

For personal use only



Phoenix Copper Limited  
ABN 67 127 446 271

Level 1, 135 Fullarton Road  
Rose Park, SA 5067  
Australia

Telephone +61 (0)8 8364 3188  
Facsimile +61 (0)8 8364 4288  
info@phoenixcopper.com.au  
www.phoenixcopper.com.au

## ASX ANNOUNCEMENT – 21 JULY 2010

### COPPER AND GOLD ASSAY RESULTS - PRINCESS ROYAL

**Further Excellent Copper and Significant Gold Assay Results returned in near-surface Diamond Core from Princess Royal including:**

**Copper** PCD022- 6.8m @ 2.61%Cu from 0.4m and  
PCD024 - 1.9m @ 4.54%Cu from 14.0m, and  
PCD025 - 2.3m @ 1.07%Cu from 17.0m, and  
**Gold** PCD022 - 1.4m @ 4.30g/t Au from 6.8m, and  
PCD024 - 9.1m @ 1.28g/t Au from 2.9m, and  
PCD025 - 1.0m @ 1.50g/t Au from 45.0m.

### Princess Royal – Diamond Drilling

Diamond drilling continues at Princess Royal 10km south east of Burra on a program designed to produce a Resource Statement by testing the metallurgical properties, dip, azimuth, plunge, strike and continuity of copper mineralisation around the historic workings on EL3549 (See **figure 1**).



**Figure 1: Diamond drilling the Eastern Side of the Princess Royal looking South East**

Twenty six holes for 1019.2m were completed in the program, PCD009 to 34 on nine cross sections, six on the Eastern side of the prospect and three on the Western side (See table 1 and figures 2-7).

**Table 1: Location of Sections Drilled**

GDA94 Zone 54	Historic Section	Local section	Holes on Section	
6,261,647N	570N	4970N	PCD009-014	Eastern
6,261,615N	525N	4925N	PCD015-018	Eastern
6,261,530N	430N	4830N	PCD019-021	Eastern
6,261,490N	395N	4795N	PCD022-023	Eastern
6,261,460N	350N	4750N	PCD024-026	Eastern
6,261,515N	500N	4900N	PCD027-028	Western
6,261,600N	575N	4975N	PCD029	Western
6,261,635N	600N	5000N	PCD030	Western
6,261,845N	765N	5165N	PCD031-032	Eastern
6,261,873N	790N	5190N	PCD033	Eastern
6,261,883N	796N	5196N	PCD034	Eastern

## Copper – Results

Assays from PCD009-017 have been previously reported.

Assays from PCD018-025 are reported in table 2.

Assays from PCD026-034 are pending.

**Table 2: Copper Results for PCD018 - PCD025**

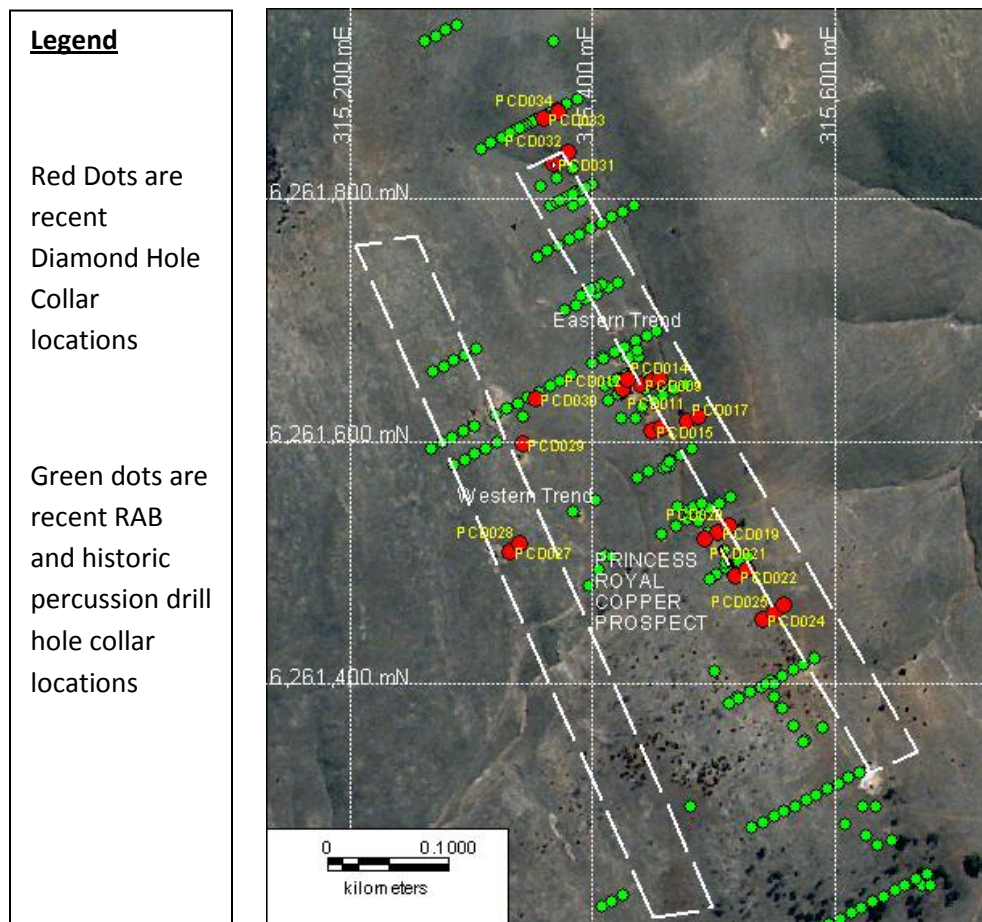
Hole Id	AGD N	AGD E	RL	Azi mag	Dip	Depth	From m	Width m	Grade
PCD018	6261621	315487	481	243	-55	90.4	1.60	1.90	0.66% Cu
							22.70	1.30	0.84% Cu
PCD019	6261525	315503	477	236	-55	36.0	0.70	1.00	0.68% Cu
PCD020	6261529	315512	478	236	-55	25.5	No Intersection > 0.5% Cu		
PCD021	6261521	315493	478	60	-55	30.5	6.00	1.00	0.52% Cu
PCD022	6261491	315517	481	236	-55	25.0	0.40	<b>6.80</b>	<b>2.61% Cu</b>
PCD023	6261496	315528	481	236	-55	39.0	1.70	2.70	0.90% Cu
PCD024	6261454	315540	486	236	-55	33.2	0.40	3.90	0.62% Cu
							9.00	0.50	0.51% Cu
							14.00	<b>2.70</b>	<b>4.54% Cu</b>
PCD025	6261460	315549	486	236	-55	51.0	6.00	2.50	0.61% Cu
							14.80	4.50	0.83% Cu

