ASX ANNOUNCEMENT

13 January 2015

Further High Grade BID intersected at PIOP

highlights

- *Further significant High Grade Fe intersections from drilling Bedded Iron (BID) targets*
- *Intersections are outside of recently published PIOP Resource of 1,042 Mt @ 55.6% Fe*
- *Best result of 30m at 63.4% Fe from surface adjoining the Delta deposit*
- *Target BID mineralisation remains open beyond current drilling*

Pilbara Iron Ore Project (PIOP)

Tenement M47/1451 (Blacksmith)

Flinders Mines Limited (FMS) 100%

Flinders Mines Limited (ASX:FMS) is pleased to announce that further significant high grade, near surface Bedded Iron (BID) mineralisation has been intersected in drilling at the Company's wholly owned Pilbara Iron Ore Project "PIOP" in the Pilbara region of Western Australia - in areas outside of the project's currently defined resource.

BID Drilling Results

All assays have now been received for the BID targeted drilling undertaken at the PIOP late in 2014 (*Figure 1*). A specialised track mounted Reverse Circulation (RC) drill rig was used to access BID targets adjacent to the Blackjack, Champion, Delta and Paragon Mineral Resources. A total of 67 holes were drilled as part of this program and the results for some of these holes were reported previously (*refer to ASX release on 28/11/2014*). The results for all remaining holes are reported here. A list of the more significant intersections is shown below in Table 1 with a complete list of intersections for all holes in Table 2.

Hole	From (m)	To (m)	Interval (m)	Fe%	SiO_2%	Al_2O_3%	P%	LOI%
HPRC1276	0	10	10	60.1	3.7	2.9	0.08	6.5
HPRC1277	0	16	16	56.9	2.4	2.8	0.12	12.6
HPRC1658	0	22	22	59.3	3.5	2.2	0.10	8.9
HPRC3599	0	10	10	59.1	2.9	2.2	0.08	8.8
HPRC5602	0	30	30	63.4	2.2	1.8	0.12	4.2
HPRC5604	0	16	16	58.7	3.7	2.1	0.11	8.7
HPRC5607	0	22	22	58.8	2.9	2.0	0.09	10.2
HPRC5611	0	26	26	60.2	2.8	2.5	0.13	7.8
HPRC5612	0	18	18	59.3	1.7	2.9	0.13	9.7

Table 1 : *Significant Fe intersections from surface, from 2014 BID targeted RC drilling.*

