



ANNOUNCEMENT TO THE AUSTRALIAN SECURITIES EXCHANGE: 30 SEPTEMBER 2015

### JORC 2012 RESOURCE ESTIMATE FOR KULON PROGO PROJECT

Indo Mines Limited ('Indo Mines') is pleased to announce the completion of a Mineral Resource estimate, reported in accordance with the requirements of the JORC Code (2012 edition) for its 70% owned Kulon Progo iron sands project.

A summary of the Resource estimate is set out in the following table.

Block	Stratigraphy	Category	Volume (,000 m <sup>3</sup> )	Dry Tonnes (,000 t)	Fe (%)	TiO <sub>2</sub> (%)	V <sub>2</sub> O <sub>5</sub> (%)
Resource Block	Surface Sand	Measured	29,044	55,370	12.56	1.65	0.06
		Indicated	77,800	150,600	14.17	1.87	0.07
		<b>Total</b>	<b>106,900</b>	<b>206,000</b>	<b>13.74</b>	<b>1.81</b>	<b>0.07</b>
Mining Boundary	Surface Sand	Measured	22,015	42,079	12.37	1.62	0.06
		Indicated	67,900	131,600	14.15	1.87	0.07
		<b>Total</b>	<b>89,900</b>	<b>173,700</b>	<b>13.72</b>	<b>1.81</b>	<b>0.07</b>

Note: The Resource Block is defined as all areas of the Resource defined within the concession by the exploration drilling at a 9% Total Fe cut-off. The Mining Boundary is defined as the Resource Block, minus a 200-metre buffer zone (required by Indonesian regulations) between the high tide mark and the allowed mining area boundary at a 9% Total Fe cut-off.

In addition, there are Resources within the concession hosted within the Gravel underlying the Surface Sand. This gravel layers also contains lower grades of Total Fe. The Resource estimate for the Gravel horizon is set out in the following table.

Block	Stratigraphy	Category	Volume (,000 m <sup>3</sup> )	Dry Tonnes (,000 t)	Fe (%)	TiO <sub>2</sub> (%)	V <sub>2</sub> O <sub>5</sub> (%)
Resource Block	Gravel	Indicated	188,500	327,600	7.22	0.90	0.03
Mining Boundary	Gravel	Indicated	150,300	261,900	7.23	0.90	0.03

Note: The Resource Block is defined as all areas of the Resource defined within the concession by the exploration drilling at a 5% Total Fe cut-off. The Mining Boundary is defined as the Resource Block, minus a 200-metre buffer zone (required by Indonesian regulations) between the high tide mark and the allowed mining area boundary at a 5% Total Fe cut-off.

The resource estimate has been prepared by Brett Gunter of PT GMT Indonesia. An Executive Summary of the Resource Report is attached as an Appendix to this announcement, along with a description of the assessment and reporting criteria used in the estimation reflecting those detail in Table 1 of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012).

#### **Competent Persons Statement**

The information in this announcement that relates to Exploration Results and Mineral Resources of the Kulon Progo Iron Sands Project is based on information compiled and reviewed by Mr. Brett Gunter, who is a Member of the Australian Institute of Mining and Metallurgy and works full time for PT GMT Indonesia. The information has been forwarded to him by Indo Mines Limited as being representative of the work completed on the concession.

Mr Gunter, signing on behalf of PT GMT Indonesia, is a qualified Geologist who has more than 25 years of relevant mining and geological experience in coal, bulk commodities and metals, working for major mining companies and for consultants. During this time he has either managed or contributed significantly to a number of exploration and mining studies related to the estimation, assessment, evaluation and economic extraction of mineral resources in Indonesia.

He has sufficient experience which is relevant to the style and type of deposit under consideration and to the activity he is undertaking to qualify him as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. He consents to the inclusion in the announcement of the Resource estimate in the form and context in which it appears.

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## EXECUTIVE SUMMARY

PT GMT Indonesia was requested by Indo Mines Limited (IML) to conduct a technical review and Resource estimation of the PT Jogja Magasa Iron (JMI) concession area. The prospect area lies within the Daerah Istimewa Yogyakarta (DIY, Special Region of Yogyakarta), Indonesia. The Kulon Progo Project is a joint venture between Indo Mines Limited (70%) and PT Jogja Magasa Mining (JMM, 30%).

