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1 March 2018

PIOP Mineral Resource Estimate Update

Highlights

- Mineral Resource estimate for the PIOP (Blacksmith and Anvil tenements) based on updated metallurgical regressions confirm the potential for lower-grade detrital material to contribute to the Mineral Resource.
- Total PIOP Mineral Resource re-estimated at 1,484 Mt and reported in accordance with the JORC Code (2012 Edition).
- The Resource estimation phase for the PIOP is now complete with the focus moving to mine planning and process engineering activities aimed at determining technical and economic product tonnages.

PIOP Global Resource Estimate

Flinders Mines Limited (ASX: FMS) is pleased to announce an update to the PIOP Mineral Resource at the Company's wholly owned Pilbara Iron Ore Project "PIOP" in Western Australia. Following the completion of a drilling campaign and subsequent metallurgical laboratory analysis, Snowden Mining Industry Consultants (Snowden), on behalf of Flinders Mines Ltd (FMS), has re-estimated and updated the Mineral Resource estimate.

Area	Classification	Tonnes (Mt)	Fe %	SiO_2 %	Al_2O_3 %	P %	LOI %
Blacksmith	Measured	54	59.8	6.24	4.28	0.064	2.98
	Indicated	1,148	52.6	14.1	4.81	0.067	4.93
	Inferred	105	51.6	15.7	5.13	0.057	4.40
Blacksmith Total		**1,307**	**52.8**	**13.9**	**4.81**	**0.066**	**4.81**
Anvil	Inferred	176	47.1	21.3	6.05	0.044	4.13
Anvil Total		**176**	**47.1**	**21.3**	**6.05**	**0.044**	**4.13**
PIOP (Blacksmith & Anvil)	Measured	54	59.8	6.24	4.28	0.064	2.98
	Indicated	1,148	52.6	14.1	4.81	0.067	4.93
	Inferred	282	48.8	19.2	5.7	0.049	4.23
Grand Total		**1,484**	**52.2**	**14.8**	**4.96**	**0.064**	**4.73**

Small discrepancies may occur due to rounding. Cut Off: Ore types DID1, DID2, DID3 reported using Fe>40% and Al_2O_3<8%; ore types DID4, CID, BID reported using Fe>50% and Al_2O_3<6%

The Mineral Resource for the PIOP has been reported above cut-off grades as follows:

- DID1, DID2, DID3 (OPF2): Fe>40% and Al_2O_3<8%
- DID4, CID, BID (OPF1): Fe>50% and Al_2O_3<6%

The cut-off grades are based on product optimisation carried out by Snowden based on metallurgical regressions provided by FMS for two ore processing facilities – known as Ore Processing Facility 1 (OPF1) and Ore Processing Facility 2 (OPF2). The OPF1 processing route includes crushing, wet scrubbing, wet screening and hydrocyclone desliming. FMS propose to beneficiate relatively low grade DID1, DID2 and DID3 (detrital) mineralisation using the OPF2 processing route which includes crushing, scrubbing, wet screening and dense media separation (DMS). The metallurgical regressions based largely on the 2017 drilling campaign samples support this as being a viable processing path.

Further Work

This maturation work confirms one of the key assumptions in the independent strategic review studies conducted in February 2017, that detrital ore has the potential to be upgraded into economic saleable product and hence included in the resource estimate.

The quantity and grades of saleable and economic product are now the subject of further detailed mine planning and process engineering activities which remain an ongoing focus for FMS. It should be noted that as this work proceeds, the yields from processing some of the detrital material are relatively low, and when combined with ore loss of resource from mining and potential sterilisation of areas sensitive to traditional owners, that the Ore Reserve estimate may be materially lower than this revised resource estimate.

Full details of the Mineral Resource estimate and parameters used can be found in Appendix 1 and Appendix 2.

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About Flinders Mines Limited

Flinders Mines Limited is an ASX-listed (ASX: FMS) exploration and development company focused on the commercialisation of its large, high quality hematite resource - the Pilbara Iron Ore Project (PIOP)

Competent Person's Statement – Mineral Resources

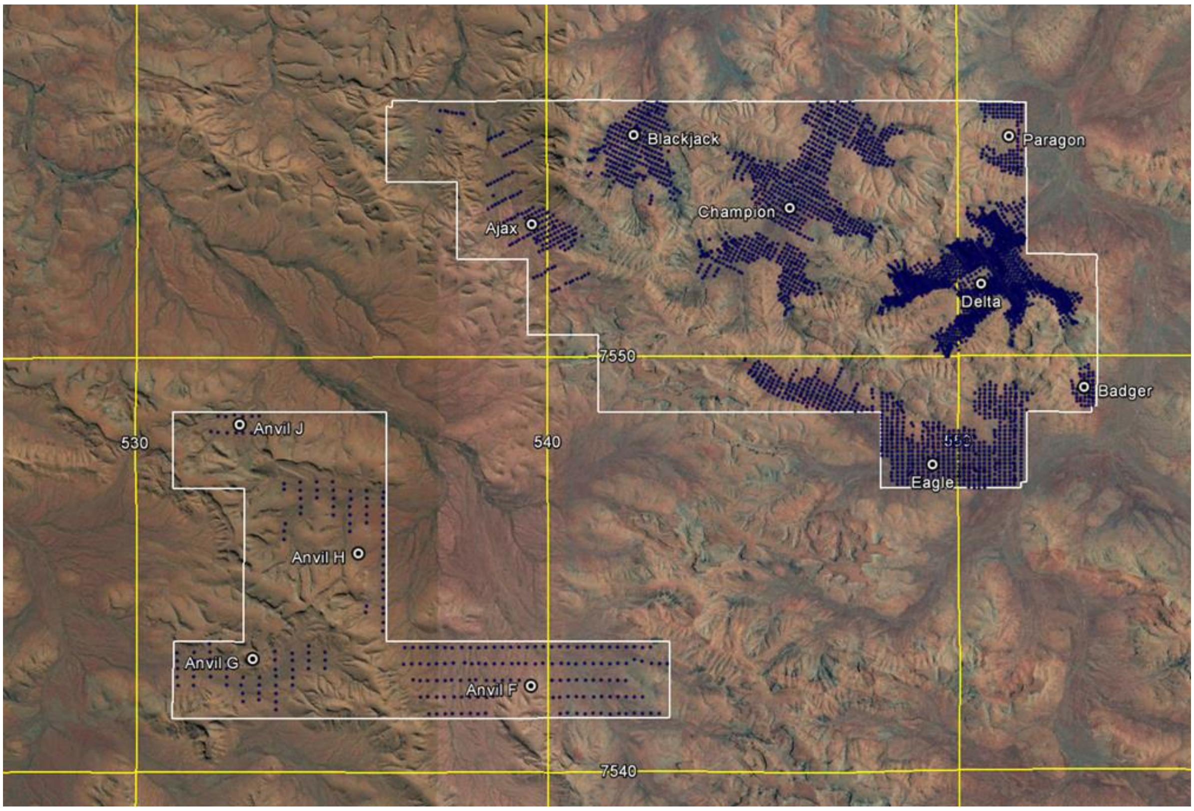
The information in this report that relates to the PIOP Mineral Resource estimate is based on information compiled by John Graindorge who is a Chartered Professional (Geology) and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to 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". John Graindorge is a full-time employee of Snowden Mining Industry Consultants Pty Ltd and consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Appendix 1 – Mineral Resource Statement

