

ASX ANNOUNCEMENT – 25 March 2014

## RESOURCE DEVELOPMENT DRILLING COMPLETED AT BARBARA: SATELLITE EXPLORATION DRILLING UNDERWAY

*Resource drilling underpins ongoing Feasibility Study on near-term copper-gold development*

### HIGHLIGHTS

- 2,160m of RC and diamond drilling completed at the Barbara JV Copper-Gold Project, North Queensland, concluding the required resource development drilling of the deposit as part of the ongoing Feasibility Study. Assays are awaited.
- Diamond drilling has commenced for definitive metallurgical test work including both oxide and sulphide high-grade shear and vein-style copper-gold ores.
- Updated Mineral Resource estimate expected to be completed in Q2 of CY2014, with the Feasibility Study on track to be completed during Q4, paving the way for a Decision to Mine.
- RC exploration drilling has now commenced at the exciting Mt Olive, Lilly May, Manxman and Spectre prospects, located ~4km south-west of the Barbara copper-gold deposit.

Syndicated Metals Limited (ASX: SMD – “Syndicated” or “the Company”) is pleased to advise that it has completed the final phase of resource development drilling at its flagship **Barbara Copper-Gold Project** in Joint Venture with CopperChem Limited in North Queensland (Figure 1).

Resource development drilling at the Barbara deposit (Indicated Mineral Resource of 3.8Mt at 1.6% Cu and 0.2ppm Au and Inferred Mineral Resource of 1.6Mt at 1.1% Cu and 0.1ppm Au) has been ongoing since January 2014 as part of the work required to complete the Feasibility Study of the Project. CopperChem is sole funding the Barbara Feasibility Study under the 50/50 Joint Venture with Syndicated.

With the completion of this program, the RC and diamond drill rigs have now been deployed to the satellite exploration program and metallurgical test work program respectively.

### Barbara Resource Development Program

RC and diamond drilling comprising 661m of RC drilling and 1,499m of HQ-sized diamond core was completed in 25 holes between January and March 2014. Drill-hole locations from the 2014 program are shown in Figure 2. Core typical of the style of mineralisation encountered at Barbara is shown in Figures 3 and 4.

Filleted core samples have been dispatched for assay to Queensland based assay laboratories.

Key features of the resource development drilling program include:

- Drilling was undertaken on 20m spaced in-fill drill lines to ensure continuity of the high grade material within the South Lode and around the base of the proposed open pit in the North Lode. Drilling also targeted the transitional zone to determine potential copper species outside the malachite ore in the oxide material and the chalcopryite ore in fresh material;
- Generally, high grade, coarse grained chalcopryite mineralisation was encountered with quartz veining and silica and pyrite alteration on both the hangingwall and footwall contacts of the mineralisation;
- Between the Hangingwall and the Footwall Lodes, the Central Zone consists of disseminated and blebby chalcopryite in chorite-biotite schist;
- The South Pit area displays all three (Hangingwall, Central and Footwall) mineralisation styles. The Footwall style of mineralisation appears absent in the North Pit area and therefore the ore zone is generally thinner and lower in average grade;
- Only minor amounts of transitional type copper species were encountered; and
- Ore zones were intersected within 1 or 2m of their anticipated positions and are within 1-2m of the true width predicted from surrounding (mostly RC) drill holes, indicating a strong predictability and continuity of mineralisation style and location.