The iron sand deposit extends over a strike length of approximately 22 kilometres of coastline between the Sungai Bogowonto (Bogowonto River) and the Sungai Progo (Progo River). The deposit extends from the active shoreline for up to 1.8km inland from the coastline. The granted area of the JMI CoW covers approximately 15km of the potential deposit strike length. The concession is centred on coordinates E110° 05' S07° 54'.

The exploration program that generated the drilling data used in this resource estimate was completed by MacKay and Schnellmann commencing in March 2006 and was largely completed by the end of July 2006. The data is well collected, well documented and backed by procedures and reviews that make the data suitable for inclusion in to a Resource estimate. QA/QC programs in place at the time are well documented and the results have shown the sample collection techniques are repeatable and accurate.

The deposit comprises two main units, the Surface Sand (Ss) and Gravel (Gr) units. The Surface Sand (Ss), Gravel (Gr) and Silt (Sl) units are all mineralised in the sense that they contain liberated magnetite that is potentially extractable. The Ss unit is obviously the most attractive from a potential exploitation point of due to the higher grades and generally consistent nature of the Ss horizon.

The geological modelling and block modelling was completed using Leapfrog Geo v2.2 software.

The database utilised for modelling comprised the following data sets:

- 929 drill holes with holes ranging from 7m to 37m and a total drilled metreage of 14,466m
- 14,467 lithological entries on generally 1m intervals
- 14,467 assay interval entries with 4,086 missing intervals (not assayed)
- 3,044 bulk density determinations throughout the deposit, both in Ss and Gr units
- Topographic data.

A geological model and block model was compiled to define the area of the deposit within the CoW area. The geological model and interpolated block model were validated to ensure they conformed to the exploration data. The block model was categorised into areas reflecting the confidence in the continuity of the mineralisation between points of observation.

The following Resource estimate is made for the JMI CoW concession area, date stamped 25<sup>th</sup> September 2015. We believe the Resource estimate is robust and fully represents the exploration data and current geological situation within the JMI CoW concession area. The Resource estimates made are global estimates. The Resource estimates are reported in accordance with the requirements of the JORC Code (2102) edition.

The Ss Unit Resource is outlined as follows:

Block	Stratigraphy	Category	Volume (,000 m <sup>3</sup> )	Dry Tonnes (,000 t)	Total Fe (%)	TiO <sub>2</sub> (%)	V <sub>2</sub> O <sub>5</sub> (%)
Resource Block	Surface Sand	Measured	29,044	55,370	12.56	1.65	0.06
		Indicated	77,800	150,600	14.17	1.87	0.07
		<b>Total</b>	<b>106,900</b>	<b>206,000</b>	<b>13.74</b>	<b>1.81</b>	<b>0.07</b>
Mining Boundary	Surface Sand	Measured	22,015	42,079	12.37	1.62	0.06
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		<b>Total</b>	<b>89,900</b>	<b>173,700</b>	<b>13.72</b>	<b>1.81</b>	<b>0.07</b>

Note: The Resource Block is defined as all areas of the Resource defined within the concession by the exploration drilling at a 9% Total Fe cut-off. The Mining Boundary is defined as the Resource Block, minus a 200-metre buffer zone (required by Indonesian regulations) between the high tide mark and the allowed mining area boundary at a 9% Total Fe cut-off.

The Gr Unit Resource is outlined as follows:

Block	Stratigraphy	Category	Volume (,000 m <sup>3</sup> )	Dry Tonnes (,000 t)	Total Fe (%)	TiO <sub>2</sub> (%)	V <sub>2</sub> O <sub>5</sub> (%)
Resource Block	Gravel	Indicated	188,500	327,600	7.22	0.90	0.03
Mining Boundary	Gravel	Indicated	150,300	261,900	7.23	0.90	0.03

Note: The Resource Block is defined as all areas of the Resource defined within the concession by the exploration drilling at a 5% Total Fe cut-off. The Mining Boundary is defined as the Resource Block, minus a 200-metre buffer zone (required by Indonesian regulations) between the high tide mark and the allowed mining area boundary at a 5% Total Fe cut-off grade.

