



FLINDERS
DIAMONDS

Australian Stock Exchange Announcement

INTERPRETATION OF PETERBOROUGH HELIMAG DATA IDENTIFIES OVER 65 KIMBERLITE PIPE TARGETS

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The Manager

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Australian Stock Exchange

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Highlights

- Peterborough Survey locates 65 kimberlite pipe targets
- Over 200 kimberlite dyke targets including a new suite of northeast trending dyke targets
- 26 new kimberlites located in last three months including 10 pipes
- Flinders Ranges Project to now focus on kimberlite pipe exploration

Summary

Flinders Diamonds Limited (Flinders) has completed a first-pass interpretation of helimag data from the recent Peterborough survey. A total of 65 kimberlite pipe and over 200 kimberlite dyke targets have been identified. The dyke targets include a new suite of northeast trending dykes which may have different diamond contents to the northwest trending suite. Pipe targets are up to 500 metres across as at Franklyn, but most are in the 100 to 300 metre size range and are not visible on the previous 400 metre line-spaced airborne magnetic surveys. The large

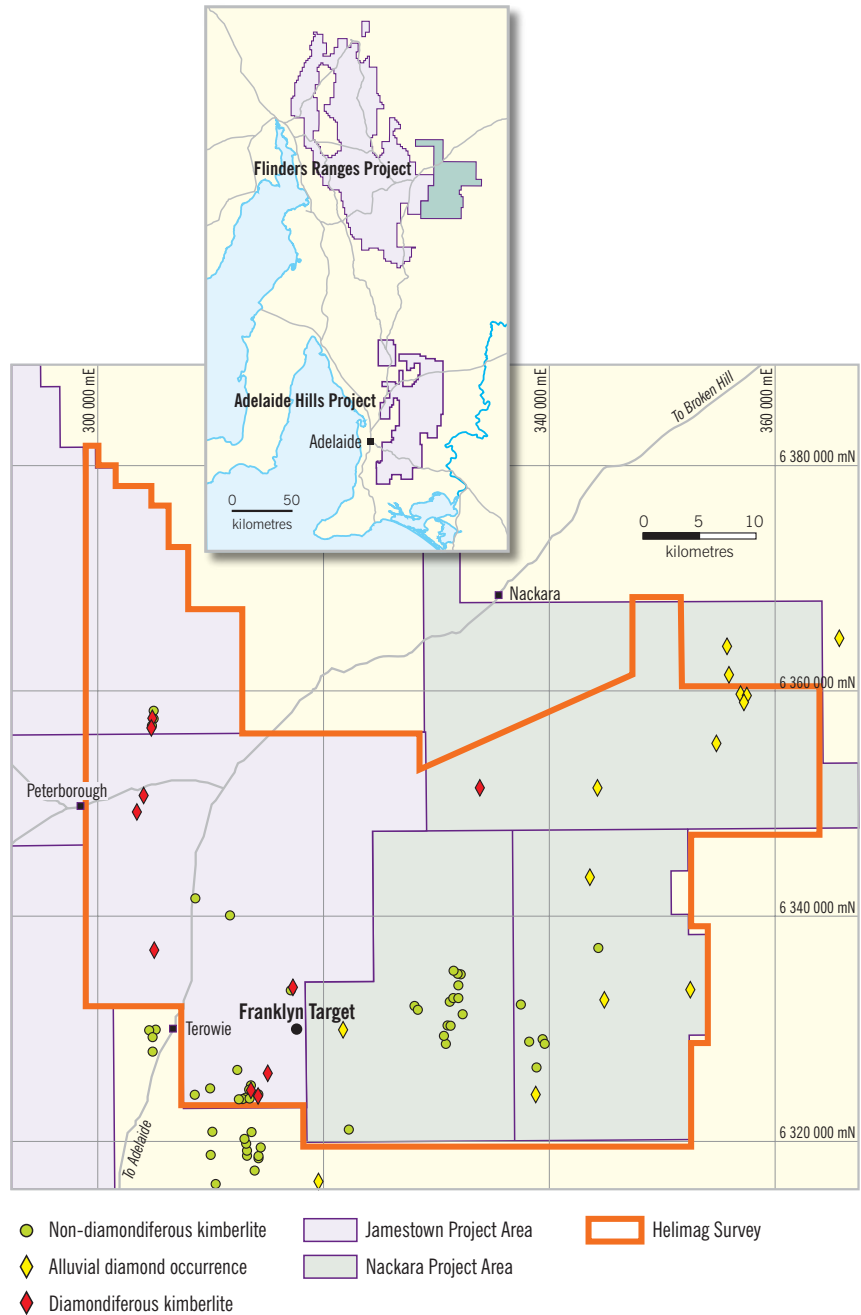


Figure 1 Location of the Peterborough and Nackara Helimag surveys.