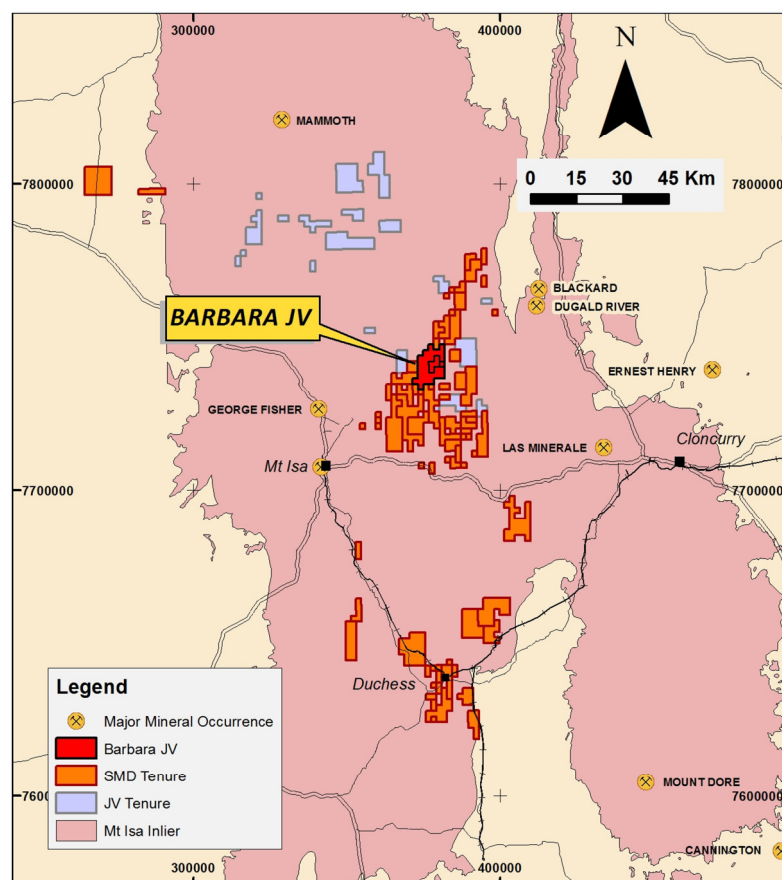


Figure 1 – Project Location Plan

## **Metallurgical Drilling**

Drilling has now commenced on the final phase of technical work associated with the resource and metallurgical testing of the Barbara deposit.

Drilling of approximately 10 diamond drill holes (PQ and HQ size core) has commenced to provide sufficient samples to undertake definitive metallurgical test work of all the metallurgical domains encountered within the deposit. The drilling is expected to take approximately 1 month to complete. The locations of the proposed metallurgical holes are shown on Figure 2.

Test work will assess the leaching performance of oxide ores from both the North and South Pits and test material handling and flotation performance of sulphide ores from the three zones encountered in the resource development drilling.

## **Satellite Area Exploration**

With the completion of the resource development drilling, RC drilling has commenced on the Lilly May, Spectre, Mt Olive and Manxman areas, located to the south-west of Barbara (see Figure 5).

Drilling is targeting depth extensions of historical surface workings, coincident EM geophysical and soil geochemical targets and will be followed up with down-hole geophysical surveys to search for additional targets.

The rationale for the exploration program has been outlined previously (see ASX Announcement – 18 February 2014) and is illustrated in Figure 6.

## **Management Comment**

Syndicated's Managing Director, Andrew Munckton, said the Company was pleased with the outcomes of the recently completed resource development drilling on behalf of the joint venture partners CopperChem Limited and Syndicated Metals.

"The program ran smoothly and the predictability of the ore width and positions of the mineralisation we encountered was outstanding," Mr Munckton said. "We are looking forward to receiving the assay results from the core drilling.

"There were no great surprises in the program but it was pleasing to see the coarse nature of the chalcopyrite in both the Hangingwall and Footwall zones, which augurs well for good flotation recovery results in the upcoming metallurgical test work program.

"We are also pleased to have started drilling at the Lilly May, Spectre, Mt Olive and Manxman Prospects. We believe these prospects hold great promise for the Joint Venture as we aim to build a resource inventory in the area capable of sustaining mining beyond what the Feasibility Study of Barbara defines.

"The initial drilling program is targeted at and around some of the old workings but also contains holes aimed at deeper and broader targets. All holes will be used to establish platforms for down-hole geophysical instruments, which will be used to guide our exploration drilling efforts towards the most prospective locations which may not be immediately apparent from surface mapping and soil geochemistry."

“We are able to progress the exploration drilling in a staged manner with the drill rig returning to the Barbara metallurgical drilling program while we analyse the results of the initial stage of exploration work,” Mr Munckton continued.

“This will ensure a steady flow of news over the coming weeks and a good balance and level of coordination between both the exploration and development aspects of this project, enabling us to systematically progress both elements over the next few months,” he said.

