



The Manager
Companies Announcements Office
Australian Securities Exchange
20 Bridge Street SYDNEY NSW 2000

WEEKLY

IRON ORE DRILLING REPORT – No. 17

HAMERSLEY PROJECT, WA



HIGHLIGHTS

HAMERSLEY TENEMENT E47/882 Flinders Mines Limited (FMS) 100%

- *Approximately two-thirds of assays have now been received.*
- *High-grade Banded Iron Deposit (BID) mineralisation is now confirmed in four Target Areas and 39% of Area D holes.*
- *BID mineralisation is present under Channel Iron Deposit (CID) mineralisation and was not included in initial Exploration Target estimates by Dr R Russell. BID mineralisation is a likely source of additional high grade direct shipping ore (DSO).*
- *First assays confirm presence of CID mineralisation in area B.*

Drilling Statistics

Table 1 Completed Reverse Circulation drillholes in each area.

Target Area	No of Holes	Metres Drilled
Area A	0	0
Area B	34	1,208
Area C	103	5,027
Area D	67	3,011
Area E	97	5,793
Total	301	15,039

Inferred Resources

All assays have been received for Area D. Technical evaluation is currently being carried out by FMS to aid in the development of an Inferred Resource. Once this interpretation and evaluation is complete, Golder & Associates will determine the Inferred Resource for Area D.

All assays for Area E are due to be returned soon which will allow for interpretation and completion of an Inferred Resource for Area E. Inferred Resources will be completed for Areas B and C once all assays are returned.

Drilling Activity

Flinders Mines Limited's Hamersley Iron Ore Project in WA comprises five target areas: Areas A, B, C, D and E (see Figure 1).

Since Weekly Report 16, released on 17 December 2008, no further drilling has

Number of samples sent for assay	8,167
Number of assays received	5,288
Number of assay results awaited	2,879

Note: This table includes previously reported numbers.

*Note: These 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.

List of received assayed intersections in week

Table 2

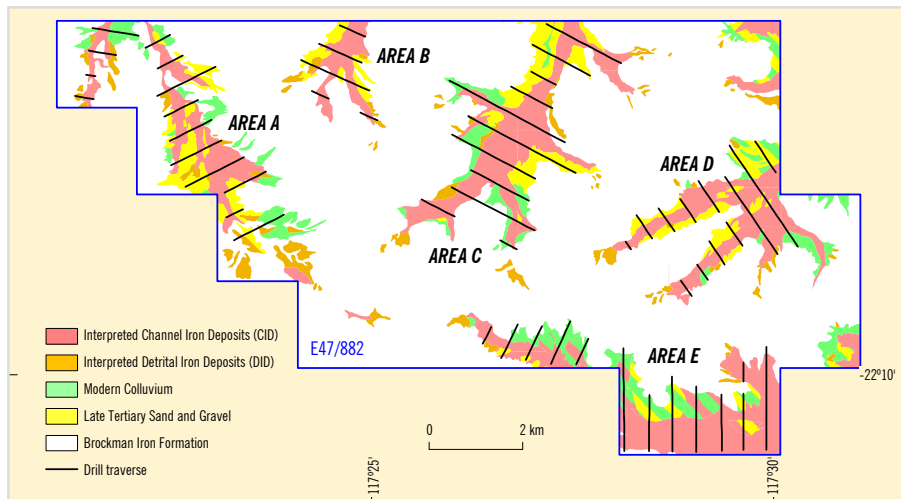


Figure 1 Hamersley E47/882 showing the location of Target Areas.

occurred. A total of 1460 assays were received for 12 holes in Area B, 21 holes in Area C, 14 holes in Area D and 16 holes in Area E. This now takes the total of assays received to 65%. The significant results are presented in Table 2.

Bedded Iron Deposit Mineralisation (BID)

The geological model has been refined since the completion of drilling in December 2008 and importantly the availability of over 5,000 assays. The iron mineralisation consists of two key

styles; BID and CID. BID is a weathered product of the basement Banded Iron Formation and is located beneath the CID. The term CID is used to include a higher grade pisolite dominant mineralisation located below a unit composed of lower grade fragmental hematite, often referred to as Detrital Iron Deposit (DID).

