



27 October 2011

## **MUMBWA PROJECT, ZAMBIA: HIGH-GRADE COPPER MINERALISATION INTERSECTED IN 1<sup>ST</sup> DRILL HOLE**

### **KEY POINTS**

- **Assay results from the first Phase 5 drill hole reveals significant copper mineralisation at the Mumbwa Project, Zambia.**
- **Drill hole S36-023 has intercepted the following drilled thickness intervals:**
  - **282.7m at 1.05% Cu between 178.3m and 461m, including**
    - **60m at 2.58% Cu between 324m and 384m.**
- **Three drilling rigs are onsite progressing the remaining Phase 5 drill holes including double shifting for day and night operations.**
- **Assay results for gold from drill hole S36-023 are awaiting complete analysis and will be released upon receipt by the Company in early November 2011.**



Blackthorn Resources Limited (ASX: BTR) (“the Company” or “Blackthorn Resources”) is pleased to advise that copper (Cu) assay results have been received from the first drill hole S36-023 completed on the Kitumba deposit at the Mumbwa Project in Zambia.

The Company is conducting the Phase 5 exploration program which includes core drilling 16 targets for approximately 8,900 metres. The drilling program commenced in August 2011, utilising three drilling rigs to complete a series of ‘infill’ and ‘step-out’ holes at Kitumba and to drill ‘scout’ holes on regional targets identified nearby. The aim of the drilling program is to better define the inferred mineral resource category at Kitumba, and explore for additional mineralised units to add further volume to the existing mineral resource.

### **S36-023**

The first ‘infill’ target was drilled to intercept the core of the copper mineralisation previously identified at Kitumba. This hole, S36-023, was core drilled at an angle of 70 degrees towards the west (270 degrees) to an end-of-hole depth of 483.1 meters.

A series of 522 samples were collected throughout the entire length of the drill hole. These were sent to the AH Knight Laboratory in Kitwe, Zambia for preparation and copper analysis. A sample split was taken and sent to the AH Knight Laboratory in Fairbanks, Alaska for gold analysis. The Company has received all copper assays as reported herein. However, the gold assays for this hole are pending and it is anticipated that these will be available in early November 2011.

Drill hole S36-023 is situated in the central part of the Kitumba mineral resource area as shown in Figure 1. The Company is encouraged by these results as they provide further confidence in the continuity and grade distribution within the Kitumba IOCG system. Further drilling and mineralised intercepts are required from other surrounding drill holes to refine the geological and resource models for the area.

#### *Geological Observations*

S36-023 intersected feldspar porphyry syenite and quartz porphyry granite over much of the hole. Textures typical of the Kitumba deposit are observed in the drill core including kaolinite, sericite and extensive hematite alteration as well as brecciation.

In-line with other Kitumba drill holes, the upper 150m of S36-023 is leached and copper-deficient. However, this is underlain by a deeply oxidised zone containing zones of supergene copper enrichment, particularly between 300m and 400 metres. These zones are characterised by malachite, chalcocite, dihydrite, cuprite, bornite, native copper, and remnant pyrite and chalcopyrite. Primary hypogene sulphide mineralisation is encountered below this.

S36-023 is distinguished by having intersected some of the highest copper grades observed on the Mumbwa Project to date.

Drilled thickness intervals are quoted as weighted average grades for mineralised intersections using  $\geq 0.25\%$  copper cut-off. True-widths are not quoted as further work is required to correlate data with adjacent drill holes and determine the geometry of mineralisation at Kitumba. True-widths can be a difficult to determine at this early stage in the Project because the geological interpretation at Kitumba represents an intrusive IOCG system, which is considered to be sub-vertical to vertically orientated, with the tendency to pinch and swell at the intersection of major lineaments.