Although some of the Gr Unit lies within the Measured Resource category applicable to the Ss Unit, we have relegated all of the Gr Unit Resource to Indicated to reflect the uncertainty in the methodology of mining such a deposit. The base of the Gr Unit Resource has also been truncated at a level approximately 10m below mean seal level, even though the Gr Unit extends below this point in many areas.

Factors that may affect the Resource estimate are limited to the non-technical factors of the project, such as land utilisation, spatial planning and community perceptions of the project.

From an exploration viewpoint, there are few recommendations that are valid. However, future work may consider any of the following:

- Utilising the remnant samples for further widespread magnetite recovery test work over a wider area of the deposit for predictive recovery modelling
- The infill drilling could be completed in some areas to raise the category levels of some Resources (from Indicated to Measured) but there may be little benefit from such a program at this point in time
- Further hydrogeological work to determine any mining constraints on the water table level at various times of the year (wet/dry season)
- For further development, a reproduction of the feasibility study completed previously and incorporating the newly planned processing route of a beneficiation plant and smelter would define fully the development options for the project.

# **APPENDIX 1**

## **JORC CODE (2012) RESOURCE ESTIMATE CHECKLIST**

Criteria	JORC Code explanation	Commentary	Risk Rating
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were generally taken at 1m intervals except for three 0.5m intervals and one 2m interval. These latter 4 intervals were not assayed. Each one-metre sample was split at the rig using a 1:7 triple deck sample splitter. After air-drying at the camp this 1/8th split was further split to produce a 0.25kg sample for despatch to the laboratory and a dry retention sample.</li> <li>All samples were collected based on visual observation of iron minerals.</li> <li>Full samples collected for each interval.</li> <li>Resource is based on 929 drill holes with holes ranging from 7m to 37m and a total drilled metreage of 14,466m, 14,467 lithological entries, 10,381 routine analyses and 3,044 bulk density determinations.</li> </ul>	Low
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul style="list-style-type: none"> <li>Two aircore drill rigs were used on the program, an RB E260 mounted on a track base and an RB T37 mounted on a heavy-duty agricultural tractor with separate compressors with support vehicles.</li> </ul>	Low
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were weighed against theoretical recovery.</li> <li>Suitable size compressors used to ensure full sample recovery.</li> <li>The mineralisation is evenly distributed throughout the sample interval.</li> </ul>	Low
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>The geologist who was assigned to that drill rig using a pro forma drill log, filled in by hand, to log the samples returned by the drilling.</li> <li>All intervals were logged.</li> <li>Mineral quantities estimated visually, recorded in the log sheets, quantitative logging.</li> </ul>	Low
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-</li> </ul>	<ul style="list-style-type: none"> <li>Each one-metre sample was split at the rig using a 1:7 triple deck sample splitter. After air-drying at the camp this 1/8th split was further split to produce a 0.25kg sample for despatch to the laboratory and a dry retention sample. Sampling was direct from the hole.</li> <li>Sample preparation procedures were adequate. Each individual sample split sent to the laboratory was around 0.25 kilograms to save on freight charges requiring each one metre sample returned by the drilling to be split at the rig using a 1:7 triple deck sample splitter. After air-drying at the camp this 1/8th split would be further split to produce a sample for</li> </ul>	Low

