



Quarterly Report

For the quarter ending
31 March 2011

HIGHLIGHTS

PILBARA IRON ORE PROJECT (PIOP) – WA

- *Discussions continued on a domestic and international basis with respect to infrastructure and product marketing.*
- *Value improvement studies progressed according to schedule.*
- *Measured Resource drilling commenced late in March with 172 holes completed for 8.2 km of drilling.*
- *Diamond drilling program commenced for Phase 3 Metallurgy program.*
- *Native Title negotiations formally commenced.*
- *Excellent BID intersections on the valley flanks of Delta deposit, from targeted DSO exploration program.*
- *Global Mining Study completed realising an additional 17 Mt of final product for the PFS base case.*

CANEGRASS MAGNETITE PROJECT – WA

- *Metallurgical testwork program was successfully completed. Saleable magnetite products can be realised.*

CORPORATE

- *Continued focus on a range of monetisation paths for the PIOP.*
- *A strong appetite for FMS Pilbara final product mix throughout Asia.*
- *Available funds of A\$41.4 million at 31 March 2011.*

PILBARA IRON ORE PROJECT

Since completion of the Prefeasibility Study (PFS), the Flinders Mines executive team has prioritised its focus on the manner in which the resource is best monetised for shareholders. The focus remains twofold – understanding potential infrastructure solution which optimises project value, in combination with extensive product marketing throughout the broader Asia region.

With the prefeasibility study having been completed at the start of the year, Flinders Mines has transitioned to a bridging works phase where a number of value improvement projects are being completed in preparation for transition into a full Definitive Feasibility Study (DFS). These value improvement projects and continued infrastructure access negotiations are expected to be the major focus over the coming June quarter.

The key activities progressed during the March quarter are summarised below.

MINING, PROCESSING AND INFRASTRUCTURE

- A new mining study has been completed. By using variable cut off grades and removing some PFS constraints that restricted mining locations, an additional 17 million tonnes of product has been produced from the same resource base further improving the project viability.
- The physical testing and analysis of CID material was completed at the end of March and report writing has commenced. This will provide the information necessary to determine the potential for a proportion of approximately 110 Mt of CID material within the Global Resource to be processed into additional saleable product.
- The Phase 3 metallurgical testwork program has been developed and will commence with receipt of drill core samples from the current drilling program.
- An intra-pit logistics study has been completed. This analysed various transport options for material transport between mining pits and the processing facility. This study has identified at what tonnages it becomes more economic to use alternate transport methods and will be utilised during the DFS.
- CSIRO was selected as the organisation to carry out sinter test work for the PIOP. All samples have been prepared and delivered to the CSIRO and testwork will commence in April.
- A capital reduction study has commenced in order to determine the total capital required if the project was to commence at an initial 15 Mtpa.

ENVIRONMENT AND APPROVALS

- Stakeholder consultation continued with project briefings provided to various State and Commonwealth departments, the Shire of Ashburton and local Pilbara landowners.
- A decision was taken to seek environmental approvals for a 15 Mtpa start-up, not 5 Mtpa as previously advised.
- Activities associated with Phase 2 groundwater investigations commenced.
- Additional flora surveys were completed and a commitment was made to undertake subterranean fauna investigations in the Champion, Blackjack and Eagle pit areas as a result of an extensive wet season.
- In line with the application for a mining lease, a negotiation protocol was agreed with the determined Native Title holders, the Eastern Guruma. Negotiations have proceeded and early expectations are that an agreement will be reached, as expected, in the fourth quarter 2011.

FUTURE WORK PROGRAM

The corporate focus for Flinders Mines during the June quarter will be the ongoing negotiations for infrastructure and marketing arrangements.

From an operations perspective, efforts will continue with value improvement studies and preparation for the DFS. Some of the studies not already mentioned include the following:

- Developing a Direct On Line (DOL) beneficiation plant
- Completing a long lead item procurement strategy
- Developing a plan for safety in design
- Reviewing options for co-disposal of tailings which have the potential to reduce cost and minimise environmental impact
- Continue with the measured resource drilling program
- Recommence the targeted BID DSO exploration program.