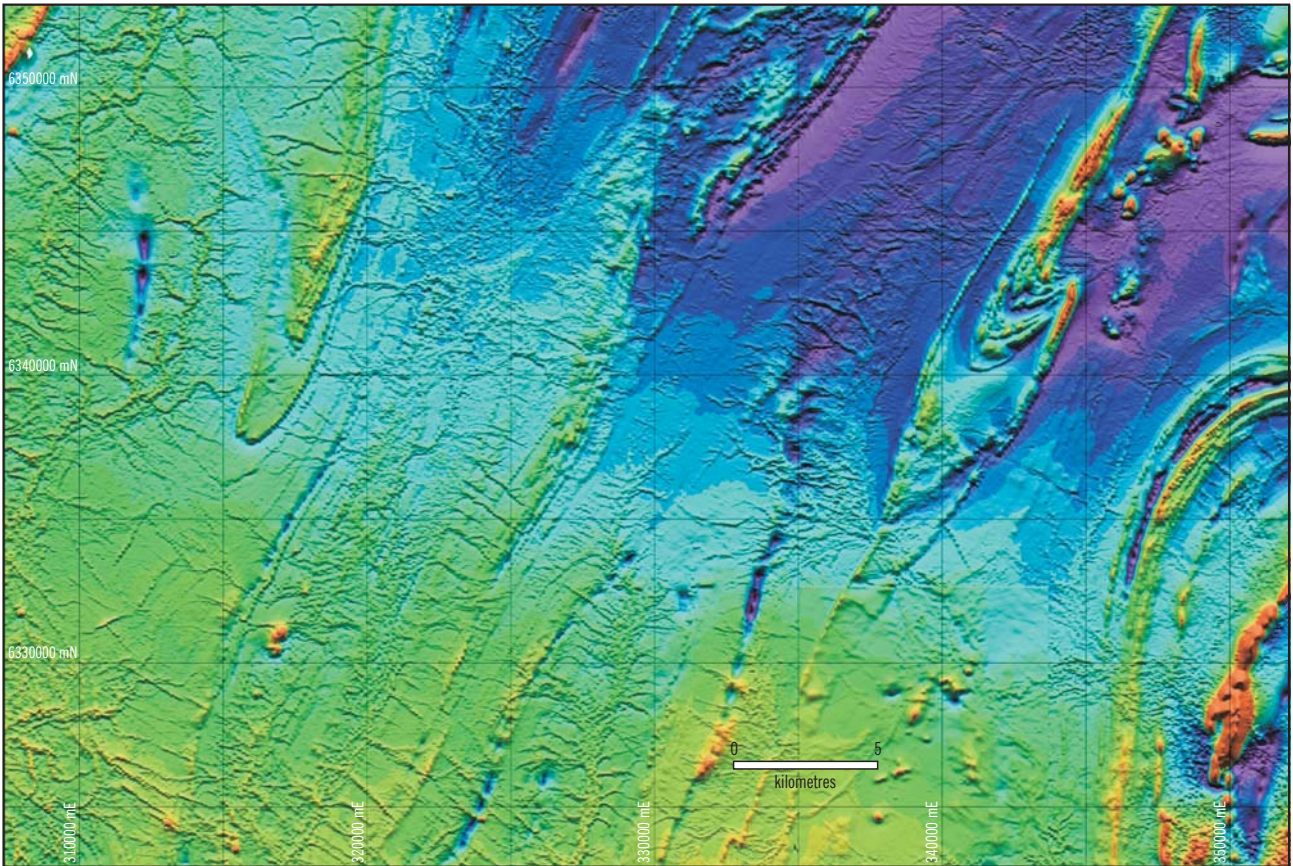


Figure 2 Helimag image from the combined Peterborough and Nackara surveys.

number of pipe targets has enabled Flinders to change the exploration focus of its Flinders Ranges diamond exploration project to a search for grade in kimberlite pipes.

Interpretation of Peterborough Helimag Survey Data

A first-pass interpretation of magnetic data has been carried out by a consultant geologist. This has involved data from both the Peterborough and previous Nackara Helimag surveys totalling some 22,600 line kilometres of data at 100 metre line spacing and 25 metre flying height. The new surveys have enabled identification of numerous invisible features on the best previous 400 metre line-spaced data. Location of the surveys is shown on Figure 1 and an image of most of the survey area is shown in Figure 2.

A summary map showing preliminary interpretation of targets is shown as Figure 3. A total of 65 first priority kimberlite pipe targets has been identified. They vary in size from the 48 hectare Franklyn Target to targets only 100 metres across. Targets have been checked against cultural features and anomalies located over sheds, buildings, pipelines etc have been discounted. Many targets lie along lines of kimberlite dykes and hence may be fissures or feeder systems associated with the dykes.

