

24 September, 2015

# **Exceptional in-fill drilling results at Chilalo Graphite Project**

#### **Key Points**

- Excellent results received from the recent 14-hole, 1,461m in-fill diamond drilling program at the high-grade Shimba deposit, part of IMX's Chilalo Graphite Project in south-east Tanzania
- All holes intersected significant widths of high-grade graphite (average true width 20-30m), notable intersections included:
  - o 27.6m grading 12.07% TGC from 17.1m down-hole (NRD15-086)
  - 26.3m grading 12.69% TGC from 43m down-hole (NRD15-079)
  - o 24.7m grading 12.47% TGC from 44.3m down-hole (NRD15-084)
  - 23.0m grading 13.88% TGC from 13m down-hole (NRD15-083)
  - 19.3m grading 12.18% TGC from 95.2m down-hole (NRD15-082)
- Results confirm the grade, consistency and robustness of the Shimba deposit, which lies at surface, outcropping over a strike length of 500m and remains open along strike and at depth.
- In-fill drilling results are to underpin an updated Mineral Resource estimate for the Shimba deposit.
- The updated Mineral Resource estimate is expected to upgrade the majority of the high-grade Shimba mineralisation from Inferred to a higher confidence category.

IMX Resources (ASX: IXR, TSX: IXR, IXR.WT) ('IMX' or the 'Company') is pleased to advise that results from its 2015 in-fill diamond drilling program confirm the grade and continuity of the Shimba deposit at its flagship Chilalo Graphite Project, with a significant portion of the existing Inferred Resource expected to be upgraded to higher confidence categories. The upgraded Mineral Resource estimate is expected to be completed this month.

The program, which comprised 14 diamond drill holes for 1,461 metres, was designed to update the initial high-grade Inferred Resource for the Shimba deposit of 7.4Mt grading 10.7% TGC for 792,000t of contained graphite (see ASX Announcement 7 April 2015<sup>1</sup>) to higher confidence categories. The location of the diamond drill holes is shown in Figure 1 and a cross section is shown in Figure 2.

The recent program builds on the drilling completed at Chilalo in 2014 (19 Reverse Circulation drill holes for 1,564 metres and five diamond drill holes for 321 metres) which underpinned the maiden Mineral Resource.

IMX CEO Phil Hoskins said the successful in-fill diamond drilling program had paved the way for an updated resource. This will underpin the ongoing PFS, which is focusing on the development of a mining operation initially producing 50,000tpa of graphite based on the high-grade Shimba deposit, and is expected to be completed in November.

<sup>1.</sup> Since announcing the Inferred Resource estimate on 7 April 2015, IMX confirms that it is not aware of any new information or data that materially affects the information included in that announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimate in that announcement continue to apply and have not materially changed.

"The strong results from this drill program have reinforced the grade and consistency of the mineralisation, validating our strategy to focus on the Shimba deposit as the foundation for our initial mining operation," he said.

"The deposit averages 20-30 metres true width, with its proximity to surface and anticipated low strip ratio making it a very attractive open pit mining proposition. Approximately 90 per cent of the Inferred Resource lies within 100 metres of the surface, with 20 per cent hosted in the higher grade near-surface oxide zone. All of this is expected to translate into low mining and operating costs," Mr Hoskins said.

The high grade near-surface oxide zone is demonstrated by NRD15-083, which returned a strong intersection of 23m grading 13.88% TGC from 13m down-hole. The oxide zone of the Shimba deposit presents an opportunity for a low-cost operation in the early years of mine life. The high-grade oxide zone occurs within 20-30m of surface, resulting in low strip ratios and the softer material is likely to be mined using free-dig rather than drill and blast, which results in lower mining costs. There are numerous outcropping targets in close vicinity to Shimba, which, based on geophysical targeting, are expected to generate similar deposits, with the potential to provide an additional source of high grade oxide material.

Initial testwork on material from the oxide zone has generated encouraging rougher flotation results. The Company is confident that the metallurgical testwork results from composite samples, in particular the recently reported flake size distribution with up to 68% in the large and jumbo flake categories, will be replicated in the oxide zone.