Resource estimate oOverview

The PIOP comprises two project areas – Blacksmith and Anvil. The Blacksmith area contains seven deposits named Ajax, Blackjack, Badger, Champion, Delta, Eagle and Paragon. The Anvil area, which is approximately 5 km to the southeast of the Blacksmith area, contains four deposits, named Anvil F, G, H and J. The Blacksmith deposits are located within tenement M47/1451, while the Anvil deposits are located within tenement E47/1560.

Figure-1: Blacksmith (M47/1451) and Anvil Deposits (E47/1560)



Yellow lines show the 10 km UTM grid; blue points = drill hole collars

Snowden Principal Consultant, John Graindorge, visited the PIOP on the 23rd and 24th October 2017, observing the outcropping mineralisation and general site layout, along with drill core intervals from 2017 sonic drilling and historical diamond core.

With the exception of drilling for geotechnical and metallurgical samples, no additional drilling that materially impacts the volume and/or grade of the resource estimate has been conducted at the PIOP. Additional metallurgical test work has provided sufficient confidence that the lower grade detrital mineralisation can be upgraded to produce a saleable product.

Previous Mineral Resource estimates for all the Blacksmith deposits were compiled by Optiro Pty Limited ("Optiro") in 2014, while previous resource estimates for the Anvil deposits were compiled by Golder Associates in 2010.

Geology and mineralisation

The PIOP area is dominated by the Brockman Iron Formation of the Hamersley Group. The project area consists of large channel systems which contain significant tonnages of detrital and channel iron deposits (DID and CID), along with bedded iron deposits (BID) below the channel.

DID is characterised by hematite rich mineralisation that has been eroded from surrounding banded iron formation. It is mainly composed of detrital material of pisolitic or fragmental types. The DID is sub-divided into four units, DID1 to DID4, based on textural and chemical characteristics. The upper unit, DID1, is the least mature and has the lowest Fe content and highest SiO_2 and Al_2O_3 content of the DIDs. The Fe content increases from DID1 to DID4, with a corresponding decrease in the SiO_2 and Al_2O_3 content, with the DID4 unit being highest in Fe and lowest in SiO_2 and Al_2O_3.

Below the DID units lies the BID mineralisation, which is interpreted to be of the Dales Gorge Member of the Brockman Iron Formation. The BID is interpreted to comprise a goethitic, hydrated hard-cap style mineralisation, with remnant bedding and a vuggy texture. CID mineralisation has been identified between the DID and BID mineralisation in some parts of the Delta, Eagle, Champion and Blackjack deposits. The CID is typically a yellow-brown colour due to the goethitic nature of this unit, with fossilised wood observed in many intersections. Internal clay zones of up to a few metres thick, comprising a white clay, have been intersected within the CID. The geological continuity of the internal clay horizons is relatively low and they are interpreted to form lenses or pods.

The characteristics of the geological units are summarised in Table-1 below.

Table-1: Geological Units & Descriptions

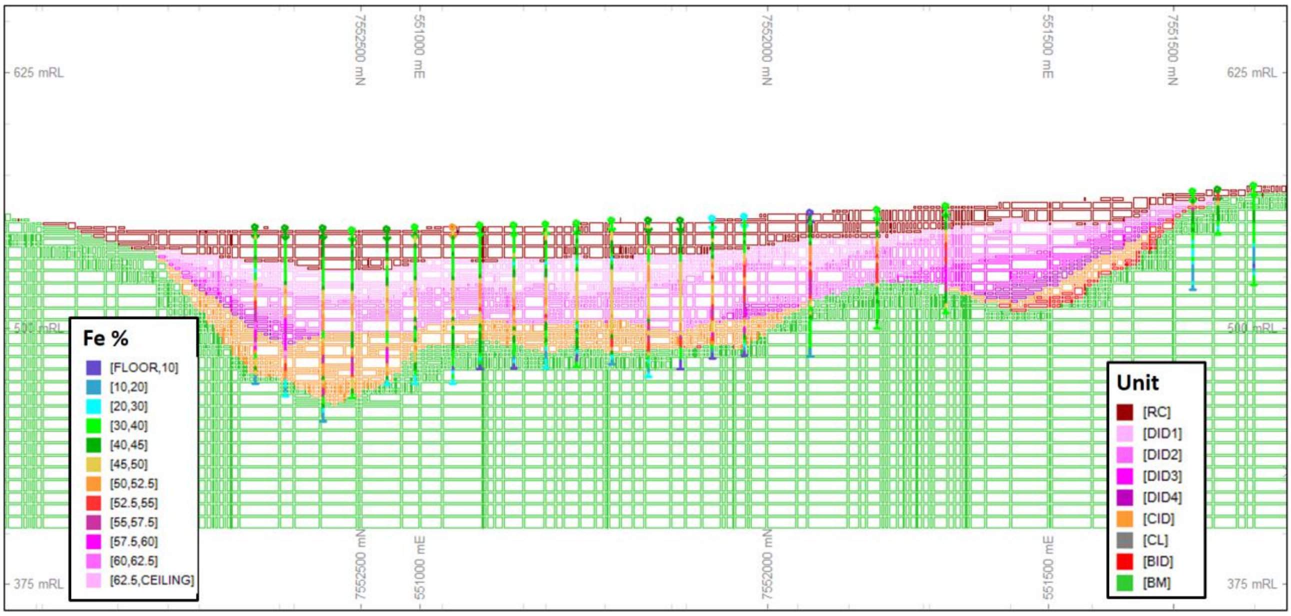
Strat	Column	Code	Description
Cover		RC	Recent colluvium containing BIF, chert and shale fragments within a fine hematite matrix
Detrital iron deposit		DID1	Fine hematite pisolites with variable colluvium fragment concentrations, coarse fragments common
		DID2	Semi-consolidated pisolite dominant, transition between DID1 and DID3
		DID3	Semi-consolidated pisolite dominant with hematite fragments and fine hematite matrix; minimal clasts
		DID4	Competent, hard, pisolite hematite fragments with fine hematite matrix
Channel iron deposit		CID	Goethite-rich clays, goethite oolites and pisolites with fossil wood and basal conglomerate, along with internal white clay layers/lenses
Bedded iron deposit		BID	Vuggy, goethitic hard-cap with weak to moderate remnant banding and alternating hematite and goethite-rich bands
Basement		BM	Weakly altered/mineralised to fresh BIF, chert and shale

