

MAR 20030003: LITTLE LEGEND

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NTS 84 H/3, H/6

**ASSESSMENT REPORT FOR EXPLORATION CONDUCTED
ON THE LITTLE LEGEND PROPERTY AND SURROUNDING AREA, BIRCH
MOUNTAINS, NORTHEASTERN ALBERTA**

Permit: 9398090062

Approximate Property Location:

Latitude: 57°25'

Longitude: 113°18'

Near Namur Lake, Northern Alberta (NTS H/3, H/6)

Completed By:

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ASSESSMENT REPORT FOR EXPLORATION CONDUCTED ON THE LITTLE LEGEND PROPERTY AND SURROUNDING AREA, BIRCH MOUNTAINS, NORTHEASTERN ALBERTA

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ASSESSMENT REPORT FOR EXPLORATION CONDUCTED ON THE LITTLE LEGEND PROPERTY AND SURROUNDING AREA, BIRCH MOUNTAINS, NORTHEASTERN ALBERTA

SUMMARY

APEX Geoscience Ltd. was retained from fall 2000 until present as consultants by Blue Diamond Mining Corp. (Blue Diamond), formerly known as New Blue Ribbon Resources Ltd., to evaluate the diamond potential of Blue Diamond's Little Legend Property and the surrounding areas. The property is located about 115 km northwest of Fort McMurray in Township 95, Range 20, West of the Fourth Meridian. The property is situated within the recently discovered northwest trending field of kimberlites in the Birch Mountains known as the Legend or Birch Mountain Kimberlite field. Kimberlites are located within a couple of kilometres northwest, east and southeast of the Little Legend Property.

The potential for discovery of a kimberlite on Blue Diamond's Little Legend Property is high based upon the available information for the property and the surrounding area. An aggressive follow-up ground exploration program is warranted in order to determine if medium to high priority magnetic anomalies 24, 25, 33, 40, 41, 42, 43, 44, 45, 46, 49, 51, 52, 53, 57, 58, 76, 80, 83, 99, 110, 111 and 112, none of which appear to be directly associated with drainage or culture, are indicative of possible kimberlite pipes. Other magnetic anomalies that yield high quality magnetic responses, but have been downgraded in priority because they lie proximal to drainage or culture, should be accurately compiled and ground checked, as well as some of the lower priority magnetic anomalies that are not associated with drainage or culture. At present, the level of risk for the discovery of an economic diamondiferous kimberlite on the Little Legend Property is moderate to high because: (a) kimberlites have not been discovered on the permit to date, (b) little or no exploration sampling for diamond indicator minerals has been performed to date in order to determine which magnetic anomalies could be related to kimberlite pipes and which of those returning positive indications could be diamondiferous, and (c) glacial drift of unknown thickness blankets the region with little or no way of using existing oil, gas and hydrogeological information to establish drift thickness.

The Little Legend Property exists within a favourable regional setting for possible kimberlites and diamonds and warrants an aggressive follow-up ground exploration program. Favourable traits of the regional setting of Blue Diamond's Little Legend Property, include: (a) the property is thought to be underlain by the western edge of the TMZ, but may be underlain by basement of the Buffalo Head Terrane, which underlies Ashton's diamondiferous kimberlites in the Buffalo Head Hills, (b) seismic refraction and reflection studies indicate that the crust in the Namur Lake region is likely between 35 to 40 km thick, a trait favourable for the formation and preservation of diamonds in the upper mantle, (c) the Little Legend Property exists along the same trend of gravity lows as those associated with the surrounding Birch Mountain Kimberlites, (d) the Little Legend Property exists along the north flank of the northeast trending Peace River Arch and the east edge of the northwest trending Grosmont High, either one of which could have controlled the

emplacement of Cretaceous kimberlites in the Birch Mountains, (e) at least two of the Birch Mountain Kimberlites discovered by Kennecott are diamondiferous, and (f) little diamond indicator sampling has been conducted down-ice of the Little Legend Property.

A two-phase follow-up exploration program is recommended for Blue Diamond's Little Legend Property to evaluate the potential for the presence of diamondiferous kimberlites or related intrusions. The **Phase 1** program should consist of gridding, ground geophysical surveying and surface sampling within Blue Diamond's Little Legend Property. Selected medium to high priority magnetic anomalies that are not drainage or culture related, should be tested by ground geophysical surveys in order to determine if they are indicative of possible kimberlite pipes. Other magnetic anomalies that yield high quality magnetic responses proximal to drainage or culture should be accurately compiled and ground checked, as well as some of the lower priority magnetic anomalies that are not drainage or culture related. Systematic and reconnaissance diamond indicator sampling of tills and streams should be conducted in conjunction with the ground geophysical surveys in order to evaluate all potential targets. The objective of the Phase 1 program is to have one or more targets at the drill ready stage with several targets requiring further detailed follow-up work in order to get to the drill ready stage. Summer access in the region is difficult, therefore, it is recommended that as much of the ground geophysical work as possible be conducted during the current winter season. The reconnaissance sampling portion of the program along with the ground geophysical surveys will require about four weeks of fieldwork using a four-man crew. The total cost to conduct the recommended Phase 1 exploration program is estimated at \$150,000, not including GST.

Depending upon the results of the Phase 1 exploration program, **Phase 2** should consist of drilling of selected targets delineated by the Phase 1 program, and further follow-up ground exploration to bring the reconnaissance targets that yielded positive results during the Phase 1 program to the drill ready stage. A detailed program for the Phase 2 follow-up exploration, and a detailed budget thereto, is completely dependent upon the results of the recommended Phase 1 exploration program.

INTRODUCTION AND TERMS OF REFERENCE

APEX Geoscience Ltd. (APEX) was retained from winter 2000 to present, as consultants by Blue Diamond Mining Corp. (Blue Diamond), formerly known as New Blue Ribbon Resources Ltd., to evaluate the diamond potential of Blue Diamond's Little Legend Property and surrounding areas. This evaluation included in this assessment report is based upon an independent technical report completed during the fall of 2002 and prepared on the basis of available published and unpublished material and winter exploration programs during the winters of 2000 and 2002. This assessment report documents the results of exploration by Blue Diamond and APEX, including a property visit performed by Mr. M.B. Dufresne, M.Sc., P.Geol., a Qualified Person, during the fall of 1998.

DISCLAIMER

The authors, in writing this report, use sources of information as listed in the references. The report written by Mr. Michael B. Dufresne, M.Sc., P.Geol., a Qualified Person is a compilation of proprietary and publicly available information as well as information obtained during the property visit. The government reports discussed here in were prepared by a person or persons holding post secondary geology, or related university degree(s), prior to the implementation of the standards relating to National Instrument 43-101. The information in those reports is therefore assumed to be accurate. Those reports written by other geologists are also assumed to be accurate based on the property visit and data review conducted by the authors, however they are not the basis for this report. The Little Legend Property is considered an early stage exploration property and does not contain any diamond or kimberlite discoveries to date. However, non-diamondiferous kimberlites have been discovered within a few kilometers of the boundaries of the property

PROPERTY DESCRIPTION AND LOCATION

The legal description for the Little Legend Property is provided in Table 1. Situated along the southeastern flank of the Birch Mountains, the Little Legend Property lies about 21 km southwest of Namur Lake and 115 km northwest of Fort McMurray (Figure 1). The Little Legend Property is within the Namur Lake 1:250,000 scale National Topographic System (NTS) map sheet 84H, specifically 84 H/3 and H/6 1:50,000 scale NTS map sheets.

TABLE 1. LEGAL PERMIT DECIPTION LITTLE LEGEND PROPERTY

Permit No.	Issue Date	Expiry Date	Legal Description			
			Twp.	Rg.	W. of	Section
9398090062	Sept. 30, 1998	Sept. 30, 2002	95	20	4	1-36

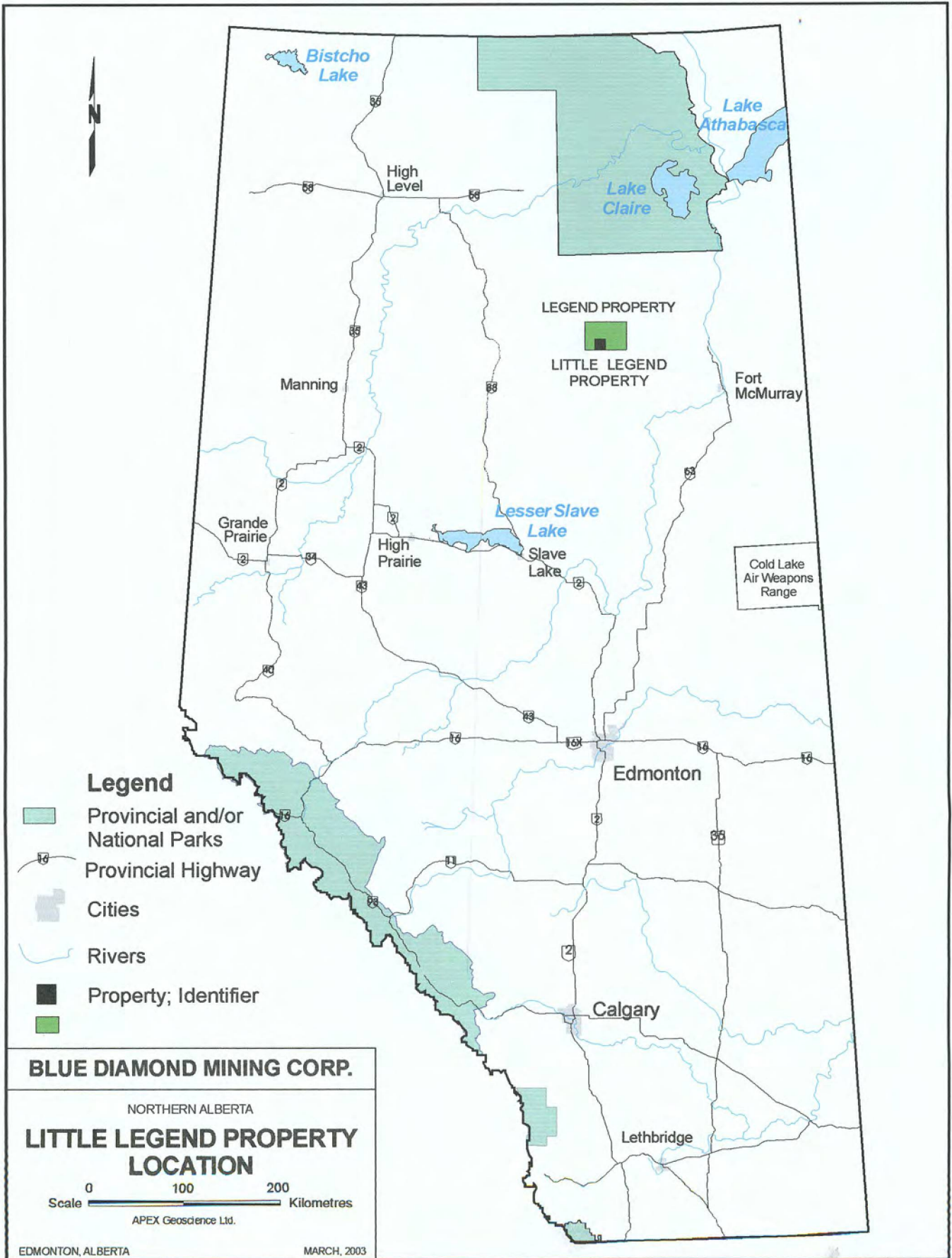
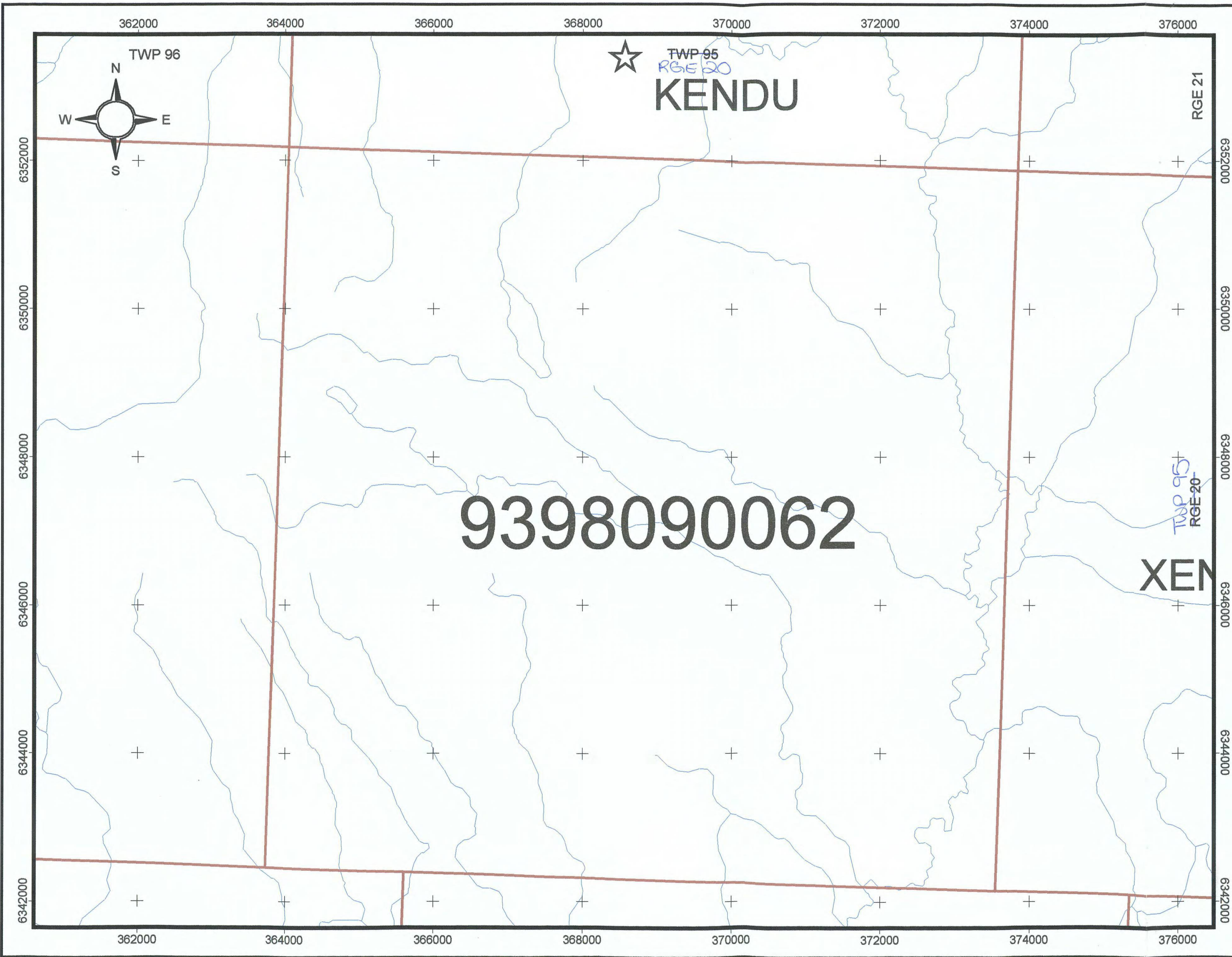


FIGURE 1



- Legend
- ★ Kimberlite; Identifier
 - Township boundary (W of 4)
 - Drainage

the east border. The southern limit of the zone of discontinuous permafrost passes south of the Little Legend Property in an east-west direction. Permafrost has been noted at higher elevations in the muskeg areas (Hackbarth and Nastasa, 1979). Average annual temperatures range from -22°C in January to 16°C in July. The majority of the area is covered by boreal forest comprised of spruce and jack pine. Small, northwest to southeast elongated muskegs and ponds are common in low-lying regions.

HISTORY

Previous Exploration

The bulk of exploration in the Namur Lake region has been restricted primarily to oil sands, gas and groundwater. Geological mapping and airborne geophysical surveys have been conducted by various government agencies and companies in the past as part of large regional studies (GSC, 1983; Green, 1970; Hamilton *et al.*, 1998). In addition, oil, gas and water well logs have been compiled by various Alberta government agencies into drift thickness, bedrock topography and paleochannel maps (Pawlowicz and Fenton, 1995a,b; Dufresne *et al.*, 1996).

Diamond exploration in northern Alberta commenced with a major staking and exploration rush during 1992 and 1993 as a result of the NWT diamond discoveries and the rumoured DeBeers kimberlite and diamond discovery at Mountain Lake near Grande Prairie. Much of this initial exploration culminated with little or no success. The Alberta Geological Survey (AGS) has conducted reconnaissance till sampling for diamond indicator minerals across most portions of Northern Alberta since 1992. Nine till samples have been collected within the Namur Lake map area (Figures 2 and 3), all outside of the Little Legend Property (Dufresne *et al.*, 1996; Pawlowicz *et al.*, 1998). Two of the till samples have each yielded one diamond indicator mineral (DIM) of interest, a high chrome grossular garnet and a high titanium, high magnesium chromite (Figures 2 and 3). The samples containing the DIM's were collected from north and northwest of the Little Legend Property. A till sample collected immediately south of and partially down-ice of the Little Legend Property yielded no significant DIM's. Sampling in the Namur Lake area is sparse due to the poor summer access.

The most significant exploration to date for northern Alberta is the discovery of diamondiferous kimberlites during early 1997 in the Buffalo Head Hills and during late 1998 in the Birch Mountains. Southwest of the Little Legend Property, Ashton has discovered up to 38 kimberlites in the Buffalo Head Hills and the Peerless Lake area. The first 10 kimberlites discovered in the Buffalo Head Hills were found by drill testing anomalous, high frequency, aeromagnetic anomalies with shallow, highly diffractive seismic signatures (Carlson *et al.*, 1998). A total of 15 kimberlites of variable size were initially delineated within Ashton's permits based on drill-testing of magnetic anomalies with associated seismic responses (Ashton Mining of Canada Inc., 1997a to I; Carlson *et al.*, 1998). The discovery of a kimberlite field in the Buffalo Head Hills provided the incentive for other companies to initiate diamond exploration programs elsewhere in northern Alberta.

Diamond exploration, including a High Resolution Airborne Magnetic (HRAM) survey was flown by Spectra Exploration Geoscience Ltd. (Spectra) for Montello Resources Ltd. (Montello) and Redwood Resources Ltd. (Redwood) during the spring to early summer of 1998 over the Legend Property, which covers a large portion of the Birch Mountains. Kennecott Canada Inc. (Kennecott), in an option deal with Montello and Redwood, conducted ground geophysics and drilling of eight potential kimberlite targets on the Legend Property during the late summer and fall of 1998. Kennecott's drill program resulted in the identification of seven kimberlite pipes within the Legend Property (Montello Resources Ltd., 1998a,b). Initial sampling results from the drill core indicate that at least two of the pipes, Phoenix and Legend, are weakly diamondiferous (Montello Resources Ltd., 1998a,b). An eighth kimberlite was identified during early 1999 (Montello Resources Ltd., 1999). Six of the pipes, including Phoenix, lie along a significant northwest to southeast magnetic trend that extends through Blue Diamond's Little Legend Property (Figure 3). At least three of the intersected kimberlite pipes, Roc, Valkyrie and Xena, as well as the most recently (ninth) intersected kimberlite named Kendu (New Blue Ribbon Resources Ltd., 2000), lie within a couple of kilometres north and east of the Little Legend Property, respectively (Figure 3).

DEPOSIT TYPES: DIAMONDIFEROUS KIMBERLITES

To understand the significance of diamond indicator minerals (DIMs), it is important to understand the type of igneous rocks from which primary diamond deposits are mined. The most common rock type from which diamonds are mined are kimberlites and, to a lesser extent, lamproites and orangeites. DIMs describe minerals that are common constituents of these three rock types, some of which are phenocrysts and others that are xenocrysts. For the purposes of this discussion, DIMs will refer to minerals that are both characteristic and diagnostic of kimberlites.

Kimberlites

Kimberlite is best described as a hybrid igneous rock (Mitchell, 1986, 1989, 1991; Skinner, 1989; Scott Smith, 1995). Kimberlites are igneous in nature since they have crystallised from a molten liquid (kimberlitic magma) originating from the earth's upper mantle. Kimberlite magma contains volatile gases and is relatively buoyant with respect to the upper mantle. As a result, pockets of kimberlitic magma will begin to ascend upward through the upper mantle and along a path of least resistance to the earth's surface. As the kimberlitic magma ascends, the volatile gases within the magma expand, fracturing the overlying rock, continually creating and expanding its own conduit to the earth's surface. As a kimberlitic magma begins to ascend to the earth's surface it rips up and incorporates fragments or xenoliths of the various rock types the magma passes through on its way to surface. As the magma breaks down and incorporates these xenoliths, the chemistry and mineralogy of the original magma becomes altered or hybridised. The amount and type of foreign rock types a kimberlite may assimilate during its ascent will determine what types of minerals are present in the kimberlite when it erupts at surface.

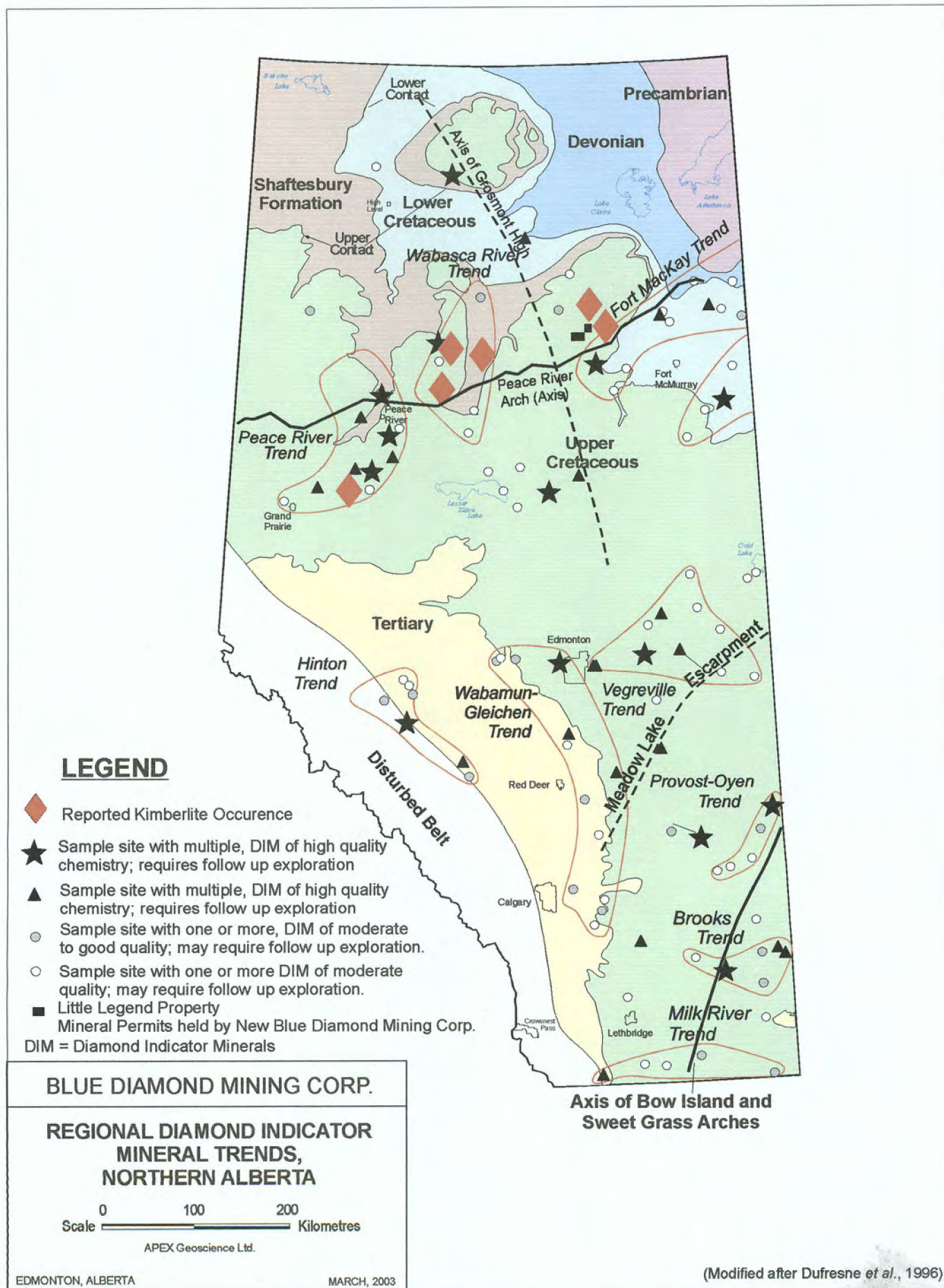
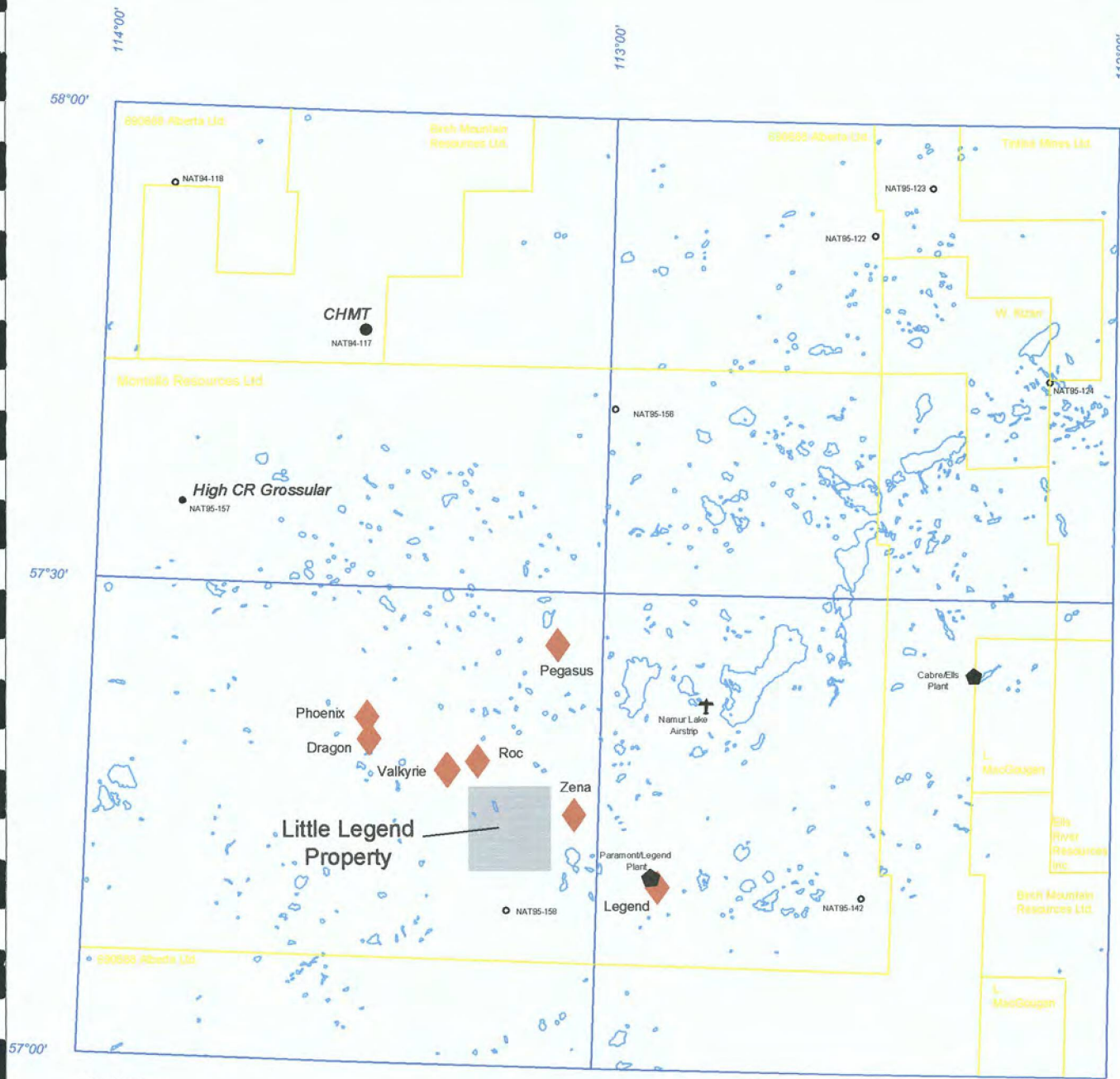


FIGURE 2.



LEGEND

- NAT94-117 Diamond indicator site with one or more diamond indicator minerals of moderate quality chemistry. May require follow-up exploration. (Sample Identifier)
- NAT95-123 Sample Site (Sample Identifier)
- Metallic mineral permit boundary; Owner
- BLUE DIAMOND MINING CORP.
Little Legend Property
- ◆ Roc Reported kimberlite occurrence; identifier
- Drainage
- ✚ Airstrip
- ⬠ Plant/camp; Identifier

CHMT - Chromite

BLUE DIAMOND MINING CORP.

NAMUR LAKE AREA
LITTLE LEGEND PROPERTY RELATIVE TO THE
LEGEND KIMBERLITES AND REGIONAL
INDICATOR MINERAL ANOMALIES

0 NTS: 84 H 40
Scale ————— Kilometres
1:500,000

APEX Geoscience Ltd.

EDMONTON, ALBERTA

MARCH, 2003

FIGURE 3

When kimberlitic magma reaches or erupts at the earth's surface, the resulting volcanic event is typically violent, creating a broad shallow crater surrounded by a ring of kimberlitic volcanic ash and debris ("tuffaceous kimberlite"). The geological feature created by the eruption of a kimberlite is referred to as a diatreme or kimberlite pipe (Mitchell, 1986, 1989, 1991). In a simplified cross section a kimberlite diatreme appears as a near vertical, roughly "carrot shaped" body of solidified kimberlite magma capped by a broad shallow crater on surface that is both ringed and filled with tuffaceous kimberlite and country rock fragments (Mitchell, 1986, 1989, 1991).

