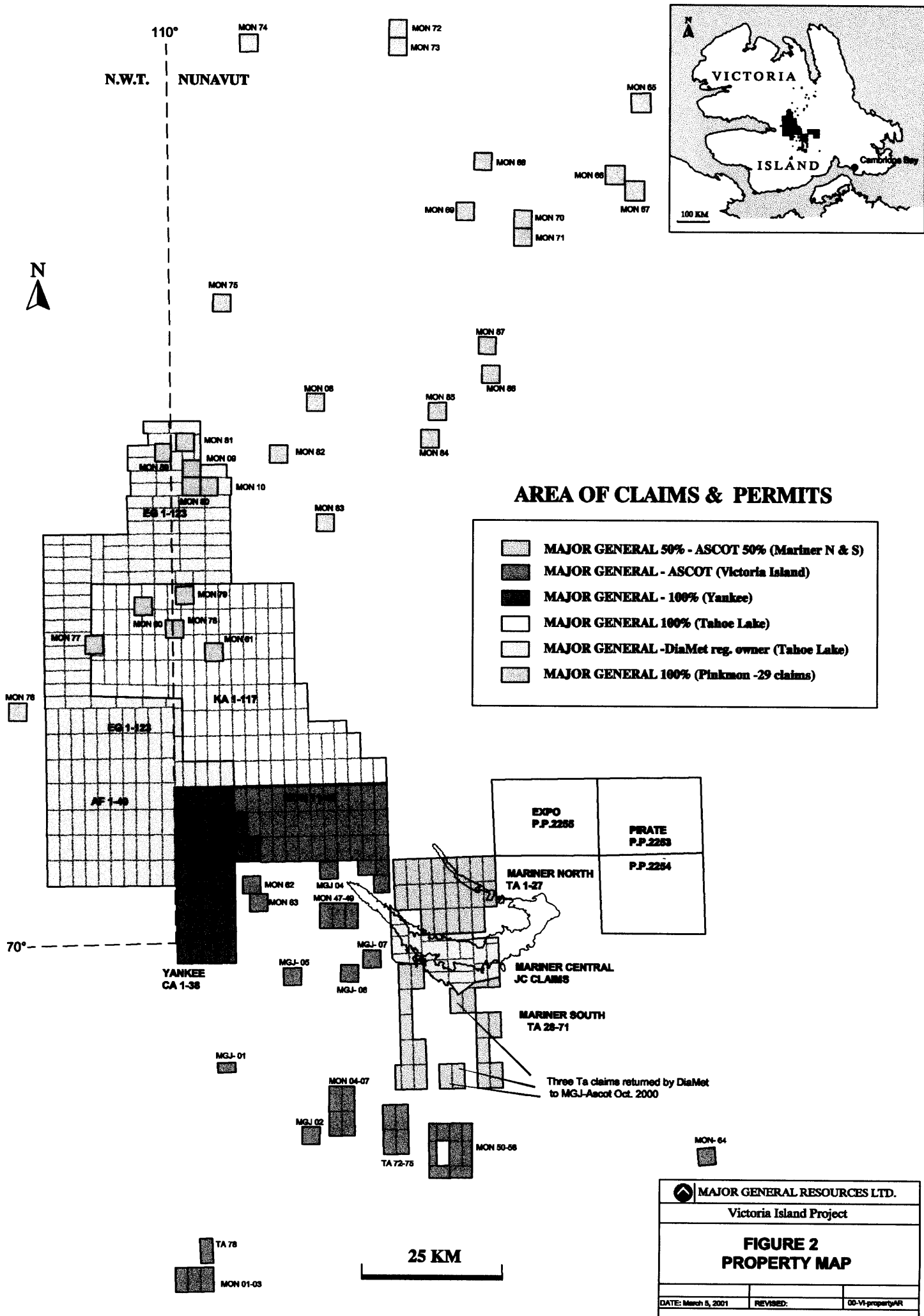
MAGNETIC SIGNATURE OF VICTORIA ISLAND KIMBERLITES

All the known kimberlites on Victoria Island have been discovered by airborne magnetic surveys. The kimberlites are predominantly magnetic lows up to a few hundred nTs, due to pipe like bodies and/or dyke like bodies. In most cases, only a limited amount of drilling, in one or two discovery holes, has been done, so the actual configuration of the kimberlites is unknown at this time. As the kimberlites are hosted by non-magnetic sedimentary rocks, the lows must be due to reversed remnant magnetism. One of the known pipes, the Whimbrel Pipe, has an intense positive magnetic signature, and the Pintail Pipe has an ambiguous response. Several kimberlite dykes, along which the pipes are emplaced, are also signatored by magnetic highs up to of several nTs in the helicopter results and several tens of nTs in ground surveys. In one or two cases, the dykes are also evident in the fixed-wing surveys. The pipes have been called 'blows' but the difference in the magnetic signature of the pipes and dykes clearly indicates they were emplaced at different times.

