

30 November 2015

## NACHINGWEA GOLD EXPLORATION UPDATE

### **HIGHLIGHTS**

- Further exploration confirms Kishugu and Naujombo as significant, large scale gold targets
- Test pitting program at Kishugu finds strong gold anomalism, consistent with results of previous soil sampling
- Extensional soil sampling at Naujombo identifies gold anomaly likely to extend to over 5km by 1km
- Exploration work provides valuable information to support definition of drill targets

IMX Resources Limited (ASX: IXR) ('IMX' or the 'Company') is pleased to provide an update on recent exploration activities to advance the Kishugu and Naujombo Gold Prospects ('Kishugu' and 'Naujombo') located on its Nachingwea property in south-east Tanzania (see Figure 1).

Both Kishugu and Naujombo are extensive coherent gold anomalies, Kishugu covering 6km by 600m, with up to 0.9g/t Au within the main trend (ASX announcements 14 October 2014 and 26 November 2014)<sup>1</sup> and Naujombo measuring greater than 5km by 1km with maximum values of up to 131ppb (0.1g/t) Au in the main anomaly (ASX announcement 7 May 2015)<sup>2</sup>.

Figure 1 below illustrates that Kishugu and Naujombo are associated with the same structural corridor and both anomalies exhibit very similar multi-element signatures (arsenic, bismuth and silver). Given that these two targets are located 35km from one another, the potential exists to identify a significant gold camp should the anomalies confirm the presence of economic gold mineralisation.

Whilst the Company has been focussed on delivery of the Chilalo graphite project which has emerged as a world class flake graphite project, low-cost exploration programs have recently concluded at both Kishugu and Naujombo. The exploration programs have involved test pitting at Kishugu and extensional soil sampling at Naujombo, with highly encouraging results, further confirming Kishugu and Naujombo as outstanding gold targets. The Company believes that this work represents an efficient use of limited funds given the very large scale of these two prospects and the imperative to focus on the world class Chilalo graphite project.

IMX Managing Director Phil Hoskins said that whilst the development of Chilalo remained the Company's focus, the results of the exploration at Kishugu and Naujombo demonstrate the optionality afforded to the Company by its large and prospective Nachingwea landholding.

<sup>&</sup>lt;sup>1</sup> Since announcing these exploration results on 14 October 2014 and 26 November 2014, IMX confirms that it is not aware of any new information or data that materially affects the information included in those announcements.

<sup>&</sup>lt;sup>2</sup> Since announcing these exploration results on 7 May 2015, IMX confirms that it is not aware of any new information or data that materially affects the information included in that announcement.

"The geophysical, geochemical and geological characteristics, together with their structural setting, highlight both Kishugu and Naujombo as excellent gold exploration opportunities. The sheer scale of these anomalies has presented some exploration challenges and the recently completed work is critically important in dictating our approach at Kishugu and Naujombo going forward.

While our focus of effort this year has been on advancing our Chilalo graphite project, the low-cost exploration work carried out at these gold prospects has enhanced the Company's understanding of their potential, provided valuable information to assist in determining appropriate and cost-effective drilling techniques and will enable identification of drill ready targets", Mr Hoskins said.

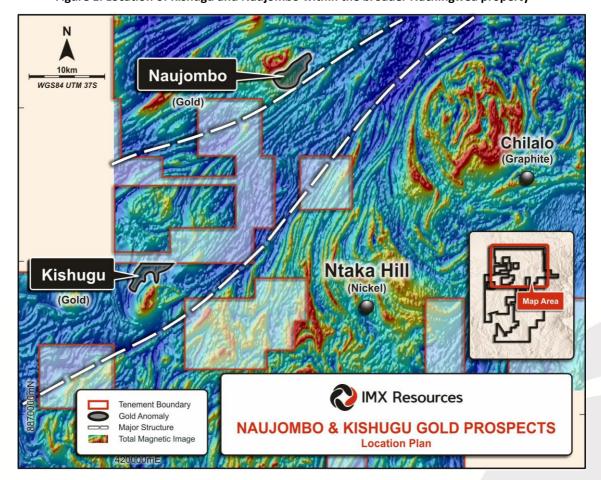


Figure 1. Location of Kishugu and Naujombo within the broader Nachingwea property

### Kishugu

The Kishugu gold prospect was identified as a large gold-in-soil anomaly following soil sampling programs in 2014. The Company has recently completed an exploration program that comprised seven test pits, dug to a depth of 7m to 9m, six of which were situated on different targets within the anomaly and a seventh control pit that was located outside the anomaly (see Figure 2).

