



AIM: MARL

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Further High Grade Intercepts Reported from Resource Extension and Exploration Drilling at the Hot Maden Gold-Copper Project, NE Turkey.

Mariana Resources Ltd ('Mariana' or 'the Company'), the AIM listed exploration and development company with projects in Turkey and South America, is pleased to provide the following update on the ongoing diamond drill program at the high grade Hot Maden project (Figures 1 and 2). Results are reported for drill holes HTD-36 to HTD-50, with assays for drill holes HTD-51 to HTD-53 expected shortly.

Highlights:

- o Assays are pending for a down-dip extension to the high grade gold-copper resource which has been intersected in hole **HTD-52**, below discovery hole HTD-4, with a **chalcopryite-pyrite-bearing breccia extending over 50m downhole**.
- o Some of the highest grade zinc intervals to date have been intersected in holes drilled around the northern and eastern margins of the high grade gold-copper resource, including **HTD-44: 36.5m @ 7.1% Zinc ("Zn") + 1.8 g/t Gold ("Au") + 0.51% Copper ("Cu")** from 25.5m*.
- o Exploration drilling in the southern target area, 400m south of the existing resource area and within the northern extension to the pre-1923 vein mining area, has returned high grade vein / stockwork type gold mineralisation in **HTD-50: 1.0m @ 13.7 g/t Au** from 64m with assays pending for multiple sulfide-bearing vein/stockwork zones in **HTD-51** and **HTD-53**.
- o High grade, stockwork/veinlet gold-copper mineralisation was intersected in scout drill hole **HTD-45: 5m @ 5.0 g/t Au** from 11m, **15m @ 3.2 g/t Au + 1.22% Cu** from 24m, and **5m @ 9.1 g/t Au + 1.4% Cu** from 46m, one of five holes in the untested "Ridge Area" to the south and southeast of the high grade gold-copper resource. A possible structural offset to the high grade zone between the Ridge Area and Main Zone is a target for future drilling.
- o An updated mineral resource estimate for Hot Maden will incorporate assay results from drill holes HTD-18 to HTD-53 into the existing resource model, and is expected to be completed in June 2016.

- o Exploration activities (geological / structural mapping, geochemical sampling) continue to focus on the generation of new high-grade gold-copper targets for drill testing. A geophysical program designed to search for a mineralized porphyry gold-copper system underlying the high grade mineral resource (and beneath the anhydrite breccias at 400m vertically) is expected to be undertaken during H2, 2016.

* Note – all intersections quoted are as metres downhole.

Links to Figures: http://marianaresources.com/site/media/May_23_Maps.pdf

Chief Executive Officer Glen Parsons today commented:

“Results from drill holes HTD-36 to HTD-50 continue to enhance our geological understanding of the Hot Maden project, with exploration and resource extension drilling continuing to intersect new gold-copper and zinc mineralisation in addition to providing further geotechnical data for use in development studies. Drilling on the southern extension of the reported resource area indicates a structural offset with a new targeted area developing as well as further to the south in the new discovery area with assays pending for mineralised zones observed in drill core.

“Exploration drilling in the southern target area has returned high grade vein / stockworks type gold mineralisation in HTD-50 with significant visual sulfide-bearing vein / stockwork zones also in holes HTD-51 and HTD-53.

Furthermore, HTD-44 is showing one of the highest grade zinc intervals returned to date, currently Zn is not factored into any of our reported resource estimates.

“2016 has been a strong year for Mariana, in February we announced the best gold-copper intersection to date with HTD 34 intersecting 71.0m @ 32.7 g/t Au + 1.9% Cu. Following the fundraise, announced earlier this month, we have secured a stronger investor base mitigating the short term funding risk going forward and demonstrating the huge support for the Hot Maden project. The Company also now has funds secured to take it comfortably through the next 12-18 months.

“An updated mineral resource estimate for the Hot Maden Project is expected to be completed next month and I look forward to updating the market of our progress in due course.”

Hot Maden Gold-Copper Project Update

Recent drilling activities at the Hot Maden project have focused on:-

- Testing of potential extensions to the known high grade gold-copper mineral resource,

- Scout drilling of the “Ridge Area” (the southerly step out from the current mineral resource),
- Scout drilling of the Southern Vein Field (the northern extension of the area mined by Russian interests pre-1923).

Main Resource Area - Extension Drilling

In the northern half of the current mineral resource area, drill hole HTD-52 intersected a new, down-dip extension to the high grade gold-copper resource. A total of **50m of multiphase, chalcopyrite-pyrite(-hematite-jasper)-bearing breccia** was intersected from 262m (assays pending, Figure 3). This intersection lies outside the current mineral resource model and is therefore expected to provide a positive contribution to the next mineral resource update. A further 5 drill holes (HTD-36-40) were designed to test the current eastern and northern margins of the gold-copper resource. This drilling predominantly intersected the flanking zinc envelope except for HTD-37 intersecting 46m @ 0.8 g/t Au + 0.25% Cu from 62m.

In the southern half of the current mineral resource area, three step forward holes (HTD-44, HTD-47, and HTD-48) were completed on section 4,542,100N (Figure 6). These holes were designed to test for nearer-surface expressions of the gold-copper mineralisation intersected in holes HTD-11/-12/-22, but ultimately intersected zinc and zinc-gold mineralisation. Particularly noteworthy is that HTD-44 intersected one of the thickest and highest grade zinc(-gold) intersections seen to date at Hot Maden: **36.5m @ 7.1% Zn + 1.8 g/t Au** from 25.5m downhole.

Ridge Area

Five scout holes were completed in the “Ridge Area”, located immediately to the south and southeast of the current mineral resource area. High grade, stockworks/veinlet Au-Cu mineralisation was successfully intersected in **HTD-45 (5m @ 5.0 g/t Au from 11m, 15m @ 3.2 g/t Au + 1.22% Cu from 24m, and 5m @ 9.1 g/t Au + 1.4% Cu from 46m)**, with dominantly zinc being intersected in the remainder. The gold-copper mineralisation intersected in HTD-45 appears to differ from that observed in section 4,542,100N: i) monophase (?) quartz-pyrite(-chalcopyrite) veinlets in HTD-45 vs. multiphase pyrite-chalcopyrite breccia in section 4,542,100N, ii) the mineralisation in HTD-45 occurs at a higher elevation than in “adjacent” holes HTD-11/-12, and iii) the dominance of dacitic host rocks in the ridge area (vs andesites and andesitic volcanics in the main resource area). Based on these observations, a post mineralisation fault is interpreted to lie between the Ridge Area and the mineral resource area; accordingly, a strong possibility exists that the southern extension to the high grade zone may be structurally offset.

Southern Vein Field /HTD 27 Area

Three scout drill holes (HTD-50, HTD-51, and HTD-53) were also completed in the Southern target area (the northern extension of the area mined by Russian interests prior to 1923) with assay received for HTD-50 (**1m @ 13.7 g/t Au** from 64m). Assays are pending for the vein/stockworks

zones observed in HTD-51 (at 117m and 163m) and HTD-53 (40m from 158m). Further systematic work will be required to develop the exploration potential of this sector; high grade vein targets represent a valid exploration target in their own right and will be evaluated on a priority basis going forward.

Mineral Resource Update

An updated mineral resource estimate for the Hot Maden Project, which will incorporate assay results obtained from drill holes HTD-18 up to HTD 53 into the existing mineral resource model, is currently expected to be released by June, 2016. The updated mineral resource estimate will be undertaken by RungePincockMinarco, the independent mining consultants which completed the maiden (August, 2015) mineral resource estimate for Hot Maden.

Table 1: Summary of drill holes HTD-36 to HTD-53 (Cross Sections from North to South)

Drill Hole	From (m)	To (m)	Intercept (m)	Au g/t	Cu %	Zn %	Comments
Cross Section 4,542,350N							Figure 2
HTD-37	21.0	27.0	6.0	-	-	1.90	Mixed Zinc Zone, Northern Margin of Au-Cu Zone
	44.0	49.0	5.0	-	-	2.04	
	62.0	108.0	46.0	0.8	0.25	0.63	
Including	71.0	72.0	1.0	-	-	3.43	
	97.0	99.0	2.0			2.69	
	104.0	110.0	6.0	-	-	2.78	
	187.5	189.5	2.0	-	-	4.33	
	194.0	197.0	3.0	-	-	2.25	
HTD-38	69.0	79.0	10.0	-	-	1.25	Zinc Zone, Northern Margin of Au-Cu Zone
	87.0	92.0	5.0	1.0	0.47	0.33	
	139.0	145.0	6.0	-	-	1.56	
HTD-40	6.0	35.0	29.0	-	-	1.58	Zinc Zone, Northern Margin of Au-Cu Zone
	56.6	65.0	8.4	0.7	-	0.65	
Cross Section 4,542,300N							Figure 2
HTD-39	12.1	18.0	5.9	0.7	-	-	Zinc Zone, Eastern Margin of Au-Cu Zone
	25.1	30.1	5.0	0.6	0.40	-	
	99.0	102.0	3.0	-	-	1.54	

Cross Section 4,542,250N							Figures 2, 3
HTD-36	81.0	91.0	10.0	-	-	4.62	Zinc Zone, Eastern Margin of Au-Cu Zone
	101.0	101.3	2.0	-	0.39	5.93	
	133.0	144.0	11.0	0.5	0.27	2.84	
HTD-52	262.0	312.0	Assays Pending				Main Au-Cu Zone; Step back hole to HTD 04/09
Cross Section 4,542,100N							Figures 2, 6
HTD-44	25.5	62.0	36.5	1.8	0.51	7.12	Zinc Zone, Eastern Margin of Au-Cu Zone
<i>Including</i>	25.5	42.0	16.5	1.0	0.31	13.7	
	70.1	77.0	6.9	0.5	0.28	-	
	99.0	111.0	12.0	0.6	0.25	-	
<i>And</i>	107.0	111.0	4.0	-	-	4.80	
HTD-47	34.0	37.0	3.0	0.5	-	5.00	Zinc Zone
HTD-48	26.0	27.4	1.4	0.4	-	4.80	Zinc Zone, Western Margin of Au-Cu Zone.
	32.0	33.0	1.0	0.7	-	1.70	
	39.0	41.0	2.0	-	-	1.73	
	56.0	57.0	1.0	-	-	1.95	
Cross Section 4,542,050N							Figure 2
HTD-41	123.0	124.0	1.0	-	-	1.08	Ridge Area, Zinc Zone
	130.0	134.0	4.0	-		1.39	
	137.0	138.0	1.0	-	-	2.68	
	143.0	153.0	10.0	0.3	-	2.45	
	158.0	159.0	1.0	-	-	5.30	
	172.0	190.0	18.0	0.7	0.57	-	
<i>and</i>	182.0	184.0	2.0	-	-	2.70	
HTD-42	198.0	199.8	1.8	-	-	2.72	Ridge Area, Zinc Zone
	207.0	209.0	2.0	-	-	1.47	
	219.9	221.0	1.1	-	-	1.80	
	235.0	242.0	7.0	0.5	-	3.85	
	255.0	257.0	2.0	0.3	-	2.32	
	262.0	263.0	1.0	-	2.49	-	
	286.0	288.0	2.0	0.8	1.73	-	
	288.0	289.5	1.5	12.9	4.79	-	
	306.0	307.0	1.0	0.3	1.19	-	
	318.0	320.0	2.0	1.9	0.22	-	

HTD-43	4.0	10.5	6.5	-	-	2.62	Ridge Area, Zinc Zone
	13.0	20.3	7.3	0.4	-	1.27	
	34.0	42.5	8.5	0.3	-	2.10	
	50.0	53.0	3.0	-	-	1.62	
	69.0	70.0	1.0	-	-	1.90	
	71.0	72.0	1.0	-	-	2.49	
	86.0	93.0	7.0	-	-	3.10	
	95.0	103.0	8.0	1.2	1.29	-	
	113.0	118.0	5.0	0.8	0.74	-	
	225.0	226.0	1.0	-	2.40	-	
HTD-45	1.0	6.0	5.0	-	-	2.83	Ridge Area, Au-Cu Zone
	11.0	17.0	6.0	5.0	-	-	
	24.0	39.0	15.0	3.2	1.22	-	
<i>Including</i>	28.0	29.0	1.0	8.8	3.27	-	
	46.0	51.0	5.0	9.1	1.40	-	
<i>Including</i>	50.0	51.0	1.0	25.6	1.51	-	
HTD-49	32.5	35.0	2.5	1.0	-	5.37	Ridge Area, Zinc Zone
	62.0	91.0	29.0	-	-	0.90	
	107.0	113.0	6.0	-	-	2.21	
	120.0	124.0	4.0	-	-	1.43	
	126.0	127.0	1.0	0.4	-	1.92	
HTD-27 Area 4,541,850N <i>Figure 2</i>							
HTD-46	0.0	21.0	21.0	-	-	1.32	Zinc Zone
Southern Vein Field 4,541,750N and 4,541,800N <i>Figure 2</i>							
HTD-50	8.0	9.0	1.0	4.2	0.39	-	High Grade Vein Zones
	30.0	31.0	1.0	5.0	-	-	
	64.0	65.0	1.0	13.7	0.54	-	
	124.0	125.0	1.0	3.8	0.92	-	
	134.0	135.0	1.0	5.1	-	-	
	144.0	145.0	1.0	4.3	-	-	
	185.0	188.0	3.0	3.8	2.00		
<i>Including</i>	185.0	186.0	1.0	8.5	0.66		
HTD-51	36.0	37.0	1.0	Assays Pending			Veinlet Zones
	111.0	118.0	7.0				
	163.0	164.0	1.0				
	296.0	297.0	1.0				
	356.5	357.5	1.0				

