

MAR 20090010: LEGEND

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NTS 84H

**ASSESSMENT REPORT FOR THE LEGEND PROPERTY,
BIRCH MOUNTAINS, NORTHERN ALBERTA: MINERAL PERMITS
9302090598 to 9302090605, 9303040865, 9305031145 to 9305031147,
9305031156 to 9305031161, 9305121217 to 9305121218, and
9306061085**

Part B

REPORT AND APPENDICES

Approximate Property Location

Latitude: 57° 14' N

Longitude: 113° 10' W

135 km Northwest of Fort McMurray, North-Central Alberta (NTS 84H)

**Completed By:
APEX Geoscience Ltd.
Suite 200, 9797 – 45th Avenue
Edmonton, Alberta, Canada
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April 22, 2009
Edmonton, Alberta Canada

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Anetta Banas, M.Sc., Geol. IT

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- 5 DIAMOND INDICATOR MINERAL PROCESSING AND RESULTS (SRC)
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- 7 DMS TAILINGS AUDIT (SRC)

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9306061085**

SUMMARY

APEX Geoscience Ltd. (APEX) was retained from 2006 to 2008, as consultants by Grizzly Diamonds Ltd. (Grizzly), to complete diamond core drilling and sampling of the Legend Kimberlite and ground geophysical at the Legend property in the Birch Mountain region of northeast Alberta. Grizzly acquired an undivided 100% interest in the Legend metallic mineral permits, and an undivided 85% interest in the Little Legend mineral permits from Blue Diamond Mining Corporation (BDM) during 2005 and 2006. The Legend and Little Legend permits together form the Legend property, which is situated approximately 430 km northeast of Edmonton. The Legend property is located approximately 175 km to the east of the Buffalo Head Hills kimberlite field and several other Grizzly properties. Grizzly's holdings in the Birch Mountains encompass 23 metallic mineral permits totaling approximately 128,512 hectares (ha) (317,560 acres), and cover all, or portions of, Township 94, Ranges 18, 19, 21, and 22; Township 95, Ranges 18, 19, 20, and 22; Township 96, Ranges 19 to 22 west of the 4th meridian. A subset of 21 metallic mineral permits totaling approximately 110,080 hectares (272,008 acres) is the subject of this report. The Legend Property is located within National Topographic System (NTS) 1:250,000 scale map sheet 84H and within NTS 1:50,000 map sheets 84H/02 to 84H/07. Although diamond exploration on Grizzly's Birch Mountain permits is still in the early stages, the potential for discovery of additional diamondiferous kimberlites is considered high, based on the regional geological setting in conjunction with the positive results of exploration conducted to date. The results of the geophysical and drilling programs were presented in the 2007 Assessment report. This assessment report details the results of the samples collected from the drilling program of the Legend kimberlite. The expenditures claimed for this assessment report total CDN\$138,754.12 (not including GST or 10% allowable overhead) for exploration at the Legend property.

The regional setting in the Birch Mountain area is considered favourable for the presence of diamondiferous kimberlites. Grizzly's Legend property is located along the western margin of the Proterozoic Taltson Magmatic Zone (TMZ), in close proximity to the eastern extent of the Buffalo Head Terrane (BHT). The local bedrock geology and underlying crystalline basement in association with deep seated, penetrative structures, such as the Peace River Arch, likely provided a favourable environment for the ascent of kimberlitic magmas in the Birch Mountains. The regional cratonic setting is considered favourable for the formation and preservation of diamonds in the upper

mantle and their transport to surface in kimberlitic magma during periodic tectonic activity associated with movement along the Peace River Arch. This has been established with the discovery of 9 kimberlite pipes in the Birch Mountains area, at least 2 of which are diamondiferous (Legend and Phoenix).

Previous exploration by Montello Resources Ltd., Redwood Resources Ltd., and Kennecott Canada Exploration Inc. was successful in identifying eight kimberlite pipes, which together comprise the diamondiferous Legend kimberlite field. A ninth kimberlite, the Kendu kimberlite, was discovered by Blue Diamond Mining during 2001. The Legend property encompasses seven of the nine kimberlites discovered between 1998 and 2001. Diamond exploration on the Legend property is still in the early stages due to limited diamond indicator mineral (DIM) sampling and geophysical studies. A high resolution aeromagnetic survey during the late 1990's identified numerous circular anomalies, possibly indicative of kimberlitic intrusives. Detailed follow up work, consisting of helicopter and ground geophysical surveys, over several of these targets produced discrete geophysical responses similar to those for known kimberlites. These targets have yet to be drill tested. Minimal DIM sampling has been conducted down-ice of the Legend property. The diamond potential of Grizzly's Legend property cannot be fully assessed with the limited amount of sampling that has been conducted to date. However, it is expected that further systematic sampling will lead to a better understanding of the diamond potential of the property.

During 2005 and 2006 APEX personnel completed eight ground magnetic surveys over the Argonaut, Lammasu, Legend, Legend Camp, Legend West, Gemini, Centaur and LGD051 targets. The Lammasu and Argonaut surveys yielded magnetic anomalies that were drill tested but no kimberlite was intersected. The Lammasu anomaly was explained by the presence of a layer of dark, fine grained, highly magnetic material interpreted as lake bottom sediments. The Argonaut magnetic anomaly was not explained by drilling. The two Legend magnetic anomalies were relegated for future drill testing based on inconclusive results from the 1998 drill testing conducted by Kennecott. The Gemini anomaly remains a high priority target. The Centaur and LGD051 anomalies appear to be attributable to magnetic paleo-gravel channels and no further work is recommended. In March 2006 two cut lines 350 m long x 8 m wide were constructed for access across the Legend kimberlite in preparation for the 2007 drill program.

Exploration on the Legend property in 2007 consisted of the completion of fourteen diamond drill holes over the Legend kimberlite. The Legend anomaly was originally identified from an airborne magnetic survey. The target was drilled in 1998 by Kennecott resulting in the discovery of the Legend kimberlite. In 2006, a ground geophysical survey was conducted over the Legend target to delineate its size and extent. The 2007 drill program was designed to test the extent of the Legend kimberlite associated with the ground magnetic anomaly. During the 2007 drill program 1819.66 m of core drilling over the Legend kimberlite was completed and a mini-bulk sample was collected (of composite core samples) to constrain the diamond potential of the

kimberlite. A total of 9,852 kg of kimberlite core was processed through dense media separation (DMS) and 84.7 kg (wet) (64.45 kg dry) of concentrate was recovered. Caustic fusion of the concentrate resulted in the recovery of one macrodiamond. Additionally, 3 composite drill core samples totaling 168.35 kg were collected for caustic fusion for microdiamonds. A total of 3 microdiamonds were recovered from these samples. One sample was additionally processed for indicator minerals and olivine and picroilmenite were recovered. The results of the sampling program are discussed in this report.

An aggressive, systematic follow up exploration program in 2009, including diamond indicator mineral sampling, airborne magnetic-electromagnetic surveys, ground geophysical surveys, and drilling is warranted to search for additional diamondiferous kimberlites within Grizzly's Birch Mountain permits. A number of untested airborne magnetic anomalies remain to be surveyed with ground geophysics in the Birch Mountain area. Additionally, electromagnetic and gravity survey datasets should be compiled and additional surveys completed over potential target areas in the search for non-magnetic kimberlites.

INTRODUCTION AND TERMS OF REFERENCE

APEX Geoscience Ltd. (APEX) was retained from 2005 to 2008, as consultants by Grizzly Diamonds Ltd. (Grizzly), to evaluate the diamond potential of the Legend property and surrounding areas within the Birch Mountain region. This assessment report has been prepared on the basis of available published and unpublished material and winter exploration programs during the winters of 2004-2005, 2005-2006, and 2007. This assessment report documents the results of the samples collected from the drilling program performed by APEX, on behalf of Grizzly during the winter of 2007. The expenditures claimed for this assessment report total CDN\$138,754.12 (not including GST or 10% allowable overhead) for exploration at the Legend property (Appendix 1).

DISCLAIMER

The author, in writing this report, used 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 author; however they are not the basis for this report. The Legend Property is in the early stage of exploration, but does contain previously confirmed diamond and kimberlite discoveries.

PROPERTY DESCRIPTION AND LOCATION

Grizzly's Legend property is located in northeast Alberta approximately 430 kilometres (km) northeast of Edmonton and 135 km west of Fort McMurray, Alberta (Figure 1). The Legend property is located on Township 94, Ranges 18, 19, 21 and 22; Township 95, Ranges 18, 19, 20 and 22; and Township 96, Ranges 19 to 22 west of the meridian. Grizzly's Legend Property encompasses 23 metallic mineral permits totaling approximately 128,512 hectares (ha) (317,560 acres). A subset of 21 metallic mineral permits totaling approximately 110,080 hectares (ha) (272,013 acres) are the subject of this report. The property permits are located south of the Birch Mountain Wildlands Park, with the northern boundary of Township 96 bordering the park (Figure 1). The properties are located within National Topographic System (NTS) 1:250,000 scale map sheet 84H and 1:50,000 scale NTS map sheets 84H/02 to 84H/07. A list of legal descriptions for the Legend property permits that are the subject of this report are provided in Table 1. Mineral permit locations are shown in Figure 2. Copies of the metallic mineral permit agreements are included in Appendix 2.

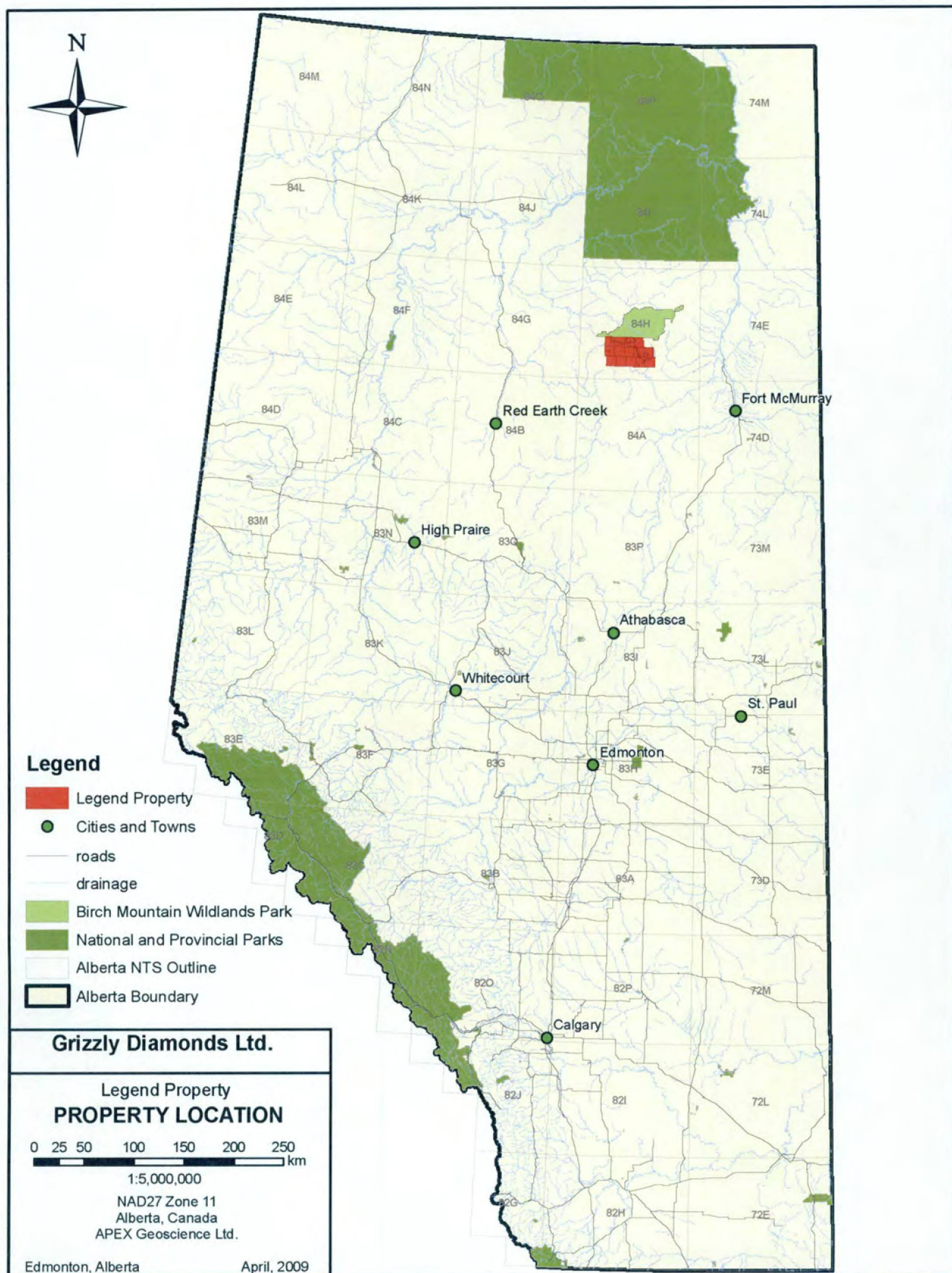
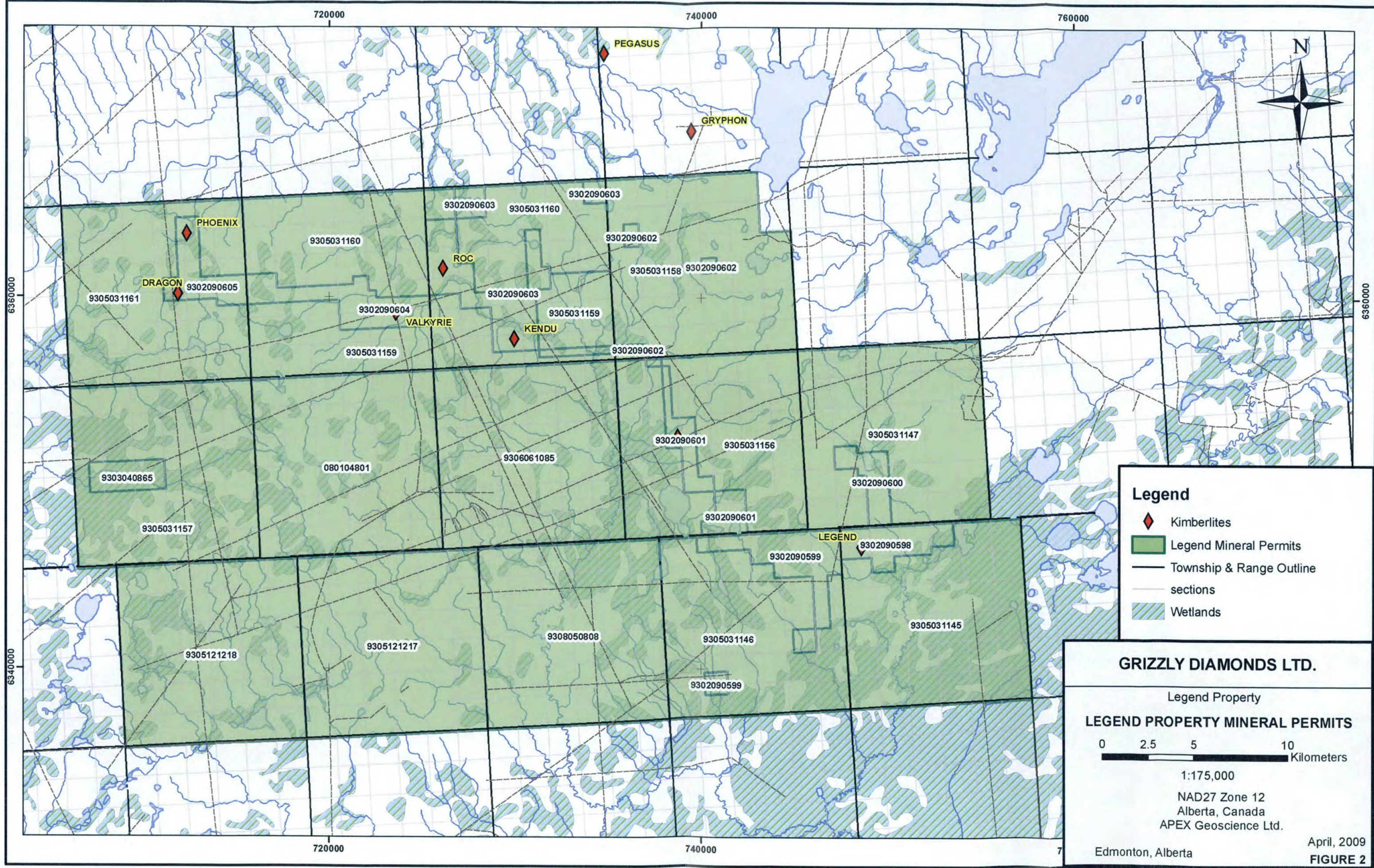


FIGURE 1



- Legend**
- Kimberlites
 - Legend Mineral Permits
 - Township & Range Outline
 - sections
 - Wetlands

GRIZZLY DIAMONDS LTD.

Legend Property
LEGEND PROPERTY MINERAL PERMITS



1:175,000
NAD27 Zone 12
Alberta, Canada
APEX Geoscience Ltd.

TABLE 1. LEGAL PERMIT DESCRIPTIONS*

PERMIT NUMBER	RECORD DATE	TIME	LEGAL DESCRIPTION	PERMIT HOLDER	AREA (HA)
9302090598	4-Sept-2002	10 Years	4-18-094: 29NW,L10,L15; 31-33; 34NW,L5-L7,L10,L15	Grizzly Diamonds Ltd	1008
9302090599	4-Sept-2002	10 Years	4-19-094: 5L14-L16; 8SE,L3,L6; 13L13,L14; 14SE,L3,L6,L9-L11; 24W; 25N,SW; 26N; 27L9,L16; 32NE,L11,L14; 33N; 34-36	Grizzly Diamonds Ltd	1792
9302090600	4-Sept-2002	10 Years	4-18-095: 4W,L2,L7,L10,L15; 8L16; 9W,L2,L7,L10,L15; 16SW,L2,L7; 17S,L10-L12	Grizzly Diamonds Ltd	672
9302090601	4-Sept-2002	10 Years	4-19-095: 3; 4SE; 9N; 10S; 16W; 20E; 21W; 29L2,L7,L10,L15; 32L2,L7,L10,L13,L14	Grizzly Diamonds Ltd	1104
9302090602	4-Sept-2002	10 Years	4-19-096: 5L3,L4; 6L5-L8; 15L13, L14; 19L15,L16; 22L3,L4; 30SE	Grizzly Diamonds Ltd	256
9302090603	4-Sept-2002	10 Years	4-20-096: 1L5-L8; 2L5-L8; 3NW,L7,L8; 4N; 9; 10W; 15SW,NE,L11,L14; 16S; 17S,NW; 18N; 19; 20SW; 22L1-L3,L6,L7,L10,L11,L14,L15; 27L2,L3,L6,L7; 30; 32; 36NE,L6-L8,L11,L14	Grizzly Diamonds Ltd	2528
9302090604	4-Sept-2002	10 Years	4-21-096: 10N; 11N; 12N; 13S; 14S,L12; 15; 16N; 17N; 18N; 19S; 22L1,L2	Grizzly Diamonds Ltd	1456
9302090605	4-Sept-2002	10 Years	4-22-096: 13N; 14L13-L16; 15L14-L16; 22SE,L3,L6,L9,L16; 23S,NW; 24S; 26W; 27L1,L8,L9,L16; 34L1,L8; 35SW	Grizzly Diamonds Ltd	976
9303040865	11-Apr-2003	10 Years	4-22-095: 16N; 17N; 18NE; 19SE; 20S; 21S	Grizzly Diamonds Ltd	640
9305031145	21-Mar-2005	10 Years	4-18-094: 1-28; 29S,L9,L16; 30; 34L1-L4, L8,L9,L16; 35-36	Grizzly Diamonds Ltd	8208
9305031146	21-Mar-2005	10 Years	4-19-094: 1-4; 5S,L9-L13 06-7; 8N,L4,L5; 9-12; 13S,NE,L11,L12; 14L4,L5,L12-L16; 15-23; 24E; 25 SE; 26S; 27S NW,L10,L15; 28-31; 32S,L12,L13; 33S	Grizzly Diamonds Ltd	7424
9305031147	21-Mar-2005	10 Years	4-18-095: 1-3; 4L1,L8,L9,L16; 5-7; 8S,NW,L9,L10,L15; 9L1,L8,L9,L16; 10-15; 16N,L1,L8; 17L9,L13-L16; 18-36	Grizzly Diamonds Ltd	8544
9305031156	21-Mar-2005	10 Years	4-19-095: 1-2; 4N,SW; 5-8; 9S; 10N; 11-15; 16E; 17-19; 20W; 21E; 22-28; 29W,L1,L8, L9,L16; 30-31; 32SW,L1,L8,L9,L11,L12,L15, L16; 33-36	Grizzly Diamonds Ltd	8112
9305031157	21-Mar-2005	10 Years	4-22-095: 1-15; 16S; 17S; 18S,NW; 19N,SW; 20N; 21N; 22-36	Grizzly Diamonds Ltd	8576
9305031158	21-Mar-2005	10 Years	4-19-096: 1-4; 5N,SE,L5,L6; 6N,L1-L4; 7-14; 15S,NE,L11,L12; 16-18; 19S,NW,L9,L10; 20-21; 22N,SE,L5,L6; 23-24; 26-29; 30N,SW; 31-35	Grizzly Diamonds Ltd	8448
9305031159	21-Mar-2005	10 Years	4-20-096 1N,L1-L4; 2N,L1-L4; 03SW,NE, L1,L2; 4S; 5-8; 10E; 11-14; 15SE; 18S 4-21-096: 1-9; 10S; 11S; 12S; 16S; 17S; 18S	Grizzly Diamonds Ltd	6112
9305031160	21-Mar-2005	10 Years	4-20-096: 15L12,L13; 16N; 17NE; 20N,SE; 21; 22L4,L5,L8,L9,L12,L13,L16; 23-26; 27N,L1,L4,L5,L8; 28-29; 31; 33-35; 36L1-L5,L12,L13 4-21-096: 13N; 14NE,L11,L13,L14; 19N; 20-21; 22N,SW,L7,L8; 23-36	Grizzly Diamonds Ltd	8336
9305031161	21-Mar-2005	10 Years	4-22-096: 1-12; 13S; 14S,L9-L12; 15S,L9-L13; 16-21; 22NW,L4,L5,L10,L15; 23NE; 24N; 25; 26E; 27W,L2,L7,L10,L15; 28-33; 34N,SW,L2,L7; 35N,SE; 36	Grizzly Diamonds Ltd	8240
9305121217	8-Dec-2005	10 Years	4-21-094: 1-36	Grizzly Diamonds Ltd	9216
9305121218	8-Dec-2005	10 Years	4-22-094: 1-36	Grizzly Diamonds Ltd	9216
9306061085	29-Jun-2006	10 Years	4-20-095: 1-36	Grizzly Diamonds Ltd	9216
Property Total					110,080Ha

*Based upon a land titles search March 30, 2009

The mineral permits are currently held in the name of Grizzly Diamonds Ltd. of Suite 220, 9797 – 45th Avenue, Edmonton, Alberta. Based upon a property title search, the mineral permits appear to be free of any encumbrances and are 100% owned by Grizzly Diamonds Ltd. This assessment report is filed for Mineral Permits 9302090598 – 9302090605, 9303040865, 9305031145 – 9305031147, 9305031156 – 9305031161, 9305121217 – 9305121218, and 9306061085.