A large number of kimberlite dyke targets, over 200, have also been identified. Most trend generally northwest, but for the first time a swarm of possible dykes with a northeast trend has also been identified. Some are shown on Figure 3. Identification of

a new dyke swarm may be important as it could contain different diamond contents to previously identified dykes.

Due to Flinders ongoing exploration, it is now confident that most targets will represent kimberlite bodies. However, they still need to be ground located and sampled for microdiamonds before bulk sampling can generally be justified.

Recent Kimberlite Discoveries

Between 12 March and 29 May Flinders has been conducting ongoing ground magnetic surveys and trenching resulting targets. Forty targets have been trench tested with the discovery of 26 new kimberlite bodies which have been sampled and are awaiting microdiamond analysis. The new kimberlites were mainly located from the 2005 Nackara Helimag survey and

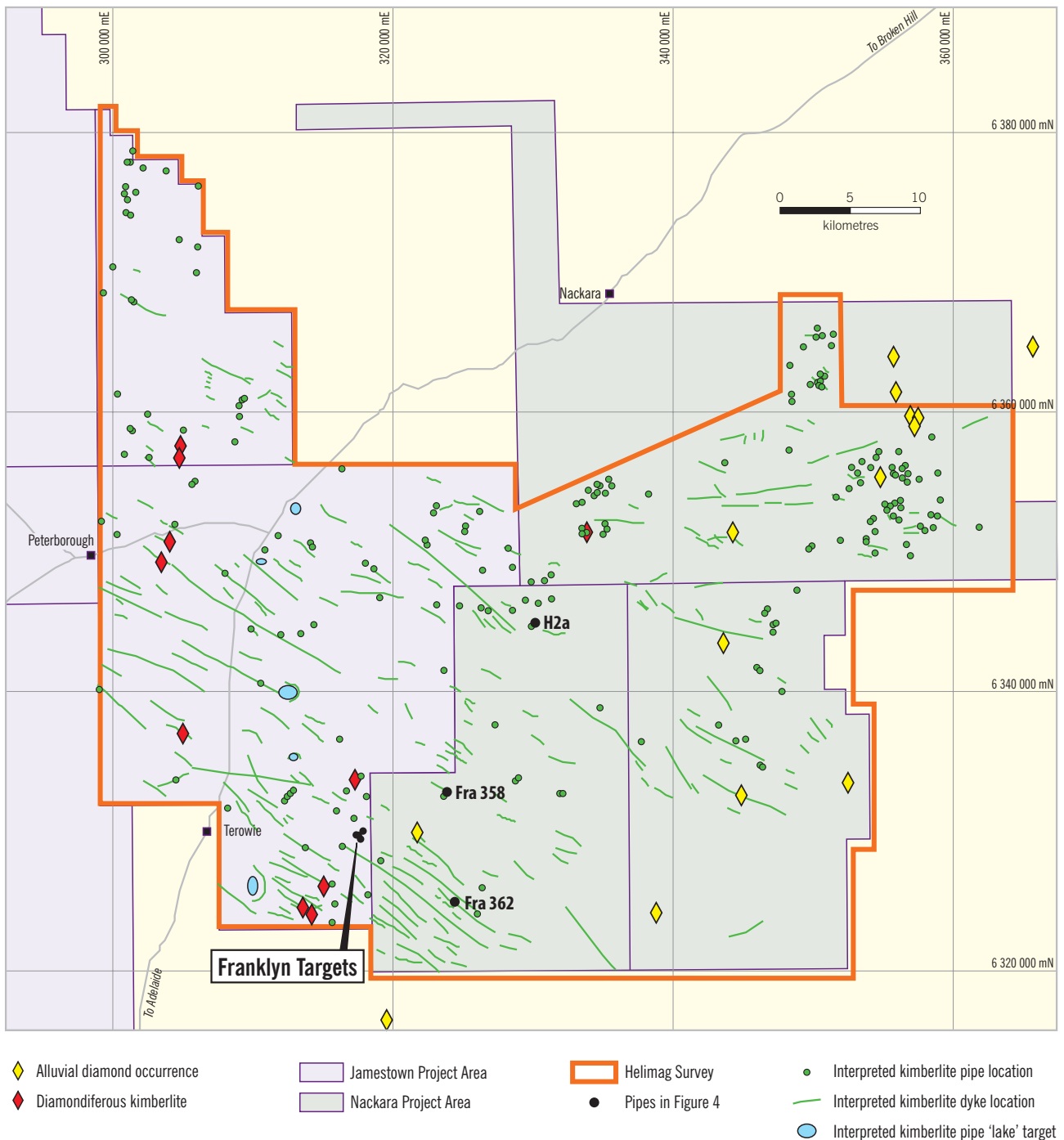


Figure 3 Preliminary interpretation of kimberlite targets from the Peterborough and Nackara Helimag surveys.