Diamond Indicator Minerals

Diamonds do not crystallise from a kimberlitic magma: they crystallise within a variety of diamond-bearing igneous rocks in the upper mantle called peridotites and eclogites. Peridotites and eclogites are each made up of a diagnostic assemblage of minerals that crystallise under specific pressure and temperature conditions similar to those conditions necessary to form and preserve diamonds ("diamond stability field"). Diamond bearing peridotite can be further broken down into three varieties that are, in order of greatest diamond bearing significance, garnet harzburgite, chromite harzburgite, and, to a lesser extent, garnet lherzolite. For a kimberlite to be diamond bearing, the primary kimberlitic magma must disaggregate and incorporate some amount of diamond bearing peridotite or eclogite during its ascent to the earth's surface. The type and amount of diamond bearing peridotite or eclogite the kimberlitic magma incorporates during its ascent will determine the diamond content or grade of that specific kimberlite as well as the size and quality of diamonds. Diamond bearing peridotite and eclogite occur as discontinuous pods and horizons in the upper mantle, typically underlying the thickest, most stable regions of Archean continental crust or cratons (Helmstaedt, 1993). As a result, almost all of the economic diamond bearing-kimberlites worldwide occur in the middle of stable Archean cratons.

Diamond indicator minerals (DIMs) include minerals that have crystallised directly from a kimberlitic magma (phenocrysts), or mantle derived minerals (xenocrysts) that have been incorporated into the kimberlitic magma as it ascends to the earth's surface. Examples of DIMs are picroilmenite, titanium and magnesium rich chromite, chrome diopside, magnesium rich olivine, pyrope garnet and eclogite garnet. Varieties of garnet include G1, G2, G9, G10, G11, G12 pyropes as defined by Dawson and Stephens (1975), G9 and G10 pyropes as defined by Gurney (1984) and Gurney and Moore (1993) and G3, G4, G5, and G6 eclogitic garnets as defined by Dawson and Stephens (1975). From this paragraph on, reference to G1, G2, G3, G4, G5, G6, G11 and G12 pyrope garnets refers to Dawson and Stephens' (1975) classification and G9 and G10 refers to Gurney's (1984) G9 and G10 pyrope garnets of lherzolitic and harzburgitic origin, respectively.

DIMs are used not only to assess the presence of kimberlites in regional exploration programs but also to assess whether the kimberlites have the potential to contain diamonds. There are a limited variety of DIMs from which information pertaining to the diamond bearing potential of the host kimberlite can be gained. Typically, these are DIMs that have been derived from diamond bearing peridotite and eclogite in the upper mantle

(Mitchell, 1989). The most common examples of these would include sub-calcic, G10 Chrome (Cr) pyrope garnets (harzburgitic), G9 pyrope garnets (Iherzolitic), Chrome (Cr)- and Magnesium (Mg)-rich chromite (diamond inclusion field or "DIF" chromite from chromite or spinel harzburgite), diamond inclusion field "DIF" eclogitic garnets and chemically distinct jadeitic clinopyroxene (diagnostic of diamond bearing eclogites).

Other indicator minerals that have crystallised from a kimberlitic magma can provide information as to how well the diamonds in a given kimberlite have been preserved during their ascent to surface. For instance, the presence of low iron and high magnesium picroilmenites in a kimberlite is a positive indication that the oxidation conditions of a kimberlitic magma were favourable for the preservation of diamonds during their ascent to surface in the kimberlitic magma.

Kimberlites and Diamond Exploration

Due to the unique geometry of a kimberlite pipe and the manner in which the kimberlite has intruded a pre-existing host rock type, there are often differences in the physical characteristics of a kimberlite and the host rock. Sometimes these contrasting physical characteristics are significant enough to be detected by airborne or ground geophysical surveys. Two of the most commonly used geophysical techniques are airborne or ground magnetic surveys and electromagnetic (EM) surveys. A magnetic survey measures the magnetic susceptibility and EM surveys measure the electrical conductivity (or resistivity) of the material at or near the earth's surface. When magnetic or resistivity measurements are collected at regular spaced intervals along parallel lines, the data can be plotted on a map and individual values can be compared. If a geophysical survey is conducted over an area where the bedrock and overburden geology is constant and there are no prominent structures or faults, there will be little variation in magnetic or resistivity response. However, when a kimberlite intrudes a homogenous geologic unit and erupts on surface, there is often a detectable change in the geophysical signature or anomalous magnetic or resistivity response over the kimberlite diatreme. When the data are contoured the anomalous results often occur as a circular or oval anomaly outlining the surface or near surface expression of the diatreme.

The effectiveness of geophysical methods in kimberlite exploration is dependent on the assumption that the difference between the geophysical signature of the hosting rock unit and a potential kimberlite is significant enough to be recognised by the geophysical techniques available. There are many examples of economic kimberlites that produce very subtle, unrecognisable geophysical responses as well as non kimberlite geologic features and man made structures (referred to as "cultural interference") such as oil wells, fences, bridges, buildings which can produce kimberlite like anomalies. For these reasons, it is extremely important that other information such as DIM surveys be used in conjunction with geophysical evidence to confirm whether there is other information to support the presence of a kimberlite diatreme (Fipke *et al.*, 1995).

REGIONAL GEOLOGICAL SETTING

Precambrian

The Little Legend Property lies near the eastern edge of the Western Canadian Sedimentary basin within the northern segments of the Peace River Arch (PRA). However, Precambrian rocks are not exposed within the Namur Lake region (NTS 84H). The basement underlying the PRA is comprised of several terranes including the Buffalo Head and the Chinchaga, both of which were accreted between 1.8 and 2.4 billion years (Ga) ago and collectively form the Buffalo Head Craton (Ross *et al.*, 1991, 1998). Due to their relatively stable history since accretion, the Buffalo Head and Chinchaga terranes are currently the focus of extensive diamond exploration in northern Alberta.

The basement underlying the Little Legend Property borders the Buffalo Head Terrane and has been interpreted to be part of the Talston Magmatic Zone (Figure 4). The Talston Magmatic Zone (TMZ) is a 2.0 to 1.8 Ga aged terrane that represents a magmatic arc related to collisional orogeny during the Proterozoic. It is unclear whether the TMZ represents a deep-seated thermal welt between two distinct protocontinents or a discreet thin-skinned thrust slice that has been emplaced over the top of the basement of the Rae Subprovince, as has been proposed for the Trans-Hudson orogenic belt in Saskatchewan (Hajnal *et al.*, 1993). The TMZ is characterised by a highly corrugated internal fabric comprised of extremely high relief, north to northwest trending sinuous magnetic anomalies.

The Little Legend property is underlain by the western portion of the TMZ with much lower magnetic relief and a somewhat indistinct magnetic pattern relative to typical TMZ terrane. Villeneuve *et al.* (1993) indicate that the western boundary of the TMZ is not obvious based upon geophysical data and has been placed using zircon ages from a couple of basement drill cores. The basement beneath the Little Legend property may belong to the eastern "Utikuma Belt" of the BHT as the western portion of the TMZ. The BHT is an area of high positive magnetic relief with a north to northeasterly fabric (Villeneuve *et al.*, 1993). Ashton Mining of Canada Inc.'s (Ashton) diamondiferous kimberlites are underlain by basement of the BHT. Part of the Churchill Structural Province (Rae Subprovince), the BHT may represent either Archean crust that has been thermally reworked during the Hudsonian (Proterozoic) Orogeny (Burwash *et al.*, 1962; Burwash and Culbert, 1976; Burwash *et al.*, 1994) or an accreted Proterozoic terrane that may or may not have an Archean component (Ross and Stephenson, 1989; Ross *et al.*, 1991; Villeneuve *et al.*, 1993). Precambrian rocks intersected in drill core from the BHT comprise felsic to intermediate metaplutonic rocks, felsic metavolcanic rocks and high-grade gneisses (Villeneuve *et al.*, 1993). The presence of numerous eclogitic garnets, eclogitic pyroxenes and chromium-bearing corundums in association with kimberlites or related intrusions in northern Alberta may indicate the presence of a significant volume of accreted and subducted oceanic basalt and sedimentary protolith in the lower crust and/or upper mantle beneath the BHT. Seismic refraction and reflection studies indicate that the crust in the Namur Lake region is likely between 35 to 40 km thick, a trait favourable for the formation and preservation of diamonds in the upper mantle (Dufresne *et al.*, 1996).

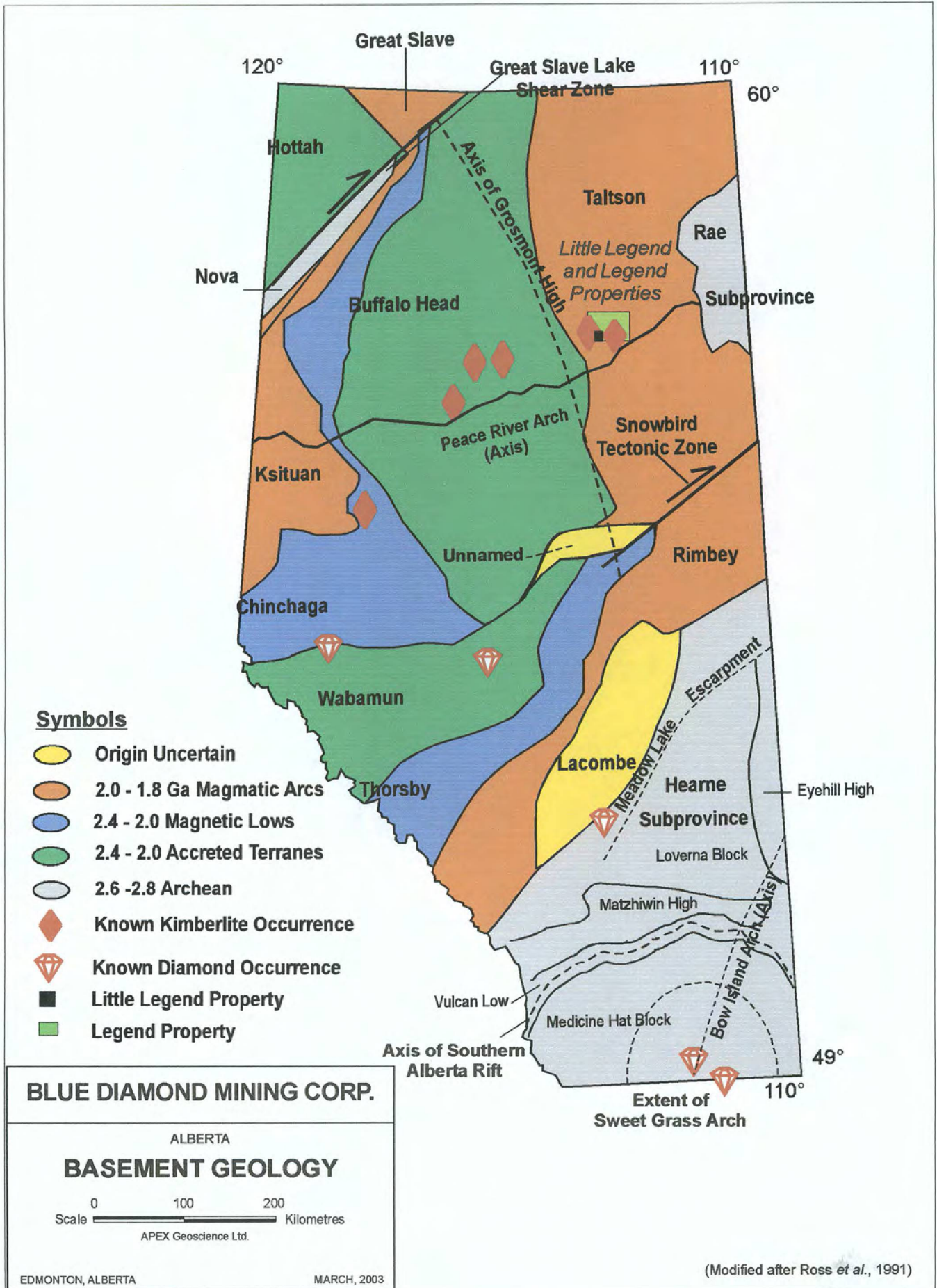


Figure 4

Phanerozoic

Overlying the basement in the Namur Lake region is a thick sequence of Phanerozoic rocks comprised mainly of Cretaceous sandstones and shales near surface and Mississippian to Devonian carbonates and salts at depth (Glass, 1990). Bedrock exposure within the permit block is limited primarily to river and stream cuts and topographic highs. Table 2 shows the upper units found in the region. Further information pertaining to the distribution and character of these and older units can be obtained from well log data in government databases and various geological and hydrogeological reports (Green *et al.*, 1970; Hackbarth and Nastasa, 1979; Glass, 1990; Mossop and Shetson, 1994).

Underlying the near surface Cretaceous units in the Namur Lake area is a thick succession of Devonian to Mississippian carbonates, calcareous shales and salt horizons (Mossop and Shetson, 1994). Several of the Devonian carbonate units are part of the Grosmont Reef Complex, a large structure that extends in a northwesterly direction from east of Lesser Slave Lake to the N.W.T. (Bloy and Hadley, 1989). The Grosmont Reef Complex is likely the result of tectonic uplift along this trend during the Devonian. This structure, in conjunction with the PRA, may have played a significant role in the localisation of faults and other structures that could have provided favourable pathways for kimberlite volcanism.

TABLE 2
GENERALIZED STRATIGRAPHY - NAMUR LAKE AREA

SYSTEM	GROUP	FORMATION	AGE* (MA)	DOMINANT LITHOLOGY
PLEISTOCENE			Recent	Glacial till and associated sediments
TERTIARY			6.5 to Recent	Preglacial sand and gravels
UPPER CRETACEOUS		Lea Park	80 to 83	Bioturbated silty-shale
	Smoky	Kaskapau	88 to 92	Shale, silty-shale and ironstone; includes the Second White Specks unit
		Dunvegan	92 to 95	Sandstone and siltstone
	Fort St. John	Shaftesbury	95 to 98	Shale, bentonites, Fish-Scale Member
LOWER CRETACEOUS	Colorado	Pelican	98 to 100	Glaucconitic sands, siltstone, mudstone and conglomerate
		Joli Fou	100 to 103	Shale, glauconitic sandstone and bentonite

*Ages approximated from Green *et al.* (1970), Glass (1990), Dufresne *et al.* (1996) and Leckie *et al.* (1997).

In general, the Cretaceous strata underlying the Little Legend Property is composed of alternating units of marine and nonmarine sandstones, shales, siltstones, mudstones and bentonites. The oldest documented units exposed in the vicinity of the permit area belong to the Smoky Group, a sequence of Upper Cretaceous, calcareous and noncalcareous shales (Figure 5). However, older units from the base of the Fort St. John and/or the top of the Colorado groups, such as the Shaftesbury Formation, may be exposed in river and stream cuts.

Colorado Group is Lower Cretaceous in age and contains numerous formations, including the Joli Fou and the Pelican, which are correlative with the Peace River Formation of the Fort St. John Group further west (Dufresne *et al.*, 1996). The Joli Fou Formation is comprised of shale with interbedded, bioturbated to glauconitic sandstones and minor amounts of bentonite, pelecypod coquinas, nodular phosphorite and concretionary layers of calcite, siderite and pyrite (Glass, 1990). The Pelican Formation disconformably overlies the Joli Fou Formation and is gradational with the overlying Shaftesbury Formation (shales of the Colorado Group). The Pelican Formation is comprised of glauconitic sands, interbedded siltstone and mudstone with minor amounts of conglomerate. Coalified plant fragments and bioturbated sandstones are locally abundant.

The Shaftesbury Formation is lower Upper Cretaceous in age and is comprised of marine shales with fish-scale bearing silts, thin bentonitic streaks and ironstones. The upper contact is conformable and transitional with the Dunvegan Formation, where the Dunvegan Formation is present. The Shaftesbury Formation may be exposed along river and stream cuts. Evidence of extensive volcanism during deposition of the Shaftesbury Formation exists in the form of numerous bentonitic horizons throughout the formation, especially within and near the Fish Scales horizon (Leckie *et al.*, 1992; Bloch *et al.*, 1993). The deposition of the Shaftesbury Formation is also chronologically correlative with the deposition of the Crowsnest Formation volcanics of southwest Alberta (Olson *et al.*, 1994; Dufresne *et al.*, 1995) and with kimberlitic volcanism near Fort à la Corne in Saskatchewan (Lehnert –Thiel *et al.*, 1992; Scott Smith *et al.*, 1994).

Deltaic to marine, feldspathic sandstones, silty shales and laminated carbonaceous siltstones, characterise the Dunvegan Formation. The Dunvegan Formation in the Birch Mountains region is shaley, thin and often discontinuous. As a result, it may or may not be present within the Namur Lake area. Where present, the unit is conformably overlain by shales of the Kaskapau Formation of the Smoky Group. It should be noted that the Ashton pipes exist just above or near the contact between the Kaskapau and the Dunvegan formations (Dufresne *et al.*, 1998).

The LaBiche Formation is a frequently incorrectly used term correlative to units of the Shaftesbury Formation and other formations within the Smoky and Colorado groups (Glass, 1990). In the Namur Lake area, the LaBiche Formation is equivalent to the Smoky Group and Lea Park Formation. The Smoky Group is Upper Cretaceous in age and is comprised of thinly bedded, marine, silty shale with occasional ironstone and claystone nodules and thin bentonite streaks. The group is divided into three formations: (a) a lower shale unit, Kaskapau, which includes the Second White Specks marker unit (SWS); (b) a

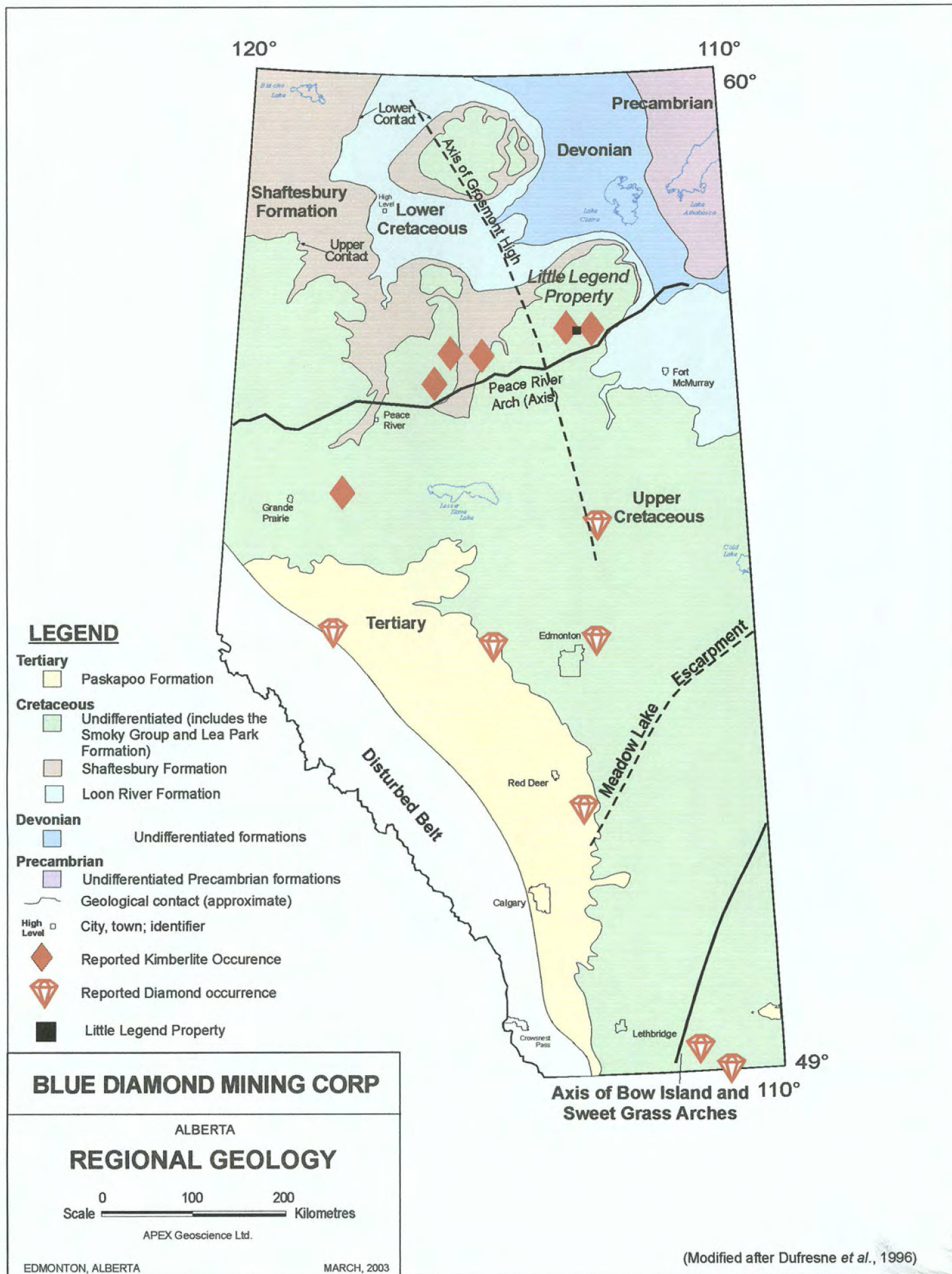


FIGURE 5

middle sandstone, named the Bad Heart; and, (c) an upper shale, Puskwaskau, which contains the First White Specks marker unit. Bedrock exposures in the Little Legend Property are likely comprised of the Kaskapau Formation, in particular, the SWS or lower, since most of the upper portions of the Smoky Group have been eroded away during tectonic uplift, possibly associated with uplift of the PRA. The Kaskapau Formation contains abundant ammonite fossils and concretions. In addition, foraminifera are present in the lower arenaceous units (Glass, 1990). Exposures of the Smoky Group are generally limited to river and stream cuts, topographic highs, and regions with thin drift veneer. In the Namur Lake region, the SWS is unconformably overlain by the Lea Park Formation. The top of the SWS also culminates with evidence of a significant increase in volcanism, based on the volume and number of bentonite units in the vicinity. It is conceivable that this volcanism may have been in conjunction with or a prelude to gradual uplift and non-deposition of the missing Smoky Group formations. There is strong evidence of volcanism associated within the depositional time span of the Smoky Group in the vicinity of the PRA (Auston, 1998; Carlson *et al.*, 1998). Ashton's recently discovered Buffalo Head Hills kimberlites yield emplacement ages of 86 to 88 Ma (Auston, 1998; Carlson *et al.*, 1998).

The youngest bedrock unit in the Namur Lake area is the Lea Park Formation of Upper Cretaceous age. Marine in origin, the Lea Park Formation is comprised of light grey shale and pale grey, glauconitic, silty-shale with ironstone concretions. Preliminary micropaleontology conducted by the Geological Survey of Canada (GSC) on drill cores from the Birch Mountains area indicates a time gap of 4 to 8 million years between the Lea Park Formation and the top of the underlying SWS Formation. This time gap, combined with the evidence of regolithic material incorporated in the lag deposit capping the SWS in boreholes situated to the east, indicates that significant uplift and erosion may have occurred between the end of the SWS and the deposition of the overlying Lea Park shales and siltstones (Dufresne *et al.*, 2001). The recently discovered Birch Mountain Kimberlites in the Namur Lake area are reported to yield emplacement ages ranging from 71 (Montello Resources Ltd., 1999) to about 84 Ma (Northern Miner, 1998). The lattermost age corresponds roughly to the age of the erosional unconformity between the SWS and Lea Park.

Quaternary

Data and information about the surficial geology in central to northern Alberta is sparse and regional in nature. Prior to continental glaciation during the Pleistocene, most of Alberta, including the Namur Lake region, had reached a mature stage of erosion. Large, broad paleochannels and their tributaries drained much of the region, flowing in an east to northeasterly direction (Dufresne *et al.*, 1996). In addition, fluvial sand and gravel was deposited preglacially in these channels.

During the Pleistocene, multiple southwesterly and southerly glacial advances of the Laurentide Ice Sheet across the region resulted in the deposition of ground moraine and associated sediments (Figure 5 in Dufresne *et al.*, 1996). The advance of glacial ice may have resulted in the erosion of the underlying substrate and modification of bedrock topography. Dominant ice flow directions within the Little Legend Property appear to be

topographically controlled, following the southwest trend of the Birch Mountains. In addition, topographic variations may have locally channelled ice flow towards the south to south-southeast. Glacial sediments infilled low-lying and depressional areas, draped topographic highs and covered much of the Namur Lake area as veneers and/or blankets of till and diamict. Localised pockets of deposits from glacial meltwater and proglacial lakes likely infilled areas of low relief.

Glacial ice is believed to have receded from the area between 15,000 and 10,000 years ago. After the final glacial retreat, lacustrine clays and silts were deposited in low-lying regions along with organic sediments. Rivers previously re-routed due to glaciation, re-established easterly to northeasterly drainage regimes similar to that of the pre-Pleistocene. Extensive colluvial and alluvial sediments accompanied post-glacial river and stream incision.

The majority of the Little Legend Property is covered by drift of variable thickness, ranging from 45 m to likely over 150 m (Pawlowicz and Fenton, 1995a,b). Drilling by Kennecott on the adjacent Legend Property intersected drift ranging from approximately 120 m northwest and west of the Little Legend Property to over 80 m just east of Blue Diamond's property (Montello Resources Ltd., 1998a,b). Drift thickness may be thinner locally, in areas of higher topographic relief. As an example, one of the kimberlites drilled by Kennecott was intersected beneath only 12.2 m of overburden. Unfortunately, local drift thickness for the Little Legend property can not be easily delineated due to the sparsity of publicly available data for the region. Limited general information regarding bedrock topography and drift thickness in northern Alberta is available from the logs of holes drilled for petroleum, coal or groundwater exploration and from regional government compilations (Mossop and Shetson, 1994; Pawlowicz and Fenton, 1995a,b; Dufresne *et al.*, 1996).

Structural Geology

In north-central Alberta, the PRA is a region where the younger Phanerozoic rocks, which overlie the Precambrian basement, have undergone periodic vertical and, possibly, compressive deformation from the Proterozoic into Tertiary time (Cant, 1988; O'Connell *et al.*, 1990; Dufresne *et al.*, 1995, 1996). This pattern of long-lived, periodic uplift and subsidence has imposed a structural control on the deposition patterns of the Phanerozoic strata in northern Alberta. In addition, this periodic movement has resulted in a rectilinear pattern of faults that not only is responsible for structurally controlled oil and gas pools, but may have provided potential pathways for later deep-seated intrusive kimberlitic magmas.

During the mid-Cretaceous and Early Tertiary, compressive deformation occurred as a result of the orogenic event that eventually led to the formation of the Rocky Mountains. The PRA was emergent during this period resulting in the reactivation of many prominent basement faults. The Phanerozoic rocks beneath the Little Legend Property lie along the northeastern edge of the axis of the PRA and are underlain by and proximal to basement faults related to the Grosmont Reef Complex, which formed over the Grosmont High (Bloy and Hadley, 1989; Dufresne *et al.*, 1996). There is strong evidence that basement faults that have manifested themselves in the overlying Phanerozoic sedimentary succession

may have controlled the emplacement of the Mountain Lake Kimberlite and the Buffalo Head Hills kimberlites west of the Little Legend Property (Dufresne *et al.*, 1996; Leckie *et al.*, 1997). It is unclear whether the kimberlites discovered to date in the Birch Mountains by Kennecott and its joint venture partners surrounding Blue Diamond's Little Legend Property show any spatial relationship to structures in the underlying basement and/or Phanerozoic succession. However, structures observed on the Little Legend Property resulting from tectonic activity associated with movement along the PRA, the Grosmont High, or even along contacts between different basement terranes could be pathways for kimberlitic volcanism.

2000 – 2002 EXPLORATION

Legend Property

2000 – 2002 Ground Magnetic Surveys

During February 2000 and February 2002, Dahrouge Geological Consulting Ltd. (Dahrouge) completed gridding and ground magnetic surveys over twelve high resolution airborne magnetic anomalies (Appendix 2). All of the anomalies that were surveyed are in the southeast portion of the Legend Property in close proximity to the Little Legend Property. A brief synopsis of the work conducted by Dahrouge between 2000 and 2002 is also included in Appendix 2. During the Fall of 2000, APEX also conducted limited ground geophysical surveys at the Legend Property, mostly to locate collar locations over targets that were previously flown with detailed close-spaced helicopter magnetic and electromagnetic surveys. The ground magnetic surveys for these targets, including target 33, Bacchus, Kendu, Lammasu, Iris, Siren and Dutchman are also included in Appendix 2.

All of the ground grids were on the order of 500 m by 400 m with line-spacing at 100 m (Appendix 2). With the exception of a couple of targets, the bulk of the ground magnetic surveys yielded low priority linear to sinuous 'channel-like' magnetic features that do not warrant any further follow-up exploration. The ground magnetic surveys yielded isolated to partially circular magnetic anomalies of interest for further kimberlite exploration at the Lammasu, Argonaut and Hippogriff targets (Appendix 2). Other targets that yielded a difficult signature to interpret and could benefit from infill ground magnetics on the order of 25 to 50 m line-spacing include Centaur, Bacchus Dutchman, Cronus, LDG066 and LDG094 (Appendix 2). The Lammasu, Centaur and Hippogriff targets warrant drill testing for kimberlite.

2000 Drilling Kendu Target

During November 2000, APEX supervised a drill program of the Kendu magnetic target. During a three week program, including ground magnetics followed by drill mobilization, drilling and demobilization the Kendu Target was drill tested by Aggressive Diamond Drilling Ltd. One corehole was drilled to a depth of 206.36 m with a total 116.14 m of core recovered. Kimberlitic breccia was intersected a depth of 100.56 m.

The Kendu Kimberlite, the ninth kimberlite intersected in the Birch Mountains, was comprised of abundant eclogite and lherzolite xenoliths as well as abundant mantle derived indicator minerals. Caustic fusions analysis of approximately 170 kg of split drill core, conducted at Lakefield Research and the Saskatchewan Research Council, did not yield any microdiamonds. Drill logs and lab certificates for the Kendu Kimberlite are attached in Appendix 3. The kimberlite indicator mineralogy for the Kendu Kimberlite are discussed in detail in Dufresne *et al.* (*In Preparation*)

2002 Drilling Lammasu Target

During November 2001, APEX obtained winter land use permits on behalf of Blue Diamond for drill testing the Lammasu magnetic target. In anticipation of the proposed drill program, Canadian Mine Services out of Edmonton mobilized a drill rig to the Legend Property and initiated all drill set up. APEX and Canadian Mine Services personnel completed initial set and initiated drilling during April, 2002. Drilling was halted prior to reaching any significant depth due to a lack of water required to complete the drillhole. The drill is presently on site and drilling of the double-lobed Lammasu Target will be completed this spring.