The wavy line represents the unconformity between the channel/detrital deposits above and bedded deposits below; not to scale

Geological interpretation

The various units were interpreted as wireframe surfaces, based on the geological logging and geochemical characteristics. For Blacksmith, Snowden reviewed the interpretations used in the 2014 resource models and believes that they are reasonable. As such, the geological interpretation for Blacksmith remains as per the 2014 models. For Anvil, Snowden updated the geological interpretation to use the same geological framework as that used at Blacksmith. Given the geological similarity between the iron mineralisation at Anvil and Blacksmith, Snowden believes that this is reasonable. An example oblique cross-section, looking northeast across the central portion of the Delta deposit, is shown in the Figure-2 below.

Figure-2: Example NW-SE oblique section through central Delta deposit



Blocks coloured by unit; drill holes coloured by Fe grade

Data

The data used to generate the grade estimates was supplied by FMS and included the following information:

- Block models, wireframes and drill hole composite files, along with resource reports, for the 2014 Blacksmith deposits.
- Drill hole data tables for the Anvil deposit.
- Density measurements from diamond and sonic drill core.
- Topographic surfaces for the Blacksmith and Anvil areas.
- Contour strings of water table modelling conducted by Advisian on behalf of FMS. Snowden generated a wireframe surface based on these strings.

Drilling methods

The majority of the Blacksmith deposits have been drilled on a nominal 125 m section spacing with holes spaced at 100 m intervals on section, with the drill sections oriented based on the dominant trend of the channel at each deposit. The drilling at Anvil is based on a 400 m section spacing with holes drilled at 200 m intervals on section. Drilling within the Delta deposit is down to 50 m by 50 m in some areas. All RC drilling at both Blacksmith and Anvil is vertical. As the drill holes are relatively short (average depth approximately 50 m) and vertical, no downhole surveying was conducted.

Snowden believes that this is reasonable as any deviation will likely be negligible and of no material impact to the resource modelling.

Approximately 93% of the drilling at the PIOP is reverse circulation (RC) drilling. The remainder of the drilling is either diamond core (PQ or HQ size), along with a small amount of Sonic drilling conducted in 2017. Diamond core and Sonic drilling was primarily conducted to acquire samples for metallurgical and geotechnical test work, or as twinned holes with RC holes for comparison purposes.

Field sampling

Snowden understands that no RC drilling has been conducted since 2014 and that samples from the RC drilling were collected using a static cone splitter mounted below the cyclone. A nominal 4 kg to 5 kg sample was collected for each 2 m interval in a pre-numbered calico sample bag. RC drilling utilised a 140 mm face sampling bit. Logging indicates that minimal water was encountered within the DID units during drilling and predominately dry samples were collected from the DID. Some wet samples were encountered in the CID and BID (and BM). When wet samples were encountered (either due to ground water or water injection to stabilise the hole) in the rig sampling system, care was taken to clean and flush out potential contaminants between sampling intervals; however, the process of cleaning the cyclone and flushing the hole of cuttings between rods/intervals for dry intervals is not recorded. Wet samples were collected in the same manner as dry samples, but were left to dry before being processed. Sample recovery from RC drilling was visually estimated (based on the quantity of cuttings) as being either “good” or “poor”, with the majority of samples recorded as having good recovery. Snowden notes that this is only an indicative measure for RC drill recovery. FMS report that poor recovery was typically encountered in the upper portions of the drill holes within the RC and DID1.

Only minimal diamond drilling has been conducted, primarily to provide material for metallurgical or geotechnical test work. Diamond core drilling utilised PQ or HQ diameter coring with triple tube to maximise recovery. However, poor sample recovery was noted within the unconsolidated and semi-consolidated DID and for the 2017 drilling programme, sonic drilling with an internal diameter of 97.9 mm was used to recover adequate samples from the upper DID for metallurgical test work.

Assaying

Samples were submitted to NATA accredited commercial laboratories in Australia, who prepared and assayed the samples using industry standard procedures. Assays were completed by fused bead x-ray fluorescence (XRF) for the standard iron ore suite of elements. A further test portion of the sample was analysed by thermogravimetric analysis (TGA) to determine the total loss on ignition (LOI) at 1,000°C.

QAQC

For the RC drilling conducted by FMS, standards and field duplicates were inserted into the sample batches to monitor the analytical accuracy and precision of the sampling. Additionally, several unannounced laboratory audits were conducted, along with twinned diamond and RC drill holes to assess for bias due to the drilling method, and checks between hard copy assay certificates and the database to ensure the data was uploaded correctly.