The discovery of BID, or “Brockman Ore”, at the Hamersley Project is of importance since it represents a DSO material. In addition the BID is extensive in Area D and the early assays from Areas B and C indicate that

BID may be extensive in these areas as well.

Area E

Laboratory results were received for 16 holes in Area E. These holes are all from the western headwaters and intersect CID mineralisation. Drill hole HRC99 intersected 10m at 59.8% iron, within a 24m intersection at 55.8% iron. Minor BID mineralisation was intersected in holes HRC108 and HRC109 on Line 7. HRC109 intersected 16m at 61.5% iron, 3.8% aluminium and 4.1% silica within a wider zone (26m) at 59.0% iron.

Area D

Laboratory results were received for 14 holes in Area D. These holes are from a variety of locations in Area D. Further BID mineralisation was intersected in a number of holes providing support for an extensive region of BID mineralisation identified within this Area. HRC267 intersected 18m at 59.2% iron from 18m and HRC266 intersected 28m at 58.6% iron, including 18m at 61.2% iron. Based on assay results to date, there are 26 holes in Area D which have intersected BID mineralisation. This represents 39% of the total holes drilled.

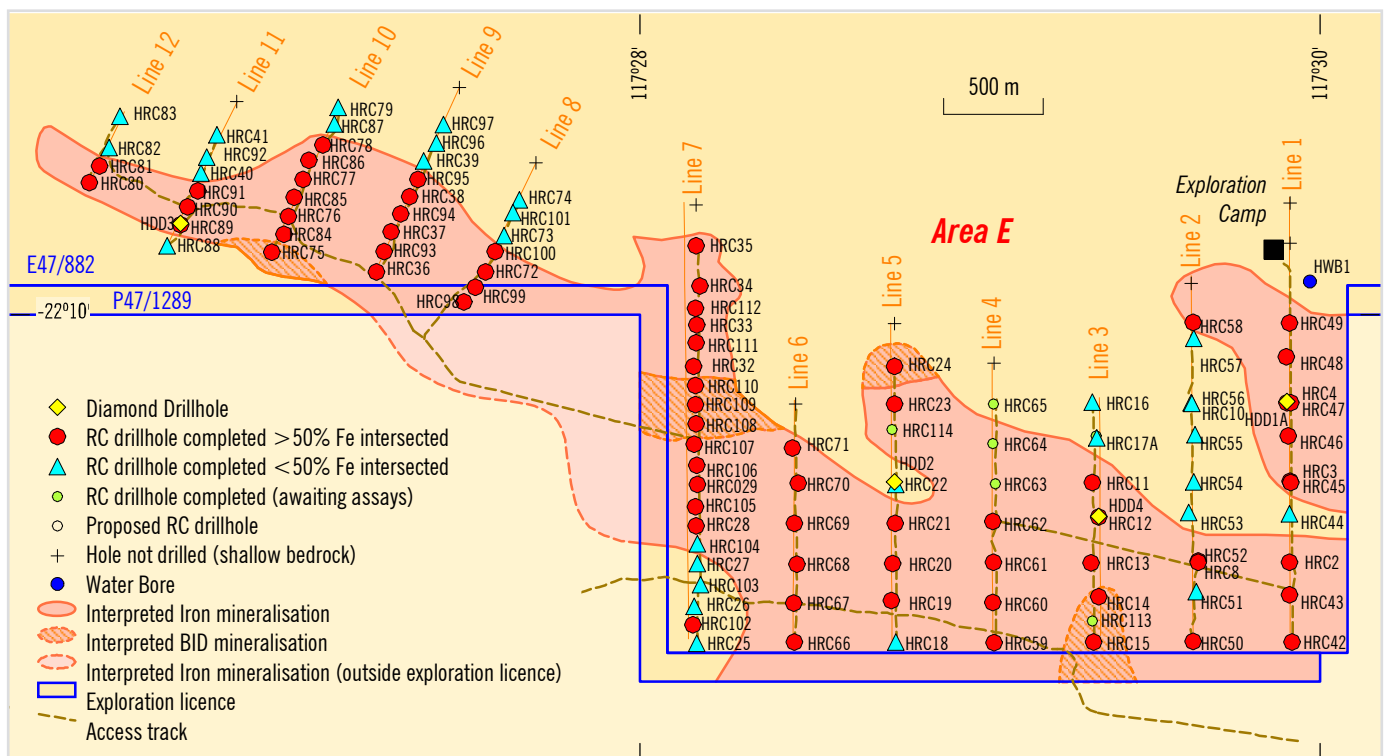


Figure 2 Current Diamond drilling and completed RC drilling in Area E.