Little Legend Property

Review Of The 1998 HRAM Survey Data

A widely-spaced, government aeromagnetic survey was flown over the region by the Department of Mines and Technical Surveys (DMTS) in 1952 (GSC, 1983). The flight lines were spaced every 1.6 km with cross-lines at approximately 24 km. A review of the data shows two north-northwest to south-southeast linear trends, a magnetic high in the northeast corner and a magnetic low in the southwest corner of the property. Numerous magnetic low "bullseyes" lie within the linear magnetic low within the Namur Lake sheet. Although potential kimberlite targets are rarely in excess of 500 m, the DMTS data (GSC, 1983) has been used by private exploration companies, including Montello, to define prospective areas for staking, and airborne and ground magnetic surveys.

During the spring to early summer of 1998, Spectra flew a HRAM survey, on behalf of Montello and Redwood, over their Legend Property in the Birch Mountains. Flight lines were spaced at 200 m intervals, with tie lines at 1 to 1.2 km spacing. Flight altitude averaged about 100 m above ground surface. Blue Diamond's Little Legend Property was overflown by Spectra during the survey. Blue Diamond acquired the raw data pertaining to the Little Legend Property from Montello in November of 1998. This data was levelled by Spectra on behalf of Blue Diamond during November and December 1998 and was subsequently provided to APEX for review for potential kimberlite targets in January 1999. Overall, the magnetic data indicates the same general magnetic trends seen in the 1952 (DMTS) data. Northwest trending magnetic highs, likely due to the trend of basement rocks, are evident in the northeast and southwest corners of Blue Diamond's Little Legend Property (Figure 6). A magnetic low transects the property from the southeast to northwest corners of the property.

During late January, 1999, APEX was provided with the raw flight line magnetic profiles for the Little Legend Property by Spectra. APEX personnel subsequently reviewed each flight line profile in order to search for prospective high frequency magnetic anomalies that could be related to potential kimberlites. The magnetic profiles are looked at on a vertical scale of 1 cm = 20 nT and 1 cm = 2 nT. In addition, Spectra provides a fourth differential noise to signal channel (magnetic noise) that assists in the identification of high frequency magnetic anomalies that are due to culture such as oil and gas wells, and pipelines. Up to date information on the location of oil and gas wells, pipelines, seismic lines and road access, were provided by Calgary-based GeoCADD, Alberta. The levelled total field magnetic data provided by Spectra were used to create digital maps of total field magnetic intensity, horizontal gradient, vertical gradient and first vertical derivative. Figure 6 illustrates the total magnetic intensity. Figures 7 and 8, display vertical gradient and horizontal gradient, respectively. Figure 9 illustrates the first vertical derivative. The picked high frequency magnetic anomalies that could be of interest for kimberlite exploration are identified on all four geophysical maps.

Systematic profile analysis of the magnetic data resulted in the identification of 116 prospective high frequency magnetic anomalies that are likely related to near surface features such as kimberlite pipes, near surface concentrations of magnetite associated with recent and old drainages and, in a few cases, possible culture (Appendix 4). A total of 78 of the 116 high frequency magnetic anomalies exist within the boundaries of Blue Diamond's Little Legend Property. The remaining magnetic anomalies exist outside of the boundaries of Blue Diamond's Little Legend Property, however, they exist within the confines of Blue Diamond's Legend Property. The magnetic anomalies have been ranked on the basis of the quality of the profile magnetic signature and the presence of associated map anomalies and drainage. In general, those anomalies coinciding with drainage have been downgraded, however, if kimberlites are found on the property, several of the higher quality magnetic anomalies coinciding with creeks may need to be evaluated and reprioritized. The locations of the anomalies are shown on Figures 6 to 9.

A very distinct magnetic anomaly with a prominent dipole effect exists about 4 km northwest of the northwest corner of the Little Legend Property (Figures 6 to 9). The anomaly likely corresponds to the Valkyrie kimberlite pipe, which was intersected by Kennecott during the fall of 1998. In addition, a very prominent 5 to 7 nT positive magnetic anomaly (profile anomalies 4 and 5) that is potentially indicative of a kimberlite pipe exists about 1.5 km north of the central portion of the Little Legend Property (Figures 6 to 9). This anomaly was drilled by Blue Diamond during the fall, 2000 and resulted in the discovery of the Kendu Kimberlite on the Legend Property. A total of 23 medium to high priority magnetic anomalies exist on Blue Diamond's Little Legend Property. These anomalies range in magnitude from about 3 nT up to about 8 nT for the positive magnetic anomalies. Several of the medium to high priority anomalies, not associated with drainage, are of interest for potential kimberlite targets. Anomaly 80, situated on a northeast trending seismic line in the north-central portion of the property consists of a very sharp 10 nT negative magnetic anomaly with a prominent dipole effect visible on Figures 6 to 9. The magnetic anomaly also yields a very high noise to background reading that is normally

associated with culture such as wells and pipelines. A visit of the property failed to locate any possible culture that might be responsible for the anomaly. The anomaly is on the flank of a hill and is not associated with any drainage feature. The anomaly is either the result of a spurious magnetic reading or, more likely, a possible kimberlite pipe. Two other high priority magnetic anomalies, both associated with prominent vertical gradient anomalies (anomalies 33 and 41), exist in the south-central and southwest portions of the Little Legend Property (Figures 6 to 9).

Other medium to high priority magnetic anomalies that do not appear to be directly associated with drainage and, therefore, warrant immediate follow-up ground exploration include anomalies 24, 25, 40, 42, 43, 44, 45, 46, 49, 51, 52, 53, 57, 58, 76, 83, 99, 110, 111 and 112 (Appendix 4). Several of the 1 to 3 nT low to medium-low magnetic anomalies that are not associated with drainage may also warrant follow-up ground exploration. Several of the medium to high priority magnetic anomalies in the southwest corner of the Little Legend Property exist between creeks, however their trend parallels the creek indicating that they may be drainage-related. These anomalies are likely a result of magnetic minerals concentrated in the watercourses or topographic effects such as rapid changes in elevation over short distances that cannot be compensated for by moving the fixed-wing aircraft up or down. However, it should be noted that there are also several medium to high priority magnetic anomalies in the southwest corner of the Little Legend Property that are more isolated or exist on topographic highs and, therefore, cannot be directly attributed to drainage. These anomalies all warrant ground exploration. A sinuous, curvilinear, north trending group of magnetic anomalies (anomalies 17 to 22, 24, 25, 82 and 84 to 87) exists in the northwest corner of the Little Legend Property (Figures 6 to 9). The anomalies are not associated with any current drainage feature, but they represent a 4 to 5 km long, continuous magnetic anomaly. The magnetic anomaly is likely related to a Tertiary sand and gravel deposit or a glacial meltwater feature such as an esker. Alternatively, several of the magnetic anomalies appear to be situated at the lowest point of the basement magnetic trend, which could indicate that the magnetic anomaly is related to some structural feature.

2000 Ground Magnetic Surveys

During the spring of 2000, Dahrouge completed gridding and ground magnetic surveys over one high priority airborne magnetic anomaly, one low priority anomaly and two unranked anomalies (Table 3). All of the anomalies that were surveyed are in the northeast portion of the property and were partly chosen for surveying due to ease of access (Dahrouge, 2000).

Table 3: Ground Magnetic Targets 2000

Target Name	UTM Coordinates (NAD 83)	
	Easting (m)	Northing (m)
1. Grizz (80)	369,720	6,350,000
2. Pooh (72)	371,050	6,350,440
3. Care (-)	371,700	6,350,550

8. Yogi (-)

368,040

6,348,460

The ground magnetic surveys did not yield any definitive magnetic anomalies that could be indicative of kimberlite and, therefore, require drill testing. However, potentially interesting magnetic anomalies were identified on the Care, Grizz and Pooh grids (Appendix 5). Each of these three grids should be extended and or infill surveyed to determine if the magnetic anomalies warrant any further exploration. All three grids were on the order of 200 m by 300 m grids. With the fixed wing magnetic survey flown at a line-spacing of 200 m the location of each identified airborne magnetic anomaly could easily be located from 100 to 150 m from the identified location.

Although drill targets were not identified by the initial ground geophysical surveys only 1 of 23 medium to high priority airborne magnetic anomalies were gridded and ground geophysically surveyed. With the proximity of the known Legend kimberlites, ground geophysical surveys are warranted for the remaining 22 medium to high priority magnetic anomalies identified from the airborne magnetic survey.

APEX Field Visit

During the fall of 1998, Mr. M.B. Dufresne, M.Sc., P.Geol., a Qualified Person and Principal of APEX Geoscience Ltd. visited the Little Legend Property over a period of two days. Mr. Dufresne checked a number of magnetic anomalies for culture and collected two till samples. The till samples were never processed for diamond indicator minerals. No cultural interferences were identified at any of the magnetic anomalies.

EXPENDITURES

To date, Blue Diamond has expended \$57,259.23 (Dahrouge, 2000) on exploration of the Little Legend Property (Permit 9398090062). During 2000 to 2002, Blue Diamond conducted considerable exploration in the area immediately surrounding the Little Legend Property, known as the Legend Property. A total cost of \$331,723.97 of exploration work was conducted on the formerly adjoining Legend Property Permits (Appendix 1), which have now lapsed (Appendix 6). These expenditures are being applied to the Little Legend Property for the purpose of maintaining Permit 9398090062.

DISCUSSION OF DIAMOND POTENTIAL

The age and distribution of potential kimberlite pipes in Alberta is considered to be relevant to Blue Diamond's Little Legend Property, as the age may have a bearing on the style of volcanism and, therefore, different preservation potential for different ages and styles of pipes. As an example, Early Tertiary kimberlite pipes of the Lac de Gras region are typically small, carrot shaped pipes that can be highly diamondiferous. In comparison, the Fort à la Corne and Mountain Lake pipes are poorly diamondiferous and are lenticular, stratabound pyroclastic deposits.

In Alberta, evidence exists for four and possibly five ages of alkaline volcanic activity. Any important kimberlites to be discovered in northern Alberta will likely be associated with the third and fourth major periods of volcanism that is evident in Alberta and Saskatchewan from Aptian to Santonian age, approximately from 119 Ma to 84 Ma (Dufresne *et al.*, 1996; Carlson *et al.*, 1998). These periods encompass the depositional span of the Gething Formation through to the overlying Kaskapau Formation (Table 2). This time span essentially includes all exposed Cretaceous sedimentary units in the Namur Lake map area (NTS 84H) and those likely to be exposed beneath Blue Diamond's Little Legend Property (Olson *et al.*, 1994; Dufresne *et al.*, 1995). This has been confirmed by the discovery of kimberlites in the Buffalo Head Hills and in the Birch Mountains. The Buffalo Head Hills kimberlites yield an age of 86 Ma to 88 Ma (Auston, 1998; Carlson *et al.*, 1998) and the Birch Mountains kimberlites, which lie within a few kilometres of the boundaries of the Little Legend Property, yield an age ranging from 71 Ma (Montello Reosurces Ltd., 1999) to 84 Ma (Northern Miner, 1998). If pipes of Cenomanian age are discovered on or near Blue Diamond's Little Legend Property, they are likely to be of significant size, with pyroclastic aprons and crater facies material potentially preserved, as seen within Ashton's pipes. Preservation of any pipes related to the Cenomanian volcanic event found on Blue Diamond's permits is dependent upon the degree of erosion by fluvial and glacial processes. The discovery potential of kimberlites on Blue Diamond's Little Legend Property is high. This conclusion is based upon the high quality of several of the magnetic anomalies delineated by the 1998 fixed-wing magnetic survey, in conjunction with the fact that they exist in areas that are topographically high with no evidence of associated drainage or culture.

The regional geological and tectonic setting for the Little Legend Property is favourable for the formation and preservation of diamonds in the upper mantle beneath the permit area. The Namur Lake area shares a similar regional geological setting as Ashton's Buffalo Head Hills kimberlite field, which lies southwest of Blue Diamond's Little Legend Property. Blue Diamond's Little Legend Property, and the Buffalo Head Hills and Birch Mountains kimberlites are located over or along: (a) the north flank of the PRA, (b) one of the largest residual gravity lows in Alberta, (c) an area of highly thickened crust, based upon seismic refraction data, and (d) the magnetically high Buffalo Head Terrane, an interpreted Proterozoic accreted terrane, which has been stable for at least 1.8 Ga (Dufresne *et al.*, 1996). The Little Legend Property is situated in the middle of a northwest to southeast trend of known kimberlite pipes recently discovered by Kennecott on the Legend Property. The lack of diamond indicator minerals within and down-ice of Blue Diamond's property is likely a function of the sparse to non-existent sampling by either industry or government surveys for the region. The regional setting of Blue Diamond's Little Legend Property, in conjunction with its position within the Legend Property kimberlite pipes trend, is significant and indicates that aggressive follow-up exploration is warranted.

Although the Little Legend Property is at an early stage of diamond exploration, the presence of numerous kimberlite pipes proximal to the property and the presence of bullseye type magnetic anomalies within the property, indicate that the potential for discovery of one or more kimberlite pipes is high. The potential for discovery of an

economic diamondiferous kimberlite on Blue Diamond's Little Legend Property is low as it is for most early stage diamond properties based upon world statistics for the discovery of economic kimberlites. Any kimberlites found on Blue Diamond's Little Legend Property will likely be part of the Legend or Birch Mountain kimberlite field.

CONCLUSIONS

The potential for discovery of a kimberlite on Blue Diamond's Little Legend Property is high based upon the available information for the property and the surrounding area. An aggressive follow-up ground exploration program is warranted in order to determine if medium to high priority magnetic anomalies 24, 25, 33, 40, 41, 42, 43, 44, 45, 46, 49, 51, 52, 53, 57, 58, 76, 80, 83, 99, 110, 111 and 112, none of which appear to be directly associated with drainage or culture, are indicative of possible kimberlite pipes. Other magnetic anomalies that yield high quality magnetic responses, but have been downgraded in priority because they lie proximal to drainage or culture, should be accurately compiled and ground checked, as well as some of the lower priority magnetic anomalies that are not associated with drainage or culture. At present, the level of risk for the discovery of an economic diamondiferous kimberlite on the Little Legend Property is moderate to high because: (a) kimberlites have not been discovered on the permit to date, (b) little or no exploration sampling for diamond indicator minerals has been performed to date in order to determine which magnetic anomalies could be related to kimberlite pipes and which of those returning positive indications could be diamondiferous, and (c) glacial drift of unknown thickness blankets the region with little or no way of using existing oil, gas and hydrogeological information to establish drift thickness.

The Little Legend Property exists within a favourable regional setting for possible kimberlites and diamonds and warrants an aggressive follow-up ground exploration program. Favourable traits of the regional setting of Blue Diamond's Little Legend Property, include: (a) the property is thought to be underlain by the western edge of the TMZ, but may be underlain by basement of the Buffalo Head Terrane, which underlies Ashton's diamondiferous kimberlites in the Buffalo Head Hills, (b) seismic refraction and reflection studies indicate that the crust in the Namur Lake region is likely between 35 to 40 km thick, a trait favourable for the formation and preservation of diamonds in the upper mantle, (c) the Little Legend Property exists along the same trend of gravity lows as those associated with the surrounding Birch Mountain kimberlites recently discovered by Kennecott, (d) the Little Legend Property exists along the north flank of the northeast trending Peace River Arch and the east edge of the northwest trending Grosmont High, either one of which could have controlled the emplacement of Cretaceous kimberlites in the Birch Mountains, (e) at least two of the Birch Mountain kimberlites discovered by Kennecott are diamondiferous, and (f) little diamond indicator sampling has been conducted down-ice of the Little Legend Property.

RECOMMENDATIONS

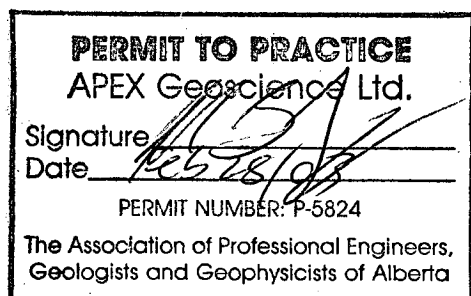
The favorable regional geological setting for Blue Diamond's Little Legend Property, the discovery of kimberlites proximal to the property by Kennecott and Blue Diamond, and the presence of multiple medium to high priority, high-frequency, magnetic anomalies, that cannot be attributed to culture or drainage, indicate that an aggressive follow-up ground exploration is warranted. A two-phase follow-up exploration program is recommended for Blue Diamond's Little Legend Property to evaluate the potential for the presence of diamondiferous kimberlites or related intrusions. Specifically:

Phase 1: The Phase 1 program should consist of gridding, ground geophysical surveying and surface sampling within Blue Diamond's Little Legend Property. Selected medium to high priority magnetic anomalies, which do not appear to be associated with drainage or culture, should be tested by ground geophysical surveys in order to determine if they are indicative of possible kimberlite pipes. Other magnetic anomalies that yield high quality magnetic responses but have been downgraded in priority because they lie proximal to drainage or culture should be accurately compiled and ground checked, as well as some of the lower priority magnetic anomalies that are not associated with drainage or culture. Systematic and reconnaissance diamond indicator sampling of tills and streams should be conducted in conjunction with the ground geophysical surveys in order to evaluate all potential targets. The till and stream sampling program should be conducted this summer in conjunction with the ground geophysical surveys. The objective of the Phase 1 program is to have one or more targets at the drill ready stage with several targets requiring further detailed follow-up work in order to get to the drill ready stage. In the case of the three previously gridded and magnetic surveyed anomalies including magnetic anomaly 80 (Grizz grid), the existing ground geophysical surveys should be extended or infilled to further test the existing magnetic features. Summer access in the region is difficult, therefore, it is recommended that as much of the ground geophysical work as possible be conducted during the winter season as **Phase 1**. The Phase 1 program should consist of ground geophysical surveys and reconnaissance sampling of streams and till where possible.

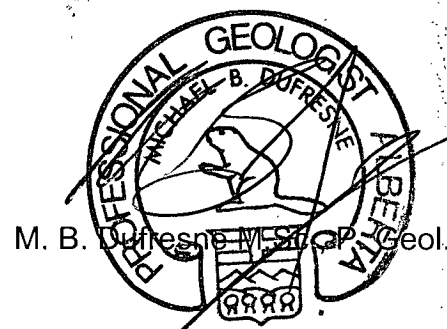
The proposed **Phase 1** program would require 4 weeks of fieldwork using a three- to four-man crew, a truck, four wheel ATV's with some minor helicopter support. This program should be commenced immediately. The total cost to conduct the recommended Phase 1 exploration programs is estimated at \$150,000, not including GST.

Phase 2: Depending upon the results of the Phase 1 exploration program, Phase 2 should consist of drilling of selected targets delineated by the Phase 1 program, as well as further follow-up ground exploration in order to bring the reconnaissance targets that yielded positive results during the Phase 1 program to the drill ready stage.

A detailed program for the Phase 2 follow-up exploration, and a detailed budget thereto, is completely dependent upon the results of the recommended Phase 1 exploration program.



APEX Geoscience Ltd.



February 28, 2003
Edmonton, Alberta, Canada

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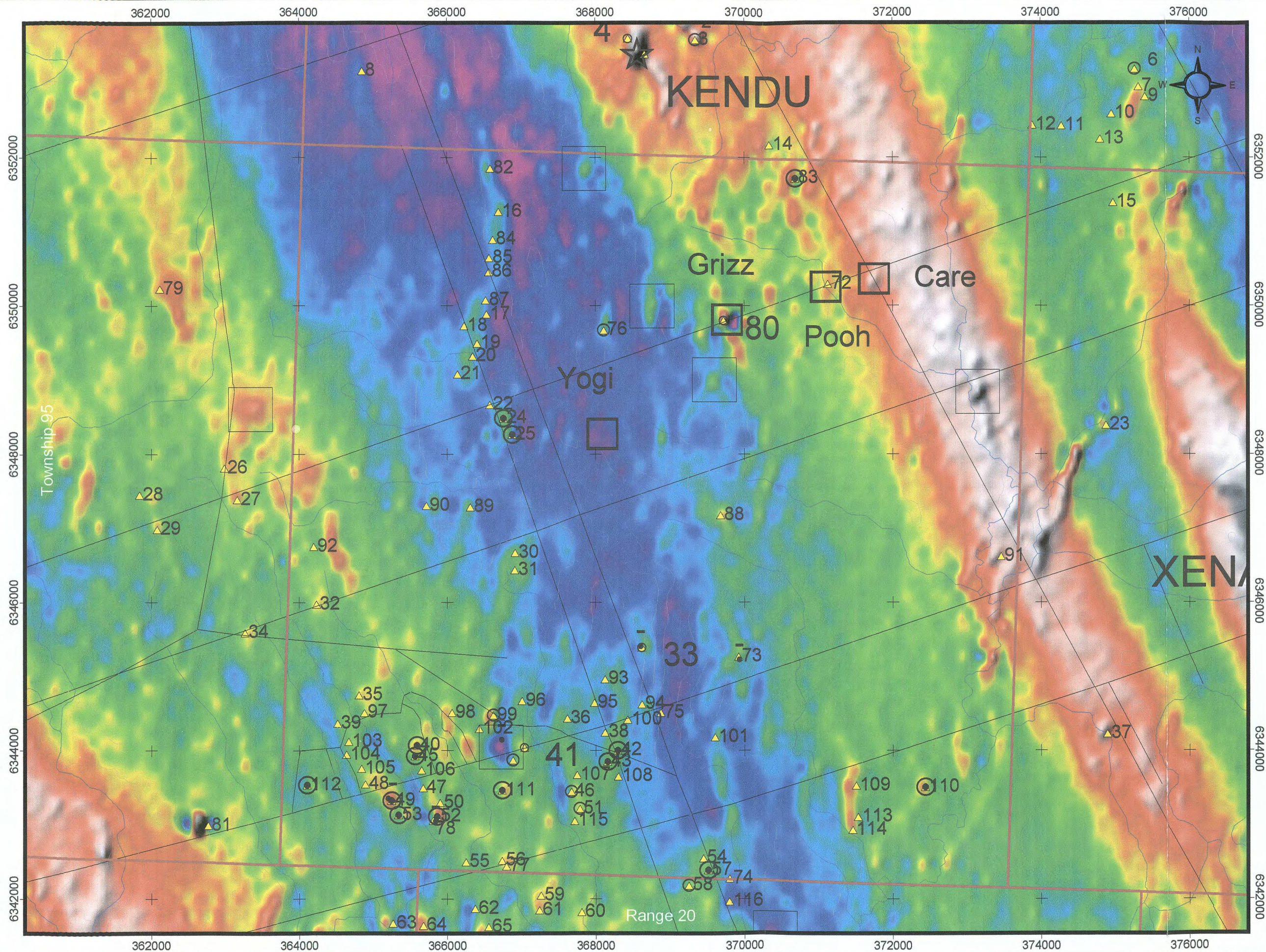
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- ### Legend
- ▲ Mag Anomalies
 - Little Legend Ground Targets
 - Mag Anomaly Prioritization
 - ⊙ 1st Priority, identifier
 - 2nd Priority, identifier
 - 3rd Priority, identifier
 - ★ Birch Mountain Kimberlites
 - ▬ Townships/ Ranges
 - Topography
 - ▬ Cutlines
 - ▬ Drainage

BUE DIAMOND MINING CORP.

Little Legend Property

Shaded First Vertical Derivative Of TMI With Magnetic Anomalies

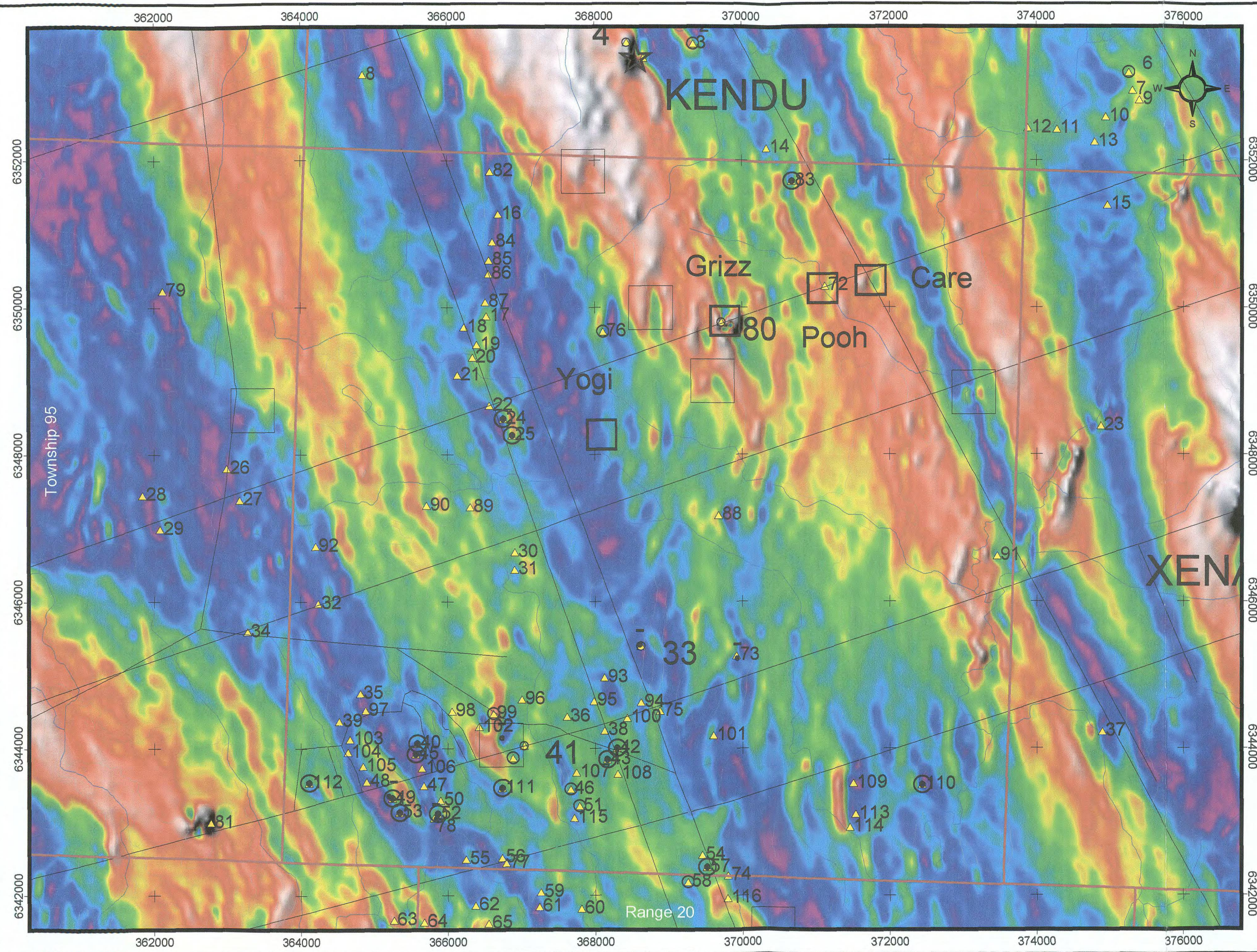
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Meters

APEX Geoscience Ltd.

Edmonton, Alberta March, 2003

Figure 8



Legend

- ▲ Mag Anomalies
- Little Legend Ground Targets
- Mag Anomaly Prioritization**
 - 1st Priority, identifier
 - 2nd Priority, identifier
 - 3rd Priority, identifier
- ★ Birch Mountain Kimberlites
- Townships/ Ranges
- Topography
- Cutlines
- Drainage

BLUE DIAMOND MINING CORP.

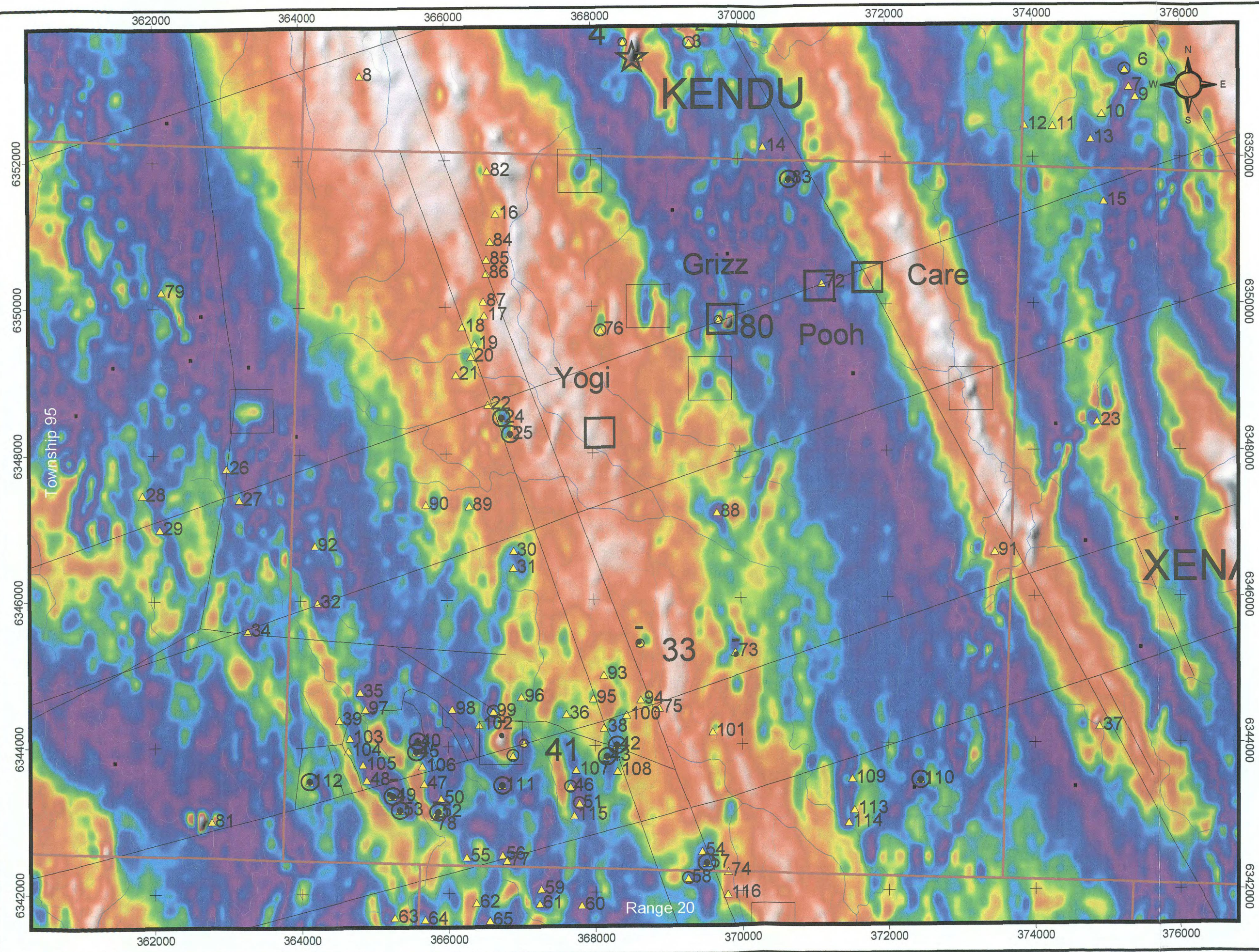
Little Legend Property

**Shaded Horizontal Gradient
Of TMI With Magnetic
Anomalies**

0 500 1000 1500 2000 2500
Meters

APEX Geoscience Ltd.
Edmonton, Alberta March, 2003

Figure 9



Legend

- ▲ Mag Anomalies
- Little Legend Ground Targets
- Mag Anomaly Prioritization**
 - ⊙ 1st Priority, identifier
 - 2nd Priority, identifier
 - 3rd Priority, identifier
- ★ Birch Mountain Kimberlites
- ▬ Townships/ Ranges
- Topography
- ⚡ Cutlines
- 🌊 Drainage

BLUE DIAMOND MINING CORP.