Alberta Mining regulations grant metallic mineral permits to the permittee for 10-year terms which are not renewable, and at any time after the initial two-year term the mineral permit may be converted into a lease. Leases are granted for 15-year terms and may be renewed. A metallic mineral permit gives Grizzly the exclusive right to explore for and develop economic deposits of minerals, including diamonds, within the boundaries of the permit. The exclusive right to explore is subject to ALBERTA REGULATION 66/93 of the Alberta Mines and Minerals Act and the contained Metallic and Industrial Minerals Regulations within the act. The Standard Terms and Conditions for the permits are described in detail on Alberta Energy's website at http://www.qp.gov.ab.ca/documents/Regs/2005_145.cfm.

A permit holder shall spend or cause to be spent, with respect to the location of his mineral permit, an amount on assessment work equal to \$5 for each hectare in the permit during the first two year period; an amount equal to \$10 per hectare for each of the second and third two year periods; and an amount equal to \$15 per hectare for each of the fourth and fifth two year periods. Mineral permits may be grouped and excess expenditures may be carried into the next two year period.

In addition to the financial commitment, a metallic mineral permit holder is required to file a statement of work on the two year anniversary date of the permit and an assessment report that documents all of the work conducted as well as the results of the work to Alberta Energy. The assessment report must be filed within 60 days after the record date after each two year period.

ACCESSIBILITY, CLIMATE, AND LOCAL RESOURCES

Access to the Legend property during the winter months (December to April) is available along maintained winter roads from Fort McMurray, AB (130 km) to the Paramount Resources Legend Gas Plant. Due to dispersed bogs in the summer months, helicopter and aircraft services based in Athabasca (300 km south) and Fort McMurray are recommended for property access. Most portions of the permit areas may be accessed along roads, cart trails, and seismic lines by four-wheel drive vehicles, all terrain vehicles (ATV's), and snowmobiles. Accommodation, food, fuel, and supplies are best obtained in the town of Fort McMurray. Exploration programs may be based out of either the Paramount Resources Legend Gas Plant or a smaller plant located west-

southwest of the Legend property. Water sources within the property are plentiful, although some lakes may occasionally dry towards the end of summer.

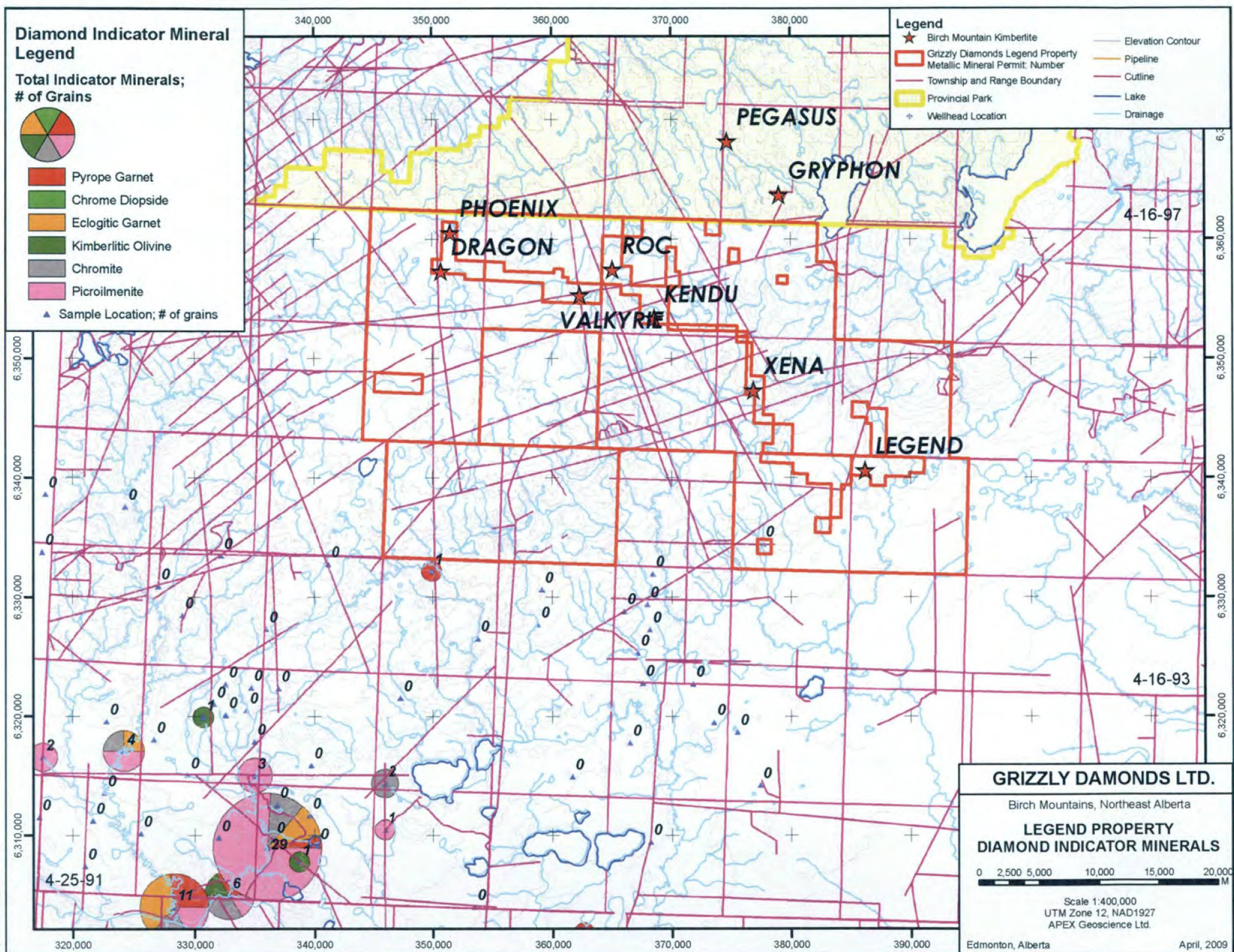
The Legend property is situated in the Birch Mountains within the Northern Boreal Plains and borders the western margin of the Canadian Shield. Relief generally comprises rolling hills and undulating plains. Elevation in the region varies from 400 metres (m) to 800 m above sea level (ASL). Topography is low to moderate with drainage patterns oriented towards the south. During the spring and summer months the mid-boreal forest is interspersed with bogs in the lowlands. Typical vegetation within the forested areas includes spruce and birch, with willow brush and muskeg. Regional fauna includes caribou, deer, moose, wolves, black and grizzly bears, as well as various small mammals. The larger lakes in the region are capable of sustaining fish and bird life. From late October to early April temperatures commonly fall below -20°C with moderate snowfall, Chinook conditions, and as low as 8 hours of daylight. Summer months are characterized by temperatures up to 30°C and daylight duration of 18 hours. Climate conditions allow year round field operations; however, heavy equipment access is dependent on winter road accessibility.

HISTORY: PREVIOUS EXPLORATION

Previous Exploration Prior to 2000

Previous exploration in the Namur Lake region has been restricted primarily to oil sands, gas, and groundwater. In the past, geological mapping and airborne geophysical surveys have been conducted by various government agencies and companies as part of large regional studies (GSC, 1983; Green, 1970; Hamilton *et al.*, 1999). In addition, various Alberta government agencies have compiled oil, gas, and water well logs into drift thickness, bedrock topography, and paleochannel maps (Pawlowicz and Fenton, 1995a,b; Dufresne *et al.*, 1996).

Diamond exploration in northern Alberta commenced in 1992 and 1993 with a major staking and exploration rush. Exploration was fuelled by 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 AGS till samples have been collected within the Namur Lake map area; however all of the samples were collected either northwest or east of the Legend property (Dufresne *et al.*, 1996; Pawlowicz *et al.*, 1998). Ashton Mining of Canada Inc. (Ashton) conducted diamond indicator mineral (DIM) sampling on the Birch Mountain property, south of the Legend property, during 1999 and 2000 (Skelton and Bursey, 1999, 2000; Skelton and Willis, 2001). Ashton collected a sample yielding up to 29 total DIMs approximately 25 km southwest of the Legend property (Figure 3). Additionally, an



Ashton till sample collected immediately south and down-ice of Legend's southern boundary yielded a single pyrope garnet (Figure 3). Minimal publicly available DIM sampling has been conducted on or in close proximity to the Legend property. Government and industry DIM sampling in the Namur Lake area is sparse due to reduced access to the region in the summer months.

The discovery of diamondiferous kimberlites during early 1997 in the Buffalo Head Hills, and late 1998 in the Birch Mountains remains to be the most significant kimberlite exploration in northern Alberta. Southwest of the Legend property, a total of 26 out of the 38 kimberlites discovered by Ashton in the Buffalo Head Hills and Peerless Lake regions have yielded diamonds. 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 mineral permits, based on drill testing 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 in the Birch Mountains in 1998, included a High Resolution Airborne Magnetic (HRAM) survey flown by Spectra Exploration Geoscience Ltd. (Spectra). The survey was completed over a large portion of the Birch Mountains, including all of the Legend property, for Montello Resources Ltd. (Montello) and Redwood Resources Ltd. (Redwood) during the spring to early summer of 1998. 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 indicated that at least two of the pipes, Phoenix and Legend, were weakly diamondiferous (Montello Resources Ltd., 1998a,b). An eighth kimberlite was identified during early 1999 (Montello Resources Ltd., 1999). Six of the kimberlites, including Phoenix, lie along a significant northwest to southeast magnetic trend that transects the Legend property (Figure 3). A total of seven kimberlite pipes, including the recently identified Kendu kimberlite (New Blue Ribbon Resources Ltd., 2000), lie within the Legend property magnetic trend (Figure 3).

Exploration 2000 -2004

During February 2000 and February 2002, Dahrouge Geological Consulting Ltd. (Dahrouge) completed ground magnetic surveys over twelve high resolution airborne magnetic anomalies on the Legend property (Dufresne, 2003; Tanton and Dahrouge, 2004). Also during the fall of 2000, APEX conducted limited ground geophysical surveys on the Legend property, in order to establish collar locations for targets previously

identified from detailed helicopter magnetic and electromagnetic surveys (Dufresne, 2003; Tanton and Dahrouge, 2004). The magnetic surveys were completed over the Bacchus, Target 33, Kendu, Lammasu, Iris, Siren, and Dutchman targets. The majority of the survey results yielded low priority linear to sinuous magnetic features that did not warrant any further follow up exploration. However, further exploration was warranted for the Kendu, Lammasu, Argonaut, and Hippogriff targets. Additionally, the Centaur, Bacchus, Dutchman, Cronus, LDG066, and LDG094 targets produced difficult to interpret magnetic signatures and required further ground magnetic studies. The Kendu, Lammasu, Centaur, and Hippogriff targets warranted drill testing for kimberlites.

In the spring of 2000, Dahrouge also completed ground magnetic surveys on the Little Legend property over one high priority anomaly, one low priority, and two unranked anomalies (Dufresne, 2003; Tanton and Dahrouge, 2004). The two ranked anomalies were selected from a review of the 1998 HRAM survey data conducted on behalf of Montello and Redwood. The ground surveys did not yield any definitive magnetic anomalies that could be indicative of kimberlite and require drill testing. It should be noted that only one of 23 medium to high priority anomalies from the 1998 HRAM dataset were surveyed with ground geophysics, warranting further follow up exploration on the remaining targets (Dufresne, 2003).

In November 2000, APEX supervised a drill program on the Kendu magnetic target, which represents the ninth kimberlite intersected in the Birch Mountains. The drill hole reached a depth of 206.36 meters (m) with 116.4 m of core recovered. Kimberlitic breccia was intersected at a depth of 100.56 m. The Kendu kimberlite contained abundant eclogite and lherzolite xenoliths, as well as abundant mantle derived indicator minerals. Caustic fusion analysis of the Kendu kimberlite drill core did not yield any microdiamonds (Dufresne, 2003). In November 2001, APEX obtained winter land use permits on behalf of Blue Diamond to drill test the Lammasu magnetic target. Drilling was initiated in April of 2002; however, the hole was abandoned due to a lack of water for drilling operations and the rig remained on site pending demobilization (Dufresne, 2003).

Exploration 2005 -2006

Between December 2005 and March 2006, ground magnetic surveys were conducted by APEX personnel to confirm the validity of the airborne anomalies and identify potential kimberlite on the Legend property. The five targets surveyed were the Argonaut, Lammasu, Legend Kimberlite, Legend Camp and Legend West. The Lammasu survey yielded a magnetic anomaly that was later drill tested in February 2006 (Table 2). Two holes were drilled in the north and south lobe of the anomaly to depths of 63.09 m and 172.21 m, respectively. Kimberlite was not encountered in either of these drill holes. The Lammasu North and South anomalies were explained by a layer of dark, fine grained, highly magnetic material interpreted as lake bottom sediments. One vertical drill hole also tested the Argonaut anomaly. The hole was

drilled to a depth of 167.03 m; kimberlite was not intersected. The Argonaut magnetic anomaly was not explained by drilling; however, a magnetic layer of sediments could have been washed away during the drilling process. The two Legend magnetic anomalies were selected for future drill testing based on inconclusive results from the 1998 drill testing conducted by Kennecott. In March 2006 two cut lines 350 m long x 8 m wide were constructed for access across the Legend kimberlite in preparation for the 2007 drill program.

TABLE 2. LEGEND DRILL HOLE SUMMARY 2006

Target	Drill Hole	Easting Nad27Z12	Northing Nad27Z12	Depth (m)	Dip	Kimberlite Reached
Lammasu S	L06-01	366048	6356186	172.21	90	no
Argonaut	L06-02	360200	6354870	167.03	90	no
Lammasu N	L06-03	366177	6356309	63.09	90	no

An additional 3 ground geophysical surveys totaling 10.7 line km were conducted in December, 2006 over the Gemini, Centaur and LGD051 targets. Based on the results of the ground magnetic surveys, only the Gemini target remains as a high priority anomaly. The results of the ground magnetic survey at the Gemini target reveal a discrete east-west elongate magnetic high anomaly of approximately 40 nanotesla (nT) and 75m x 100m dimensions. The results of the Centaur ground magnetic survey show an irregular 100m x 350m north-northeast elongate diffuse magnetic high anomaly of approximately 40 nT which becomes progressively less intense toward the northeast. The Centaur anomaly is interpreted to represent a subsurface paleo-channel containing magnetic sand or gravel. Similarly the LGD051 survey shows a series of isolated northwest trending magnetic high anomalies ranging from approximately 4 nT to 20 nT in magnitude. Many of these small magnetic high features are the results of single data readings. The LGD051 anomaly is also considered to be the result of a subsurface paleo-channel. No further work is recommended on the Centaur and LGD051 anomalies.

DEPOSIT MODEL: DIAMONIFEROUS 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. Diamond indicator minerals (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 in 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. During ascent, the volatile gases within the kimberlite magma expand, fracturing the overlying rock, continually creating and expanding its own conduit to the earth's surface. Along the ascent path to the earth's surface, the kimberlite magma rips up and incorporates fragments or xenoliths of the various rock types the magma passes through on its way to the 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 a kimberlite may assimilate during its ascent will determine what mineral assemblages are present in the kimberlite when it erupts at surface.

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 which 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 worldwide, economic, diamond bearing kimberlites occur in the middle of stable Precambrian, typically Archean, cratons. The Buffalo Head Craton is an example of such a craton.

Diamond indicator minerals (DIMs) include minerals that have crystallised directly from a kimberlitic magma (phenocrysts), or are 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, pyropic and eclogitic garnets. Varieties of garnet include G1, G2, G9, G10, G11, and 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 Iherzolitic 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 DIMs 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 Cr-pyrope garnets (harzburgitic), G9 pyrope garnets (Iherzolitic), Cr- and Mg-rich chromite (diamond inclusion quality or "DIF" chromite from chromite or spinel harzburgite), diamond inclusion quality "DIF" eclogitic garnets, and chemically distinct jadeite 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 indicate that the oxidising conditions were favourable for the preservation of diamonds during their ascent to surface in the kimberlitic magma.

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. The contrast in physical characteristics between the two units may be significant enough to be detected by airborne or ground geophysical surveys. Two of the most commonly used geophysical techniques for kimberlite exploration are airborne or ground magnetic surveys and electromagnetic (EM) surveys. A magnetic survey measures the magnetic susceptibility, while 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 and the anomalous magnetic or resistivity response over the kimberlite diatreme. Contoured datasets often reveal the anomalous results as circular or oval anomalies, outlining the surface or near surface expression of the diatreme.

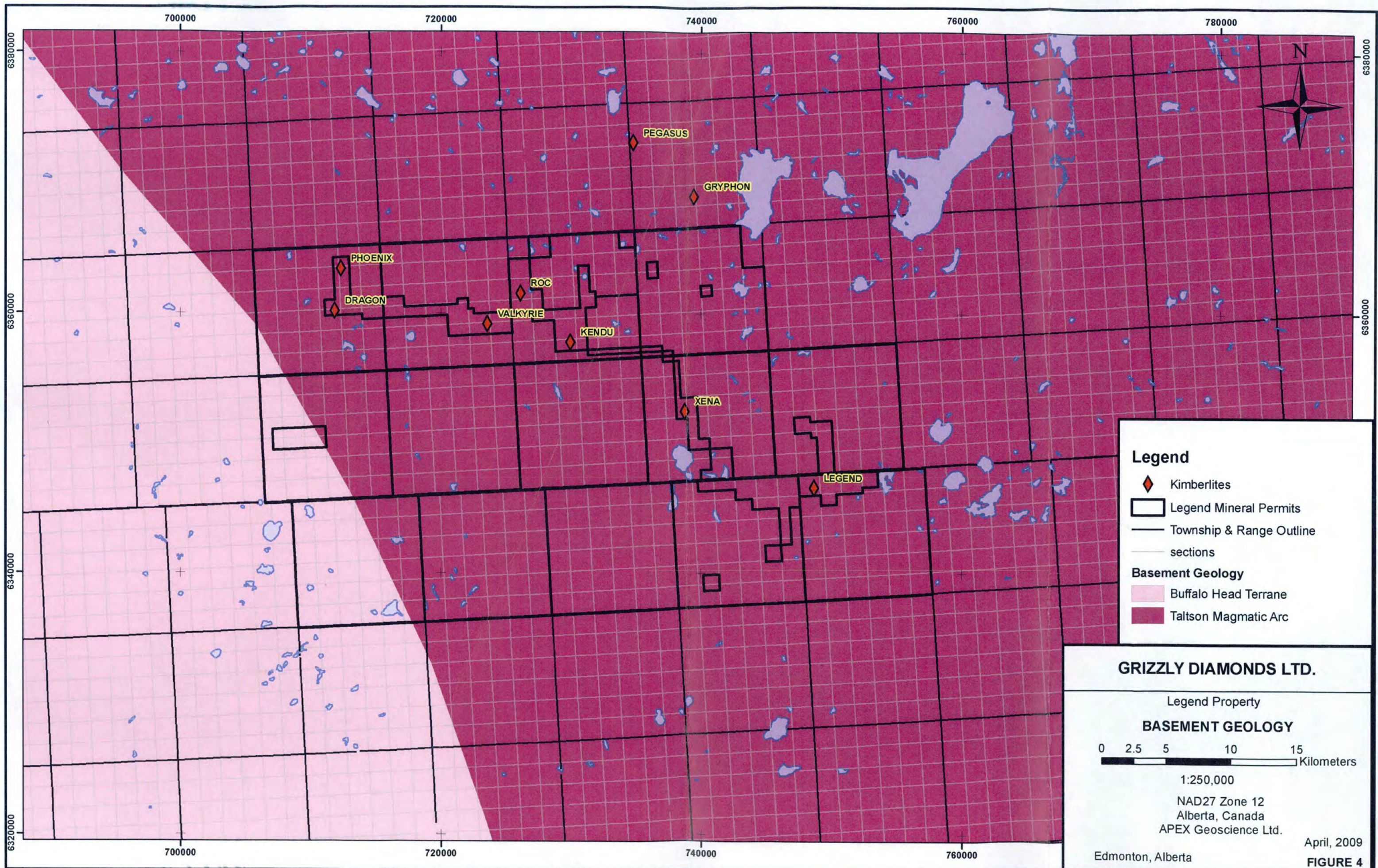
The effectiveness of geophysical techniques and methods in kimberlite exploration is dependent on the ability to recognize significant enough differences between the geophysical signature of the hosting rock unit and a potential kimberlite. There are many examples of economic kimberlites that produce very subtle, unrecognisable geophysical responses. Conversely, non-kimberlite geological features and man made structures (referred to as "cultural interference") such as oil wells, fences, bridges, and buildings can produce kimberlite like anomalies. In addition, areas characterized by thick overburden, sand, and gravel along with water and placer accumulations of heavy oxide minerals can yield magnetic and EM anomalies that are easily confused with those due to kimberlite. For these reasons, it is extremely important that other information, such as DIM surveys, be used in tandem with geophysical evidence to support and confirm the presence of a kimberlite pipe (Fipke *et al.*, 1995).

