

22 August 2011

## **PERKOA JV PROJECT: HIGH-GRADE SILVER MINERALISATION**

### **KEY POINTS**

- Assay results have been received from the first three holes drilled under the current diamond core drilling program at Perkoa to explore for along strike extension of mineralisation.
- High-grade mineralisation was intersected in all three drill holes including the following best drilled thickness intercepts:

#### **PS323**

- 27m at 185g/t Ag, 1.5% Pb between 80m and 107m, including:
  - 2m at 784.3g/t Ag, 5.9% Pb between 80.3m and 82.3m
  - 9m at 333.1g/t Ag, 2.1% Pb between 98.3m and 107.3m
- 1.5m at 244g/t Ag, 1.4% Pb between 111.7m and 113.2m

#### **PS324**

- 7m at 77g/t Ag, 0.6% Pb between 88 and 95m
- 8m at 1.5% Zn, 0.6% Pb between 115 and 123m, including:
  - 5m at 2.1% Zn, 0.72% Pb between 117 and 122m

#### **PS326**

- 6m at 20.8g/t Ag between 28m and 34m
- 3m at 136.1g/t Ag, 1.8% Pb between 111m and 114m, including:
  - 2m at 192g/t Ag, 2.7% Pb between 112m and 114m.
- Drill testing aims to determine if Silver (Ag) and Lead (Pb) mineralisation is present in an area adjacent to high-grade Zinc (Zn) mineralisation.
- The drilling program completed 14 cored holes totaling 2,387m, which includes two abandoned holes that were re-drilled because they did not attain their planned total depths.
- Samples taken from ten other completed holes are being processed and assay results are expected during September 2011.
- An investment proposal reviewing the potential to upgrade the Perkoa mineral processing circuit is expected from JV partner, Glencore International, in coming weeks.

Blackthorn Resources Limited (ASX: BTR) (“the Company” or “Blackthorn Resources”) is pleased to provide initial assay results received from the first three of the 14 drill hole program completed at the Perkoa JV Project in Burkina Faso, West Africa.

The target drilling area is situated immediately along strike of the Perkoa deposit, currently being developed as a zinc mine and being managed and operated by JV partner Glencore International Plc (50.1%) (Blackthorn Resources 39.9%).

Perkoa is a polymetallic volcanogenic massive sulphide deposit, which has a mineral resource containing predominantly high-grade zinc with minor silver and lead mineralisation. The existing JORC code compliant probable ore reserve recognises the high-grade zinc potential only.

The aim of this drilling program was to explore for along strike extensions to mineralisation in an area that was previously sparsely drilled. Subsequent investigation has identified this area as having good potential to host silver and lead mineralisation within depths that could be amenable to open-cut mining.

The exploration program completed drilling a total of 14 holes for a total of 2,387.38m as shown in Figure 1. Two holes from the planned 12 hole program were abandoned before attaining their planned end of hole depth and these holes were re-drilled. Only one of these abandoned holes (PS323 reported in this announcement) was sampled and assayed for Silver (Ag), Lead (Pb), Zinc (Zn) and Gold (Au). The Company expects to report assay results from the remaining 13 completed holes once the results are received.

All holes were drilled at an angle of 55 degrees towards the southeast. Drill hole details for the 14 completed holes are listed in Table 1 including the abandoned drill holes.

**TABLE 1–** Summary of drilling parameters for 14 cored drill holes

<b>Drill hole ID</b>	<b>Easting (mE) WGS 84 ***</b>	<b>Northing (mN) WGS 84 ***</b>	<b>Dip (degrees)</b>	<b>Azimuth (degrees)</b>	<b>End of Hole Depth (m)</b>
PS323 *	543,079	1,367,835	-55	152	121.85
PS324	543,000	1,367,785	-55	152	152.64
PS325 *	543,094	1,367,914	-55	152	81.50
PS326	542,956	1,367,761	-55	152	157.15
PS327	542,916	1,367,733	-55	152	150.00
PS328 **	543,098	1,367,919	-55	152	210.00
PS329	543,052	1,367,893	-55	152	214.30
PS330	542,882	1,367,784	-55	152	210.00
PS331	542,923	1,367,810	-55	152	217.90
PS332	542,965	1,367,842	-55	152	210.40
PS333	543,042	1,367,809	-55	152	150.00

<b>Drill hole ID</b>	<b>Easting (mE) WGS 84 ***</b>	<b>Northing (mN) WGS 84 ***</b>	<b>Dip (degrees)</b>	<b>Azimuth (degrees)</b>	<b>End of Hole Depth (m)</b>
PS334	543,007	1,367,867	-55	152	211.80
PS335	543,128	1,367,856	-55	152	148.90
PS336 **	543,086	1,367,837	-55	152	150.94
<b>TOTAL</b>					<b>2,387.38</b>

\* Abandoned drill holes

\*\* Re-drilled drill holes

\*\*\* GPS Co-ordinates of drill hole collars (~3m accuracy)

### **Sampling Summary – PS323, PS324 and PS326**

A total of 74 samples were collected from 46.6m to 116.2m for hole PS323, 92 samples from 64.00m to 152.64m for hole PS324 and 103 samples from 25.00m to 157.07m for hole PS326. These samples included a series of blanks, duplicates and certified reference samples for QA/QC purposes.