The area is underlain by non-magnetic Proterozoic shales and Ordovician carbonates that cover the Precambrian basement. Kimberlite bodies that breach to the surface through the sedimentary cover are clearly defined by 'shallow' magnetic features, in contrast to 'deep' features due to causes in the basement. Local depth of basement estimates, made from magnetic surveys, fall in the 100 m to 300 m range. The non-magnetic cover acts as a natural depth filter, in comparison to say, the Lac de Gras area, where kimberlite and non-kimberlite anomalies all emanate from the same relative depth. Some of the kimberlite intrusions in the area appear to be 'perched' in the sedimentary sequence. Also kimberlites of Proterozoic age are known to occur in Canada (Brummer et al, 1992, Robertson, 2000), so the possibility of kimberlites completely covered by sedimentary rocks cannot be entirely eliminated, although none is known at the present time. This means that a wide range of magnetic features, regardless of their apparent depth, are potential kimberlite targets on Victoria Island. On a worldwide basis, kimberlites show a wide variety on magnetic signatures including no response at all (St. Pierre, 1999). On Victoria Island, there is no reason to expect otherwise, even though most of the known pipes exhibit magnetic lows.

RESULTS AND DISCUSSION

The results were compiled in plan profile format at a scale of 1:2500 using the NAD83 UTM datum. The software used to compile the results was limited to a six-digit number for locations. This meant the first digit of the UTM northing, a 7, had to be omitted. Profiles are used, rather than contours, so that the depths of the causes of any anomalies can be visually appreciated and readily ascertained. As noted above, noisy readings at the stations marked by sample location flags, are evident at the relatively sensitive profile scales used. The noisy readings are obvious, but they do not materially affect the survey.



In modeling of the results, it is assumed that the anomalies are caused by induced magnetism, and that negative anomalies are due to negative susceptibility contrast, both clearly not the case, as many of the anomalies are due to remnant magnetism. For remnant magnetic anomalies, the direction of the remnant field determined from oriented sample would be required to affect a proper interpretation or the paleomagnetic location of Victoria Island at the time of the pipe solidified would have to be known. Also, it is assumed that the susceptibility is uniform which is clearly not the case for kimberlites composed of more than one phase. Therefore quantitative interpretations presented, herein, should only be considered approximate.

Anomalies A1 and A8 were detailed by ground magnetic surveys on the Yankee property, as illustrated by the accompanying diagrams. As mentioned above, noisy data consisting of spikes up to 10 nT were obtained when readings were taken too close to the metal shaft station flags (as opposed to lath pickets), and magnetic storms lead to improper correction for diurnal effects, as exemplified by mismatches in the results for repeat readings, such as those along the baselines.

Of the 2 airborne anomalies covered, only A8, generated a ground anomaly of interest, composed of a small 20 nT low roughly 50 m in diameter, inferred to reflect shallow source. No ground anomaly was obtained in the case of A1 which indicates the original airborne anomaly must have been spurious.

CONCLUSIONS

Ground magnetic surveys carried out on two subtle airborne magnetic anomalies on the Yankee property located on Victoria Island in Nunavut outlined a small 20 nT low in the case of anomaly A8 while anomaly A1 was not found.

The magnetic low at anomaly A8 is similar to, albeit considerably less intense than, the response of known kimberlites in the area and its source is interpreted to be at shallow depth.

Respectfully submitted
Orequest Consultants Ltd.



I. L. LeBel, P. Eng.

REFERENCES

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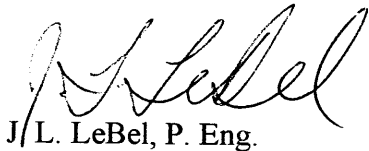
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STATEMENT OF QUALIFICATIONS

I, J.L. LeBel, of 2684 Violet Street, North Vancouver, British Columbia, hereby certify that:

1. I am a graduate of Queen's University (1971) and the University of Manitoba (1973) and I hold a B.Sc. degree in Geological Engineering and a M.Sc. degree in Geophysics.
2. I am a Professional Engineer registered with the Association of Professional Engineers and Geoscientists of British Columbia. I have been an associate member of the Society of Exploration Geophysicists for more than 25 years.
3. I have been employed in mining exploration geophysics on a full-time basis since 1972.
4. I personally carried out the ground magnetic survey discussed in this report. Other data and information contained, herein, were supplied by Major General Resources Ltd.



J/L. LeBel, P. Eng.

Vancouver, British Columbia, this 15th day of February, 2001.