GEOLOGICAL SETTING

Precambrian Geology

Grizzly's Legend Property lies near the eastern edge of the Western Canadian Sedimentary basin within the northern segments of the Peace River Arch (PRA). Unfortunately, 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 terranes 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 Legend and Little Legend properties are underlain by basement comprised of the Taltson Magmatic Zone, which borders the Buffalo Head Terrane (BHT) (Figure 4). The Taltson Magmatic Zone (TMZ) is 2.0 to 1.8 Ga and represents a magmatic arc related to collisional orogeny during the Proterozoic. It remains 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 Rae Subprovince basement; 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 an indistinct magnetic pattern. Villeneuve *et al.* (1993) indicate that the western boundary of the TMZ has been placed using zircon ages from basement drill core, rather than geophysical data. The basement beneath the Little Legend property may also consist of the eastern "Utikuma Belt" belonging to the BHT.

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 consisting 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, indicates the potential of diamondiferous kimberlites in the region. 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).

Phanerozoic Geology

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 3 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 north-westerly 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.

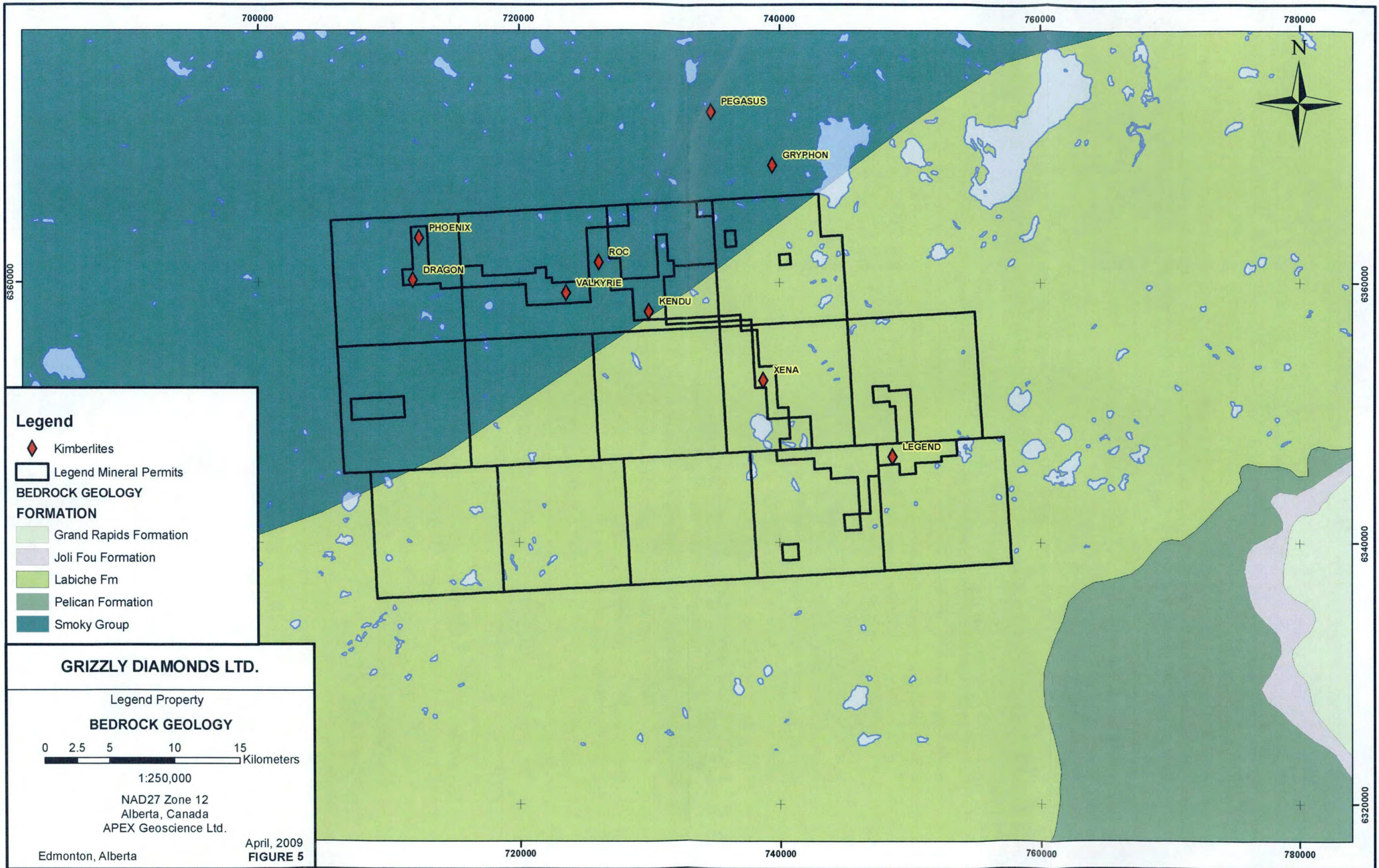
TABLE 3. GENERALIZED STRATIGRAPHY - NAMUR LAKE AREA

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	Glauconitic 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 Legend and Little Legend properties is composed of alternating units of marine and nonmarine sandstones, shales, siltstones, mudstones, and bentonites. The oldest documented units exposed in the general 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.

The Colorado Group is Lower Cretaceous in age and contains the Joli Fou and the Pelican Formations; which are correlative with the Peace River Formation of the Fort St. John Group (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 shales of the Shaftesbury Formation. The Pelican Formation is comprised of glauconitic sands, interbedded siltstone and mudstone, with minor amounts of conglomerate (Figure 5). 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. Evidence of extensive volcanism during deposition of the Shaftesbury Formation exists in the form of numerous bentonitic horizons throughout the formation, particularly within and near the Fish Scales horizon (Leckie *et al.*, 1992; Bloch *et al.*, 1993). The Shaftesbury Formation deposition is also chronologically correlative with 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). Surface exposure of the Shaftesbury Formation is commonly along river and stream cuts.

Deltaic to marine feldspathic sandstones, silty shales, and laminated carbonaceous siltstones characterise the Dunvegan Formation. Within the Birch Mountains, the Dunvegan Formation is shaley, thin, and often discontinuous. As a result, it may or may not be present within the Namur Lake area. Thin beds of shelly material, coal, siltstone and bentonite may be present. The formation is rich in shallow-water fauna, including abundant molluscs. The Dunvegan Formation becomes more arenaceous and thinner eastwards, where it grades into the LaBiche Formation. The upper contact of the unit is conformable and transitional with the Kaskapau Formation shales of the Smoky Group. The rims of the Ashton pipes exist just above or near the contact between the Kaskapau and the Dunvegan formations (Dufresne *et al.*, 2001). Dating of the Buffalo Head Hills kimberlites by the Buffalo Head Hills Joint Venture revealed that the kimberlites yield emplacement ages of 86 to 88 Ma (Auston, 1998; Carlson *et al.*, 1999).

In the Namur Lake area, the LaBiche Formation is equivalent to the Smoky Group and Lea Park Formation (Figure 5). 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 middle sandstone named the Bad Heart, and (c) an upper shale, Puskwaskau, which contains the First White Specks marker unit. The Kaskapau Formation contains abundant ammonite fossils and concretions. In addition, foraminifera are present in the lower arenaceous units (Glass, 1990). Bedrock exposures in the Little Legend property are likely comprised of the Kaskapau Formation, in particular, the SWS or lower. In the Namur Lake region, the SWS is unconformably overlain by the Lea Park Formation. The upper limit of the SWS contains evidence

supporting a significant increase in volcanism, based on the quantity and volume of bentonite units in the region. It is conceivable that this volcanism may have been in conjunction with, or a prelude to gradual uplift and non-deposition of the absent Smoky Group formations. Most of the upper portions of the Smoky Group have been eroded away during tectonic uplift, possibly associated with uplift of the PRA. There is strong evidence of volcanism within the depositional time span of the Smoky Group around the PRA (Auston, 1998; Carlson *et al.*, 1999). Exposures of the Smoky Group are generally limited to topographic highs and stream cuts within the Namur Lake area.

The youngest bedrock unit in the area belongs to 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 studies conducted by the Geological Survey of Canada (GSC) on drill cores from the Birch Mountain area indicate 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 borehole evidence of regolithic material in lag deposits capping the SWS, indicate that significant uplift and erosion may have occurred between deposition of the SWS and 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 Formations.

Quaternary Geology

Surficial geology data 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 flowed in an east to north-easterly direction, depositing fluvial sand and gravel (Dufresne *et al.*, 1996).

During the Pleistocene, multiple glacial advances of the Laurentide Ice Sheet across the region in a south to south-east direction (Figure 5 in Dufresne *et al.*, 1996) resulted in erosion of the substrate and modification of bedrock topography. Dominant ice flow directions within the Namur Lake region appear to be topographically controlled, following the south-southwest trend of the BHH (Fenton and Pawlowicz, 2005 a,b). Additionally, topographic variations may have locally channelled ice flow towards the south to south-southeast. Generally, glacial sediments formed layers of till and diamict over the landscape, with sediments localized in low-lying areas and draped over topographic highs. Furthermore, glacial meltwater and proglacial lakes often deposited fluvial and marine sediments in areas of low relief (Pawlowicz and Fenton, 2005 a,b).

Glacial ice is believed to have receded from the Buffalo Head Hills region 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 north-easterly drainage regimes similar to that of the pre-Pleistocene. Extensive colluvial and alluvial sediments accompanied post-glacial river and stream incision.

The regional area surrounding the Legend and Little Legend properties is covered by drift of variable thicknesses ranging from 45 to over 150 m (Pawlowicz and Fenton, 2005a,b and 1995a,b; Balzer and Dufresne, 1999). Drilling completed by Kennecott on the Legend Property in 1998, intersected drift thicknesses ranging from approximately 120 m northwest and west of the Little Legend property, to over 80 m thick east of Blue Diamond's property (Montello Resources Ltd., 1998a,b). Additionally, drift thickness may be locally thinner in areas of higher topographic relief. One of the kimberlites drilled by Kennecott was intersected beneath only 12.2 m of overburden. Unfortunately, local drift thicknesses for Grizzly's Legend and Little Legend properties cannot be easily delineated, due to the paucity of publicly available data for the region. Limited general information regarding bedrock topography and drift thickness in northern Alberta is available from petroleum, coal, and groundwater exploration well logs, as well as regional government compilations (Tokarsky, 1972; Mossop and Shetson, 1994; Pawlowicz and Fenton, 2005a,b and 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 PRA axis, 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). Strong evidence suggests that manifested basement faults 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 Legend properties (Dufresne *et al.*, 1996; Leckie *et al.*, 1997; Eccles *et al.*, 2000). Similar deep structures observed on Grizzly's Legend properties, resulting from tectonic activity associated with

movement along the PRA or the Grosmont High, reflect potential pathways for kimberlitic volcanism. It is unclear whether the kimberlites discovered to date in the Birch Mountains by Kennecott and its joint venture partners show any spatial relationship to structures in the underlying basement and/or Phanerozoic succession.

2007 EXPLORATION

During January and February of 2007 APEX personnel and associated subcontractors conducted an exploration drilling program on the Legend property. The 2007 exploration program was based on recommendations made in previous technical reports on the Legend property. Details of the 2007 drill program are presented and discussed in assessment report Dufresne et al., 2007. Since the filing of the 2007 Assessment report (i.e. Dufresne et al., 2007) the results for the caustic fusion analysis, dense media separation (DMS) processing and indicator mineral sampling have been received and are presented in this report. Exploration costs pertaining to the drilling, bulk sampling and sample processing from the 2007 program, claimed for this report, incurred by APEX and Grizzly total CDN\$138,754.12 (not including GST or 10% allowable overhead) (1).

2007 Drilling

Fourteen diamond drill holes totaling 1819.66 m were completed to delineate the Legend Kimberlite between January 13 and February 9, 2007 (Table 4, Figure 6). Six of the holes were drilled at -90° (vertical), and 7 of the holes were drilled at -60° . Ten drill holes intersected kimberlite. Two of the holes encountered only overburden, one of the holes intersected a thin interval of kimberlite, likely a boulder and one hole was drilled in local bedrock, and encountered weakly consolidated silt. The drill hole logs are presented in Dufresne et al., 2007.

At the Star kimberlite in the Fort a la Corne kimberlite field different phases of kimberlite yield varying diamond contents. The intent of the 2007 drill program of the Legend kimberlite was to test for the presence of multiple kimberlite phases, to collect a kimberlite sample of sufficient mass to provide a preliminary estimate of diamond content and to delineate the dimensions of the Legend kimberlite. To achieve this the drill holes were arranged along North-South and East-West cutlines that were cleared over the centre of the Legend kimberlite's approximately 800m diameter magnetic anomaly (Dufresne, 2006). A series of vertical drill holes were completed at the centre of the anomaly and at step outs to the North, South, East and West to test the depth extent of the kimberlite. From each set up a second hole, angled at -60° was completed to delineate the margins of the body. The drilling indicated the Legend kimberlite is approximately 170m in diameter.

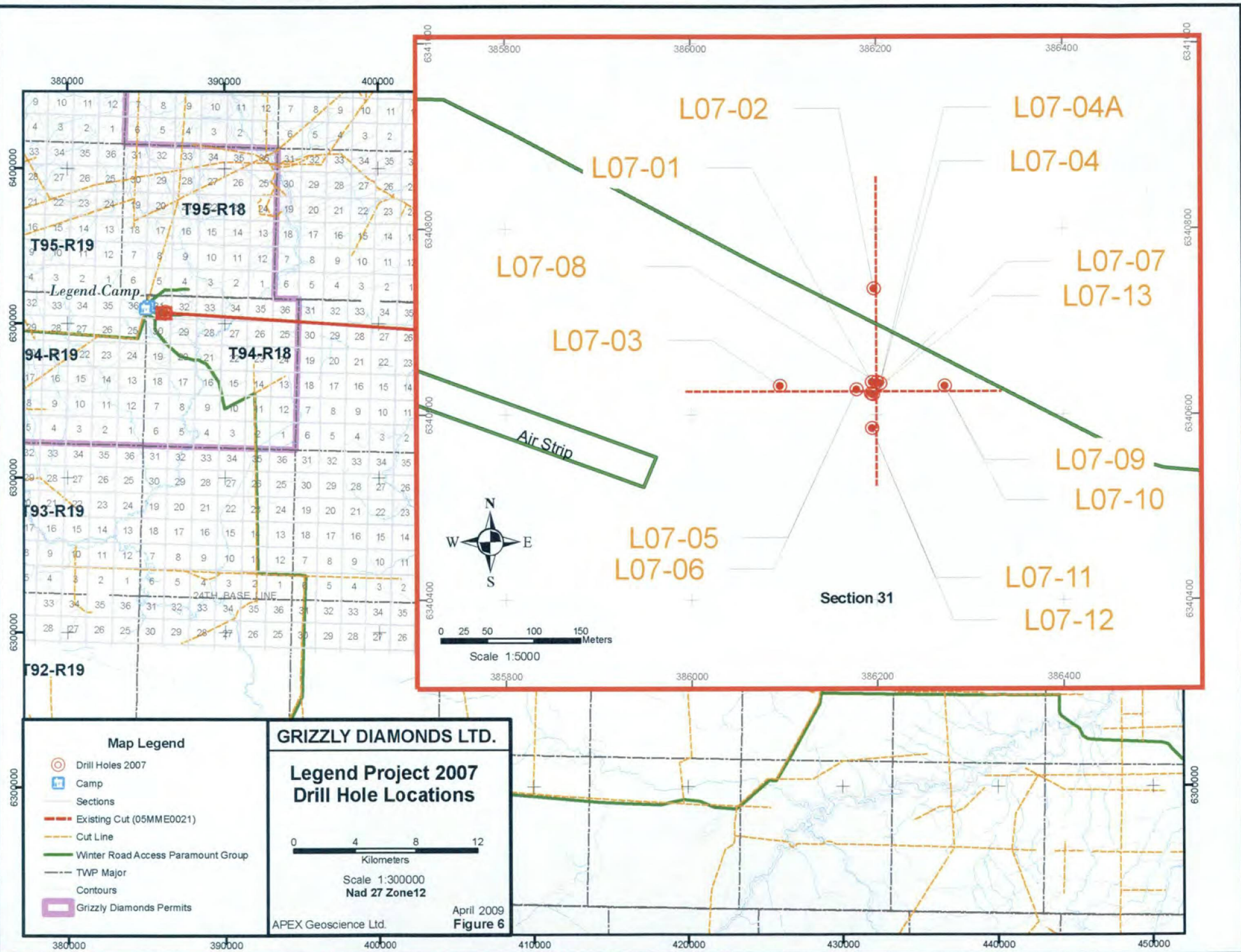
TABLE 4. LEGEND DRILL HOLE SUMMARY 2007

Drill Hole	Location UTM NAD27 Z12		Total Weight (kg)	Kimberlite Length (m)	Total Depth (m)
	Easting	Northing			
L07-01	386195	6340635	1352.2	160.32	175.87
L07-02	386197	6340736	n/a	n/a	24.38
L07-03	386096	6340631	n/a	n/a	111.25
L07-04	386204	6340634	n/a	n/a	15.24
L07-04A	386204	6340634	1339	158.81	174.96
L07-05	386178	6340627	1375	163.07	175.26
L07-06	386178	6340627	690	81.81	112.78
L07-07	386196	6340622	987	117.1	161.85
L07-08	386200	6340635	1055	125.19	163.07
L07-09	386273	6340631	1352	160.41	175.26
L07-10	386273	6340631	184	21.84	75.29
L07-11	386195	6340585	1349	160.02	175.87
L07-12	386195	6340585	n/a	n/a	78.33
L07-13	386194	6340623	1573	186.53	200.25
TOTAL			11,260 Kg	1,335.10 m	1,819.66 m

Three distinct phases of kimberlite, each interpreted as crater facies kimberlite, were recognized based on the presence of distinct volcanic textures, colour, grain size and mineralogy. The three phases were preliminarily classified in the field as: dark grey magmaclastic kimberlite, grey-green lapilli kimberlite and tan-brown muddy kimberlite.

The dark grey magmaclastic kimberlite contains fine grained euhedral serpentine or carbonate altered olivine phenocrysts and medium to coarse grained serpentine altered subrounded olivine macrocrysts. It constitutes the major phase of the kimberlite body. Abundant fine to coarse irregular shaped magmaclasts are characteristic of the unit. Magmaclasts are typically composed of dark green fine grained olivine phenocrysts within a carbonate-rich groundmass. Larger concentrically layered pyroclastic lapilli, which may have cores of olivine macrocrysts, limestone or siltstone, are also present but are less common. Sparse limestone, siltstone and rare granitoid crustal xenoliths up to 10cm in diameter are also present.

Large intersections of grey-green lapilli kimberlite were intersected in drill holes L07-4A and L07-13 with smaller intersections occurring in L07-07 and L07-10. The unit is conspicuous in that it is distinguished by abundant well rounded concentrically layered pyroclastic lapilli, often having cores of fresh coarse grained xeno-macrocrystic olivine. It appears that a single drill hole completed by Kennecott during 1998 did not



encounter a significant intersection of this phase (Arivanis, 1999). The lapilli kimberlite unit was of high interest due to the presence of these coarse mantle constituents. Crudely graded beds of densely spaced lapilli were also observed within this unit and may indicate some level of sorting by volcanic processes. Drill hole L07-13 was planned to specifically target this phase in an effort to obtain a larger sample for diamond analysis.

Tan-brown muddy kimberlite was encountered in a number of multiple drill holes, and typically occurs as narrow intervals along the margins of the kimberlite in contact with loosely consolidated sediments or compact glacial diamict overburden surrounding the body. It is less dense and finer grained than the other two phases and typically exhibits finely graded bedding.

Samples of kimberlite core were collected for diamond indicator mineral analysis, caustic fusion analysis and Dense Media Separation (DMS) processing. The samples for diamond indicator mineral analysis and caustic fusion analysis were submitted to the Saskatchewan Research Council Geoanalytical Laboratories (SRC) in Saskatoon, SK. The sample for DMS processing was submitted to the De Beers DMS plant in Grand Prairie, AB. The concentrate from the DMS processing was sent to SRC for caustic fusion analysis for diamonds.

SAMPLING METHOD AND APPROACH

Approximately 11,260 Kg of kimberlite was recovered from ten of the fourteen drill holes completed during 2007 (Table 4). Drill core sampling consisted of the collection of representative samples for future petrographic analysis, samples for diamond indicator mineral analysis, processing by caustic fusion to recover microdiamonds and the collection of a mini bulk sample for processing by Dense Media Separation (DMS) and caustic fusion.

A representative sample of approximately 0.3 m of whole drill core was selected every 10.0 m, to be kept for future reference and analysis. A total of 164 pieces of drill core weighing approximately 443 Kg were collected as representative samples. The samples were chosen to serve as a record of the major lithologies and textural varieties of kimberlite within each drill hole.

Samples for processing by caustic fusion were collected from each of the three major lithologies of kimberlite recognized during drilling. Samples of each phase were collected in a composite fashion by selecting a number of short sections of whole drill core from each drill hole containing that lithology. In this way a representative sub sample of each lithology was obtained for the determination of microdiamond content. The SRC laboratory reported weights of each sample, a list of the drill holes from which they are comprised and the lithology is presented in Table 5. Additionally a sample was submitted to the SRC for diamond indicator mineral processing: Legend 005a weighing 26.20 Kg (same rock type as sample Legend 005).

TABLE 5. COMPOSITE SAMPLES FOR CAUSTIC FUSION PROCESSING

Sample #	Sample Mass (kg)	DDH		Rock Type
Legend 004	43.1	L07-01	L07-08	Dark-grey, magmaclastic kimberlite.
		L07-05	L07-09	
		L07-06	L07-11	
		L07-07	L07-13	
Legend 005	83.2	L07-04A		Grey-green lapilli-kimberlite
		L07-10		
		L07-13		
Legend 006	42.05	L0704A	L07-08	Light-grey kimberlite, tan-brown muddy kimberlite
		L07-05	L07-09	
		L07-06	L07-11	
		L07-13		

The vast majority of kimberlite recovered during 2007 was collected to be processed by DMS. The DMS heavy mineral concentrate was subsequently processed by caustic fusion at the SRC to recover micro and macrodiamonds. Mini-bulk sampling typically involves the collection of kimberlite samples weighing between one and 100 tonnes. Samples may be collected through a variety of methods, including large-diameter core drilling, reverse-circulation drilling, or sometimes test pitting and trenching where a kimberlite is exposed at surface or is situated under shallow overburden. The size of mini-bulk samples is dependent on the ease and cost of extraction, environmental and permitting issues, as well as transportation and processing logistics. Different phases of kimberlite should be sampled separately in order to determine any variations in diamond distribution.

