



15 October 2010

## **MUMBWA JV PROJECT – EXPLORATION DRILLING RESULTS CONFIRM INTERSECTION OF COPPER MINERALISATION**

### **KEY POINTS**

- Phase 4 cored drilling program is progressing well having completed drilling 11,889m from 12 planned targets along the Mushingashi-Mutoya anomaly.
- Assay results received have confirmed copper mineralisation from drillhole MUM-0007BD which includes the following drilled thickness intersections:
  - 4m at 1.13% Cu between 534m and 538m,
  - 6m at 1.16% Cu between 598m and 604m, including
    - 2m at 2.03% Cu from 600m.
  - 2m at 1.05% Cu between 664m and 666m,
  - 10m at 1.80% Cu between 758m and 768m, including
    - 4m at 3.53% Cu from 760m.
  - 10m at 0.93% Cu between 772m and 782m, including
    - 4m at 1.38% Cu from 772m.
  - 4m at 0.95% Cu between 790m and 794m, including
    - 2m at 1.18% Cu from 792m.
  - 6m at 0.53% Cu between 800m and 806m,
  - 2m at 0.49% Cu between 870m and 872 metres.
- Drilling is continuing to test remaining targets which are sited along the north-south trending, Mushingashi-Mutoya gravity anomaly which extends for over 20km along strike.
- Induced Polarisation survey has been completed and data reviewed to determine additional holes for drill testing.
- The Phase 4 exploration program has been revised to drill test 15 targets for approximately 14,500m.



Blackthorn Resources Limited (ASX: BTR) (“the Company” or “Blackthorn Resources”) is pleased to announce that assay results have been received from a further 3 drillholes from the Mumbwa JV Project in Zambia. Drilling operations are progressing as planned and drilling is continuing to advance the Phase 4 exploration program. An Induced Polarisation (IP) geophysical survey has been completed and review of IP data has added extra holes for drill testing. The revised Phase 4 exploration program now entails drilling 15 targets for approximately 14,500m, of which 12 holes have already been completed.

Copper mineralisation has been identified in drill hole MUM-0007BD which includes a drilled thickness intersection (using 0.0% Cu cut-off) of 56m grading 0.68% Cu from 758m to 814m drilled depth. Drill hole MUM-0007D is situated at the northern end of the Mushingashi-Mutoya anomaly and was drilled to test a structural intersection on the flank of a high gravity anomaly within a de-magnetised zone. The copper results intersected are encouraging and provide valuable information towards understanding the exploration model for iron oxide copper-gold (IOCG) style of deposits.

Joint venture partner BHP Billiton (40%) is funding and managing the Phase 4 exploration program and considerable progress in drilling activities has already been achieved. Sample preparation and analysis is ongoing.

### **Assay Results**

Completed assay results have been received from a further 3 drill holes MUM-0007BD and MUM-0006BD and MUM-0003D. Drill hole MUM-0007D intersected significant copper mineralisation. MUM-0006BD and MUM-0003D did intersect sporadic mineralised intervals of copper. However the presence of mineralisation was not continuous.

PRESS RELEASE

**Drill hole: MUM-0007BD**

Drill hole MUM-0007BD was drilled on the 'MUS-07' target situated in the northern part of the drilling area as illustrated in FIGURE 1. MUM-0007BD was drilled at an angle of 60 degrees towards the east (090 degrees) and was terminated at a drilled depth of 1,026.30 metres. A total of 409 drill core and quality control samples were submitted to the SGS laboratory for sample preparation and multi-element analysis.

Drilled thickness intervals are quoted as weighted average grades for mineralised intersections using  $\geq 0.25\%$  Copper (Cu) and  $\geq 0.25$  g/t gold (Au) cut-off.

- 2m at 0.53% Cu between 360m and 362m,
- 2m at 0.35% Cu between 454m and 456m,
- **4m at 1.13% Cu** between 534m and 538m,
- 2m at 0.50% Cu between 540m and 542m,
- 2m at 0.35% Cu between 552m and 554m,
- **6m at 1.16% Cu** between 598m and 604m, including
  - 2m at 2.03% Cu between 600m and 602m.
- 2m at 0.30% Cu between 652m and 654m,
- **2m at 1.05% Cu** between 664m and 666m,
- 2m at 0.35 g/t Au between 690m and 692m, \*
- 2m at 0.51% Cu between 700m and 702m,
- **10m at 1.80% Cu** between 758m and 768m, including
  - 4m at 3.53% Cu between 760m and 764m.
- **10m at 0.93% Cu** between 772m and 782m, including
  - 4m at 1.38% Cu between 772m and 776m.
- **4m at 0.95% Cu** between 790m and 794m,
- **6m at 0.53% Cu** between 800m and 806m,
- 2m at 0.35% Cu between 812m and 814m,
- **2m at 0.49% Cu** between 870m and 872m.

\* Denotes an interval of gold mineralisation.