Criteria	JORC Code explanation	Commentary	Risk Rating
	<p><i>half sampling.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>despatch to the laboratory and a dry retention sample.</p> <ul style="list-style-type: none"> <li>• Duplicate and sample replicates submitted for analysis.</li> <li>• The material is fine sand, therefore the material represents the in-situ material and the sample technique is appropriate.</li> </ul>	
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• ALS Chemex of Australia completed almost all analyses of the samples from the Kulon Progo deposit drilling.</li> <li>• Samples were routinely analysed for a suite of 11 elements and oxides by XRF with Loss on Ignition being determined gravimetrically. The parameters determined were Al<sub>2</sub>O<sub>3</sub>, CaO, Fe, K<sub>2</sub>O, MgO, Mn, P, S, SiO<sub>2</sub>, TiO<sub>2</sub>, V<sub>2</sub>O<sub>5</sub> and Lol (Loss on Ignition). This technique is appropriate.</li> <li>• 490 Standard Samples, 469 Blank Samples and 409 Duplicate Samples were sent to the laboratory for chemical analysis.</li> <li>• Analysis of the data shows no chronic or systematic bias in the analysis.</li> </ul>	<p>Low</p>
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Twinned holes were drilled within one to five metres horizontally of the original holes of ten of the earliest drill holes to test if the sampling when the smaller compressor was used was satisfactory.</li> <li>• All work was completed by non IML contractors.</li> <li>• No adjustments were made to assay data, all results are raw.</li> <li>• The hand written drill hole logs prepared by the field geologists were input to a series of excel files that were proof read for errors in data entry, logic and formatting. The relevant data from the digital drill hole logs was then combined into a single excel database file that was prepared by one person only.</li> <li>• In total, 110 sample analyses from a total of 10,361 routine samples were removed from the database due to sample handling errors that could not be resolved.</li> </ul>	<p>Low</p>
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Two Sokkil GSR2700 IS Differential GPS units were provided by IML for use during the exploration program, one for use as a base station and the other as a rover unit.</li> <li>• The data is projected to UTM WGS 84 Z49S, height data has been adjusted to Orthometric Height (or geoidal height) based on the EGM08 ellipsoidal / geoidal separation model.</li> </ul>	<p>Low</p>
<p><i>Data spacing and distribution</i></p>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The first pass drilling was along 26 lines at 800 metres apart at nominal 100 metre centres. Follow up infill drill holes were at centres 100 metres apart along lines 400 metres apart over the part of the drilled area to the east of the Serang River and the base camp at Glagah. A third pass of drilling was at 50 metre centres along lines 200 metres apart over around one third of the second pass drilling area that is located east of</li> </ul>	<p>Low</p>

Criteria	JORC Code explanation	Commentary	Risk Rating
		<p>the Serang River and adjacent to the ocean.</p> <ul style="list-style-type: none"> <li>The data density is sufficient to establish grade and thickness continuity of the mineralised units.</li> <li>Samples composited to 1 metre intervals in the geological model.</li> </ul>	
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All drill holes were drilled vertically, which is appropriate for the flat lying stratigraphy within the area explored.</li> </ul>	<p>Low</p>
<p><i>Sample security</i></p>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sample security of iron sands is not considered critical. Sample packed directly from the sample area on site to shipment to Australia.</li> </ul>	<p>Low</p>
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Review of all exploration QA/QC data was undertaken for this resource estimate. No chronic bias or systematic errors noted.</li> </ul>	<p>Low</p>
<p><i>Mineral tenement and land tenure status</i></p>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The JMI CoW concession area is based on the legality of a Contract of Work (CoW) signed on the 4<sup>th</sup> November 2008. A CoW is a concession used by foreign investment for participation in Indonesian mining projects. The system is a binding contractual arrangement between the concession owner and the Republic of Indonesia, which sets out a series of development steps and stages from initial surveys to development and production. Although no longer issued under the new mining law, a number of CoWs exist for a number of commodities throughout Indonesia and are considered the most secure form of mineral concession within Indonesia.</li> <li>The Kulon Progo Project is a joint venture between Indo Mines Limited (70%) and PT Jogja Magasa Mining (JMM, 30%).</li> </ul>	<p>Low</p>
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Kulon Progo iron sands have been explored on a number of occasions dating from approximately 1971 when a survey was carried out by the Geological Survey of Indonesia (GSI), an economic study by the Japanese Overseas Technical Cooperation Agency and a feasibility study by Sverdrup and Parcel Inc.</li> </ul>	<p>Low</p>
<p><i>Geology</i></p>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Iron sand and gravel deposits occur along the south coast of Java as raised beaches immediately inland from the coast. The source of the magnetite is believed to be basaltic and andesitic volcanic rocks, the erosional products from which are transported down drainages to the coast where they are deposited and reworked by coastal wave and wind action.</li> </ul>	<p>Low</p>