Drilling Intersections

Table 2: List of significant RC drillhole intersections (assays received).

Hole ID	From (m)	To (m)	Interval (m)	Fe (%)	Al ₂ O ₃ (%)	SiO ₂ (%)	P (%)	LOI (%)	Target Area
HPRC0098	28	54	26	53.46	6.56	10.96	0.065	4.82	E
incl	46	54	8	55.38	4.50	7.08	0.095	8.80	E
HPRC0099	24	48	24	55.84	4.86	11.41	0.058	2.98	E
incl	38	48	10	59.76	4.49	5.85	0.062	3.33	E
HPRC0102	26	28	2	54.50	4.63	5.99	0.096	10.80	E
HPRC0105	28	34	6	51.67	7.80	8.19	0.063	9.77	E
HPRC0106	54	58	4	55.10	3.40	7.93	0.072	9.59	E
HPRC0108	34	60	26	59.03	4.12	7.24	0.062	3.57	E
incl	42	58	16	61.54	3.82	4.12	0.068	3.32	E
HPRC0109	30	46	16	55.14	4.42	11.33	0.064	4.66	E
incl	36	44	8	58.93	4.21	6.13	0.071	4.56	E
HPRC0242	0	12	12	58.08	5.35	7.42	0.050	3.24	D
HPRC0261	8	32	24	59.37	4.71	7.75	0.052	1.92	D
incl	22	32	10	61.80	4.61	4.50	0.048	1.77	D
HPRC0266	30	58	28	58.59	3.42	8.27	0.082	3.63	D
incl	36	54	18	61.22	3.49	4.78	0.081	3.19	D
HPRC0309	18	52	34	55.78	3.97	7.66	0.093	8.19	C
incl	24	48	24	56.88	3.76	5.10	0.104	9.44	C
HPRC0312	44	60	16	55.18	5.74	7.19	0.073	7.29	C
incl	48	60	12	56.57	4.57	5.53	0.086	8.22	C
HPRC0314	54	66	12	53.40	4.73	10.99	0.096	6.77	C
HPRC0318	34	60	26	59.13	3.85	8.56	0.058	2.07	C
incl	42	58	16	62.46	3.29	4.81	0.060	1.54	C
HPRC0319	10	28	18	57.48	2.34	4.52	0.107	10.24	C
HPRC0325	6	34	28	56.50	2.99	8.54	0.085	6.98	C
incl	16	34	18	58.00	2.25	4.65	0.109	9.40	C
HPRC0326	20	44	24	55.00	3.52	9.35	0.093	7.59	C
HPRC0402	22	48	26	56.55	4.20	10.45	0.068	3.65	B
incl	30	46	16	59.86	4.21	5.73	0.071	3.64	B
	54	58	4	53.40	2.40	9.89	0.109	10.70	B
HPRC0412	8	30	22	63.05	3.26	4.09	0.056	1.71	B

NB: These intersections are based on an Fe cut-off grade of 50%, with no top cut, and a maximum internal dilution of 2m. Analysis via XRF fusion at SGS Laboratories. LOI = Loss of ignition.

