

# Kroussou Drilling Contract Finalised On Track for Commencement in June Surface Targets – Open Pit

Ground preparations underway in anticipation for a start in June

# ASX ANNOUNCEMENT 14 May 2018 ASX: TKM ARBN: 124 462 826

**Board of Directors** 

Mr Greg Bittar
Non-Executive Chairman

Mr Bradley Drabsch

Managing Director

**Ms Sonja Neame** Non-Executive Director

Mr Michael Bowen

Non-Executive Director

#### **Issued Capital**

Shares – 322.9 M Options – 120.2M Share Price – A\$0.021 Market Cap. – A\$6.78N

#### Registered Office – Australia

Suite 5/56 Kings Park Rd WEST PERTH WA 6005

Registered Office – Bermuda

Trinity Hall
43 Cedar Avenue
HAMILTON HM12

#### **Postal Address**

P.O. Box 1796 *WEST PERTH WA 6872* 

T +61 8 6555 1879
E info@trekmetals.com.au
W trekmetals.com.au

#### **HIGHLIGHTS**

- Drilling contract negotiations finalised with Geofor Gabon SA (Groupe Fugro)
- Drilling anticipated to commence before mid June
- Approximately 2,000m of diamond drilling to be completed at several open pit targets at the highly prospective Kroussou zinc-lead project
- Detailed targeting continues with ground preparation currently underway on site
- Historic drilling very shallow with very few assays undertaken
- Overall 17m average maximum depth in historic drillholes with only approximately 6% of metres drilled ever assayed

Trek is very pleased to announce that final negotiations with our preferred drilling contractor in Gabon, Geofor Gabon SA (Groupe Fugro), have been finalised with drilling set to commence in June.

Approximately 2,000m of diamond drilling will be undertaken at several highly prospective targets within the Kroussou Project area. TKM is aiming to present an open pit exploration target to the market at the completion of this drilling programme.

Trek's Managing Director Bradley Drabsch commented that "The anticipation is building amongst the crew with everyone excited about the impending commencement of our maiden exploration drilling programme at Kroussou. The Geofor team did a great job for us last year during our confirmation drilling programme and we look forward to their presence this time around as we seek to expand on what we already know about the project."

#### Historic Drilling - Very Limited Depth - Very Limited Assaying

Figure 2, below, provides a graphic illustration of the paucity of drilling completed historically that tested any of the identified mineralisation within the Dikaki channel to a depth that makes modern open-pit mining a viable prospect. The BRGM (Bureau de Recherches Géologiques et Minières ) who were exploring in the region during the early 1960's and the late 1970's, were solely focussed on the delineation of lead deposits within the top 20m of surface and gave little attention to the zinc potential, nor the depth potential of the numerous significant zones of mineralisation that were discovered. In many cases the down-dip potential of the mineralisation encountered at or near surface, was not investigated or was not intersected due to the shallowness of the drilling.

Some key facts about the historic drilling include:

- Approximately 7,500m drilled in total historically
- Only approximately 6% of all metres drilled have been assayed
- Overall average maximum drillhole depth is about 17m
- Just 25 holes drilled deeper than 40m
- Zero holes drilled deeper than 40m after 1963

TKM looks forward to building on the historic work and demonstrating the true potential of the Kroussou Project.