***For further information:***

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***Competent Person’s Statement***

*The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Andrew Munckton who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience 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 of Exploration Results, Mineral Resources and Ore Reserves (the “JORC Code”). Mr Munckton is a full-time employee of Syndicated Metals Limited and consents to the inclusion in the report of the Exploration Results and Mineral Resources in the form and context in which they appear.*

***Exploration Targets***

*This report comments on and discusses Syndicated Metals Limited’s exploration in terms of target size and type. The information relating to Exploration Targets should not be misunderstood or misconstrued as an estimate of Mineral Resources or Ore Reserves. The potential quantity and quality of material discussed as Exploration Targets is conceptual in nature since there has been insufficient work completed to define them as Mineral Resources or Ore Reserves. It is uncertain if further exploration work will result in the determination of a Mineral Resource or Ore Reserve.*

## Appendices

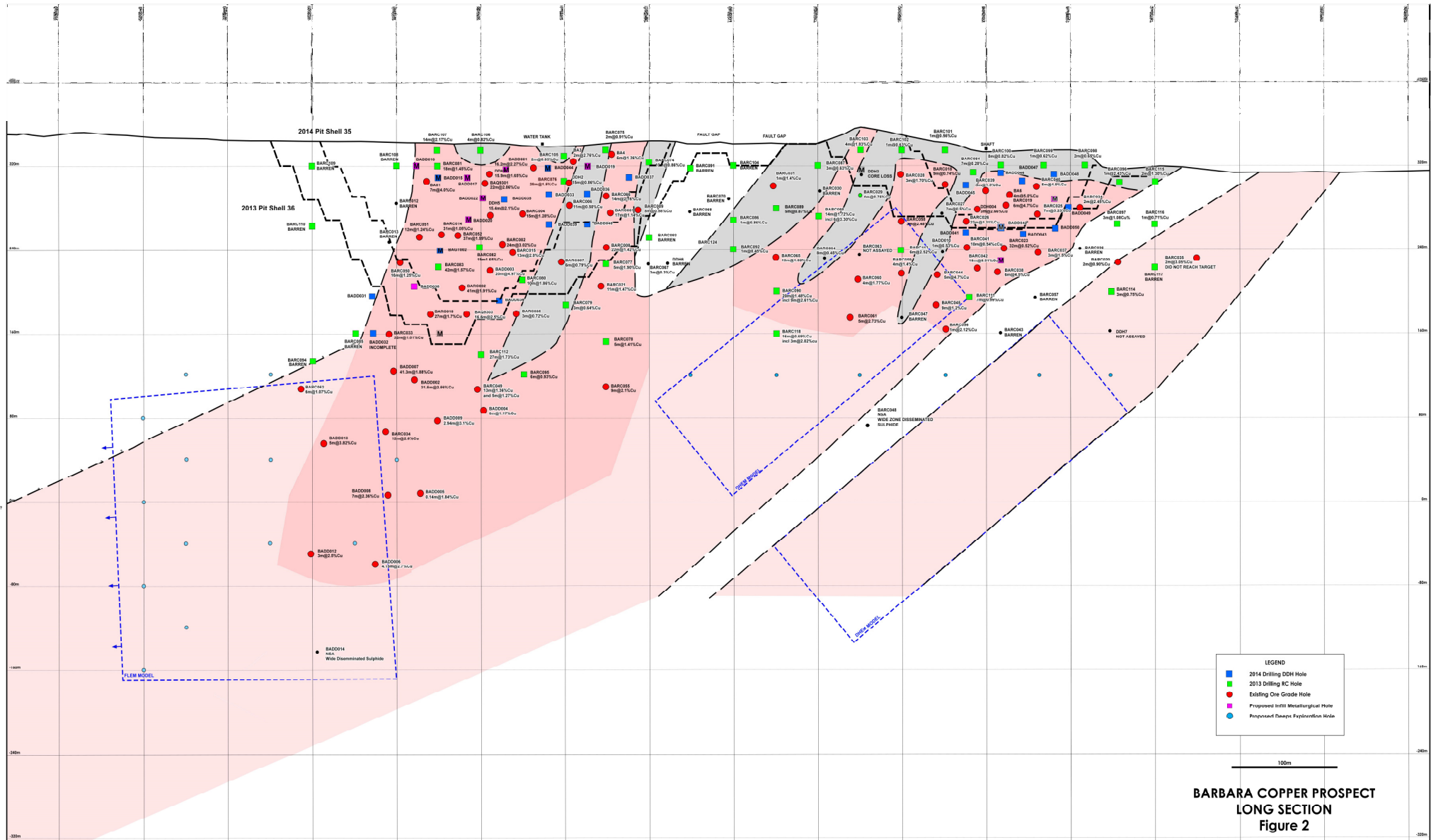


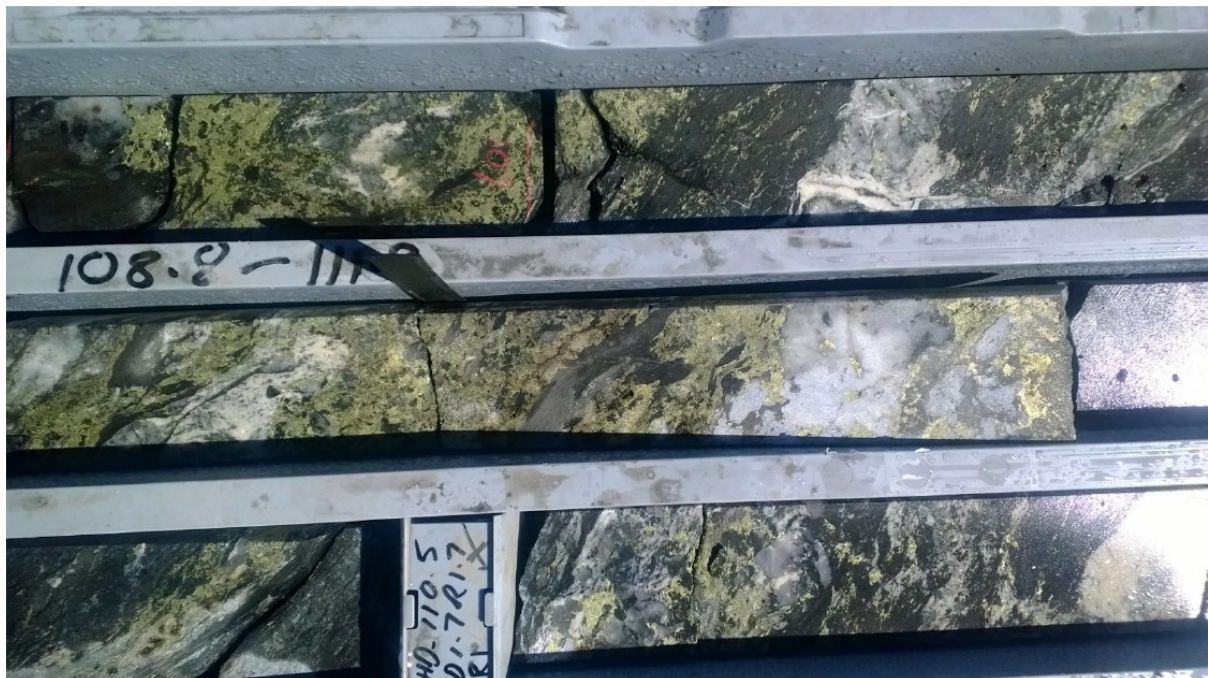
Figure 2 - Long Section of the Barbara Deposit





**Figure 3**

Coarse grained chalcopyrite associated with quartz veining and pyrite alteration. Core is approximately 63mm in diameter.



**Figure 4**

Filleted HQ drill core showing coarse grained chalcopyrite associated with quartz veining and silica-pyrite alteration. Note matrix style fine grained copper mineralisation over printed by coarse grained chalcopyrite. Ore is indicative of hangingwall style high-grade copper mineralisation. Core is approximately 63mm in diameter.