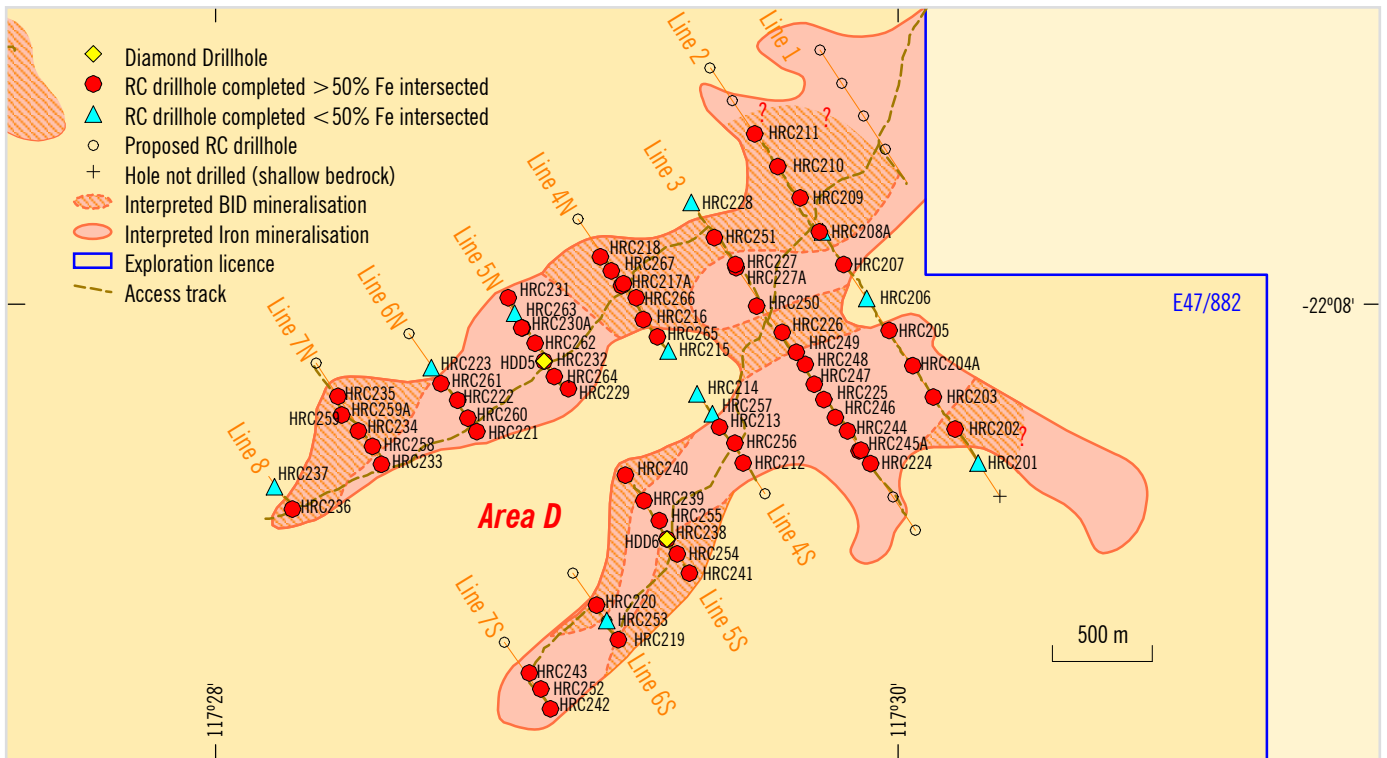


Figure 3 Current Diamond drilling and completed RC drilling in Area D.

Area C

Laboratory results were received for 21 holes in Area C. Drill hole HRC318 intersected 16m of CID mineralisation at 62.5% iron, within a 26m intersection at 59.1% iron. HRC325 intersected 28m of both CID and BID mineralisation from 6m below the surface at 56.5% iron with low aluminium and silica. Included within this was 18m at 58.0% iron. Together with holes HRC324 and HRC326, the eastern end of line 5 in Area C displays characteristics of BID mineralisation similar to that observed in Area D. With more than 75% of the assays still to be received for Area C there is potential for large areas of BID mineralisation to be identified similar to that seen in Area D.

Area B

The first results were received for Area B this week. With intersections of both CID and BID mineralisation. Drill hole HRC412 intersected 22m of CID mineralisation at 63.1% iron, 3.3% aluminium and 4.1% silica. HRC411 intersected 12m of BID mineralisation at 55.3% iron on the margin of the channel. This confirms the presence of BID mineralisation in Areas B, C, D and E.