Following the completion of geologic logging and the collection of representative and caustic fusion samples the remaining drill core was placed in large heavy duty poly-woven ore bags (megabags) in preparation for transport from the exploration site to a secure facility. A total of nine ore bags weighing 9,852 kg were sent to the De Beers DMS facility in Grand Prairie. Drill core from each of the three phases of kimberlite was collected in separate numbered megabags for determination of their individual diamond contents. The DeBeers DMS lab weights of the 3 samples are given in Table 6.

TABLE 6. MEGABAG SAMPLES FOR DMS PROCESSING

Sample	Sample Mass (Kg)	Lithology	Concentrate Weight (Kg)
Legend 001	966	Light-grey kimberlite, tan-brown muddy kimberlite	20.30
Legend 002	1,234	Dark-grey, magmaclastic kimberlite.	31.96
Legend 003	7,622	Grey-green lapilli-kimberlite	32.45
TOTAL	9,852		84.71

SAMPLE PREPARATION ANALYSES AND SECURITY

Diamond Indicator Mineral (DIM) Processing

At the SRC, in order to recover heavy mineral concentrates from rock samples (i.e. core), the samples are weighed and cleaned then crushed to -2mm. The crushed samples are sieved into 3 fractions: >1.00mm, <1 mm to >0.25 mm; <0.25 mm using vibrascreens. The <0.25 mm material and >1 mm material is stored. The <1 mm to >0.25 mm fraction is put through a specific gravity (SG) separation and the SG>2.96 fraction is subject to magnetic separation. The ferromagnetic material is removed with a hand magnetic. The resulting heavy mineral concentrate is picked for kimberlite indicator minerals. The SRC processing flowchart for diamond indicator minerals is presented in Appendix 5.

In the field, the DIM samples were placed in 20 litre plastic pails in preparation for transport. Each lid was then sealed with five numbered security tags, and the numbers were recorded. The samples were then shipped by courier to the SRC where the condition of the pails and security numbers of the seals was recorded and verified by APEX personnel prior to processing.

Caustic Fusion Processing

Caustic fusion analysis involves controlled rock crushing and complete digestion of the rock at high temperatures, in the presence of caustic soda. Dissolution of the kimberlite obliterates nearly all the minerals in the sample but leaves the diamonds intact. Residues are then observed and diamonds are recovered by sieving through square mesh screens that range in size between 0.1 and 1.7 millimetres (mm). Diamonds are then described and sorted to determine the abundance of each size. The number and size of the diamonds recovered in such a test, represents one factor in determining the extent of the additional drilling and sampling that is conducted on the kimberlite deposit. The caustic fusion procedures employed at the SRC are ISO/IEC

17025 accredited and are presented in Appendix 3.

In the field, samples for caustic fusion analysis were placed in 20 litre plastic pails in preparation for transport. Each lid was then sealed with five numbered security tags, and the numbers were recorded. The samples were then shipped by courier to the SRC where the condition of the pails and security numbers of the seals was recorded and verified by APEX personnel prior to processing.

DMS Processing

At the De Beers processing plant, kimberlite samples are crushed, sized, and processed to produce concentrates for diamond. The kimberlite is crushed to ~8mm in a stand alone jaw crusher with oversize material (>6mm) further crushed to smaller than 6mm. The crushed kimberlite is then processed through a Density Media Separator (DMS). Density separation uses a water and ferrosilicon powder mix to produce a slurry with an approximate density of 2.5 g/cm³. The crushed kimberlite and slurry mixture are passed through a high pressure cyclone (centrifugal separator) that produces light and heavy concentrates. The density contrast within the cyclone allows the heavy minerals, including diamonds, to exit through the bottom while the lighter tailings are either discarded or stored for audit. The heavy fraction (i.e. the concentrate) was sent to the SRC for caustic fusion and diamond recovery. The concentrate weights recovered from each sample are presented in Table 6. The purpose of DMS processing is to reduce a large volume of kimberlite into a diamond bearing concentrate which is more feasible and cost effective to process using the more expensive (per unit mass) caustic fusion method. From the 9,852 kg of kimberlite core submitted for DMS processing 84.7 kg (wet) of concentrate was produced and sent for caustic fusion. The DMS processing report is included in Appendix 4.

Samples submitted for DMS processing were placed into megabags prior to shipping. The top of each bag was sealed with a numbered braided steel cable lock, and the numbers were recorded. The samples were shipped by transport truck to a secure storage facility at the SRC prior to determination of a processing date at the De Beers facility. The samples were shipped to the De Beers DMS lab in Grand Prairie, AB by transport truck for processing in September. The concentrate from DMS processing was collected in 20 liter metal pails in a "hands off" concentrate cage. The pails were closed and sealed with uniquely numbered single use security seals and then stored in a vault in the DMS plant building. Once processing was complete the samples were shipped to the SRC by Brinks (armored vehicle).

2007 SAMPLE RESULTS

Diamond Indicator Minerals Sample

A total of 200 indicator minerals were recovered from sample Legend 005a. From

the 23% of the concentrate fraction that was picked 100 olivine and 100 ilmenite grains were recovered. No grains were sent for microprobe analysis. The SRC results are presented in Appendix 5.

Caustic Fusion Samples

A total of 3 microdiamonds were recovered from the Legend 004, 005, 006 caustic fusion samples. Two microdiamonds were recovered from the Legend 004 sample and 1 microdiamond was recovered from the Legend 005 sample. SRC lab sheets are presented in Appendix 4.

DMS Samples

The DMS processing of 9,852 kg of kimberlite core resulted in the recovery of 84.71 (wet) kg (64.45 dry kg) of heavy mineral concentrate. At the SRC 1 macrodiamond was recovered from the concentrate from sample Legend 003. The diamond has dimensions of 2.1 mm x 1.58 mm x 1.46mm and is described as a colorless, included, twinned octahedron. The caustic fusion results of the DMS samples are presented in Appendix 6.

SAMPLE VERIFICATION

A tailings audit was completed on the combined tails of the Legend 001, 002 and 003 samples from the De Beers DMS processing. A total of 7,379 kg of tailings were processed by the SRC through their DMS and 9.85 kg of heavy mineral concentrate was recovered. The concentrate was processed through caustic fusion and no diamonds were recovered. Results of the audit are presented in Appendix 7.

CONCLUSIONS AND DISCUSSION

The regional setting for Grizzly's Birch Mountain permits is considered highly favourable for the presence of diamondiferous kimberlites. The Grizzly permits are predominantly underlain by Early Proterozoic to Archean basement of the Buffalo Head Craton. The local bedrock geology, underlying crystalline basement, and associated Phanerozoic structures, such as the Peace River Arch, likely provided a favourable environment for the formation and ascent of kimberlitic magmas in the Buffalo Head Hills area. Periodic tectonic activity associated with movement along the Peace River Arch and the Grosmont High, would have also influenced the formation and ascent of kimberlitic magma in the upper mantle. Significant crustal thicknesses (35 to 40 km) identified from seismic refraction and reflection surveys indicate that the Birch Mountain area is underlain by upper mantle suitable for the formation and preservation of

diamonds. This has been established by the discovery of 9 kimberlite pipes, of which at least 2 are diamondiferous, on the Legend property to date. Exploration and drilling between 1998 and 2001, has resulted in the discovery of 9 kimberlites within the Birch Mountains.

Limited bedrock exposures have been observed and reported within the area due to the presence of extensive glacial deposits. Local bedrock exposed in the area or intersected in near surface drilling is age correlative to bedrock intruded by kimberlites in other parts of the region. The glacial history for the region is very complex with regions of thick glacial drift, extensive glacial gravel, and evidence of extensive glacial tectonism. Drift thickness is known to range from 45 m to more than 150 m, with multiple layers of till and glacial outwash. The complex glacial deposits and glacial history can be a serious impediment to exploration for kimberlites. Detailed compilations on glacial deposit type and drift thickness should accompany any future exploration programs for kimberlites and diamonds in the Birch Mountain area. Regions of thin drift and less glacial complexity should be the focus of any future exploration programs. Those areas underlain by thick drift in preglacial paleo-river channels should be omitted from future exploration.

Previous exploration, between 1998 and 2001, by Montello Resources Ltd., Redwood Resources Ltd., and Kennecott Canada Exploration Inc. identified eight kimberlite pipes, which comprise the diamondiferous Legend kimberlite field. A ninth kimberlite, the Kendu kimberlite, was discovered by Blue Diamond Mining in 2001. The Legend property encompasses seven of the nine kimberlites discovered between 1998 and 2001. Diamond exploration on the Legend property is still in the early stages due to limited DIM sampling and geophysical studies. A high resolution aeromagnetic survey during the late 1990's identified numerous circular anomalies, possibly indicative of kimberlitic intrusives. Detailed follow up work, consisting of helicopter and ground geophysical surveys, over several of these targets produced discrete geophysical responses similar to those for known kimberlites. These targets have yet to be drill tested. Minimal diamond indicator sampling has been conducted down-ice of the Legend property. The diamond potential of Grizzly's Legend property cannot be fully assessed with the limited amount of sampling that has been conducted to date. However, it is expected that further systematic sampling will lead to a better understanding of the diamond potential of the property.

Airborne magnetic survey results originally identified the Legend anomaly and in 1998 Kennecott drill tested the target, intersecting kimberlite. In 2006, a ground geophysical survey was conducted over the Legend target to delineate its size and extent. Additionally in 2006, several high priority targets were located and prepared for ground magnetic surveys. Unfortunately none of the three targets drilled in 2006 intersected kimberlite. The magnetic anomalies drilled at the Lammasu and Argonaut targets were explained by a highly magnetic layer of fine-grained sediment either in the overburden or bedrock. No new kimberlites were discovered on the Legend Property during the 2006 exploration and drilling. Exploration on the Legend property during 2007

consisted of the completion of fourteen diamond drill holes over the Legend kimberlite. A total of 1,819.66 m of core drilling was completed at the Legend kimberlite in early 2007 and a mini-bulk sample was collected to constrain the diamond potential. One macrodiamond was recovered from the mini-bulk sample and 3 microdiamonds were recovered from samples collected for caustic fusion. The macrodiamond has dimensions of 2.1 mm x 1.58 mm x 1.46mm and is described as a colorless, included, twinned octahedron. No variation of diamond content between different phases of kimberlite is evident. The diamond results closely approximate the historic results reported by Kennecott and confirm that the Legend kimberlite does not contain an economically viable diamond deposit.

RECOMMENDATIONS

An aggressive, systematic follow up exploration program in 2009, including diamond indicator mineral sampling, airborne magnetic-electromagnetic surveys, ground geophysical surveys, and drilling is warranted to search for additional diamondiferous kimberlites within Grizzly's Birch Mountain permits. A number of untested airborne magnetic anomalies remain to be surveyed with ground geophysics in the Birch Mountain area. Additionally, electromagnetic and gravity survey datasets should be compiled and additional surveys completed over potential target areas in the search for non-magnetic kimberlites. The potential for discovery of additional diamondiferous kimberlites within Grizzly's Legend property is considered high.

For Grizzly's Legend property, future exploration should be conducted in three stages (Table 7) and consist of the following:

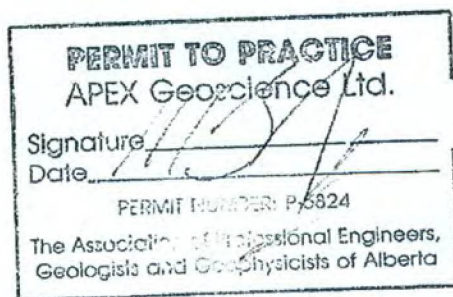
- Stage 1:** Stage 1 should consist of DIM sampling over the Legend property to identify trends within the distribution and occurrence of indicator minerals. Prospecting and the collection of approximately 200 till samples (@\$1000/sample all-up; includes accommodation, travel, taxis, camp and field equipment and supplies, analytical, sample freight, etc.). The estimated cost of the Stage 1 exploration is \$ 200,000.
- Stage 2:** Within Stage 2, any unexplained anomalies from previous geophysical surveys first require ground truthing for man-made culture, and any remaining anomalies left unexplained should then be considered for ground geophysical surveys and subsequent drill testing. The estimated cost of the Stage 2 exploration is \$ 170,000.
- Stage 3:** The Stage 3 drilling program should drill test at least 4 geophysical anomalies using either diamond drill or water well drill. The estimated cost for each drill hole is \$75,000. Individual drill targets will be determined based on the results of Stage 1 and 2.

TABLE 7. RECOMMENDED 2009/2010 PROGRAM AND BUDGET, LEGEND PROPERTY

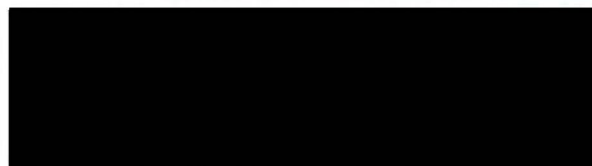
ITEM	DESCRIPTION	COST
Stage 1		
	Prospecting and the collection of approximately 200 till samples (@\$1000/sample all-up; Includes accommodation, travel, taxis, camp and field equipment and supplies, analytical, sample freight, etc.)	\$200,000
Stage 2		
1	Unexplained anomalies from Stage 1 would first require ground truthing for man-made culture.	\$20,000
2	A number of rank 2 and 3 airborne anomalies remain to be investigated. A further 15 ground magnetic surveys are warranted based on existing information. \$10,000 per target	\$150,000
	Total Stage 1 and 2 Project Costs, Excluding GST	\$ 370,000
Stage 3		
1	Four drill hole program: The estimated cost of each drill hole is \$75,000.	\$300,000
	GRAND TOTAL EXPLORATION BUDGET	\$ 670,000

The total estimated cost of the recommended exploration for Grizzly Diamond Ltd.'s Birch Mountain property including drilling is **\$670,000** plus GST.

APEX Geoscience Ltd.



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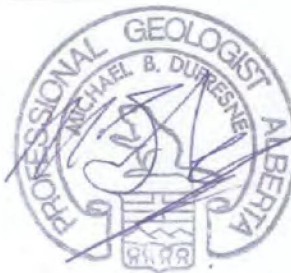
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CERTIFICATE OF AUTHOR

I, Michael B. Dufresne, M.Sc., P.Geol., do hereby certify that:

1. I am President of: APEX Geoscience Ltd. Suite 200, 9797 – 45th Avenue
Edmonton, Alberta T6E 5V8 Phone: 780-439-5380
2. I graduated with a B.Sc. Degree in Geology from the University of North
Carolina at Wilmington in 1983 and with a M.Sc. Degree in Economic Geology
from the University of Alberta in 1987.
3. I am a Professional Geologist registered with APEGGA (Association of
Professional Engineers, Geologists and Geophysicists), and a 'Qualified Person'
in relation to the subject matter of this report.
4. I am not aware of any material fact or material change with respect to the
subject matter of the Report that is not reflected in the Report, or the omission to
disclose which makes the Report misleading.
5. I have visited the property that is the subject of this Report During fall 2005 and
summer 2006.




Michael B. Dufresne, M.Sc., P.Geol.
Edmonton, Alberta, Canada
April 22, 2009

CERTIFICATE OF AUTHOR

I, Anetta Banas, residing at #413, 10717-83Ave, Edmonton, Alberta, Canada do hereby certify that:

1. I am a graduate of the University of Alberta with a BSc Degree in Geology (2002) and a MSc degree in Earth and Atmospheric Sciences (2005) and have practiced my profession continuously since January, 2006.
2. I am a Geologist-in-Training registered with APEGGA (Association of Professional Engineers, Geologists and Geophysicists).
3. I have not received, nor do I expect to receive, any interest directly or indirectly, in the Birch Mountains Property.
4. I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report of the omission to disclose which makes the Report misleading.
5. I have not visited the properties that are the subject of this Report.



Anetta Banas, MSc., Geol.I.T.
Edmonton, Alberta, Canada
April 22, 2009

APPENDIX 1

GRIZZLY 2007-2008 EXPENDITURES LEGEND PROPERTY

No.	ITEM	AMOUNT	SUBTOTAL	TOTAL
1.	APEX Geological Staff Costs - May 1, 2007 to December 31, 2008			
	Principals directly involved - Field and Office Work	\$4,522.00		
	Geological Staff - Office Work	\$6,253.50		
	Consultants Equipment Rentals & Fees	\$2,869.83		
	Subtotal APEX Costs		\$13,645.33	
2.	APEX Field Costs - Winter - Spring 2007			
	Accommodation Paramount Camp	\$40,181.18		
	Costs - Food	\$1,851.28		
	Fuel Paramount Camp	\$10,467.20		
	Airfare and Travel	\$343.34		
	Analytical Costs			
	Saskatchewan Research Council - Caustic Fusion	\$19,262.60		
	DeBeers DMS Processing	\$25,000.00		
	Geophysical Subcontract - Intrepid Geophysics	\$250.00		
	Miscellaneous Field and Office Supplies - Maps, Publications, Digital Data, Communication etc	\$22.34		
	Subtotal APEX Field Costs		\$97,377.94	
	TOTAL APEX 2007 - 2008 LEGEND PROJECT COSTS			\$111,023.27
3.	Grizzly Diamond Direct Costs			
	Drilling SubContract - Canadian Mining Services			
	Completion of Drilling & Demob (Spring 2007)	\$27,730.85		
	Subtotal Grizzly Costs		\$27,730.85	
	TOTAL 2007 - 2008 LEGEND EXPLORATION COSTS			\$138,754.12
4.	Allowable Grizzly Administration Costs			
	10% Allowable Administration Cost	\$13,875.41	\$13,875.41	
	TOTAL 2007-2008 LEGEND ASSESSMENT EXPENSE			\$152,629.53

APPENDIX 2

MINERAL PERMIT AGREEMENTS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:02:28 PM

Agreement Number: 093 9305121217

Status: ACTIVE
Agreement Area: 9216Term Date: 2005-12-08
Continuation Date:

DESIGNATED REPRESENTATIVEClient Id: 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-21-094:** 01-36

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 3:57:23 PM

Agreement Number: 093 9305031161

Status: ACTIVE
Agreement Area: 8240**Term Date:** 2005-03-21
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-22-096:** 01-12;13S;14S,L9-L12;15S,L9-L13;16-21;22NW,L4,L5,L10,L15;23NE;24N;25;26E;
27W,L2,L7,L10,L15;28-33;34N,SW,L2,L7;35N,SE;36

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:00:55 PM

Agreement Number: 093 9305031160

Status: ACTIVE
Agreement Area: 8336**Term Date:** 2005-03-21
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-20-096:** 15L12,L13;16N;17NE;20N,SE;21;22L4,L5,L8,L9,L12,L13,L16;23-26;27N,L1,L4,L5,L8;28
29;31;33-35;36L1-L5,L12,L13
4-21-096: 13N;14NE,L11,L13,L14;19N;20;21;22N,SW,L7,L8;23-36

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:01:58 PM

Agreement Number: 093 9305031159

Status: ACTIVE
Agreement Area: 6112Term Date: 2005-03-21
Continuation Date:

DESIGNATED REPRESENTATIVEClient Id: 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-20-096:** 01N,L1-L4;02N,L1-L4;03SW,NE,L1,L2;04S;05-08;10E;11-14;15SE;18S**4-21-096:** 01-09;10S;11S;12S;16S;17S;18S

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:08:31 PM

Agreement Number: 093 9305031158

Status: ACTIVE
Agreement Area: 8448**Term Date:** 2005-03-21
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-19-096:** 01-04;05N,SE,L5,L6;06N,L1-L4;07-14;15S,NE,L11,L12;16-18;19S,NW,L9,L10;20;21;
22N,SE,L5,L6;23;24;26-29;30N,SW;31-35

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 3:59:35 PM

Agreement Number: 093 9305031157

Status: ACTIVE
Agreement Area: 8576Term Date: 2005-03-21
Continuation Date:

DESIGNATED REPRESENTATIVEClient Id: 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-22-095:** 01-15;16S;17S;18S,NW;19N,SW;20N;21N;22-36

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:07:08 PM

Agreement Number: 093 9305031156

Status: ACTIVE
Agreement Area: 8112Term Date: 2005-03-21
Continuation Date:

DESIGNATED REPRESENTATIVEClient Id: 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-19-095:** 01;02;04N,SW;05-08;09S;10N;11-15;16E;17-19;20W;21E;22-28;29W,L1,L8,L9,L16;30;31;32SW,L1,L8,L9,L11,L12,L15,L16;33-36

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:09:02 PM

Agreement Number: 093 9305031147

Status: ACTIVE
Agreement Area: 8544**Term Date:** 2005-03-21
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-18-095:** 01-03;04L1,L8,L9,L16;05-07;08S,NW,L9,L10,L15;09L1,L8,L9,L16;10-15;16N,L1,L8;
17L9,L13-L16;18-36

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:06:22 PM

Agreement Number: 093 9305031146

Status: ACTIVE
Agreement Area: 7424**Term Date:** 2005-03-21
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-19-094:** 01-04;05S,L9-L13;06;07;08N,L4,L5;09-12;13S,NE,L11,L12;14L4,L5,L12-L16;15-23;24E;
25SE;26S;27S,NW,L10,L15;28-31;32S,L12,L13;33S

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:10:05 PM

Agreement Number: 093 9305031145

Status: ACTIVE
Agreement Area: 8208**Term Date:** 2005-03-21
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-18-094:** 01-28;29S,L9,L16;30;34L1-L4,L8,L9,L16;35;36

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:04:58 PM

Agreement Number: 093 9306061085

Status: ACTIVE
Agreement Area: 9216**Term Date:** 2006-06-29
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-20-095:** 01-36

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 3:58:53 PM

Agreement Number: 093 9303040865

Status: ACTIVE
Agreement Area: 640Term Date: 2003-04-11
Continuation Date:

DESIGNATED REPRESENTATIVEClient Id: 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-22-095:** 16N;17N;18NE;19SE;20S;21S

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:00:04 PM

Agreement Number: 093 9302090605

Status: ACTIVE
Agreement Area: 976**Term Date:** 2002-09-04
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-22-096:** 13N;14L13-L16;15L14-L16;22SE,L3,L6,L9,L16;23S,NW;24S;26W;27L1,L8,L9,L16;
34L1,L8;35SW