All assay results have now been received for the 2015 program and, with the exception of hole NRD15-074, which was drilled for geotechnical purposes, all holes intersected significant widths of high-grade graphite mineralisation. A full list of drill-hole collar locations and intersection details is provided in Appendix A, with highlights set out below:

0	NRD15-073	27.1m @ 10.87% TGC from 84.3m down-hole
0	NRD15-075	22.1m @ 11.41% TGC from 85.2m down-hole
0	NRD15-076	29.6m @ 12.07% TGC from 44m down-hole
0	NRD15-079	26.3m @ 12.69% TGC from 43m down-hole
0	NRD15-083	23.0m @ 13.88% TGC from 13m down-hole
0	NRD15-084	24.7m @ 12.47% TGC from 44.3m down-hole
0	NRD15-086	27.6m @ 12.07% TGC from 17.1m down-hole

The in-fill drilling has confirmed the consistency of the mineralisation, demonstrating that Shimba is a robust and predictable deposit.

**PHIL HOSKINS** 

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Figure 1. Shimba Deposit: Location of 2015 diamond drilling

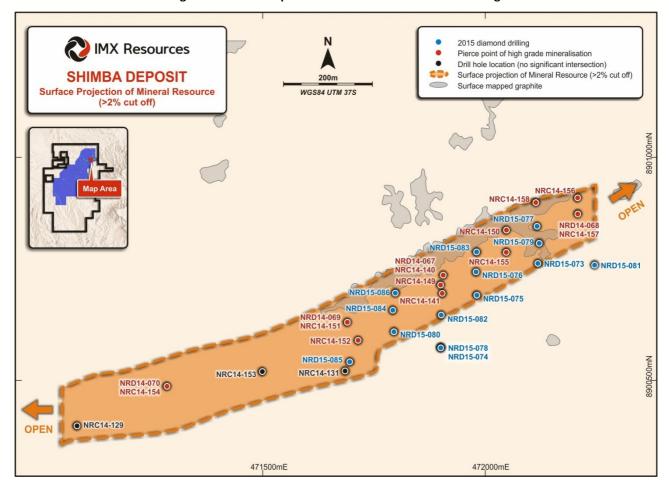
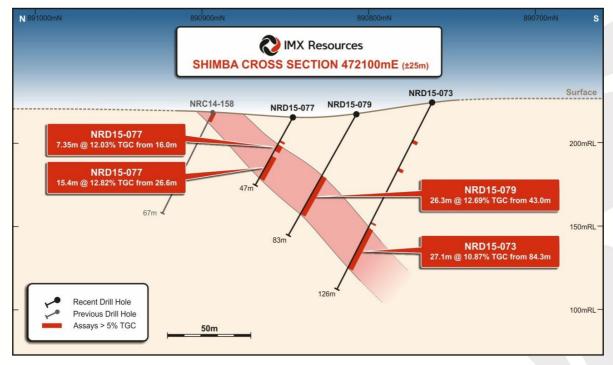


Figure 2. Shimba Deposit: Cross section



#### Competent Person's / Qualified Person's Statement

Information relating to exploration results at the Chilalo Project, located on the Nachingwea Property, is based on data collected under the supervision of Mr Nick Corlis, in his capacity as Executive Director, Exploration. Mr Corlis, BSc (Hons) MSc, is a registered member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and the activity being undertaken to qualify as a Competent Person under JORC 2012. Mr. Corlis has verified the data underlying the information contained in this announcement and approves and consents to the inclusion of the data in the form and context in which it appears.

#### **About IMX Resources Limited**

IMX Resources is an Australian minerals exploration company that holds a 5,800 km² tenement package at the Nachingwea Property in south-east Tanzania. The Nachingwea Property hosts the Chilalo Graphite Project, the Ntaka Hill Nickel Project and the Kishugu and Naujombo Gold Prospects. IMX's primary focus is on high-grade, high quality graphite and it is rapidly advancing development of the Chilalo Graphite Project. Chilalo is located approximately 220 km by road from the deep water commercial Mtwara Port, the majority of which is a sealed main road. IMX aims to become a respected supplier of high quality graphite for the clean technology economy.

