



FLINDERS
DIAMONDS

Australian Stock Exchange Announcement

FDL LOCATES ITS FIRST DIAMONDIFEROUS KIMBERLITE

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The Manager
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HIGHLIGHTS

Flinders Ranges Project, SA

- Eureka dyke 9f confirmed as Company's first diamondiferous kimberlite — the one metre wide dyke can be traced for at least two kilometres
- 12 new kimberlite dykes discovered in last two months
- Magnetics proving effective for identifying previously undetected kimberlites

Skeleton Flat Project, WA

- One five-kilometre long, 1.2 metre wide, kimberlite dyke confirmed in vicinity of previous alluvial diamond occurrences
- Five kimberlite samples collected from trenches for microdiamond determinations

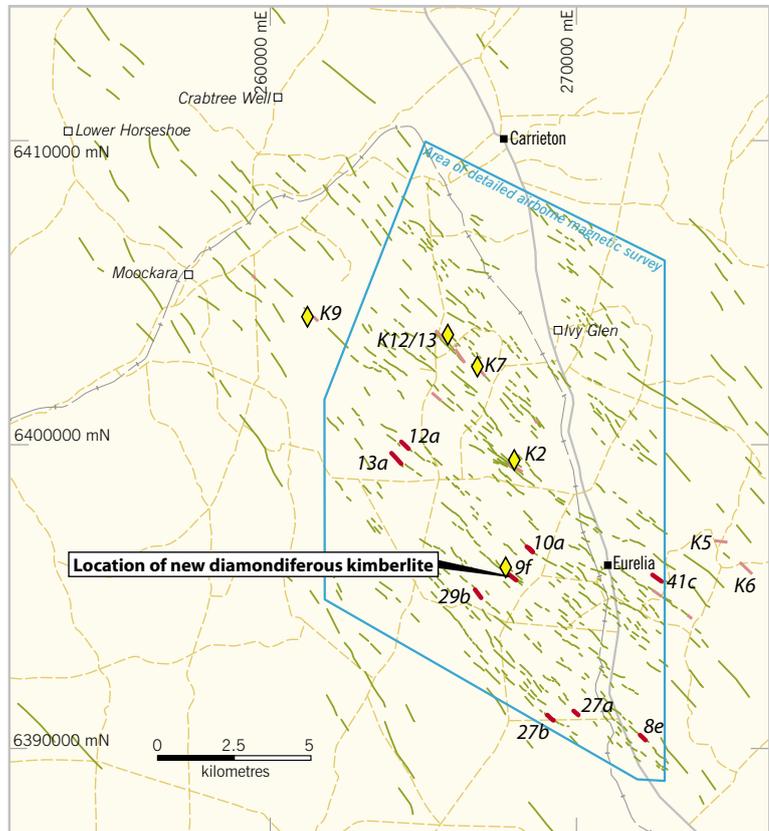
SUMMARY

Exploration in the past two months has resulted in the discovery of 12 kimberlite dykes in the Eureka area of the Flinders Ranges Project in South Australia and the confirmation of one kimberlite dyke in the Skeleton Flat Project in the Kimberley Region of Western Australia. Microdiamond determinations have been carried out on three of the dykes from Eureka and one of the samples returned two microdiamonds. Diamond testing is also being carried out on the remaining samples. A combination of airborne magnetics with follow-up ground magnetic traverses, is proving effective in discovering new kimberlites.

PROJECT DETAILS

Flinders Ranges Project

In the last six months, FDL has developed techniques employing airborne magnetic data to locate primary kimberlite in the Flinders Ranges. Interpretation of regional airborne magnetic images led to the recognition of three major kimberlite dyke swarms (see June 2003 Quarterly Report) and resulted in acquisition of the tenements referred to previously as the Jamestown and Nackara Projects. Together with the existing Springfield area, these areas



Kimberlite dyke discovered by FDL.....	9f	Main road.....	—
Kimberlite dyke discovered by Stockdale..	K7	Track.....	- - -
Magnetic features - possible dykes.....		Abandoned railway..	- - -
Diamond location.....	♦		

Figure 1 Kimberlite dyke targets in the Eureka area.

have been renamed the Flinders Ranges Project. In February 2003, FDL flew a 100 metre line-spaced airborne survey at Eureka and has now identified hundreds of linear magnetic targets, as shown on Figure 1.

Since June 2004, 105 airborne targets have been assessed by 403 line kilometres of ground magnetic traverses. Once ground located, the targets are being trenched with an excavator in areas of shallow cover. It may take several trenches to test each target and so far about half the targets tested have resulted in new kimberlite discoveries. At the others, either bedrock could not be reached, or no kimberlite was recognised. To date, 12 new kimberlite dykes have been discovered at Eureka. Eureka is considered highly prospective due to the occurrences of diamondiferous kimberlites previously discovered by De Beers

exploration subsidiary Stockdale Prospecting Limited in the late 1970s. These are shown in Figure 1.