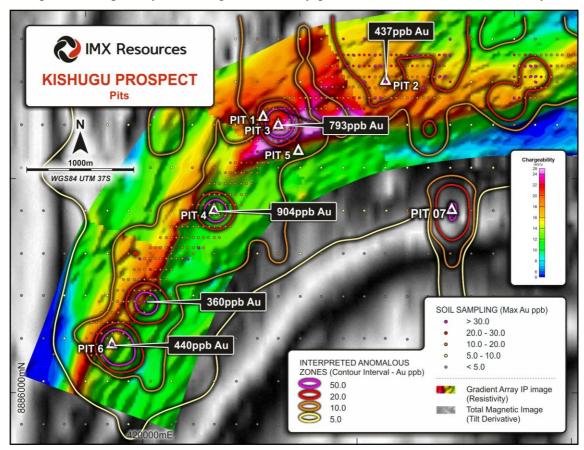


Figure 2: Kishugu Prospect showing IP Conductivity, gold in surface soils and location of test pits

The depth of the cover (4-5m) indicates that trenching would be too expensive and logistically ineffective as an exploration tool, leaving test pitting as the logical option. Downhole channel samples were taken at 1m intervals in each pit and assay results show strong gold anomalies in all holes except the control pit (Pit 7). The results shown below in Table 1 confirm the strong anomalism indicated by the previous soil sampling program.

Table 1: Gold (ppb) in channel samples from test pits

From (m)	To (m)	Pit 1	Pit 2	Pit 3	Pit 4	Pit 5	Pit 6	Pit 7
0	1	11	38	11	12	13	38	2
1	2	14	61	11	13	13	34	1
2	3	12	26	11	11	16	32	<1
3	4	11	27	9	11	13	32	<1
4	5	2	46	6	9	9	49	1
5	6	6	6	3	6	12	15	<1
6	7	2	9	3	3	1	10	<1
7	8	8	n/a	n/a	n/a	3	n/a	n/a
8	9	n/a	n/a	n/a	n/a	2	n/a	n/a

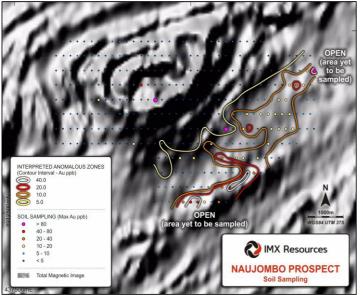
### Naujombo

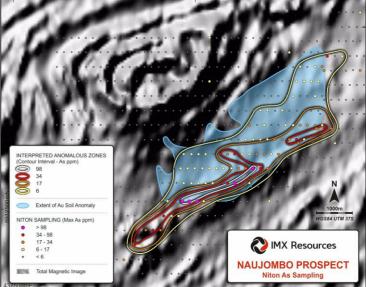
The Naujombo gold prospect was identified as a large gold-in-soil anomaly following soil sampling programs in 2014 and 2015. It was initially targeted because it exhibited a similar geophysical signature and stream sediment gold anomaly to Kishugu. The extent of previous regional reconnaissance soil sampling left the anomaly open to the north-east and south-west. Recent soil sampling to close off the Naujombo anomaly was analysed by a Niton X-Ray Fluorescence analyser ('Niton'). The Company uses the Niton on all soil samples collected on the Nachingwea property as a low-cost pre-screening tool before submitting samples for the more expensive laboratory analysis.