Flinders Mines Limited
ABN 46 091 118 044
www.flindersmines.com

Level 1, 135 Fullarton Road,
Rose Park
South Australia 5067

PO Box 4031
Norwood South
South Australia 5067

telephone 61 8 8132 7950
facsimile 61 8 8132 7999
email info@flindersmines.com

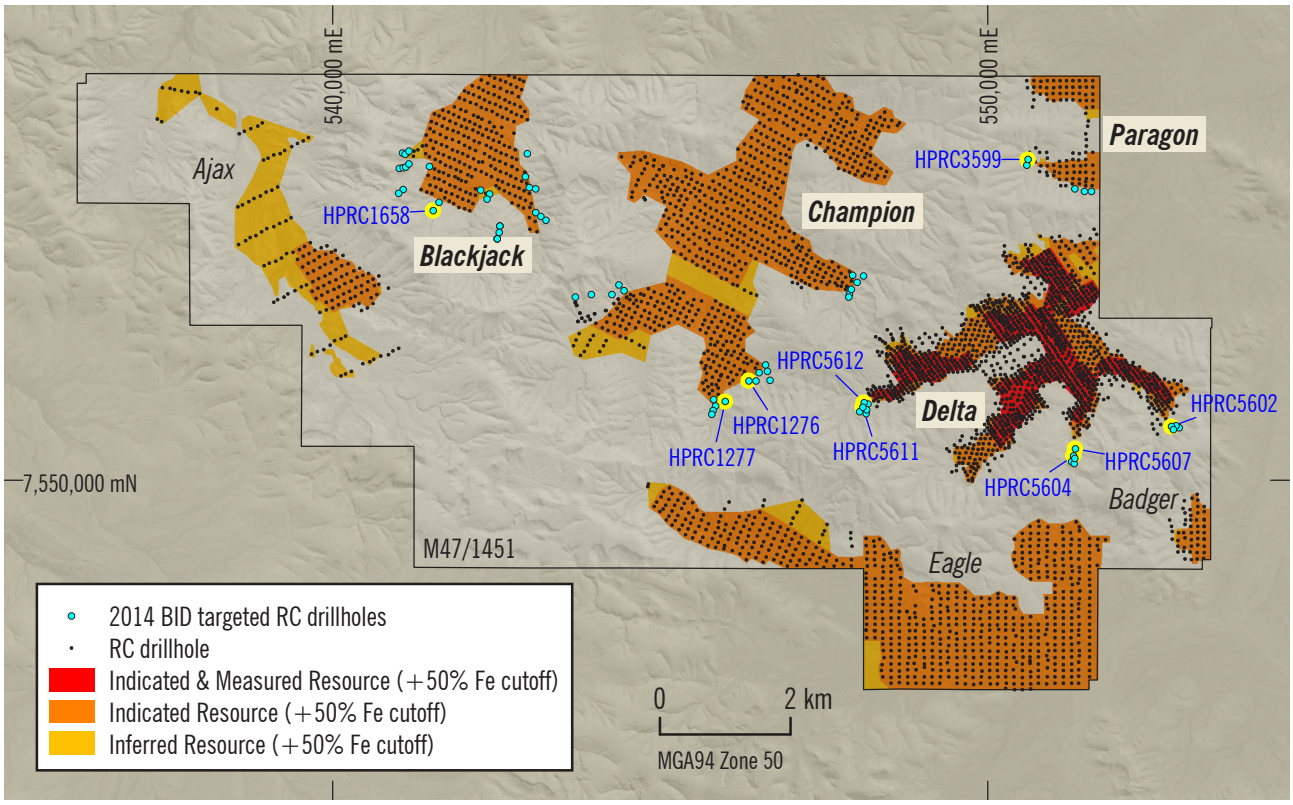

Figure 1 *Location of the 2014 BID targeted RC drillholes.*

Further high grade iron mineralisation continues to be intersected adjacent to areas of known mineralisation and outside of the current resource boundary. All of these intersections are from surface and have extremely low levels of SiO_2 and Al_2O_3. Some of these holes (eg HPRC5608 – HPRC5613) represent the first real test of detrital "ramp" areas that are present on the margins and at the ends of many of the valleys within the project area. While these holes do intersect a thin layer of cemented detrital material, it appears this material acts as a protective cap with often up to 20m of high quality BID underneath.

The aim of the latest drilling was to test areas of mapped and modelled BID mineralisation. The results are very encouraging with further analysis to occur prior to planning further work.

The Company earlier this month announced an upgraded total Inferred and Indicated Resource for the PIOP of 1,042 million tonnes at 55.6% Fe (*refer to ASX release on 9/1/2015*).

IAN GORDON
MANAGING DIRECTOR

13 January 2015

Table 2 : *Intersections summary for 2014 BID targeted RC drillholes.* *NSI - No significant intersection*

