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FOR RELEASE
7 October 2014

# NEW GRAPHITE DISCOVERY IN RUANGWA TENEMENT

- **Rapid reconnaissance exploration program identifies new graphite anomaly**
- **Surface outcrop rock samples identify multiple grades in excess of 10% graphite**
- **Continued focus on the world class Nachu Graphite Project**

Magnis Resources Limited (ASX:MNS) has discovered a new separate tenement demonstrating multiple graphite grades. This is in addition to its rapidly progressing Nachu Graphite Project in Tanzania.

The Ruangwa tenement (prospecting licence PL 7377/2011) is approximately 35 kilometres north east of the Nachu Graphite Project in southern Tanzania covering approximately 168km$^2$ (Figure 1). The tenement has few residents and is predominantly covered by natural vegetation.


Figure 1: Location of the Ruangwa prospecting licence (PL 7377/2011) in relation to the Nachu Graphite Project in southern Tanzania

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With a short break in drilling at the Nachu Graphite Project, the exploration team was redeployed, in late July, to carry out a rapid assessment program on nearby tenements including the Ruangwa tenement. Exploration, in the short timeframe available, focused on areas where access was possible and included geological mapping and outcrop rock sampling, stream sediments sampling and random ground radiometric surveys. The field mapping identified that the western half of the tenement included basement rock of the Mozambique Belt System, which includes graphitic schist, a similar sequence of metamorphic rocks as at the Nachu Graphite Project.

A total of 15 outcrop samples were collected and sent to the laboratory for multi-element and graphitic carbon analysis. The results and coordinates are shown in Table 1 while Figure 2 shows the distribution of results within the tenement. The area of identified graphitic schist requires further mapping and exploration north into the central area of the tenement that at the time was inaccessible due to dense vegetation.

With the expected ramp up in the commercial development of the world class Nachu Graphite Project, it is expected that exploration resources will be available after the wet season in 2015 for redeployment to the Ruangwa tenement. The exploration program at the Ruangwa tenement is likely to require a ground electro-magnetic program run in conjunction with extended geological mapping and sampling programs prior to any drill testing of the graphite anomaly.

| Sample ID | Easting | Northing | Lithology | Graphitic Carbon % |
|---|---|---|---|---|
| RURK201 | 515545 | 8916966 | Graphitic Schist | 13.2 |
| RURK202 | 515565 | 8916975 | Graphitic Schist | 12.4 |
| RURK203 | 515563 | 8916966 | Graphitic Schist | 12.5 |
| RURK204 | 515720 | 8917543 | Graphitic Schist | 0.7 |
| RURK205 | 516776 | 8917101 | Graphitic Schist | 6.9 |
| RURK206 | 516776 | 8917104 | Graphitic Schist | 8.5 |
| RURK207 | 516777 | 8917100 | Graphitic Schist | 10.9 |
| RURK208 | 517325 | 8917338 | Graphitic Schist | 3.9 |
| RURK209 | 517329 | 8917341 | Graphitic Schist | 3.9 |
| RURK210 | 516833 | 8917965 | Graphitic Schist | 15.5 |
| RURK211 | 516824 | 8917969 | Graphitic Schist | 12.1 |
| RURK212 | 516823 | 8917980 | Graphitic Schist | 14.6 |
| RURK213 | 516683 | 8917970 | Graphitic Schist | 11.6 |
| RURK214 | 516408 | 8917958 | Graphitic Schist | 9.8 |
| RURK215 | 517337 | 8917348 | Graphitic Schist | 3.1 |

Table 1: Outcrop samples location and analysis results

CEO Dr Frank Houllis commented: “Today’s announcement is very exciting for the company. Despite the significance of this discovery our focus remains fixed on moving our world class Nachu Graphite Project towards production.”