FMS provided Snowden with QAQC data and/or reports for the 2008 to 2014 drilling programmes. Snowden reviewed the documented practices employed by FMS with respect to the RC drilling, sampling, assaying and QAQC, and believes that the processes are appropriate and that the data is of a good quality and suitable for use in Mineral Resource estimation.

Estimation Methodology

Snowden employed the following approach to the resource modelling for Blacksmith:

- Snowden conducted a detailed review of the 2014 block models compiled by Optiro for all the Blacksmith deposits. Snowden found that the modelling process and parameters used by Optiro are reasonable and, given that no additional drilling that is material to the resource (in terms of volume or grade) has been conducted since 2014, Snowden has accepted the Optiro resource models with respect to the geological interpretation and domaining, along with the grade estimation for the major elements.
- As the secondary elements were not estimated in the resource models, estimates for CaO, K_2O, MgO, MnO and Na_2O were completed and added to the models by Snowden.
- The resource classification was updated to reflect Snowden's opinion of the level of uncertainty within certain domains and areas of the resource.
- The bulk density was reviewed and updated with additional measurements collected from the 2017 diamond and sonic core.

Data analysis

The sample data was coded within the mineralisation wireframes. Compositing was completed within the geological domains based on a 2 m downhole compositing interval.

Variograms were generated to assess the spatial continuity of the various elements and as inputs to the kriging algorithm used to interpolate grades. Snowden Supervisor software was used to generate and model the variograms for each element within each domain.

Block model and grade estimation

Block models were constructed for each deposit at Blacksmith based on a parent block size of 100 mE by 100 mN by 6 mRL, with a minimum sub-block size of 10 mE by 10 mN by 2 mRL. However, for the Delta deposit, a smaller parent block size of 50 mE by 50 mN by 6 mRL was used due to the closer drill hole spacing. Due to the wider drill hole spacing at Anvil, a parent block size of 100 mE by 200 mE by 6 mRL or 200 mE by 100 mE by 6 mRL, depending on the orientation of the channel, was used for the Anvil deposits. The chosen parent block sizes are based on the nominal drill hole spacing along with consideration of the geometry of the mineralisation and the results of the grade continuity analysis. The block models are limited to the tenement boundaries supplied by FMS.

Snowden validated and accepted the 2014 block grade estimates by Optiro for Fe, SiO_2, Al_2O_3, P, S, LOI and TiO_2, which were estimated using ordinary kriging (parent cell estimates) using hard domain boundaries. Snowden estimated CaO, K_2O, MgO, MnO and Na_2O grades using ordinary block kriging, using the same approach adopted by Optiro. Due to the variable orientation of the channels, orientation sub-domains were used within each estimation domain, with the search ellipse oriented appropriately for each sub-domain. Search ellipse ranges were based on the results of the variography along with consideration of the drill hole spacing, with a minimum of four and maximum of 32 composites used for the initial search pass, with no more than four composites per drill hole.

Model validations

The block grade estimates, were validated using:

- Visual comparison of block grade estimates and the input drill hole composites
- Global comparison of the average composite (naïve and declustered) and estimated block grades
- Moving window averages comparing the mean block grades to the composites.

The conclusions from the model validation work are as follows:

- Visual comparison of the model grades and the corresponding drill hole grades shows a good correlation and trends observed in the drilling are honoured in the block estimates.
- A comparison of the global drill hole mean grades with the mean grade of the block model estimate (for each domain) shows that the block model mean grades are typically within 5% of the drill hole means for the majority of elements, which is a good outcome.
- With the exception of poorly sampled regions, the grade trend plots show a good correlation between the patterns in the block model grades compared with the drill hole grades.

Bulk Density

Bulk density measurements at the PIOP have been taken using a variety of techniques, including hydrostatic (i.e. Archimedes' Principle) measurements of 15 cm pieces of diamond drill core (uncoated, plastic wrapped and wax-coated samples), calliper measurements of 15 cm pieces of diamond drill core (whole core), downhole gamma gamma geophysical logging of drill holes, and calliper measurements of core from sonic drilling.

Analysis by Snowden of the downhole gamma gamma logging revealed that this data was not usable to estimate the bulk density as the data was not processed and calibrated when originally collected.

Based on analysis of bulk density measurements of diamond core, along with data from the sonic drilling, Snowden assigned the bulk density to the model blocks (for both Blacksmith and Anvil) as per the Table-2.

Table-2: Bulk Density assigned to block model

Unit	Assigned bulk density (t/m^3)	Comment
RC	2.40	Average value
DID1	2.62 (weighted avg.)	Multiple linear regression based on block estimated Fe, SiO_2, Al_2O_3 and P
DID2	2.93 (weighted avg.)	
DID3	3.04 (weighted avg.)	
DID4	3.28 (weighted avg.)	
CID	2.64	Average value
CL	2.20	No samples, assumed value
BID	2.59	Average value
BM	3.15	Average value

Mineral Resource classification and reporting

The February 2018 PIOP Mineral Resource estimate has been classified and reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code).

The Mineral Resource has been classified as a combination of Measured, Indicated and Inferred Resources using the following criteria:

- Measure Resource – DID3 or DID4 with good geological continuity and defined by drilling on a 50 mE by 50 mN grid or better. The Measured Resource is limited to the Delta deposit.
- Indicated Resource – mineralisation with reasonable geological continuity and defined by drilling on a 100 mE by 100 mN grid or better.
- Inferred Resource – mineralisation with poor geological continuity or which is defined by drilling on a grid greater than 100 mE by 100 mN, along with extrapolation beyond the drilling. All Anvil deposits are classified as Inferred in its entirety.
- The confidence in the DID1 and DID2 is considered to be lower due to uncertainty associated with the sample recovery within the largely unconsolidated DID1 and DID2 intervals, along with fewer bulk density measurements, resulting in these units being classified as Indicated Resources even at a 50 mE by 50 mN drill spacing.
- The geological confidence in the CID and BID is considered to be lower due to poorer geological continuity, resulting in these units being classified as Indicated Resources even at a 50 mE by 50 mN drill spacing.
- All blocks within the Recent Colluvium(RC), Clay (CL) and Basement (BM) units remain unclassified and do not form part of the Mineral Resource.