#### 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.



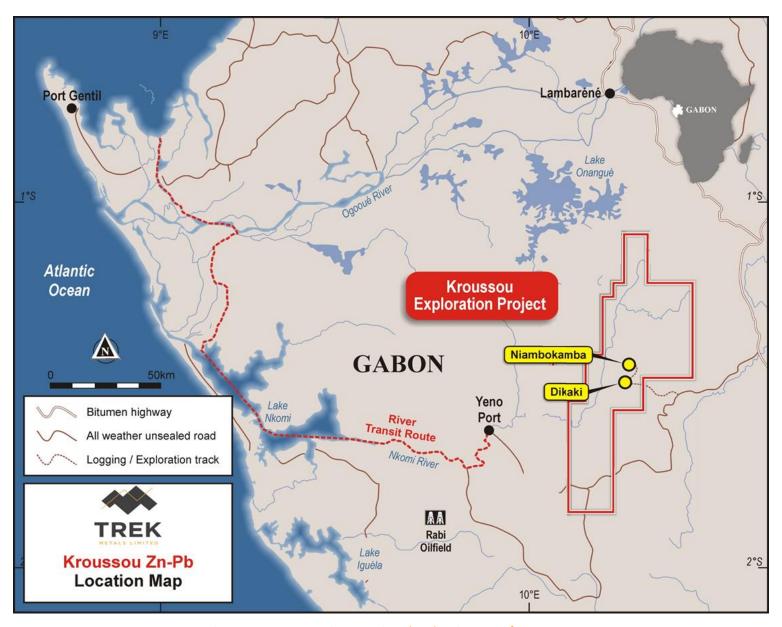


Figure 1: Kroussou Project Location Plan showing Key Infrastructure



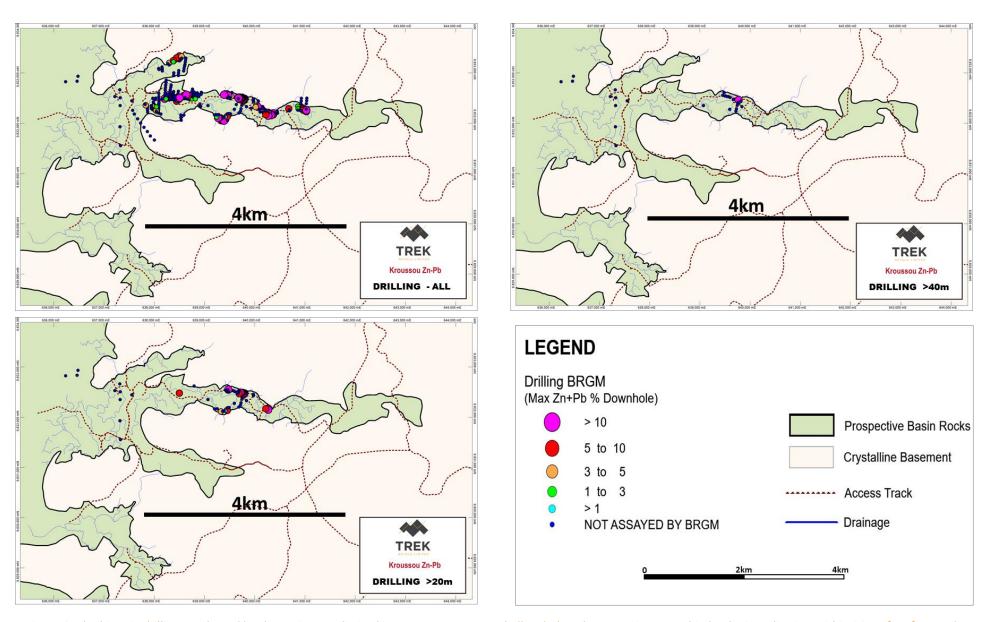


Figure 2: The historic drilling conducted by the BRGM was limited in most cases to very shallow holes, they were interested in lead mineralization within 20m of surface and drilled and assayed accordingly