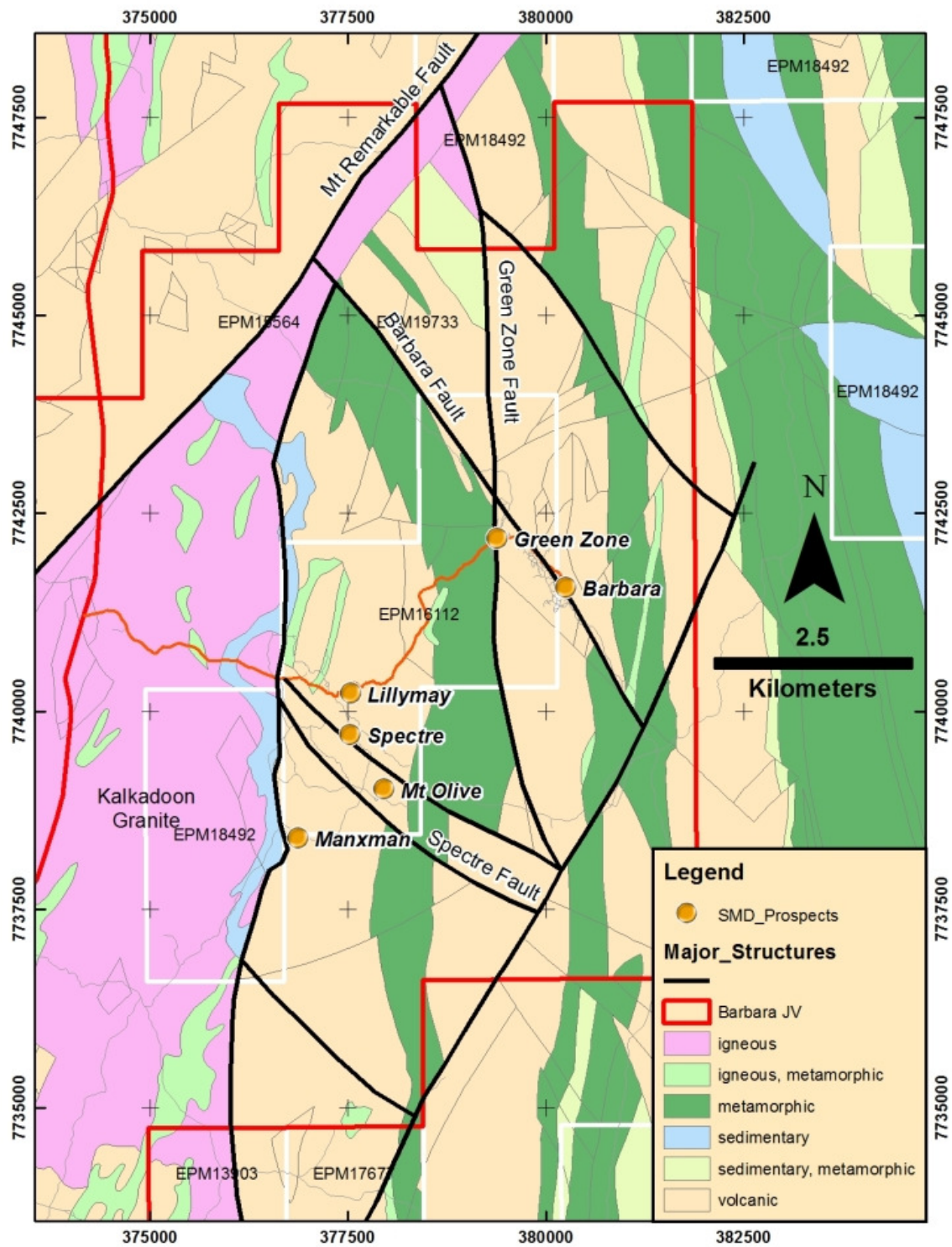


Figure 5 - Exploration targets and regional geology



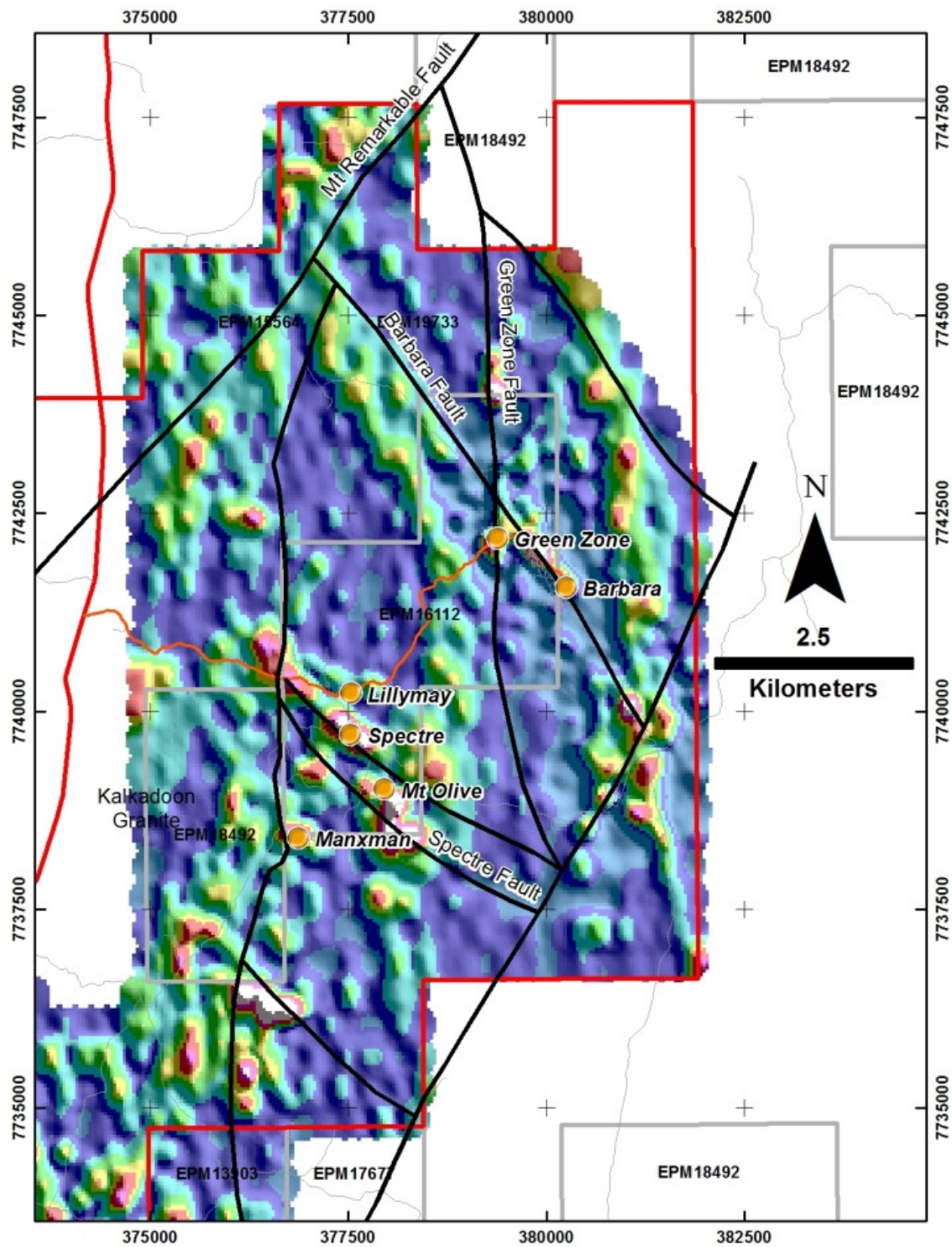


Figure 6 - Exploration Targets & Cu in soil geochemistry



Criteria	JORC Code explanation
Sampling Techniques and Data	
Sampling techniques	<p><i>Nature and quality of sampling (e.g. 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.</i></p> <p>25 Diamond drill holes, 9 with Reverse Circulation (RC) precollars completed by Syndicated Metals Limited (SMD).</p> <p>RC drillholes were sampled at 1m intervals using a rig mounted cyclone with an 87.5-12.5% riffle splitter to collect a 3.5kg to 4kg sample. Selected ore zone samples were selected based on Geology and Handheld XRF analysis and were sent to SGS laboratories in Townsville for multi-element analysis and Au analysis. Reject samples are bagged and will be retained on site for 12 months before discarding.</p> <p>HQ sized diamond core was filleted using a diamond core saw machine. Samples of approximately 1/3 core (20 mm thick) were sampled at intervals of between 60cm and 1.2m cut to geological boundaries. The majority of samples were 1m in length. Sample weights vary from 2.0 kg to 3.0kg for filleted HQ sized core.</p>
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p>Sampling was carried out using Syndicated Metals Limited (SMD) sampling protocols and QAQC procedures.</p>
	<p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg 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.</i></p> <p>RC and diamond core drilling was used to obtain a generally 1m in RC and 60cm to 1.2m sample in diamond core representative sample. A multi element concentration reading of each interval was taken using a Niton Portable XRF. The samples submitted for assay were given a unique sample ID and shipped to SGS Laboratories, Townsville. Samples were dried, pulverised by an LM2 and Analysed for Cu, Co, S, Ca, Mg, Fe, V, As, Cd, Cr, Pb, Zn, Zr, K, Ti, Ag by four acid digest with an ICP finish. Gold was analysed using fire assay.</p>
Drilling techniques	<p><i>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).</i></p> <p>RC Drilling has been undertaken using a face sampling percussion hammer with 5 ¼" to 5 ½" bits.</p> <p>Diamond drilling was undertaken on HQ (63mm diameter) diamond core.</p>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p>RC drilling recoveries were monitored visually by means approximating bag weight to theoretical weight followed by checking sample loss through outside return and sampling equipment.</p> <p>Diamond core recoveries were monitored and logged. Recoveries were uniformly high exceeding 95%.</p>
	<p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p>RC holes were collared with a well-fitting stuffing box to ensure material to outside return was minimized. Drilling was undertaken using auxiliary compressors and boosters to keep the hole dry and lift the sample to the sampling equipment. Cyclone and sampling equipment was checked regularly and cleaned. Hole was flushed at end of each sample and end of each rod. Bit was pulled back after every metre to reduce contamination through the ore zone.</p> <p>Diamond cores were collared from RC precollars in fresh rock ensuring no sample loss or when collared from surface "triple tube" drilling techniques were employed to ensure maximum core recovery and integrity of the material structure.</p>
	<p><i>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.</i></p> <p>Recovery was visually checked and sample loss of the fine or coarse fraction was minimised by following SMD drilling protocols and procedures.</p>