Extrapolation beyond the drilling is limited to approximately one drill section in most cases.

The Mineral Resource for the PIOP has been reported above cut-off grades as follows:

- DID1, DID2, DID3 (OPF2): Fe>40% and Al2O3<8%
- DID4, CID, BID (OPF1): Fe>50% and Al2O3<6%

The cut-off grades are based on product optimisation carried out by Snowden based on metallurgical regressions provided by FMS for the Ore Processing Facility 1 (OPF1) and Ore Processing Facility 2 (OPF2) processing routes. FMS propose to beneficiate relatively low grade DID1, DID2 and DID3 mineralisation using a processing route known as OPF2, which includes crushing, scrubbing, wet screening and dense media separation (DMS). The metallurgical regressions based largely on 2017 sonic drilling samples shows this to be a viable processing flow sheet. The OPF1 processing route includes crushing, wet scrubbing, wet screening and hydrocyclone desliming.

The total PIOP Mineral Resource, including Blacksmith and Anvil, is estimated to be 1,484 Mt at 52.2% Fe, 14.8% SiO_2 and 4.96% Al_2O_3, reported using the cut-offs defined above. Approximately 20% of the resource tonnage occurs below the water table. The Mineral Resource is detailed in Table-3.

While exercising all reasonable due diligence in checking and confirming the data validity, Snowden has relied largely on the data as supplied by FMS to estimate and classify the PIOP Mineral Resource. As such, Snowden accepts responsibility for the resource modelling and classification while FMS has assumed responsibility for the accuracy and quality of the underlying drilling data.

Table-3: PIOP Mineral Resource statement, as at February 2018

Area	Class	Units	Tonnes (Mt)	Density (t/m^3)	Fe %	SiO_2 %	Al_2O_3 %	P %	LOI %	S %	TiO_2 %	CaO %	K_2O %	MgO %	MnO %	Na_2O %
Blacksmith	**Measured**	DID3	28	3.01	57.8	8.00	5.34	0.053	3.08	0.019	0.57	0.05	0.02	0.07	0.02	0.05
		DID4	26	3.25	62.0	4.34	3.14	0.076	2.87	0.017	0.60	0.03	0.01	0.05	0.04	0.04
	Measured Total		54	3.12	59.8	6.24	4.28	0.064	2.98	0.018	0.58	0.04	0.02	0.06	0.03	0.04
	Indicated	DID1	347	2.62	45.7	25.2	5.62	0.043	2.81	0.013	0.48	0.06	0.07	0.09	0.03	0.04
		DID2	241	2.83	53.2	14.3	5.86	0.043	2.70	0.016	0.57	0.05	0.03	0.09	0.02	0.04
		DID3	145	3.04	58.4	7.42	5.05	0.054	3.00	0.017	0.66	0.04	0.02	0.06	0.03	0.03
		DID4	38	3.30	62.3	3.83	2.68	0.080	3.22	0.017	0.80	0.03	0.01	0.04	0.05	0.02
		CID	172	2.64	54.5	8.43	3.95	0.109	8.94	0.009	0.31	0.04	0.01	0.06	0.03	0.02
		BID	205	2.59	56.3	6.14	3.14	0.111	9.46	0.027	0.37	0.03	0.02	0.04	0.03	0.03
	Indicated Total		1,148	2.73	52.6	14.1	4.81	0.067	4.93	0.017	0.49	0.05	0.04	0.07	0.03	0.03
	Inferred	DID1	61	2.69	48.0	21.5	5.78	0.044	3.07	0.014	0.52	0.10	0.07	0.13	0.03	0.03
		DID2	5	2.89	53.2	14.8	4.96	0.052	3.00	0.017	0.51	0.05	0.04	0.07	0.02	0.04
		DID3	16	3.01	57.3	7.84	5.34	0.051	3.86	0.018	0.58	0.05	0.02	0.08	0.03	0.01
		DID4	3	3.24	61.9	4.98	2.72	0.067	2.76	0.021	0.66	0.01	0.01	0.01	0.02	0.00
		CID	1	2.64	53.9	7.83	3.93	0.140	9.70	0.009	0.24	0.05	0.03	0.13	0.05	0.01
		BID	21	2.59	56.0	6.81	3.46	0.097	8.89	0.034	0.39	0.02	0.01	0.03	0.03	0.01
	Inferred Total		105	2.73	51.6	15.7	5.13	0.057	4.40	0.019	0.50	0.07	0.05	0.10	0.03	0.02
Blacksmith Total			**1,307**	**2.74**	**52.8**	**13.9**	**4.81**	**0.066**	**4.81**	**0.017**	**0.49**	**0.05**	**0.04**	**0.07**	**0.03**	**0.03**
Anvil	**Inferred**	DID1	122	2.58	44.2	25.5	6.31	0.041	3.88	0.019	0.61	0.06	0.05	0.09	0.02	0.04
		DID2	33	2.76	51.1	15.4	6.63	0.036	3.83	0.023	0.78	0.05	0.03	0.08	0.02	0.04
		DID3	11	3.06	58.3	7.44	4.58	0.050	3.13	0.020	1.09	0.04	0.02	0.07	0.03	0.02
		BID	12	2.59	55.4	7.36	2.90	0.103	8.45	0.028	0.53	0.04	0.01	0.06	0.04	0.02
	Inferred Total		176	2.64	47.1	21.3	6.05	0.044	4.13	0.021	0.66	0.06	0.04	0.09	0.02	0.04
Anvil Total			**176**	**2.64**	**47.1**	**21.3**	**6.05**	**0.044**	**4.13**	**0.021**	**0.66**	**0.06**	**0.04**	**0.09**	**0.02**	**0.04**
Grand Total			**1,484**	**2.73**	**52.2**	**14.8**	**4.96**	**0.064**	**4.73**	**0.017**	**0.51**	**0.05**	**0.04**	**0.08**	**0.03**	**0.03**