Once a probable kimberlite is located, its kimberlitic chemistry is confirmed by chemical analysis for major and trace elements. Samples of approximately 20 kg are then sent for microdiamond determination. Results from dykes 8e, 9f and 27b (Figure 1) recently became available and sample 9f contained two microdiamonds. This diamond content is not in itself likely to be economic, but the result — *the first diamondiferous kimberlite identified by the Company* — is an important milestone in FDL's search for diamondiferous kimberlites and further work in the area is justified.

Sample 9f is part of a dyke about one metre wide which can be traced for at least two kilometres. The sample site is shown in Figure 2. It is anticipated that additional diamondiferous dykes will be located in the coming months. Follow up sampling of larger samples will be undertaken on those with the highest diamond contents.



Figure 2 Location of diamondiferous kimberlite sample 9f, the green-grey dyke is about one metre wide.

FDL has now demonstrated an ability to find diamondiferous kimberlites by following up airborne magnetic anomalies, rather than the more time consuming and expensive process of diamond indicator mineral sampling. A vital ingredient for this work is access to recent high-resolution, 100 metre line-spaced airborne magnetic surveys. Eurelia is only one of 22 known diamond occurrences in the 15,000 square kilometre Flinders Ranges Project area, so large areas will need to be covered by new surveys to help locate the many other primary sources likely to be present.

Skeleton Flat Project

The Skeleton Flat Project is located about 65 kilometres northwest of Halls Creek in the highly prospective Kimberley Region of Western Australia. In October and November 2003, FDL carried out a program of trenching to test five kimberlite pipe targets, but no kimberlites were intersected. After reassessing data from a 1996 high-resolution aeromagnetic survey a possible kimberlite dyke swarm was identified. The main target is a five kilometre long, north-northeast trending dyke that may be the source for

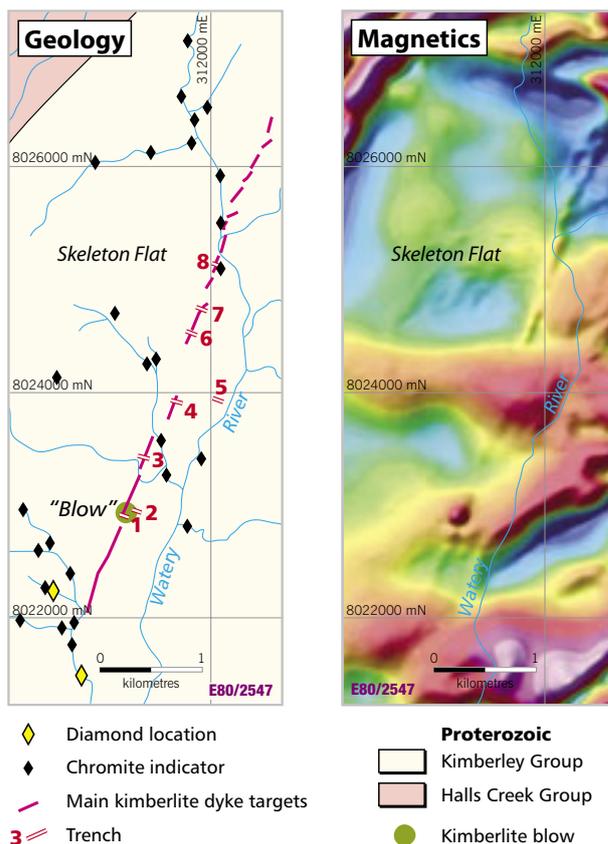


Figure 3 October kimberlite dyke sampling locations at Skeleton Flat.

the two macrodiamond localities near its southern end (Figure 3). Trenching and sampling of the dyke swarm was undertaken between 15 and 20 October 2004.

Ground magnetic traverses were very successful in locating the main dyke because the magnetic background is quiet and the main dyke is highly magnetic. The main dyke is near vertical and ranges in width from 0.8 to 1.8 metres, averaging about 1.2 metres. Other magnetic features, originally thought to be smaller parallel dykes, were not generally detectable by ground magnetic surveying, and are now thought to represent slightly magnetic faults. Eight trenches were dug, as shown on Figure 3. Five intersected a variety of green-blue-grey kimberlite facies material, while in one trench the overburden was too deep to reach the dyke and in two trenches no kimberlite was intersected. Trench 1 sampled a small kimberlite pipe or "blow" about 80 metres across that had been located by previous exploration in 1996. Five representative samples each of about 20 kg from trenches 1, 3, 4, 7 and 8 have been freighted to Perth for microdiamond testing.

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