To find out more, please visit <u>www.imxresources.com.au</u>.

# Appendix A: Summary of Assay Results 2015 Diamond Drilling Program: Shimba Deposit, Chilalo Graphite Project

Hole ID	Hole Type	Location East / North UTM:WGS84	Az / Dip	Hole Depth (m)	Drilled From	Drilled To	Interval (m)	TGC (%)
NRD15-073	DD	472117.73 / 8900762.09	360 / -63	125.68				
				Incl	84.3	111.4	27.1	10.87
NRD15-074	DD	471899.856 / 8900572.787	360 / -60	74.8	Geotech			
NRD15-075	DD	471980.734 / 8900690.775	360 / -63	131.47				
				Incl	85.2	107.3	22.1	11.41
NRD15-076	DD	471979.005 / 8900743.118	360 / -63	89.6				
				Incl	44.0	73.6	29.6	12.07
NRD15-077	DD	472115.867 / 8900845.492	360 / -61	46.5				
				Incl	16.0	23.4	7.4	12.03
				Incl	26.6	42	15.4	12.82
NRD15-078	DD	471899.856 / 8900573.787	360 / -50	173.7				
				Incl	137.9	149.4	11.5	15.11
NRD15-079	DD	472120.812 / 8900807.269	360 / -61	83.4				
				Incl	43.0	69.3	26.3	12.69
NRD15-080	DD	471794.613 / 8900608.838	360 / -62	119.8				
				Incl	81.4	94.6	13.2	11.68
				Incl	96.7	107.0	10.3	10.31
NRD15-081	DD	472245.343 / 8900758.453	360 / -60	128.8				
				Incl	40.0	50.0	10.0	5.89
NRD15-082	DD	471900.824 / 8900646.426	360 / -62	130.9				
				Incl	95.2	114.5	19.3	12.18
NRD15-083	DD	471980.182 / 8900787.838	360 / -60	76.0				
				Incl	13.0	36.0	23.0	13.88
NRD15-084	DD	471792.14 / 8900657.152	360 / -60	113.1				
				Incl	44.3	69.0	24.7	12.47
NRD15-085	DD	471695.313 / 8900541.374	360 / -60	119.7				
				Incl	88.1	105.0	16.9	9.55
NRD15-086	DD	471797.674 / 8900695.502	000 / -60	47.7				
				Incl	17.1	44.7	27.6	12.07

# **APPENDIX B. JORC 2012 Table 1 Reporting**

#### **Section 1. Sampling Techniques and Data**

Criteria	Explanation
Sampling techniques	<ul> <li>Samples were composited to 2m and sent for LECO analyses as well as for ICP Multi-element analyses. All Core samples were submitted for analysis.</li> <li>Grade standards (Certified Reference Materials – CRM's) and field duplicate samples were used to monitor analytical accuracy and sampling precision.</li> <li>Sampling is guided by IMX Resources' standard operating and QA/QC procedures.</li> <li>HQ Diamond core is geologically logged and sampled to corresponding RC intervals when twinning an RC hole, otherwise sampling is to geological contacts with nominal samples lengths between 0.25 and 1.5 metres. Core is quarter cored by diamond blade rock saw, numbered and bagged before dispatch to the laboratory for analysis.</li> </ul>
	Core is routinely photographed.
Drilling techniques	<ul> <li>Diamond holes were drilled in a direction so as to hit the mineralisation orthogonally.</li> <li>Diamond drilling (HQ) with standard inner tubes. HQ diameter (63.5mm) to target depth.</li> </ul>
Drill sample recovery	<ul> <li>Diamond core recoveries in fresh rock are measured in the core trays and recorded as RQD metres and RQD% recovery as part of the geological logging process.</li> <li>Core recoveries where good, typically &gt; 95%</li> </ul>
Logging	<ul> <li>Detailed geological logging of all Diamond holes captured various qualitative and quantitative parameters such as mineralogy, colour, texture and sample quality.</li> <li>The logging data is planned to be utilised for both Mineral Resource estimation and future mining and processing studies.</li> <li>Logging data is collected via ruggedised laptops. The data is subsequently downloaded into a dedicated Datashed database for storage, hosted by a database consultancy.</li> <li>All diamond core has been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>Core is cut with a diamond saw into half core and then one half into quarter core. A quarter of the core is sent for assay, a quarter for archive and a half for metallurgical testwork. Generally, one of each of the 2 control samples (blank or standard) is inserted into the sample stream every twentieth sample.</li> </ul>