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:01:24 PM

Agreement Number: 093 9302090604

Status: ACTIVE
Agreement Area: 1456**Term Date:** 2002-09-04
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-21-096:** 10N;11N;12N;13S;14S,L12;15;16N;17N;18N;19S;22L1,L2

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:03:46 PM

Agreement Number: 093 9302090603

Status: ACTIVE
Agreement Area: 2528Term Date: 2002-09-04
Continuation Date:

DESIGNATED REPRESENTATIVEClient Id: 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-20-096:** 01L5-L8;02L5-L8;03NW,L7,L8;04N;09;10W;15SW,NE,L11,L14;16S;17S,NW;18N;19;
20SW;22L1-L3,L6,L7,L10,L11,L14,L15;27L2,L3,L6,L7;30;32;36NE,L6-L8,L11,L14

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:08:19 PM

Agreement Number: 093 9302090602

Status: ACTIVE
Agreement Area: 256**Term Date:** 2002-09-04
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-19-096:** 05L3,L4;06L5-L8;15L13,L14;19L15,L16;22L3,L4;30SE

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:07:26 PM

Agreement Number: 093 9302090601

Status: ACTIVE
Agreement Area: 1104**Term Date:** 2002-09-04
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-19-095:** 03;04SE;09N;10S;16W;20E;21W;29L2,L7,L10,L15;32L2,L7,L10,L13,L14

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:09:18 PM

Agreement Number: 093 9302090600

Status: ACTIVE
Agreement Area: 672**Term Date:** 2002-09-04
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-18-095:** 04W,L2,L7,L10,L15;08L16;09W,L2,L7,L10,L15;16SW,L2,L7;17S,L10-L12

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:06:42 PM

Agreement Number: 093 9302090599

Status: ACTIVE
Agreement Area: 1792**Term Date:** 2002-09-04
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-19-094:** 05L14-L16;08SE,L3,L6;13L13,L14;14SE,L3,L6,L9-L11;24W;25N,SW;26N;27L9,L16;
32NE,L11,L14;33N;34-36

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:09:44 PM

Agreement Number: 093 9302090598

Status: ACTIVE
Agreement Area: 1008**Term Date:** 2002-09-04
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-18-094:** 29NW,L10,L15;31-33;34NW,L5-L7,L10,L15

METALLIC AND INDUSTRIAL MINERALS

**MINERAL AGREEMENT DETAIL REPORT**

Report Date: March 31, 2009 4:00:27 PM

Agreement Number: 093 9305121218

Status: ACTIVE
Agreement Area: 9216**Term Date:** 2005-12-08
Continuation Date:

DESIGNATED REPRESENTATIVE**Client Id:** 8078830
Client Name: GRIZZLY DIAMONDS LTD.
Address: 9797 45 AVE NW SUITE 220
EDMONTON, AB
CANADA T6E 5V8

LAND / ZONE DESCRIPTION**4-22-094:** 01-36

METALLIC AND INDUSTRIAL MINERALS

APPENDIX 3

CAUSTIC FUSION PROCESSING AND RESULTS (SRC)

Caustic Fusion Diamond Report

Apex Geoscience Ltd
 Attention: Dean Besserer
 PO #/Project: 99251
 Samples: 20

June 25, 2007

- 1) Original Sample Weight in kilograms (SWT)
- 2) Bottom Sieve Size in microns (Sieve)
- 3) Diamonds > 500 microns (Macro)
- 4) Diamonds < 500 microns (Micro)
- 5) Weight of Diamonds > 500 microns in milligrams (Wt+)
- 6) Weight of Diamonds >106 microns < 500 microns in milligrams (Wt-)
- 7) Number of QC/QA Tracers (-212+180microns) Recovered Fusion (QC 1)
- 8) Number of QC/QA Tracers (-300+250microns) Recovered Chemical Treatment (QC 2)
- 9) Number of synthetic diamonds recovered (whole and fragments) (SYN)

Sample #	SWT	Sieve	Macro	Micro	Wt+	Wt-	QC 1	QC 2	SYN
LEGEND 004 1/5	8.60	106	0	0	0	0	10/10	10/10	5
LEGEND 004 2/5	8.60	106	0	0	0	0	10/10	10/10	6
LEGEND 004 3/5	8.60	106	0	0	0	0	10/10	10/10	3
LEGEND 004 4/5	8.65	106	0	0	0	0	10/10	10/10	5
LEGEND 004 5/5	8.65	106	0	2	0	0.019	9/10	10/10	11
LEGEND 005 1/10	8.30	106	0	0	0	0	10/10	10/10	0
LEGEND 005 2/10	8.30	106	0	0	0	0	10/10	10/10	0
LEGEND 005 3/10	8.30	106	0	1	0	0.010	10/10	9/10	1
LEGEND 005 4/10	8.30	106	0	0	0	0	10/10	10/10	0
LEGEND 005 5/10	8.30	106	0	0	0	0	10/10	10/10	5
LEGEND 005 6/10	8.30	106	0	0	0	0	10/10	10/10	0
LEGEND 005 7/10	8.25	106	0	0	0	0	10/10	10/10	25
LEGEND 005 8/10	8.25	106	0	0	0	0	10/10	10/10	0
LEGEND 005 9/10	8.25	106	0	0	0	0	10/10	10/10	5
LEGEND 005 10/10	8.65	106	0	0	0	0	10/10	10/10	8
LEGEND 006 1/5	8.40	106	0	0	0	0	9/10	10/10	1
LEGEND 006 2/5	8.40	106	0	0	0	0	10/10	10/10	18
LEGEND 006 3/5	8.40	106	0	0	0	0	10/10	10/10	12
LEGEND 006 4/5	8.40	106	0	0	0	0	9/10	10/10	0
LEGEND 006 5/5	8.45	106	0	0	0	0	10/10	10/10	14

Total carats in this group is: 0.00015

Caustic Fusion Diamond Description Detail

Apex Geoscience Ltd
 Attention: Dean Besserer
 PO #/Project: 99251

June 25, 2007

Sample Number: LEGEND 004 5/5

Original Sample Weight in kilograms (SWT)	8.65
Bottom Sieve Size in microns (Sieve)	106
Diamonds > 500 microns (Macro)	0
Diamonds < 500 microns (Micro)	2
Weight of Diamonds > 500 microns in milligrams (Wt+)	0
Weight of Diamonds >106 microns < 500 microns in milligrams (Wt-)	0.019
Number of QC/QA Tracers (-212+180microns) Recovered Fusion (QC 1)	9/10
Number of QC/QA Tracers (-300+250microns) Recovered Chemical Treatment (QC 2)	10/10
Number of synthetic diamonds recovered (whole and fragments) (SYN)	11

Fraction Size	Diamond Length	Width	Height	Individual Diamond Weight	Total Diamond Weight in Fractions	Diamond Description
Microns	Count	mm	mm	mg	mg	
+ 150	1			0.014	0.014	
+ 106	1			0.005	0.005	

Total octacarats in this sample is: 9,500.00

Caustic Fusion Diamond Description Detail

Apex Geoscience Ltd
Attention: Dean Besserer
PO #/Project: 99251

June 25, 2007

Sample Number: LEGEND 005 3/10

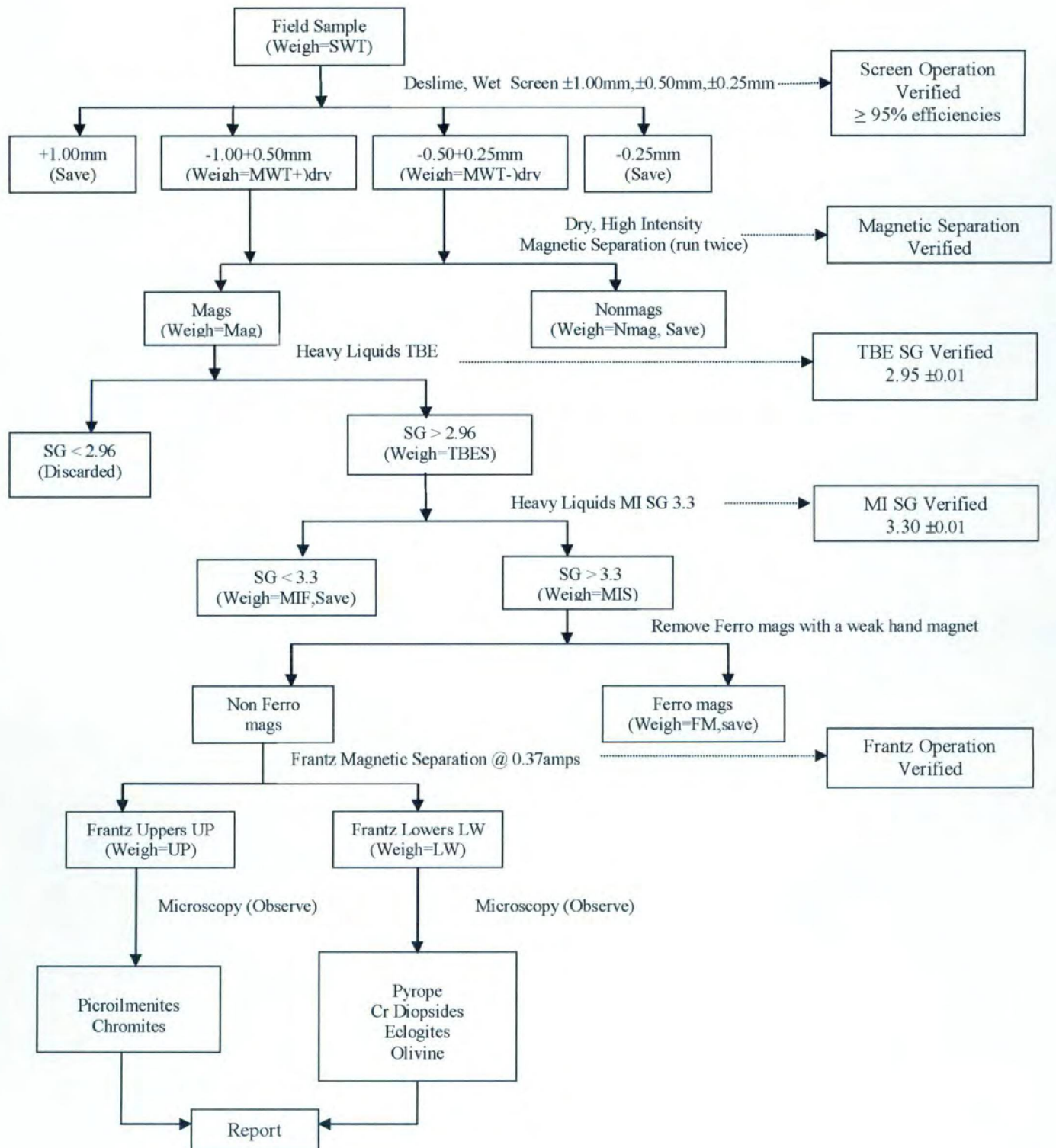
Original Sample Weight in kilograms (SWT)	8.30
Bottom Sieve Size in microns (Sieve)	106
Diamonds > 500 microns (Macro)	0
Diamonds < 500 microns (Micro)	1
Weight of Diamonds > 500 microns in milligrams (Wt+)	0
Weight of Diamonds >106 microns < 500 microns in milligrams (Wt-)	0.010
Number of QC/QA Tracers (-212+180microns) Recovered Fusion (QC 1)	10/10
Number of QC/QA Tracers (-300+250microns) Recovered Chemical Treatment (QC 2)	9/10
Number of synthetic diamonds recovered (whole and fragments) (SYN)	1

Fraction Size	Diamond Length	Width	Height	Individual Diamond Weight	Total Diamond Weight in Fractions	Diamond Description
Microns	Count	mm	mm	mg	mg	
+ 106	1			0.010	0.010	

Total octacarats in this sample is: 5,000.00

**Grizzly Legend Property 2007
Kimberlite Indicators**

CAUSTIC FUSION PROCESSING FLOWCHART



APPENDIX 4

DENSE MEDIA SEPARATION (DMS) PROCESSING REPORT (De Beers)



De Beers Canada Inc. – Exploration Division

**APEX GEOSCIENCE (GRIZZLY DIAMONDS -
LEGEND) 2007 EVALUATION SAMPLE TREATMENT
REPORT**

Alistair Skinner

September 2007

Edited By: Peter Williamson

Circulation: MD, PAW, DW, Library
Copies: CHQ, MRM, GP, APEX Geoscience

KEY WORDS: Quality Control; Time and Motion; DMS; Concentrate; Granulometry,
Crushing.

ICD#: M/9043

EXECUTIVE SUMMARY

The APEX Geoscience (Grizzly Diamonds) 2007 bulk sample treatment was carried out at the DBCI treatment facility in Grande Prairie, Alberta. In summary, nine 2t ore bags weighing a total of 9 852kg (as weighed in Grande Prairie) of Kimberlitic core, which was split into three different samples, namely Legend 1, Legend 2 and legend 3, was collected in the field by APEX Geoscience (Grizzly Diamonds) and shipped to Grande Prairie for processing.

The concentrate mass produced for the ~9.85t of processed kimberlitic material was 84.71kg, which gave an overall head feed yield of 0.85%. The sample processing was completed in 4 working days, comprising of 12-hour shifts.

The ore bags were transported to Grande Prairie by truck.

The sample processing plant was a 150-mm DMS unit. The Kimberlite core sample was crushed to ~8mm in a stand alone jaw crusher, scrubbed, oversize material (>6 mm) was reduced to smaller than 6mm in an in line jaw crusher and the sized material pumped onto a 0.5mm square aperture wedge wire Dillon preparation screen prior to being pumped through the 150 mm cyclone. Tracer tests show the cut point for both the 2mm and the 4mm tracers to be between 2.95 and 2.97 g/cm³, while the Ep was between 0.04 and 0.06.

Sample concentrate was collected in 20 liter grey metal pails, in a 'hands off' concentrate cage. The pails were closed and sealed with uniquely numbered, single use security seals and then stored in a 20-foot de-mountable class three vault, located within the plant building. Once processing was complete, the pails were shipped to the Saskatchewan Research Council (SRC) in Saskatoon.

An experienced De Beers supervisor provided supervision on every shift of the processing.

No major problems were encountered during the processing of these samples.

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Scope of works
Letter of agreement

APPENDIX 2

Tracer Tests

APPENDIX 3

Purge and Cage clean-out numbers

APPENDIX 4

Granulometry

1.0 LOCATION

The bulk processing plant was located in Grande Prairie, Alberta. All the samples were trucked from the collection site to Grande Prairie.

2.0 DE BEERS SAMPLE TREATMENT – 2007

2.1 Introduction

The APEX Geoscience (Grizzly Diamonds) 2007 Kimberlite sampling program collected a total of 9 852 head-feed kilograms of Kimberlitic material.

A 1t/hr (150mm) DMS plant with a 8 x 5 stand alone jaw crusher, an integral scrubber, a trommel screen (8mm aperture), a crusher, a preparation screen (0.5mm aperture) and a concentrate recovery system with a 30/70 split side by side sinks/floats screen (0.5mm aperture), was used to treat the drill chips.

All treatment plant operational parameters were recorded. This included operational time and motion information with discrimination of operational and down time. A Dense Media Controller controlled the medium density, while hand medium density measurements were taken and recorded every 30 minutes during feed as a check. Density tracer tests were done and the density cut point and E_p was determined.

Concentrates were stored on site in a 20-foot de-mountable class 3 vault. The concentrates were shipped from Grande Prairie to the Saskatchewan Research Council in Saskatoon, for final processing and diamond recovery.

A CCTV surveillance system monitored the sample yard, DMS processing area and concentrate vault. All red areas were double locked.

During DMS processing Dean Besserer of APEX geoscience audited the processing on behalf of Grizzly Diamonds.

2.2 Pre Prep Section

2.2.1 EQUIPMENT USED

An 8 x 5 stand alone jaw crusher was used to crush the core. While the pre-prep module consisted of a 2.4m long scrubber, with a diameter of 1.2m, this was fitted with a 0.092-m high helical lifter bar. The scrubber revolved at 22rpm, ~53% of critical speed. During feed the scrubber was run in forward, this ensured that the product was kept inside the scrubber for a predetermined time, ideally three minutes. During clean out the

scrubber was reversed aiding quick and easy clean out. A 6mm trommel screen was fitted to the discharge end of the scrubber.

A 6 x 4 jaw crusher, with a closed gap setting of 5mm, received and crushed all the +8mm material from the trommel screen; the crushed product was then pumped, in closed circuit, by a 3/2 Warman pump back into the feed end of the scrubber. All correctly sized material was pumped via a 4/3 Warman pump onto a Dillon prep screen.

2.2.2 TREATMENT PROCEDURES

The core was crushed using an 8 x 5 single toggle stand alone jaw crusher, with a closed gap setting of 7mm and the crushed sample was gravity fed into a 2 ton ore bag. After weighing, the sample was hoisted in its ore bag, by a 2t hoist and discharged directly from the ore bag into the scrubber. After scrubbing, the sample was discharged onto an 6mm square aperture trommel screen, while all -6mm material fell through the screen into a 4/3 Warman pump. This correct size material was fed via the 4/3 Warman pump into a dropout box and onto the Dillon prep-screen.

Material over 6mm in size fell from the trommel screen lip into a 6 x 4 jaw crusher, set to a closed gap setting of 5mm. The crushed product gravity fed into a 3/2 Warman pump and was returned to the scrubber. In this way, all +6mm material was kept in closed circuit until it was crushed to below 6mm in size.

2.3 Pre Section and DMS recovery

2.3.1 EQUIPMENT USED

The preparation and DMS recovery section consisted of a reversible 1 700mm x 850mm Dillon pre-prep screen, fitted with a 0.5mm aperture wedge wire screen, a 3/2 vertical spindle pump, a 150 mm cyclone with a 32mm spigot, a DMC unit, a pressure gauge capable of reading up to 100 Kpa, a 30/70 split sinks/floats screen (600 x 1 200mm), each side fitted with 0.5mm a wedge wire screen and a secure concentrate cage.

2.3.2 TREATMENT PROCEDURE

During processing the -0.5mm material was removed on the Dillon screen, while the sample was split into high and low density fractions in the cyclone. The high-density material (concentrate) reports to 20l steel pails, located within a secure double locked concentrate cage. The low-density material (tails) were collected in pre-numbered bulk bags for weighing and storage.

The sample was discharged from the 4/3 scrubber pump, through a dropout box onto the Dillon screen, all -0.5mm material fell through the screen and was gravity fed into a slimes sump. The Dillon screen was fitted with 4 rows of spray bars and run in reverse during sample feed to ensure the longest most effective screening time possible. During cleanout between samples, the screen was run in 'forward', consequently aiding in a quick cleanout. After being washed on the Dillon screen, the $+0.5\text{mm}$ sample material gravity fed off the screen into a feed funnel which fed the sample into the 3/2 vertical spindle pump, which also acted as the mixing box. This pump fed the sample/FeSi mix at $\sim 51\text{ Kpa}$ into the cyclone, where the material was split into a heavy (concentrate) and a light fraction. The 'lights' fraction was washed across the wider side of the 30/70 split screen, a set of double spray bars washed the FeSi off the sample material. This light sample material was discharged from the screen into a pre-numbered bulk bag for weighing and storage. The heavy fraction (concentrate) discharged across the narrower side of the 30/70 split screen, a set of double spray bars washed the FeSi off this concentrate material, the concentrate gravity fed off the screen into a 20 liter steel pail located within a secure, double locked, concentrate cage. Concentrate pails were sealed inside the concentrate cage, making use of a glove box system to do this. A uniquely numbered, single use, security seal was used to seal the pails. Once sealed, the pails were removed from the security cage, excess water was drained by laying the pails on their side for a period of time, the pails were then weighed and transferred to a vault, fitted with a motion detector and two cameras. The pails were stored in the vault until they were shipped to the SRC in Saskatoon.

Schematic flow sheet of the 150mm Grande Prairie DMS

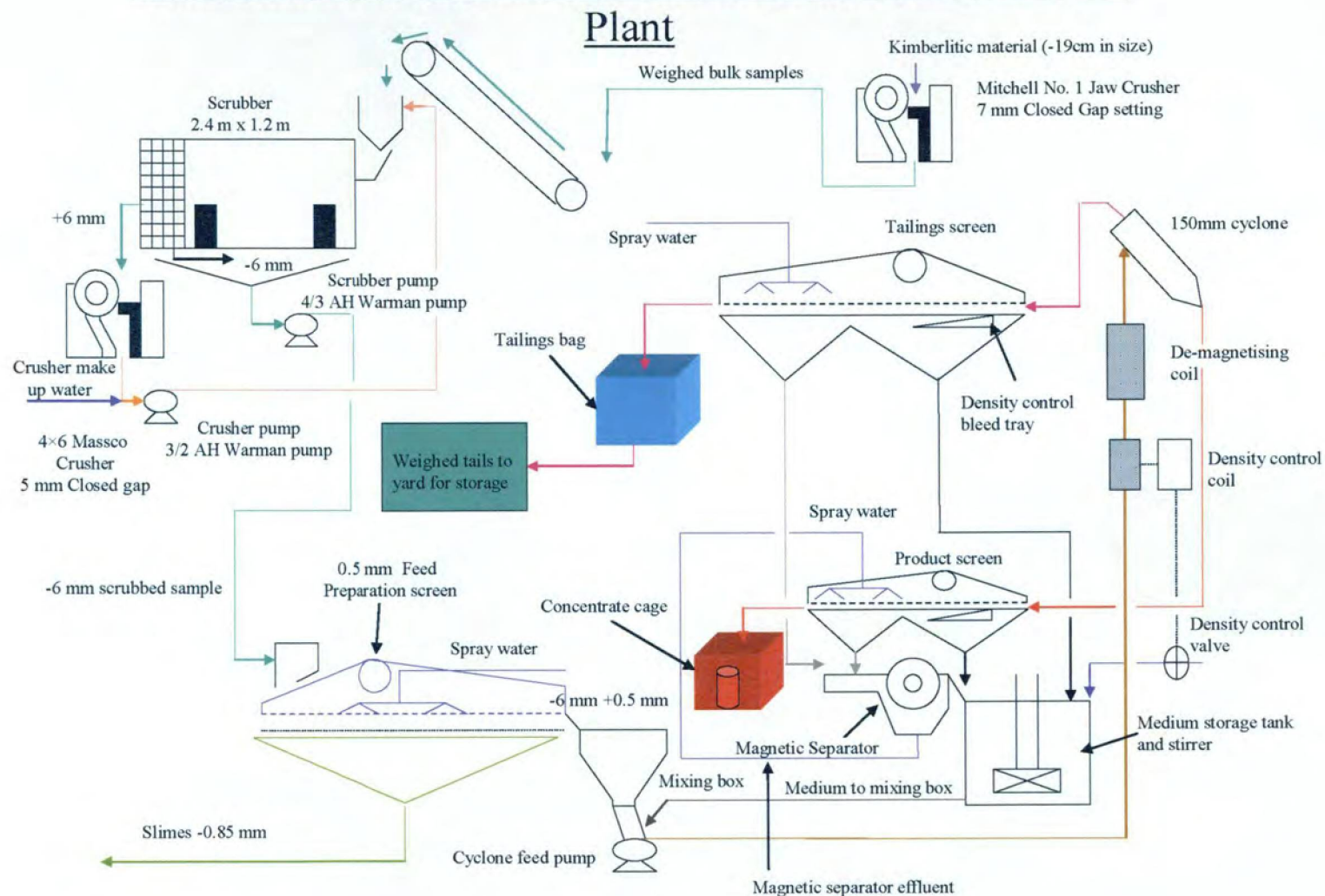


Figure 1 above, illustrates the flow sheet of the plant used to process the APEX Geoscience (Grizzly Diamonds) 2007 Bulk sample

2.4 Concentrate Storage and Shipping

2.4.1 STORAGE

All concentrates were stored in a double locked, sealed, 20 ft class 3 demountable vault. Two CCTV cameras, as well as a motion detector were installed inside the vault. A recording was kept on a 24hr basis. All tapes are stored in the security office.

