



15 February 2011

MUMBWA JV PROJECT: VERIFICATION OF GOLD AND BASE METAL ASSAYS COMPLETED BY INDEPENDENT LABORATORY

KEY POINTS

- **The assay verification process, implemented to confirm a discrepancy in gold assays identified in drill hole MUM-008BD, has been completed by the independent QA/QC expert and further checked by the independent 'umpire' laboratory.**
- **Reanalysis of the original sample pulps and coarse rejects as well as quarter core resamples taken from remaining half core has confirmed there was an error made by the laboratory in the original gold assay for drill hole MUM-008BD. Only low levels of gold were detected in the subsequent reanalyses of samples from this drill hole.**
- **Part of the assay verification process involved the analysis at the independent 'umpire' laboratory of 400 random sample pulps from the other completed Phase 4 drill holes to substantiate the gold and base metal assay results identified and reported previously.**
- **All base metal and gold assays from the other Phase 4 drill holes previously reported to the ASX have been confirmed to be correct. Details of the drilling parameters and assay results for these previously reported drill holes are included in Annexure 1.**
- **Assay results from five remaining Phase 4 drill holes can now be completed following confirmation that the laboratory handling processes and analytical procedures are reliable. A sixth Phase 4 hole that was drilled will not be sampled as it was abandoned before final depth. The hole was redrilled and sampled by another drill hole positioned nearby.**
- **The Inferred Mineral Resource estimated for the Kitumba area and announced on 19 October 2009 is not in doubt.**



Blackthorn Resources Limited (ASX: BTR, “the Company” or “Blackthorn Resources”) is pleased to announce that the assay verification process for the Mumbwa Phase 4 drill holes has been completed. The assay verification process, detailed in an announcement made by the Company on 21 December 2010, was implemented to confirm that the Phase 4 assay results previously reported were correct and that the laboratory’s handling and analytical processes could be relied upon.

The assay verification process was undertaken by an independent QA/QC expert engaged by BHP Billiton, the manager of the Mumbwa Joint Venture, and included check assays of previously tested core sample pulp by an independent ‘umpire’ laboratory, ALS Chemex.

As announced on 13 December 2010, Blackthorn Resources informed the market of a potential discrepancy in the gold assay results from a single Phase 4 drill hole MUM-008BD, which had previously reported high grade gold mineralisation. Subsequent analysis of the residual core sample pulps only detected low levels of gold in this drill hole. An investigation was initiated to determine the cause of the discrepancy and the potential extent of any further analytical discrepancy across other elements from Phase 4 drill holes previously reported.

Phase 4 Drilling Program - background

Located in the Central province of Zambia, the Mumbwa JV Project is being explored for Iron-Oxide Copper-Gold (IOCG) style mineralisation by joint venture partners BHP Billiton (40%) and Blackthorn Resources (60%). BHP Billiton is currently funding and managing the Phase 4 drilling program which has completed drilling 15 holes from a series of targets along the 20km Mushingashi – Mutoya anomaly.

The Phase 4 drilling program commenced in early 2010 and has reported assay results from 9 drill holes to date. Results from 5 drill holes are pending. A 6th hole (MUM-0016BD), which was drilled but abandoned at 431 m before attaining its target depth, was not sampled. This abandoned drill hole was redrilled and sampled by replacement hole (MUM-0018D).

Assay Verification Process

A staged assay verification process was designed with independent input and Competent Person approval to audit all assay results generated from the current Phase 4 drilling program and to verify that the laboratory processes and results reported to date could be relied upon.

BHP Billiton engaged an independent QA/QC expert to review assay results from all 9 Phase 4 drill holes reported to date, before progressing with the laboratory analysis of remaining core samples from the 5 remaining drill holes.

The first part of the verification process was to confirm the concentration of gold in a single drill hole MUM-008BD which initially identified a high grade mineralised zone, including 8m at 14.09g/t gold from 1,081m down-hole depth. The verification process involved a series of tests on residual core sample pulps from the original samples, as well as a second analysis sourced from a fresh split of the half core which was stored onsite as part of industry standard practice.

In addition to the independent QA/QC expert review, a random selection of 400 sample pulps from already processed samples were submitted to another independent laboratory for umpire check assays.

Based on the positive findings and recommendations from the independent expert, it is considered that the remaining 5 drill holes (MUM-0004D, MUM-0010BD, MUM-0014BD, MUM-0017BD and MUM-00018D) can now be submitted for analysis. Please note, drill hole MUM-0016BD was abandoned at a depth of 431m before reaching its planned target depth. Another hole MUM-0018D was drilled within 20m of the original hole and terminated at a depth of 1,119 metres. The latter drill hole will be sampled to replace the abandoned drill hole.