Little Legend Property

**Shaded Vertical Gradient
Of TMI With Magnetic
Anomalies**

0 500 1000 1500 2000 2500
Meters

APEX Geoscience Ltd.

Edmonton, Alberta March, 2003

Figure 7

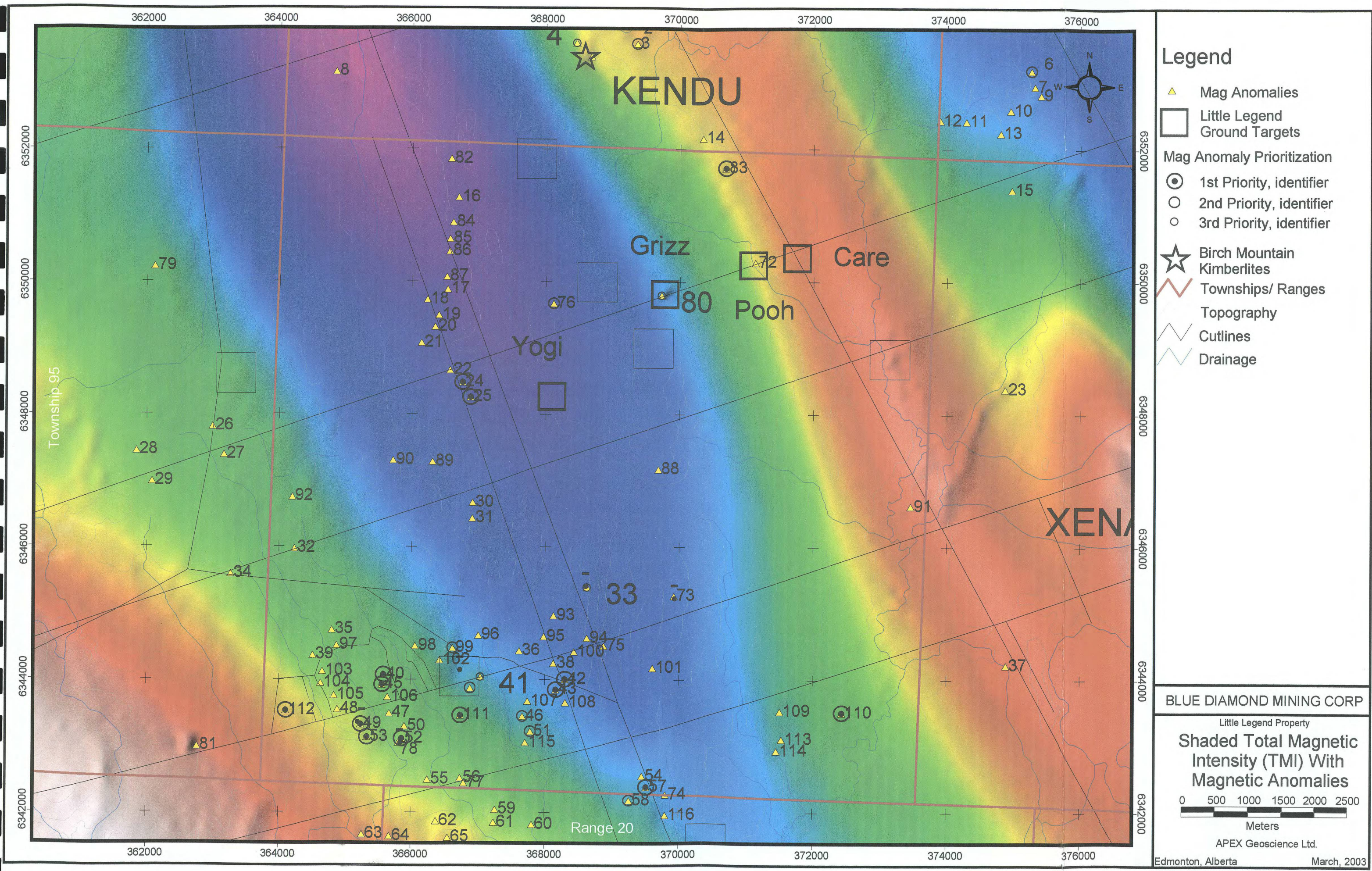


Figure 6

CERTIFICATION

I, M.B. DUFRESNE OF 267 BURTON ROAD, EDMONTON, ALBERTA, CERTIFY AND DECLARE THAT I AM A GRADUATE OF THE UNIVERSITY OF NORTH CAROLINA AT WILMINGTON WITH A B.SC. DEGREE IN GEOLOGY (1983) AND A GRADUATE OF THE UNIVERSITY OF ALBERTA WITH A M.SC. DEGREE IN ECONOMIC GEOLOGY (1987). I AM REGISTERED AS A PROFESSIONAL GEOLOGIST WITH THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF ALBERTA AND, AS SUCH, AM A QUALIFIED PERSON FOR THE PURPOSES OF THIS QUALIFYING REPORT.

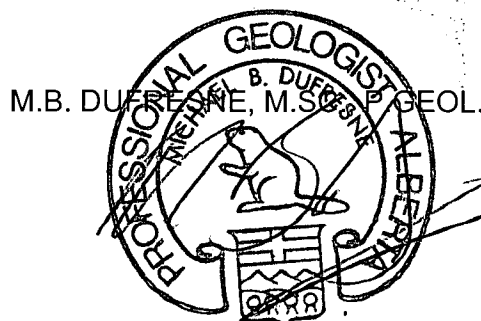
MY EXPERIENCE INCLUDES SERVICE AS AN EXPLORATION GEOLOGIST WITH THE DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT, YUKON, FROM 1983 TO 1985. FROM 1986 TO 1993, I HAVE CONDUCTED AND DIRECTED PROPERTY EXAMINATIONS AND EXPLORATION PROGRAMS ON BEHALF OF COMPANIES AS A GEOLOGIST IN THE EMPLOY OF R.A. OLSON CONSULTING LTD. AND ITS PREDECESSOR COMPANY TRIGG, WOOLLETT, OLSON CONSULTING LTD. OF EDMONTON, ALBERTA. SINCE JANUARY 1994, I HAVE CONDUCTED AND DIRECTED PROPERTY EXAMINATIONS, PROPERTY EVALUATIONS AND EXPLORATION PROGRAMS ON BEHALF OF COMPANIES AS A PRINCIPAL IN APEX GEOSCIENCE LTD. OF EDMONTON, ALBERTA.

I HAVE NO INTEREST, DIRECT OR INDIRECT, IN THE PROPERTIES THAT ARE THE SUBJECT OF THIS REPORT OR SECURITIES OF BLUE DIAMOND MINING CORP., NOR DO I EXPECT TO RECEIVE SUCH INTEREST. APEX GEOSCIENCE LTD. HAS NO INTEREST, DIRECT OR INDIRECT, IN THE PROPERTIES, HOWEVER, APEX DOES OWN SECURITIES OF BLUE DIAMOND MINING CORP., WHICH WERE OBTAINED AS PART OF A DEBT SETTLEMENT DURING 2001.

THIS REPORT ENTITLED " **ASSESSMENT REPORT FOR EXPLORATION CONDUCTED ON THE LITTLE LEGEND PROPERTY AND SURROUNDING AREA, BIRCH MOUNTAINS, NORTHEASTERN ALBERTA**" WAS WRITTEN, IN PART BY ME AND COMPLETED UNDER MY SUPERVISION AND IS BASED UPON THE STUDY OF PUBLISHED AND UNPUBLISHED DATA. I HAVE PERSONALLY VISITED THE LITTLE LEGEND PROPERTY THAT IS THE SUBJECT OF THIS REPORT FOR TWO DAYS DURING THE FALL OF 1998. I AM NOT AWARE OF ANY MATERIAL FACT OR MATERIAL CHANGE WITH RESPECT TO THE SUBJECT MATTER OF THIS TECHNICAL REPORT THAT IS NOT REFLECTED IN THIS REPORT.

I HEREBY GRANT BLUE DIAMOND MINING CORP. OF SHERWOOD PARK, ALBERTA, PERMISSION TO USE THIS REPORT AS AN ASSESSMENT REPORT FOR THE LITTLE LEGEND PROPERTY.

FEBRUARY, 2003
EDMONTON, ALBERTA



APPENDIX 1

Legal Permit Description Legend Property

Little Legend Property

Blue Diamond Mining Corp.

Appendix 1
Legal Permit Discription Legend Property
Little Legend Property
Blue Diamond Mining Corp.

Permit No.	Issue Date	Expiry Date	Legal Description			
			Twp.	Rg.	W. of	Section
9,397,060,083	24-Jun-97	Lapsed	94	16	4	1 to 36
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9,397,060,086	24-Jun-97	Lapsed	94	19	4	1 to 36
9,397,060,087	24-Jun-97	Lapsed	94	20	4	1 to 36
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Appendix 1
Legal Permit Discription Legend Property
Little Legend Property
Blue Diamond Mining Corp.

Permit No.	Issue Date	Expiry Date	Legal Description			
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9,397,060,138	24-Jun-97	Lapsed	99	24	4	1 to 36
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9,397,060,142	24-Jun-97	Lapsed	100	19	4	1 to 36
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APPENDIX 2

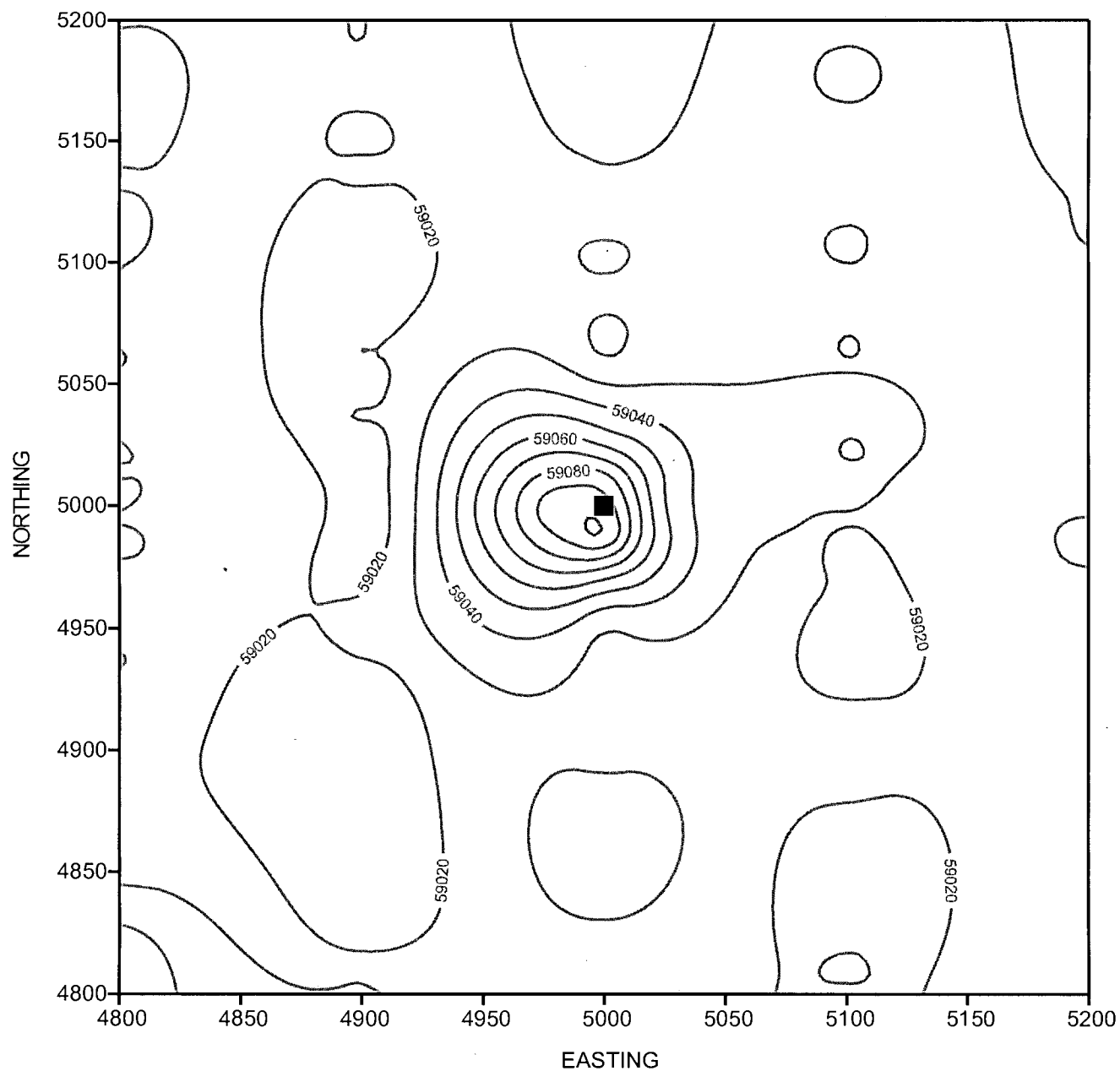
Ground Magnetic Targets 2001-2002

Little Legend Property

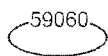
Blue Diamond Mining Corp.

Appendix 2
Ground Magnetic Targets 2000 - 2002
Little Legend Property
Blue Diamond Mining Corp.

Target Name	Figure #	UTM Coordinates (Nad27)	
		Easting (m)	Northing (m)
Argonaut	Figure 1	360197	6354866
Centaur	Figure 2	388817	6340152
Cronus	Figure 3	358941	6337447
Kendu	Figure 4	368862	6353474
Lammasu	Figure 5	366087	6356262
Prometheus	Figure 6	388050	6360968
LGD066	Figure 7	369473	6353964
LGD082	Figure 8	345724	6347972
LGD094	Figure 9	387377	6339586
LGD095	Figure 10	387269	6343198
LGD097	Figure 11	383740	6336907
LGD099	Figure 12	377657	6333702



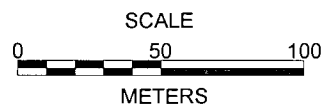
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
360197E 6354866N



BLUE DIAMOND MINING CORP.

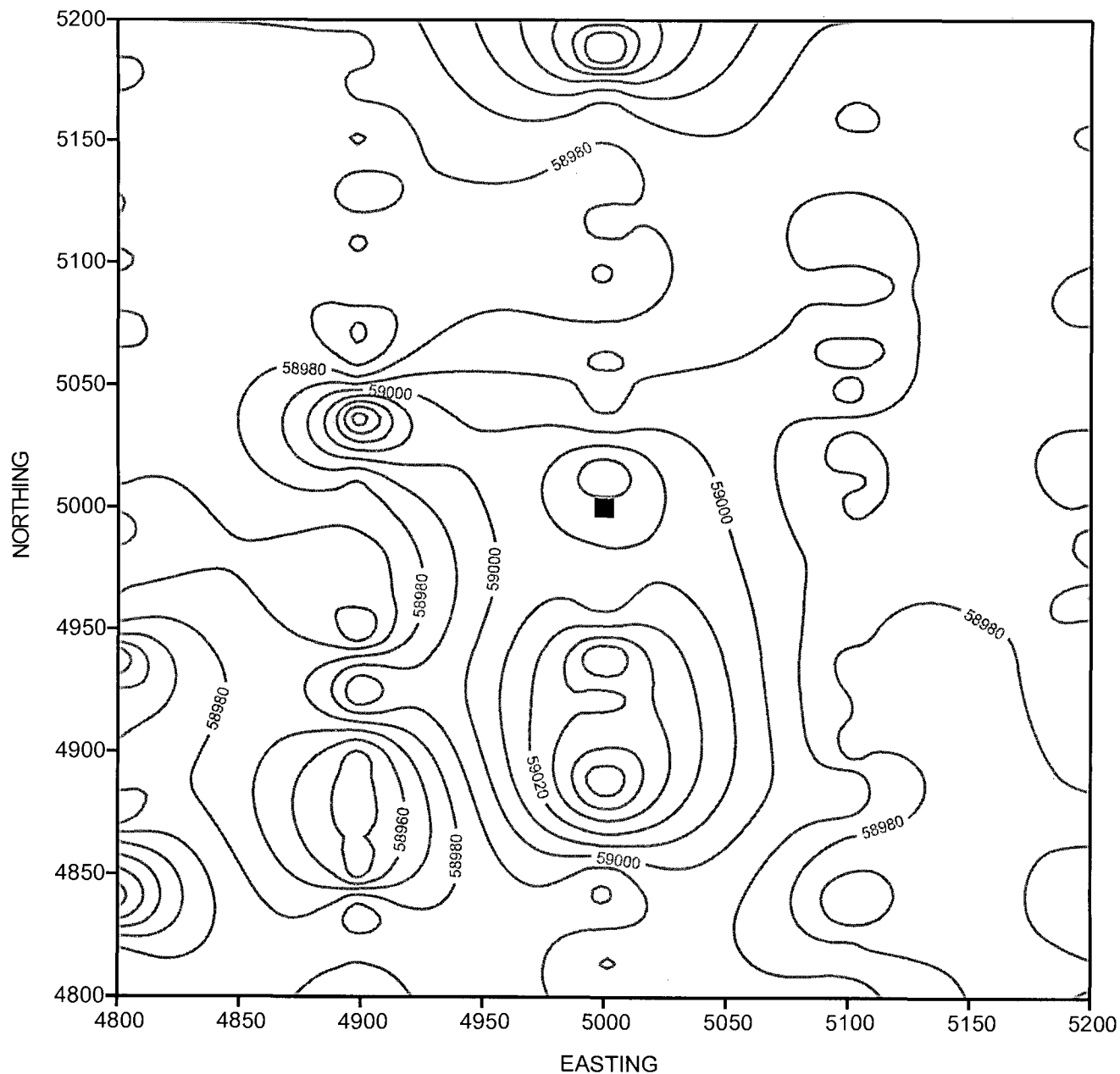
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

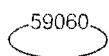
**Figure 1: Argonaut
Ground Magnetic Survey
Total Field Magnetic Contours**

MDS

2003.02



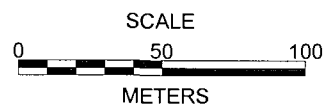
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
388817E 6340152N



BLUE DIAMOND MINING CORP.

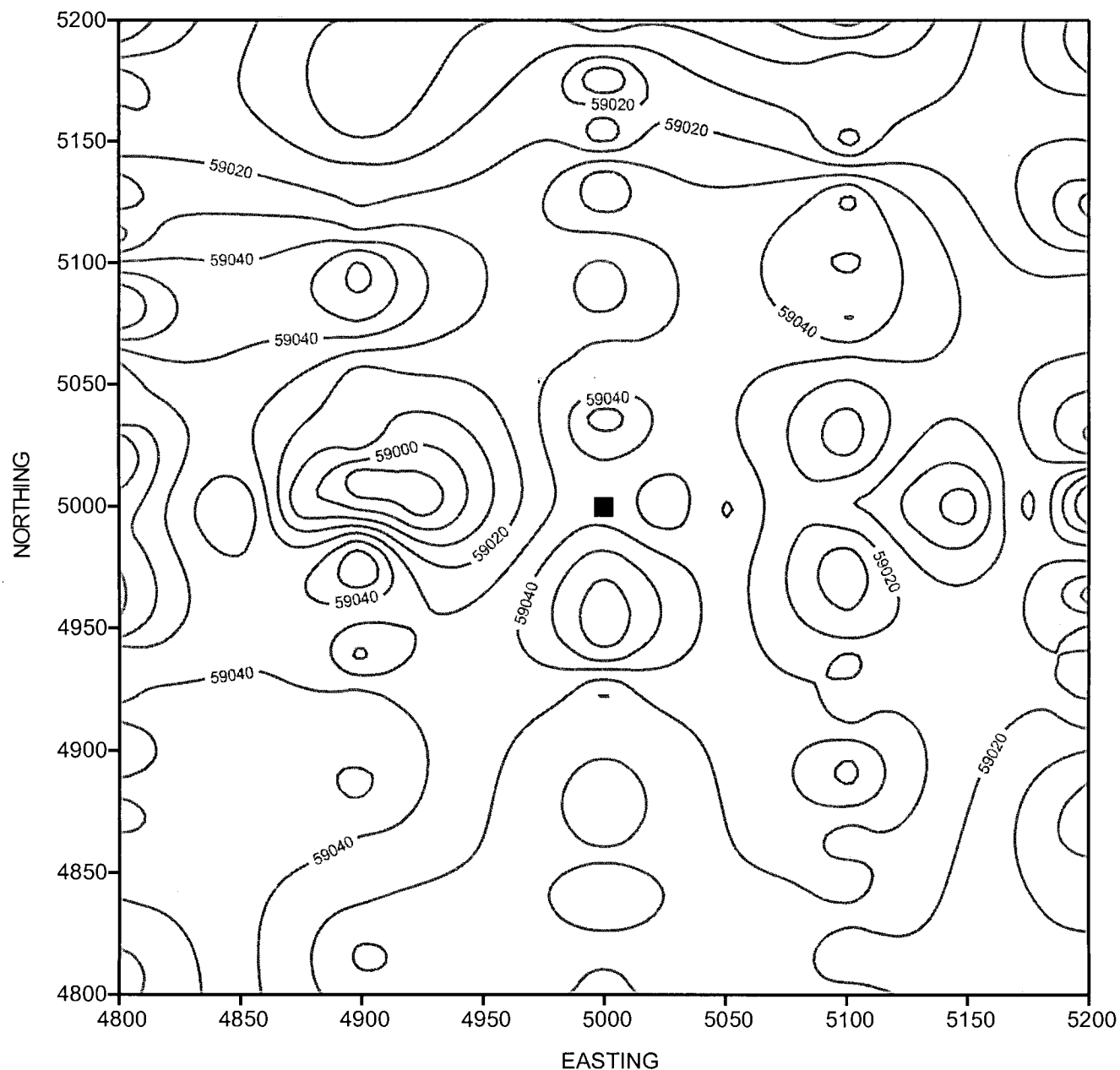
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

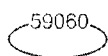
**Figure 2: Centaur
Ground Magnetic Survey
Total Field Magnetic Contours**

MDS

2003.02



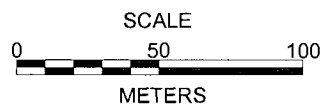
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
358941E 6337447N



BLUE DIAMOND MINING CORP.

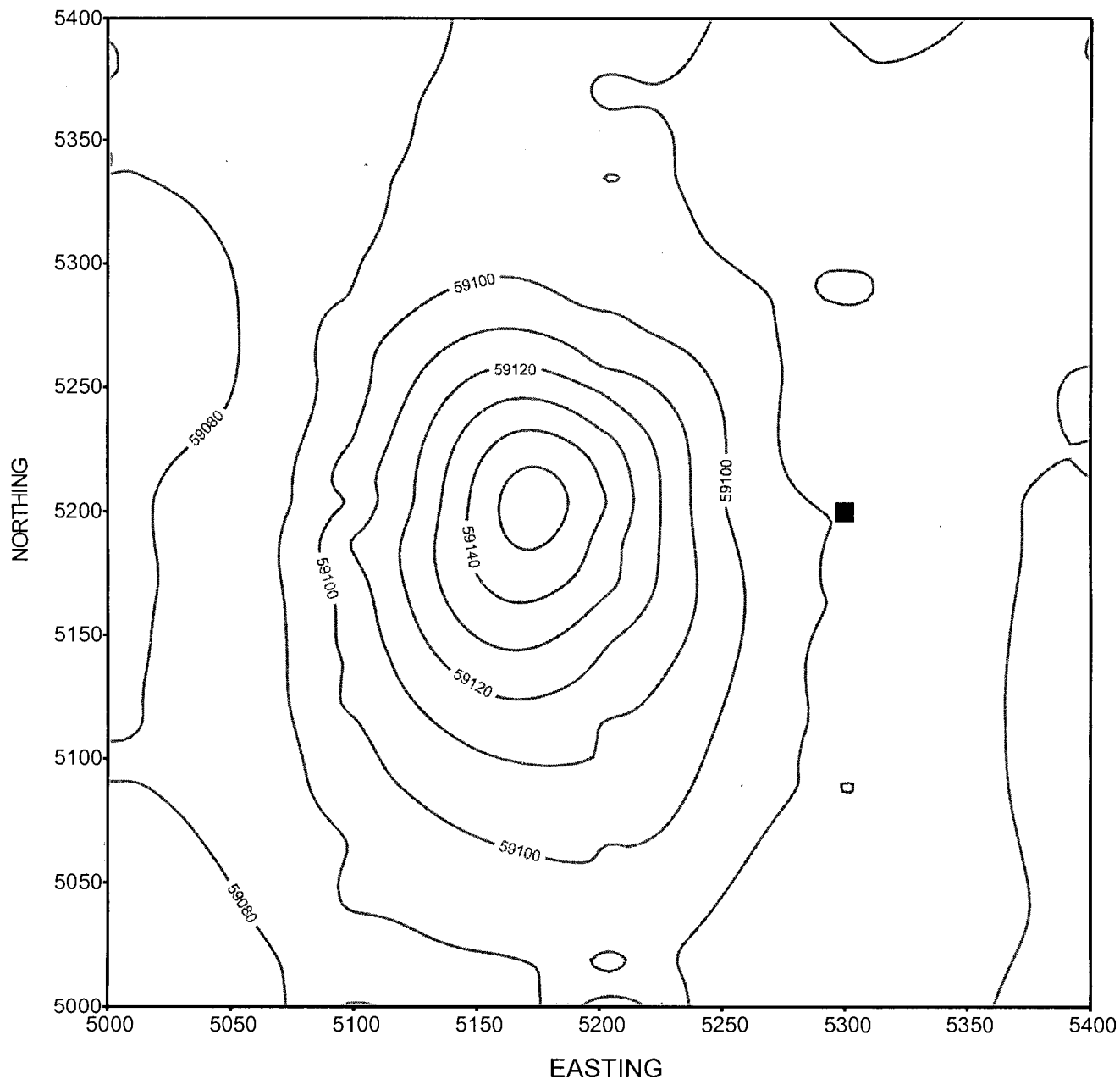
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

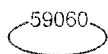
Figure 3: Cronus
Ground Magnetic Survey
Total Field Magnetic Contours

MDS

2003.02



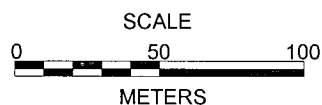
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
368682E 6353474N



BLUE DIAMOND MINING CORP.