Hole	Deposit	From (m)	To (m)	Interval (m)	Fe%	SiO_2%	Al_2O_3%	P%	LOI%	MGA E	MGA N	RL	Azimuth	Dip
HPRC1265	Champion			*NSI*						548105	7553117	636	0	-90
HPRC1266	Champion	4	8	4	55.2	7.4	3.8	0.07	9.5	547934	7553126	612	0	-90
HPRC1267	Champion			*NSI*						548005	7553022	612	0	-90
HPRC1268	Champion	0	22	22	59.3	3.5	2.2	0.10	8.9	547920	7552909	633	0	-90
HPRC1269	Champion			*NSI*						547890	7552849	635	0	-90
HPRC1270	Champion	0	16	16	57.3	5.4	3.1	0.10	9.0	547880	7552791	646	0	-90
HPRC1271	Champion			*NSI*						546672	7551524	646	0	-90
HPRC1272	Champion			*NSI*						546632	7551661	630	0	-90
HPRC1273	Champion			*NSI*						546608	7551756	630	0	-90
HPRC1274	Champion			*NSI*						546509	7551642	617	0	-90
HPRC1275	Champion			*NSI*						546459	7551516	618	0	-90
HPRC1276	Champion	0	10	10	60.1	3.7	2.9	0.08	6.5	546351	7551514	632	0	-90
HPRC1277	Champion	0	16	16	56.9	2.4	2.8	0.12	12.6	545988	7551199	632	0	-90
HPRC1278	Champion			*NSI*						545790	7551008	647	0	-90
HPRC1279	Champion	0	4	4	54.1	8.0	3.0	0.09	10.8	545802	7551068	641	0	-90
HPRC1280	Champion	0	4	4	54.8	5.9	3.4	0.10	11.6	545845	7551137	630	0	-90
HPRC1280	Champion	6	10	4	54.4	6.7	3.7	0.09	11.1	545845	7551137	630	0	-90
HPRC1281	Champion	0	8	8	55.7	3.6	4.0	0.11	12.0	545813	7551232	623	0	-90
HPRC1282	Champion	0	6	6	56.7	6.6	2.5	0.11	9.1	543705	7552796	695	0	-90
HPRC1283	Champion			*NSI*						543953	7552831	703	0	-90
HPRC1284	Champion			*NSI*						544261	7552838	640	0	-90
HPRC1285	Champion			*NSI*						544367	7552982	652	0	-90
HPRC1286	Champion			*NSI*						544443	7552892	637	0	-90
HPRC1656	Blackjack	0	10	10	55.7	6.8	3.1	0.11	9.6	542537	7553778	723	0	-90
HPRC1656	Blackjack	14	18	4	57.6	7.6	3.0	0.05	6.5	542537	7553778	723	0	-90
HPRC1657	Blackjack	16	26	10	55.4	6.3	4.3	0.12	9.3	542551	7553878	716	0	-90
HPRC1657	Blackjack	28	50	22	58.3	4.4	3.3	0.21	8.2	542551	7553878	716	0	-90
HPRC1657	Blackjack	52	56	4	58.1	8.2	1.2	0.13	7.1	542551	7553878	716	0	-90
HPRC1658	Blackjack			*NSI*						541532	7554117	643	0	-90
HPRC1659	Blackjack			*NSI*						541626	7554241	628	0	-90
HPRC3598	Paragon	0	14	14	55.8	5.7	3.2	0.07	10.3	550592	7554809	592	0	-90
HPRC3599	Paragon	0	10	10	59.1	2.9	2.2	0.08	8.8	550612	7554900	581	0	-90
HPRC3600	Paragon			*NSI*						551329	7554446	565	0	-90
HPRC3601	Paragon			*NSI*						551475	7554411	564	0	-90
HPRC3602	Paragon			*NSI*						551582	7554410	560	0	-90
HPRC5599	Delta	0	10	10	56.9	6.5	2.0	0.07	9.5	552917	7550804	643	0	-90
HPRC5599	Delta	12	16	4	54.4	8.1	2.9	0.07	10.6	552917	7550804	643	0	-90
HPRC5600	Delta	0	22	22	58.6	5.0	1.9	0.08	8.7	552875	7550830	643	0	-90
HPRC5601	Delta	0	24	24	59.2	3.0	2.0	0.07	9.4	552828	7550775	626	0	-90
HPRC5602	Delta	0	30	30	63.4	2.2	1.8	0.12	4.2	552799	7550818	618	0	-90
HPRC5603	Delta	0	18	18	58.7	3.9	3.2	0.10	7.5	551280	7550282	667	0	-90
HPRC5604	Delta	0	16	16	58.7	3.7	2.1	0.11	8.7	551304	7550374	630	0	-90
HPRC5605	Delta	0	16	16	59.5	2.4	2.2	0.10	9.0	551328	7550334	643	0	-90
HPRC5606	Delta	0	16	16	58.3	3.5	2.7	0.12	9.6	551314	7550250	647	0	-90
HPRC5607	Delta	0	22	22	58.8	2.9	2.0	0.09	10.2	551341	7550482	633	0	-90
HPRC5608	Delta	0	20	20	56.1	6.3	3.4	0.15	9.4	548143	7551017	668	0	-90
HPRC5609	Delta	0	22	22	59.1	4.0	2.0	0.11	8.7	548147	7551079	650	0	-90
HPRC5610	Delta	0	18	18	57.6	4.7	2.7	0.13	9.7	548046	7551043	657	0	-90
HPRC5611	Delta	0	26	26	60.2	2.8	2.5	0.13	7.8	548089	7551112	635	0	-90
HPRC5612	Delta	0	18	18	59.3	1.7	2.9	0.13	9.7	548112	7551179	622	0	-90
HPRC5613	Delta	0	12	12	58.4	2.5	2.1	0.10	10.8	548173	7551164	618	0	-90

For further information please contact:

Ian Gordon
Managing Director
Ph: (08) 8132 7950
Email: info@flindersmines.com

Investor Relations

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

Head Office

Level 1, 135 Fullarton Road
Rose Park
South Australia 5067

PO Box 4031
Norwood South
South Australia 5067

Ph: (08) 8132 7950
Fax: (08) 8132 7999
Email: info@flindersmines.com

www.flindersmines.com

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, defined in accordance with the 2004 JORC Code, have not been updated since to comply with the 2012 JORC Code on the basis that the information has not materially changed since it was last reported (refer to ASX announcement dated 23/5/2013). 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 Targets, Exploration Results, or 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. Dr 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr McDonald consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC 2012 - Table 1

Pilbara Iron Ore Project, January 2015

Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	• Reverse Circulation (RC) drilling was used to collect 2m downhole samples for assaying. • Typically, a 4 to 5kg sample was collected using a cone splitter. This sample was sent for major and trace element analysis via XRF of fused discs. All RC samples were submitted for analysis. • Grade standards (Certified Reference Materials – CRM's) and field duplicate samples were used to monitor analytical accuracy and sampling precision. • Diamond drilling methods were used to twin a number of the RC drillholes to test sample representivity and to collect samples for metallurgical test work. • All diamond drillholes employed triple tubed coring methods with half core samples used for QAQC purposes and whole core used for metallurgical test work.
Drilling techniques	• The vast majority of the downhole samples were collected from Reverse Circulation (RC) drill holes of approximately 140mm diameter utilising a face sampling hammer button bit. • PQ sized Diamond (DD) holes were drilled for metallurgical work and HQ sized holes for geotechnical and QAQC purposes. All geotechnical holes were angled and the core was oriented.
Drill sample recovery	• Sample quality and recovery of both RC and DD drilling were continuously monitored during drilling to ensure that samples were representative and recoveries maximised. • RC sample recovery was recorded as good (G) or poor (P) based on visual appraisal of sample size. The majority of all samples were logged as good. • Diamond core recoveries are routinely recorded in the database as a measure of length of core recovered versus the depth drilled. • Results of previous RC-DD twin holes indicate that there is no significant bias in the RC assays related to the presence of water, the sample particle size or the material types comprising the sample.
Logging	• Detailed geological logging of all RC and DD holes captured various qualitative and quantitative parameters such as mineralogy, colour, texture and sample quality. • RC holes were logged at 2m intervals. • The logging data is utilised for both Mineral Resource estimation and future mining and processing studies. • All diamond core was digitally photographed. • Logging data is collected via ruggedised laptops using Ocris logging software which applies inbuilt validation checks as data is entered. The data is subsequently downloaded into a dedicated Geobank database for storage.
Sub-sampling techniques and sample preparation	• RC drilling samples were collected in pre-labelled bags via a cone splitter mounted directly below the cyclone. • Wet and dry samples were collected via the same technique. The majority of samples collected were dry. • Samples were stored on site prior to being transported to the laboratory. Wet samples were allowed to dry before being processed. • Samples were sorted, dried and weighed at the laboratory where they were then crushed and riffle split to obtain a sub-fraction for pulverisation. The pulverised sample was reduced further and combined with various reagents prior to oven fusion to create a fused disc.