Independent QA/QC Expert Report

The final report from the independent expert engaged by BHP Billiton has been received. In addition to the independent expert review, BHP Billiton has also conducted an extensive audit of the laboratory facilities in Ndola, Zambia and Johannesburg, South Africa.

In summary, the sample handling and analytical processes from both laboratories have passed the independent audit. It is now considered that the sampling and laboratory analysis processes can be relied upon to complete the assay analysis of the remaining Phase 4 drill holes.

Verification of Drill Hole MUM-008BD – no gold mineralisation intersected

A series of tests were performed on the original residual core sample pulps and residual coarse rejects for drill hole MUM-008BD as well as on quarter core from this hole, which originally returned high grade gold mineralisation. Portions of the sample pulp were reanalysed by both the original laboratory and the independent check laboratory to determine the gold concentration in the samples.

It has now been determined that there was an error in the original gold assays for drill hole MUM-008BD as reported on 20 October 2010 - there are only low levels of gold in drill hole MUM-008BD below the 0.25 g/t gold cut-off.

The Company would like to correct its announcement dated 20 October 2010 and notify the market that there was no significant gold detected in Phase 4 drill hole MUM-008BD.

Kitumba Inferred Mineral Resource

The inferred mineral resource estimated for the Kitumba region, which was completed in 2009, did not include holes drilled during the Phase 4 drilling program. The focus of the Phase 4 drilling program has been on the Mushingashi – Mutoya anomalous region situated towards the north-northwest of the Kitumba area. The validity of the Inferred Mineral Resource defined for the Kitumba area and reported to the ASX on 19 October 2009 is not in doubt.

Umpire Check Assays

A random selection of 400 core sample pulps was taken from previously tested Phase 4 drill holes and submitted to ALS Chemex in Johannesburg as an independent laboratory to run umpire check assays for all elements analysed in the original analytic process, including gold and copper.

The check assay results received from ALS Chemex confirm that, except for drill hole MUM-008BD as noted above, the previous results reported for the other drill holes are correct and reliable.

A table of the verified assay results from the Phase 4 drill holes reported to date is included in Appendix 1, listing the drilled thickness intersections and weighted average grades for mineralised intervals using 0.25g/t Au and 0.25% Cu cut-off grades.

Managing Director, Mr Scott Lowe said

“I am satisfied that the joint venture (“JV”) has put appropriate remedial actions in place immediately as a result of verifying the error by the laboratory in misreporting the gold assay results from drill hole MUM-008BD. The work completed by the independent expert to verify the sampling and analytical processes is encouraging, and the JV is now in a position to recommence the analytical processes for the remaining Phase 4 drill holes. Following the QA/QC review of the remaining assay results, the Company will release these results to the market as they are made available.”

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 in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Robertson has consented to inclusion of this information in the form and context in which it appears.

ATTRIBUTION

The information in this report which relates to Mineral Resources at the Mumbwa JV Project in Zambia has been reviewed and approved for release by Mr Michael R Hall, MBA, MAusIMM, Pr. Sci. Nat. who has 30 years' experience in mineral exploration and who is a consultant to the MSA Group and who has sufficient experience in relation to the style of mineralisation and type of deposit under consideration 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 Hall has consented to inclusion of this information in the form and context in which it appears.

Should you require further information please contact:

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ANNEXURE 1 _ Phase 4 Mumbwa JV Project

Table 1 – Summary of drilling parameters for 15 planned targets from Mumbwa JV Project

Target ID	Drill Hole ID	Planned Depth (m)	EOH Depth (m)	Easting (m)	Northing (m)	Dip (°)	Azimuth (°)	
MU_01	MUM-0004D	800	1,076.8	475,750	8,376,550	-60	112	
MU_02	MUM-0003D	1,100	1,032.0	476,460	8,377,800	-60	270	
MUS_06	MUM-0010BD	800	911.6	472,850	8,391,650	-90	000	
MUS_07	MUM-0007BD	1,200	1,026.3	472,300	8,390,250	-60	090	
MUS_08	MUM-0012BD	800	986.2	472,890	8,389,100	-85	320	
MUS_010	<i>Not drilled</i>	800	<i>Not drilled</i>	472,490	8,385,720	-60	090	
MUS_011	MUM-0016BD	800	431.6	473,500	8,386,250	-60	270	
	MUM-0018D	1,250	1,119.0	473,520	8,386,250	-75	270	
SM_01	MUM-0001BD	800	850.7	474,398	8,379,700	-60	090	
SM_02	MUM-0006BD	1,100	1,004.7	474,740	8,380,395	-60	270	
SM_03	MUM-0011BD	800	928.3	473,250	8,382,100	-70	270	
SM-05	MUM-0009D	1,000	1,000.0	473,900	8,383,700	-60	270	
MUS-05A	MUM-0015BD	1,000	1,038.7	472,870	8,388,100	-80	200	
MUS_015	MUM-0008BD	1,200	1,094.6	473,696	8,380,688	-70	320	
MUS_016	MUM-0014BD	1,200	939.5	475,500	8,381,200	-50	270	
MU_03	MUM-0017BD	1,100	1,100.3	476,770	8,375,250	-55	090	
		15,750	14,540.3					