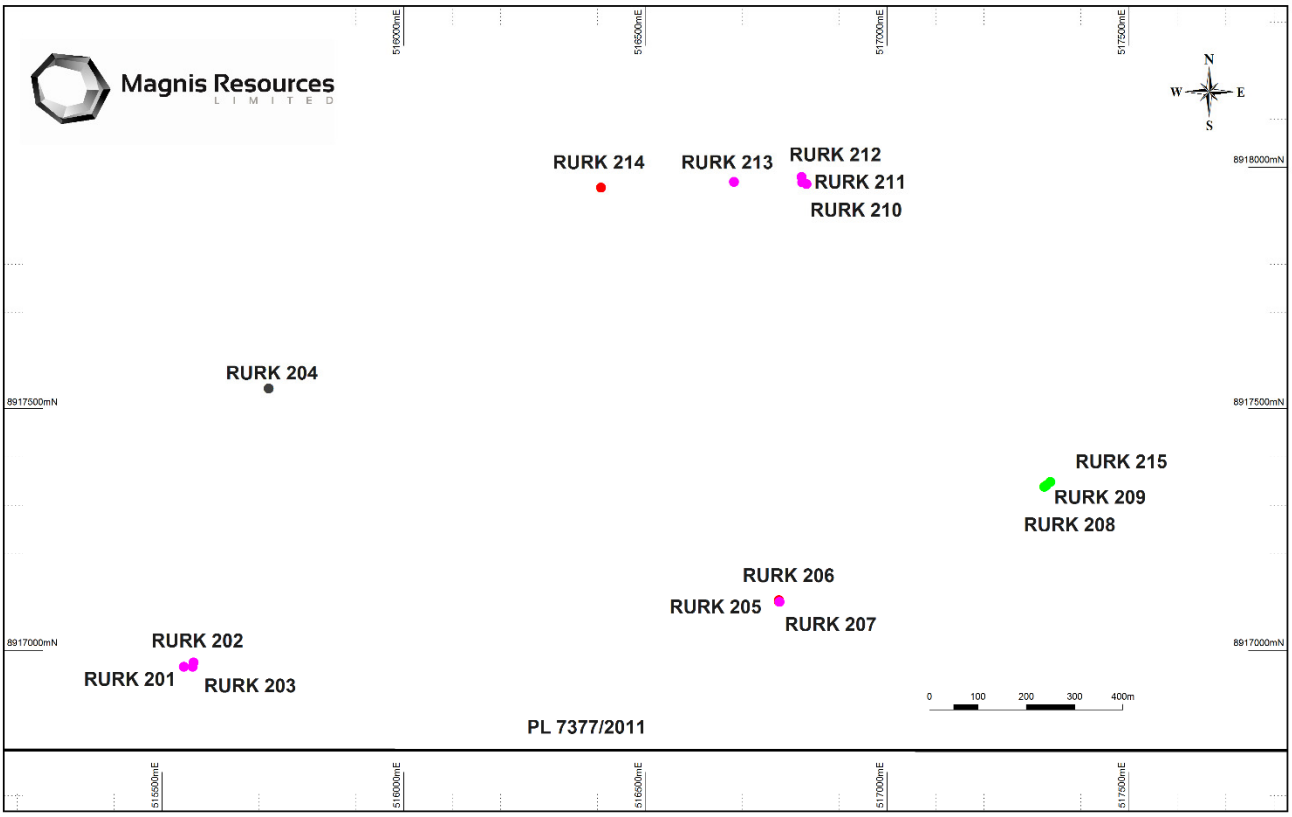


Figure 2: Location of graphite outcrop samples with results

Dr Frank Houllis
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*Information in this report that relates to Exploration activities and Exploration results is based on information compiled by Mr Brent Laws, a Competent Person who is a registered member of the* Member of the Australasian Institute of Mining & Metallurgy*. Mr Laws is a full time employee of Magnis Resource Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for reporting of Exploration Results. Mr Laws consents to the inclusion of the data in the form and context in which it appears*.

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## 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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.* | • All samples taken to date are random outcrop samples taken during field mapping. Samples are typically 3-5 kg in weight. |
| *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.).* | • No drilling has been undertaken. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • No drilling has been undertaken. |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • All outcrop rock samples have been logged and described to append to initial surface mapping. |
| *Sub-sampling techniques* | • *If core, whether cut or sawn and whether quarter, half or all core taken.* | • Full samples have been sent for analysis, typically 3-5kg each |

