

5 September 2013

New High Quality Pilbara Iron Intersections

Pilbara Iron Ore Project (PIOP), Western Australia

highlights

- *Excellent results from new Brockman Iron Deposit (BID) drilling program*
- *Potential to increase existing PIOP high quality DSO resource*
- *Shallow, low cost tonnes will translate into saleable inventory*
- *A significant number of high priority BID targets still remain untested*



Tenements M47/1451 (Blacksmith) and E47/1560 (Anvil)

Flinders Mines Limited (FMS) 100%

2013 BID DRILLING UPDATE

Flinders Mines Limited (ASX: FMS) is pleased to announce a significant number of high quality Brockman Iron Deposit (BID) intersections from new drilling for the Delta target area on the eastern side of the Blacksmith tenement, part of the Company's wholly owned Pilbara Iron Ore Project in Western Australia.

BID mineralisation at the PIOP has cost and timing advantages to Flinders Mines. This is predominantly due to the BID mineralisation being direct shipping ore (DSO) quality requiring no beneficiation, thus reducing processing costs. In addition, this BID material would likely be mined at a lower strip ratio than other parts of the PIOP global resource, leading to lower mining costs.

The mineralisation intersected in this new 2013 drilling program lies outside the existing resource and will form part of the next resource estimate.

Flinders anticipates that a high proportion of any increase to BID ore tonnage will directly translate into the saleable ore inventory.

The latest results are from a follow-up Reverse Circulation (RC) drilling program targeted at defining additional BID mineralisation at the PIOP. The small drilling program targeted areas of known open mineralisation and targets identified on the flanks of the Delta valley. A total of 71 holes for 2,484m were completed (Figure 1).

All drilling has been completed and assays received. Drill rates were faster than expected and resulted in the drilling program finishing ahead of schedule and under budget. This work represents part of testing the current PIOP Exploration Target* of 180 – 280Mt (at 55 to 58% Fe). Additional extensions and high priority targets still remain untested.

Table 1 Pilbara Iron Ore Project significant 2013 reverse circulation drilling intersections.

| Hole | Easting (MGA Zone 50) | Northing (MGA Zone 50) | From (m) | To (m) | Interval (m) | Fe % | SiO ₂ % | Al ₂ O ₃ % | P% | LOI% |
|----------|-----------------------|------------------------|----------|--------|--------------|-------|--------------------|----------------------------------|-------|-------|
| HPRC5482 | 549788 | 7550184 | 0 | 10 | 10 | 61.32 | 3.42 | 2.88 | 0.087 | 4.63 |
| HPRC5483 | 549822 | 7550161 | 0 | 18 | 18 | 58.68 | 2.94 | 2.60 | 0.127 | 9.58 |
| HPRC5503 | 551549 | 7551082 | 0 | 12 | 12 | 61.39 | 6.30 | 3.00 | 0.056 | 1.72 |
| HPRC5509 | 551310 | 7550721 | 0 | 26 | 26 | 59.20 | 2.29 | 2.52 | 0.138 | 9.59 |
| HPRC5510 | 551309 | 7550648 | 0 | 18 | 18 | 61.47 | 1.50 | 1.57 | 0.121 | 8.13 |
| HPRC5511 | 551311 | 7550786 | 0 | 18 | 18 | 61.27 | 2.76 | 1.74 | 0.116 | 6.77 |
| HPRC5514 | 551254 | 7550857 | 0 | 10 | 10 | 58.12 | 4.35 | 1.67 | 0.083 | 9.92 |
| HPRC5529 | 550401 | 7553382 | 0 | 30 | 30 | 59.16 | 2.43 | 2.53 | 0.147 | 9.51 |
| HPRC5530 | 550473 | 7553311 | 4 | 34 | 30 | 57.34 | 7.07 | 3.36 | 0.089 | 6.57 |
| incl | | | 10 | 22 | 12 | 61.64 | 2.61 | 2.09 | 0.094 | 5.90 |
| HPRC5531 | 550608 | 7553430 | 2 | 52 | 50 | 56.17 | 7.09 | 5.71 | 0.084 | 5.85 |
| incl | | | 24 | 48 | 24 | 60.14 | 2.76 | 3.37 | 0.099 | 6.81 |
| HPRC5533 | 551127 | 7553443 | 22 | 62 | 40 | 56.97 | 7.77 | 4.40 | 0.084 | 5.55 |
| incl | | | 34 | 60 | 26 | 59.32 | 3.71 | 3.84 | 0.103 | 6.81 |
| HPRC5535 | 551169 | 7553374 | 30 | 76 | 46 | 57.94 | 8.21 | 4.03 | 0.091 | 4.02 |
| incl | | | 44 | 76 | 32 | 60.42 | 4.43 | 3.39 | 0.111 | 4.89 |
| HPRC5539 | 549829 | 7552577 | 0 | 16 | 16 | 59.31 | 3.66 | 3.06 | 0.128 | 7.71 |
| HPRC5540 | 549734 | 7552653 | 0 | 16 | 16 | 59.07 | 4.95 | 2.32 | 0.104 | 7.96 |
| HPRC5543 | 552824 | 7550841 | 0 | 30 | 30 | 56.67 | 3.96 | 2.89 | 0.101 | 11.38 |