Table 2 – Summary of verified assay results from 9 Phase 4 drill holes

Gold assays from DDH holes are reviewed initially using a 0.0 g/t Au cut-off to broadly identify mineralised zones. Mineralised zones within drill holes are further assessed using a 0.25% Cu and 0.25 g/t Au cut-off grade to evaluate the mineralised intersections for reporting purposes. Only mineralised intersections with weighted average cut-off grade greater than 0.25% Cu and 0.25 g/t Au are reported below. True-width intersections are not quoted as additional interpretation is required to correlate data from adjacent holes.

Drill hole ID	Depth From (m)	Depth To (m)	Drilled Interval (m)	Copper Assay (%)	Gold Assay (g/t)
MUM-0001BD	418	420	2	0.31	-
	432	434	2	0.27	-
	436	438	2	0.34	-
	506	510	4	0.26	-
	518	520	2	0.29	-
	524	526	2	0.29	-
	532	536	4	0.28	-
	542	546	4	0.44	-
	588	590	2	0.35	-
	626	628	2	-	0.39
	678	680	2	0.59	-
	706	708	2	0.47	-
	820	822	2	-	1.72
MUM-0003BD	562	564	2	-	1.35
	758	760	2	0.28	-
	830	832	4	0.48	-
	1,020	1,024	4	0.57	-
MUM-0006BD	490	492	2	0.53	-
	888	890	2	0.26	-
	916	918	2	0.27	-
	922	924	2	0.35	-
	942	944	2	0.26	-
	946	948	2	0.29	-
MUM-0007BD	360	362	2	0.53	-
	454	456	2	0.35	-
	534	538	4	1.13	-
	540	542	2	0.5	-
	552	554	2	0.35	-
	598	604	6	1.16	-
	652	654	2	0.3	-
	664	666	2	1.05	-
	690	692	2	-	0.35
	700	702	2	0.51	-
	758	768	10	1.80	-
	772	782	10	0.93	-

Drill hole ID	Depth From (m)	Depth To (m)	Drilled Interval (m)	Copper Assay (%)	Gold Assay (g/t)
MUM-0007BD	790	794	4	0.95	-
	800	806	6	0.53	-
	812	814	2	0.35	-
	870	872	2	0.49	-
MUM-0008BD	347	351	4	0.30	-
MUM-0009D	520	522	2	-	0.69
	820	822	2	0.39	-
MUM-0011BD	446	448	2	0.62	-
	550	552	2	0.35	-
	632	634	2	0.68	-
	640	646	6	0.52	-
	684	688	4	-	0.29
	828	830	2	-	0.27
MUM-0012BD	486	488	2	0.29	-
	516	518	2	0.35	-
	586	588	2	0.41	-
	592	594	2	0.3	-
	606	608	2	0.43	-
	610	614	4	0.37	-
	820	822	2	0.34	-
MUM-0015BD	430	436	6	0.53	-
	440	442	2	0.37	-
	468	472	4	0.29	-
	480	484	4	0.34	-
	514	516	2	0.26	-
	518	522	4	0.46	-
	526	528	2	0.27	-
	548	552	4	0.33	-
	554	558	4	0.28	-
	564	566	2	0.27	-
	570	574	4	-	0.84
798	800	2	-	0.42	

Notes:

1. 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. A Quality Assurance/Quality Control (QA/QC) program includes chain of custody protocol, a systematic submittal of 10% 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.

2. Samples were obtained by splitting nominal sized HQ/NQ diamond-core in half to obtain approximately 8kg samples. Half core was submitted to the laboratory for analysis with the remaining half stored in core trays at the onsite core storage facility at Mumbwa in Zambia.
3. For review of mineralisation from drilling in Zambia, a 0.25% Cu and 0.25 g/t Au cut-off was applied to mineralised intervals and weighted averages for continuous zones above the nominated cut-offs were calculated for reporting purposes.

Ends