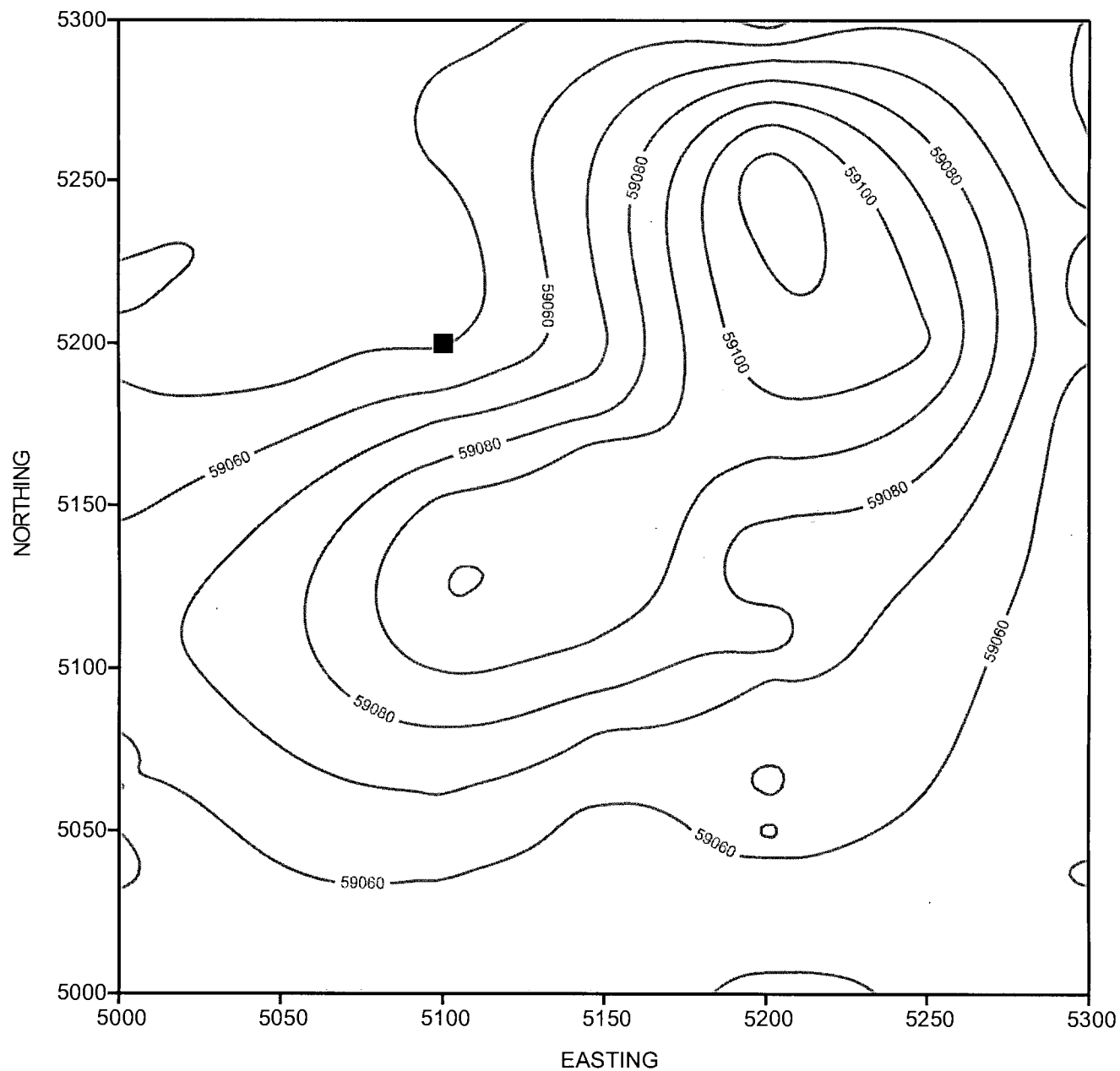
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

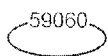
Figure 4: Kendu
Ground Magnetic Survey
Total Field Magnetic Contours

MDS

2003.02



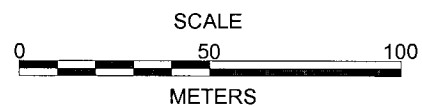
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
366087E 6356262N



BLUE DIAMOND MINING CORP.

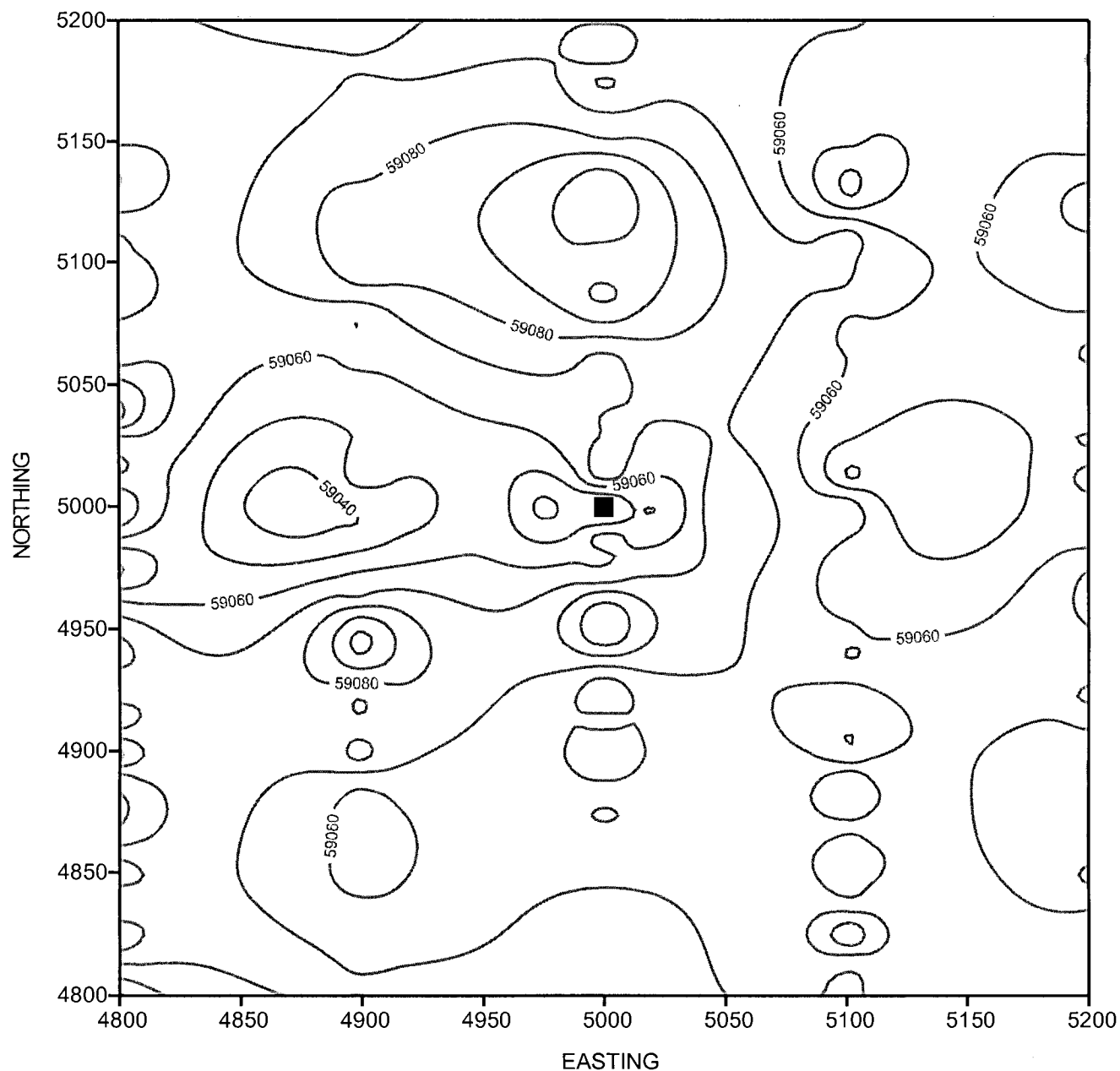
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

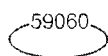
**Figure 5: Lammasu
Ground Magnetic Survey
Total Field Magnetic Contours**

MDS

2003.02



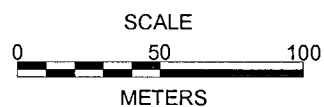
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
369473E 6353964N



BLUE DIAMOND MINING CORP.

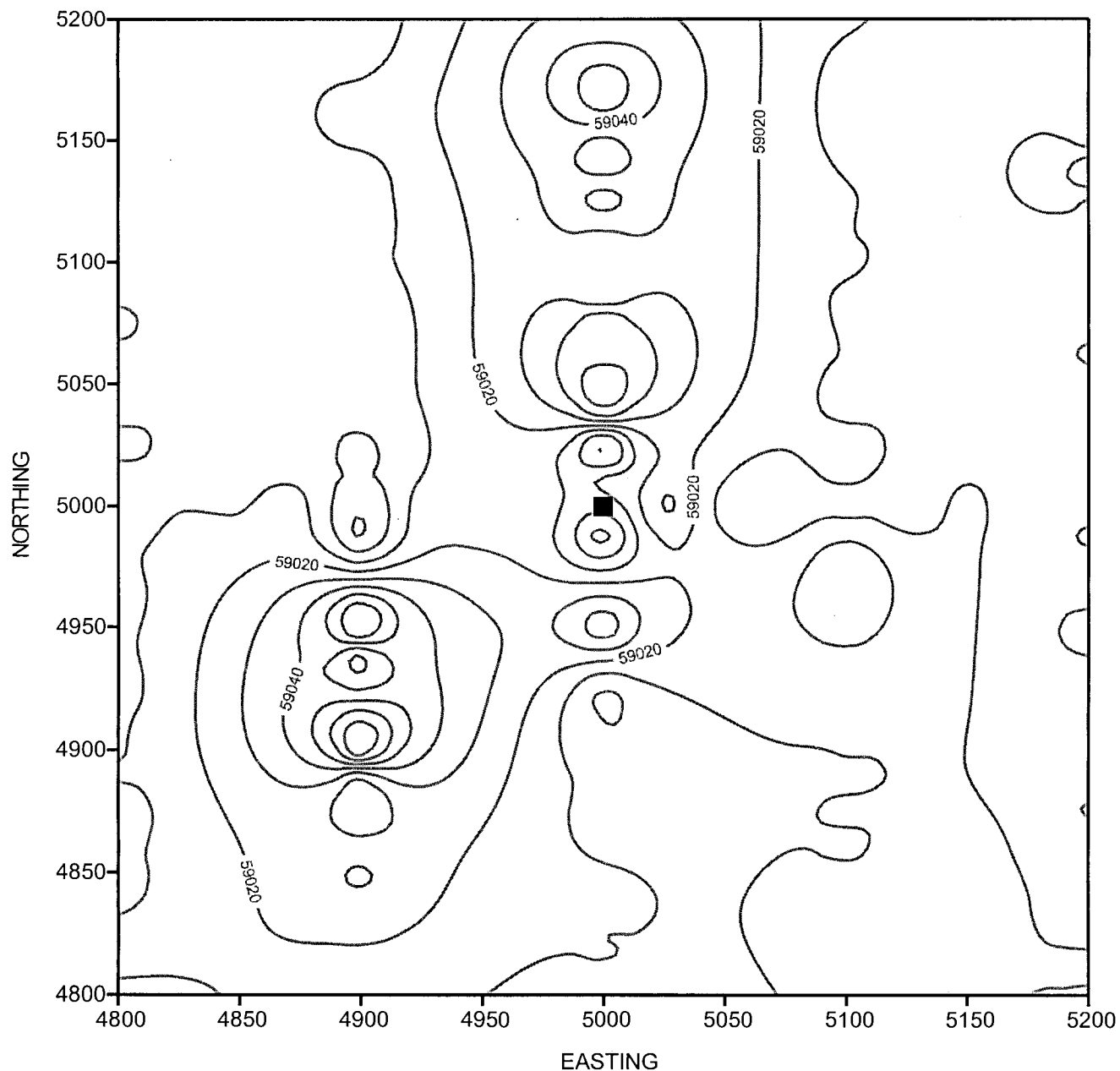
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

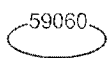
Figure 7: LGD066
Ground Magnetic Survey
Total Field Magnetic Contours

MDS

2003.02



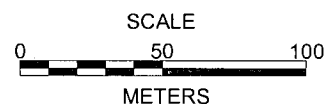
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
345724E 6347972N



BLUE DIAMOND MINING CORP.

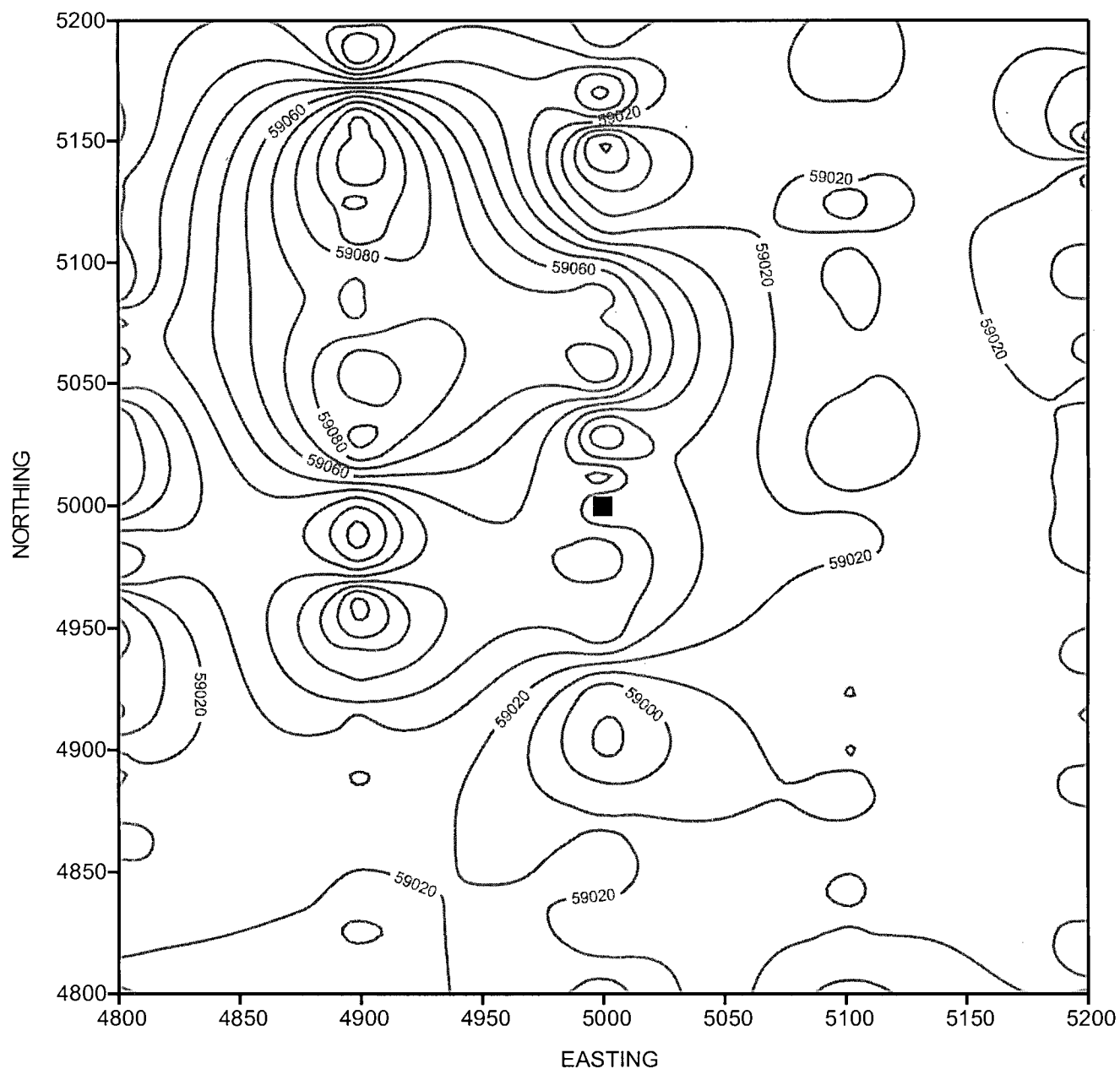
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

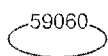
Figure 8: LGD082
Ground Magnetic Survey
Total Field Magnetic Contours

MDS

2003.02



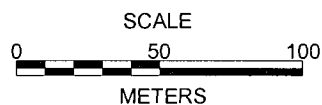
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
387377E 6339586N



BLUE DIAMOND MINING CORP.

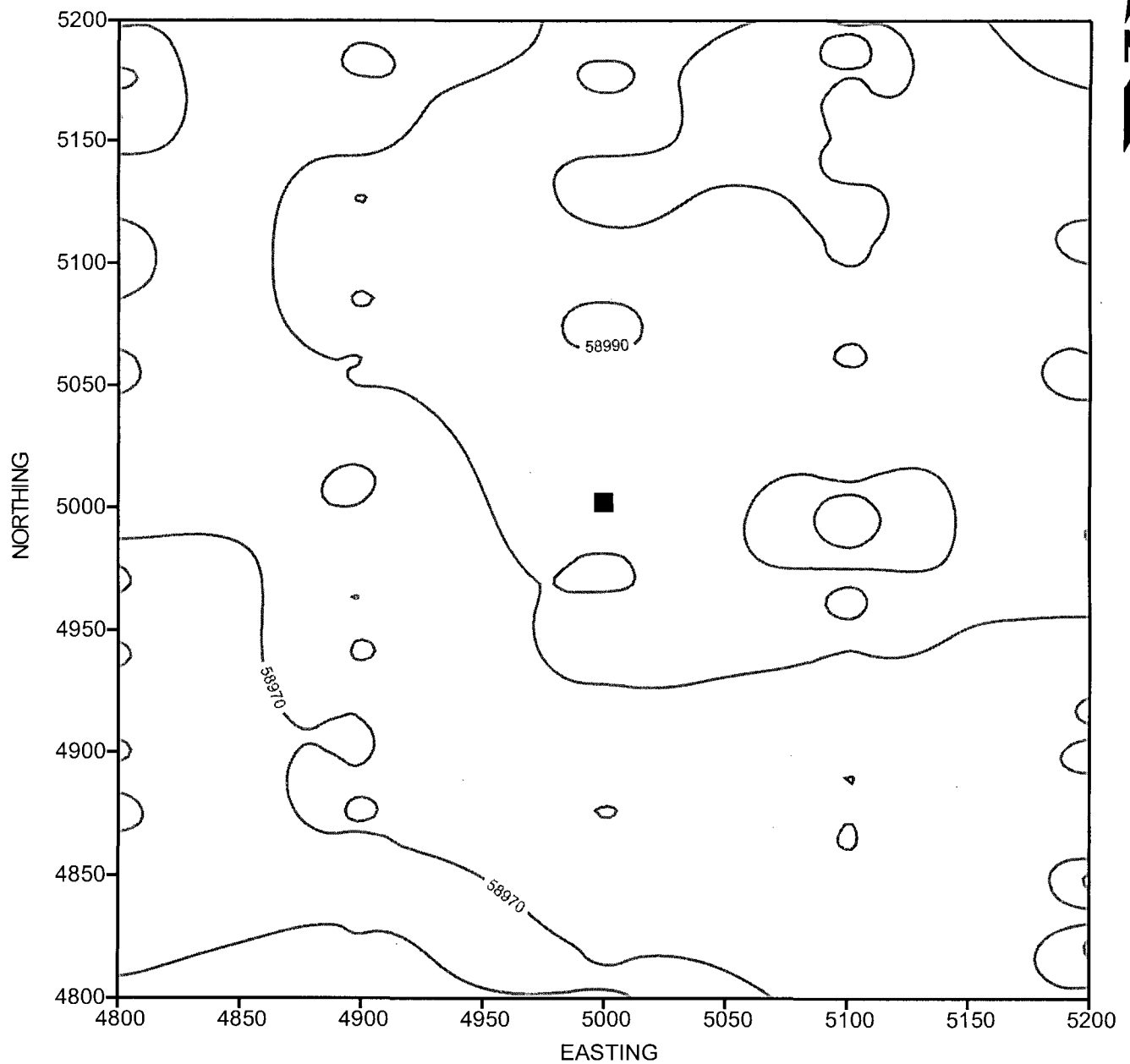
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

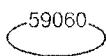
Figure 9: LGD094
Ground Magnetic Survey
Total Field Magnetic Contours

MDS

2003.02



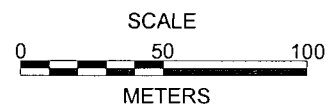
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
387269E 6343198N



BLUE DIAMOND MINING CORP.

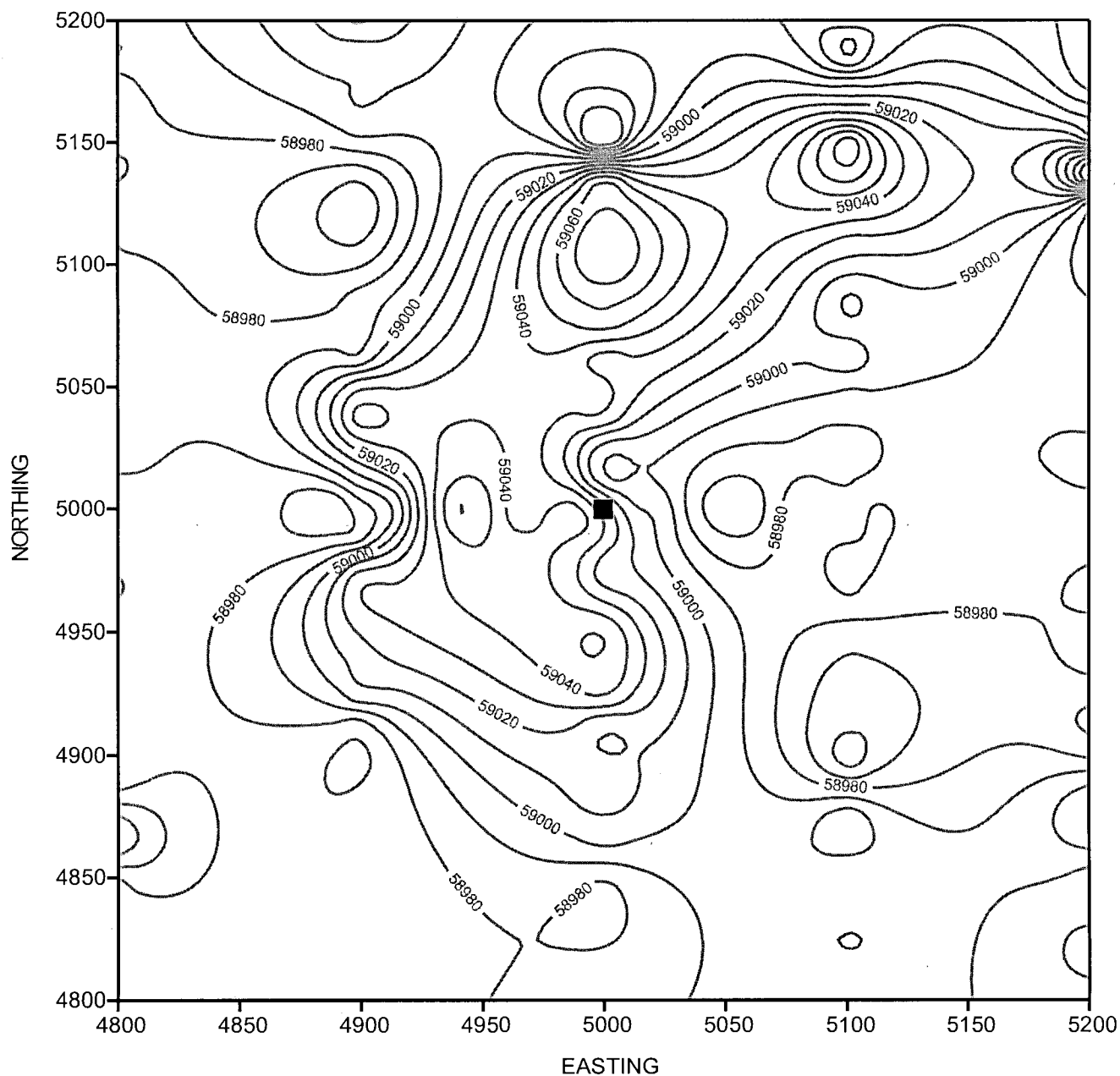
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

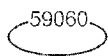
Figure 10: LGD095
Ground Magnetic Survey
Total Field Magnetic Contours

MDS

2003.02



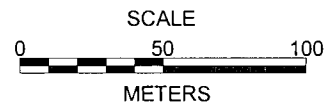
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
383740E 6336907N



BLUE DIAMOND MINING CORP.

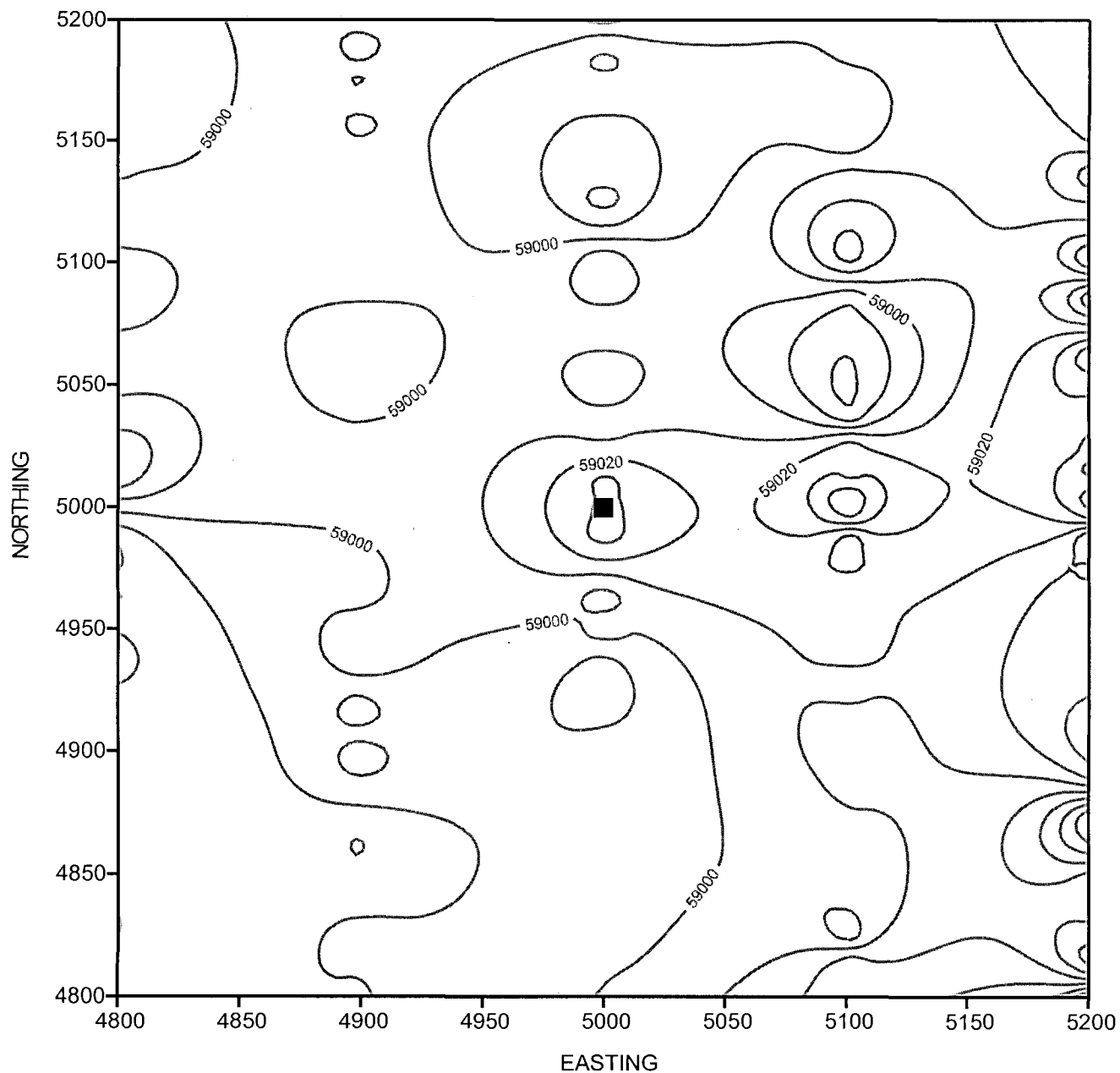
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

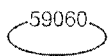
Figure 11: LGD097
Ground Magnetic Survey
Total Field Magnetic Contours

MDS

2003.02



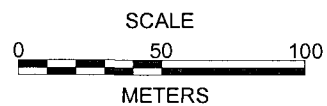
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
377657E 6333702N



BLUE DIAMOND MINING CORP.

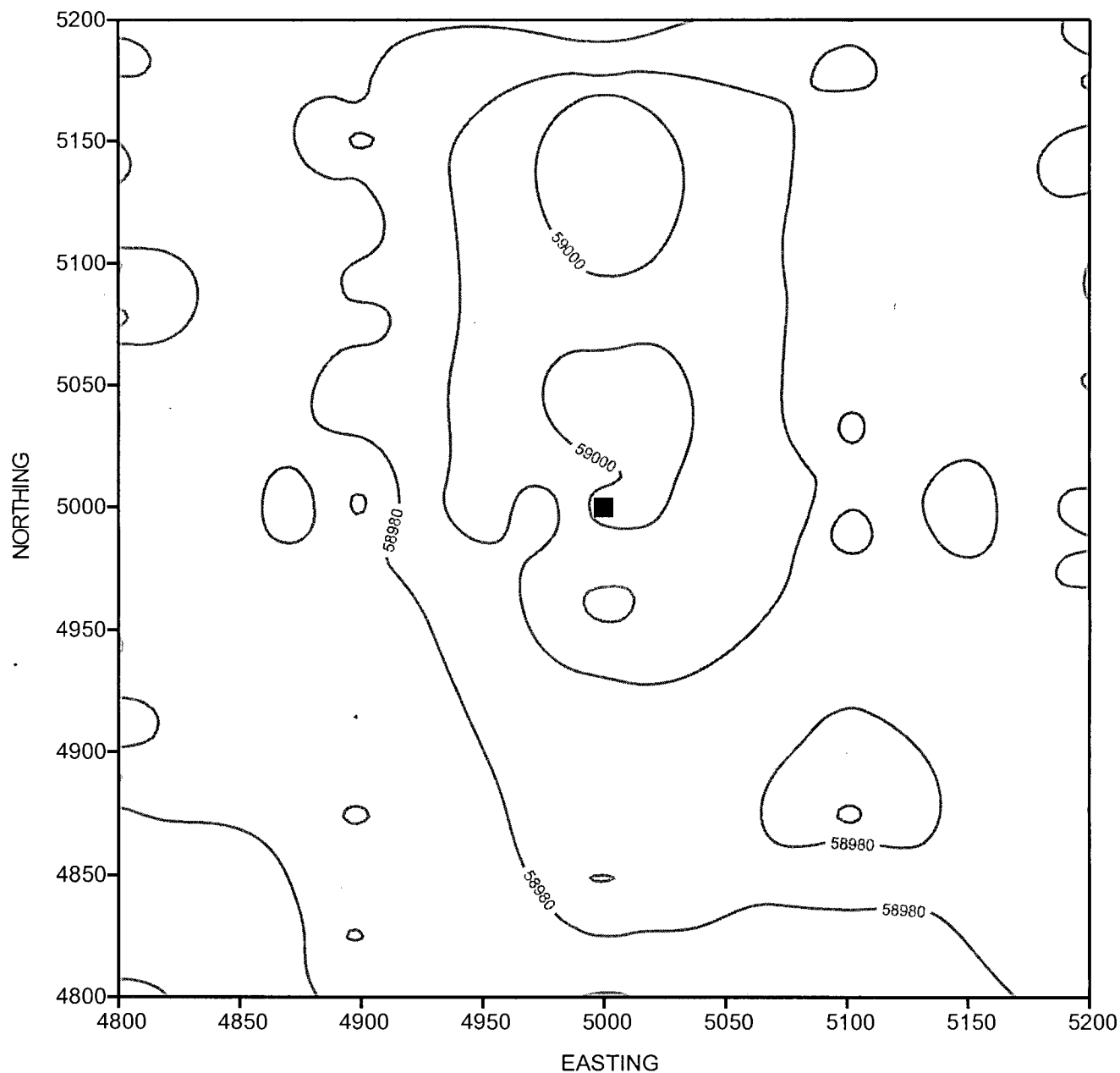
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

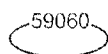
Figure 12: LGD099
Ground Magnetic Survey
Total Field Magnetic Contours

MDS

2003.02



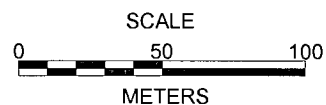
LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
388050E 6360968N



BLUE DIAMOND MINING CORP.

