

# ASX ANNOUNCEMENT

11 February 2010



## Encouraging microdiamond results from Pilbara project and Eurelia project

### highlights

- A microdiamond has been found in a gravel sample from Flinders Mines' (FMS) Pilbara iron ore project area.
- Diamond identification has been verified by observation and scanning electron microscope.
- Significant additional concentrations of microdiamonds continue to be found in new kimberlite samples from Flinders Mines' Eurelia project in South Australia.

#### PILBARA DIAMOND PROJECT, WA

E47/1560 and E47/1524

*Flinders Mines Limited (FMS) 100% diamond rights*

Results have been returned from Diotech Laboratory in Perth for a sample taken in the Pilbara Project during July 2009 for diamond indicator mineral extraction (sample 500005). This project area includes several adjacent tenements which are part of a commodity swap agreement between Flinders Mines and Fortescue Metals Group. The sample returned a positive result for one microdiamond. This was a gravel sample from tenement E47/1560, and was taken from drainage works to investigate a circular, possible volcanic pipe feature visible in aerial photographs (Figure 1). The circular feature has a diameter of approximately 500 metres and extends across the boundary of tenements E47/1560 and E47/1524. This new microdiamond discovery is a significant find for Flinders Mines, and gives further encouragement for diamond exploration

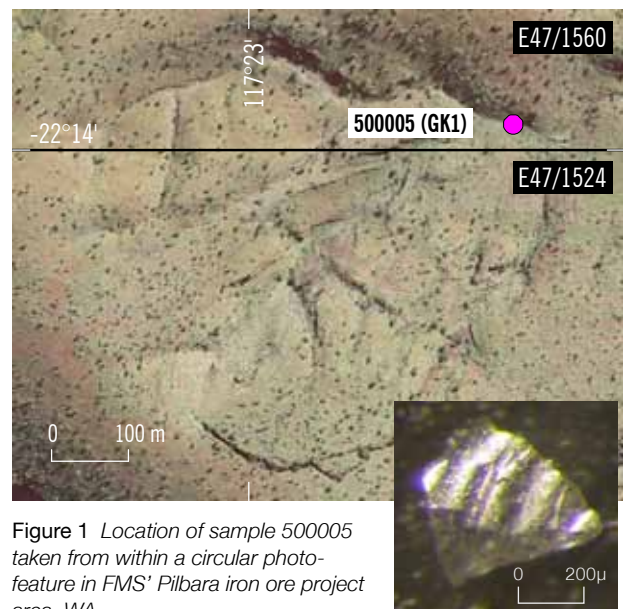


Figure 1 Location of sample 500005 taken from within a circular photo-feature in FMS' Pilbara iron ore project area, WA.

in the Pilbara region. Follow up sampling will be undertaken to confirm results in this and other nearby circular topographic and magnetic features.

## FLINDERS RANGES DIAMOND PROJECT, SA

Springfield Project EL 4208 Gilbert Hill

Flinders Mines Limited (FMS) 100% diamond rights

### EURELIA DIAMOND DISCOVERY

Five new microdiamond counts have been received from the Eurelia area, and all have returned positive results for microdiamonds (Table 1). Four of the samples were taken along the diamondiferous Eurelia K3 trend and one along the Bel Forest K7-K4 trend. The highest microdiamond count was from sample 100148, which yielded 63 microdiamonds from a 20 kilogram sample (Table 1). This is the highest microdiamond count to date and confirms

that bulk sampling is justified. The diamond results to date show distinctive crystal shapes on the K3 trend and rounded shapes on the Bel Forest K7-K4 trend. This suggests a notable difference in the geological evolution of each kimberlite trend. These results continue to confirm the positive microdiamond results reported in the December 2009 quarterly report.

Table 1 Microdiamond counts for five Eurelia kimberlite samples

(Microdiamond defined as less than 0.5 millimetres)

FMS number	Head weight (kilograms)	Total micro-diamond raw counts	Normalised counts per 20 kilograms	Kimberlite trend or body	Maximum size (mm)
EU-100148	19.9	63	63	K7-K4	0.60
EU-100153	24.2	26	21	K3	0.55
EU-100154	20.4	12	12	K3	0.38
EU-100155	24.2	69	57	K3	0.38
EU-100156	25.8	76	59	K3	0.63

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