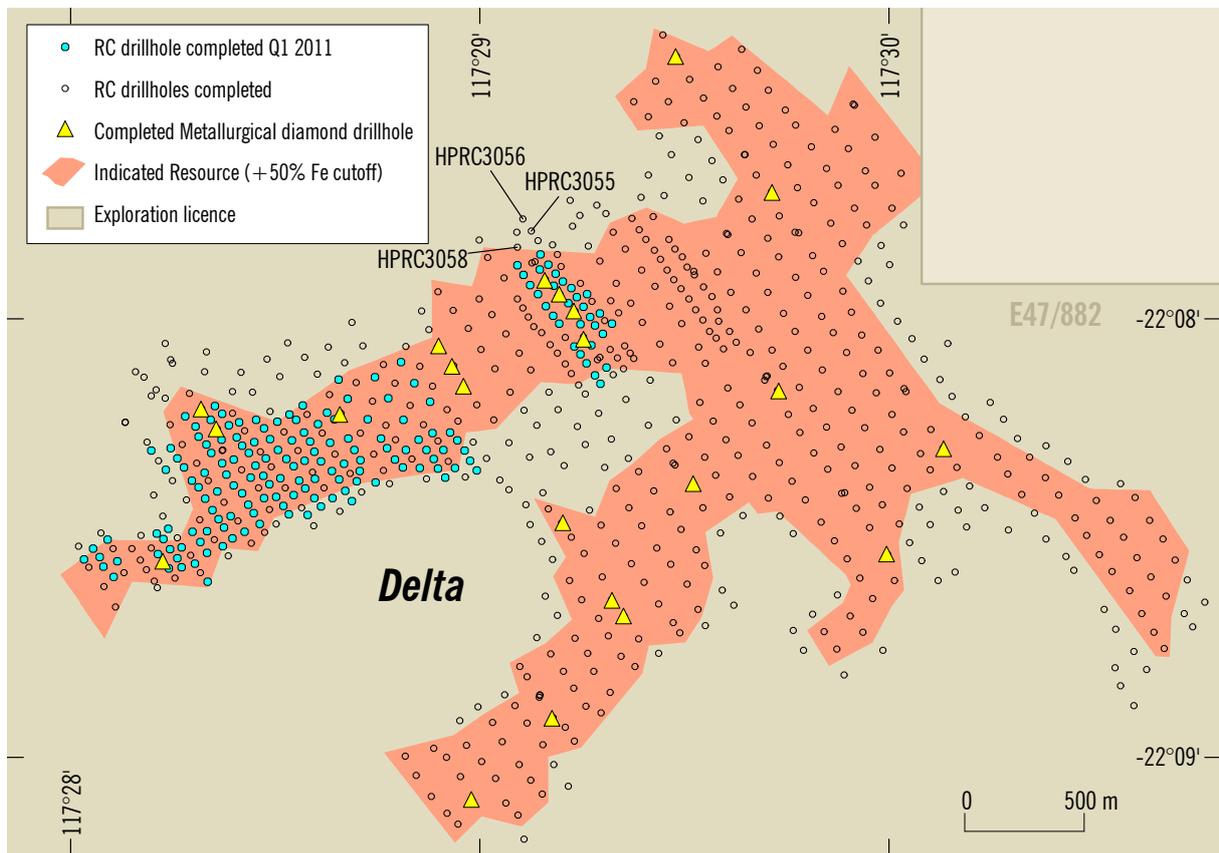


Figure 1 Location of drilling, Delta deposit, Pilbara Iron Ore Project, showing RC drillholes completed Q1 2011.

EXPLORATION AND EVALUATION ACTIVITIES

New drilling at the Pilbara Iron Ore Project (PIOP) commenced early in March 2011 after delays of several weeks due to heavy rain and difficult site access. Two reverse circulation (RC) rigs have been focussing on a drill out of the Delta deposit, to convert current Indicated Resource to Measured Resource status as the Company moves towards a DFS. At the end of the quarter a total of 172 RC holes had been completed for 8,235 m (Figure 1).