Appendix 2: JORC Table-1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Exploration results are based on 2m composite samples from Reverse Circulation (RC) drilling. • An average sample size of 4-5 kg was collected from RC drilling and sent for major and trace element analysis via fused bead XRF. All samples were submitted for analysis. • Standards (Certified Reference Materials – CRM's) and field duplicates were used to ensure sample representivity and quality of assay results. • All diamond drill holes were triple tubed with half core used for QAQC purposes and whole core used for metallurgical or geotechnical test work.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• The majority of drilling was RC drill holes of approximately 140mm (5.5 in) diameter utilising a face sampling hammer button bit. • PQ sized diamond holes were drilled for metallurgical work and HQ sized holes for geotechnical and QAQC purposes. Some geotechnical holes were angled and oriented.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Sample quality and recovery of both RC and diamond drilling was 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 a visual estimate of the amount of cuttings recovered. 93% of all samples were logged as good. • Diamond core recoveries are routinely logged and recorded in the database as a measure of length of core recovered versus the depth drilled. The global length weighted average core recovery is 87%. Average core recovery is 75% within DID1, 80% for DID2, 87% for DID3, 85% for DID4, 91% for CID and 85% for BID. • Results of previous RC-diamond twin holes indicate that there is no significant bias in the RC assays compared to the diamond core assays. However, there is some uncertainty associated with these comparisons due to poor diamond core recoveries in some units (e.g. DID1).
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Detailed geological logging of all RC and diamond 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 relevant for both mineral resource estimation and future mining and processing studies. • All diamond core has been photographed. • All intervals were logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling was representative of the in situ material collected, including field duplicate/second-half sampling.*	• RC drilling samples are collected in pre-labelled bags via a cone splitter mounted directly below the cyclone. • Wet and dry sample are collected via the same technique. • Samples were stored on site prior to being transported to the laboratory. Wet samples were allowed to dry before being processed. • At the laboratory the samples are sorted, dried at 105°C and weighed. They are crushed and split via a riffle splitter to obtain a sub-fraction. This fraction is pulverized and used for analysis. • Field duplicates were taken at a rate of 4 per 100 samples in the same manner as the original sample. • Field standards (commercial pulp CRM's sourced from Geostats Pty

Criteria	JORC Code explanation	Commentary
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Ltd) were inserted at a rate of 5 per 100 samples. • Internal 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 standard industry practice.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Samples were forwarded primarily to the Ultra Trace laboratory in Perth or the Amdel laboratory in Cardiff, NSW for sample preparation and analysis. Pulp samples were also sent to the SGS laboratory in Perth for umpire analysis as part of FMS's QAQC procedures. All laboratories used are NATA accredited for ISO17025. • All samples were analysed via fused bead X-Ray Fluorescence (XRF) 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°C using thermogravimetric analysis (TGA). • Field duplicates were taken at a rate of 4 per 100 samples in the same manner as the original sample, directly from the rig-mounted splitter. • Standards were inserted by FMS into the RC sample batches at a nominal rate of 5 per 100 samples. Commercial iron ore pulp standards were sourced from Geostats Pty Ltd (GIOP series standards), with a range of grades from approximately 20% Fe up to 61% Fe. • The assay results of the pulp standards show most of results fall within acceptable tolerance limits and no material bias is evident. Field duplicates show a high level of precision has been achieved for the majority of samples, with at least 90% of field duplicates having less than 10% half absolute relative difference (HARD) for the major elements. • Approximately 5% of samples have been sent to an umpire laboratory (SGS, Perth) as an independent check. No significant issues were identified with an excellent correlation between laboratories.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intersections have been verified by FMS geologists. • A twin hole (RC vs DD) analysis demonstrated a high degree of compatibility between the two sample types with no evidence of any significant grade bias due to drilling method. • Twin RC vs RC holes have shown good correlation between the original and twin hole. • During previous drilling campaigns, logging data was collected directly via Ocris logging software with inbuilt validation checks and loaded into a Geobank database. Assay data was loaded directly into the database. A physical check of assays within the database versus hard copies is done at a rate of approximately 5%. No significant errors have been identified. • Several unannounced audits of laboratories were conducted while FMS samples were being processed. No issues or concerns were apparent.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole collar locations have been surveyed by FMS using a Differential GPS (DGPS) with an accuracy of less than 5cm for easting, northing and elevation. • Collar surveys are validated against planned coordinates and the topographic surface. • As the drill holes are relatively short (average depth approximately 50 m) and vertical, no downhole surveying was conducted. Snowden believes that this is reasonable as any deviation will likely be negligible and of no material impact to the resource modelling. • The primary grid used is Map Grid Australia 94, Zone 50 (MGA94). Vertical datum is the Australian Height Datum (AHD). • Topographic surface uses Lidar 50cm contours acquired by FMS in 2009.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The drill grid spacing varies between deposits. • For the majority of deposits, a nominal spacing of approximately 100 m by 125 m is achieved. The Delta deposit is drilled at a spacing of approximately 50 m by 50 m over much of its area while Ajax is approximately 100 m by 500 m. The drilling at Anvil is based on a 400 m section spacing with holes drilled at 200 m intervals on section. • This level of drill spacing is sufficient for this style of mineralisation to establish the degree of geological and grade continuity to support