For those holes completed but with assays pending observations to date include;

- PCD026 - 35 to 46m extremely iron rich gossanous quartz veined siliceous dolomite.
- PCD027 - 17.5 to 20m **visible malachite** in brecciated quartz vein in siliceous dolomite.
- PCD028 - 23.5 to 24.5m **visible malachite** in brecciated quartz vein

For personal use only

- PCD029 - 22 to 25.5m goethitic quartz vein breccia
- PCD030 - 38 to 48.3 goethitic gossanous breccia?
- PCD031 – Iron and Manganese rich breccia with many stopes / voids 3 to 9.0m
- PCD032 – 0 to 2m and 6 -7.5m iron rich gossan, 47.5-48.5m iron rich breccia with weak malachite
- PCD033 – 0 to 6m **visible malachite** in brecciated gossan, 6 to 19m lots of core lost in iron breccia.
- PCD034 – 0 to 0.5m gossanous iron and manganese rich soil, 0.5 to 13m sheared iron rich dolomite.



**Figure 2: Drill hole Location Plan Princess Royal**

### Gold

As stated in Phoenix Copper’s last few ASX releases, historically in the Burra district gold has not been associated with copper mineralisation; however significant gold results (See **table 3**) continue to be received in the holes assayed at Princess Royal. The higher gold results occur in material above and to the east of the main body of copper mineralisation in material that would necessarily be extracted as overburden to access the higher grade copper beneath (See **figure 3**). The best result returned in these latest assays was in **PCD024 – 9.1m @ 1.28g/t Au from 2.9m.**

**Table 3: Gold Results for PCD018 - 025**

Hole Id	AGD N	AGD E	RL	Azi mag	Dip	Depth	From m	Width m	Grade
PCD018	6261621	315487	481	243	-55	90.4	No Intersection > 0.2 g/t Au		
PCD019	6261525	315503	477	236	-55	36.0	0.70	0.30	0.21g/t Au
PCD020	6261529	315512	478	236	-55	25.5	No Intersection > 0.2 g/t Au		
PCD021	6261521	315493	478	60	-55	30.5	No Intersection > 0.2 g/t Au		
PCD022	6261491	315517	481	236	-55	25.0	2.00	0.70	0.21g/t Au
							6.80	1.40	4.30g/t Au
PCD023	6261496	315528	481	236	-55	39.0	26.00	1.00	0.21g/t Au
PCD024	6261454	315540	486	236	-55	33.2	2.90	9.10	1.28g/t Au
PCD025	6261460	315549	486	236	-55	51.0	5.00	1.00	0.52g/t Au
							18.00	1.30	0.43g/t Au
							45.00	1.00	1.50g/t Au

### Importance of Results

The diamond holes (collar locations shown in **figure 2** as red dots and sections in **figures 3 to 7**) are designed to provide geological data and metallurgical samples and to confirm the size and shape of the mineralisation on each section as a prerequisite to a broader reverse circulation drilling program that will test the full strike extent and continuity of both the Eastern and Western mineralised trends (seen in figure 2) and provide a basis for a future resource statement.