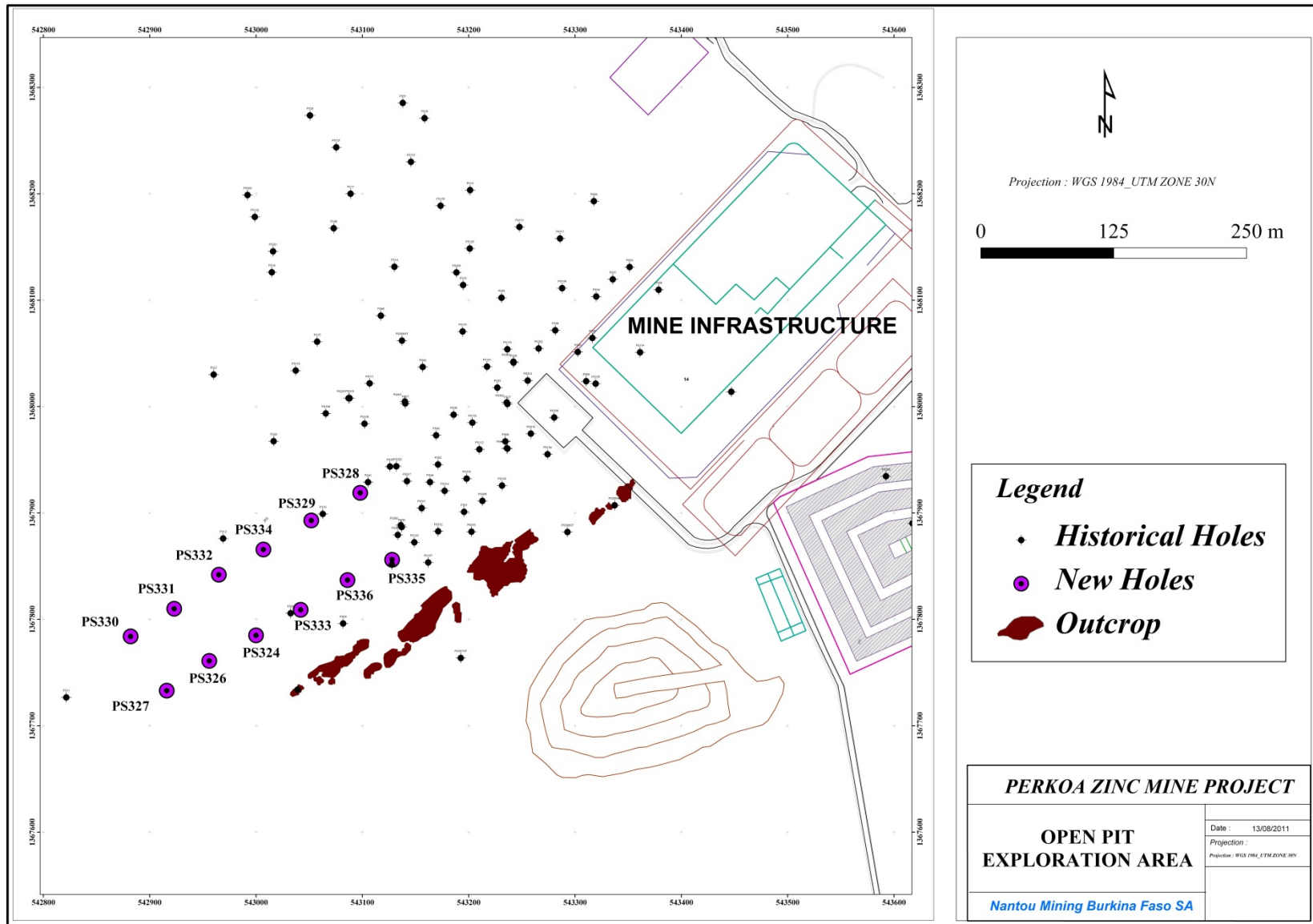
Samples were sent to the ALS Chemex laboratory in Ouagadougou for preparation. Selected samples were analysed for gold at the ALS Chemex laboratory in Ouagadougou. Prepared sample splits were subsequently sent to the ALS Chemex laboratory in Canada for analysis of base metals, lead, zinc and silver.