2.4.2 SHIPPING

All the concentrate was shipped in a single shipment, to the SRC in Saskatoon.

2.5 Sample Weighing

On receipt of the bulk bags containing the Kimberlite at the treatment site, they were weighed using a 5 tonne capacity digital floor scale with a resolution of 1kg and then crushed. This scale was last calibrated in November 2005. Each ore bag weight was recorded and following treatment, the tailings were collected into bulk bags and weighed.

3.0 QUALITY CONTROL

A number of quality control measures were carried out to ensure the integrity and quality of the sample. These include tracer tests; crusher gap checks and Marcy scale calibration.

The crusher gap was checked by lowering a block of lead into the crusher while it was running and then checking the crushed lead width with a Vernier.

Various measures were put into place to prevent sample contamination. Plant clean out was undertaken at the start and the end of the project and after clean-up between each sample. This involved a thorough cleaning of scrubber, feed bin, pumps and screens etc. This clean out was visually inspected by the shift supervisor who then completed a decontamination document, certifying that the plant was decontaminated with reference to more important sections of the plant.

In an attempt to avoid contamination, the scrubber would be reversed and washed out. Spillage would be collected from beneath the plant and re-introduced into the process stream. All screens would be hosed and un-blinded. The cyclone feed pump would be stopped and restarted, to dislodge any trapped grains. The plant would also be run without load for 15 minutes between

samples, in order to flush out any entrained material, in an attempt to prevent contamination between samples.

Before processing started, a ~2t gravel 'purge' sample was run through the plant. This was to dislodge any material from the previous project which may have hung-up in the plant. Then again on completion of the project a ~2t gravel 'purge' sample was run through the plant. This was to dislodge any material from this project which may have hung-up in the plant. The concentrate from the 'purge' sample which was run through the plant at the end of the project was collected. This 'purge' concentrate was labeled 'purge' and was sent with the rest of the concentrates to the SRC for final diamond recovery.

In addition the concentrate cage floor was washed and vacuumed out at the end of the project (after the running of the 'purge' sample). The vacuumed material was added to an empty pail and sent to the SCR as a concentrate. This pail was labeled 'cage cleanout'.

3.1 Tracer Tests

Tracer tests were carried out using 2 mm and 4 mm cubical tracers in the following densities:

TRACER DENSITIES g/cm³

2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.53
-----	-----	-----	-----	-----	-----	-----	------

Twenty 2 mm and 4 mm, 'wetted' tracers, of each density were introduced into the feed stream in the Vertical spindle pump. The tracers were collected off both the sinks and the floats screen after having passed through the cyclone. The tracer tests were done while the plant was running without a load.

The numbers of each density tracer reporting to each screen, sinks and floats, was recorded and entered into the computer, the percentage sinks then plotted onto a graph and a Tromp curve was obtained. The density of the medium and the cyclone inlet pressure were also recorded at the time of the tracer tests. From the plotted tromp curve, the plant cut point (the density at which 50% of the tracer's report to concentrate) and the Ep (an indication of the sharpness of the cut) was determined.

A cut point of no more than 3.0g/cm³ and an Ep of less than 0.08 was deemed as acceptable for the commencement of sample treatment. No discrepancies were observed during treatment.

See Appendix 2 for all Tracer Test results carried out during the project.

Figure 2

Drill Hole:	Average
Sample #:	APEX Geoscience
Date:	
Shift:	
Test #:	01
Test Accepted?	Yes

4mm	d50	2.95 g/cm ³
	Ep	0.040
2mm	d50	2.97 g/cm ³
	Ep	0.060
Medium Density		2.50 g/cm ³
Operating Pressure		51 kPa

Tracer g/cm ³	Percentage Sink		No. Sink		No. Float	
	2mm	4mm	2mm	4mm	2mm	4mm
2.7		#DIV/0!				
2.8	0.0	0.0	0	0	20	20
2.9	20.0	25.0	4	5	16	15
3.0	65.0	80.0	13	16	7	4
3.1	95.0	100.0	19	20	1	0
3.2	100.0	100.0	20	20	0	0
3.3	100.0	100.0	20	20	0	0
3.4	100.0	100.0	19	20	0	0
3.53	100.0	100.0	20	20	0	0

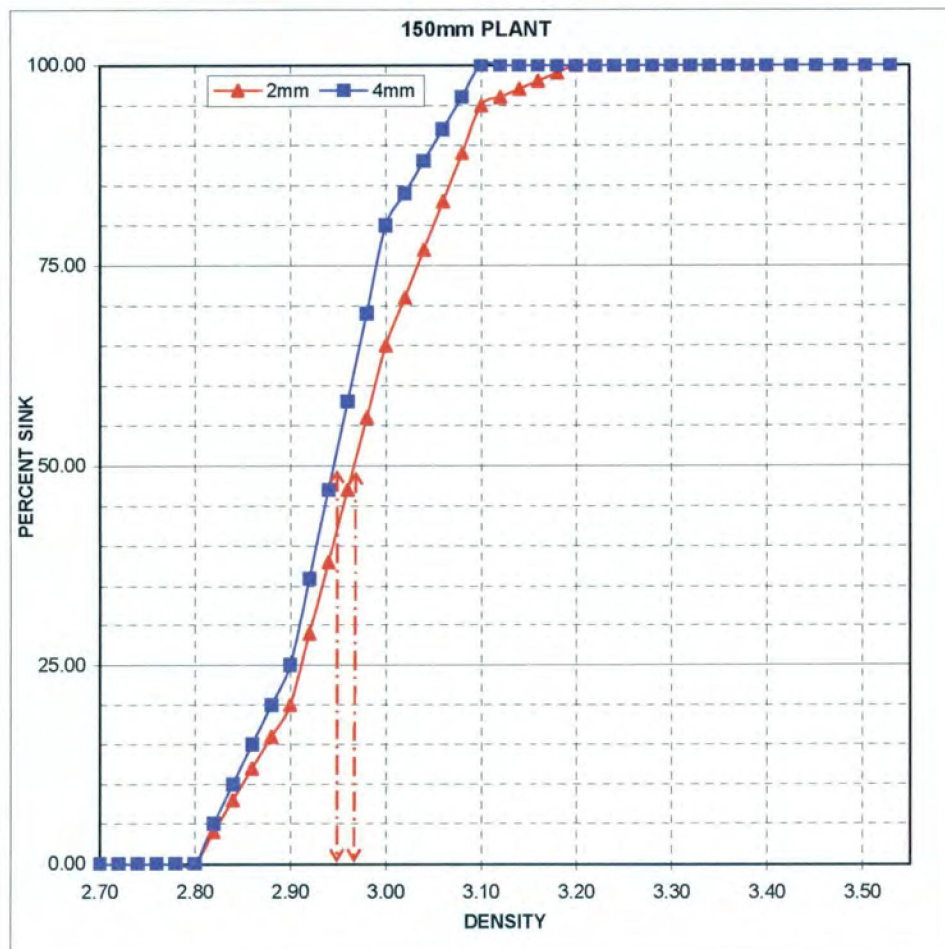


Figure 2 above illustrates the average tracer test results for the tracer tests done during the APEX Geoscience (Grizzly Diamonds) 2007 processing programme.

3.2 Density Control

The density of the medium on the plant was set and automatically controlled by a dense media controller at 2.5 g/cm^3 . The DMC measures the density of the medium/sample mix and is set add water to the plant when the density is 0.02g/cm^3 more than the set-up value, the water is then switched off again when the density gets 0.02g/cm^3 lower than the set-up value. The plant is always set so the density is climbing slowly, in this way ensuring that the DMC gauge functions correctly.

The DMC gauge was calibrated before sample treatment commenced. Calibration checks of the DMC gauge were carried out on a half hourly basis.

4.0 PROCESSING

4.1 General

Three Kimberlite bulk samples were obtained from APEX Geoscience. A total of 9 852 weighed tonnes (in Grande Prairie) of Kimberlite material was received in Grande Prairie for processing. The total wet concentrate weight produced was 84.71kg, translating to a theoretical yield of 0.85%, this excludes 0.33kg of purge and 0.21kg of cage clean out concentrate.

After crushing and scrubbing 26% of -0.5mm material was produced and discarded as slimes. All head feed granulometry material was returned to the process stream during processing of that particular sample.

The table below provides a break down of the sample processing data. This includes sample headfeed weight, tailings weight, concentrate weight, concentrate yield and percent slimes (-0.5mm) material produced from crushing and scrubbing.

Table 1

GRIZZLY DIAMONDS 2007 WT DATA

SAMPLE #	GP Weight (kg)	Conc. Weight (kg)	Headf'd. Conc. Yld (%)	Tails Weight (kg)	% -0.5mm Differ.
Legend 1	966	20.30	2.10	722	23.16
Legend 2	1,234	31.96	2.59	780	34.20
Legend 3	7,622	32.45	0.43	6,030	20.46
Purge		0.33			
Cage Clean-out		0.21			
Total	9,822	85.25		7,532	
Average			0.87		25.94

4.1.1 CONCENTRATE HANDLING

The concentrates were stored in grey 20-liter metal pails; these pails were sealed with uniquely numbered single use security seals. The concentrate weight minus the weight of the pail was recorded. The total concentrate weight for the project was 85.25kg (this includes the gravel purge sample concentrate and the concentrate cage cleanout at the end of the project). The sealed pails were stored in a 20-ft vault. Once processing was complete, the concentrates were shipped to the SRC using Brinks.

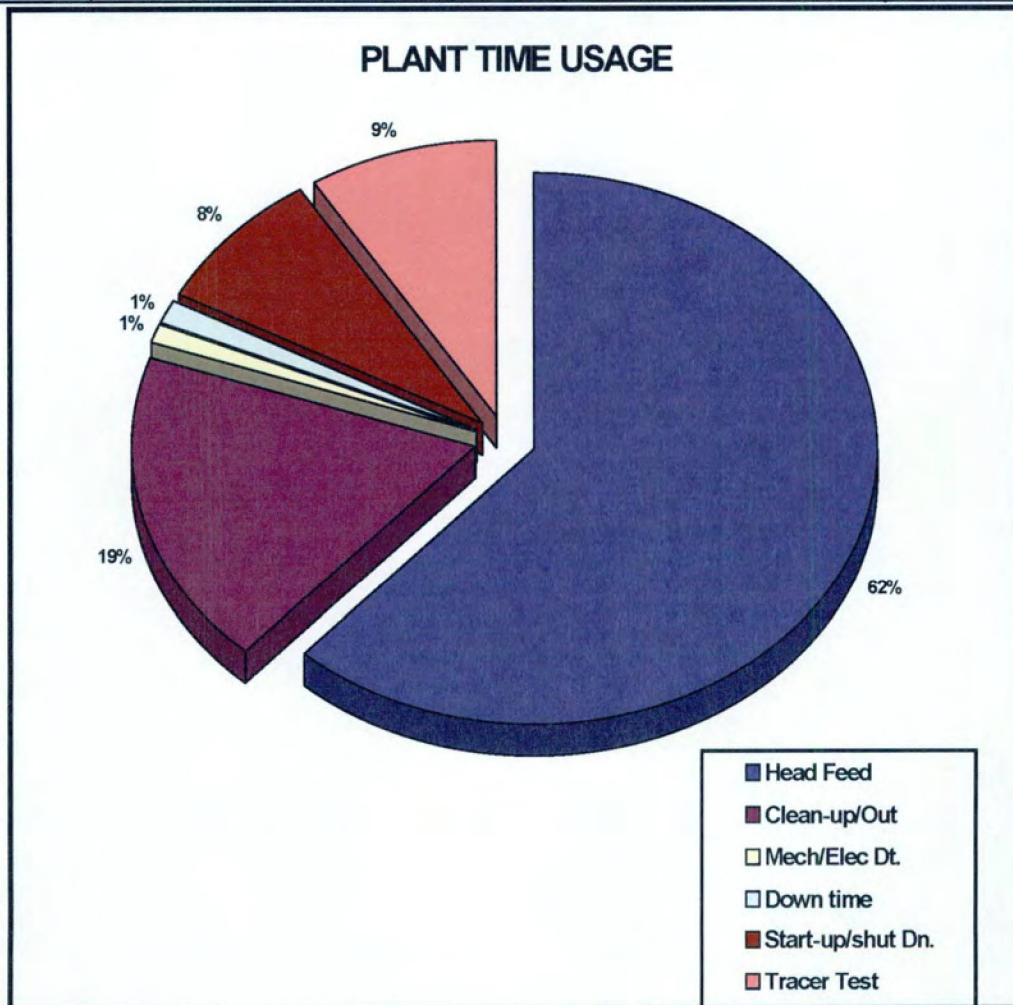
4.1.2 TIME AND MOTION STUDIES

This section deals with the time distribution over the entire processing of the APEX Geoscience (Grizzly Diamonds) sample regarding head-feed, Mechanical/electrical down time, General down time, Start-up/Shut-down, Tracer tests and concentrate removal. See figure 3 below for a table with a complete breakdown of the time usage as well as a pie graph illustrating this graphically.

Figure 3

PLANT TIME SHEET

Date	Sample No.	Head Feed	Clean-up/Out	Mech/Elec Dt.	Down time	Start-up/shut Dn.	Tracer Test	Total	Feed Weight (kg)	Feed Rate (T/hr)
29-May	Legend 003	240	0	0	0	60	60	360	2672	0.67
30-May	Legend 003	485	90	0	0	45	45	665	4950	0.61
11-May	Legend 001	110	65	15	0	30	65	285	996	0.54
11-May	Legend 002	170	75	0	15	30	0	290	1234	0.44
TOTALS		765	230	15	15	105	110	1240	7180	0.56



4.1.3 HEAD FEED

Head feed represents the proportion of time used for treating the Kimberlite ore through the DMS plant. Overall head feed time was 62% of the total plant running time, giving an average head feed rate of 0.56t/hr for the project. The magsep bearings gave in during processing between samples Legend 002 and Legend 003.

4.1.4 CLEAN-UP/OUT

Cleanup/out is the time that it took to clean and purge the plant on completion of the sample. Cleanup/out time took 19% of the total plant time. This was high as the samples were fairly small so a disproportionate amount of time was spent cleaning the plant compared to feeding the plant.

4.1.5 MECHANICAL/ELECTRICAL DOWN TIME

This is any down time, which is not within the operator's or plant supervisor's control. The cause of the 1% down time experienced was the magsep bearings gave in. The magsep was sent out for repairs in Edmonton, once it was repaired it was put back into place and processing was resumed.

4.1.6 START-UP/SHUT DOWN

This is the time it took to get the plant to premium operating density before processing began and the time it took to shut the plant down after processing had been completed. The start-up and shut down time was 8% of the total processing time.

4.1.7 TRACER TEST

This is the time it took to do the tracer test before processing started each day. This was 9% of the total processing time.

4.1.8 DOWN TIME

This is any down time, which is within the operator's or plant supervisor's control. The cause of the 1% down time experienced was due to large boulders choking up the cyclone feed pump. Processing restarted successfully after the larger rocks were removed from the pump.

5.0 GRANULOMETRY

The APEX Geoscience (Grizzly Diamonds) 2007 kimberlite processing project had granulometry analyses performed on the head feed as well as the tailings. Samples from both the head feed and tailings were dried and screened in Grande Prairie to determine the size distribution of the particles. The head feed moisture content was also obtained during the granulometry analysis.

The head feed screening analysis provides an indication of the type of product that is to be processed. All head feed granulometry material was returned to the process stream during processing of that particular sample.

Tailings screening analysis can indicate the potential for diamond lock-up, the degree of comminution of the sample product through the sample treatment process, the screening efficiency of the plant and the effectiveness of the top-size crushing.

Granulometry methods and procedures are as follows:

5.1 Head Feed Samples

The head feed granulometry samples were collected post crushing, directly out of the bulk bags in Grande Prairie. An amount of sample was taken out of each bag and mixed to total about 3kg per sample. The wet samples were weighed, the samples were then dried in an oven at approximately 350°F for 2-3 hours and after drying the samples were then reweighed. From these two weights the percentage moisture content was obtained.

The head feed samples which were clay rich had to be washed through a point five millimeter screen to remove the clay component. The sub point five millimeter material was dried and weighed and the weight was added to that of the coarse fraction to obtain the dry weight. The plus point five millimeter material was placed in a sieve stack consisting of 8.0mm, 6.3mm, 4.0mm, 2.0mm, 1.0mm, a 0.5mm sieve and a Tyler pan (-0.5mm).

A full breakdown of screening analyses and graphs by individual sample is included in Appendix 4.

5.2 Tailings Samples

A grab sample was taken at the beginning and end of treatment of each ore bag. The sample was collected by circulating a metal dish under the tailings chute in a figure-8 pattern to ensure an unbiased sample. The plant operator, who was responsible for collecting the sample, adjusted the frequency of the sampling according to the number of ore bags making up the sample. A sample with a low number of ore bags required a

higher frequency of sampling than a sample with a larger number of ore bags to produce about 3 kg of tailings material.

The sample was then placed in an oven at approximately 350°F for 2-3 hours, or until completely dry. The dry sample was then weighed and placed in a Rotap shaker with the following sieve classes: 8.0mm, 6.3mm, 4.0mm, 2.0mm, 1.0 mm, 0.5mm and a Tyler pan (-0.5mm). Each sieve class was weighed and the weight was recorded.

A full breakdown of screening analyses and graphs by individual sample is included in Appendix 4.

5.3 Results Discussion

5.3.1 MOISTURE CONTENT

The moisture content of the three samples was fairly constant. The legend 001 sample returned a moisture content of 3.1%, while the Legend 002 sample returned a moisture content of 2.1% and the legend 003 sample returned a moisture content of 2.9%.

Results of these studies are present in Appendix 4.

5.3.2 GRANULOMETRY

5.3.2.1 Head feed

The percentage of coarse material (+6.3mm) within the head feed varied from a high of 58% (Legend 002) to a low of 51% (Legend 003). While legend 001 was found to have 55% plus 6.3mm material in the head feed.

The percentage of slimes (-0.5mm) found in the head feed ranged from a high of 12% (Legend 001 and 002) to a low of 6% (Legend 003).

5.3.2.2 Tailings

The crushing efficiency of the Grande Prairie plant was good, with only one sample (Legend 001) producing up to 2% of material in the top cutoff size range of 6.3mm. All the other samples showed less than 1% of the material was larger than the top cut off of 6.3mm.

The screening efficiency of the plant was excellent, with an average of 26% of -0.5mm material in the head feed, this was reduced to an average of 0.1% of -0.5mm material in the tailings after processing.

Results of these studies are present in Appendix 4.

6.0 AREAS OF RISK AND RECOMMENDATION

In terms of sample processing, most areas of risk were contained by the implementation of strict procedures on the plant during sample handling and processing.

In addition to the implementation of revised procedures, the constant supervision provided as well as the data monitoring undertaken during processing minimized the potential impact of many of the risk areas.

During DMS processing Dean Besserer of APEX Geoscience Ltd. audited the processing on behalf of Grizzly Diamonds.