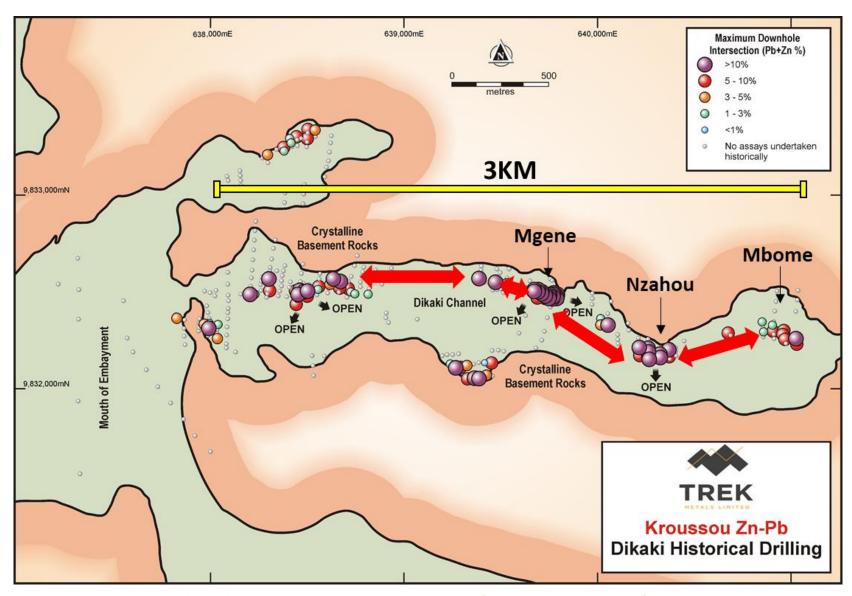


Figure 3: The Dikaki Channel showing historic drilling and some of the prospects that emerged from that work.

Potential connectivity of zones along strike within the channel is clearly demonstrated.



# **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 30g 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>Trek Drilling</li> <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> <li>Historic Drilling</li> <li>Due to the historic nature of the drilling results reported herein, it is not possible to comment on the quality of the sampling used to produce the results described. It is known from the historic reports that the drillcore was sawn.</li> <li>Results were obtained from historic reports produced by the Bureau de Recherches Géologiques et Minières (BRGM, French Geological Survey) during the late 1970's and early 1980's.</li> <li>Rock Samples</li> <li>Samples collected at surface using a geological hammer where necessary</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).	Trek Drilling Drilling is either HQ diamond or NQ diamond.  Historic Drilling Drilling was completed using a Winkie style diamond drill rig producing drill core of approximately 25mm diameter.
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>Trek Drilling</li> <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 has been established.</li> </ul>



Criteria	JORC Code explanation	Commentary
		Historic Drilling     Due to the historic nature of the drilling results reported herein, it is not possible to comment on the recoveries achieved at the time.
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 relevant intersections logged.</li> </ul>	<ul> <li>Trek Drilling</li> <li>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 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> <li>Historic Drilling</li> <li>All drill core was logged in detail, however, due to the age of the drilling and the inability to check-log the core due to its destruction, these logs can be used as a guide only and will not be suitable for use in a Mineral Resource estimation.</li> <li>Qualitative: Lithology, alteration, mineralisation etc.</li> <li>All holes for their entire length appear to have been 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>Trek Drilling</li> <li>The drill core has been cut in half using a standard petrol-powered core saw.</li> <li>Sampling half core is industry standard.</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> <li>Historic Drilling</li> <li>Due to the historic nature of the drilling results reported herein, it is not possible to comment on the method of sampling, sampling techniques and sample preparation methodology.</li> <li>It is known that the core was sawn prior to assay.</li> </ul>



Criteria	JORC Code explanation	Commentary
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</li> </ul>	Trek Drilling Samples were processed in Gabon by Setpoint laboratories. Samples were: Dried Crushed to 80% passing 2mm Pulverised to 80% passing 80 microns Packaged and sent to Intertek Genalysis in Perth Samples were assayed by Intertek Genalysis in Perth using a 4 acid digest (considered a total digest) with an ICP-OES or ICP-MS (element dependant) finish. Analytes included: Au, Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Ti, U, V, W, Y, Zn Laboratory and Trek submitted QAQC samples returned results within acceptable limits.  Historic Drilling Due to the historic nature of the drilling results reported herein, it is not possible to confirm the method of assay or analytical technique however historical reports indicate the drill samples were analysed using atomic absorption methods but the digestion method is not clear. No description of QAQC protocols is provided in the historic reports.  Geophysical Parameters Gradient Array IP: Receiver: Zonge GGT32II 10 Channel Transmitter Frequency: 0.125Hz Line Spacing: 100m oriented North-South Dipole Spacing: 50m  Dipole Dipole IP: Receiver: Zonge GGT32II 10 Channel Transmitter Frequency: 0.125Hz Dipole Spacing: 50m recording to N=8