**Drill hole: MUM-0006BD**

Drill hole MUM-0006BD was drilled on the 'SM-02' target situated in the central part of the drilling area as illustrated in FIGURE 1. MUM-0006BD was drilled at an angle of 60 degrees towards the west (270 degrees) and was terminated at a drilled depth of 1,004.7 metres. A total of 320 drill core and quality control samples were collected and submitted to the SGS laboratory for sample preparation and multi-element analysis.

Drilled thickness intervals are quoted as weighted average grades for mineralised intersections using  $\geq 0.25\%$  Copper (Cu) and  $\geq 0.25$  g/t gold (Au) cut-off.

- 2m at 0.53% Cu between 490m and 492m.
- 2m at 0.26% Cu between 888m and 890m.
- 2m at 0.27% Cu between 916m and 918m.
- 2m at 0.35% Cu between 922m and 924m.
- 2m at 0.26% Cu between 942m and 944m.
- 2m at 0.29% Cu between 946m and 948m.

**Drill hole: MUM-0003D**

Drill hole MUM-0003D was drilled on the 'MU-02' target situated in the southern part of the drilling area as illustrated in FIGURE 1. MUM-0003D was drilled at an angle of 60 degrees towards the west (270 degrees) and was terminated at a drilled depth of 1,032.00 metres. A total of 606 drill core and quality control samples were collected and submitted to the SGS laboratory for sample preparation and multi-element analysis.

Drilled thickness intervals are quoted as weighted average grades for mineralised intersections using  $\geq 0.25\%$  Copper (Cu) and  $\geq 0.25$  g/t gold (Au) cut-off.

- 2m at 1.35g/t Au between 562m and 564m. \*
- 2m at 0.28% Cu between 758m and 760m.
- 4m at 0.48% Cu between 830m and 832m.
- 4m at 0.57% Cu between 1,020m and 1,024m.

\* Denotes an interval of gold mineralisation.

#### PHASE 4 EXPLORATION PROGRAM

The Phase 4 exploration program has been revised and is now planning to drill 15 targets from the Mushingashi-Mutoya-Kitumba gravity anomaly which extends for over 20km strike length as shown in Figure 1.

Twelve drill holes have been completed and drilling rigs are continuing to drill remaining planned targets which are spaced approximately 2,000m apart along the north-south trending Mushingashi-Mutoya anomaly. The Phase 4 program has completed drilling 11,889.4m from 12 targets and progress of drilling remaining targets is underway as shown in TABLE 1.

An Induced Polarisation (IP) geophysical survey has been completed and review of data has identified additional holes worthy of follow-up by drilling. A new target 'MU-03' as shown in Figure 1 was generated through review of the recent IP data and this target is currently being drill tested.

**TABLE 1 – Phase 4 Status of planned drill targets from the Mumbwa JV Project, Zambia.**

#	Target ID	Drill Hole ID	Planned Depth (m)	EOH Depth (m)	Easting (m)	Northing (m)	Dip (°)	Azimuth (°)
1	MU_01	MUM-0004D	800	1,076.8	475,750	8,376,550	-60	112
2	MU_02	MUM-0003D	1,100	1,032.0	476,460	8,377,800	-60	270
3	MUS_06	MUM-0010BD	800	911.6	472,850	8,391,650	-90	000
4	MUS_07	MUM-0007BD	1,200	1,026.3	472,300	8,390,250	-60	090
5	MUS_08	MUM-0012BD	800	986.2	472,890	8,389,100	-85	320
6	MUS_010	<i>Planned</i>	800	<i>Planned</i>	472,490	8,385,720	-60	090
7	MUS_011	MUM-0016BD	800	<i>In progress</i>	473,500	8,386,250	-60	270
8	SM_01	MUM-0001BD	800	850.7	474,398	8,379,700	-60	090
9	SM_02	MUM-0006BD	1,100	1,004.7	474,740	8,380,395	-60	270
10	SM_03	MUM-0011BD	800	928.3	473,250	8,382,100	-70	270
11	SM-05	MUM-0009D	1,000	1,000.0	473,900	8,383,700	-60	270
12	MUS-05A	MUM-0015BD	1,000	1,038.7	472,870	8,388,100	-80	200
13	MUS_015	MUM-0008BD	1,200	1,094.6	473,696	8,380,688	-70	320
14	MUS_016	MUM-0014D	1,200	939.5	475,500	8,381,200	-50	270
15	MU_03	MUM-0017BD	1,100	<i>In progress</i>	476,770	8,375,250	-55	090
			<b>14,500</b>	<b>11,889.4</b>				

**Managing Director Mr Scott Lowe said:**

*“Blackthorn Resources is encouraged by the drilling results achieved in drillhole MUM-0007D. Copper mineralisation is quite continuous in this hole from 758m drilled depth, and maintains good values around ~1% copper for over approximately 40 metres.*

*This is the first hole with interesting copper mineralisation intersected during this phase of drilling. However results for remaining holes are pending. The Mushingashi - Mutoya anomaly being explored is of regional scale and extends for approximately 20 kilometres. The Mumbwa licence covers an expansive area and assessing the full potential of the project is reliant on receipt of remaining assay results to interpret a geological model for the system.*

*The Company is awaiting assay results and will update shareholders as these become available”.*