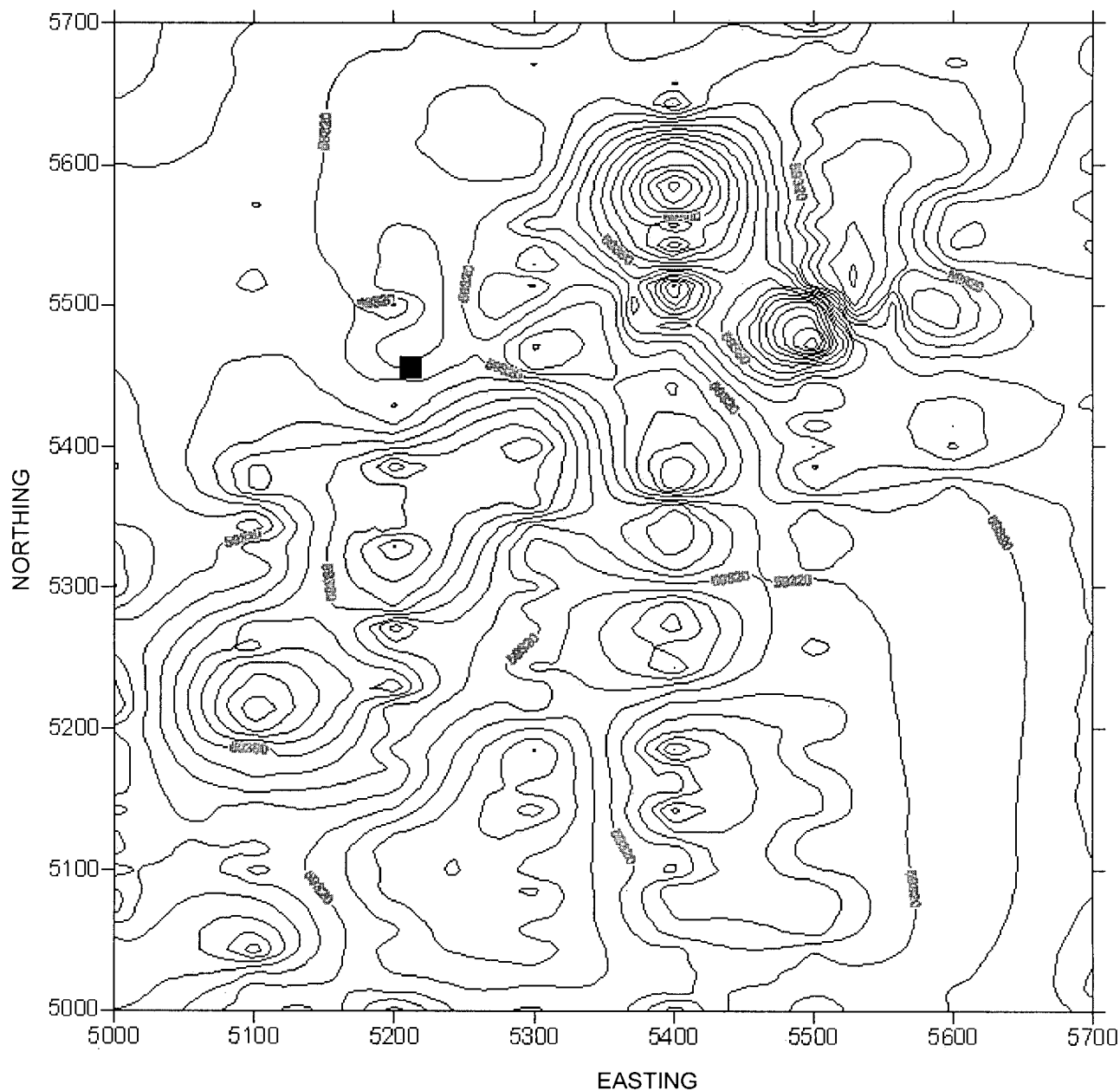
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

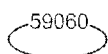
**Figure 6: Prometheus
Ground Magnetic Survey
Total Field Magnetic Contours**

MDS

2003.02



LEGEND & SYMBOLS



Isomagnetic Contour
Contour Interval 10 nT



UTM Coordinate (Nad27)
382475E 6335885N

BLUE DIAMOND MINING CORP.

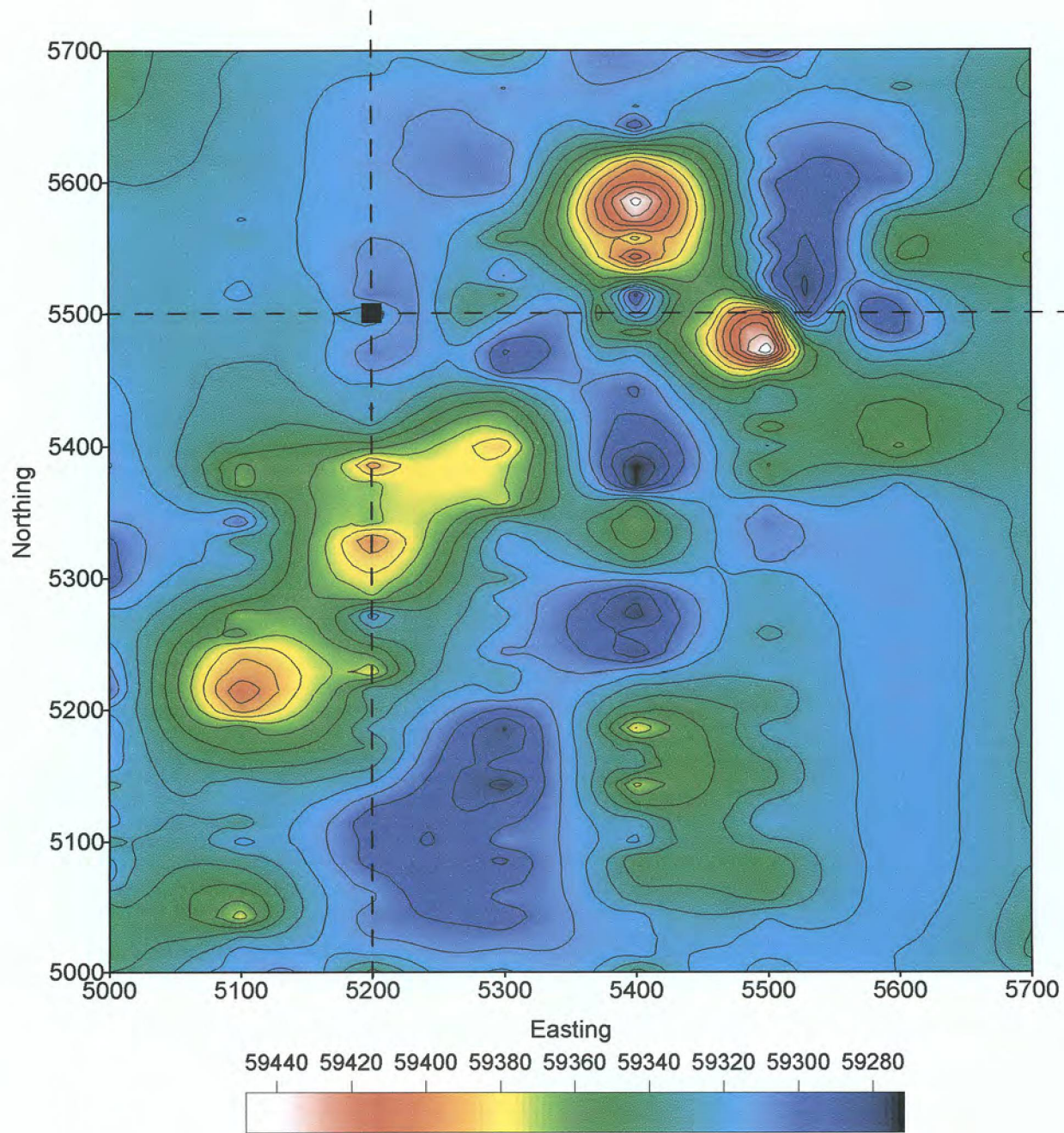
DAHROUGE GEOLOGICAL CONSULTING LTD.
EDMONTON, ALBERTA

BIRCH MOUNTAINS, NE ALBERTA

Figure 13: Bacchus
Ground Magnetic Survey
Total Field Magnetic Contours

MDS

2003.02



SYMBOLS



Seismic line



Isomagnetic contour;
contour interval 10 nT



UTM co-ordinate:
382475 E 6335885 N

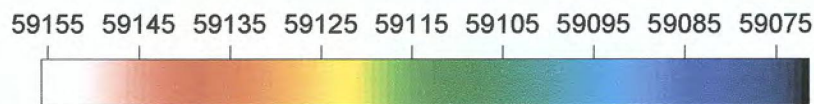
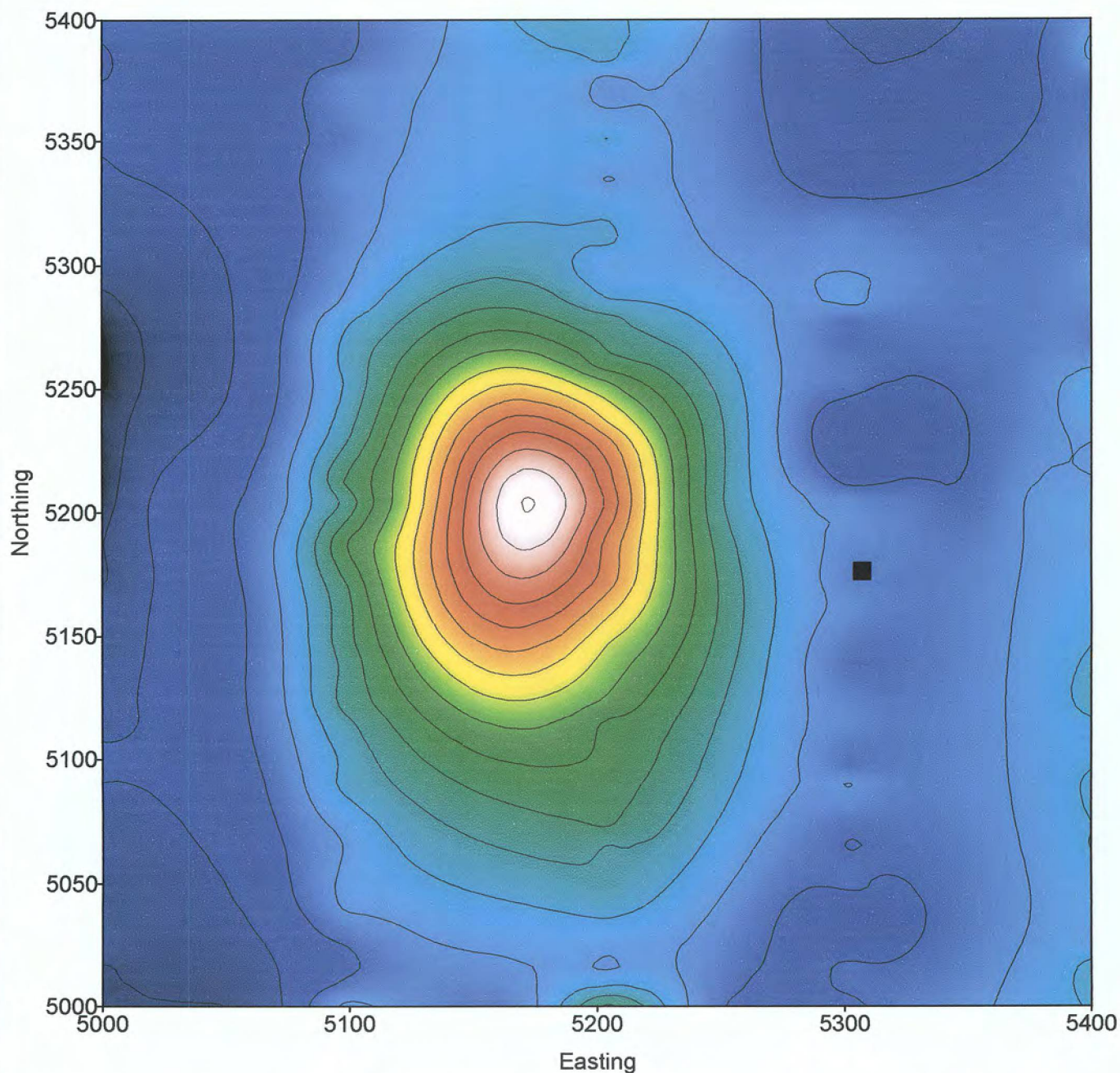


BLUE DIAMOND MINING CORP.

BACCHUS GRID GROUND MAGNETIC SURVEY TOTAL FIELD MAGNETIC CONTOURS

Scale 0 50 100 200 Metres

March, 2003



SYMBOLS



Isomagnetic contour;
contour interval 5 nT



UTM co-ordinate:
368682 E 6353474 N



BLUE DIAMOND MINING CORP.

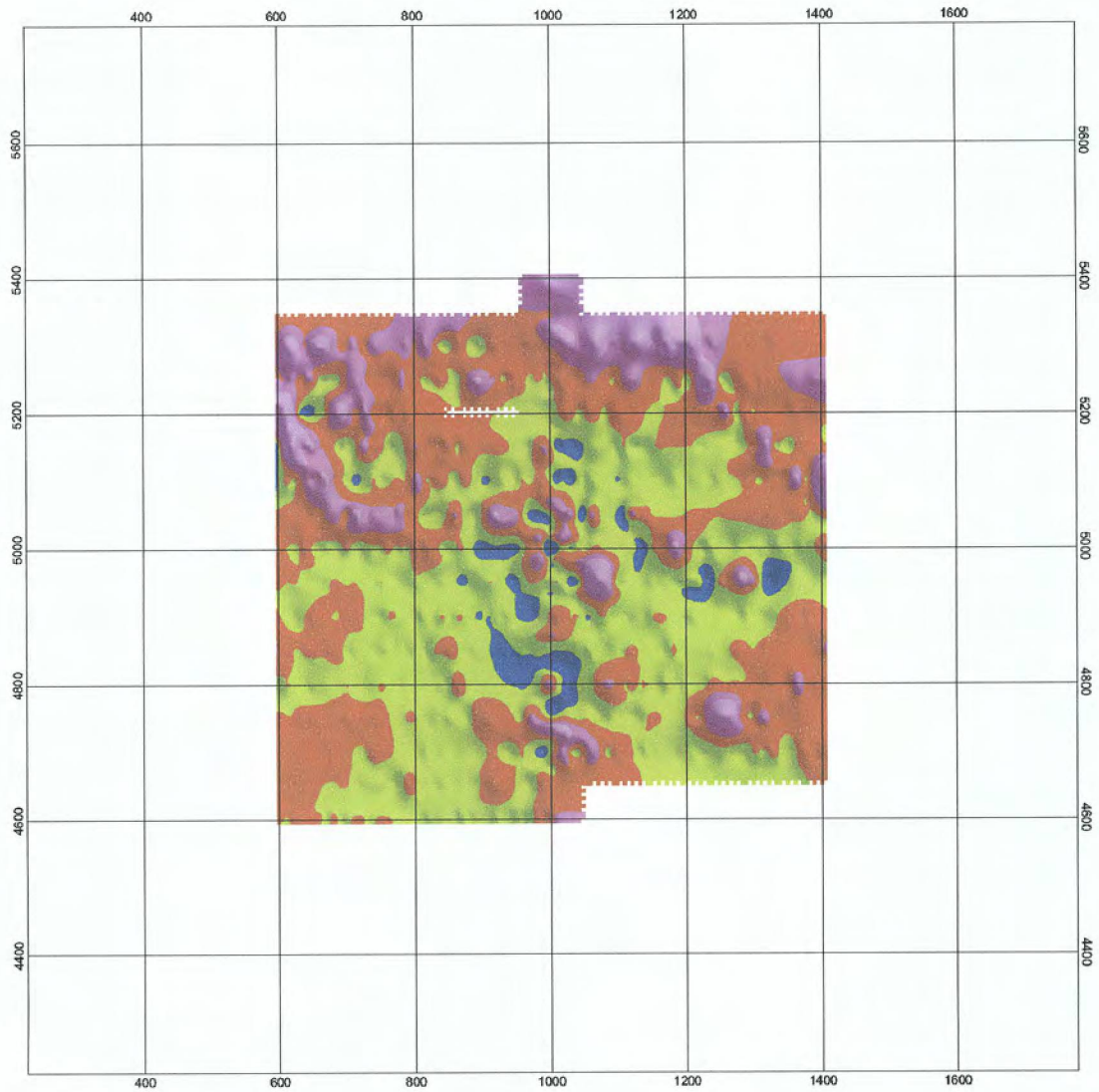
KENDU GRID GROUND MAGNETIC SURVEY TOTAL FIELD MAGNETIC CONTOURS

Scale 0 50 100 Metres

March, 2003



NORTHING



EASTING

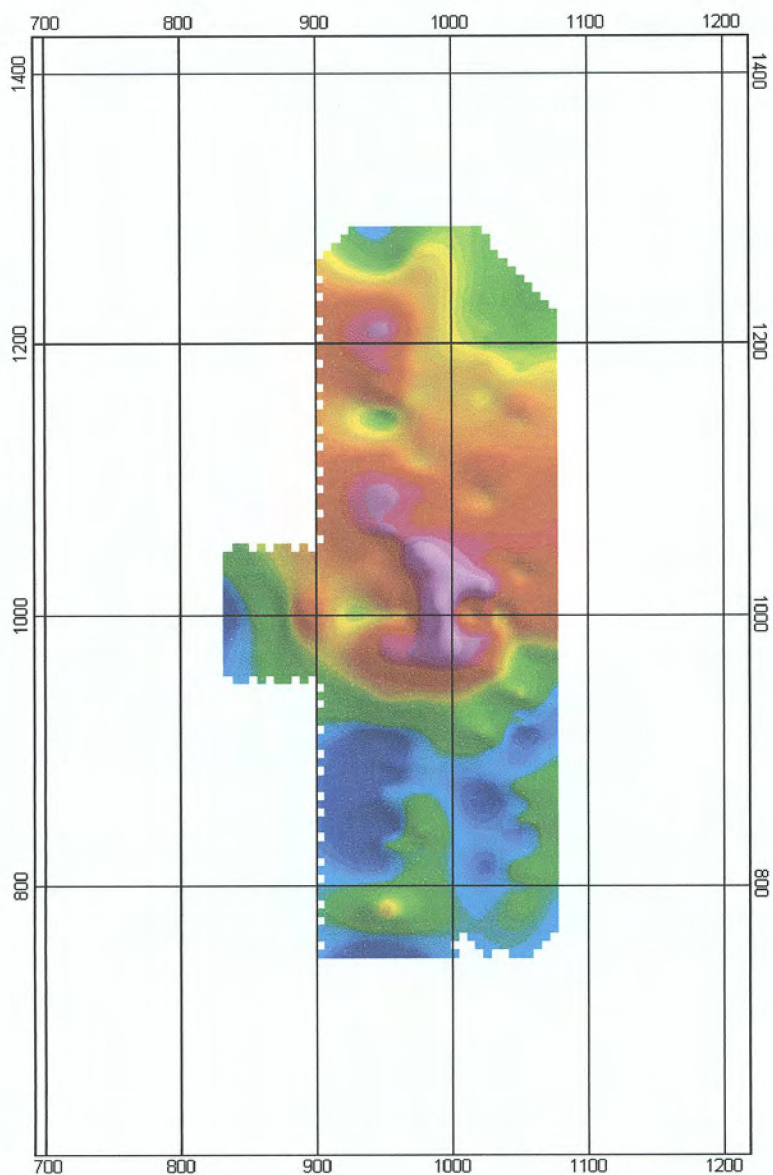
BLUE DIAMOND MINING CORP.

**DUTCHMAN GRID
GROUND MAGNETIC SURVEY
TOTAL FIELD MAGNETIC CONTOURS**

0 200 400
SCALE METERS

March, 2003

NORTHING



EASTING

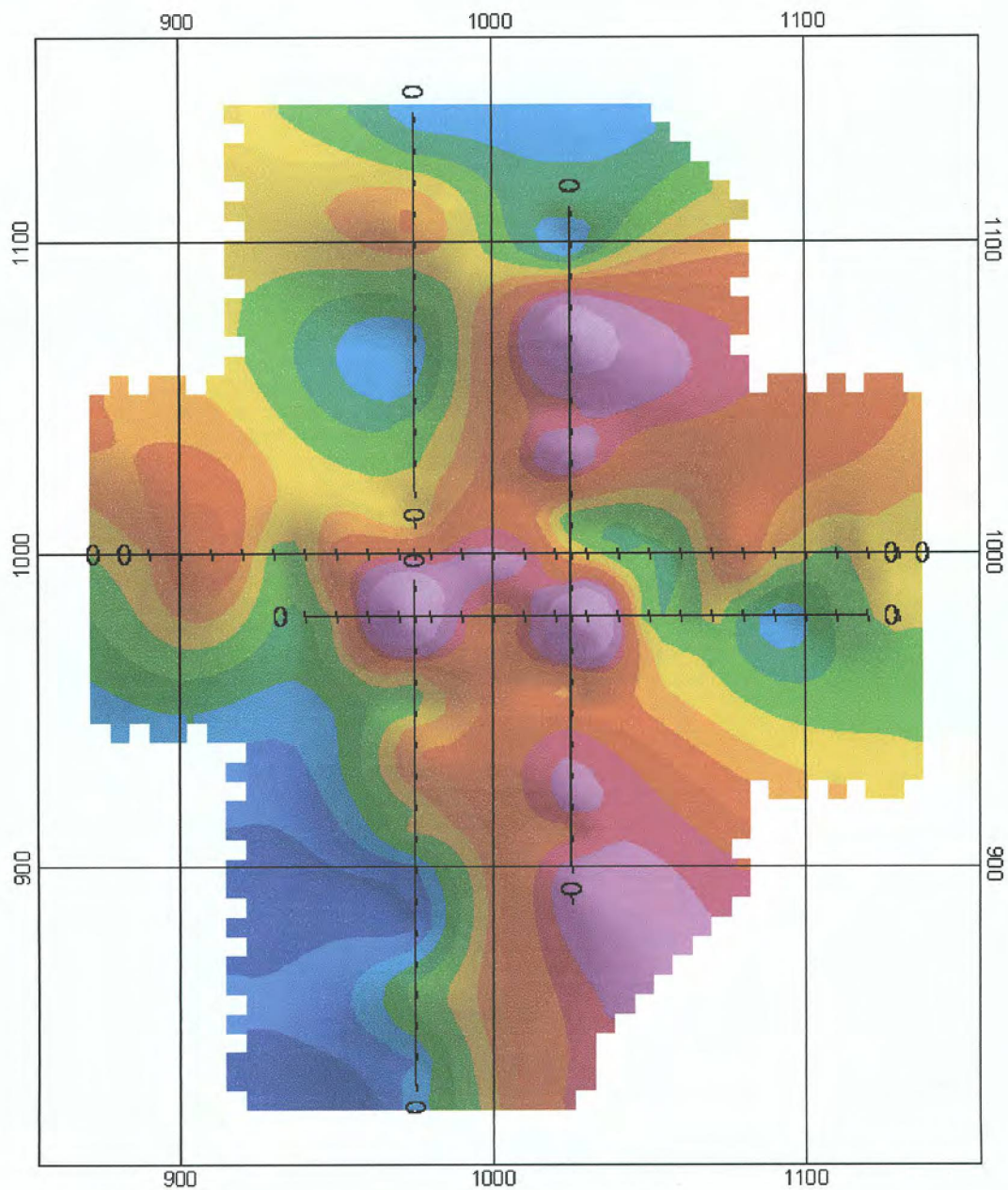
BLUE DIAMOND MINING CORP.

**HIPPOGRIFF GRID
GROUND MAGNETIC SURVEY
TOTAL FIELD MAGNETIC CONTOURS**

0 100 200
SCALE METERS

March, 2003

NORTHING



EASTING

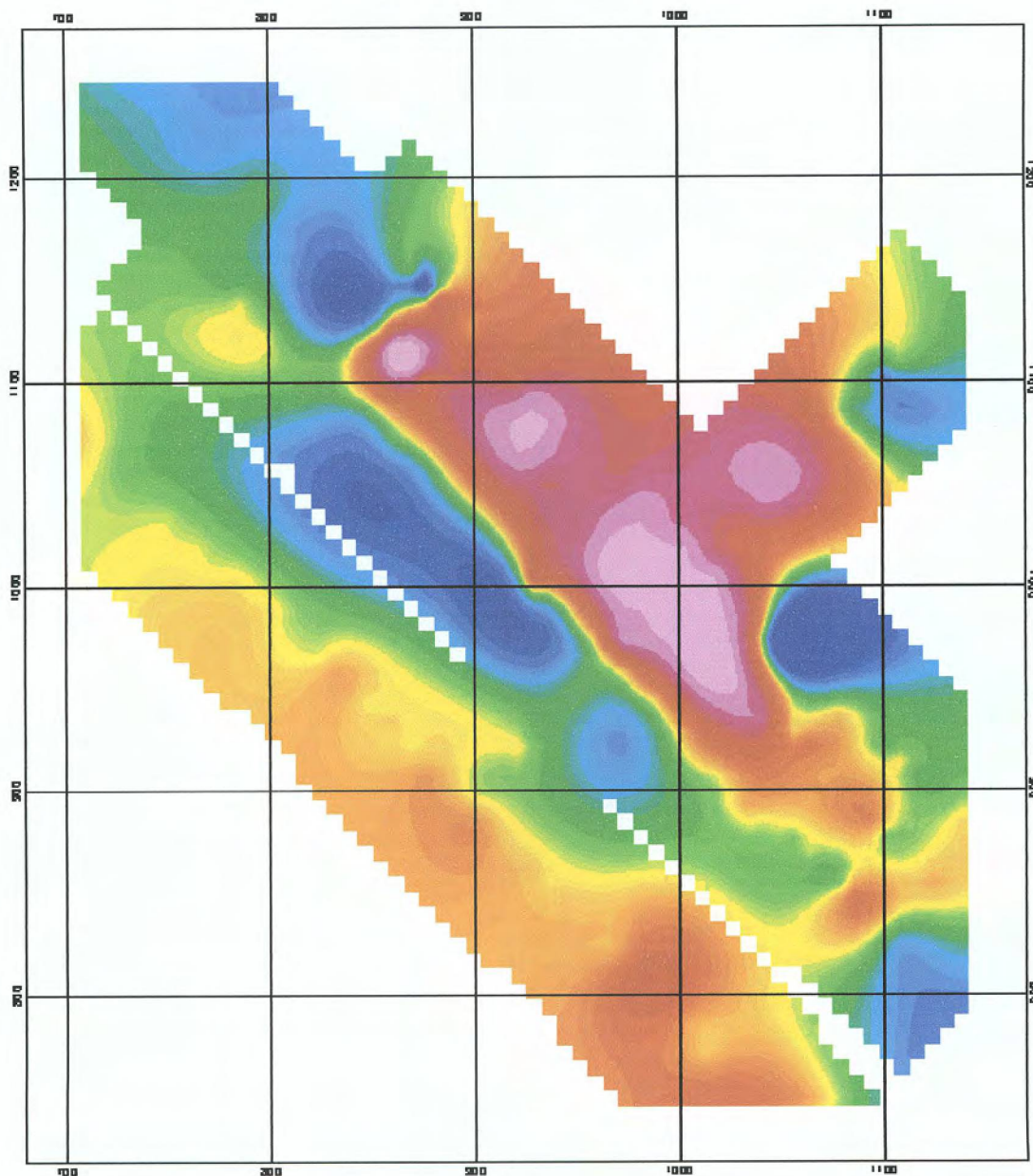
BLUE DIAMOND MINING CORP.