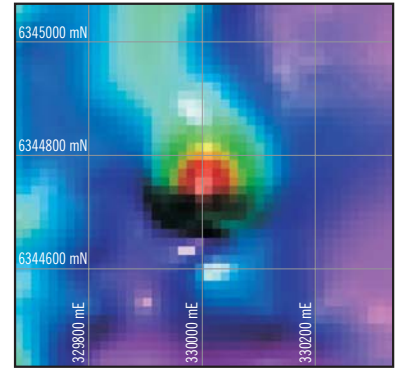
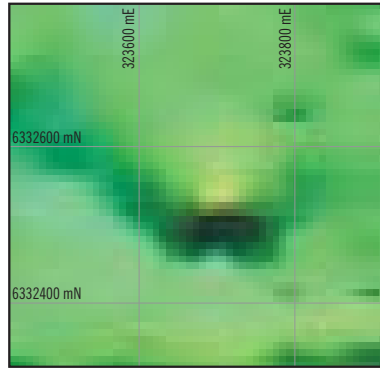
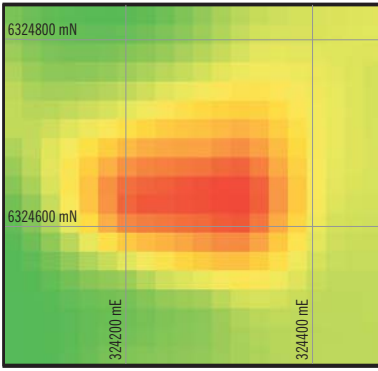
consist of 13 dykes, 10 pipes and 3 sills. The rate of 26 kimberlites in three months is the highest discovery rate yet achieved by Flinders and it is believed this can be sustained in the near future. The ratio of pipe to dyke discoveries is also the highest achieved to date

and confirms Flinders ability to focus on pipes in future. A selection of three recent pipe discoveries is illustrated by both helimag and ground mag images on Figure 4.

Implications of Results

The large number of kimberlite pipe and fissure targets identified has enabled Flinders to change the focus of its Flinders Ranges diamond exploration project to a search for grade in kimberlite pipes. Kimberlite pipes,

Magnetic images from the Helimag Survey



Images from ground magnetic surveys

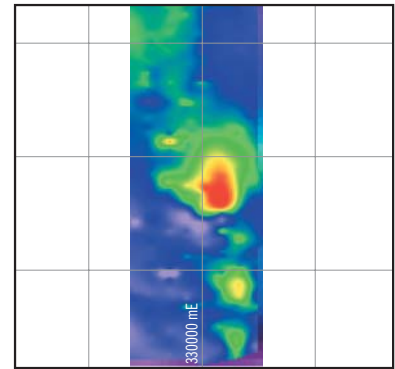
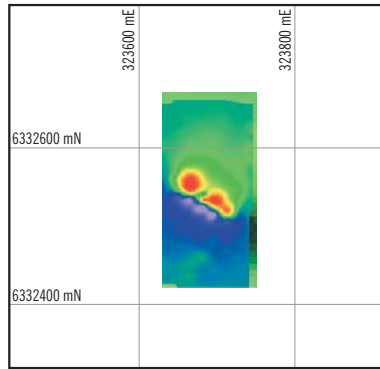
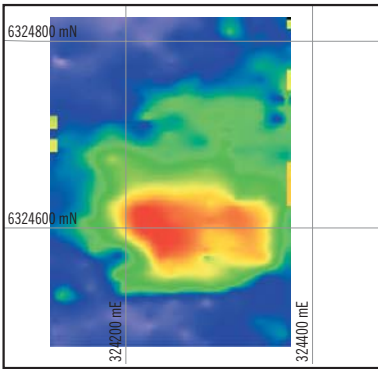


Fig 4a Fra 362

Fig 4b Fra 358

Fig 4c Fra H2a

Figure 4 Helimag and ground magnetic images from three recently-discovered kimberlite pipe

if they contain economic quantities of diamonds, are more likely to be mineable as an open cut with lower operating costs than an underground mine. A focus on kimberlite pipes and fissures therefore increases the chances of a commercial discovery.

Future Exploration

As now established, the next stage of exploration will consist of ground magnetic surveys to accurately locate the position of targets on the ground with digital GPS control. Ground magnetic targets will be tested by excavator pits, and if kimberlites are

discovered they will be confirmed by chemical analysis and tested for microdiamonds. Any kimberlites reporting high microdiamond grades will be tested by bulk sampling.

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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 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".