<b>Logging</b>	<i>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.</i>	Logging was completed by a Geologist using SMD logging procedures that were developed to accurately reflect the geology of the area and mineralisation styles.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging is qualitative and quantitative in nature and captured downhole depth, colour, lithology, texture, alteration, sulphide type, sulphide percentage and structure. All core is digitally photographed for historical reference.
	<i>The total length and percentage of the relevant intersections logged.</i>	All drillholes are logged in full.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	HQ sized core was filleted using automatic diamond core saw. Filleting takes approximately 1/3 of the core sample consisting of a 20mm thick arc in HQ sized (63mm diameter) core.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	The RC samples were split (87.5%-12.5%) by the multi-tiered riffle splitter within the cyclone of the drilling rig. Majority of the samples were recorded as dry and minimal wet samples were encountered. Sample duplicates were obtained by splitting the reject sample in the field using the multi-tier riffle splitter.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	The samples were sent to an accredited laboratory for sample preparation and analysis. SGS laboratory follows industry best standards in sample preparation including: optimal drying of the sample (temperature and time for base metal sample), crushing and pulverization of the entire sample in a LM2 to a grind size of 85% passing at 75 microns.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Quality Control (QC) procedures involved the use of certified reference material - Base metals standards prepared by Ore Research and Exploration Pty Ltd, along with blanks and field sample duplicates.
	<i>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.</i>	Field sample duplicates were taken twice in every 100 samples.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are believed to be appropriate to correctly represent the style, thickness of copper and gold mineralisation in the Mt Isa Inlier.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The use of Four Acid digest and Fire assay are classified as total assays. Sequential assaying (acid soluble and cyanide soluble) assaying was undertaken on all oxide and transitional ore samples submitted for assay.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation, etc.</i>	No geophysical tools were used to determine any element concentrations used in the resource estimate. A handheld XRF instrument was used to determine if samples are to be submitted for chemical analysis (assay).
	<i>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.</i>	Syndicated Metals inserted certified standards and duplicates into the sample sequence. Field duplicates and standard control samples have been used at a frequency of 2 field duplicates and 6 standards per 100 samples.  ALS Laboratories QAQC included insertion of certified standards, blanks, check replicates and fineness checks to ensure grind size of 85% passing 75 micron as part of their own internal procedures.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	None undertaken in this programme.
	<i>The use of twinned holes.</i>	None undertaken in this programme.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Geological and sampling information was collected using an electronic logging system.

	<i>Discuss any adjustment to assay data.</i>	No adjustments were undertaken.
<b>Location of data points</b>	<i>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.</i>	Initial collar locations were determined by handheld GPS device and will be surveyed using RTK-60 GPS by licensed surveyors before resource estimates are completed.
	<i>Specification of the grid system used.</i>	GDA94 MGA Zone 54 datum North.
	<i>Quality and adequacy of topographic control.</i>	Drillholes are surveyed by licensed surveyors at the conclusion of the program. Prior to the hole being surveyed the hole is picked up using handheld GPS.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Drill spacing in this program is at approximately 20m x 40m
	<i>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.</i>	The drill spacing in this program is at 20m x 40m, which is believed to be sufficient to classify the Barbara Copper gold deposit as Measured, Indicated and Inferred Mineral Resource.
	<i>Whether sample compositing has been applied.</i>	All samples were collected at 1m sample intervals except a small amount of diamond core samples which were between 60cm and 120 cm in length and cut to geological boundaries. No compositing was necessary or completed.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The predominant drill orientation of the drilling is –60 to grid east. At this orientation the intercepts are close to true widths. However, there are a number of holes which have been drilled between -60 and -90 degrees to the east which are at an angle to the main ore zone. From the sampling to date no bias has been identified due to the orientation.
	<i>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.</i>	No bias is currently known.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Samples were stored on site and transported to SGS Laboratories in Townsville for preparation and multi-element and fire assay analyses. The samples were labeled from the point of collection and retained this unique number throughout the analytical process.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews have been undertaken at this point.