### S36-023

Drilled Thickness Interval (m)		Weighted Average Cu Grade (%)		Drilled Depth From (m)		Drilled Depth To (m)
2.5	at	0.49	between	108	and	110.5
0.9	at	0.35	between	119.1	and	120
1	at	0.29	between	124	and	125
4	at	0.48	between	134	and	138
including						
1.39	at	0.69	between	134	and	135.39
1.2	at	0.63	between	136.8	and	138
1	at	0.36	between	149	and	150
<b>282.7</b>	<b>at</b>	<b>1.05</b>	<b>between</b>	<b>178.3</b>	<b>and</b>	<b>461</b>
including						
<b>8</b>	<b>at</b>	<b>1.23</b>	<b>between</b>	<b>187</b>	<b>and</b>	<b>195</b>
<b>11.7</b>	<b>at</b>	<b>1.70</b>	<b>between</b>	<b>199.3</b>	<b>and</b>	<b>211</b>
2	at	0.99	between	220	and	222
<b>8</b>	<b>at</b>	<b>0.98</b>	<b>between</b>	<b>224</b>	<b>and</b>	<b>232</b>
0.8	at	1.02	between	242	and	242.8
<b>3.7</b>	<b>at</b>	<b>1.56</b>	<b>between</b>	<b>247.3</b>	<b>and</b>	<b>251</b>
<b>8</b>	<b>at</b>	<b>2.96</b>	<b>between</b>	<b>263</b>	<b>and</b>	<b>271</b>
<b>60</b>	<b>at</b>	<b>2.58</b>	<b>between</b>	<b>324</b>	<b>and</b>	<b>384</b>
<b>6</b>	<b>at</b>	<b>1.02</b>	<b>between</b>	<b>385</b>	<b>and</b>	<b>391</b>
2.6	at	1.16	between	395.4	and	398
1	at	1.37	between	415	and	416
1	at	1.03	between	418	and	419
1	at	1.33	between	423	and	424
2	at	1.74	between	439	and	441
1	at	1.01	between	455	and	456
1	at	1.16	between	460	and	461

The Company's Managing Director, Mr Scott Lowe said

*"These first assays results are extremely positive indeed, showing continued evidence of high-grade intercepts of copper mineralisation in the Kitumba inferred mineral resource zone. The Company is very pleased with the results received so far and is eager to progress the drilling program and further define the mineral resource potential at Kitumba.*

*There is growing evidence there is something very real at Kitumba and situated at reasonable mining depths to consider potential open-cut and/or underground mining. Blackthorn Resources will aim to add further value to this project through mineral resource development and exploration of other targets."*

**Notes:**

Gold and copper assays were performed by fully ISO17025 accredited AH Knight laboratories in Kitwe, Zambia and Fairbanks, Alaska. Samples were analysed for total copper by 4-acid digest and atomic absorption spectrometry (AAS) and acid soluble copper (ASCu) by cold acid leach and AAS finish. Samples are analysed for gold using conventional fire assay procedures with AAS finish on 30g aliquots.