Measured Resource

Early indications are that the infill drilling to Measured status is consistent with the distribution of known mineralisation, confirming the robust nature of the geological and resource models. Of the assays which have been received, the significant intersections are shown in Table 1.

In addition to the RC drilling program, there is a diamond core drill rig on site dedicated to a separate program at sourcing additional material for the Phase 3 geometallurgical testwork. This rig also commenced early in March and to date has completed three holes in the Eagle deposit (Figure 2). Further holes are planned in the coming months for the Delta and Champion deposits.

Brockman Iron Deposit (BID) – DSO exploration

Final assay results were received during the quarter for drilling undertaken late in 2010 on the untested flanks of the channels. This drilling was designed to test BID targets in the hills adjacent to areas of significant BID mineralisation already identified beneath the valley floor. Results for significant intersections are shown in Table 2. The results are very encouraging with significant thicknesses and grades of BID mineralisation intersected such as 34 m @ 54.8% Fe in HPRC3055, 54 m @ 57.2% Fe in HPRC3056 and 30 m @ 59.5% Fe in HPRC3058. The majority of these intersections are also low in deleterious elements and occur from or very near surface.

Based on the success and significance of the BID drilling undertaken late last year, Flinders Mines is currently investigating a range of potential targets on the flanks of the known mineralisation. A mapping program in the hills has been implemented, not only in Delta but across the whole tenement, in areas that may be prospective for high quality BID mineralisation. The aim of this work is to prioritise targets for drilling as soon as necessary approvals and clearances can be obtained. The mineralisation identified on the flanks of the hills last year remains open and will be the focus of further investigation and drilling during the second quarter and into the second half of 2011.

Table 1 Significant intersections of mineralisation from PIOP Measured drilling.

Hole	Area	From	To	Interval	Fe	SiO ₂	Al ₂ O ₃	P	LOI
Delta Measured		(m)	(m)	(m)	(%)	(%)	(%)	(%)	(%)
HPRC3239	Delta	12	24	12	61.95	4.18	2.50	0.087	3.77
HPRC3245	Delta	4	28	24	57.50	4.81	2.71	0.106	9.60
HPRC3227	Delta	10	26	16	60.43	4.69	2.96	0.078	5.12