It is typical to conduct a down-hole survey for completed holes. However, drill hole PS323 was not surveyed as it did not achieve its target depth and the hole was blocked once drilling rods were removed. This site was re-drilled by another hole, PS336, which was down hole surveyed. The assay results from the re-drilled PS363 hole will be released in due course.

The Company was eager to sample the core produced from the first drill holes to initially assess the potential of the drilling program. Further work to review the core and results is progressing to determine the relationship of mineralisation for the various base metal elements tested.

### **Assay Results - PS323, PS324 and PS326**

Assays from the three drill holes were reviewed to broadly identify mineralised zones which relate to the hanging-wall and foot-wall geological facies. Mineralised zones were further assessed using 20g/t Ag, 0.3% Pb, 0.5% Zn, and 0.15g/t Au cut-off grades to evaluate the mineralised intersections for reporting purposes. Only mineralised intersections with weighted average cut-off grades greater than 20g/t Ag, 0.3% Pb and 0.5% Zn are highlighted in bold in Table 2, 3 and 4. True-width intersections are not quoted, as additional interpretation is required to correlate data from adjacent holes. Results for gold were also received but are not included herein as assays were of low tenure.



**FIGURE 1 –** Perkoa drill hole location plan showing 12 drill targets for 14 drill holes.

**TABLE 2 –** Summary of drilling results for drill holes PS323 (above reporting cut-off)

**Drill hole - PS323**

	<b>Depth From (m)</b>	<b>Depth To (m)</b>	<b>Drilled Interval (m)</b>	<b>Silver Assay (g/t)</b>	<b>Lead Assay (%)</b>	<b>Zinc Assay (%)</b>	
	70.20	73.20	3.00	<b>64.50</b>	0.37	0.21	
	75.25	77.25	2.00	<b>59.20</b>	0.40		
including	76.25	77.25	1.00	<b>97.10</b>	<b>0.61</b>	0.03	
	78.25	79.25	1.00	<b>26.00</b>	0.23	0.14	
27m at 185g/t Ag, 1.5% Pb	80.25	82.25	<b>2.00</b>	<b>784.30</b>	<b>5.95</b>	0.24	
	including	81.25	82.25	<b>1.00</b>	<b>1,510.00</b>	<b>11.45</b>	0.18
		84.25	86.25	<b>2.00</b>	<b>35.65</b>	0.35	0.18
		88.70	92.50	<b>3.80</b>	<b>61.81</b>	<b>1.64</b>	<b>0.54</b>
		93.80	96.20	<b>2.40</b>	<b>27.71</b>	<b>0.77</b>	<b>1.47</b>
	including	93.80	94.80	<b>1.00</b>	15.00	<b>0.53</b>	<b>3.25</b>
		95.40	96.20	<b>0.80</b>	<b>51.50</b>	<b>1.24</b>	0.16
		98.30	107.30	<b>9.00</b>	<b>333.13</b>	<b>2.14</b>	0.12
	111.65	114.20	2.55	<b>148.30</b>	<b>0.87</b>	0.11	
including	111.65	113.20	1.55	<b>244.03</b>	<b>1.38</b>	0.16	
	115.20	116.20	1.00	<b>141.00</b>	0.34	0.02	

**Interpretation – PS323**

Mineralisation intersected in drill hole PS323 was comprised of sulphide lenses predominantly between 70m and 115m down hole depth containing sphalerite, pyrite, pyrrhotite and galena. The occurrence of galena was typically as small lenses or confined to fractures as infill or veinlets within fractures. The host rock comprises fine grained, dark meta-sedimentary silicified tuffs.

It is apparent that the presence of silver mineralisation is not obvious from geological logging and it is inferred that silver is occurring as very fine grained silver sulphides which may be associated with pyrite and silicate minerals.