7.0 DE BEERS CONCLUSION

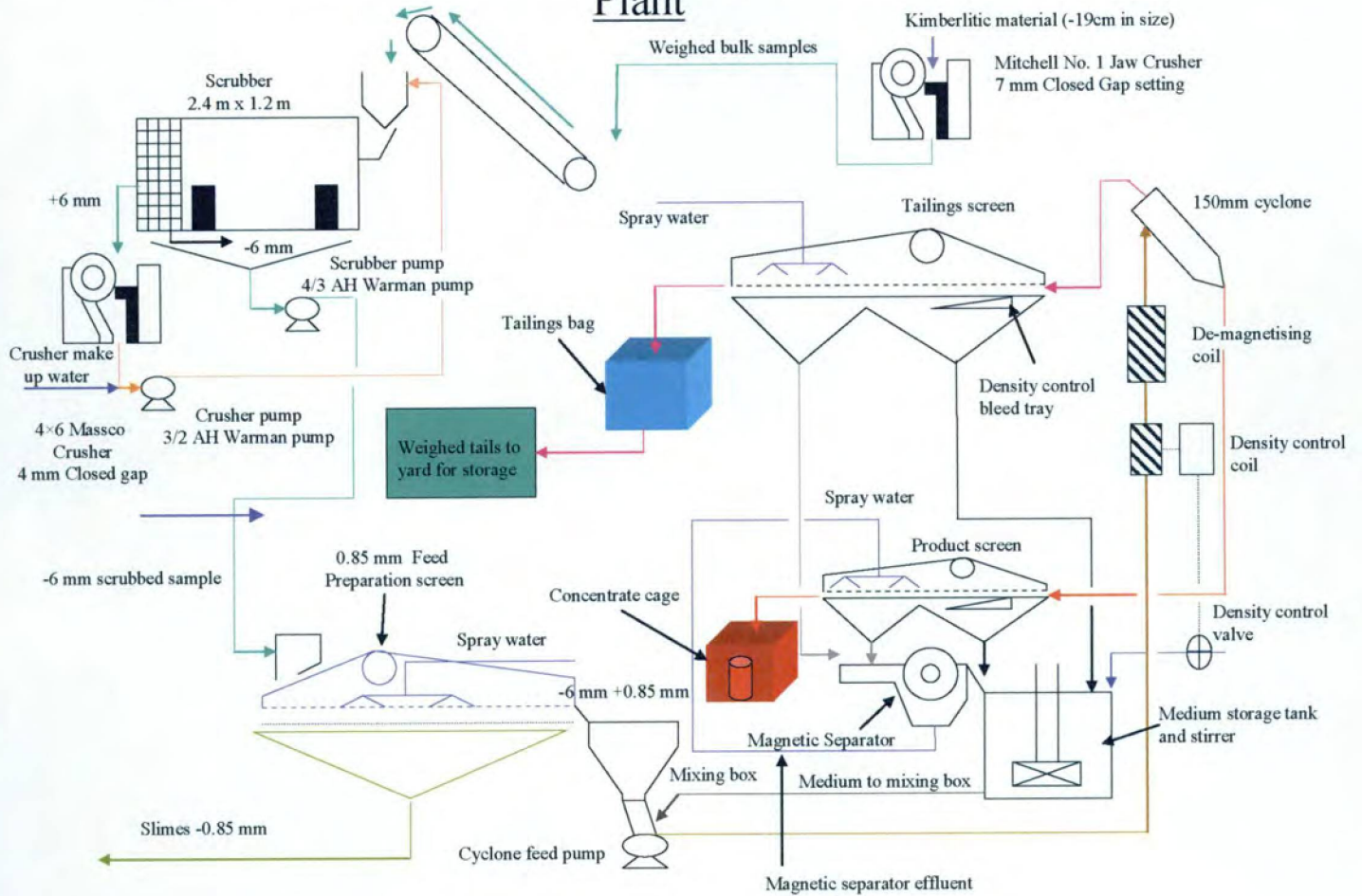
The objectives of the exercise were achieved in that all the sample material received from APEX Geoscience (Grizzly Diamonds) for this program was processed in a 3 day period, effectively and securely.

APPENDIX 1

**Scope of Works
Letter of agreement**

Schematic flow sheet of the 150mm Grande Prairie DMS

Plant



APPENDIX 2

Tracer Tests

APEX
Core 2007
TRACER TEST

Drill Hole:	Commissioning 1
Sample #:	APEX Geoscience
Date:	10/05/2007
Shift:	
Test #:	01
Test Accepted?	Yes

4mm	d50	2.93	g/cm ³
	Ep	0.050	
2mm	d50	2.94	g/cm ³
	Ep	0.060	
Medium Density		2.50	g/cm ³
Operating Pressure		50	kPa

Tracer	Percentage Sink		No. Sink		No. Float	
g/cm ³	1mm	2mm	2mm	4mm	2mm	4mm
2.7	#DIV/0!					
2.8	0.0	0.0	0	0	20	9
2.9	35.0	33.3	7	9	13	18
3.0	80.0	100.0	16	18	4	0
3.1	95.0	100.0	19	20	1	0
3.2	100.0	100.0	20	20	0	0
3.3	100.0	100.0	20	20	0	0
3.4	100.0	100.0	19	20	0	0
3.5	100.0	100.0	20	20	0	0

100.00

75.00

PERCENT SINK

25.00

0.00

2.70

2.80

2.90

3.00

3.10

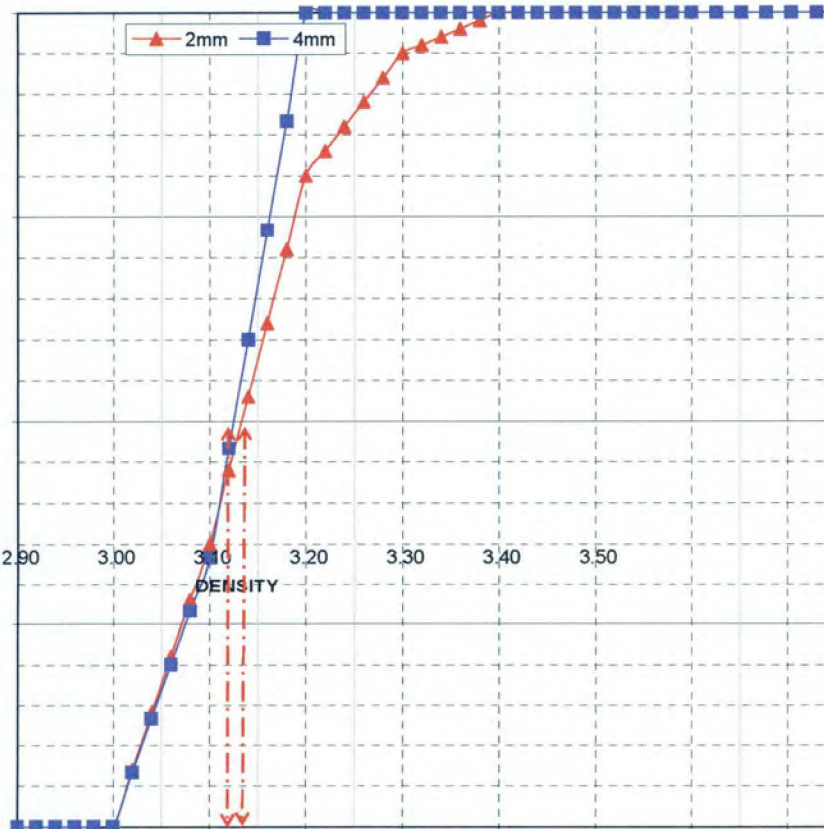
3.20

3.30

3.40

3.50

DENSITY

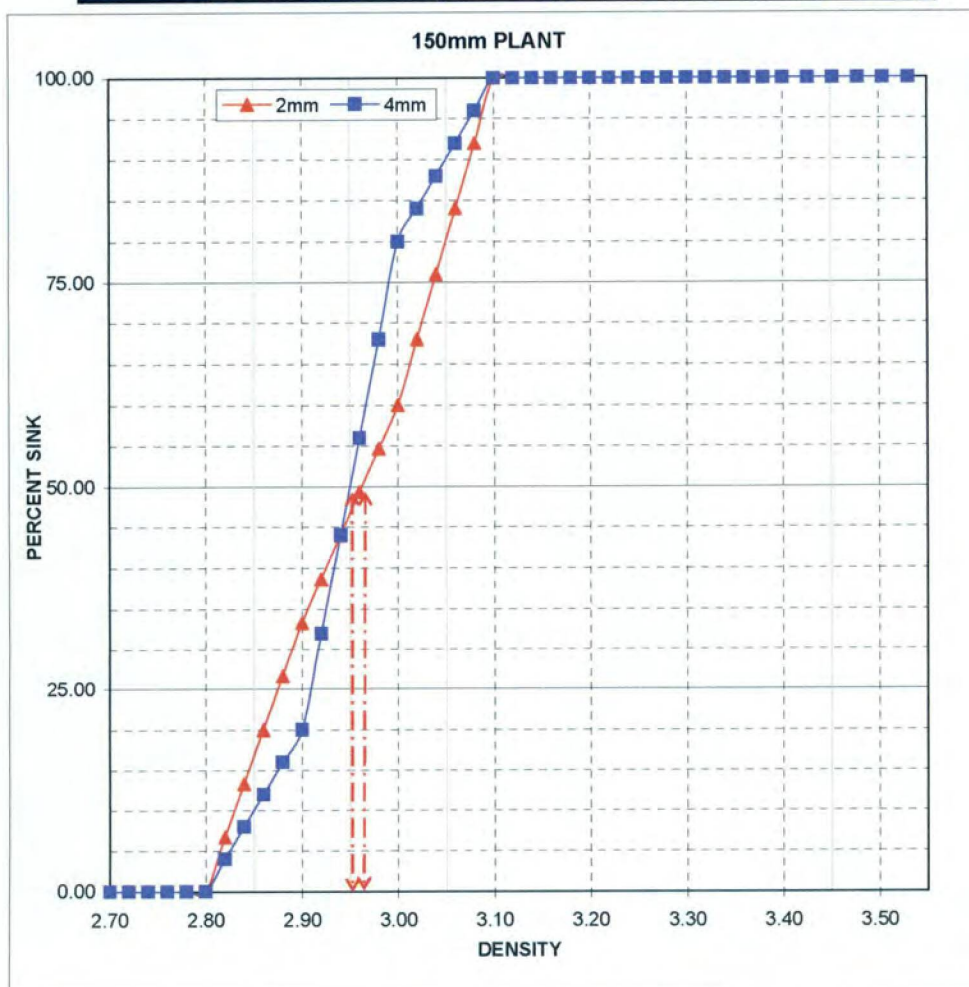


APEX
Core 2007
TRACER TEST

Drill Hole:	Legend 001
Sample #:	APEX Geoscience
Date:	11/05/2007
Shift:	
Test #:	01
Test Accepted?	Yes

4mm	d50	2.95 g/cm ³
	Ep	0.040
2mm	d50	2.96 g/cm ³
	Ep	0.080
Medium Density		2.55 g/cm ³
Operating Pressure		52 kPa

Tracer g/cm ³	Percentage Sink		No. Sink		No. Float	
	2mm	4mm	2mm	4mm	2mm	4mm
2.7		#DIV/0!				
2.8	0.0	0.0	0	0	20	20
2.9	33.3	20.0	7	4	14	16
3.0	60.0	80.0	12	16	8	4
3.1	100.0	100.0	20	20	0	0
3.2	100.0	100.0	20	20	0	0
3.3	100.0	100.0	20	20	0	0
3.4	100.0	100.0	20	20	0	0
3.53	100.0	100.0	20	20	0	0

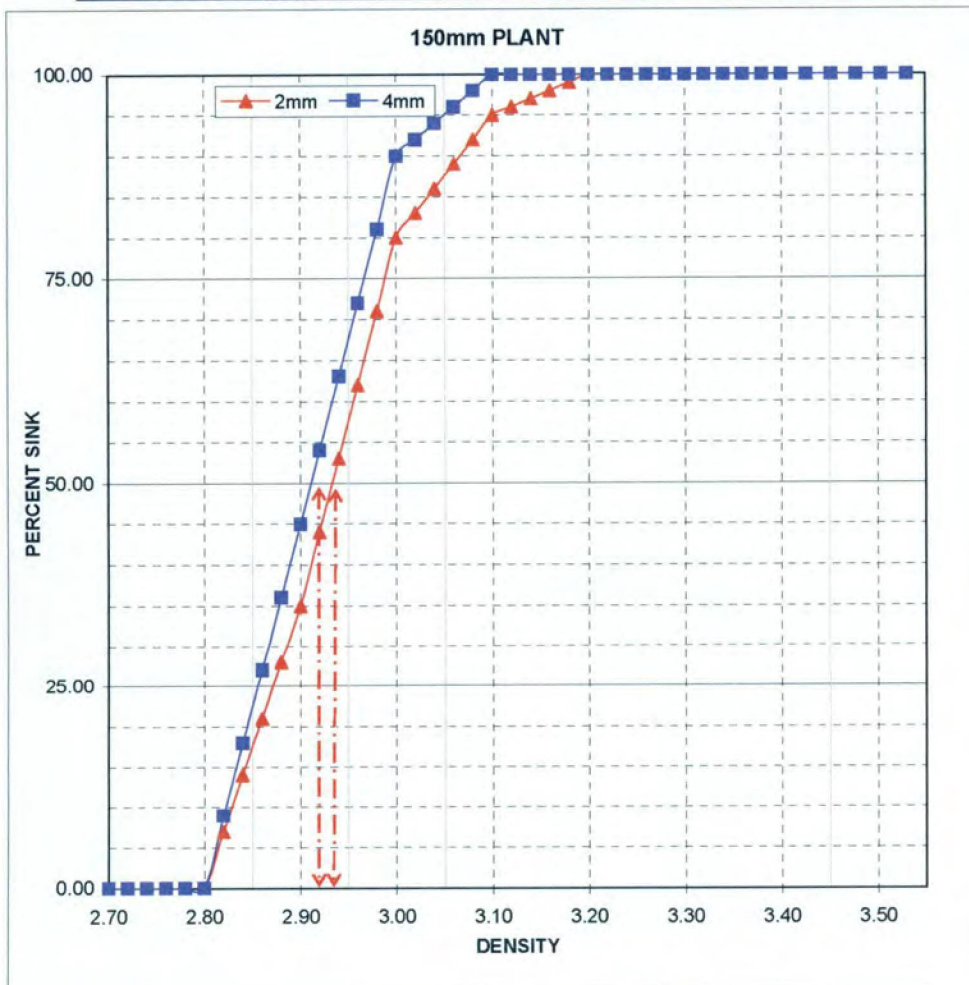


APEX
Core 2007
TRACER TEST

Drill Hole:	Legend 003
Sample #:	APEX Geoscience
Date:	29/05/2007
Shift:	
Test #:	01
Test Accepted?	Yes

4mm	d50	2.92	g/cm ³
	Ep	0.060	
2mm	d50	2.94	g/cm ³
	Ep	0.060	
Medium Density		2.50	g/cm ³
Operating Pressure		50	kPa

Tracer g/cm ³	Percentage Sink		No. Sink		No. Float	
	2mm	4mm	2mm	4mm	2mm	4mm
2.7		#DIV/0!				
2.8	0.0	0.0	0	0	20	20
2.9	35.0	45.0	7	9	13	11
3.0	80.0	90.0	16	18	4	2
3.1	95.0	100.0	19	20	1	0
3.2	100.0	100.0	20	20	0	0
3.3	100.0	100.0	20	20	0	0
3.4	100.0	100.0	19	20	0	0
3.53	100.0	100.0	20	20	0	0

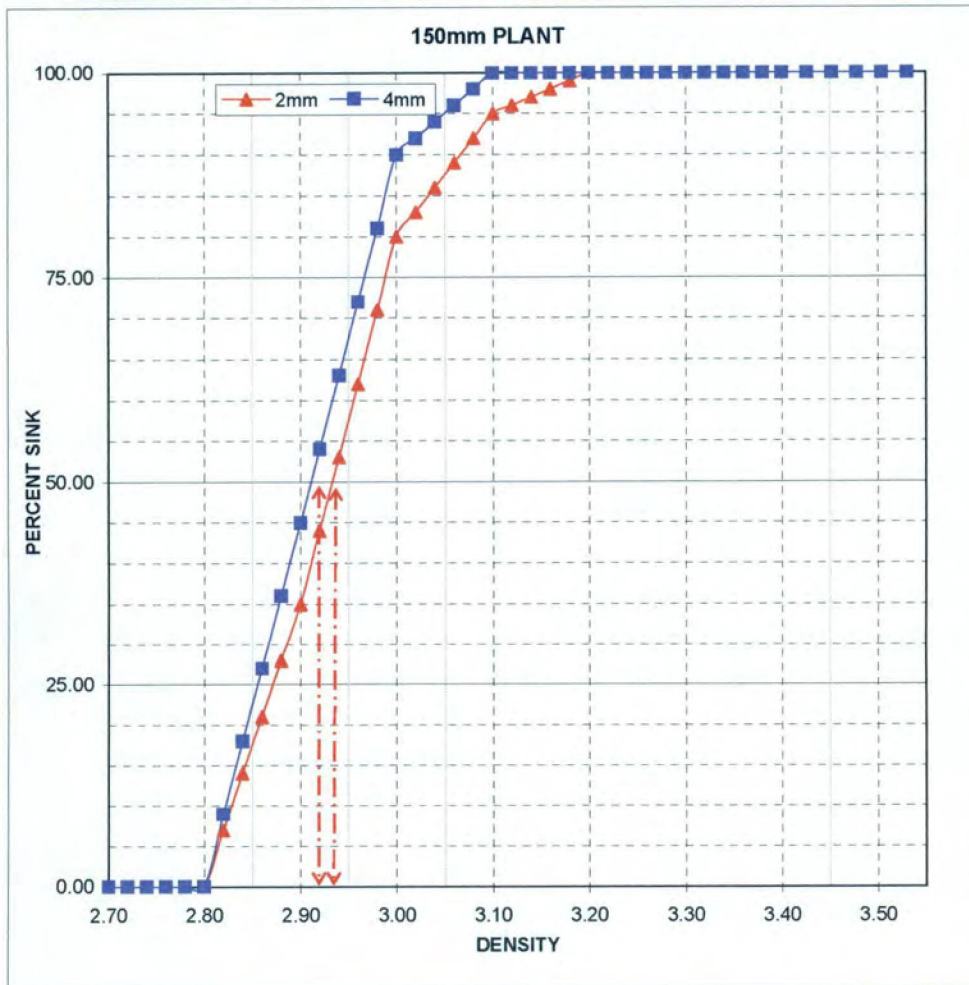


APEX
Core 2007
TRACER TEST

Drill Hole:	Legend 003
Sample #:	APEX Geoscience
Date:	29/05/2007
Shift:	
Test #:	01
Test Accepted?	Yes

4mm	d50	2.92	g/cm ³
	Ep	0.060	
2mm	d50	2.94	g/cm ³
	Ep	0.060	
Medium Density		2.50	g/cm ³
Operating Pressure		50	kPa

Tracer g/cm ³	Percentage Sink		No. Sink		No. Float	
	2mm	4mm	2mm	4mm	2mm	4mm
2.7		#DIV/0!				
2.8	0.0	0.0	0	0	20	20
2.9	35.0	45.0	7	9	13	11
3.0	80.0	90.0	16	18	4	2
3.1	95.0	100.0	19	20	1	0
3.2	100.0	100.0	20	20	0	0
3.3	100.0	100.0	20	20	0	0
3.4	100.0	100.0	19	20	0	0
3.53	100.0	100.0	20	20	0	0



APPENDIX 3

Purge/Clean-out numbers

De Beers Canada Exploration Inc.

	QUALITY FORM - QWIF 008 PURGE SAMPLE NUMBER AND WEIGHT	
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[illegible]

De Beers Canada Exploration Inc.

[illegible]

APPENDIX 4

Granulometry

QUALITY FORM - QWIF 016 GRANULOMETRY RESULTS

GRANULOMETRY RESULTS

Head feed	
Sample Number:	Legend 001
Drill hole:	
Ore bag(s):	1
Interval- From:	
Interval- To:	
Date:	01-Jun-07

Sample's wet mass: 4005.28
 Sample's dry weight before washing: 3882.74
 Sample's dry weight after washing: 3882.74
 Slimes (-0.5 mm material): 0.00
 -0.5 mm material in sieve class: 469.09
 Total -0.5 mm material: 469.09

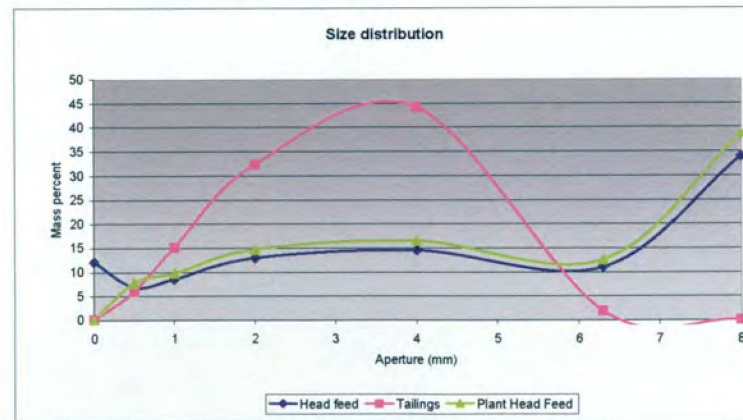
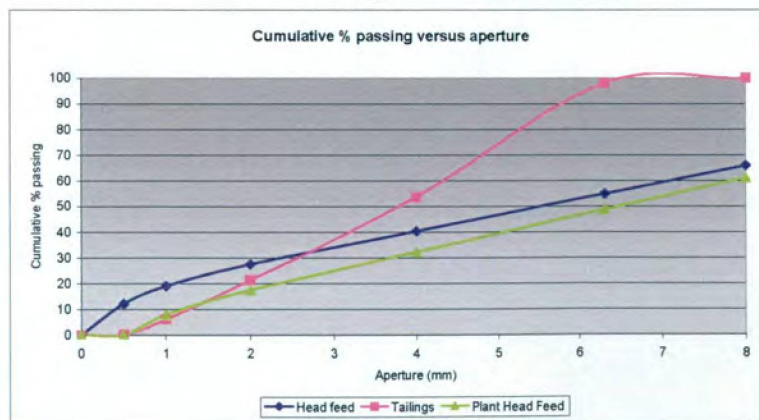
Head feed		
Aperture (mm)	Sample weight (g)	Reverse cumulative (%)
8.0	1323.24	34.1
6.3	426.71	45.1
4	563.04	59.6
2.0	502.26	72.6
1.0	330.61	81.1
0.5	265.10	87.9
0.0	469.09	100.0
Total	3880.05	

Tailings	
Sample Number:	Legend 001
Drill hole:	
Ore bag(s):	
Date:	01-Jun-07

Moisture content of Head feed: 3.1 %
 Slimes percentage (-0.5 mm material): 12.1 %
 * (in head feed)

Tailings		Head feed		Plant Head Feed		Tailings	
Aperture (mm)	Sample weight (g)	Sample weight (g) Interval:	Sample weight (g) Interval:	Total sample weight (g)	Reverse cumulative %	Aperture (mm)	Sample weight (g)
				0.00	0.0	8.0	6.09
				0.00	0.0	6.3	96.56
8.0	6.09			6.09	0.1	4.0	2170.26
6.3	96.56			96.56	2.1	2.0	1590.18
4.0	2170.26			2170.26	46.3	1.0	744.42
2.0	1590.18			1590.18	78.8	0.5	294.36
1.0	744.42			744.42	93.9	0.0	3.21
0.5	294.36			294.36	99.9	Total	4905.08
0.0	3.21			3.21	100.0		