# APPENDIX B. JORC 2012 Table 1 Reporting (cont.)

#### **Section 1. Sampling Techniques and Data**

Criteria	Explanation
Quality of assay data and laboratory tests	<ul> <li>All diamond samples were submitted to ALS for both the sample preparation and analytical assay.</li> </ul>
	<ul> <li>Samples were sent to the ALS laboratory in Mwanza (Tanzania) for sample preparation. Samples are crushed so that &gt;70% passes -2mm and then pulverised so that &gt;85% passes -75 microns.</li> </ul>
	<ul> <li>For all samples a split of the sample are analysed using a LECO analyser to determine graphitic carbon (ALS Minerals Codes C-IR18).</li> </ul>
	<ul> <li>Every 20<sup>th</sup> sample will be analysed using a complete sample characterisation package (CCP-PKG01). This package combines the whole rock package ME-ICP06 plus carbon and sulfur by combustion furnace (ME-IR08) to quantify the major elements in a sample. Trace elements including the full rare earth element suites are reported from three digestions with either ICP-AES or ICP-MS finish: a lithium borate fusion for the resistive elements (ME-MS81), a four acid digestion for the base metals (ME-4ACD81) and an aqua regia digestion for the volatile gold related trace elements (ME-MS42).</li> </ul>
	<ul> <li>QC insertion rates will be every 20th sample (1 standard, 1 blank, 1 site duplicate). Additionally 1 standard 1 blank and 1 site duplicate will be inserted for every 20 m of mineralisation intersected. A mineralised zone is a zone greater than 5 m with a visual estimate of more than 5% graphite, internal dilution of non-mineralisation (up to 5m) can be included in the mineralised thickness</li> </ul>
	<ul> <li>Laboratory duplicates and standards were also used as quality control measures at different sub-sampling stages.</li> </ul>
	<ul> <li>Approximately 5% of all samples will be sent to an umpire laboratory as an independent check.</li> </ul>

# APPENDIX B. JORC 2012 Table 1 Reporting (cont.)

#### **Section 1. Sampling Techniques and Data**

Criteria	Explanation
Verification of sampling and assaying	<ul> <li>Senior IMX Resources geological personnel supervise the sampling, and alternative personnel verified the sampling locations and external oversight is established with the contracting of an external consultant to regularly assess on site standards and practices to maintain best practice.</li> </ul>
	<ul> <li>Assay data is loaded directly into the Datashed database which is hosted by and managed by an external database consultancy.</li> </ul>
	<ul> <li>Visual comparisons will be undertaken between the recorded database assays and hard copy records at a rate of 5% of all loaded data.</li> </ul>
	<ul> <li>Below detection limit values (negatives) have been replaced by background values for each element.</li> </ul>
Location of data points	<ul> <li>Drillhole collar locations have been surveyed using a handheld GPS with an accuracy of &lt;4m for easting, northing and elevation coordinates.</li> </ul>
	<ul> <li>Drillhole collars where re-surveyed using a Differential GPS with an accuracy of &lt;5 cm at the end of the program.</li> </ul>
	<ul> <li>Collar surveys are validated against planned coordinates and the topographic surface.</li> </ul>
	<ul> <li>Downhole surveys are conducted during drilling using a Reflex single shot every 30 meters.</li> </ul>
	<ul> <li>The primary (only) grid used is UTM WGS84 Zone 37 South datum and projection</li> </ul>
Data spacing and distribution	<ul> <li>This program is the first drilling conducted in the area. A proportion of the drilling will be exploratory with spacing dictated by the location of targets interpreted from airborne Versatile Time Domain Electromagnetic Surveys (VTEM).</li> </ul>
	<ul> <li>The spacing of infill RC drilling is aimed at determining a Mineral Resource spacing of RC drilled holes on a nominal grid of 200m x 150m or less up to 200m x 200m being deemed appropriate in most instances; drilling will have some closer spacing in order to confirm continuity of mineralisation.</li> </ul>
	<ul> <li>The diamond drilling spacing is variable and designed to provide ample coverage to twin the RC holes for QA/QC and collect enough mineralised material for metallurgical testwork.</li> </ul>
Orientation of data in relation to geological	<ul> <li>All holes have been orientated towards an azimuth so as to be able intersect the graphitic mineralisation in a perpendicular manner.</li> </ul>
structure	<ul> <li>From surface mapping of the area and VTEM modelling, the regional foliation dips at an angles of between 50 and 60 degrees to the south to south- southwest. The drilling was hence planned at a dip of -60/65 degrees oriented 315 to 360 degrees.</li> </ul>
Sample security	<ul> <li>The samples are packed at the drill site and sealed prior to daily transport to the local field office which has 24 hour security prior to transport by locked commercial truck carrier to ALS Mwanza. The laboratory (ALS) ships the sealed samples after preparation, to Brisbane in Australia.</li> </ul>
Audits or reviews	<ul> <li>An independent consultants from CSA Global, with expertise in graphite completed a site visit prior to and upon commencement of drilling to ensure the sampling protocol met best practices to conform to industry standards.</li> </ul>