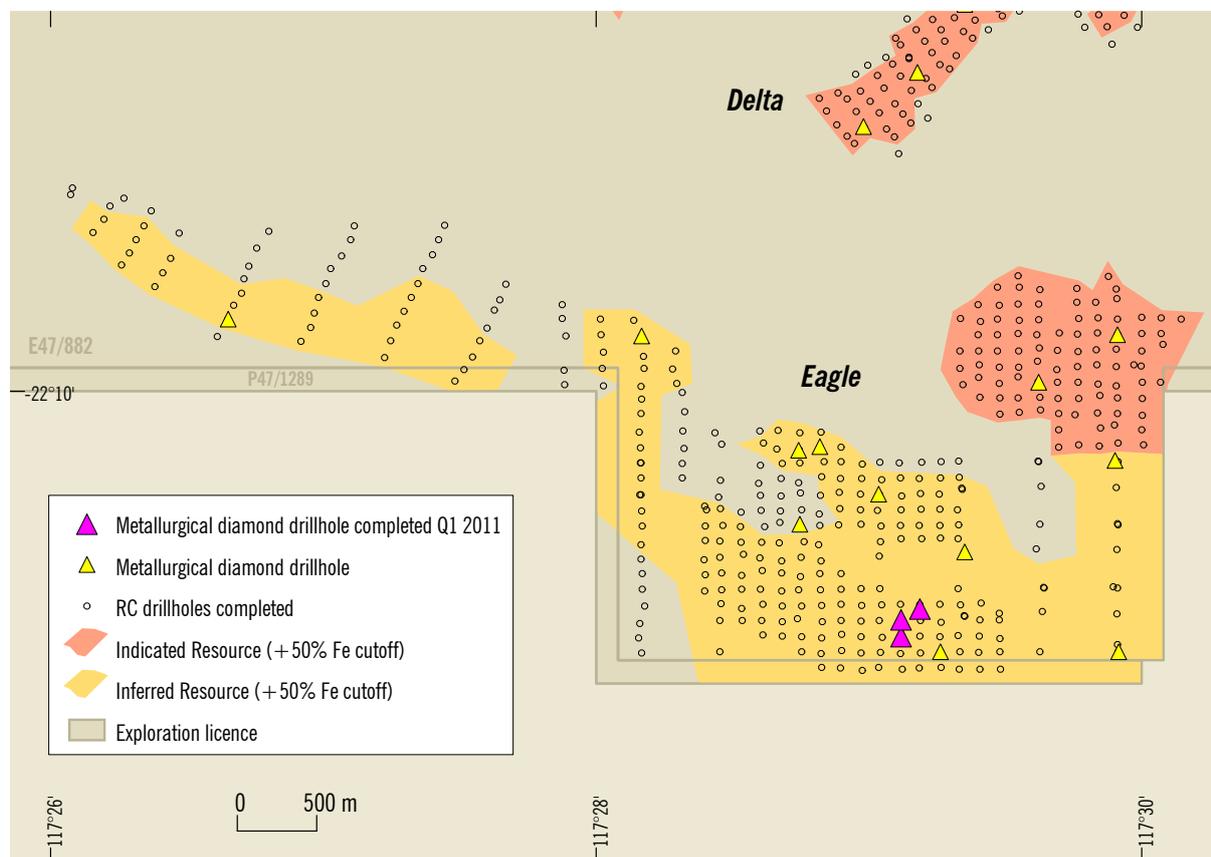


Figure 2 Location of drilling, Delta deposit, Pilbara Iron Ore Project, showing metallurgical diamond drillholes completed Q1 2011.

Table 2 Significant intersections of mineralisation from PIOP BID drilling.

Hole	Area	From	To	Interval	Fe	SiO ₂	Al ₂ O ₃	P	LOI
BID Drilling		(m)	(m)	(m)	(%)	(%)	(%)	(%)	(%)
HPRC3051	Delta Hills	0	16	16	56.11	4.25	3.34	0.091	11.35
HPRC3052	Delta Hills	0	16	16	58.90	2.50	1.95	0.118	10.6
HPRC3054	Delta Hills	0	10	10	57.26	4.52	2.54	0.126	10.34
HPRC3055	Delta Hills	0	34	34	54.83	7.67	3.65	0.120	9.48
HPRC3056	Delta Hills	0	54	54	57.24	5.51	3.41	0.114	8.65
HPRC3057	Delta Hills	0	20	20	55.42	7.36	3.63	0.092	9.10
HPRC3058	Delta Hills	0	30	30	59.54	2.43	2.38	0.112	9.32
HPRC3060	Delta Hills	0	28	28	56.93	5.02	2.89	0.113	9.98

CANEGRASS MAGNETITE PROJECT

Activities on the Canegrass scoping study have proceeded well with metallurgical testwork having been completed late in March. While the final report is still being written, the testwork showed that it was possible to produce saleable products from the project.

The geological interpretation, based on the drilling in 2010, is close to completion in readiness for the resource estimation. Geological interpretation of the complex stratigraphy is ongoing, based on lithological and geophysical data collected down hole. When combined with assays, a 3-dimensional geological model is being constructed in preparation for undertaking a resource estimate on the mineralisation.

The results of the metallurgical testwork and resource estimation will be used to determine the best way to progress the Canegrass Magnetite Project.

The maiden resource for Canegrass will be announced in Q3, 2011.

OTHER COMMODITIES

The non-iron ore tenements are planned to be divested into Flinders Exploration Ltd whose Initial Public Offer has been extended until June 2011. Minor exploration has been carried out for diamonds and phosphate during the quarter. Reviews have continued over tenements assessing the prospectivity for copper and gold, which is now the main commodity focus of the IPO.