Criteria	JORC Code explanation	Commentary
		Mineral Resource classification.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The vast majority of drill holes are vertical and less than 120m deep. • Given the drill hole spacing and the predominantly flat lying ore body, any deviation of these vertical holes would have minimal impact on the geological interpretation. • No apparent material relationship is present between sampling bias and geological orientation.
Sample security	• *The measures taken to ensure sample security.*	• Sample chain of custody is managed by Flinders. • Samples in calico bags were packed into polyweave bags and then placed into heavy duty bulka bags for transport to Tom Price. They were then transported via commercial freight directly to the laboratory. • Consignment notes for each submission are tracked and monitored.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No formal audits or reviews have been undertaken. • As part of the Mineral Resource estimation, Snowden reviewed the documented practices employed by FMS with respect to the previous RC drilling, sampling, assaying and QAQC, and believes that the processes are appropriate and that the data is of a good quality and suitable for use in Mineral Resource estimation.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Pilbara Iron Ore Project (PIOP) comprises two 100% owned tenements, M47/1451 and E47/1560, located approximately 70km NW of Tom Price. • The tenements lie within the Eastern Guruma Native Title Determination. FMS has a current Native Title Agreement in place.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration 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 in the past.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• 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 Detrital Iron Deposits (DID) and Channel Iron Deposits (CID). Some areas of the bedrock are also mineralised forming Bedded Iron Deposits (BID). • DID is characterised by hematite rich mineralisation that has been eroded from surrounding banded iron formation. It is mainly composed of detrital material of pisolitic or fragmental types. The DID is sub-divided into four units, DID1 to DID4, based on textural and chemical characteristics. The upper unit, DID1, is the least mature and has the lowest Fe content and highest SiO_2 and Al_2O_3 content of the DIDs. The Fe content increases from DID1 to DID4, with a corresponding decrease in the SiO_2 and Al_2O_3 content, with the DID4 unit being highest in Fe and lowest in SiO_2 and Al_2O_3. • Below the DID units lies the BID mineralisation, which is interpreted to be of the Dales Gorge Member of the Brockman Iron Formation. The BID is interpreted to comprise a goethitic, hydrated hard-cap style mineralisation, with remnant bedding and a vuggy texture. CID mineralisation has been identified between the DID and BID mineralisation in some parts of the Delta, Eagle, Champion and Blackjack deposits. The CID is typically a yellow-brown colour due to

Criteria	JORC Code explanation	Commentary
		the goethitic nature of this unit, with fossilised wood observed in many intersections. Internal clay zones of up to a few metres thick, comprising a white clay, have been intersected within the CID. The geological continuity of the internal clay horizons is relatively low and they are interpreted to form lenses or pods.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• No exploration results being reported. • Due to the advanced nature of the project and the large numbers of drill holes, the current drilling is not considered material and therefore drill hole collar information not be tabulated. • A diagram showing the location of drill hole collars is included in the accompanying release.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No exploration results being reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• No exploration results being reported.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being*	• Refer to figures in main summary.

Criteria	JORC Code explanation	Commentary
	reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• No exploration results being reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No exploration results being reported. • Mapping and outcropping mineralisation supports the geological interpretation is these areas.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Infill drilling across the deposits may be required in future to improve confidence and for additional metallurgical testwork. • Additional targets for bedded mineralisation have been identified. • However no further drilling is currently planned.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Logging data for RC drilling was captured using ruggedized laptops using Ocris logging software, which applied validation during data entry/input. The data (including assay data) was subsequently uploaded to a database. • In late-2017 and early 2018, FMS engaged RSC Consulting to update and validate the database. All current and historical drilling was imported into Micromine software and reviewed in 3D, to check for spatial errors. Micromine was also used to validate the data for interval errors and missing data. Any errors found were corrected by referring to original field data. A selection of assay results from the database used for estimation were compared to original assay batches received from the laboratory. A comparison was done of drilling data used in previous resource estimation and the database, to check for missing data. No significant errors or issues were found by RSC during these checks. • The existing database is currently being migrated from an historic GBIS structure to a modern Geobank one, including all assays being imported from the original assay batches to minimise the chance of errors.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Snowden Principal Consultant, John Graindorge, visited the PIOP on the 23rd and 24th October 2017, observing the outcropping mineralisation and general site layout, along with drill core intervals from 2017 sonic drilling and historical diamond core.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The various units were interpreted as wireframe surfaces, based on the geological logging and geochemical characteristics. • For Blacksmith, Snowden reviewed the interpretations used in the 2014 resource models and believes that they are reasonable. As such, the geological interpretation for Blacksmith remains as per the 2014 models. For Anvil, Snowden updated the geological interpretation to use the same geological framework as that used at Blacksmith. Given the geological similarity between the iron

Criteria	JORC Code explanation	Commentary
		mineralisation at Anvil and Blacksmith, Snowden believes that this is reasonable. • Alternative interpretations are unlikely to have a material impact on the global resource volumes.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The deposits vary in size and are controlled by the geomorphology of the channels. • Strike lengths of the channels ranges from approximately 1 km at Badger and Paragon, to approximately 6.5 km at Eagle. The width of the channels ranges from a few hundred metres within individual tributaries, up to 2 km wide within the central portion of the channels (e.g. Champion and Delta). • The channels are up to approximately 65 m deep, with 5-20 m of recent cover overlying the DID. The top of the DID through to the base of CID ranges from 10 m to 60 m thick, thickening towards the middle of the channel and narrowing along the flanks.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.*	• Block model constructed using a parent block size of 100 mE by 100 mN by 6 mRL for all Blacksmith deposits except Delta which used a 50 mE by 50 mN by 6 mRL parent block size. A parent block size of either 100 mE by 200 mN by 6 mRL or 200 mE by 100 mN by 6 mRL was used for the Anvil deposits depending on the orientation of the channel and drilling grid. The block size is based on half the nominal drill hole spacing along with an assessment of the grade continuity. • Snowden validated and accepted the 2014 block grade estimates by Optiro for Fe, SiO_2, Al_2O_3, P, S, LOI and TiO_2, which were estimated using ordinary kriging (parent cell estimates) using hard domain boundaries. Snowden additionally estimated CaO, K_2O, MgO, MnO and Na_2O grades using ordinary block kriging, using the same approach adopted by Optiro. Grade estimation was completed using Datamine Studio 3 (Datamine) software. • Due to the variable orientation of the channels, orientation sub-domains were used within each estimation domain, with the search ellipse oriented appropriately for each sub-domain. Search ellipse ranges were based on the results of the variography along with consideration of the drill hole spacing, with the same search neighbourhood parameters used for all elements to maintain the