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| *and sample preparation* | • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | sample.<br>• Samples are submitted for LECO analyses as well as for ICP Multi-element analyses.<br>• Sample preparation was completed by ALS in Mwanza (Tanzania), before the prepared samples are shipped to ALS in Brisbane for content determination.<br>• The sample procedure standards followed are internal to ALS and are listed below:<br>• WEI-21 (Receive Sample Weight, Mwanza), LOG-22 (Sample Log-in, Mwanza), CRU-31 (Fine Crushing, Mwanza), SPL-21 (Split Sample, Mwanza), PUL-32 (Pulverizing Sample, Mwanza), CRU-QC (Crushing QC Test, Mwanza), PUL-QC (Pulverizing QC Test, Mwanza), LOG-24 (Pulp Log-in, Mwanza), LEV-01 (Waste Disposal Levy, Brisbane), QUA-01 (Quarantine Treatment Charge, Brisbane), C-IR18 (Graphitic Carbon by LECO, Brisbane). For the RC cuttings the multi-element analysis is coded ME-ICP41 (35 Element Aqua Regia ICP AES, Brisbane).<br>• QC measures include the submission of duplicate samples (5% of samples), blanks (5% of samples) and standards (5% of samples) over and above the internal controls at ALS. |
| *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.*<br>• *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.*<br>• *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.* | • The laboratory uses internal standards in addition to the standards, blanks and duplicates inserted by Magnis Resources Limited.<br>• The samples have been analysed by ALS, with sample preparation done in Mwanza Tanzania, and analyses performed in Brisbane. Sampling procedures are listed above and |

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| | | includes drying, crushing, splitting and pulverizing such that 85% of the sample is 75 micron or less in size. A split of the sample will analysed using a LECO analyser to determine carbon in graphite content. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • The field geologists are contracted by or in the employment of entities related to Magnis Resources, and regular assessment of on-site standards and practices are run to maintain best practice. |
| *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • A hand-held GPS was used to identify the position of all samples (xy horizontal error of 5 metres) and reported using ARC 1960 grid and UTM datum zone 37 south. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • The spacing and type of sample is insufficient for a mineral resource estimate. Sample collection has been on a random spacing based on available outcrop to assess. |
| *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.*<br>• *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.* | • Insufficient information is currently available to determine structural orientations and mineralisation associations. |
| *Sample security* | • *The measures taken to ensure sample security.* | • The samples are packed at the site and sealed prior to transport by locked commercial truck carrier to ALS Mwanza. The laboratory (ALS) ships the sealed samples after preparation to Brisbane in Australia. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • No audits or reviews have been undertaken. |

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## Section 2 Reporting of Exploration Results

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

| Criteria | JORC Code explanation | Commentary |
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| *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.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.* | • The prospecting license PL 7377 was granted on the 1st February 2012 for a period of four years for the exploration of Uranium. The area covered by the prospecting licence is 168.14 km2. The PL is situated in the Ruangwa, district within the Lindi region of south-east Tanzania.<br>• The PL is held by Uranex Tanzania Ltd. and is not subject to joint venture agreements, third parties, royalties or partnerships. The surface area is administered by the Government as native title. The area is rural, with wilderness areas and subsistence farming occurring on the PL.<br>• At this stage the tenure is under application for amendment to include Graphite. In accordance with Section 36 (1) (b) of the Mining Act, 2010 the notification of a discovery of a mineral deposit the discovery of graphite whilst under general exploration for Uranium requires an amendment to the PL to include Graphite, the government process of assessment and amendment is in progress since the application for amendment was accepted on the 30th September 2014. We have no reason to believe that tenure for Graphite will not be granted. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • No known exploration has been completed by other parties in this area. Some gemstone and gold diggings are present in the PL. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • Regionally the license area covers to the east estuarine and marine sedimentary rocks comprising mudstones, septarian marls, arkose, sandstones, conglomeratic limestone(including oolite and sand), and evaporate (including gypsum, anhydrate and salt) whilst to |

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| | | the west marine sedimentary rocks overly basement rocks of the Mozambique belt system which principally comprise metamorphic rocks ranging from schist to gneisses including marbles, amphibolites, graphitic schist, mica and kyanite schist, acid gneisses, hornblende, biotite and garnet gneisses, quartzites, granulites, chlorite, charnokite and pegmatite veins. |
| *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:*<br>o *easting and northing of the drill hole collar*<br>o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>o *dip and azimuth of the hole*<br>o *down hole length and interception depth*<br>o *hole length.*<br>• *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 drilling has been conducted.<br>• No material information has been deliberately excluded. |
| *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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • No averaging has been applied. |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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* | • The structure of the area is currently unknown and requires follow up exploration to provide adequate assessment. |

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| | *known').* | |
| *Diagrams* | • *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.* | • Figure 2 shows the distribution of graphite samples and graphitic carbon grades. |
| *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.* | • All samples taken and available graphite grades are 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.* | |
| *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).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • An expanded exploration program will require electro-magnetic geophysical ground survey and extended detailed mapping and sampling with possible trenching prior to drill testing. All work should be sequential and progress assessed on merit. |