# APPENDIX B. JORC 2012 Table 1 Reporting (cont.)

### **Section 2. Reporting of Exploration Results**

Criteria	Explanation
Mineral tenement and land tenure status	<ul> <li>The exploration results reported in this announcement are from work carried out on granted prospecting licence PL 6073/2009 licence PL 6073/2009 which is owned by Warthog Resources Limited, a wholly owned subsidiary of IMX.</li> </ul>
	<ul> <li>The prospecting licence PL 6073/2009 is in good standing</li> </ul>
	<ul> <li>The tenements are the subject of a joint venture agreement with MMG Exploration Holdings Limited which holds an interest in the Nachingwea Property of approximately 15%.</li> </ul>
Exploration done by other	<ul> <li>Exploration has been performed by an incorporated subsidiary company of IMX, Ngwena Limited</li> </ul>
parties	<ul> <li>Stream sediment surveys carried out historically by BHP were not assayed for the commodity referred to in the announcement</li> </ul>
Geology	<ul> <li>The regional geology is thought to comprise late Proterozoic Mozambique mobile belt lithologies consisting of mafic to felsic gneisses interlayered with amphibolites and metasedimentary rocks</li> </ul>
Drill hole information	<ul> <li>The drillhole information is supplied in Section 1 and the location of the drillhole collars is shown in the accompanying release (Appendix 1).</li> </ul>
	<ul> <li>No material information has been deliberately excluded.</li> </ul>
Data aggregation methods	<ul> <li>Significant intercepts are reported based on a 5% cut-off with a minimum length of 5 m which has an allowable maximum 2m of internal low grade material. All significant intercepts are generated using Datashed software automated grade compositing function.</li> </ul>
	<ul> <li>Higher grade significant intercepts are reported based on a 10% cut-off with a minimum length of 2m with no internal low grade material. All significant intercepts are generated using Datashed software automated grade compositing function.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>Due to the exploratory nature of the drilling the assessment of geometry of the mineralisation is ongoing. This will be greatly improved by the drilling of several DD holes enabling structural and mineralogical assessment.</li> <li>At present all the reported lengths are 'down-hole'. The true widths will be applied once the structure and mineralogy has been correlated with structural core measurements and modelled.</li> </ul>
Diagrams	<ul> <li>A diagram showing the location of the drillhole collars is included in this announcement.</li> </ul>
Balanced reporting	<ul> <li>All reported visual estimate intervals are downhole intervals from drilling aimed at being as perpendicular to mineralisation as practical.</li> </ul>
Other substantive exploration data	<ul> <li>The VTEM survey has been processed with data used to target mineralisation in the most efficient and representative manner.</li> </ul>
Further work	Refer to the announcement.