IRIS GRID
GROUND MAGNETIC SURVEY
TOTAL FIELD MAGNETIC CONTOURS

0 50 100
SCALE METERS

March, 2003

NORTHING



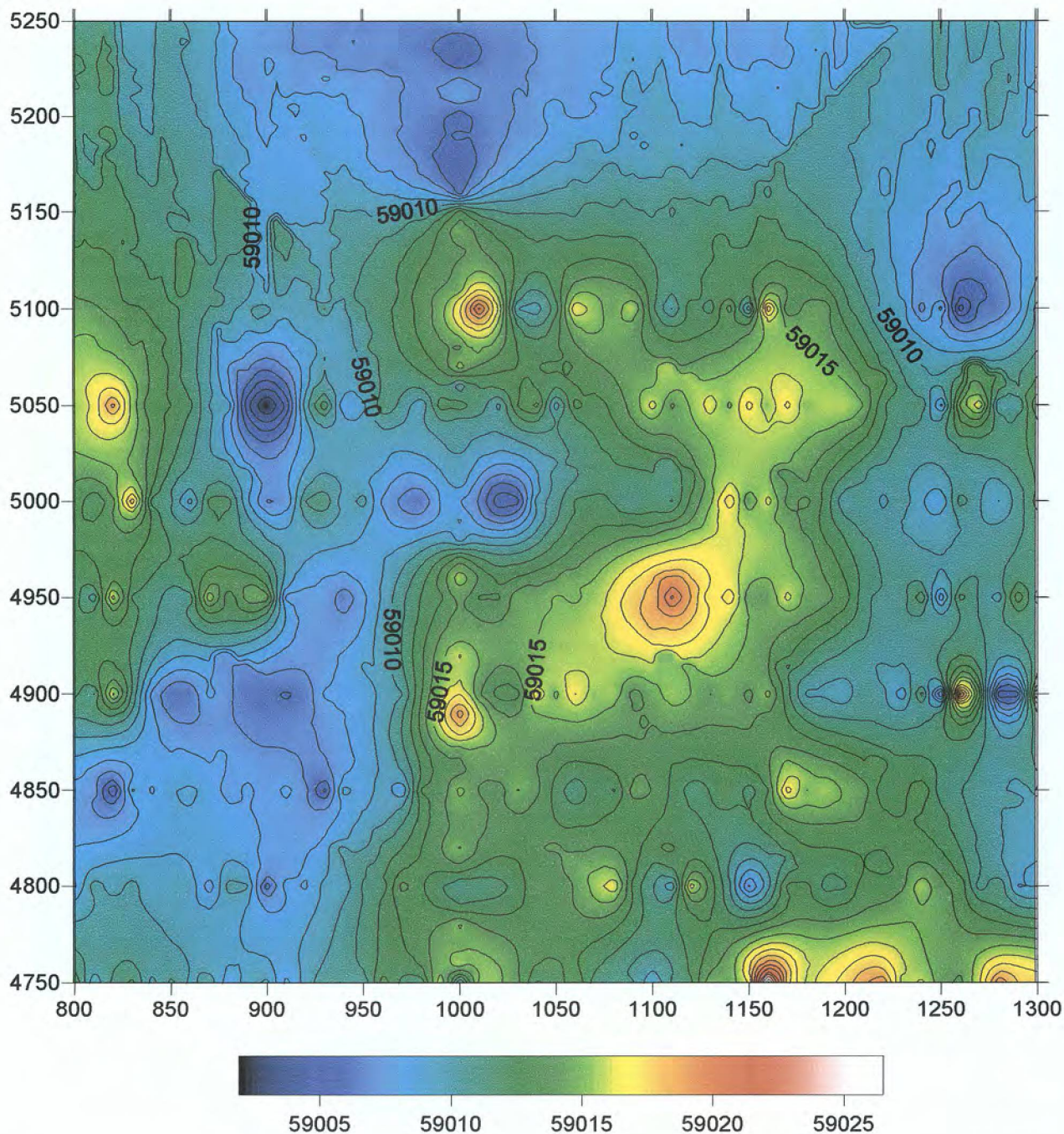
EASTING

BLUE DIAMOND MINING CORP.

SIREN GRID
GROUND MAGNETIC SURVEY
TOTAL FIELD MAGNETIC CONTOURS

0 500 1000
SCALE METERS

March, 2003



SYMBOLS



Isomagnetic contour;
contour interval 5 nT

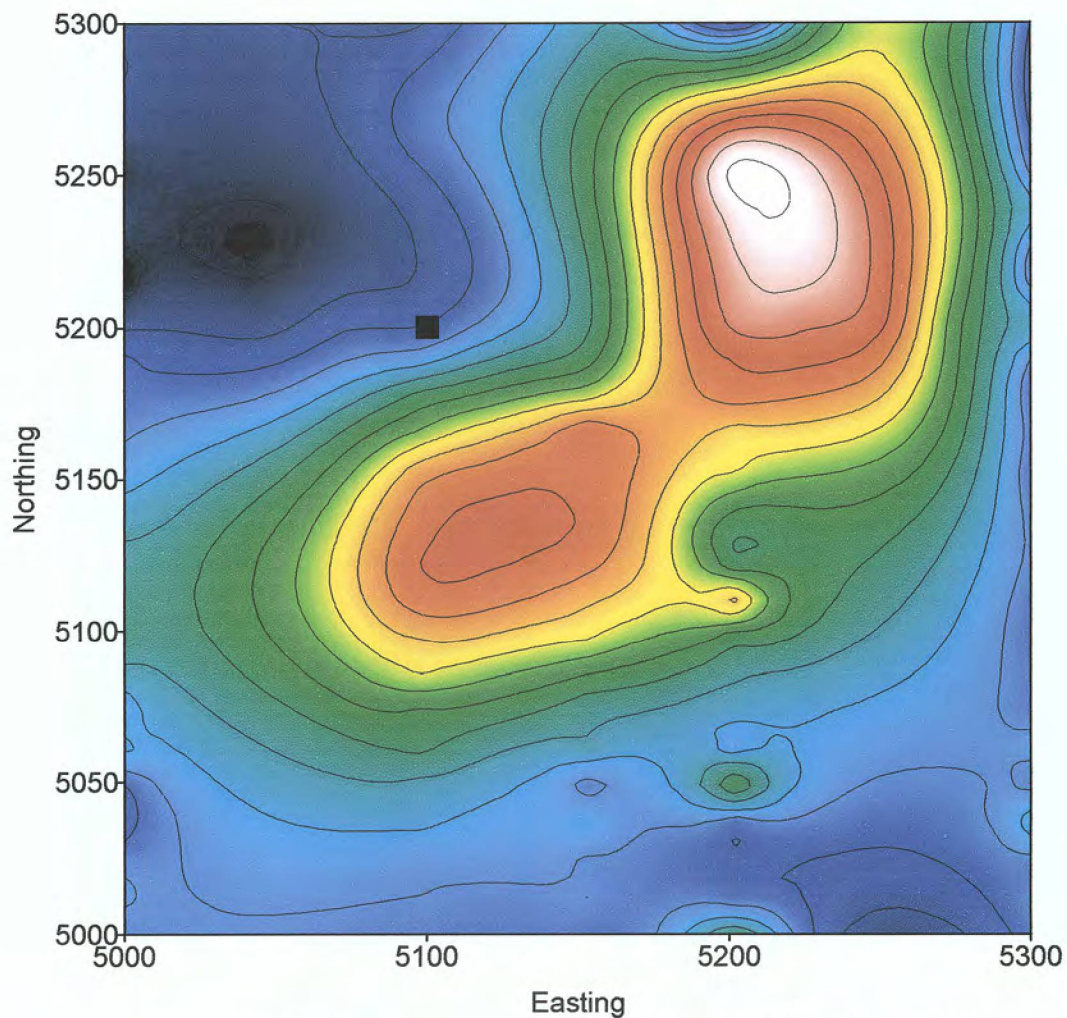


BLUE DIAMOND MINING CORP.

**LL33 GRID
GROUND MAGNETIC SURVEY
TOTAL FIELD MAGNETIC CONTOURS**

Scale 0 50 100 150 Metres

March, 2003



SYMBOLS



Isomagnetic contour;
contour interval 5 nT



UTM co-ordinate:
366087 E 6356262 N



BLUE DIAMOND MINING CORP.

LAMMASU GRID GROUND MAGNETIC SURVEY TOTAL FIELD MAGNETIC CONTOURS

Scale 0 50 100 Metres

March, 2003

APPENDIX 3

Kendu Target Drill Logs and Lab Certificates

Little Legend Property

Blue Diamond Mining Corp.

Blue Diamond Mining Corp.

APEX GEOSCIENCE LTD.

APEX GEOSCIENCE LTD.

DRILLING COMPANY Aggressive Drilling				COLLAR ELEVATION Approx. 630m		AZIMUTH Vertical		TOTAL FOOTAGE Approx. 354'		LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM KENDU Target		CORE SIZE - NQ	
DATE HOLE STARTED Nov. 13-17, 2000		DATE COMPLETED Nov. 23-27, 2000		DATE LOGGED Jan. 25, 2001		LOGGED BY Andrea Noyes		LOCATION Birch Mountains 4-20-96-04					
PURPOSE				SYSTEM METRIC _X_ Meters IMPERIAL _X_ Feet		SUBMITTED BY (Signature)		PROPERTY NAME Legend					
FOOTAGE		METERAGE		ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE °	SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	DIAMOND COUNT		
FROM	TO	FROM	TO					FROM	TO				
412.5	542.5	135.31	177.96	TKB	Cr-pyropo more abundant in this section, 5%, limestone clasts up to 4cm in diameter; ilmenite is also larger		K-00-01-15	135.31	137.47	2.16			
					in this section, 3mm in diameter; 3%; some olivine macrocrysts have fresh cores - bleb-like alteration, 25-		K-00-01-16	137.47	140.75	3.28			
					30%; large country rock xenoliths up to 5 cm in diameter along with shale and mud clasts 5%; some of		K-00-01-17	140.75	144.03	3.28			
					the chrome diopside and Cr-pyropo nodules may be peridotite xenoliths (?); tar/oil pocket found at		K-00-01-18	144.03	147.31	3.28			
					520.1'. Clay pockets approximately one to two inches thick were found at 506.3',506.7', 507.1', 507.10',		K-00-01-19	147.31	150.59	3.28			
					519.6' and were not included as part of the samples.		K-00-01-20	150.59	153.87	3.28			
					Section from 542.5' to 545 was not sampled as kimberlite contains a clay seam of unknown thickness.		K-00-01-21	153.87	157.15	3.28			
							K-00-01-22	157.15	160.43	3.28			
					DIM taken at 426.5', 466', 478.6', 505.10',532.10'		K-00-01-23	160.43	162.40	1.97			
					Specimens taken at 416.5' and 452 by Roy Eccles; 417.2' by GR 122; 525.4' by Dean Besserer; 452.3'		K-00-01-24	162.40	165.68	3.28			
					for Bob Luth; and 532.8' by C and P.		K-00-01-25	165.68	170.28	4.6			
							K-00-01-26	170.28	173.56	3.28			
					Note: there is a discrepancy in measurements from core box 15 to 16.		K-00-01-27	173.56	176.84	3.28			
							K-00-01-28	176.84	177.96	1.12			
542.5	563.4	177.96	184.82	TKB	Heavily weathered/altered, friable kimberlite matrix; clay seam found at 548.5'; dark grey to brown		K-00-01-29	180.12	182.74	2.62			
					kimberlite matrix; 5% calcite; 1% garnet present; clay seam from 544 to 545. Section 542.5 to 545 not sampled.		K-00-01-30	182.74	184.82	2.08			
					Discrepancy in measurements from 545 to 549.								
563.4	589.9	184.82	193.49	TKB	Brecciated section; very similar to section 412.5-542.5 in composition. Clay pockets approximately one		K-00-01-31	184.82	185.70	0.88			
					to two inches thick were found at 574.4', 574.9', 575.11', 576.7', 586.1 and were not included as part of the		K-00-01-32	185.70	188.98	3.28			
					samples.		K-00-01-33	188.98	192.26	3.28			
					DIM taken at 583'		K-00-01-34	192.26	193.49	1.23			
					Specimens taken at 565.5' by Larry; and 587.4' by APEX								
589.9	598.8	193.49	196.41	Clay									
598.8	599	196.41	196.52	TKB	Calcite veining; shale clasts; similar to 412.5-542.5'								
					Note: this section was not sampled.								
599	601.6	196.52	197.34	Clay									
601.6	618.7	197.34	202.95	TKB	Same comments as 563.4-589.9'; large 2cm ilmenite megacryst at 608.4'. Clay pockets approximately one to		K-00-01-35	197.40	198.49	1.09			
					two inches thick were found at 609.1' and 611.4' and were not included as part of the samples.		K-00-01-36	198.49	203.08	4.59			
618.7	627.9	202.95	?	Clay									
627	629	?	206.36	TKB	Same comments as 601.6-627.9		K-00-01-37	205.79	206.36	0.57			

APEX GEOSCIENCE LTD.

DRILLING COMPANY Aggressive Drilling				COLLAR ELEVATION Approx. 630m		AZIMUTH Vertical		TOTAL FOOTAGE Approx. 354'		LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM KENDU Target		CORE SIZE - NQ	
DATE HOLE STARTED Nov. 13-17, 2000		DATE COMPLETED Nov. 23-27, 2000		DATE LOGGED Jan. 25, 2001		LOGGED BY Andrea Noyes		LOCATION Birch Mountains 4-20-96-04					
PURPOSE				SYSTEM METRIC _X_ Meters IMPERIAL _X_ Feet		SUBMITTED BY (Signature)		PROPERTY NAME					
								Legend					
FOOTAGE		METERAGE		ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE °	SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	DIAMOND COUNT		
FROM	TO	FROM	TO					FROM	TO				
329	336	107.94	110.24	TKB	Altered olivine present, 1mm, 20%; shale fragments still present, 1cm; 1-2mm ilmenite grains appear again,		K-00-01-04	107.94	110.24	2.3			
					1%; garnet with kelyphite rims present, 1mm, 3%; some fragmented garent nodules are present as well,								
					2-6mm; green matrix; serpentine alteration is evident; Cr-pyrope 1% and ilmenite seen at 330'; garnet and								
					chrome diopside intergrowths present here as well; some olivines possess kelyphite rims.								
					DIM collected at 331'								
					Specimens taken at 334' by Larry K and Jody and at 334.6' by Roy Eccles.								
					Note: not quite a half core taken at 329.2'								
336	351.4	110.24	116.25	TKB	Clay rich kimberlite matrix, friable; similar to unit 311.10-329; 10% calcite in matrix; garnet is present both		K-00-01-05	110.24	113.65	3.41			
					Cr-pyrope and pyrope, 2%; some large nodules of garnet and chrome diopside present, up to 4cm;		K-00-01-06	113.65	115.27	1.62			
					kinked phlogopite books present.								
					DIM taken at 344'								
					Specimen collected at 345'								
351.4	396.7	116.25	130.11	TKB	Green/yellow colored matrix; friable and heavily altered/weathered; 1% Cr-pyrope garnets with kelyphite		K-00-01-07	115.27	117.78	2.51			
					rims, 2mm; large garnet-rich nodules present, minimum of 7cm diameter - crustal origin?		K-00-01-08	117.78	121.06	3.28			
					DIM taken at 374.9'		K-00-01-09	121.06	124.34	3.28			
							K-00-01-10	124.34	127.62	3.28			
							K-00-01-11	127.62	130.11	2.49			
396.7	400.8	130.11	131.45	TKB	Dark green matrix; 5% calcite in matrix; shale fragments still present, 2cm; olivine still heavily altered;		K-00-01-12	130.11	131.45	1.34			
					garnet 3%, 1-2mm; 1% ilmenite seen, 1mm; some Cr-pyrope and chrome diopside nodules present;								
					phlogopite still heavily altered, 5-10%, 3mm in diameter.								
400.8	407.2	131.45	133.59	TKB	Yellow/green, friable matrix; heavily altered/weathered; garnet still present 1%.		K-00-01-13	131.45	133.59	2.14			
407.2	412.5	133.59	135.31	TKB	Same comments as section 396.7-400.8.		K-00-01-14	133.59	135.31	1.72			

LakefieldResearch

Mineralogical Services



Microdiamond Selection and Description

submitted by
Apex Geoscience Limited

Project Managed by: Bruce Craig Jago, Ph.D.

Submission Date: January 26, 2001

Project No.: 8901-285/LIMS#JAN1001.R01

Note

This report refers to the samples as received. The practice of this Company in issuing reports of this nature is to require the recipient not to publish the report or any part thereof without the written consent of Lakefield Research Limited.

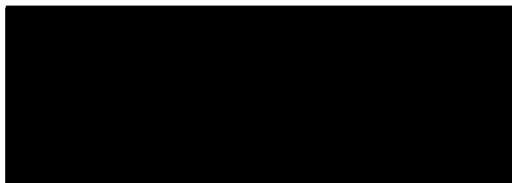
Neither Lakefield Research Limited, nor its subcontractors, consultants, agents, officers, or employees shall be held responsible for any loss or damage resulting directly or indirectly from any default, negligence, error or omission. The liability of Lakefield Research Limited, if any, shall be limited in total to the invoiced value of this project.

Summary

Microdiamond Selection and Description

Microdiamond selection and description was completed on four caustic fusion residues (Kendu-01; +.6mm Cr, +.15mm Cr, +.25mm Cr and +.75mm Cr) using a binocular microscope. Diamonds were not found in any of the residues; these results are reported as a Certificate of Analysis in Appendix A.

LAKEFIELD RESEARCH LIMITED



Bruce Craig Jago, Ph.D.
Manager – Mineralogical Services
Lakefield Research Limited

January 26, 2001

Technical Support: Maria Mezei and Robert Buchan

APPENDIX A

CERTIFICATE OF ANALYSIS RESULTS OF MICRODIAMOND SELECTION AND DESCRIPTION

Lakefield Research Limited

P.O. Box 4300 - 185 Concession St. - Lakefield Ontario K0L 2H0
Phone: 705-652-2019 FAX: 705-652-3123

APEX Geoscience Limited
Attn : Dean Besserer

#200, 9797-45 Ave., Edmonton, AB
Canada, T6E 5V8
Phone: (780) 433-1336, Fax: (780) 916-5782

Lakefield, January 24, 2001

Date Rec. : 10 January 2001
LR. Ref. : MI1001-JAN01
Reference : LR2100053
Project : 8901-285

CERTIFICATE OF ANALYSIS

Sample ID	Diamond Discription	Picking Time
1: KENDU-01 +.6MM CR	0	01/22/2001
2: KENDU-01 +.15MM CR	0	01/22/2001
3: KENDU-01 +.25MM CR	0	01/22/2001
4: KENDU-01 +.75MM CR	0	01/22/2001



Bruce Jago
Manager, Mineralogical Services

Lakefield Research



Lakefield Research Limited
185 Concession St., Box 4300
Lakefield, Ontario
K0L 2H0, CANADA

Tel: (705) 652-2112
Fax: (705) 652-3123
Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-285**

Client: **APEX Geoscience Limited**

Date: January 24, 2001

LIMS No. **JAN1001.R01**


Sample No. **KENDU-01 +.6MM CR**

Mesh	Fraction	Description
+6	Ferromagnetic Non-mag	Not applicable
-6+20	Ferromagnetic Non-mag	Not applicable
+100	Ferromagnetic Mag	Not applicable
-20+100	Paramagnetic Mag (0.1 amp)	Not applicable
-20+100	Paramagnetic Mag (0.3 amp)	Not applicable
-20+100	Diamagnetic Mag (0.5 amp)	Not applicable
-20+100	Diamagnetic Non-mag (0.5 amp)	Not applicable

Sample Weight: 0
Number of Syndites: 0


Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

Maria Mezei

Diamond Selection Specialist


Quality Control

for Robert Buchan

Consulting Mineralogist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

LAKEFIELD RESEARCH LIMITED

January 24, 2001

P.O. Bag 4300, 185 Concession Street, Lakefield, Ontario K0L 2H0

Phone: 705-652-2112

E-mail: bjago@lakefield.com

Fax: 705-652-3123

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-285

LIMS No. JAN1001.R01

Sample No. KENDU-01 +.6MM CR

Client: APEX Geoscience Limited

No.	Stone Dimension, mm			Weight				Percent Preservation	Stone Description	
	X	Y	Z	mg	Carats	Colour	Clarity		Morphology	
Stones Weighed Individually										
0					0.000000					
				0.000	0.000000	Sub-Total				
Stones Weighed as a Group										
0					0.000000					
				0.000	0.000000	Sub-Total				
					0.000000	TOTAL				

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



Lakefield Research Limited
185 Concession St., Box 4300
Lakefield, Ontario
K0L 2H0, CANADA

Tel: (705) 652-2112
Fax: (705) 652-3123
Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-285

Client: APEX Geoscience Limited

Date: January 24, 2001

LIMS No. JAN1001.R01

Sample No. KENDU-01 +.15MM CR

Mesh	Fraction	Description
+6	Ferromagnetic Non-mag	Not applicable
-6+20	Ferromagnetic Non-mag	Not applicable
+100	Ferromagnetic Mag	Not applicable
-20+100	Paramagnetic Mag (0.1 amp)	Not applicable
-20+100	Paramagnetic Mag (0.3 amp)	Not applicable
-20+100	Diamagnetic Mag (0.5 amp)	Not applicable
-20+100	Diamagnetic Non-mag (0.5 amp)	Not applicable

Sample Weight: 0
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.

Selection and Description

Maria Mezei
Diamond Selection Specialist

Quality Control

for Robert Buchan
Consulting Mineralogist

Note:

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Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

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E-mail: bjago@lakefield.com

Fax: 705-652-3123

January 24, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-285**

LIMS No. **JAN1001.R01**

Sample No. **KENDU-01 +.15MM CR**

Client: **APEX Geoscience Limited**

No.	Stone Dimension, mm			Weight				Percent Preservation	Stone Description	
	X	Y	Z	mg	Carats	Colour	Clarity		Morphology	
Stones Weighed Individually										
0					0.000000					
0.000					0.000000	Sub-Total				
Stones Weighed as a Group										
0					0.000000					
0.000					0.000000	Sub-Total				
					0.000000	TOTAL				

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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185 Concession St., Box 4300
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K0L 2H0, CANADA

Tel: (705) 652-2112
Fax: (705) 652-3123
Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-285**

Date: January 24, 2001

Client: **APEX Geoscience Limited**

LIMS No. **JAN1001.R01**


Sample No. **KENDU-01 +.25MM CR**


Mesh	Fraction	Description
+6	Ferromagnetic Non-mag	Not applicable
-6+20	Ferromagnetic Non-mag	Not applicable
+100	Ferromagnetic Mag	Not applicable
-20+100	Paramagnetic Mag (0.1 amp)	Not applicable
-20+100	Paramagnetic Mag (0.3 amp)	Not applicable
-20+100	Diamagnetic Mag (0.5 amp)	Not applicable
-20+100	Diamagnetic Non-mag (0.5 amp)	Not applicable

Sample Weight: 0
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description
Maria Mezei
Diamond Selection Specialist


Quality Control
for Robert Buchan
Consulting Mineralogist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

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Fax: 705-652-3123

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-285**

LIMS No. **JAN1001.R01**

Sample No. **KENDU-01 +.25MM CR**

Client: **APEX Geoscience Limited**

No.	Stone Dimension, mm			Weight				Percent Preservation	Stone Description	
	X	Y	Z	mg	Carats	Colour	Clarity		Morphology	
Stones Weighed Individually										
0					0.000000					
0.000					0.000000	Sub-Total				
Stones Weighed as a Group										
0					0.000000					
0.000					0.000000	Sub-Total				
					0.000000	TOTAL				

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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Fax: (705) 652-3123
Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-285**

Date: January 24, 2001

Client: **APEX Geoscience Limited**

LIMS No. **JAN1001.R01**


Sample No. **KENDU-01 +.75MM CR**


Mesh	Fraction	Description
+6	Ferromagnetic Non-mag	Not applicable
-6+20	Ferromagnetic Non-mag	Not applicable
+100	Ferromagnetic Mag	Not applicable
-20+100	Paramagnetic Mag (0.1 amp)	Not applicable
-20+100	Paramagnetic Mag (0.3 amp)	Not applicable
-20+100	Diamagnetic Mag (0.5 amp)	Not applicable
-20+100	Diamagnetic Non-mag (0.5 amp)	Not applicable

Sample Weight: 0
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description
Maria Mezei
Diamond Selection Specialist


Quality Control
for Robert Buchan
Consulting Mineralogist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

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LAKEFIELD RESEARCH LIMITED

January 24, 2001

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Phone: 705-652-2112

E-mail: bjago@lakefield.com

Fax: 705-652-3123

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-285

LIMS No. JAN1001.R01

Sample No. KENDU-01 +.75MM CR

Client: APEX Geoscience Limited

No.	Stone Dimension, mm			Weight				Percent Preservation	Stone Description	
	X	Y	Z	mg	Carats	Colour	Clarity		Morphology	
Stones Weighed Individually										
0					0.000000					
0.000					0.000000	Sub-Total				
Stones Weighed as a Group										
0					0.000000					
0.000					0.000000	Sub-Total				
					0.000000	TOTAL				

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.



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Saskatchewan Research Council

125 - 15 Innovation Blvd.

Saskatoon, SK Canada S7N 2X8

Ph: 306-933-5400 Fax: 306-933-7446

Internet: <http://www.src.sk.ca>

February 1, 2001

Accounting 306-933-5405

NEW BLUE RIBBON RESOURCES
10048 - 87th Avenue
EDMONTON, AB T6E 2N9

01478

INVOICE # 105989

Reference
Your Order No.
Contract #

Page 1 of 1

Attention: L. KRYSKA

DESCRIPTION	Qty	Price	Amount
OT01.09, SN22			
Caustic Fusions	19.00	416.000	7,904.00
Whole Core Fusion requires 2 days extra fusion at \$50.00 per day.			
	19.00	100.000	1,900.00

GST Registration No. R107864258

Sub Total: 9,804.00

Tax: GST 686.28

PLEASE PAY THIS AMOUNT

10,490.28

10385

Terms: A/R Net 30

Interest of 18% per annum, compounded monthly, will be charged on all accounts over 30 days

For Payment by VISA or MASTERCARD please phone 306-933-5586

Date December 15,2000

**TO: DEAN BESSERER
 NEW BLUE RIBBON**

**FROM: AL HOLSTEN
 MANAGER, GEOANALYTICAL LABORATORIES
 SASK. REASEARCH COUNCIL
 PH: (306)933-5426
 FAX: (306)933-5656**

RE: RESULTS FOR SAMPLE KENDU - 01

KG OF SAMPLE FUSED: 4.40 kg. of sample fused

SIEVE SIZE: 75um

METHOD: Caustic fusion

RESULTS:

0 Macrodiamonds,

0 Microdiamonds, Total weight (mg): Average weight (mg):

TRACERS: 10 / 10 synthetic diamond tracers recovered

Diamond dimensions in mm			Description	Wt. mg
L	W	H		
0.24	0.22	0.16	yellow, clear frag. ,rough, poss. synth.	
0.22	0.22	0.20	yellow, cloudy frag. ,rough, poss. synth.	
0.24	0.20	0.14	yellow, cloudy frag. ,rough, poss. synth.	
0.24	0.20	0.06	yellow, cloudy frag., rough, poss.synth.	
0.22	0.14	0.08	yellow, clear frag., etched, poss.synth.	
0.18	0.16	0.10	yellow, cloudy frag.,smooth, poss.synth.	

Geoanalytical Laboratories

Saskatchewan Research Council

125-15 Innovation Blvd.

Saskatoon, Sask.

S7N 2X8

E-mail: geochemlab@src.sk.ca

Contact: Allan Holsten

Bernard Gartner

Phone: 306-933-5426

Fax : 306-933-5656

Geoanalytical Laboratories was established in 1972 and provides a wide spectrum of services to the mining industry. We offer standard analytical and mineral processing packages as outlined in our fee schedule. In addition, we also provide cost estimates for customized packages. This customization gives clients flexibility in their exploration programs without any additional costs. We operate 24 hours a day, 7 days a week for your convenience.

All reports are the confidential property of the clients. Publications of statements, conclusions or extracts from these reports are not permitted without the client's written permission.

This copy of results, constitutes the **final official report**. SRC's Geoanalytical Laboratories liability will be limited only to the final official report. It is the client's responsibility to ensure that all interpretation of analysis is done, using data from this report.

The client will not use the name Saskatchewan Research Council in connection with the sale, offer, advertisement or the promotion of any article, product, or company without the prior written consent of SRC.

SRC's Geoanalytical Laboratories liability, if any, will be limited to the cost of performing the analysis.

Reviewed by: _____



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Saskatchewan Research Council
125 - 15 Innovation Blvd.
Saskatoon, SK Canada S7N 2X8
Ph: 306-933-5400 Fax: 306-933-7446
Internet: <http://www.src.sk.ca>

TO: SRC CLIENTS

**FROM: AL HOLSTEN
MANAGER, GEOANALYTICAL
PH: (306) 933-5426
FAX: (306) 933-5656**

RE: Picking of diamond indicator mineral grains

Picking mineral grains can be a very subjective process. Color and morphology are the main determining factors used. Subtle differences in elemental composition can result in major changes in the color and morphology of mineral grains. To the best of our ability, we pick mineral grains that have a high probability of being indicators and officially report these. We also pick border line indicators that have a lower probability. The borderline indicators are reported as possible grains on the indicator mineral grain description sheets. To ensure that you get a completely accurate picture of the mineralogy we recommend that you analyze as many grains as possible from both the high and low probability groups. The accuracy of your interpretation will be directly proportional to the number of analyses performed. SRC does not accept any responsibility concerning interpretation. This is the sole responsibility of the client.

Saskatchewan Research Council Geoanalytical Services
 125-15 Innovation Blvd., Saskatoon, SK., S7N 2X8
 Phone:306-933-5426 Fax:306-933-5656

* = ALL SAMPLE FUSED FOR DIAMONDS

M1126 BESSERER NEW BLUE RIBBON DECEMBER 18 2000 (2) [INDICATORS]
 OT00.272

- 1 SAMPLE WEIGHT IN KG
- 2 MID FRACTION -1.00+0.18MM DRY WEIGHT IN GRAMS
- 3 FRANTZ LOWERS @ 0.34 AMPS IN GRAMS
- 4 FRANTZ LOWERS @ 0.19 AMPS IN GRAMS
- 5 VISIBLE PYROPIC GARNET GRAIN COUNT
- 6 Cr-DIOPSIDE GRAIN COUNT
- 7 Picroilmenite GRAIN COUNT
- 8 CHROMITE GRAIN COUNT
- 9 % PERMROLL MAG PROCESSED

	SWT	MWT	LW1	LW2	PG	CD	PICRO	CHROM	%
KENDU 1	4.40	1627	*	*	255	267	0	0	35
KENDU 1 REP					133	202	0	0	

Indicator Mineral Grain Description

GROUP: OT00.272

Lower 1 Fraction

REP- Repicked Sample		B-Blank		DEF-Definite		POS-Possible		Picked %	Others picked by
No.	Sample Name	Pyrope Gt. DEF	Pyrope Gt. POS	Cr. Diop. DEF	Cr. Diop. POS	Eclog. POS	Olivine POS		
1	KENDU 01	255	0	267	0	38	6	15	2
	Comments: Others are possible titanium pyropes								MMG
2									
	Comments:								
3									
	Comments:								
4									
	Comments:								
5									
	Comments:								
6									
	Comments:								
7									
	Comments:								
8									
	Comments:								
9									
	Comments:								
10									
	Comments:								
11									
	Comments:								
12									
	Comments:								
	REPICK	133	0	202	0	30	4	10	77
	Comments: Others are possible phlogopites								BFM

Indicator Mineral Grain Description

Group: OT00.272

Lower 2 Fraction

REP- Repicked Sample		B-Blank		DEF-Definite		POS-Possible	
No.	Sample Name	Picrolilmenite		Chromite		% Picked	Others picked by
		DEF	POS	DEF	POS		
1	KENDU-01	0	17	0	30	10	0
	Comments: MMG						
2							
	Comments:						
3							
	Comments:						
4							
	Comments:						
5							
	Comments:						
6							
	Comments:						
7							
	Comments:						
8							
	Comments:						
9							
	Comments:						
10							
	Comments:						
11							
	Comments:						
12							
	Comments:						
	REPICK	0	43	0	0	10	0
	Comments: BR						

Date December 15,2000

TO: DEAN BESSERER
 NEW BLUE RIBBON

FROM: AL HOLSTEN
 MANAGER, GEOANALYTICAL LABORATORIES
 SASK. REASEARCH COUNCIL
 PH: (306)933-5426
 FAX: (306)933-5656

RE: RESULTS FOR SAMPLE KENDU - 01

KG OF SAMPLE FUSED: 4.40 kg. of sample fused

SIEVE SIZE: 75um

METHOD: Caustic fusion

RESULTS:

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0 Microdiamonds, Total weight (mg): Average weight (mg):

TRACERS: 10 / 10 synthetic diamond tracers recovered

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0.24	0.20	0.06	yellow, cloudy frag., rough, poss.synth.	
0.22	0.14	0.08	yellow, clear frag., etched, poss.synth.	
0.18	0.16	0.10	yellow, cloudy frag.,smooth, poss.synth.	



