

13th June 2014 - ASX Announcement

## MALAGASY ADVANCES HIGH-GRADE GRAPHITE POTENTIAL

100% owned Maniry Project - Southern Madagascar

### **HIGHLIGHTS**

- Detailed mapping and sampling of the **Razafy Prospect** (formally Lens L) at the Company's 100% owned Maniry Graphite Project has identified a series of high-grade, outcropping graphite lenses that extend for at least 1.6 kilometres.
- Sampling of the outcropping graphite mineralisation has returned high-grade results of up 33.7%C.
- Graphite lens thicknesses range from 20 to 70 metres thick.
- Petrological analysis of selected samples confirms the high quality nature of the graphite. The graphite flake size is generally >0.7mm with some material as course as several millimetres. The graphite is largely free from inclusions of other minerals
- Metallurgical samples have been submitted to fully determine the key characteristics of the graphite mineralisation.

#### **BACKGROUND**

Malagasy Minerals Ltd (ASX Code: MGY / "Malagasy") has established a large exploration project in Southern Madagascar (Figure 2.) that is prospective for both mafic-ultramafic intrusive related magmatic nickel-copper-platinum group metals (PGM) deposits and high-grade, high-quality graphite deposits.

The graphite prospectivity of the region has been established by the discovery of the large, high-quality Molo Graphite Deposit by Energizer Resources Inc. ("Energizer"). Malagasy announced (27<sup>th</sup> March 2014) that subject to final payment, it had finalized the sale of the company's 25% interest in the project in order to crystallise significant value and to increase its focus on the company's highly prospective 100% owned ground. The transaction is set to deliver a low-risk immediate return to Malagasy in the form of initial cash and share payments, whilst maintaining leveraged exposure through future benchmark cash and share payments.

Malagasy has been working to a strategy to define the potential of the 100% held ground to host additional high-grade graphite deposits that would have the potential to either enhance, or be enhanced by, the development of the Molo Graphite Deposit by Energizer. Malagasy is targeting a high-grade resource base with a particular focus on identifying near surface, low mining cost deposits that can be assessed quickly and at modest cost, potentially working off the benefits of the Molo development.

# RAZAFY PROSPECT - MANIRY PROJECT Background

The Maniry Project is located in the southern part of the company's Ampanihy Project (Figure 1.) and has been identified as being highly prospective for not only high-grade, high-quality graphite deposits but also for large-scale intrusive related nickel-copper-PGM deposits and molybdenum-selenium-REE deposits.

An earlier program of graphite exploration at Maniry (ASX announcement 26<sup>th</sup> August 2013) identified a series of large, high-grade outcrops of graphite mineralisation within a broader graphite trend covering an area of approximately 8km x 4km. This initial work was followed by a more detailed program of systematic rock chip sampling across the interpreted strike of the graphite lenses (ASX announcement 21<sup>st</sup> November 2013) to

determine the continuity of grade across the width of these graphite lenses. This resulted in the identification of 12 graphite lenses that have the potential to host a significant deposit of graphite mineralisation (Figure 3).

#### Recent Exploration

This most recent program of work has focused on the Razafy Prospect (Lens L) and has consisted of detailed mapping and sampling of 6 lenses of outcropping high-grade graphite mineralisation (Figure 1). The key outcomes of the work include:

- Identification of 6 high-grade outcropping course flake graphite horizons extending over 1.6 kilometres;
- Graphite horizons have been mapped at widths ranging from 20 to 70 metres;
- Sampling of the mineralisation indicates consistent grades with low variability and the potential for areas of very high grade mineralisation (peak result 33.66%C);
- Preliminary petrological analysis of selected samples confirms the high quality nature of the graphite mineralisation. The graphite flake size is generally >0.7mm with some material as course as several millimetres. The graphite is largely free from inclusions of other minerals; and
- Composite samples of the mineralisation have been collected and have been submitted for comprehensive metallurgical test work.

The width, strike length and proud outcropping nature of the high-grade graphite mineralisation indicate the potential for significant tonnages of high-grade, high-quality graphite mineralisation. The metallurgical test work will provide initial data on the quality of the mineralisation.

This work has clearly demonstrated the potential for the Maniry Graphite Project to host significant deposits of high-grade graphite mineralisation. When it is considered that the Razafy Prospect is the first of 12 targets to be assessed in detail it is clear that a new graphite province has been discovered by Malagasy Minerals.

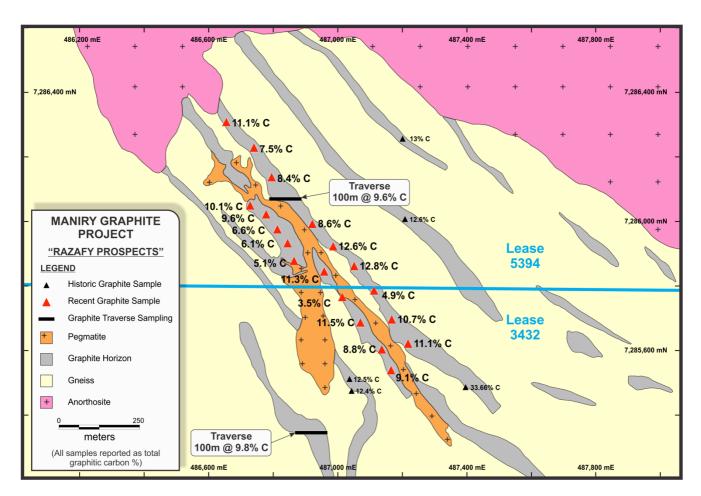


Figure (1) – Razafy Prospect Geology and Sample Locations



Photo 1

High-grade graphite sample from Razafy Prospect.



Photo 2

High-grade graphite sample from Razafy Prospect.



Photo 3

Close up photo of high grade graphite sample.

Note course flake size of graphite.

Table (1) - Razafy Prospect Graphite Samples

Sample No	Easting	Northing	Carbon %
MD12579	486,972	7,285,920	12.6
MD12580	487,039	7,285,860	12.8
MD12581	487,110	7,285,782	4.9
MD12582	487,153	7,285,694	10.7
MD12583	487,211	7,285,620	11.1
MD12584	487,163	7,285,537	9.1
MD12585	487,109	7,285,603	8.8
MD12586	487,068	7,285,685	11.5
MD12587	486,994	7,285,760	3.5
MD12588	486,928	7,285,845	11.3
MD12589	486,901	7,285,989	8.6
MD12590	486,839	7,286,067	6.7
MD12591	486,777	7,286,132	8.4
MD12592	486,714	7,286,223	7.5
MD12593	486,654	7,286,304	11.1
MD12594	486,730	7,286,046	10.1
MD12595	486,780	7,286,021	9.6
MD12596	486,815	7,285,974	6.6
MD12597	486,846	7,285,930	6.1
MD12598	486,866	7,285,875	5.1

Analysis completed by Genalysis-Intertek Laboratories (Perth). The analytical method was CSA (Total Carbon and Sulphur by CS analyser) detection limit of 0.01% - 50%C.

#### **Future Exploration**

The Malagasy Exploration team is currently in the field and is mapping and sampling the remainder of the graphite targets that have been previously identified. The results of this work will then be expected to lead to a program of trenching and/or drilling during the current field season.

Signed on behalf of the Board

### Peter Langworthy Technical Director

#### **Competent Persons Statement**

## **Competent Person's Statement**

Information in this announcement that relates to exploration results is based on and fairly represents information and supporting documentation prepared and compiled by Peter Langworthy BSc (Hons), who is a Corporate Member of the Australasian Institute of Mining and Metallurgy. The information in this announcement that relates to previously released exploration data was disclosed under JORC Code 2012. The relevant dates are noted in the text.

Mr. Langworthy is a Director of Malagasy Minerals Limited. Mr. Langworthy has sufficient experience that 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 in the 2012 Edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves. Mr. Langworthy consents to the inclusion in the announcement of the matters based on this information in the form and context in which it appears.

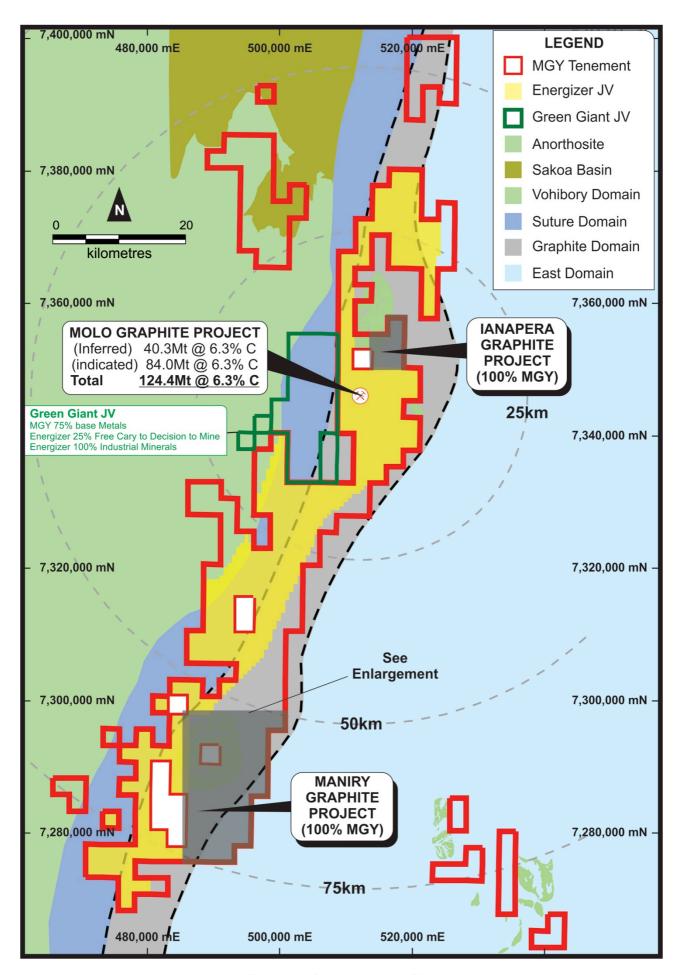


Figure (2) - Project Location Plan

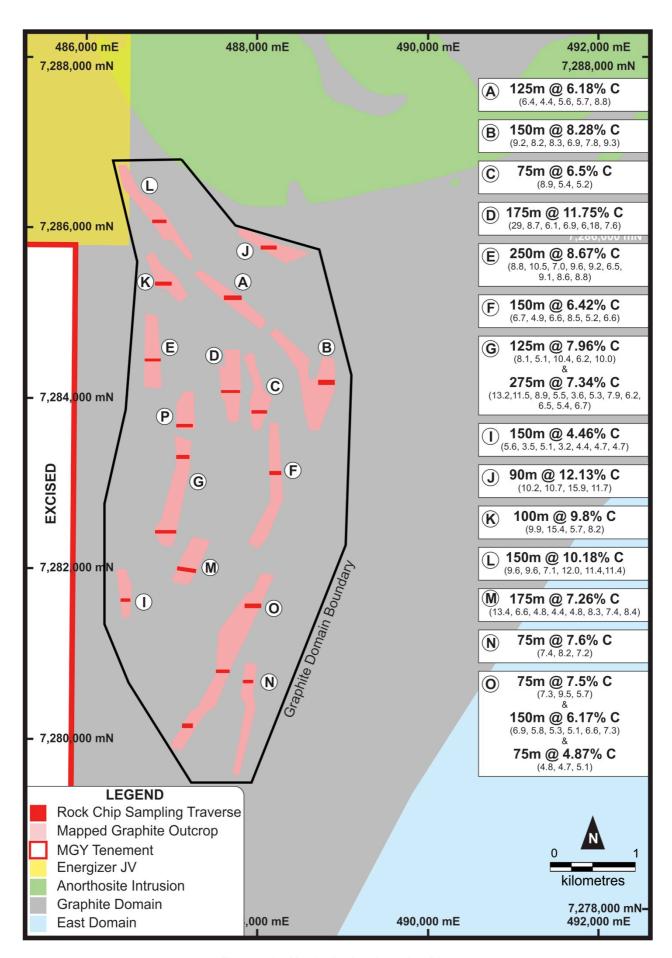


Figure (3) - Maniry Project Location Plan

# **JORC Code, 2012 Edition – Table 1 report template**

# Section 1 Sampling Techniques and Data

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

Criteria	IS Section apply to all succeeding section  JORC Code explanation	Commentary
Sampling techniques	<ul> <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>	Rock chips – 20 collected - were taken from locations identified as prospective by the field geologist. Approximately 2.5kg of sample was taken and placed in a calico bag. Samples may have been from one single point or from a number of points within a 5-10m radius
Drilling techniques	<ul> <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>	No drilling has been undertaken that relates to this announcement.
Drill sample recovery	<ul> <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>	No drilling has been undertaken that relates to this announcement.
Logging	<ul> <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</li> </ul>	No drilling has been undertaken that relates to this announcement.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>relevant intersections logged.</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-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>All samples were dry at point of collection</li> <li>Field QC procedures for all soil and rock chip sampling programs involve the use of Certified Reference Material (CRM) as assay standards and field duplicate samples at a frequency of 1 in every 30 samples.</li> <li>All QA/QC controls and measures are routinely reviewed and reported on at the completion of the program.</li> <li>External laboratory QA/QC checks are routinely monitored and stored in the MGY database.</li> <li>Sample size is considered adequate for the rocks encountered, mineralization style and purpose of this program.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	Assaying of rock chips was undertaken by Intertek-Genalysis in Perth. Samples were pulverized, representatively sampled, digested by 4 acids and then analyzed by mass spectrometer for 53 elements including PGE's. Internal laboratory QAQC procedures were adhered to with results later checked by the MGY Senior Geologist.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Data collected has been verified by both MGY Geologists and Consultants OMNI GeoX Pty. Ltd.</li> <li>Malagasy internal procedures that meet Western Australian industry standards were adhered to during all sampling.</li> <li>All XRF analysis was undertaken by OMNI GeoX Pty. Ltd. and adhered to internal procedures.</li> <li>Assay and XRF data has been collected electronically and stored within a database.</li> <li>No data has been adjusted.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Sample location and altitude was recorded with handheld GPS with an accuracy of ±4m horizontally.</li> <li>The grid system used was UTM Zone 38S (WGS 84)</li> <li>Results are reported in Appendix 1.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Rock chips were taken at the field geologists discretion</li> <li>No samples have been composited</li> </ul>
Orientation of data in	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible</li> </ul>	Soil traverses were orientated across/perpendicular to the main

Criteria	JORC Code explanation	Commentary
relation to geological structure	structures and the extent to which this is known, considering the deposit type.	geological trend.
Sample security	The measures taken to ensure sample security.	During collection, samples were stored appropriately on site under the supervision of the Senior Geologist before being transferred to the in country office in Antananarivo. Samples were then freighted by DHL to Perth where they were held by Intertek-Genalysis laboratories for quarantine and some analysis before being transferred to Omni GeoX Pty. Ltd. warehouse for further analysis.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No reviews or audits have been undertaken at this point.</li> </ul>

# **Section 2 Reporting of Exploration Results**

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

(Criteria listed in the preceding section also apply to this section.)  Criteria JORC Code explanation Commentary		
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Work was undertaken upon permits: 21059, 21064, 13832, 16753, 38323, 38324, 21062, 19003, 16747, 21063, 28346, 31735, 21061, 14619, 38469, 38392, 25605, 38392, 31734, 25606, 21060, 13811, 3432</li> <li>The tenements are located within the inland South West of Madagascar approximately centered on the townships of Fotradrevo and Ampanihy.</li> <li>Tenements are held 100% by Mada Aust Ltd. A wholly owned subsidiary of Malagsay Minerals Ltd.</li> <li>No overriding royalties are in place</li> <li>There is no native title agreement required</li> <li>Tenure does not coincide with any historical sites or national parkland</li> <li>Semi-arid, thinly vegetated, relatively flat to low lying hills with sub-cropping rock.</li> <li>Tenements are currently secure and in good standing.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul><li>Regional mapping undertaken by BRGM.</li><li>No other available data.</li></ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The deposit type and mineralization style being explored for is Mafic-Ultramafic intrusive related Ni-Cu-PGE sulphides.</li> <li>The project overlies a prominent 20km wide zone of folded and assemblage of graphite and quartz-feldspar schists (&lt;60% graphite), quartzite and marble units, with lesser intercalated amphibolite and leucogneiss. This zone, termed the Ampanihy Belt is a core component of the Neoproterozoic Graphite System. The belt is interpreted as a ductile shear zone accreted from rocks of</li> </ul>

Criteria	JORC Code explanation	Commentary
		both sedimentary and volcanic origin.
Drill hole Information	<ul> <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> <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>	No drilling has been undertaken that relates to this announcement.
Data aggregation methods	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.	Sample results reported in entirety.
Relationship between mineralisation widths and intercept lengths	<ul> <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>	No drilling has been undertaken that relates to this announcement.
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.	See embedded diagrams and tables within body of text.
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.	Refer to body of text.
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations;</li> </ul>	No other pertinent exploration data to be reported.

Criteria	JORC Code explanation	Commentary
	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	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Refer to body of text