Logistics

FMS staff are currently on site preparing for the 2009 drilling campaign. Earthmoving for the access track is being planned for Area A and drill line gridding will soon be underway for tenement E47/1560.

Tenements

Nothing to report.

Dr Kevin Wills
MANAGING DIRECTOR
21 January 2009

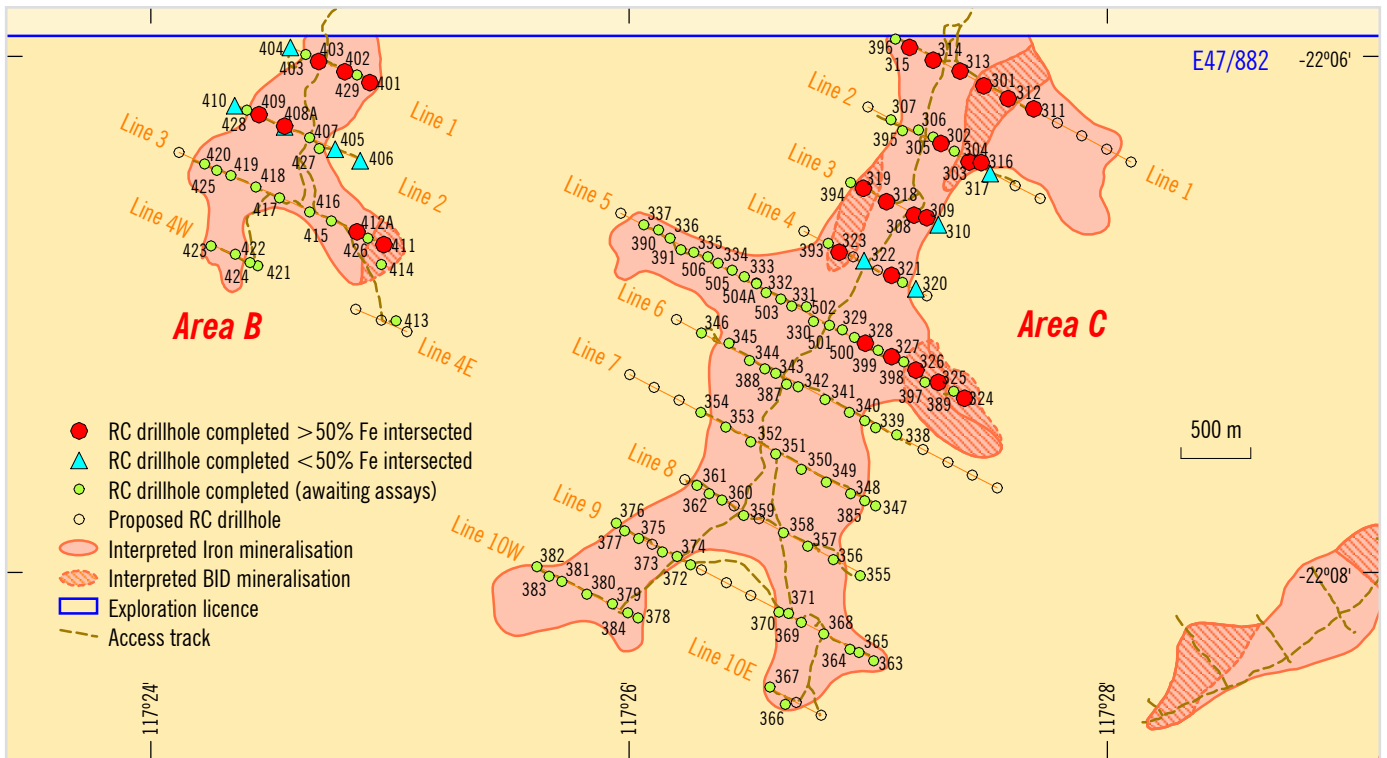


Figure 4 Proposed and completed RC drilling in Areas B and C.

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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. Dr Wills is an employee of Flinders Mines Limited. He 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 a Competent Person as defined in the 2004 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves".