

# Trek's maiden drilling at Dikaki returns visible zinc in all holes

Plus, results show mineralisation extends well beyond the priority channels into the greater basin area, increasing the project's potential significantly

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#### **Issued Capital**

Shares – 156.0 M Options – 55.5M Share Price – A\$0.042 Market Cap. – A\$6.55N

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# **HIGHLIGHTS**

- Trek's maiden drilling program at the Dikaki Prospect within the Kroussou zinc-lead project in Gabon has been completed
- Visible mineralisation is present in all holes, including the twin of historic hole S1 drilled outside the Dikaki channel
- The twin of S1 provides confidence that mineralisation is not just present within the channels along the basin margin but within the entire basin itself, establishing the entire basin as a target
- Samples are in the lab with all assays expected late April/early May
- An additional tenement has been granted to cover more of the prospective Basin

Trek Metals Limited (ASX:TKM) is pleased to announce that its maiden drilling program at the Kroussou Project in Gabon (subject to an option agreement with Battery Minerals Limited (ASX:BAT)) has returned visible zinc-lead mineralisation in every hole.

The drilling, which was conducted at the Dikaki Prospect at Kroussou, also provides Trek with the confidence that the historic drilling information is reliable.

Importantly from an overall project perspective is the twin of historic hole S1. This twin hole displays visual mineralisation at various depths down-hole (details of this hole provided in ASX announcement, 28 Feb 2017).

This is highly significant because it shows that the mineralisation may not be restricted to the channels themselves but may be present within the broader basin. As a result, the target area for the project has been extended significantly, with the entire basin now considered prospective for zinc and lead.

Samples from the drilling are now in the laboratory with all assays expected to be returned by late April/early May.

Trek Managing Director Bradley Drabsch said: "Confirming the historic work is a key step towards opening up this region for a major exploration campaign. These results are extremely promising and highlight Kroussou's immense potential to host a world-class zinc-lead system."

### **New Tenement**

A new prospecting licence, G4-588, has now been granted and provides the opportunity to continue exploration deep into the prospective Cotier Basin.

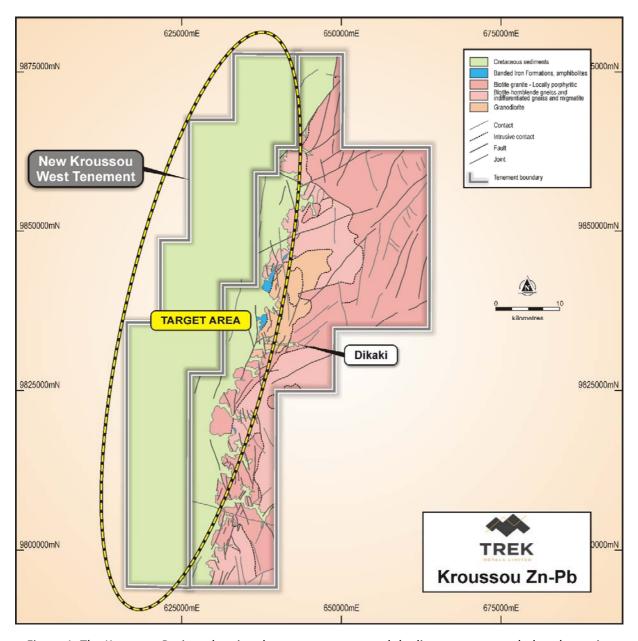


Figure 1: The Kroussou Project showing the new tenement and the live target expanded to the entire sedimentary basin.



# **About the Kroussou Project**

Zinc and lead mineralisation is hosted in Cretaceous sediments exposed on the margin of the Cotier (Coastal) Basin within preserved channels and onlapping unconformable Archaean and Paleoproterozic basement rocks. Base metal occurrences are mapped along the length of the Kroussou Project License (84km strike for ~1,500km² of tenure). Only a limited number (2 of 18) of the exposed channels were drill tested by the Bureau de Recherches Géologiques et Minières (BRGM) historically, with both channels containing significant base metal mineralisation. Trek believes there is scope for the discovery of further base metal accumulations within the remaining untested 16 channels and also greater potential westward within the broader Cotier Basin.

The Dikaki Prospect, the area with the most historic drilling (small diameter diamond core) returned numerous shallow intersections of ore grade and width zinc plus lead mineralisation. Some of the better intersections reported included 2.3m @ 21.2% Zn+Pb from 0.9m, 8.3m @ 7.8% Zn+Pb from 13.6m and 7.0m @ 8.2% from 9.4m. These holes were drilled by the BRGM in 1979-1980 (for further details refer to TKM's ASX Announcement from 2 November 2016).