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Accounting 306-933-5405

February 1, 2001

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10046 - 87th Avenue
EDMONTON, AB T6E 2N9

01478

INVOICE # 105989

Reference
Your Order No.
Contract #

Page 1 of 1

Attention: L. KRYSKA

DESCRIPTION	Qty	Price	Amount
OT01.09, SN22			
Caustic Fusions	19.00	416.000	7,904.00
Whole Core Fusion requires 2 days extra fusion at \$50.00 per day.			
	19.00	100.000	1,900.00

GST Registration No. R107864258

Sub Total: 9,804.00
Tax: GST 686.28

PLEASE PAY THIS AMOUNT

10,490.28

10385

Terms: A/R Net 30

Interest at 18% per annum, compounded monthly, will be charged on all accounts over 30 days
For Payment by VISA or MASTERCARD please phone 306-933-5586

APPENDIX 4

Aeromagnetic Anomalies

Little Legend Property

Blue Diamond Mining Corp.

Appendix 4
Aeromagnetic Anomalies
Little Legend Property
Blue Diamond Mining Corp.

Note: All aeromagnetic anomalies as selected by Balzer and Dufresne (1999)
UTM co-ordinates are NAD 27

Anomaly Number	Line	Fiducial	UTM		Approximate Magnetic Intensity (nT)
			Easting	Northing	
16	L2490	7867	366691	6351264	3 to 3½
17	L2560	4172	366530	6349877	2½ to 3
18	L2570	5370	366228	6349722	3½ to 4
19	L2580	6535	366400	6349486	4
20	L2590	4232	366342	6349313	4
21	L2600	5430	366139	6349071	4
22	L2620	1832	366570	6348660	3
24	L2630	3046	366754	6348479	5 to 6
25	L2640	4264	366871	6348256	4 to 5
30	L2720	2959	366910	6346665	3
31	L2730	4166	366907	6346431	3
32	L2760	7846	364236	6345969	2½
33	L2780	10196	368621	6345387	3 to 4
35	L2820	3005	364811	6344745	2½ to 3
36	L2830	4162	367612	6344428	2½ to 3
38	L2840	5312	368127	6344239	3 to 3½
39	L2840	5358	364521	6344364	2½
40	L2850	6505	365587	6344065	2½ to 5
41	L2850	6523	367035	6344036	2½ to 6
42	L2820	6538	368295	6343998	2½ to 5
43	L2860	7704	368160	6343843	4 to 5
44	L2860	7720	366880	6343866	3
45	L2860	7737	365563	6343919	4 to 5
46	L2890	3004	367666	6343439	7 to 8
47	L2880	3029	365673	6343488	3 to 4
48	L2880	2040	634896	6343544	4 to 5
49	L2890	4329	365246	6343318	5
50	L2890	4337	365902	6343290	2½
51	L2890	4360	367784	6343209	4
52	L2900	5527	365861	6343105	3
53	L2900	5534	365340	6343125	5
54	L2920	7844	369445	6342546	2½
55	L2930	9050	366247	6342490	2½
56	L2930	9056	366732	6342512	3
57	L2930	9088	369508	6342382	3
58	L2940	10189	369252	6342178	3½ to 4
72	T5440	7148	371133	6350284	5
73	T5450	8470	369920	6345258	2½
74	T5450	8508	369797	6342267	2½
75	T5460	8802	368873	6344504	2½
76	T5470	10128	368114	6349664	4
77	T5480	10492	366790	6342436	2½ to 3
78	T5490	11927	365810	6343047	4

Appendix 4
Aeromagnetic Anomalies
Little Legend Property
Blue Diamond Mining Corp.

Anomaly Number	Line	Fiducial	UTM		Approximate Magnetic Intensity (nT)
			Easting	Northing	
80	L2560	4212	369723	6349793	10 to 11
82	L2460	4268	366579	6351846	2 to 2½
83	L2460	4319	370690	6351709	2 to 2½
84	L2510	10252	36612	6350888	2 to 2½
85	L2520	3061	366564	6350640	2
86	L2530	574	366558	6350452	2
87	L2550	3003	366516	6350068	2½ to 3
88	L2690	10262	369680	6347168	2
89	L2690	10305	366309	6347280	2
90	L2690	10312	365719	6347300	2
91	L2710	1860	373463	9346614	2
92	L2720	2991	364200	6346749	2
93	L2800	592	368127	6344959	2 to 3
94	L2820	2956	368620	6344621	2
95	L2820	2964	367981	6344641	1½
96	L2820	2977	367003	6344665	2 to 3
97	L2830	4128	364881	6344511	2½
98	L2830	4143	366061	6344503	2
99	L2830	4150	366618	6344471	2½ to 3
100	L2830	4172	368431	6344412	2½ to 3
101	L2840	5293	369602	6344173	2
102	L2840	5334	366425	6344291	2
103	L2850	6494	364668	6344120	2
104	L2860	7748	364641	6343944	1½
105	L2870	1786	364843	6343756	2
106	L2870	1796	365650	6343730	1½ to 2
107	L2870	1822	367742	6343667	2½
108	L2870	1829	368305	6343647	2½ to 3
109	L2870	1867	371508	6343522	2 to 2½
110	L2870	1878	372437	6343501	2 to 2½
111	L2880	3016	366732	6343458	2½
112	L2880	3050	364107	6343529	2
113	L2890	4403	371536	6343101	2½
114	L2900	5458	371460	6342926	2
115	L2900	5504	367709	6343046	2½ to 3

Anomalies outside of the property but within the geophysical dataset

1	L2350	537	369384	6353970	5
2	L2360	1786	369386	6353920	5 to 6
3	L2370	2913	369344	6353576	4 to 5
4	L2370	2923	368442	6353596	5 to 7
5	L2380	4151	368664	6353387	5 to 7
6	L2380	4232	375259	6353185	4 to 5
7	L2390	5212	375310	6352947	2
8	L2400	6463	364855	6353160	2

Appendix 4
Aeromagnetic Anomalies
Little Legend Property
Blue Diamond Mining Corp.

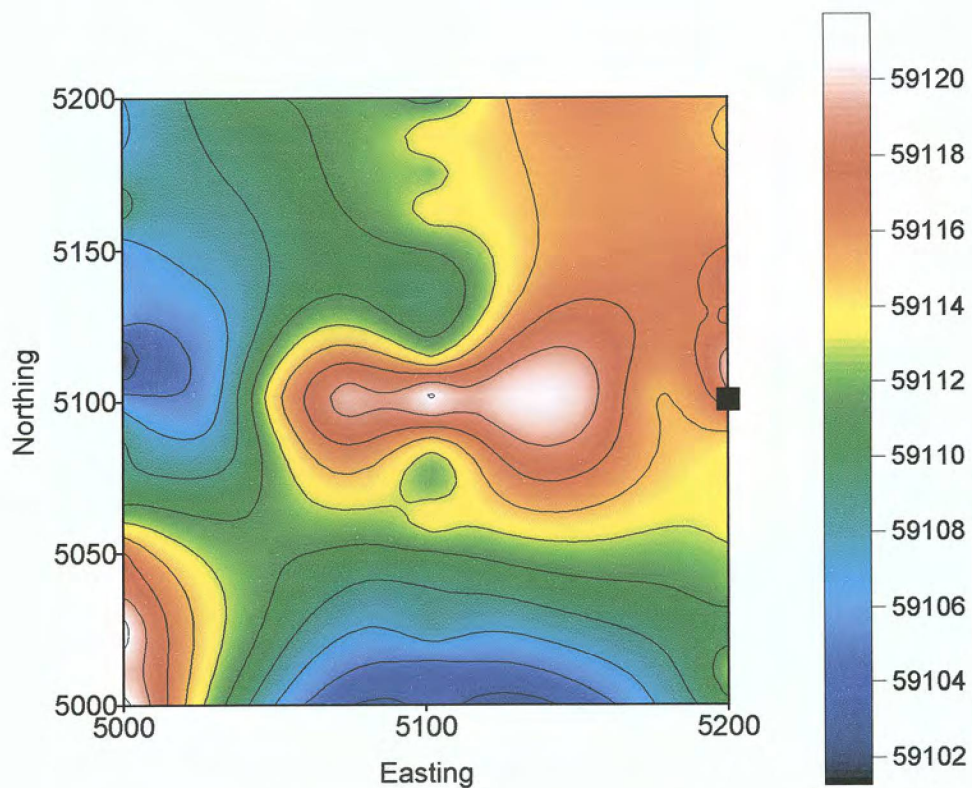
Anomaly Number	Line	Fiducial	UTM		Approximate Magnetic Intensity (nT)
			Eastings	Northing	
9	L2400	6594	375400	6352814	3
10	L2410	7566	374946	6352586	4
11	L2420	1963	374280	6352422	2½
12	L2420	1968	373888	6352433	2
13	L2430	472	374795	6352245	3
14	L2440	1812	370346	6352164	2½
15	L2470	5373	374967	6351389	2
23	L2620	1930	374873	6348382	3
26	L2670	7945	362988	6347808	3 to 4
27	L2690	10347	363163	6347380	2½
28	L2690	10363	361845	6347443	2½
29	L2710	1726	362078	6346979	2½ to 3
34	L2780	10262	363270	6345586	2
37	L2830	4248	374889	6344217	4
59	L2950	11401	367257	6342039	3½
60	L2960	604	367808	6341814	1½
61	L2960	612	367235	6341842	2½ to 3
62	L2960	623	366374	6341863	2
63	L2970	1825	365268	6341662	3½
64	L2970	1830	365677	6341635	4 to 5
65	L2970	1840	366553	6341616	2½
66	L2980	3011	367721	6341443	4
67	L2980	3028	366372	6341485	4 to 5
68	L2990	4222	366542	6341244	5 to 7
69	L2990	4235	367612	6341209	3 to 4
70	L3000	5388	Not plotted	Not plotted	3 to 4
71	L3000	5403	Not plotted	Not plotted	5 to 7
79	T5530	3283	362114	6350224	2½
81	L2910	6478	362764	6342983	>10
116	L2950	11431	369794	6341958	2

APPENDIX 5

Ground Magnetic Targets 2000

Little Legend Property

Blue Diamond Mining Corp.



SYMBOLS



Isomagnetic contour;
contour interval 2 nT



UTM co-ordinate:
371857 E 6350305 N

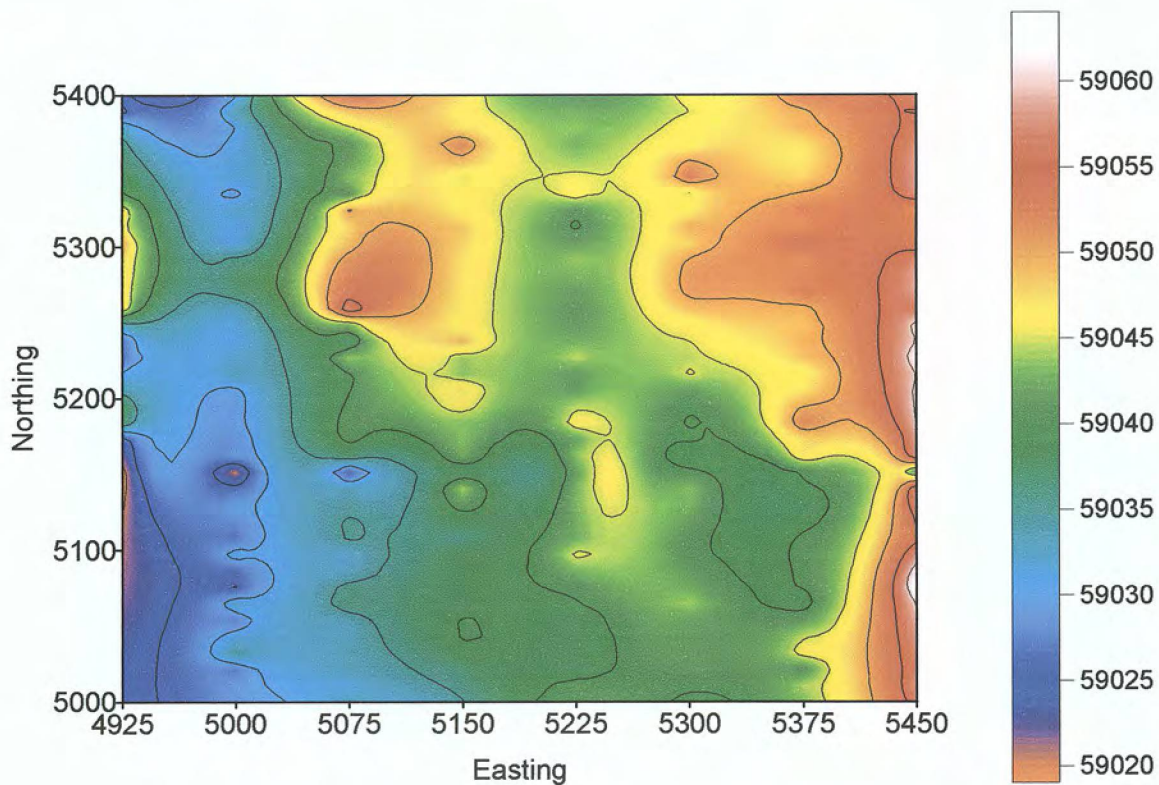


BLUE DIAMOND MINING CORP.

CARE GRID GROUND MAGNETIC SURVEY TOTAL FIELD MAGNETIC CONTOURS

Scale 0 50 100 Metres

March, 2003



SYMBOLS



Isomagnetic contour;
contour interval 5 nT



UTM co-ordinate:
371117 E 6350245 N

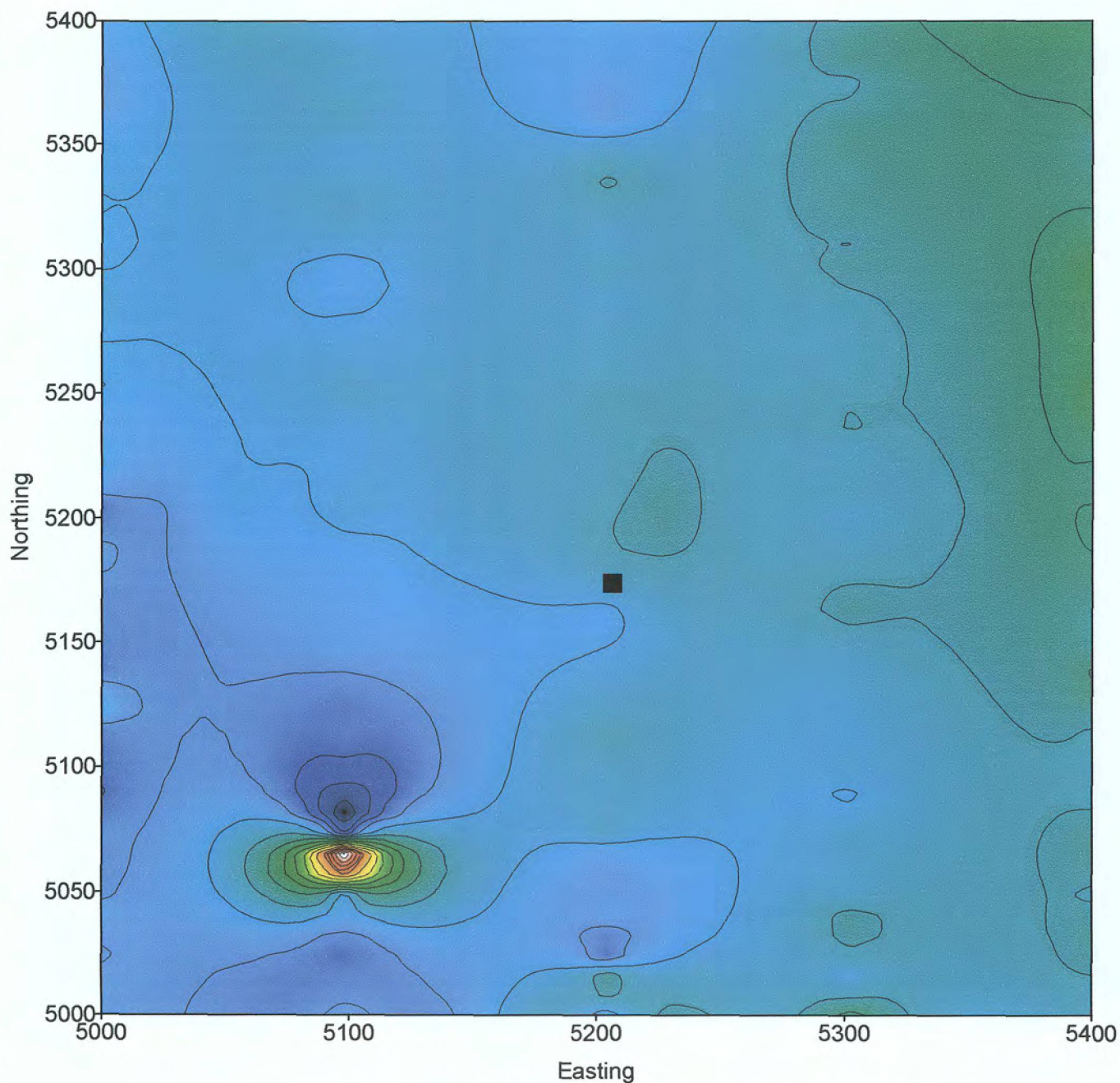


BLUE DIAMOND MINING CORP.

GRIZZ GRID GROUND MAGNETIC SURVEY TOTAL FIELD MAGNETIC CONTOURS

Scale 0 50 100 200 Metres

March, 2003



59030 59020 59010 59000 58990 58980 58970 58960 58950



SYMBOLS



Isomagnetic contour;
contour interval 5 nT



UTM co-ordinate:
368066 E 6348285 N

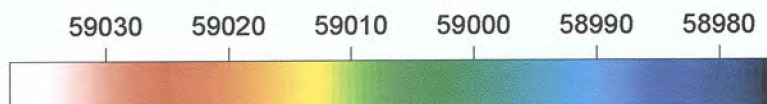
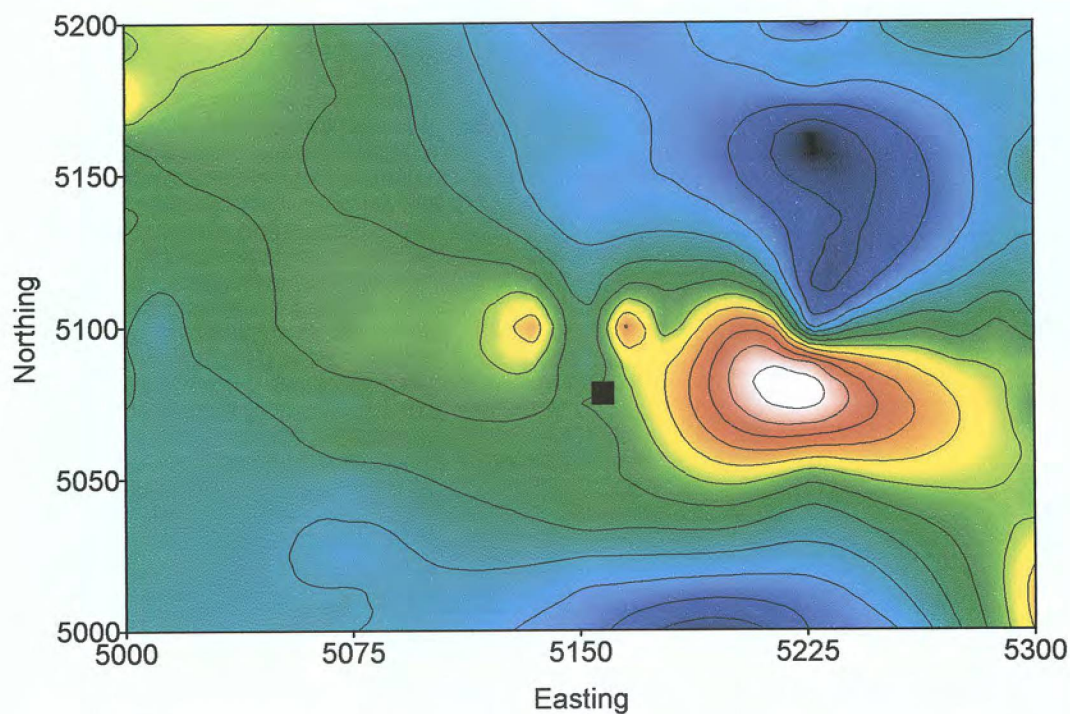


BLUE DIAMOND MINING CORP.

YOGI GRID GROUND MAGNETIC SURVEY TOTAL FIELD MAGNETIC CONTOURS

Scale 0 50 100 Metres

March, 2003



SYMBOLS



Isomagnetic contour;
contour interval 5 nT



UTM co-ordinate:
371117 E 6350245 N



BLUE DIAMOND MINING CORP.

**POOH GRID
GROUND MAGNETIC SURVEY
TOTAL FIELD MAGNETIC CONTOURS**

Scale 0 50 100 150 Metres

March, 2003

APPENDIX 6

Expenditures

**Little Legend Property
Blue Diamond Mining Corp.**

APPENDIX 6
LEGEND PROPERTY EXPENDITURES 2000 - 2002

Blue Diamond Mining Corporation (Formerly New Blue Ribbon Resources Ltd.)							
Project Income Detail - Legend Property							
					Revenue	Expense	
5045	Maps						
	11/30/1998	Dahrouge Geological Consulting Ltd	Nov 30	J272		<u>1,500.00</u>	<u>\$1,500.00</u>
5060	Drilling Contractors						
	3/10/2000	Aggressive Diamond Drilling Ltd.	40	J630		12,571.89	
	8/23/2000	Aggressive Diamond Drilling Ltd.	73	J189		4,000.00	
	11/18/2000	Aggressive Diamond Drilling Ltd.	102	J402		9,995.40	
	11/18/2000	Aggressive Diamond Drilling Ltd.	101	J403		1,984.00	
	11/18/2000	Aggressive Diamond Drilling Ltd.	100	J404		3,261.81	
	11/29/2000	Aggressive Diamond Drilling Ltd.	108	J405		23,694.60	
	11/29/2000	Aggressive Diamond Drilling Ltd.	107	J406		5,013.81	
	3/9/2001	Aggressive Diamond Drilling Ltd.	130	J663		<u>7,798.22</u>	<u>\$68,319.73</u>
5070	Contract Services						
	10/31/1998	Dahrouge Geological Consulting Ltd	Oct 31/98	J160		636.86	
	11/30/1998	Dahrouge Geological Consulting Ltd	Nov 30	J272		1,422.50	
	12/31/1998	Dahrouge Geological Consulting Ltd	Dec 31	J273		811.50	
	1/31/1999	Dahrouge Geological Consulting Ltd	Jan 31	J292		910.00	
	2/28/1999	Apex Geoscience Ltd.	A99-13	J375		3,900.00	
	2/28/1999	Dahrouge Geological Consulting Ltd	Feb 28	J376		337.50	
	5/31/1999	Dahrouge Geological Consulting Ltd	May-99	J50		2,660.00	
	5/1/1999	Spectra Exploration Geoscience Corp	L-001	J52		1,250.00	
	12/31/1999	Dahrouge Geological Consulting Ltd	Dec 31/99	J361		525.00	
	1/31/2000	Dahrouge Geological Consulting Ltd	Jan 31/00	J454		1,290.61	
	2/29/2000	Dahrouge Geological Consulting Ltd	Feb-00	J565		8,531.43	
	2/28/2000	New Claymore Resources Ltd.	2-00	J581		3,703.50	
	3/31/2000	Dahrouge Geological Consulting Ltd	Mar-00	J634		442.40	
	4/30/2000	Dahrouge Geological Consulting Ltd	Apr-00	J722		1,148.13	
	4/27/2000	New Claymore Resources Ltd.	3-00	J734		3,723.50	
	8/1/2000	Dahrouge Geological Consulting Ltd	Jul 31/00	J197		1,138.16	
	8/31/2000	New Claymore Resources Ltd.	#3-00	J206		3,703.50	
	9/30/2000	Apex Geoscience Ltd.	2184	J307		1,967.98	
	10/31/2000	Apex Geoscience Ltd.	2197	J308		2,338.80	
	10/31/2000	Additional expenses pd by L Kryska	Stmt	J389		7,000.00	
	11/17/2000	Canadian Helicopters	18947	J409		8,861.36	
	11/23/2000	Canadian Helicopters	18916	J410		10,625.00	
	11/28/2000	Canadian Helicopters	18934	J411		11,661.55	
	11/30/2000	Dahrouge Geological Consulting Ltd	Nov 30/00	J414		7,940.94	
	11/29/2000	GeoLink Exploration Ltd.	NBL-11-29	J420		1,222.67	
	11/10/2000	Kennecott Canada Exploration Inc.	1110	J426		1,000.00	
	11/5/2000	McMurray Aviation	13022	J429		160.03	
	11/12/2000	McMurray Aviation	13043	J430		547.60	
	11/16/2000	McMurray Aviation	13061	J431		273.80	
	11/18/2000	McMurray Aviation	13067	J432		303.40	
	11/23/2000	McMurray Aviation	13096	J433		366.30	
	11/25/2000	McMurray Aviation	13100	J434		273.80	
	11/28/2000	McMurray Aviation	13109	J435		606.81	
	12/7/2000	Aggressive Diamond Drilling Ltd.	109	J497		687.50	
	12/12/2000	Canadian Helicopters	19013	J500		586.64	
	12/11/2000	Canadian Helicopters	19007	J501		3,223.50	
	12/31/2000	Dahrouge Geological Consulting Ltd	Dec 31/00	J503		3,118.02	
	1/31/2001	Dahrouge Geological Consulting Ltd	Jan 31/01	J579		856.37	
	11/30/2000	Apex Geoscience Ltd.	2221	J665		18,789.91	
	3/12/2001	Canadian Helicopters	19309	J666		14,060.30	
	2/28/2001	Dahrouge Geological Consulting Ltd	Feb 28/01	J669		185.71	
	4/30/2001	Dahrouge Geological Consulting Ltd	Apr 30/01	J671		183.00	

LEGEND PROPERTY EXPENDITURES 2000 - 2002

	2/1/2001	GeoLink Exploration Ltd.	2001-2	J678	924.30	
	2/28/2001	GeoLink Exploration Ltd.	2001-3	J679	2,188.05	
	3/31/2001	McMurray Aviation	Credit	J741	(0.01)	
	2/21/2001	Lakefield Research Limited	M2064	J746	15,390.00	
	3/31/2001	GeoLink Exploration Ltd.	2001-7	J825	2,709.75	
	4/30/2001	New Claymore ResourcesLtd.	RV 3-00	J844	(3,703.50)	
	4/30/2001	Lakefield Research Limited	M2064 Cr	J853	(8,100.00)	\$142,384.17
		Total				\$212,203.90
	4/30/2001	Whalen Resources Ltd.	Sep 7/00	J849	2,000.00	
	4/30/2001	Whalen Resources Ltd.	Sep 21/00	J850	5,500.00	
	4/30/2001	Whalen Resources Ltd.	Oct 4/00	J851	5,000.00	
	5/31/2001	GeoLink Exploration Ltd.	2001-7A	J189	1,174.88	
	7/31/2001	Apex Geoscience Ltd.	2251	J193	8,921.23	
	7/31/2001	Apex Geoscience Ltd.	2269	J194	7,267.50	
	7/31/2001	Apex Geoscience Ltd.	2273	J195	1,251.21	
	6/30/2001	Apex Geoscience Ltd.	2356	J196	252.94	
	11/1/2001	Dahroughe Geological Consulting Ltd	1-Oct	J339	90.00	
	2/28/2002	Apex Geoscience Ltd.	2519	J495	5,768.99	
	3/31/2002	Apex Geoscience Ltd.	2552	J562	1,078.25	
	3/31/2002	Dahrouge Geological Consulting Ltd	Mar 31/02	J565	1,265.25	
	2/28/2002	Dahrouge Geological Consulting Ltd	Feb 28/02	J596	20,487.75	
	4/10/2002	McMurray Aviation	15164	J598	1,214.00	
	4/11/2002	McMurray Aviation	15165	J599	2,428.00	
	4/12/2002	McMurray Aviation	15166	J600	607.00	
	4/13/2002	McMurray Aviation	15178	J601	1,821.00	
	4/17/2002	McMurray Aviation	15200	J602	607.00	
	8/1/2002	Delta Helicopters	11204	J171	14,002.43	
	8/1/2002	Delta Helicopters	11202	J173	38,782.64	\$119,520.07
		TOTAL LEGEND PROPERTY COSTS				\$331,723.97