HTD-53	158.0	198.5	40.5	Assays Pending	Veinlet / Breccia Zone

Quality Control and Assurance

Mineralised intervals presented in Table 1 are drill intersection widths and may not represent true widths of mineralisation. Drill core obtained from the diamond drill program was dominantly HQ-sized core with the remainder being PQ-sized core. All drill core was photographed and quick logged prior to sampling. Standard sampling protocol involved the halving of all drill core and sampling over generally 1 m intervals (in clearly mineralized sections) or 2 m intervals (elsewhere), with one half of the core being placed in a sealed sample bag and dispatched to the analytical laboratory for analysis. Samples have been analysed at ALS Laboratories' facility in Izmir, western Turkey. All samples have been analysed for gold using a 30g Fire Assay with AAS finish (or Screen Fire Assay for higher grade samples), in addition to a 32 element ICP-AES analysis of an aqua regia digest. Samples in which ICP analyses returned greater than the maximum detection limit for the elements Ag (10 ppm), Cu (10,000 ppm), Fe (15%), Pb (10,000 ppm), and Zn (10,000 ppm) were re-analysed using the AAS analytical technique. Standards and blanks were inserted in to the analytical sequence on the basis of one standard for every 20 samples, 2 blanks in every batch, and one duplicate every 40 samples.

Health, Safety, and Environment (HSE)

No HSE incidents have been reported during the current diamond drill program.

Hot Maden drill holes – technical data

Technical data relating to Hot Maden drill holes HTD-36 to HTD-53 are given in the following tables.

Main Resource Area - Extension Drilling

Hole ID	Easting	Northing	Elevation (m)	Azimuth	Dip (degrees)	Depth (m)	Assays
HTD-36	740,748.4	4,542,248.4	876.2	270	-65	150	Complete
HTD-37	740,650.1	4,542,327.9	888.6	090	-60	198	Complete
HTD-38	740,667.3	4,542,339.1	888.8	090	-50	147	Complete
HTD-39	740,687.1	4,542,281.5	875.9	090	-53	120	Complete
HTD-40	740,614.5	4,542,342.9	886.6	090	-66	174	Complete
HTD-44	740,683.1	4,542,099.2	883.0	270	-60	238	Complete
HTD-47	740,629.7	4,542,100.3	877.1	270	-60	201	Complete
HTD-48	740,588.8	4,542,100.9	865.5	270	-50	102	Complete
HTD-52	740,522.3	4,542,255.2	869.2	085	-60	344	Pending

Southern Extension / HTD-27 Area / Southern Vein Field

Hole ID	Easting	Northing	Elevation (m)	Azimuth	Dip (degrees)	Depth (m)	Assays
HTD-41	740,705.7	4,542,046.6	910.6	270	-65	252	Complete
HTD-42	740,749.5	4,542,029.7	900.8	270	-67	344	Complete
HTD-43	740,642.8	4,542,049.4	912.2	270	-60	249	Complete
HTD-45	740,603.0	4,542,051.2	912.6	270	-55	168	Complete
HTD-46	740,588.3	4,541,863.1	936.5	090	-70	90	Complete
HTD-49	740,647.8	4,541,997.6	951.0	270	-60	201	Complete
HTD-50	740,451.5	4,541,750.2	880.8	090	-60	294	Complete
HTD-51	740,422.3	4,541,801.0	883.0	090	-60	396	Pending
HTD-53	740,510.5	4,541,753.1	884.0	090	-60	264	Pending

****ENDS*******Qualified Person***

The information in this release 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.

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About Mariana Resources

Mariana Resources Ltd is an AIM 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) rapidly advancing to development. A maiden mineral resource estimate of 2.03 Moz gold Equivalent (Indicated Category) and 0.97 Moz gold Equivalent (Inferred Category) (100% basis) was reported for Hot Maden on August 18, 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. Mariana acquired 100% interests in the Doña Ines gold-silver and Exploradora East copper prospects in northern Chile through the Aegean Metals Group transaction which closed in January, 2015, with Mariana exploration now being funded by Asset Chile through the provision of \$1.65m for a total 50% interest. 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, 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.