Criteria	Commentary
Quality of assay data and laboratory tests	• All RC samples were submitted to Ultra Trace laboratory in Perth, an accredited laboratory with the National Association of Testing Authorities (NATA). Ultra Trace completed both the sample preparation and analytical assaying. • All samples were analysed via X-Ray Fluorescence (XRF) of a fused disc for a standard suite of elements including: Fe, SiO_2, Al_2O_3, TiO_2, MnO, CaO, P, S, MgO, K_2O, Zn, Pb, Cu, BaO, V_2O_5, Cr, Ni, Co, Na_2O. • Multi-point Loss On Ignition (LOI) was determined at 425, 650 and 1000 degrees celsius via thermo-gravimetric analysis. • Field duplicates were collected and inserted anonymously into the sample stream at a rate of 4 per 100 samples. • Pulp standards (CRM's) were inserted into the sample stream as blind samples by field geologists at a rate of 5 per 100 samples. • No significant issues or concerns were apparent with the analysis of the field duplicates or standards. • Laboratory duplicates and standards were also used as quality control measures at different sub-sampling stages. No significant issues have been identified. • No formal analysis of sample size versus grain size has been undertaken, however, the sampling techniques employed are industry best practice. • Approximately 5% of all samples have been sent to an umpire laboratory as an independent check. No significant issues were identified and an excellent correlation exists between the laboratories.
Verification of sampling and assaying	• Significant intersections have been independently verified by company geologists using geological logging and observation of the mineral assemblage. • Twin hole (RC v DD) analysis demonstrates a high degree of intersection and grade compatibility between the dominant RC samples and the twinned core with no evidence of any significant grade bias due to drilling method. • Twins formed by RC drillhole pairs also show good correlation between the original and twin hole. • Assay data is loaded directly into the Geobank database which is managed by Flinders staff. Visual comparisons are undertaken between the recorded database assays and hard copy records at a rate of 5% of all loaded data. No errors have been identified. • Several unannounced audits of the assay laboratory were conducted while Flinders' samples were being processed. No issues or concerns were apparent.
Location of data points	• Drillhole collar locations have been surveyed using a Differential GPS with an accuracy of <5cm for easting, northing and elevation coordinates. • Collar surveys are validated against planned coordinates and the topographic surface. • Downhole surveys have not been carried out as the vast majority of the drillholes are vertical and relatively shallow meaning that any minor departures from the planned drilling direction will have minimal to no impact. • The primary grid used is Map Grid of Australia 94, Zone 50 (GDA94). Vertical datum is the Australian Height Datum (AHD). • Topographic surface uses Lidar 50cm contours captured in 2009.
Data spacing and distribution	• The drill grid spacing varies between deposits. • For the majority of deposits, a nominal spacing of approximately 100m by 125m is achieved. The Delta deposit is drilled at a spacing of approximately 50m by 50m over much of its area while Ajax is approximately 100m by 500m with infill in some areas to 100m by 125m.
Orientation of data in relation to geological structure	• As the mineralisation comprises predominantly flat lying valley infill deposits, the vertically orientated drilling represents an ideal sampling orientation. The underlying bedded deposits are hosted by sub-horizontal Banded Iron Formation meaning that the sampling is also near ideal. • Localised high angle structures within the basement lithologies, particularly in the hills, may result in less ideal sampling situations.

Criteria	Commentary
Sample security	• Sample chain of custody is managed by Flinders. • Samples in calico bags are packed into polyweave bags and then placed into heavy duty bulk bags for transport to Tom Price. They are then transported via commercial freight directly to the laboratory. • Consignment notes for each submission are tracked and monitored.
Audits or reviews	• No formal audits or reviews have been undertaken. Optiro (independent Mineral Resource Consultant) has reviewed QAQC and twin hole analysis reports prepared by Flinders and undertaken independent validation of the database. No significant issues were identified.

Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	• The Pilbara Iron Ore Project (PIOP) comprises two 100% FMS owned tenements, M47/1451 and E47/1560, located approximately 70km NW of Tom Price. • The tenements lie within the Eastern Guruma Native Title Determination. Flinders has a current Native Title Agreement in place.
Exploration done by other parties	• Very little previous exploration has been undertaken by other parties. Robe River Mining undertook regional scale iron exploration while a number of other parties have undertaken diamond exploration.
Geology	• Local bedrock geology is dominated by the Dales Gorge, Whaleback Shale and Joffre Members of the Brockman Iron Formation. Incised into this bedrock are channel systems which contain buried Channel Iron Deposits (CID) and Detrital Iron Deposits (DID). Some areas of the bedrock are also mineralised forming Bedded Iron Mineralisation.
Drill hole Information	• A summary of drill hole information material to the understanding of the exploration results is included in the accompanying release (*Table 2*). • A diagram showing the location of drill hole collars is included in the accompanying release (*Figure 1*).
Data aggregation methods	• All intersections are determined using a minimum 50% Fe cut, maximum 10% SiO_2 and a maximum of 2m internal dilution. • As all samples are the same length, assays are averaged over the total intersection.
Relationship between mineralisation widths and intercept lengths	• The majority of drillholes are vertical and the ore body is predominantly horizontal, thus any intersection quoted represents an approximation of the true width of the mineralisation. Minor localised high angle structures may result in exceptions to this in some drillholes.
Diagrams	• Appropriate diagrams are included as part of the accompanying release, including a plan of drill hole collar locations and defined Mineral Resource areas.
Balanced reporting	• Intercepts for all drill holes from the current drilling are shown in Table 2 of the release.
Other substantive exploration data	• Nothing to report.
Further work	• There are currently no plans to undertake further drilling or exploration activities.