**TABLE 3 – Summary of drilling results for drill hole PS324 (above reporting cut-off)**

**Drill hole - PS324**

	<b>Depth From (m)</b>	<b>Depth To (m)</b>	<b>Drilled Interval (m)</b>	<b>Silver Assay (g/t)</b>	<b>Lead Assay (%)</b>	<b>Zinc Assay (%)</b>
	81.30	82.50	1.20	<b>94.00</b>	<b>0.59</b>	0.17
7.0m at 77g/t Ag	88.00	95.00	<b>7.00</b>	<b>77.04</b>	<b>0.63</b>	0.03
	including 88.00	90.00	<b>2.00</b>	<b>97.40</b>	<b>1.19</b>	0.03
	94.00	95.00	<b>1.00</b>	<b>186.00</b>	<b>1.02</b>	0.03
	101.00	102.00	1.00	<b>46.50</b>	0.39	0.13
	104.00	106.00	2.00	<b>58.10</b>	0.10	0.15
	107.00	108.00	1.00	<b>41.90</b>	0.08	0.03
	114.00	116.00	2.00	8.60	0.33	<b>0.54</b>
8.0m at 1.5% Zn, 0.6% Pb	115.00	123.00	<b>8.00</b>	<b>8.95</b>	0.58	<b>1.54</b>
	including 117.00	122.00	<b>5.00</b>	<b>9.90</b>	<b>0.72</b>	<b>2.14</b>
	128.00	130.60	2.60	7.40	<b>0.79</b>	0.41
	including 129.00	130.60	1.60	9.30	<b>1.08</b>	0.32

**Interpretation – PS324**

Mineralisation in drill hole PS324 is prevailing between 80m and 130m down hole depths. There are two distinct zones of mineralisation the first of which can be identified to occur between 80m and 95m and is characterised by the sulphide minerals, pyrite and galena. The second zone is from 101m to 130m which is dominated by pyrite, galena and sphalerite and is expressed by the higher zinc assay grades.

As an observation there appears to be an inverse relationship between silver and zinc such that higher grade silver assays are identified in zones where the zinc assay grades are lower. Conversely, silver grades appear to correlate well with lead grades.

**TABLE 4 – Summary of drilling results for drill hole PS326 (above reporting cut-off)**

**Drill hole - PS326**

	Depth From (m)	Depth To (m)	Drilled Interval (m)	Silver Assay (g/t)	Lead Assay (%)	Zinc Assay (%)
6m at 20.8g/t Ag	28.00	34.00	<b>6.00</b>	<b>20.80</b>	-	0.19
	51.00	52.00	1.00	0.25	-	<b>0.56</b>
	55.00	57.00	2.00	1.65	-	<b>0.66</b>
	101.00	102.00	1.00	<b>10.60</b>	<b>0.52</b>	<b>0.70</b>
	103.00	104.00	1.00	3.20	0.17	<b>0.63</b>
3m at 136.1g/t Ag, 1.8% Pb	111.00	114.00	<b>3.00</b>	<b>136.13</b>	<b>1.81</b>	0.38
	including 112.00	114.00	<b>2.00</b>	<b>192.00</b>	<b>2.65</b>	0.36

**Interpretation – PS326**

Sulphide mineralisation in drill hole PS326 is more sporadic from 50m to 115m down hole depth. Sphalerite occurs as lenses which is dominant from 50m depth, and pyrite which occurs as disseminated grains throughout the mineralised interval. Some minor lenses of galena are present from 110m down hole depths and is shown to have zones of higher grade lead intervals.

Managing Director Scott Lowe said

*“The initial set of assay results received to date have identified some very encouraging results which indicate there is high potential for this part of the mineral deposit to host economic concentrations of silver and lead. The Company is eager to receive the assays from the remaining drill holes to incorporate into the work Glencore is doing to assess the viability of making Perkoa a Silver, Lead and Zinc operation along with other improvements.”*

**ATTRIBUTION**

The information in this report that relates to exploration results at the Perkoa JV Project in Burkina Faso has been reviewed and approved for release by Mr Adama Barry, who is a member of The Australasian Institute of Mining and Metallurgy. Mr Barry has 23 years’ experience in mineral exploration and is a full-time employee of Nantou Mining Limited BV, a subsidiary of Blackthorn Resources Ltd. Mr Barry 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 2004 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Barry consents to the inclusion in this 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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Notes:

1. Analysis of samples was performed by ALS Chemex, an ISO/17025 accredited laboratory, using conventional fire assay procedures with AAS finish on 30g aliquots for gold. Base metals were analysed for multiple elements by four acid digest followed by multi-element inductively coupled plasma mass spectrometry (ICP-MS). 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 diamond-core half then in quarter to obtain approximately 2kg samples. Quarter core was submitted to the laboratory for analysis, mineralised half core will be used for metallurgical tests and the remaining quarter core stored in core trays at the Perkoa site in Burkina Faso.
3. For review of mineralisation from DDH drilling, a 20g/t Ag, 0.3% Pb, 0.5% Zn, and 0.15 g/t Au cut-off were applied to mineralised intervals and weighted averages above 20g/t Ag, 0.3% Pb and 0.5% Zn were calculated for reporting purposes.

Ends