Criteria	JORC Code explanation	Commentary	Risk Rating
Drill hole Information	<ul style="list-style-type: none"> <li>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:               <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All drill hole coordinates are available and listed. Refer to Appendix 2.</li> </ul>	Low
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable for this report.</li> </ul>	Low
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable for this report.</li> </ul>	Low
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Included as necessary within the report.</li> </ul>	Low
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable for this report.</li> </ul>	Low
Other substantive exploration data	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>All data has been reported, pilot plant test work has been completed in 2 mine areas.</li> </ul>	Low

Criteria	JORC Code explanation	Commentary	Risk Rating
	<i>contaminating substances.</i>		
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Recommendations made in conclusions, no further exploration work planned as the project is moving to full development.</li> </ul>	Low

Criteria	JORC Code explanation	Commentary	Risk Rating
<i>Database integrity</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>The hand written drill hole logs prepared by the field geologists were input to a series of excel files that were proof read for errors in data entry, logic and formatting. The relevant data from the digital drill hole logs was then combined into a single excel database file that was prepared by one person only.</li> <li>The database had added the magnetic susceptibility readings, collar surveys, the chemical analyses and the interpreted geology as this information became available. Once all the data had been input, the drill logs were again proof read and the master database prepared.</li> </ul>	Low
<i>Site visits</i>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person has not made a site visit to the project area but the co-author of the report, Veri Ardiyanto (a full time geologist employed by GMT), completed a site inspection in September 2015, compiling observations of the current site status and facilities.</li> <li>The Competent Person did not make a site visit due to the potential for unwanted attention from local officials.</li> </ul>	Low
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li><i>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</i></li> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>In reviewing the exploration data, the geological interpretation is simple and cannot be interpreted in any other way. The sequence is clearly flat lying and extends parallel to the coastline in the area. The stratigraphy is not complex and has resulted from the deposition of surface sands and gravels containing variable concentrations of iron as both magnetite and other minerals containing iron.</li> <li>All drilling data used for the geological interpretation.</li> <li>There are no alternate interpretations.</li> <li>Geological boundaries are used to control Resource estimation.</li> <li>The geology and grade are variable but continuous in the two main lithologies modelled.</li> </ul>	Low
<i>Dimensions</i>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the</i></li> </ul>	<ul style="list-style-type: none"> <li>The various horizons are flat lying and extend for 14.7km along the coast within the concession and up to 1.8km inland from the high tide</li> </ul>	Low

Criteria	JORC Code explanation	Commentary	Risk Rating
	<i>upper and lower limits of the Mineral Resource.</i>	<p>watermark.</p> <ul style="list-style-type: none"> <li>The Ss Unit ranges in thickness from less than a metre to 15.6m, whilst the Gr Unit ranges in thickness from less than a metre to 18.9m in thickness.</li> <li>The deposit extends from the surface.</li> </ul>	
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>Software used was Leapfrog Geo v2.2</li> <li>A previous Resource estimation has been prepared for comparison.</li> <li>There is insufficient data to accurately predict by-product recovery.</li> <li>No assumptions have been made regarding deleterious elements.</li> <li>All analysed samples were collected on 1m intervals. The analytical data was composited on 1m intervals within the lithological boundaries.</li> <li>No high cut was applied to any elements, as the grade is locally variable but generally consistent within the deposit over wider ranges, as outlined by the statistics.</li> <li>Blocks of 25x25x1m constrained by lithological units. Spheroidal interpolant trending 25° parallel to the coastline and sand strands, anisotropy of 3x3x1. Base range of 800 metres applied to ensure all blocks were considered within the domains.</li> <li>Geological model used to domain the Resource estimate into the Ss and Gr Units as each has certain characteristics in grade and bulk density.</li> <li>Block model and geological model reviewed in cross section and long section to ensure conformity with lithological boundaries and drill hole data. Check analysis using statistics to determine if overall block statistics are comparable to composite data.</li> </ul>	Low
<i>Moisture</i>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>Tonnages are all quoted in dry tonnes</li> </ul>	Low
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Resource estimates made have utilised a cut-off grade of 9% Total Fe for the Ss Unit as there is a natural break in the Fe Total grades within the block model, with no blocks attributed to a grade lower than 9% Total Fe. In a similar manner, the Gr Unit has a natural break at 5% Total Fe, with no blocks being assigned a value less than 5% Total Fe.</li> <li>The feasibility study completed suggested an economic cut-off of 5% Total Fe was appropriate for the preliminary operating costs generated by that study. The currently chosen cut-off grades are consistent with this on a Resource basis.</li> </ul>	Low
<i>Mining factors or</i>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is</i></li> </ul>	<ul style="list-style-type: none"> <li>The mining method developed for the deposit involves double benching, with backhoe configured excavators working on a mid</li> </ul>	Low