Head feed		Plant Head Feed		Tailings		Head feed		Plant Head Feed		Tailings	
Aperture (mm)	Cumulative % passing (%)	Calculated Plant Head Feed	Aperture (mm)	Cumulative % passing (%)	Aperture (mm)	Fractional % of total sample	Fractional % of total sample	Aperture (mm)	Fractional % of total sample	Aperture (mm)	Fractional % of total sample
8.0	65.9	61.2		100.0	8.0	34.1	38.8				0.0
6.3	54.9	48.7		100.0	6.3	11.0	12.5				0.0
4	40.4	32.2	8.0	99.9	4	14.5	16.5				0.1
2.0	27.4	17.5	6.3	97.9	2.0	12.9	14.7				2.0
1.0	18.9	7.8	4	53.7	1.0	8.5	9.7				44.2
0.5	12.1	0.0	2.0	21.2	0.5	6.8	7.8				32.4
0.0	0.0	0.0	1.0	6.1	0.0	12.1	0.0				15.2
			0.5	0.1							6.0
			0.0	0.0							0.1



QUALITY FORM - QWIF 016 GRANULOMETRY RESULTS

GRANULOMETRY RESULTS

Head feed	
Sample Number:	Legend 002
Drill hole:	
Ore bag(s):	1
Interval- From:	
Interval- To:	
Date:	01-Jun-07

Sample's wet mass: 3810.32
 Sample's dry weight before washing: 3729.82
 Sample's dry weight after washing: 3729.82
 Slimes (-0.5 mm material): 0.00
 -0.5 mm material in sieve class: 331.64
 Total -0.5 mm material: 331.64

Head feed		
Aperture (mm)	Sample weight (g)	Reverse cumulative (%)
8.0	1242.11	33.3
6.3	331.64	42.2
4	524.95	56.3
2.0	554.56	71.1
1.0	352.80	89.6
0.5	281.15	89.1
0.0	443.57	100.0
Total	3730.78	

Tailings	
Sample Number:	Legend 002
Drill hole:	
Ore bag(s):	
Date:	01-Jun-07

Moisture content of Head feed: 2.1 %
 Slimes percentage (-0.5 mm material): 8.9 %
 * (in head feed)

Tailings		Sample weight (g)		Sample weight (g)		Total sample weight (g)		Reverse cumulative %	
Aperture (mm)	Sample weight (g)	Interval:		Interval:					
8.0	9.68					0.00		0.0	
6.3	14.80					0.00		0.0	
4.0	1384.40					9.68		0.3	
2.0	1243.24					14.80		0.7	
1.0	611.92					1384.40		40.2	
0.5	238.07					1243.24		75.6	
0.0	4.10					611.92		93.1	
Total	3506.21	0		0		238.07		99.9	
						4.10		100.0	

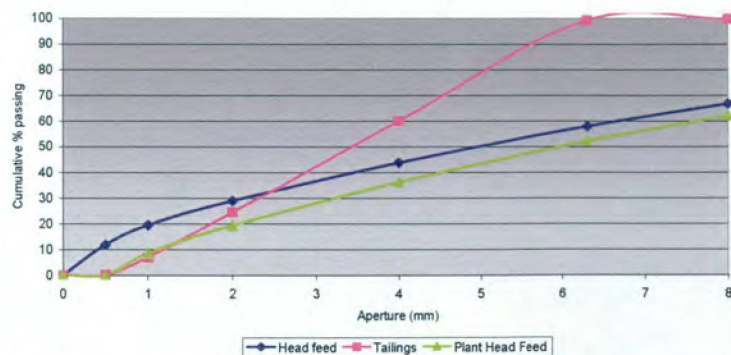
Head feed		Plant Head Feed	
Aperture (mm)	Cumulative % passing (%)	Calculated Plant Head Feed	
8.0	66.7	62.2	
6.3	57.8	52.1	
4	43.7	36.2	
2.0	28.9	19.3	
1.0	19.4	8.6	
0.5	11.9	0.0	
0.0	0.0	0.0	

Tailings	
Aperture (mm)	Cumulative % passing (%)
8.0	100.0
6.3	100.0
4	99.7
2.0	99.3
1.0	59.8
0.5	24.4
0.0	6.9
	0.1
	0.0

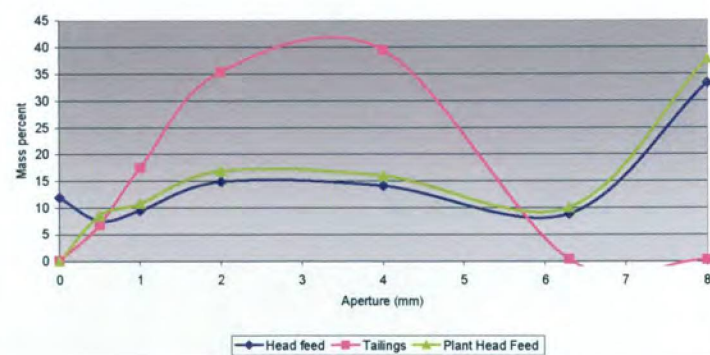
Head feed		Plant Head Feed	
Aperture (mm)	Fractional % of total sample	Fractional % of total sample	
8.0	33.3	37.8	
6.3	8.9	10.1	
4	14.1	16.0	
2.0	14.9	16.9	
1.0	9.5	10.7	
0.5	7.5	8.6	
0.0	11.9	0.0	

Tailings	
Aperture (mm)	Fractional % of total sample
8.0	0.0
6.3	0.0
4	0.3
2.0	0.4
1.0	39.5
0.5	35.5
0.0	17.5
	6.8
	0.1

Cumulative % passing versus aperture



Size distribution



QUALITY FORM - QWIF 016 GRANULOMETRY RESULTS

GRANULOMETRY RESULTS

Head feed	
Sample Number:	Legend 003
Drill hole:	
Ore bag(s):	1
Interval- From:	
Interval- To:	
Date:	01-Jun-07

Sample's wet mass: 4682.08
 Sample's dry weight before washing: 4548.64
 Sample's dry weight after washing: 4548.64
 Slimes (-0.5 mm material): 0.00
 -0.5 mm material in sieve class: 274.63
 Total -0.5 mm material: 274.63

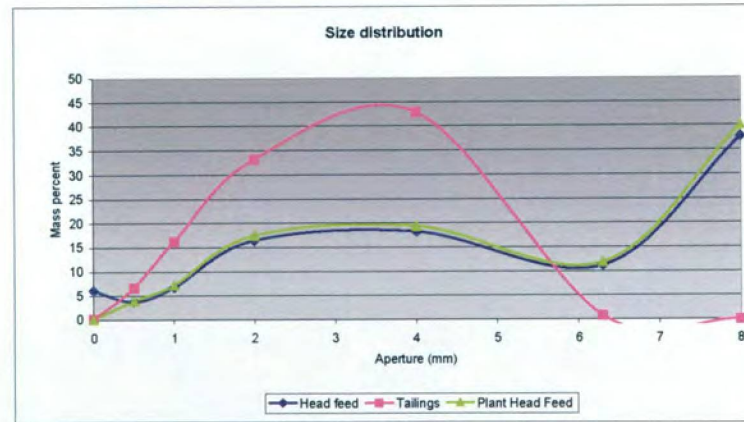
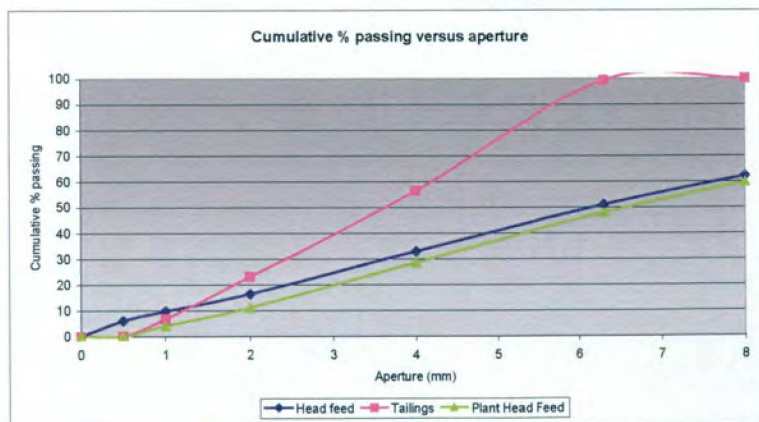
Head feed		
Aperture (mm)	Sample weight (g)	Reverse cumulative (%)
8.0	1720.08	37.8
6.3	506.11	48.9
4	828.20	67.1
2.0	746.54	83.5
1.0	306.51	90.3
0.5	187.91	94.0
0.0	274.63	100.0
Total	4549.98	

Tailings	
Sample Number:	Legend 003
Drill hole:	
Ore bag(s):	
Date:	01-Jun-07

Moisture content of Head feed: 2.9 %
 Slimes percentage (-0.5 mm material): 6.0 %
 * (in head feed)

Tailings					
Aperture (mm)	Sample weight (g)	Sample weight (g) Interval:	Sample weight (g) Interval:	Total sample weight (g)	Reverse cumulative %
				0.00	0.0
				0.00	0.0
				0.00	0.0
8.0	0.00			59.07	0.8
6.3	59.07			3082.41	43.7
4.0	3082.41			2388.08	77.0
2.0	2388.08			1166.61	93.3
1.0	1166.61			476.30	99.9
0.5	476.30			8.22	100.0
0.0	8.22				
Total	7180.69	0	0	7180.69	

Head feed			Plant Head Feed			Tailings			Head feed			Plant Head Feed			Tailings		
Aperture (mm)	Cumulative % passing (%)	Calculated Plant Head Feed	Aperture (mm)	Cumulative % passing (%)	Calculated Plant Head Feed	Aperture (mm)	Cumulative % passing (%)	Calculated Plant Head Feed	Aperture (mm)	Fractional % of total sample	Fractional % of total sample	Aperture (mm)	Fractional % of total sample	Fractional % of total sample	Aperture (mm)	Fractional % of total sample	Fractional % of total sample
8.0	62.2	59.8	8.0	100.0		8.0	37.8	40.2	8.0	0.0	0.0	8.0	0.0	0.0	8.0	0.0	0.0
6.3	51.1	47.9	6.3	100.0		6.3	11.1	11.8	6.3	0.0	0.0	6.3	0.0	0.0	6.3	0.0	0.0
4	32.9	28.6	4	100.0		4	18.2	19.4	4	0.0	0.0	4	0.0	0.0	4	0.0	0.0
2.0	16.5	11.1	2.0	99.2		2.0	16.4	17.5	2.0	0.8	0.8	2.0	0.8	0.8	2.0	0.8	0.8
1.0	9.7	3.9	1.0	56.3		1.0	6.7	7.2	1.0	42.9	42.9	1.0	42.9	42.9	1.0	42.9	42.9
0.5	6.0	0.0	0.5	23.0		0.5	3.7	3.9	0.5	33.3	33.3	0.5	33.3	33.3	0.5	33.3	33.3
0.0	0.0	0.0	0.0	6.7		0.0	6.0	0.0	0.0	16.2	16.2	0.0	16.2	16.2	0.0	16.2	16.2
			0.5	0.1						6.6	6.6		6.6	6.6		6.6	6.6
			0.0	0.0						0.1	0.1		0.1	0.1		0.1	0.1



APPENDIX 5

DIAMOND INDICATOR MINERAL PROCESSING AND RESULTS (SRC)

Apex Geoscience Ltd

Attention: Dean Besserer

PO #/Project:

Samples: 1

SRC Geoanalytical Laboratories

125 - 15 Innovation Blvd., Saskatoon, Saskatchewan, S7N 2X8

Tel: (306) 933-8118 Fax: (306) 933-5656 Email: geolab@src.sk.ca

Report No: 07-547

Date: July 30, 2007

Column Header Details

Original Sample Weight in kilograms (SWT)
+1.00MM Fraction Dry Weight in kilograms (+1.00MM)
-0.25MM Fraction Dry Weight in kilograms (-0.25MM)
Mid Fraction -1.00+0.25MM Dry Weight in grams (MWT)
LST SG 2.96 Sinks in grams (LSTS)

Pyrope Peridotitic Grains in Counts (Pyr-p)
Pyrope Eclogitic Grains in Counts (Pyr-e)
Chrome-Diopside Grains in Counts (Chr-D)
Olivine Grains in Counts (Olv)
Picroilmenite Grains in Counts (Picroilm)

Chromite Grains in Counts (Chr)
LST Sinks +0.50 Observed Weight in grams (LST+Obs)
LST Sinks -0.50 Observed Weight in grams (LST-Obs)
LST Sinks Total Observed Weight in grams (Total Obs)
LST Sinks Total Observed Weight in % (Total)

Apex Geoscience Ltd

Attention: Dean Besserer

PO #/Project:

Samples: 1

SRC Geoanalytical Laboratories

125 - 15 Innovation Blvd., Saskatoon, Saskatchewan, S7N 2X8

Tel: (306) 933-8118 Fax: (306) 933-5656 Email: geolab@src.sk.ca

Report No: 07-547

Date: July 30, 2007

Sample Number	SWT kg	+1.00MM kg	-0.25MM kg	MWT g	LSTS g	Pyr-p Counts	Pyr-e Counts	Chr-D Counts	Olv Counts	Picroilm Counts	Chr Counts	LST+Obs g	LST-Obs g	Total Obs g	Total %
LEGEND-005A	26.20	23.25	1.125	1587.1	391.68	0	0	0	>100	>100	0	75.28	13.37	88.65	23

Kimberlite Indicator Mineral Grain Morphology Sheet

Group Number: 07-547

SAMPLE	QUANTITY	LOCATION	SIZE FRACTION	GRAIN TYPE *	COLOR	SHAPE	CLARITY	LUSTRE	SURFACE FEATURE	COMMENT	DATE	OBSERV
LEGEND-005A	1	1	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	2	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	3	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	4	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	5	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	6	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	7	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	8	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	9	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	10	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	11	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	12	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	13	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	14	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	15	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	16	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	17	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	18	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	19	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	20	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	21	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	22	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	23	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	24	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	25	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	26	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	27	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	28	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	29	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	30	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	31	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	32	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	33	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	34	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	35	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	36	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	37	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	38	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	39	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	40	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	41	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	42	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM

Data sheet prepared by
Geoanalytical Laboratories
Saskatchewan Research Council
306-933-8118

4/2/2009
12:23 PM

Kimberlite Indicator Mineral Grain Morphology Sheet

Group Number: 07-547

SAMPLE	QUANTITY	LOCATION	SIZE FRACTION	GRAIN TYPE *	COLOR	SHAPE	CLARITY	LUSTRE	SURFACE FEATURE	COMMENT	DATE	OBSERV
LEGEND-005A	1	43	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	44	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	45	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	46	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	47	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	48	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	49	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	50	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	51	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	52	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	53	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	54	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	55	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	56	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	57	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	58	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	59	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	60	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	61	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	62	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	63	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	64	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	65	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	66	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	67	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	68	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	69	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	70	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	71	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	72	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	73	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	74	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	75	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	76	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	77	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	78	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	79	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	80	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	81	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	82	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	83	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	84	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM

Data sheet prepared by
Geoanalytical Laboratories
Saskatchewan Research Council
306-933-8118

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Kimberlite Indicator Mineral Grain Morphology Sheet

Group Number: 07-547

SAMPLE	QUANTITY	LOCATION	SIZE FRACTION	GRAIN TYPE *	COLOR	SHAPE	CLARITY	LUSTRE	SURFACE FEATURE	COMMENT	DATE	OBSERV
LEGEND-005A	1	85	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	86	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	87	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	88	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	89	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	90	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	91	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	92	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	93	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	94	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	95	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	96	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	97	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	98	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	99	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	100	-1.00/+0.50mm	olv	yellow	ang	translucent	vitreous	striations		07/20/07	CM
LEGEND-005A	1	1	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	2	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	3	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	4	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	5	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	6	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	7	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	8	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	9	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	10	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	11	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	12	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	13	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	14	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	15	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	16	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	17	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	18	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	19	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	20	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	21	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	22	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	23	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	24	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	25	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	26	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM

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SAMPLE	QUANTITY	LOCATION	SIZE FRACTION	GRAIN TYPE *	COLOR	SHAPE	CLARITY	LUSTRE	SURFACE FEATURE	COMMENT	DATE	OBSERV
LEGEND-005A	1	27	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	28	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	29	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	30	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	31	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	32	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	33	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	34	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	35	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	36	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	37	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	38	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	39	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	40	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	41	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	42	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	43	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	44	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	45	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	46	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	47	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	48	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	49	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	50	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	51	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	52	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	53	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	54	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	55	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	56	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	57	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	58	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	59	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	60	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	61	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	62	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	63	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	64	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	65	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	66	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	67	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	68	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM

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SAMPLE	QUANTITY	LOCATION	SIZE FRACTION	GRAIN TYPE *	COLOR	SHAPE	CLARITY	LUSTRE	SURFACE FEATURE	COMMENT	DATE	OBSERV
LEGEND-005A	1	69	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	70	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	71	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	72	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	73	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	74	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	75	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	76	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	77	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	78	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	79	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	80	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	81	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	82	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	83	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	84	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	85	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	86	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	87	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	88	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	89	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	90	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	91	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	92	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	93	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	94	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	95	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	96	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	97	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	98	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	99	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
LEGEND-005A	1	100	-1.00/+0.50mm	picroilm	black	blocky	opaque	none	none		07/20/07	CM
* Unless otherwise indicated all grains are considered definite												
		200										

APPENDIX 6

DMS SAMPLE CAUSTIC FUSION RESULTS (SRC)

Caustic Fusion Diamond Report

Apex Geoscience Ltd

Attention: Dean Besserer

PO #/Project: 99251

Samples: 4

July 11, 2007

- 1) Original Sample Weight in kilograms (SWT)
- 2) Bottom Sieve Size in microns (Sieve)
- 3) Diamonds > 500 microns (Macro)
- 4) Diamonds < 500 microns (Micro)
- 5) Weight of Diamonds > 500 microns in milligrams (Wt+)
- 6) Weight of Diamonds >106 microns < 500 microns in milligrams (Wt-)
- 7) Number of QC/QA Tracers (-4750+425 microns) Recovered (QC 3)
- 8) Number of synthetic diamonds recovered (whole and fragments) (SYN)

Sample #	SWT	Sieve	Macro	Micro	Wt+	Wt-	QC 3	SYN
LEGEND 001 1/2	3.05	425	0	0	0	0	8/10	5
LEGEND 001 2/2	12.20	425	0	0	0	0	7/10	6
LEGEND 002 1/2	13.20	425	0	0	0	0	10/10	3
LEGEND 002 2/2	11.25	425	0	0	0	0	9/10	2

7/10 Synthetic tracers were recovered for sample # Legend 001 2/2.

The method validation allows for a 95% confidence level for a minimum tracer recovery of 80%.

No other recovery deviations were reported for the group.

The reported QC failure is therefore within acceptable limits set by the method.

Caustic Fusion Diamond Report

Apex Geoscience Ltd

Attention: Dean Besserer

PO #/Project:

Samples: 4

July 12, 2007

- 1) Original Sample Weight in kilograms (SWT)
- 2) Bottom Sieve Size in microns (Sieve)
- 3) Diamonds > 500 microns (Macro)
- 4) Diamonds < 500 microns (Micro)
- 5) Weight of Diamonds > 500 microns in milligrams (Wt+)
- 6) Weight of Diamonds >106 microns < 500 microns in milligrams (Wt-)
- 7) Number of QC/QA Tracers (-4750+425 microns) Recovered (QC 3)
- 8) Number of synthetic diamonds recovered (whole and fragments) (SYN)

Sample #	SWT	Sieve	Macro	Micro	Wt+	Wt-	QC 3	SYN
LEGEND 003 1/2	11.55	425	0	0	0	0	17/20	0
LEGEND 003 2/2	13.00	425	1	0	7.884	0	17/20	0
CAGE CLEANOUT	0.05	425	0	0	0	0	10/10	0
GRAVEL PURGE	0.15	425	0	0	0	0	9/10	0

Total carats in this group is: 0.03942

Caustic Fusion Diamond Description Detail

Apex Geoscience Ltd
 Attention: Dean Besserer
 PO #/Project:

July 12, 2007

Sample Number: LEGEND 003 2/2

Original Sample Weight in kilograms (SWT)	13.00
Bottom Sieve Size in microns (Sieve)	425
Diamonds > 500 microns (Macro)	1
Diamonds < 500 microns (Micro)	0
Weight of Diamonds > 500 microns in milligrams (Wt+)	7.884
Weight of Diamonds >106 microns < 500 microns in milligrams (Wt-)	0
Number of QC/QA Tracers (-4750+425 microns) Recovered (QC 3)	17/20
Number of synthetic diamonds recovered (whole and fragments) (SYN)	0

Fraction	Size Microns	Diamond Count	Length mm	Width mm	Height mm	Individual	Total Diamond	Diamond Description
						Diamond Weight mg	Weight in Fractions mg	
	+1180	1	2.10	1.58	1.46	7.884	7.884	Colorless, included, octahedron, twinned, resorbed, stepped/ribbed, serrate laminae, pits, hillocks.

Total octacarats in this sample is: 3,942,000.00

APPENDIX 7

DMS TAILINGS AUDIT RESULTS (SRC)

Test Report
Method DMS and CF

Apex Geoscience Ltd

Attention: Dean Besserer

PO #/Project:

Samples: 1

Date of Report: February 19, 2008

Date of Observation: December 17, 2007

- 1) DMS Feed Weight in kilograms (FWT)
- 2) DMS Tails Weight in kilograms (TWT)
- 3) DMS Concentrate Weight in kilograms (CWT)
- 4) CF Bottom Sieve Size in mm (Sieve)
- 5) Diamonds >0.50 mm (Macro)
- 6) Weight of Diamonds >0.50 mm in milligrams (WT(mg))
- 7) Weight of Diamonds >0.50 mm in carats (WT(ct))
- 8) Number of QC/QA Tracers (-4.750+0.425 mm) Recovered (QC3)

Sample #	FWT	TWT	CWT	Sieve	Macro	WT(mg)	WT(ct)	QC3
LEGEND TAILINGS AUDIT	7379	6840	9.85	0.50	0	0	0	4/10

There was a deviation from Method CF as these samples were processed after a DMS preparation. QC measures applied did not reveal representational results of processing recoveries due to the deviation. Investigation revealed that the sample processing was not compromised for the group. The laboratory has now implemented additional QC protocols for this method.