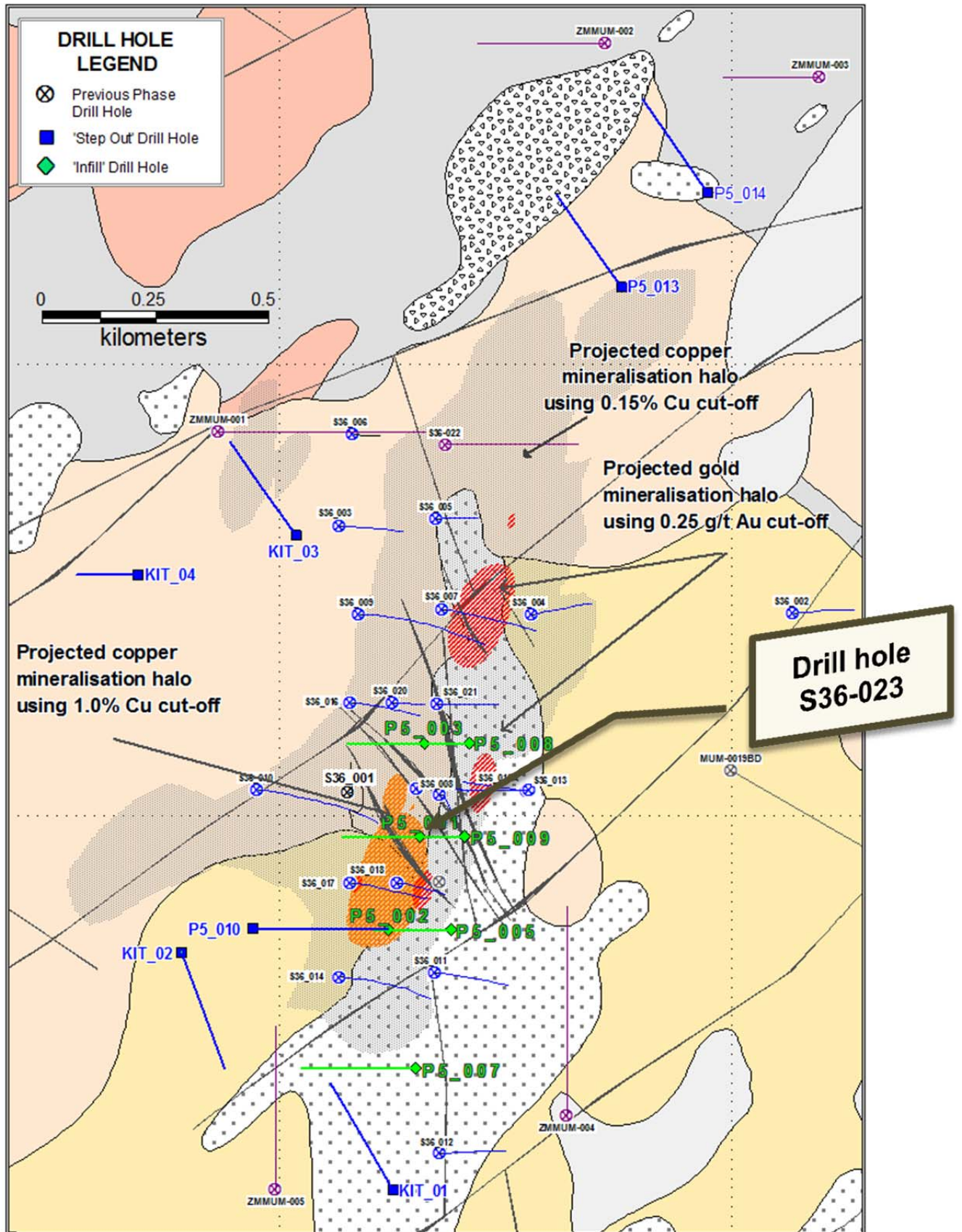
A Quality Assurance/Quality Control (QA/QC) program includes chain of custody protocol, a systematic submittal of 20% QA/QC samples including field duplicates, field blanks and certified reference samples into the flow of samples submitted to the laboratory as well as re-assaying of the mineralised zones.

