



FLINDERS  
DIAMONDS

## Australian Stock Exchange Announcement

### **TWO AGREEMENTS ENABLE FLINDERS DIAMONDS TO COMMENCE A NEW VISION FOR DIAMOND EXPLORATION ON THE GAWLER CRATON**

30 April 2007

The Manager

Companies Announcements Office

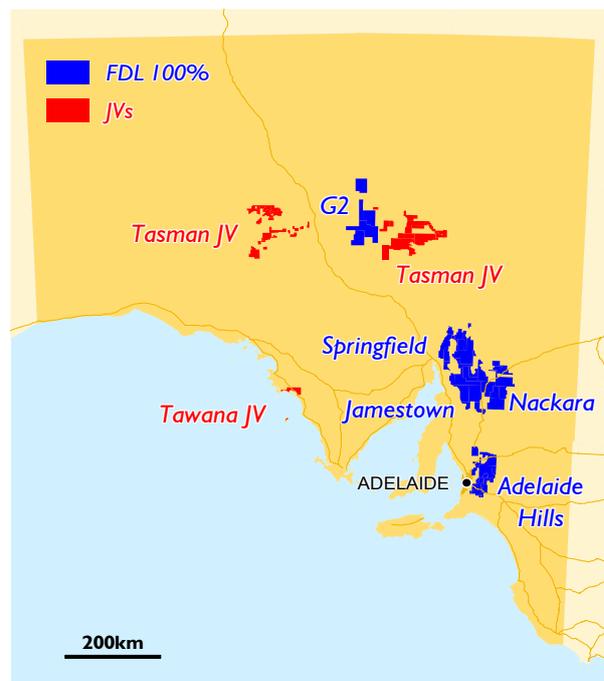
Australian Stock Exchange

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#### **Summary**

- *The Gawler Craton contains numerous diamonds and kimberlites and is a highly prospective region for diamondiferous kimberlites.*
- *Flinders Diamonds (FDL) has successfully developed high-resolution helimag surveys to locate 85 kimberlites in the Flinders Ranges - this technique will be applied to exploration through sedimentary cover on the Gawler Craton.*
- *On 27 April, FDL executed two new JV agreements in which it can earn up to a 70% interest. Together with its G2 project, FDL will have access to 33 granted exploration licences (ELs) covering 13,350 square kilometres of the prospective Gawler Craton (Figure 1).*
- *In a JV with Tawana Resources NL, FDL gained the right to spend \$2 million to earn a 70% interest in highly prospective ELs at Flinders Island and Venus Bay on the Southern Gawler Craton.*
- *In a JV with Tasman Resources NL, FDL gained the right to spend \$750,000 to earn a 70% interest in the diamond rights only in 26 ELs on the Central Gawler Craton.*
- *FDL already owns 100% of the diamond rights on five ELs in the Central Gawler Craton at its G2 Project.*

- *A program consisting of helimag and gravity surveys with drilling of resulting targets will commence in May.*
- *FDL will continue with its diamond exploration in the Flinders Ranges where it has recently agreed to purchase the bulk sampling plant it has been using.*



**Figure 1** Flinders Diamonds Projects in South Australia

### Gawler Craton - Diamond Potential

The Gawler Craton represents a geologically old and stable basement province which is similar to several parts of the world where “on-craton” diamond mines are concentrated (eg Kapvaal Craton in Southern Africa). From previous exploration, FDL is aware of at least 28 diamonds of up to one carat in weight discovered from 11 localities on the Gawler Craton. Exploration has also discovered 16 kimberlites - though none to date have been diamondiferous. Clearly, there are undiscovered diamondiferous kimberlites on the Gawler Craton.

Most the known kimberlites in South Australia have ages of between 160 and 220 million years (Jurassic to Upper Permian). Therefore, on the Gawler Craton, kimberlites are likely to be covered by younger sediments. This makes exploration, and also the chances of open-pitting a discovery, difficult if the sediments are over 100 metres thick.

FDL has developed a technique of very high resolution helimag surveys, which together with ground magnetics and trenching has located 85 new kimberlites in the last two and a half years in the Flinders Ranges. This technique will be applied to test numerous kimberlite-like magnetic anomalies that have been identified from PIRSA’s South Australian Exploration Initiative (SAEI) airborne magnetic surveys, generally flown at 400 metres line spacing.

### Flinders Ranges Project Continues

FDL believes it will locate numerous additional kimberlites in the Flinders Ranges and it is intending to actively continue with this program. The company has agreed to purchase the bulk sampling plant it has established near Terowie to treat the new kimberlite discoveries it is currently evaluating.