Although the detection limits on the Niton are too high to detect gold directly, there are other proxy elements which can infer anomalism associated with gold. Consistent with Kishugu, the Naujombo arsenic levels most closely correlate to existing laboratory analysed gold data and the Niton results of recently completed soil sampling has extended the anomaly further to the south-east for more than 1km, extending the anomaly to over 6km (see Figures 3 and 4).

Figure 3. Previous results of soil sampling at Naujombo

Figure 4. Arsenic results from Niton testing at Naujombo





### **Next steps**

While the Company's main priority is on developing the world class Chilalo graphite project, it continues to consider the best means of realising value for shareholders from the highly prospective Nachingwea Property, which includes Kishugu, Naujombo and the substantial Ntaka Hill nickel project. This may involve either exploration under a joint venture or a restructure of assets into more suitable vehicles where investors can benefit from a commodity-focussed approach and strategy.

At Kishugu, the recently completed exploration has prepared the Company for a more cost-effective shallow drill program to test parts of the anomaly which, dependent on funding and the overall strategy, would ideally commence in May 2016 following completion of the wet season.

At Naujombo, further work is planned including continued Niton analysis of soil samples; ground truthing and geological mapping to determine amenability to trenching/pitting; and gradient array induced polarisation surveys that should advance Naujombo to a point where it can be assessed for drill testing.

### Reporting of mineral resources in the 2015 annual report

The Company reported its maiden Mineral Resource at Chilalo on 7 April 2015. The Ntaka Hill Mineral Resource was last reported on 15 August 2013. As a result of the annual review of the Company's Chilalo and Ntaka Hill mineral resources there has been no change to these resources since they were previously reported as at the date of the Company's annual report.

The Company engages external consultants and Competent Persons to prepare and calculate estimates of its mineral resources. These estimates and underlying assumptions are reviewed by the Board and Management for reasonableness and accuracy. The results of the mineral resource estimates are then reported in accordance with the JORC Code and other applicable rules. Where material changes occur during the year to a project, including the project's size, title, exploration results or other technical information, then previous resource estimates and market disclosures are reviewed for completeness. The Company reviews its mineral resources as at 30 June each year and where a material change has occurred in the assumptions or data used in previously reported mineral resources, a revised resource estimate will be prepared as part of the annual review process.

**Phil Hoskins Managing Director** 

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#### **Competent Person's Statement**

Information relating to exploration results at the Kishugu and Naujombo Prospects, 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 in terms of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('JORC 2012'). Mr. Corlis has verified the data underlying the information contained in this presentation 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 5,400 km<sup>2</sup> 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 developing the highgrade and coarse flake Chilalo Graphite Project. The Pre-Feasibility Study ('PFS') released on 23 November 2015 outlined a low cost, high margin operation, with attractive project economics and confirmed the potential viability of a small scale open pit mining and conventional flotation processing operation. The PFS is based on a high-grade Indicated and Inferred JORC Mineral Resource of 9.2 Mt grading 10.7% Total Graphitic Carbon ('TGC'), comprised of an Indicated Resource of 5.1 Mt grading 11.9% TGC for 613,800 tonnes of contained graphite and an Inferred

Resource of 4.1 Mt grading 9.1% TGC for 370,300 tonnes of contained graphite. 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.