**ATTRIBUTION**

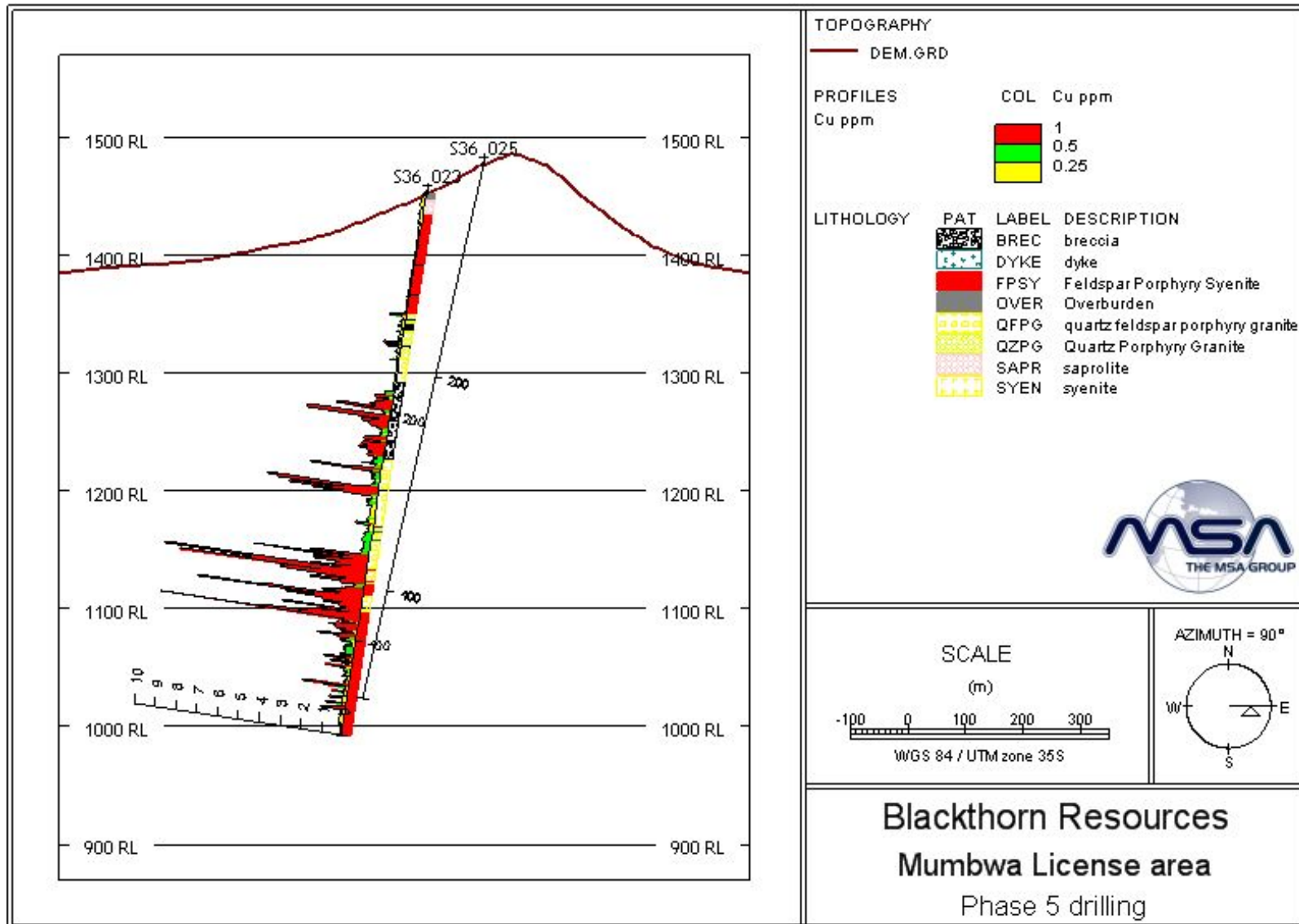
The information in this report which relates to Exploration Results at the Mumbwa Project in Zambia is based on information compiled by Mr Michael J Robertson, MSc, Pr.Sci.Nat., MSAIMM who is a member of The South African Institute of Mining and Metallurgy, which is a Recognised Overseas Professional Organisation ('ROPO'). Mr Robertson has 22 years' experience in mineral exploration and is a full-time employee of the MSA Group. Mr Robertson has sufficient experience which is 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Robertson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Should you require further information please contact:**

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**FIGURE 1 –** Phase 5 Drill hole location plan for the Kitumba Mineral Resource area, Mumbwa Project, Zambia.



**FIGURE 2** – Geological cross-section facing North for drill hole S36-023 showing Cu assay results. Planned drill trace for pending Phase 5 drill hole, S36-025, is also shown.