Assaying of core by the BRGM was highly selective due to the high cost of analysis and transport back to France at the time. Only obviously mineralised (clearly visible galena – lead sulphide) core was sent for analysis, limiting defined and quantified mineralisation to these intersections. Sphalerite (zinc sulphide) is not always easy to identify in hand specimen and zinc rich core may not have been sent for assay. Further, BRGM limited their drill program to shallow holes (average depth of 16m) with numerous holes ending in mineralisation.

The BRGM drill holes confirm multiple horizons of flat lying mineralisation. Numerous intersections of massive sulphide were reported in drill logs adding to the potential for significant zinc and lead mineralisation at the Kroussou project. The style of mineralisation is likely Mississippi Valley Type, however some Sedex Type characteristics are also observed. Petrology undertaken by Battery Minerals Limited (BAT, formerly Metals of Africa, MTA) indicates relatively equal proportions of zinc and lead minerals and the sphalerite appears to have low iron content, making it more attractive for beneficiation.

BAT has identified eighteen channels that offer very shallow, near surface targets close to the Archaean and Paleoproterozoic basement rocks. A recent field visit by Trek, identified significant zinc and lead mineralisation within modern drainage systems outcropping within the historically drilled channels. BAT previously announced confirmation of high grade rock chips at the Dikaki and Kroussou Prospects with results returning grades as high as 9.7% zinc and 33.1% lead (see ASX announcement by BAT from 7 April 2015).



## **Access to Infrastructure**

Access into the Kroussou project area has been greatly enhanced in recent times by the presence of several logging companies operating in the area. New, high quality roads and tracks have been established that allow for easy passage into the project from the bitumen highway that runs south from the capital city of Libreville.

A river port at Yeno, approximately 65km, by vehicle, to the west of the project area along a good quality road, is used by the timber and the oil industries to barge equipment and product to Gabon's main commercial shipping base at Port Gentil. This barge system presents an ideal, relatively cheap logistical solution for operations within the project to and from the main export facilities at Port Gentil.

# **Key Deal Terms**

- Drill Option TKM to fund an initial drilling programme at Kroussou up to US\$250,000.
- Should TKM elect to exercise this option (prior to 31st July 2017), TKM will pay BAT US\$240,000 in cash and/or shares as a reimbursement of costs and to secure the right to earn 30% of the Kroussou Project through the expenditure of US\$1M within 12 months of the exercise date.
- TKM can then earn a further 40% of the Project through the expenditure of US\$3M in the subsequent 24 months.
- TKM will then have earnt 70% of the Kroussou Project and agrees to free carry BAT through to the completion of a PFS (Pre-Feasibility Study, as defined in JORC 2012). At that point BAT will have the option to contribute to the delivery of a DFS (Definitive Feasibility Study as defined in JORC 2012) or dilute, via standard industry formulae to 5%, whereby below that, its interest will convert to a 2.5% Net Smelter Royalty (NSR). TKM will have the option to buy back 1% of this royalty through the payment of US\$1M to BAT.

#### **COMPETENT PERSONS STATEMENT**

The information in this report that relates to exploration results is based on information compiled by Mr Bradley Drabsch, Member of the Australian Institute of Geoscientists ("AIG") and Managing Director of Trek Metals Limited. Mr Drabsch has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a competent person as defined in the JORC Code 2012. Mr Drabsch consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.



# JORC Code, 2012 Edition - Table 1

# Section 1 Sampling Techniques and Data

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

Criteria	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>	<ul> <li>Drill core has been cut in half using a coresaw.</li> <li>No assaying has been undertaken as yet and none has been discussed in this document.</li> </ul>
Drilling techniques	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).	Drilling is either HQ diamond or NQ diamond.
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>	<ul> <li>Core recoveries are measured using industry standard methods for each metre of core drilled.</li> <li>The use of HQ diamond core ensures the best recovery under the conditions experienced in the project area.</li> <li>No relationship between recovery and grade can be determined as no samples have been assayed at this stage.</li> </ul>
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	Field logging to industry standard has been conducted on the drill core in its full condition. The core will be re-logged once cut. All observations are handwritten before being digitised into the company database. This method