### Southern Gawler Craton JV with Tawana

On April 27 FDL, Tawana Resources NL (TAW) and Orogenic Exploration Pty Ltd (OEPL) executed an agreement which allows FDL to earn, over two four-year periods, a 70% interest in ELs 2927, Venus Bay, and 3200, Flinders Island, (Figure 2). The equity can be earned in two stages, firstly 50% for \$1 million with TAW and OEPL diluting to 30% and 20% respectively, secondly FDL has an option to earn a further 20% by spending a further \$1 million with TAW and OEPL diluting to 15% each. FDL may withdraw after spending \$250,000, OEPL is free carried until a decision to mine and FDL can remain as manager while it is sole contributor.

On Flinders Island (EL 3200) a significant exploration program was carried out between 2000 and 2005 by OEPL, TAW and De Beers. Seven diamonds were discovered and numerous diamond indicator minerals located with chemical compositions suggesting high diamond contents in their source rocks. Most of the holes drilled to test for kimberlites

were directly under the indicator mineral anomalies, and no kimberlites were located. FDL’s interpretation of the data is that the indicator minerals have been blown to their present position by the southwesterly prevailing winds which deposited their host Bridgewater Formation. FDL is intending to explore for source kimberlites upwind to the southwest in an area that has not been previously drill tested.

In the Venus Bay area (EL 2927), a number of promising diamond indicator mineral anomalies, have been located again over shallow Bridgewater Formation cover. Here it is FDL’s intention to fly a high-resolution helimag survey which it expects will indicate kimberlite targets that can be drill tested.

### Central Gawler Craton JV with Tasman

On April 27 FDL and Tasman Resources NL (TAS) executed an agreement which allows FDL to earn, over a four-year period, a 70% interest in the diamond rights only on the following 26 ELs on the Gawler Craton: Central Gawler ELs: 3306,

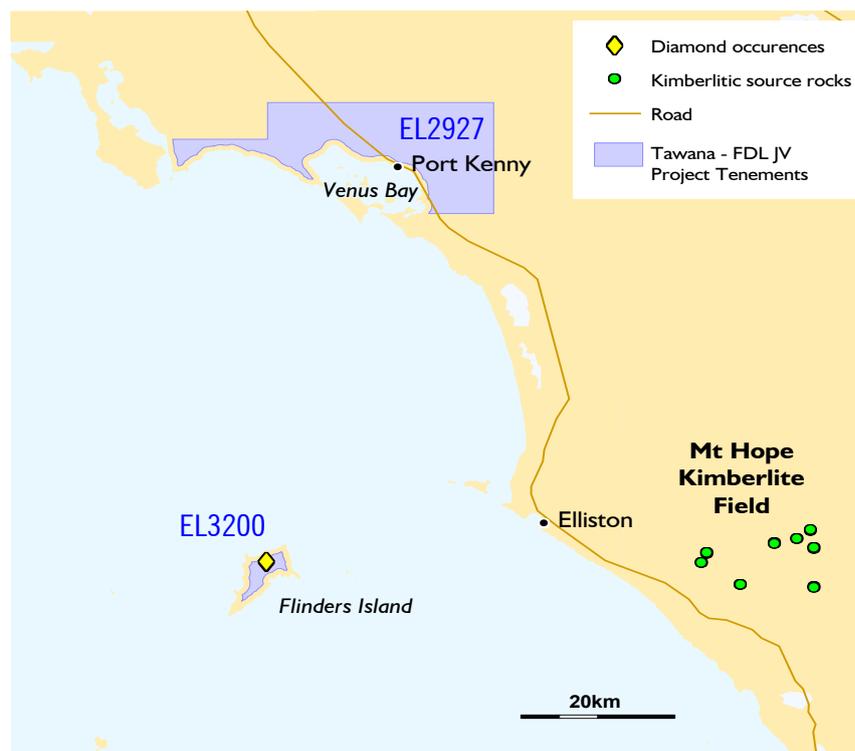
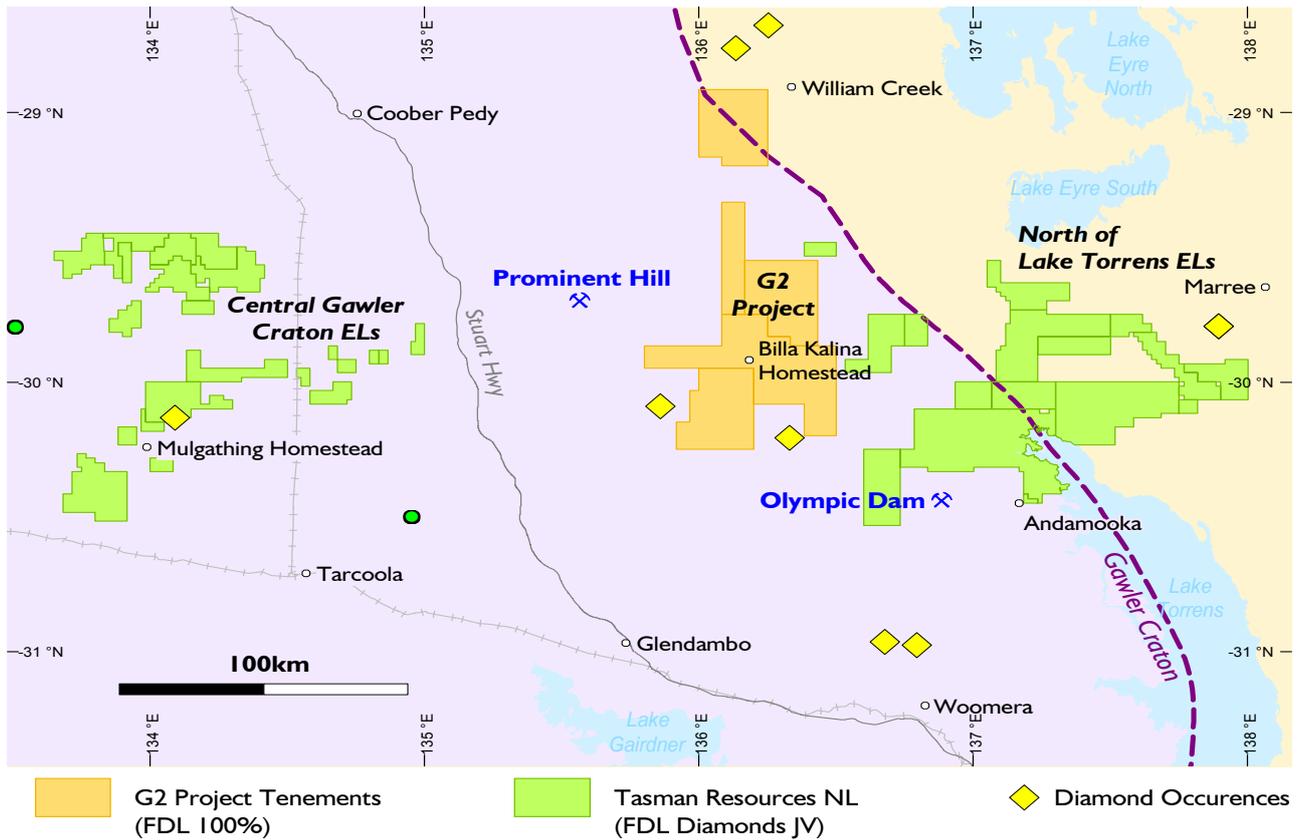