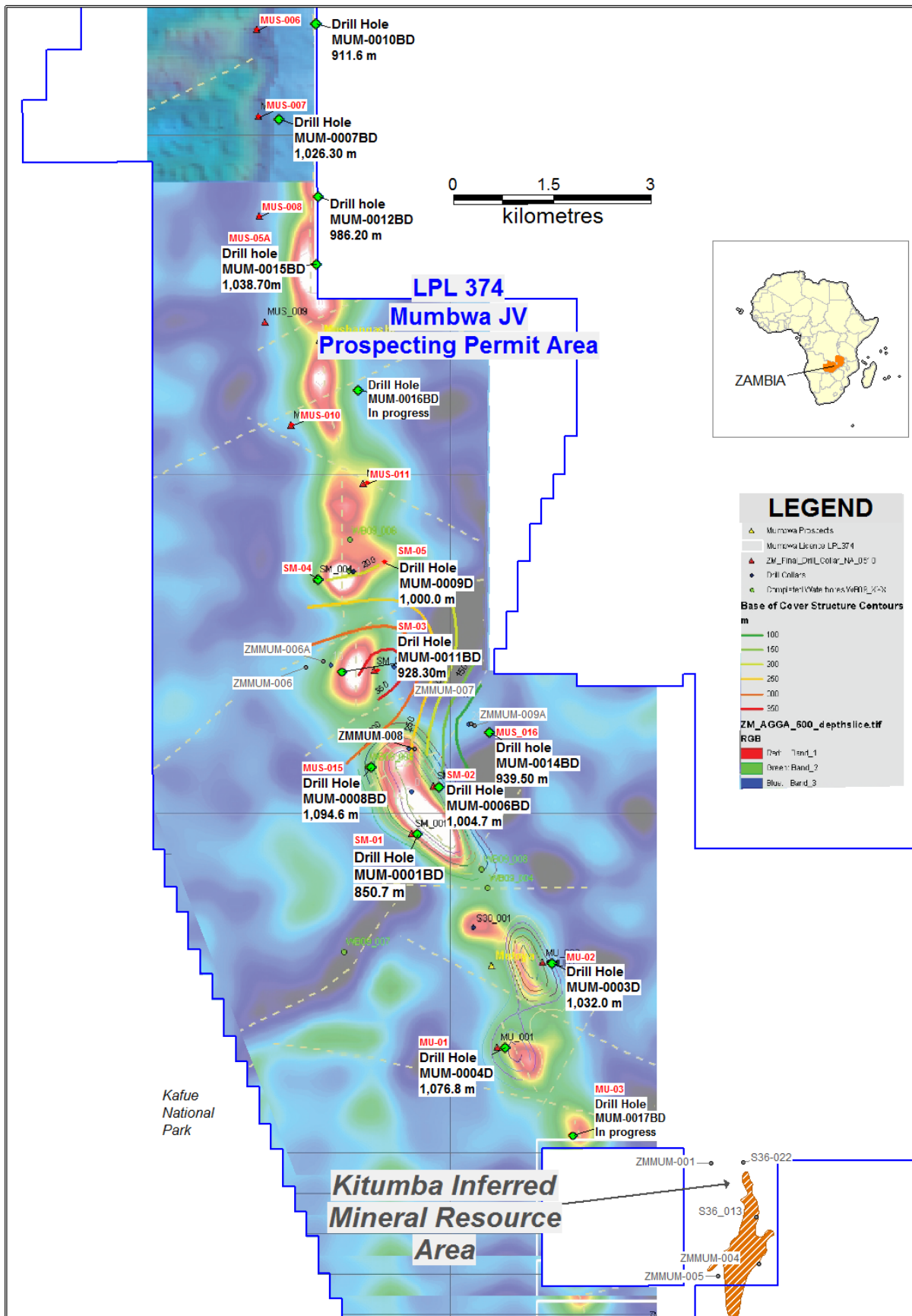
Note: Gold and copper assays were performed by ISO 9001 and ISO/IEC 17025 accredited SGS South Africa (Pty) Ltd laboratory in Johannesburg, South Africa. Samples were analysed by multi-acid digest followed by inductively coupled plasma atomic emission spectrometry (ICP-AES) and inductively coupled plasma mass spectrometry (ICP-MS) for multi-elements (non-accredited method) and by fire assay with atomic absorption spectrometry finish for gold.

**ATTRIBUTION**

The information in this report which relates to Exploration Results at the Mumbwa JV Project in Zambia has been reviewed and approved for release by Mr Michael J Robertson, MSc, Pr.Sci.Nat., MSAIMM who has 20 years experience in mineral exploration, and who is a full-time employee of the MSA Group, and has sufficient experience in relation to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined by the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (The JORC Code 2004 Edition). Mr Robertson has consented to inclusion of this information in the form and context in which it appears.

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

**Scott Lowe**  
**Managing Director**  
**Ph: + 61 2 9357 9000**



**FIGURE 1** – Drill hole location plan showing 15 Phase 4 targets over the Mushingashi and Mutoya anomalies. The Kitumba inferred mineral resource area is situated in the south east.