Criteria	JORC Code explanation	Commentary	Risk Rating
assumptions	<p><i>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.</i></p>	<p>bench, loading a track mounted self-propelled hopper. Output from the hopper will load onto a series of grasshopper conveyors either on the bench or surface. The grasshopper conveyors will feed material onto a lateral conveyor, which in turn feeds onto a spine conveyor feeding the Primary Concentrator Plant ("PCP").</p>	
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Satmagan magnetite accounts for 56-70% of the Total Fe% head grade and there is a direct correlation between Satmagan and Total Fe% head grade within the material tested.</li> <li>Although the recovery of the magnetite from the mineral sands will not equal the Total Fe%, we feel that there is not yet sufficient data to determine accurate recoveries from all sections of the deposit. In this regard, we have reported all Resources as Total Fe%.</li> </ul>	Low
Environmental factors or assumptions	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Coarse tailings from the PCP will be returned to the mining void. This will be topped by the fine tailings from the Secondary Concentrator Plant ("SCP"). Tailings will then be recontoured, ready for cropping and final rehabilitation. Pre-mining of approximately 1.5 Mt of material will develop storage for the initial three months of tailings. This material would be stockpiled and then processed to return to the initial void.</li> <li>The area has no special environmental value.</li> </ul>	Low
Bulk density	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>3,044 bulk density determinations recorded in both Ss and Gr Units.</li> <li>The density model was assigned to each block volume for the estimate of the dry tonnage for each category of Resource in each constraining boundary.</li> <li>From the interpolation, the bulk dry density for Ss averages 1.927 t/m<sup>3</sup> with a median value of 1.932 t/m<sup>3</sup>. This is consistent with the original interpretation of Reynolds (2006). For Gr, the mean bulk density is 1.736 t/m<sup>3</sup> with a median of 1.733 t/m<sup>3</sup>.</li> </ul>	Low
Classification	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li><i>Whether appropriate account has been taken of all relevant factors (ie 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).</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>Indicated Resources, the same as the Resource Block, all drilling data within the CoW concession with a 20m buffer and extending to the high-tide water mark. The drilling has been completed on a spacing ranging from 800m x 100m (in the southeast end of the CoW) to 400m x 100m over most of the deposit area.</li> <li>Mining Boundary, as a subset of the Resource Block, with a 200m buffer between the water line inland, described as a Foreshore Protection Zone.</li> <li>Measured Resources, occurring both within the Resource Block and the Mining Boundary defined as the area drilled on a general 200m x</li> </ul>	Low

Criteria	JORC Code explanation	Commentary	Risk Rating
		<p>50m spacing, which is sufficient to demonstrate continuity in the deposit.</p> <ul style="list-style-type: none"> <li>The resulting estimates are comparable in volume and grade with previous estimates and reflects the Competent Persons view on the deposit.</li> </ul>	
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>This estimate has not been reviewed or audited by any third party at this point in time.</li> </ul>	N/A
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>Estimates are global.</li> <li>It can be seen that the current Resource estimate is generally consistent with the previous resource estimate made for the Ss, both in volume and grades. In this regard, we feel confident that the geological modelling and interpretation is consistent between studies and that the block modelling interpolation.</li> <li>Factors that may affect the Resource estimate are limited to the non-technical factors of the project, such as land utilisation, spatial planning and community perceptions of the project.</li> </ul>	Low