RC drilling on the flanks of Delta valley.

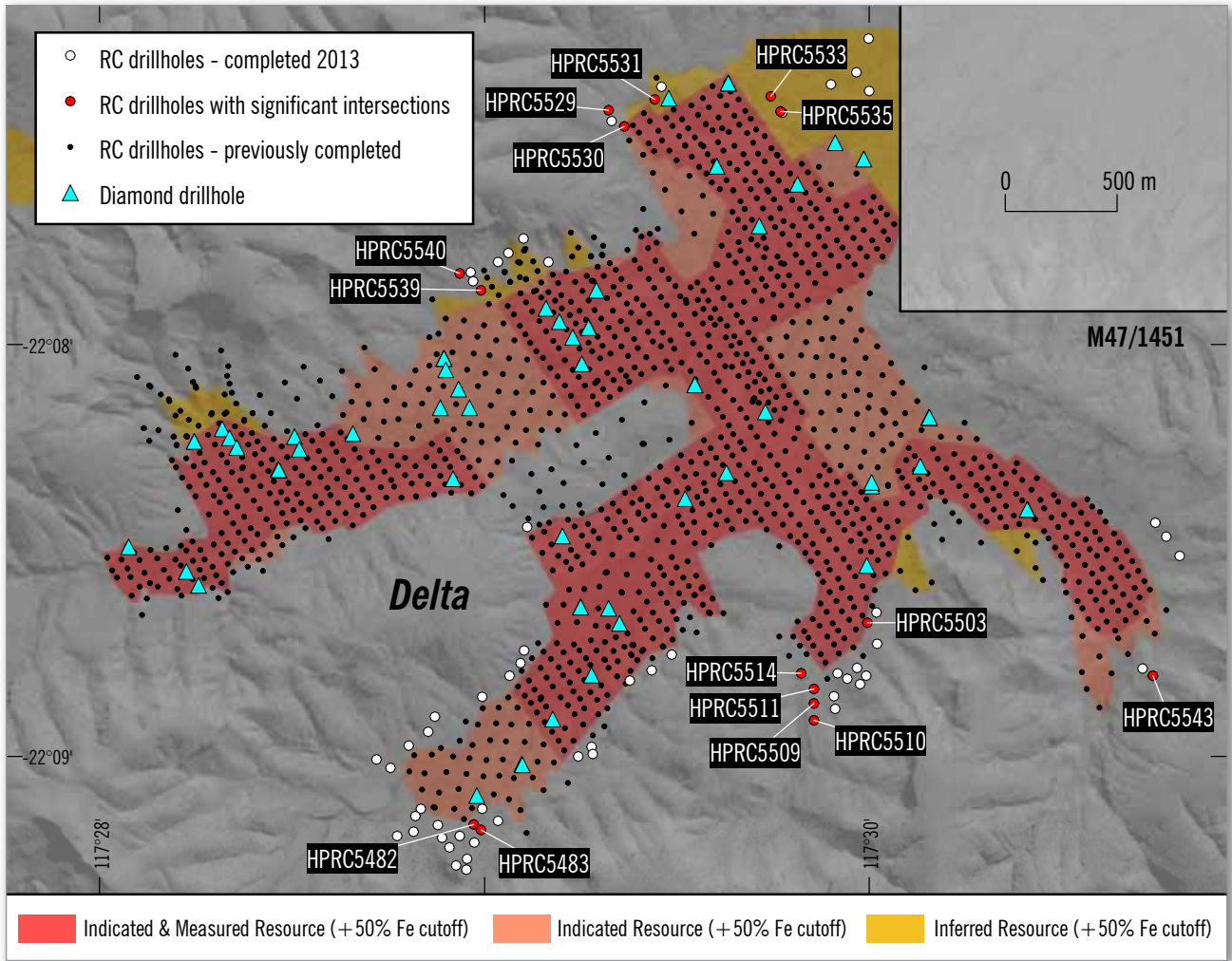


Figure 1 Showing the relationship between the recent significant RC drilling intersections, the BID target zones and the existing Mineral Resource estimate at Delta.

RESULTS

These results highlight good grades, thicknesses and close proximity to surface. The significant intersections from the program are shown in Table 1. Flinders is encouraged by the significant number of the high quality BID intersections and that they occur at several target areas. For example, several excellent intersections were encountered at a large zone on the southern flank of Delta South, including HPRC5510 with 18m at 61.5% Fe and HPRC5511 with 18m @ 61.3% Fe.

Drilling adjacent to known BID mineralisation in Delta North has returned some excellent intersections including HPRC5529 and HPRC5540, with 30m @ 59.2% Fe and 16m @ 59.1% Fe respectively. The majority of the new intersections are from surface.

ONGOING EXPLORATION

Further drilling is likely to await the outcome of ongoing discussions with third parties. This dialogue has centered on access to rail and port infrastructure as well as the provision of project funding and offtake contracts. Continuing discussions with third parties have now advanced to the due diligence phase.

ROBERT KENNEDY
EXECUTIVE CHAIRMAN

5 September 2013

For further information please contact:

Mr Robert Kennedy - Executive Chairman
Flinders Mines Limited
Ph: 08 8132 7950
Email: info@flindersmines.com

Mr Duncan Gordon – Executive Director
Adelaide Equity Partners
Ph: 08 8232 8800 or 0404 006 444
Email: dgordon@adelaideequity.com.au

QUALIFYING STATEMENTS

Forward Looking Statements

This release may include forward-looking statements. These forward-looking statements are based on management's expectations and beliefs concerning future events as of the time of the release of this document. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, some of which are outside the control of Flinders Mines Limited, that could cause actual results to differ materially from such statements. Flinders Mines Limited makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect events or circumstances after the date of this release.

***Exploration Targets**

Exploration Targets are reported according to Clause 18 of the JORC Code. This means that the potential quantity and grade is conceptual in nature and that considerable further exploration, particularly drilling, is necessary before any Identified Mineral Resource can be reported. It is uncertain if further exploration will lead to a larger, smaller or any Mineral Resource.

Competent Persons

The information in this report that relates to Exploration Results is based on information compiled by Mr Nick Corlis who is a member of the Australian Institute of Geoscientists and a full-time employee of Flinders Mines Limited. Nick Corlis has sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Nick Corlis consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Dr Graeme McDonald who is a member of the Australian Institute of Mining and Metallurgy and a full-time employee of Flinders Mines Limited. Graeme McDonald has sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Graeme McDonald consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.