Figure 2 Location of Flinders Island and Venus Bay Exploration Licences.



**Figure 3** Location of Tasman Resources - FDL JV tenement areas on the Central Gawler Craton.

3339-3345, 3423, 3532 and 3712. North of Lake Torrens ELs: 2989, 3109, 3123, 3140, 3174, 3175, 3177, 3209, 3254, 3261, 3449, 3541, 3607, 3634, 3677 (Figure 3).

FDL may withdraw after spending \$100,000 and TAS is free carried during FDL's farm-in period. A 70/30 contributing joint venture will then be formed. FDL can remain as manager during its sole contributor period or while it has a majority interest in the diamond rights. TAS will pay all necessary tenement rents and FDL has agreed to cooperate with TAS and any other parties in their exploration for non-diamonds.

Several diamonds and diamond indicator minerals are known from the project areas and surrounds. However, they are not thought to be hosted by primary basement diamond source rocks. FDL's strategy is to follow up magnetic anomalies identified from interpretation of airborne magnetic data from PIRSA's SAEI surveys at 400-meter line spacing flown in the 1990's. Once an anomaly is identified, it will be re-flown

by a 1km square sized "postage stamp" helimag survey at 50-meter line spacing. Interpretation of the high-resolution data should enable a decision about if and where to drill a hole to test the target.

**FDL's Central Gawler Craton G2 Project**

FDL has identified several similar magnetic targets from SAEI data on its G2 project area. These will also be subject to "postage stamp" helimag surveys and drill testing if interesting targets are identified.

**Forward Program**

A helicopter has been arranged to carry out helimag surveys on the central Gawler Craton and at Venus Bay in May and June. Targets identified will be drill tested during the September Quarter of 2007. Some ground magnetics may be necessary to firm up on drill collar positions. Further Gravity surveys and drill testing of targets are planned for Flinders Island in the September or, depending on the weather, in the December Quarter.

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The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Dr K Wills who is a Fellow of the Australasian Institute of Mining and Metallurgy and, through his company KJ Exploration Pty Ltd, acts as a geological consultant to Flinders Diamonds Limited. Dr Wills has more than five years relevant experience in the style of mineralisation and types of deposit under consideration and consents to inclusion of the information in this report in the form and context in which it appears. He qualifies as Competent Person as defined in the 2004 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves".