



AIM: MARL

TSXV: MRA

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Turkey-Hot Maden Gold Copper Project NI43-101 Lodged on SEDAR

Indicated (100% basis): **2.79 Million Oz Gold + 166,000 Tonnes Cu (3.43 Million Oz Au equivalent**)**

Inferred (100% basis): **375,000 Oz Gold + 17,000 Tonnes Cu (439,000 Oz Gold Equivalent**), and**

Zinc Zone- Indicated (100% basis): 11,600 Tonnes Zinc

Inferred (100% basis): **114,000 Tonnes Zinc**

Mariana Resources Ltd ('Mariana' or 'the Company'), the AIM and TSXV listed exploration and development company with projects in Turkey and South America, announces it has filed on SEDAR the National Instrument 43-101 – Hot Maden Gold Copper Project Resource Update Technical Report, dated September 7, 2016, along with all required consents and can be accessed via the link below:

Link : http://media.wix.com/ugd/dcdadf_e0b314bd462d49e985a750bf2ff3e612.pdf

The Resource Estimate in the report, as previously announced on the 25th July 2016, paves the way for the completion of the Preliminary Economic Assessment currently in progress with an anticipated completion date of around October 2016.

The July 2016 Mineral Resource Estimate in the applicable zones comprises:

Hot Maden Gold-Copper Project Update

Hot Maden – Main Gold-Copper Zone (2 g/t AuEq Cut-off)

Domain	Indicated Mineral Resource							
	Tonnes T	Au g/t	Cu %	Zn %	AuEq g/t*	Au Ounces	Cu Tonnes	AuEq Ounces**
Main Zone LG	463,000	1.1	1.1	0.3	2.4	17,000	5,000	36,000
Main Zone HG	4,501,000	3.9	1.9	0.2	6.3	570,000	87,000	908,000
Main Zone UHG	2,086,000	32.7	3.5	0.1	36.9	2,195,000	73,000	2,476,000
Mixed Gold-Zinc	17,000	7.5	3.1	3.6	11.2	4,000	1,000	6,000
Peripheral Lodes	60,000	2.1	0.4	0.4	2.5	4,000		5,000
Total	7,127,000	12.2	2.3	0.2	15.0	2,790,000	166,000	3,431,000

Domain	Inferred Mineral Resource							
	Tonnes T	Au g/t	Cu %	Zn %	AuEq g/t*	Au Ounces	Cu Tonnes	AuEq Ounces**
Main Zone LG	395,000	1.7	0.9	0.03	2.8	21,000	4,000	35,000
Main Zone HG	31,000	3.9	1.6	0.1	5.8	4,000		6,000
Main Zone UHG	6,000	39.1	2.1	0.01	41.6	7,000		8,000
Mixed Gold-Zinc	4,000	1.7	0.4	2.4	2.2			
Peripheral Lodes	282,000	3.2	0.9	0.1	4.3	29,000	2,000	38,000
Total	718,000	2.7	0.9	0.1	3.8	62,000	7,000	88,000

Hot Maden – Southern Gold-Copper Zone (2 g/t AuEq Cut-off)

Domain	Inferred Mineral Resource							
	Tonnes t	Au g/t	Cu %	Zn %	AuEq g/t*	Au Ounces	Cu Tonnes	AuEq Ounces**
South Zone LG	396,000	2.8	0.7	-	3.6	35,000	3,000	46,000
South Zone HG	583,000	5.3	0.7	-	6.1	98,000	4,000	114,000
Main Zone UHG	224,000	22.2	1.0	-	23.4	160,000	2,000	169,000
Mixed Gold-Zinc	44,000	9.0	1.0	3.2	10.2	13,000		15,000
Peripheral Lodes	104,000	1.9	0.3	-	2.2	6,000		7,000
Total	1,352,000	7.2	0.7	0.1	8.1	313,000	10,000	351,000

Hot Maden – Hangingwall Zinc Zone (2% Zn Cut-off)

	Indicated Mineral Resource			
	Tonnes t	Zn%	Pb%	Zinc t
Total	398,000	2.9	0.6	11,600

	Inferred Mineral Resource			
	Tonnes t	Zn%	Pb%	Zinc t
Total	2,871,000	4.0	0.5	114,000

This Updated Mineral Resource Estimate above has been compiled by Stewart Coates from RPM who also falls under the definition of Qualified Person (“QP”) as defined in the Canadian National Instrument “NI 43-101”. This resource estimate has been estimated in compliance with the CIM Definition Standards on Mineral Resources and Mineral Reserves and is included in the updated NI 43-101 Technical Report on Hot Maden, within appropriate reporting requirements, filed on AIM as well as on SEDAR.

A detailed breakdown of the Total Mineral Resource estimate is given below:

Note:

1. The Statement of Estimates of Mineral Resources has been compiled under the supervision of Mr. Stewart Coates who is a part-time employee of RPM and a Member of the the Association of Professional Engineers and Geoscientists of the Province of British Columbia. Mr. Coates has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined under the JORC Code which is accepted as a Foreign Code by CIM and NI 43-101. There are no material differences between the definitions of Measured, Indicated and Inferred Mineral Resources under the CIM Definition Standards and the equivalent definitions in the JORC Code. The Resource would report the same quantities to the same classifications under both the CIM Definition Standards and the JORC Code.

2. *All Mineral Resources figures reported in the table above represent estimates based on drilling completed up to 22nd June, 2016. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.*
3. **Au Equivalence (AuEq) calculated using a 100 day moving average of \$US1,215/ounce for Au and \$US2.13/pound for Cu as of May 29, 2016. No adjustment has been made for metallurgical recovery or net smelter return as these remain uncertain at this time. Based on grades and contained metal for Au and Cu, it is assumed that both commodities have reasonable potential to be economically extractable.*
 - a. **-The formula used for Au equivalent grade is: $AuEq\ g/t = Au + [(Cu\ \% \times 22.0462 \times 2.13)/(1215/31.1035)]$ and assumes 100 % metallurgical recovery.*
 - b. ***-Au equivalent ounces are calculated by multiplying Mineral Resource tonnage by Au equivalent grade and converting for ounces. The formula used for Au equivalent ounces is: $AuEq\ Oz = [Tonnage \times AuEq\ grade\ (g/t)]/31.1035$.*
4. *Mineral Resource grades are estimated in accordance with the JORC Code.*
5. *Mineral Resources are reported on a dry in-situ basis.*
6. *LG = low grade, HG = high grade and UHG = ultra-high grade.*
7. *Reported at a 2 g/t AuEq cut-off.*
8. *Mineral Resources referred to above, have not been subject to detailed economic analysis and therefore, have not been demonstrated to have actual economic viability.*

Resource Estimate Authorship and Methodology

The Mineral Resource Estimate for the Hot Maden Project was compiled under the supervision of Mr Stewart Coates, a full time employee of RPM and a Member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia. The Mineral Resource Estimate was completed using the following parameters:

- A site visit was conducted by Stewart Coates (RPM) to review the project and deposit geology, drilling, sampling and QAQC procedures. The data, drilling and geological records were found to be well maintained by Lidya and comprehensive field procedures had been developed. The site visit review concluded no significant issues were identified with regards to current geological understanding and data information.
- The Hot Maden Mineral Resource area extends over a north-south strike length of 670m (from 4,541,710mN – 4,542,380mN), has a maximum width of 105m (740,590mE – 740,695mE) and includes the 495m vertical interval from 885mRL to 390mRL.
- Drill holes used in the Mineral Resource estimate included 52 diamond holes for a total of 3,748m within the wireframes. The database contained records for 65 drill holes for 16,455m of drilling.
- Drill hole spacing is approximately 50m by 50m at the Project. Approximately 55% of current drilling is angled -60° to the east, with the remaining holes angled -60° to the west. Mineralisation is generally sub-vertical.
- Since the commencement of drilling Lidya has implemented a consistent QAQC system utilising standards, blanks and duplicate samples. The program included the submission of one standard every 20th sample, the submission of two blanks in every assay batch and field duplicates taken every 40th sample. All standards and blanks were obtained and certified by Geostats. Duplicates were split to quarter core with a core saw.
- Monitoring of standards, blanks and duplicates was undertaken by Lidya and Mariana geologists. Raw QAQC data was reviewed by RPM and results considered acceptable and suitable for use in Mineral Resource estimation.
- The mineralisation was constrained by resource outlines based on mineralisation envelopes prepared using a nominal 0.5g/t Au Equivalent cut-off grade for lower grade material, 3g/t Au Equivalent for higher grade material and approximately 15g/t Au Equivalent for ultra-high grade material. All mineralisation intersections were defined with a minimum down hole width of 2m.
- Samples within the wireframes were composited to even 1m intervals based on analysis of the sample lengths in the database. Top cuts were applied to the data based on statistical analysis of individual lodes. A top cut of 35g/t Au was applied within the higher grade domain (Object 101), a top cut of 175g/t Au was applied to the ultra-high grade domain (Object 102), a top cut of 20g/t Au was applied to Object 103 and a

top cut of 10g/t Au was applied to Objects 2 and 3, resulting in a total of 10 samples being cut. Top cuts for the remaining elements were not required; no Au top cut was applied to the remaining lodes.

- A Surpac block model was used for the estimate with a block size of 25m NS by 25m EW by 10m vertical with sub-cells of 3.125m by 3.125m by 1.25m. This was selected as the optimal block size as a result of kriging neighbourhood analysis (KNA).
- Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades in three passes using Surpac software. Linear grade estimation was deemed suitable for the Hot Maden Mineral Resource due to the geological control on mineralisation. Maximum extrapolation of wireframes from drilling was 50m down-dip and 50m along strike. This was equal to one drill hole spacing. Maximum extrapolation between drill sections was half drill hole spacing. Down-dip and along strike extrapolations were classified as Inferred Mineral Resource.
- Bulk densities within the wireframes were calculated based on a linear regression equation between Fe grade and density measurements obtained from drill core. A bulk density of 2.85t/m³ was assigned to waste material as a result of average core densities outside the wireframes. A bulk density of 2.20t/m³ was assigned to overburden.
- The Mineral Resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced diamond drilling of less than 50m by 50m, and where the continuity and predictability of the lode positions was good. The Inferred Mineral Resource was assigned to areas of the deposit where drill hole spacing was greater than 50m by 50m, where small isolated pods of mineralisation occur outside the main mineralised zones, and to geologically complex zones.
- The high grade nature of the mineralisation and the substantial thickness and size of the deposit suggest that the project has potential for eventual economic extraction using open pit and underground mining techniques.

Qualified Persons

The Statement of Estimates of Mineral Resources has been compiled under the supervision of Mr Stewart Coates, who is a full time employee of RPM and a Member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia. Mr. Coates has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure and as a Competent Person as defined in the JORC code (2012). Stewart Coates has consented to the inclusion in this release of the matters based on his information in the form and context in which it appears. All information relating to exploration activities has been reviewed by Eric Roth, Chief Operating Officer and Executive Director of Mariana Resources. Mr Roth holds a Ph.D. in Economic Geology from the University of Western Australia, is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM), and is a Fellow of the Society of Economic Geologists (SEG). Mr Roth has 25 years of experience in international minerals exploration and mining project evaluation.

****ENDS****

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About Mariana Resources

Mariana Resources Ltd is an AIM (MARL) and TSXV (MRA) quoted exploration and development company with an extensive portfolio of gold, silver and copper projects in South America and Turkey.

Mariana's most advanced asset is the Hot Maden gold-copper project in north east Turkey, which is a joint venture with its Turkish JV partner Lidya (30% Mariana and 70% Lidya) and rapidly advancing to development. An updated mineral resource estimate of 3.43 Moz gold Equivalent (Indicated Category) and 0.09 Moz gold Equivalent (Inferred Category) (100% basis) in the main resource zone as well as a maiden 351,000 Moz gold Equivalent (Inferred Category) (100% basis) in the new southern discovery zone was reported for Hot Maden on July 25, 2015. Elsewhere in Turkey, Mariana holds a 100% interest in the Ergama gold-copper project.

In southern Argentina, the Company's core gold-silver projects are Las Calandrias (100%), Sierra Blanca (100%), Los Cisnes (100%), Bozal (100%). These projects are part of a 160,000+ Ha land package in the Deseado Massif epithermal gold-silver district in mining-friendly Santa Cruz Province.

In Suriname, Mariana has a direct holding of 10.2% of the Nassau Gold project. The Nassau Gold Project is a 28,000 Ha exploration concession located approximately 125 km south east of the capital Paramaribo and immediately adjacent to Newmont Mining's 4.2Moz gold Merian project.

In Peru and Chile, Mariana is focusing on acquiring new opportunities which complement its current portfolio.

Safe Harbour

This press release contains certain statements which may be deemed to be forward-looking statements. These forward-looking statements are made as at the date of this press release and include, without limitation, statements regarding discussions of future plans, the realization, cost, timing and extent of mineral resource estimates, estimated future exploration expenditures, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, and requirements for additional capital. The words "plans", "expects", "budget", "scheduled", "estimate", "forecasts", "intend", "anticipate", "believe", "may", "will", or similar expressions or variations of such words are intended to identify forward-looking statements. Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause actual results to vary materially from those expressed or implied by such forward-looking statements, including, but not limited to: the effects of general economic conditions; the price of gold, silver and copper; misjudgements in the course of preparing forward-looking statements; risks associated with

international operations; the need for additional financing; risks inherent in exploration results; conclusions of economic evaluations; changes in project parameters; currency and commodity price fluctuations; title matters; environmental liability claims; unanticipated operational risks; accidents, labour disputes and other risks of the mining industry; delays in obtaining governmental approvals or in the completion of development or construction activities; political risk; and other risks and uncertainties described in the Company's annual financial statements for the most recently completed financial year which is available on the Company's website at www.marianaresources.com . Although we believe that the expectations reflected in such forward-looking statements are based upon reasonable assumptions and have attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking statements. Accordingly, readers are cautioned not to place undue reliance on forward-looking statements. We do not undertake to update any forward-looking statements, except in accordance with applicable securities laws.