Criteria	JORC Code explanation	Commentary
		Receiver: ANT6 Coils Ex/Ey dipole spacing : 50m Hy/Hx sample interval : 50m
		Rock Samples
		Samples assayed using a NITON XL3t GOLDD+ portable XRF
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>Trek Drilling</li> <li>All logging observations are handwritten before being digitised into the company database.</li> <li>Assays have been presented as zinc equivalent (Zn eq) using the following assumptions:         <ul> <li>Zinc Equivalent Formula (ZnEq) = Zn% + (Pb x 0.76) based upon a zinc (Zn) price of US\$3,150 / tonne and a lead (Pb) price of US\$2,400 / tonne</li> <li>Historic Drilling</li> </ul> </li> <li>Due to the historic nature of the drilling results reported herein, it is not possible to verify any of the results.</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>Trek Drilling</li> <li>A handheld GPS was used to locate each sample.</li> <li>Sample locations are provided as UTM co-ordinates within Zone 32, southern hemisphere using WGS 84 datum.</li> <li>Historic Drilling</li> <li>Drillholes were located according to topography on maps produced at the time of drilling. A process is underway to attempt to accurately locate these; however, this process is incomplete at this stage. Location accuracies are approximately +/- 10m but may be less accurate.</li> <li>Rock Samples</li> <li>Samples located using a handheld GPS</li> </ul>
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</li> </ul>	Trek Drilling Samples have been collected at regular 1m intervals unless a specific geological boundary of significance is within an interval. Samples are then



Criteria	JORC Code explanation	Commentary
	Resource and Ore Reserve estimation procedure(s) and classifications applied.  • Whether sample compositing has been applied.	<ul> <li>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>
		<ul> <li>Historic Drilling</li> <li>Drillhole collars described in historical reports are spaced at various intervals including random locations and on grids of 50m x 100m and 25m x 50m.</li> <li>Due to the historic nature of the drilling results reported herein, they will not be suitable for use in a Mineral Resource estimation.</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>	Trek Drilling and Historic Drilling  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.	Trek Drilling  Samples were transported from the field to the processing laboratory by company field personnel and then from the processing laboratory to the assaying laboratory via DHL.
		<ul> <li>Historic Drilling</li> <li>Due to the historic nature of the drilling results reported herein, it is not possible to comment on sample security.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Trek Drilling  No reviews or audits have been undertaken at this stage.  Historic Drilling
		<ul> <li>No audits are possible on the results but a full review of the historic data package is underway.</li> <li>Recently completed drilling, the subject of this release has indicated that the historic assays are useful for targeting purposes and approximate modern findings.</li> </ul>



## **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 and a Prospecting Licence (G4-588) which is convertible to an Exploration Licence should TKM elect to convert after 03<sup>rd</sup> March 2018.</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> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Large scale regional structures are believed to have influenced mineralisation deposition.</li> <li>BAT's field reconnaissance identified mineralisation within coarse-grained arkosic sandstone and conglomerate and observed local silicification.</li> </ul>
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> </ul>	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>	<ul> <li>Trek Drilling</li> <li>Intervals reported using a minimum assay of 0.2% Zn eq and a maximum of 2m internal dilution except as indicated for hole DKDD005 (see table 1 in the document)</li> <li>Zn eq calculated as follows: Pb + (0.84 x Zn) (Assuming a Zn price of US\$2,600/tonne, Pb price of US\$2,200/tonne)</li> </ul>
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>	Trek Drilling and Historic Drilling  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.	See table 1 within the document.



Criteria	JORC Code explanation	Commentary
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.	All meaningful and material information is reported.
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 and further delineate drill targets within existing mineralised zones and within the broader project area.