To find out more, please visit  $\underline{www.imxresources.com.au}.$ 

# APPENDIX A. JORC 2012 Table 1 Reporting

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

Sampling techniques  Drilling techniques	<ul> <li>Channel samples collected vertically down the face of the shaft were sampled as each meter was dug by the supervising geologist.</li> <li>The one metre samples were sent for gold analysis. (Fire Assay Fusion with Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES) analysis)</li> <li>Bottom of Hole (BOH smples were collected for whole rock 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>The shaft was geologically logged and sampled to 1m.</li> <li>No drilling was conducted, shafts were sunk vertically by hand using picks</li> </ul>
	and shovels
Drill sample recovery	No drilling was conducted, sample recovery from the hand sunk shafts was was greater than 90%
Logging	<ul> <li>Detailed logging of all 1m samples captured various qualitative and quantitative parameters such as mineralogy, colour, texture and sample quality.</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> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>Samples are collected from the face of the shaft and sent directly to the laboratory for analysis. One of each control samples (blank and standard) is inserted into the sample stream every twentieth sample with a minimum of one type of standard per batch</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>Samples were submitted to ALS for both the sample preparation and analytical assay.</li> <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 Fire Assay Fusion with Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES) analysis (ALS Minerals Codes PGM_ICP23)</li> <li>BOH samples were 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> <li>QC insertion rates will be every 20th sample (1 standard, 1 blank, 1 site duplicate). A minimium of one standard of each was sent with every batch which was below 20 samples.</li> </ul>

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

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

Criteria	Explanation				
Quality of assay data and laboratory tests (cont.)	<ul> <li>Prior to submission to the laboratory each sample from Naujombo undergoes XRF analysis using a Handheld Niton unit.</li> <li>Certified Reference Materials are read at the start of each day and analytical results were examined to make sure that the readings obtained were within the accepted range. The certificated reference materials were read at the end of the day to confirm that the results were still acceptable.</li> <li>XRF procedures consist of standards, blanks and site duplicates (coarse blank) used in a ratio of 1:20.</li> <li>QAQC results are reported weekly to confirm that the results are within acceptable levels of accuracy and precision.</li> <li>Elements reported are Ag, As, Au, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hf, Hg, K, Mn, Mo, Nb, Ni, Pb, Pd, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Th, Ti, U, V, W, Zn and Zr</li> </ul>				
Verification of sampling and assaying	<ul> <li>Senior IMX 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> <li>Assay data is loaded directly into the Datashed database which is hosted by and managed by an external database consultancy.</li> <li>Below detection limit values (negatives) have been replaced by half detection values for each element.</li> </ul>				
Location of data points	<ul> <li>Sample points have been surveyed utilising hand held Garmin GPS</li> <li>Grid system is UTM WGS84 Zone 37 South datum and projection</li> </ul>				
Data spacing and distribution	<ul> <li>For sampling at Naujombo, the original survey data spacing is 400m x 200m, with infill survey data spacing is 100m x 50m</li> </ul>				
Orientation of data in relation to geological structure	<ul> <li>All shafts have been orientated towards an azimuth so as to be able intersect the graphitic mineralisation in a perpendicular manner.</li> <li>Soil grids are orientated east-west orthogonal to the interpreted strike of the geology</li> </ul>				
Sample security	Labelling and submission of samples complies with industry standard.				
Audits or reviews	No audits have been completed on this data.				

# APPENDIX A. 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 that relate to Kishugu are from work carried out on granted prospecting licence PL 6635/2010, which is owned by Warthog Resources Limited, a subsidiary of IMX.</li> </ul>				
	<ul> <li>The exploration results reported in this announcement that relate to Naujombo are from work carried out on granted prospecting licence PL 5977/2009, which is owned by Ngwena Limited, a subsidiary of IMX</li> </ul>				
	The prospecting licences PL 6635/2010 and PL 5977/2009 are in good standing				
	<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 14%.</li> </ul>				
Exploration done by other parties	<ul> <li>Exploration has been performed by an incorporated subsidiary company of IMX, Ngwena Limited</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	Not applicable, no drilling conducted				
Data aggregation methods	Not applicable, no drilling conducted				
Relationship between mineralisation widths and intercept lengths	Not applicable, no drilling conducted				
Diagrams	<ul> <li>A diagram showing the location of the test pits is included in this announcement.</li> </ul>				
	<ul> <li>Diagrams of soil locations and the location of IMX held tenements are included in this announcement</li> </ul>				
Balanced reporting	<ul> <li>All assay results received are reported in the diagrams included in this announcement</li> </ul>				
Other substantive exploration data	Not applicable, all substantive exploration data has been reported.				
Further work	Refer to the announcement.				