Criteria	JORC Code explanation	
Exploration Results		
Mineral tenement and land tenure status	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.	Barbara Resource is located within EPM16112 and EPM15564. The current registered holder for EPM16112 and EPM15564 is Syndicated Metals Limited (SMD). These tenements are currently in the process of being transferred to the CopperChem/Syndicated Metals JV. The area covered by the Barbara Resource is subject to two separate MDL applications MDL499 (covering the whole extent of EPM16112) and MDL500 (covering the single sub block CLON 383 B within EPM15564). EPM16112 and EPM15564 and their respective MDL applications were recently subject to the Barbara Joint Venture Earn-in Agreement with CopperChem Limited (CopperChem) for the joint evaluation, development, mining and processing of the Barbara Resource. CopperChem have a 50% interest in MDL499, MDL500 and EPM16112 and a portion of EPM15564. The tenements sit within the Kalkadoon People #4 Native Title claim.
	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.	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Barbara Resource: 19 holes out of 192 have been drilled by various companies in the 1960’s - 1990’s including Nippon Mining Australia Limited (Nippon), Cyprus Gold Corporation (Cyprus) and Murchison United NL (Murchison).  Nippon conducted exploration in the area from 1965 to 1995, during which time 7 diamond holes were completed (DDH1-DDH7).  Cyprus held the Barbara tenement from 1993 to 1995, and completed holes BAQ9301, BAQ9302 and BAQ9303. A diamond tail (NQ2 core from 120.3 to 193.2m was completed for BAQ9303. The RC holes were sampled at 1m intervals and analysed for Cu and Au by ALS Laboratories in Mt Isa.  Murchison held the ground between 1995 and 2000. During their tenure they completed 9 shallow RC holes. The holes were sampled at 1-2m intervals in the mineralised zones and at 5m outside of mineralisation. Samples were sent to Amdel for Cu analysis.
Geology	Deposit type, geological setting and style of mineralisation.	The Barbara Resource is a shear hosted deposit within acid volcanics within the Kalkadoon-Leichhardt belt of the Mt Isa Inlier. The NW striking lode dips at approximately 60°to the south west, and varies from 2m to 30m true thickness.
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:	No results are provided in this announcement.
	Easting and northing of the drill hole collar	No results are provided in this announcement.
	Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	No results are provided in this announcement.
	Dip and azimuth of the hole	No results are provided in this announcement.
	Down hole length and interception depth	No results are provided in this announcement.
	Hole length.	No results are provided in this announcement.
	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.	No results are provided in this announcement.



<b>Data aggregation methods</b>	<i>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.</i>	No results are provided in this announcement.
	<i>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.</i>	No results are provided in this announcement.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values are used for reporting exploration results.
<b>Relationship between mineralisation widths and intercept lengths</b>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Not applicable.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	RC and Diamond drilling at Barbara was drilled at an azimuth of 51 Degrees to NNE and a dip of -60 to -90, The orientation of the target area/ore zone has a strike of 310 degrees and dips -60 to the west. The intersection angles for the majority of drilling were at an angle -75 to 90 degrees to the mineralised zones. Therefore reported downhole intersections for -60 to -75 degree holes are approximate to true width and the intersection honours the true width of the ore zone. However, the drillholes completed with dips from -75 to -90 overstate the thickness of the target/orezone. The degree of this, depends on the orientation of the hole.
	<i>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').</i>	See above.
<b>Diagrams</b>	<i>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.</i>	Refer to Figures 1 and 2.
<b>Balanced reporting</b>	<i>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.</i>	No results are provided in this announcement.
<b>Other substantive exploration data</b>	<i>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.</i>	Not applicable.
<b>Further work</b>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Refer Figure 2 for locations of metallurgical drill holes.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Refer to Figure 2.