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Managing Director

29 April 2011

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The information that relates to iron ore project drilling data and geological interpretations is based on information compiled by Mr Nick Corlis who is a Member of The Australian Institute of Geoscientists. Mr Corlis is Exploration Manager – Iron, of the Company. The information that relates to the Mineral Resource Estimate has been compiled by Mr Stephen Godfrey of Golder Associates Pty Ltd who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Corlis and Mr Godfrey each have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that they are 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'. Mr Corlis and Mr Godfrey consent to inclusion of the information in this report in the form and context in which it appears.

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001, 01/06/10.

Name of entity

Flinders Mines Limited

ABN

46 091 118 044

Quarter ended ("current quarter")

31 March 2011

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (9 months) \$A'000
1.1 Receipts from product sales and related debtors		
1.2 Payments for		
(a) exploration & evaluation	(3,011)	(12,218)
(b) development		
(c) production		
(d) administration	(857)	(3,474)
1.3 Dividends received		
1.4 Interest and other items of a similar nature received	164	2,437
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other	-	107
Net Operating Cash Flows	(3,704)	(13,148)
Cash flows related to investing activities		
1.8 Payment for purchases of:		
(a) prospects		
(b) equity investments		
(c) other fixed assets	(109)	(176)
1.9 Proceeds from sale of:		
(a) prospects		
(b) equity investments		
(c) other fixed assets	15	15
1.10 Loans to other entities	-	(150)
1.11 Loans repaid by other entities		
1.12 Other (provide details if material)		
Net investing cash flows	(94)	(311)
1.13 Total operating and investing cash flows (carried forward)	(3,798)	(13,459)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(3,798)	(13,459)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	14	26
1.15	Proceeds from sale of forfeited shares		
1.16	Proceeds from borrowings		
1.17	Repayment of borrowings		
1.18	Dividends paid		
1.19	Other		
	Net financing cash flows	14	26
	Net increase (decrease) in cash held	(3,784)	(13,433)
1.20	Cash at beginning of quarter/year to date	45,158	54,807
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	41,374	41,374

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	117
1.24	Aggregate amount of loans to the parties included in item 1.10	

1.25 Explanation necessary for an understanding of the transactions

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

+ See chapter 19 for defined terms.

Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities		
3.2 Credit standby arrangements		

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	9,079
4.2 Development	2,110
4.3 Production	
4.4 Administration	848
Total	11,673

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	2,809	2,532
5.2 Deposits at call	38,565	42,626
5.3 Bank overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (item 1.22)	41,374	45,158

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1		Interests in mining tenements relinquished, reduced or lapsed		

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

6.2 Interests in mining
tenements acquired or
increased

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+ See chapter 19 for defined terms.

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference + securities <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 +Ordinary securities	1,820,634,571	1,820,634,571		
7.4 Changes during quarter (a) Increases through issues 25,000 30,000 250,000 (b) Decreases through returns of capital, buy-backs				
		25,000	\$0.045	\$0.045
		30,000	\$0.084	\$0.084
		250,000	\$0.045	\$0.045
7.5 +Convertible debt securities <i>(description)</i>				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 Options <i>(description and conversion factor)</i>	400,000 432,500 1,174,999 300,000		<i>Exercise price</i> \$0.017 \$0.084 \$0.045 \$0.055	<i>Expiry date</i> 20/03/2012 05/03/2013 03/02/2014 26/08/2014
7.8 Issued during quarter				
7.9 Exercised during quarter	25,000 30,000 250,000	25,000 30,000 250,000	\$0.045 \$0.084 \$0.045	03/02/2014 05/03/2013 03/02/2014

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

7.10	Expired during quarter				
7.11	Debentures <i>(totals only)</i>				
7.12	Unsecured notes <i>(totals only)</i>				

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.



Sign here:

(Company Secretary)

Date: 29 April 2011

Print name: David W Godfrey

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

+ See chapter 19 for defined terms.