Criteria	JORC Code explanation	Commentary
	<ul> <li>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 relevant intersections logged.</li> </ul>	<ul> <li>will allow the logging to support Mineral Resource Estimations if/when required.</li> <li>Geological observations such as lithology, alteration, mineralisation etc are qualitative whereas recovery, RQD etc are quantitative.</li> <li>100% of the drill core has been fully logged.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</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>The drill core has been cut in half using a standard petrol powered core saw.</li> <li>Sampling half core is industry standard. Samples have not been submitted for further preparation work as yet.</li> <li>Core has been cut to ensure that both sides approximate one another to ensure representivity of each length.</li> <li>The sample size collected is appropriate for this stage of exploration.</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>	No assaying has been conducted as yet and none is discussed in this document.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</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>All logging observations are handwritten before being digitised into the company database.</li> <li>No assaying has been conducted as yet and none is discussed in this document.</li> </ul>
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	<ul> <li>A handheld GPS was used to locate each sample.</li> <li>Sample locations are provided as UTM co-ordinates within Zone 32,</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	southern hemisphere using WGS 84 datum.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Samples have been collected at regular 1m intervals unless a specific geological boundary of significance is within an interval. Samples are then adjusted to reflect that boundary.</li> <li>Sampling is being conducted to industry standard methods and assays would be able to be used for Resource/Reserve calculations if/when required.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Drillholes are vertical. Due to the shallow dipping nature of the known geology in the project area, this orientation is considered appropriate.
Sample security	The measures taken to ensure sample security.	Samples will be transported from the field to the processing laboratory by company field personnel and then from the processing laboratory to the assaying laboratory via DHL.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No reviews or audits have been undertaken at this stage.



# Section 2 Reporting of Exploration Results

(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 licence to operate in the area.</li> </ul>	<ul> <li>BAT acquired the Kroussou Project in Gabon from Select Exploration Limited (ASX:SLT) in March 2014. BAT has 100% equity in these projects. Havilah Consolidated Resources (HCR) holds a 0.75% NSR. This royalty may be bought back from HCR by MTA for US\$250,000</li> <li>The Kroussou tenure is an Exploration License (G4-569) renewable each year for a further 3 year period beginning the 02<sup>nd</sup> of July 2015.</li> <li>The Company is not aware of any impediments relating to the licenses or area.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Intermittent historical exploration as conducted by French Bureau de Recherches Géologiques et Minières (BRGM) at Kroussou from 1962 - 1963, the project was then later re-examined in 1979-1981 by the BRGM in joint venture with Comilog which is a Gabonese government owned mining company.</li> <li>BRGM discovered the Kroussou Pb-Zn-(Ag) mineral occurrences as well as others along various river systems on the Kroussou license.</li> <li>BRGM conducted drilling on the project in 1962, 1977-1980.</li> <li>BAT has obtained historical reports and drill logs relating to BRGM's field program.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The deposit style reported in BRGM historical files is Mississippi Valley Type (MVT) sedimentary mineralisation of Pb-Zn-(Ag) where mineralisation is similar to the Laisville (Sweden) style with deposition within siliciclastic horizons in a reducing environment.</li> <li>On a regional scale, the Pb-Zn mineral concentrations are distributed at the edge of the continental shelf which was being eroded during Lower Cretaceous time.</li> <li>Mineralisation is located within the Gamba Formation part of the N'Zeme Asso Series and was deposited during the Cretaceous as part of the Cocobeach Complex deposited during formation of the Cotier Basin.</li> <li>Mineralisation is hosted by conglomerates, sandstones and siltstones deposited in laguno-deltaic reducing conditions at the boundary of the Cotier Basin onlapping continental basement rocks.</li> <li>Large scale regional structures are believed to have influenced mineralisation deposition.</li> </ul>



Criteria	JORC Code explanation	Commentary
		BAT's field reconnaissance identified mineralisation within coarse-grained arkosic sandstone and conglomerate and observed local silicification.
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:	See table 1 within the document.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No assaying has been conducted as yet and none is discussed in this document.
Relationship between mineralisation widths and intercept lengths	<ul> <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>	Mineralisation is understood to be within shallowly dipping horizons and therefore vertical drillholes should intersect zones at approximately right angles and approximate true widths.
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.	Refer to figures and tables in report.
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.	No assaying has been conducted as yet and none is discussed in this document.
Other substantive	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations;	All meaningful and material information is reported.



Criteria	JORC Code explanation	Commentary
exploration data	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>	This current work is likely to be followed by geophysical surveys, geochemical surveys and geological mapping to generate further drill targets should TKM choose to exercise its option to enter into a JV with BAT.