Criteria	JORC Code explanation	Commentary
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	metal balance and correlations between elements. A three-pass search strategy was used (i.e. if initial search criteria are not met, an expanded search ellipse is used). A minimum of four and maximum of 32 composites was used for the initial search pass, with no more than four composites per drill hole. • Grade estimates were validated against the input drill hole composites (globally and using grade trend plots) and show a good comparison. • There is no operating mine and no production data is currently available.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All tonnages have been estimated as dry tonnages.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource for the PIOP has been reported above cut-off grades as follows: ○ DID1, DID2, DID3 (OPF2): Fe>40% and Al_2O_3<8% ○ DID4, CID, BID (OPF1): Fe>50% and Al_2O_3<6% • The cut-off grades are based on product optimisation carried out by Snowden based on metallurgical regressions provided by FMS for the OPF1 and OPF2 processing routes.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Mining of the deposit is assumed to use conventional drill and blast open cut mining methods, with on-site processing to produce a fines product.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• FMS propose to upgrade lower grade DID1, DID2 and DID3 mineralisation using a processing route known as OPF2, which includes dense media separation (DMS) and hydrocyclone desliming. Metallurgical testwork conducted by FMS, based largely on sonic drilling samples from 2017, shows this to be a viable processing flow sheet and produces a saleable product. The OPF1 processing route, which is proposed for DID4, CID and BID mineralisation is similar to OPF2, but without the DMS, and also shows a saleable product can

Criteria	JORC Code explanation	Commentary
		be produced from PIOP mineralisation.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The Blacksmith deposit occurs on a granted Mining Lease (M47/1451) and it is assumed that no environmental factors have been identified that may impede development at the PIOP.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density measurements at PIOP have been taken using a variety of techniques, namely: ○ Hydrostatic (i.e. Archimedes' Principle) measurements of 15 cm pieces of diamond drill core (whole core). Measurements were done on uncoated, plastic wrapped and wax-coated samples. ○ Calliper measurements of 15 cm pieces of diamond drill core (whole core). ○ Downhole gamma gamma geophysical logging of drill holes. ○ Calliper measurements of core from sonic drilling. • The bulk density assigned to the model blocks is based on measurements of diamond drill core. Measurements from downhole geophysics and the sonic core, was not used for the following reasons: ○ Downhole geophysical measurements were not processed or calibrated during the original surveying between 2008 and 2014, and as such the gamma gamma density measurements are unusable. FMS attempted to process this data using independent geophysical contractors, but was not successful. ○ Bulk density data collected from core produced by the 2017 sonic drilling was assessed, however, Snowden believes that the sonic data overestimates the bulk density due to incorrect diameter assumptions, issues with compression of the sample (due to the vibrations induced by the drilling method), along with potential extraction errors during drilling of unconsolidated

Criteria	JORC Code explanation	Commentary
		or semi-consolidated material. As such, Snowden believes that the sonic core density measurements are compromised and hence have been excluded from the bulk density analysis (although the trends in the sonic data have been used to validate some assumptions, such as correlations with grade). • Snowden assessed bulk density measurements from each deposit but found that there are no obvious differences between deposits and as such the deposits were combined for the bulk density analysis. Given the nature of the detrital mineralisation, which increases in Fe grade from DID1 through to DID4, Snowden assessed for any correlation between assay grade and bulk density within the combined DID data. Whilst there is only minimal data available, a strong correlation was found between bulk density and Fe, SiO_2, Al_2O_3 and P, which was validated by similar (albeit not as strong) trends in the sonic data. As such a multiple linear regression was used to estimate the bulk density of the DID based on these assay grades. For most other domains an average bulk density value was used. • Bulk density values were assigned to the model blocks based on the geological domain as per the table below:

Unit	Assigned bulk density (t/m^3)	Comment
RC	2.40	Average value
DID1	2.62 (weighted avg.)	Multiple linear regression
DID2	2.93 (weighted avg.)	Multiple linear regression
DID3	3.04 (weighted avg.)	Multiple linear regression
DID4	3.28 (weighted avg.)	Multiple linear regression
CID	2.64	Average value
CL	2.20	No samples, assumed
BID	2.59	Average value
BM	3.15	Average value

Criteria	JORC Code explanation	Commentary
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	• The Mineral Resource has been classified as a combination of Measured, Indicated and Inferred Resources using the following

Criteria	JORC Code explanation	Commentary
	• *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	criteria: ○ Measure Resource – DID3 or DID4 with good geological continuity and defined by drilling on a 50 mE by 50 mN grid or better. The Measured Resource is limited to the Delta deposit. ○ Indicated Resource – mineralisation with reasonable geological continuity and defined by drilling on a 100 mE by 100 mN grid or better. ○ Inferred Resource – mineralisation with poor geological continuity or which is defined by drilling on a grid greater than 100 mE by 100 mN, along with extrapolation beyond the drilling. All Anvil deposits are classified as Inferred in its entirety. ○ The confidence in the DID1 and DID2 is considered to be lower due to uncertainty associated with the sample recovery within the largely unconsolidated DID1 and DID2 intervals, along with fewer bulk density measurements, resulting in these units being classified as Indicated Resources even at a 50 mE by 50 mN drill spacing. ○ The geological confidence in the CID and BID is considered to be lower due to poorer geological continuity, resulting in these units being classified as Indicated Resources even at a 50 mE by 50 mN drill spacing. ○ All blocks within the RC, CL and BM units remain unclassified and do not form part of the Mineral Resource. • Extrapolation beyond the drilling is limited to approximately one drill section in most cases. • The resources have been classified based on the continuity of both the geology and the grades, along with the drill hole spacing and data quality. • The Mineral Resource classification appropriately reflects the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimate has been peer reviewed as part of Snowden's standard internal peer review process. • Snowden is not aware of any external reviews of the PIOP Mineral Resource estimate.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Mineral Resource has been validated both globally and locally against the input composite data. The Measured and Indicated portions of the Mineral Resource estimate are considered to be locally accurate at the scale of the parent block size. Close spaced drilling during grade control is required to assess the confidence of the short-range grade continuity. • No production data is available for comparison with the Mineral Resource estimate at this stage.