**The results continue to be encouraging with the visible malachite and / or gossanous zones seen in most holes.** All indications are that a resource statement will be available before the end of the year.

Though test work has not been completed the presence of Azurite and Malachite as the dominant copper bearing minerals indicates that the deposit should be amenable to low cost heap leach. The Princess Royal Prospect can then be considered as another source of copper production to complement the copper production from the Mountain of Light Mining Lease at Leigh Creek.

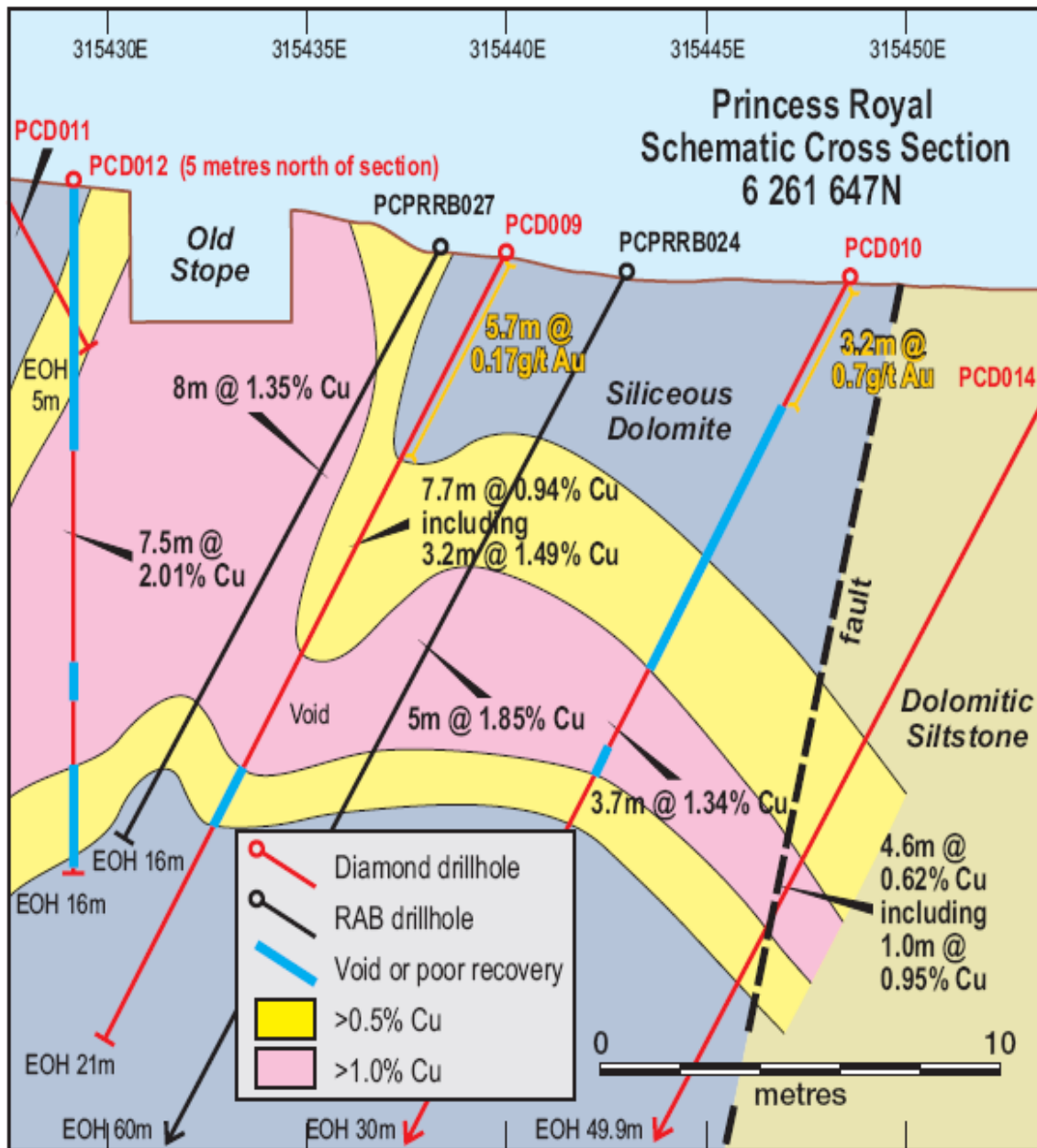


Figure 3: Cross Section 6261647N (GDA94 Zone 54), 4970N Local

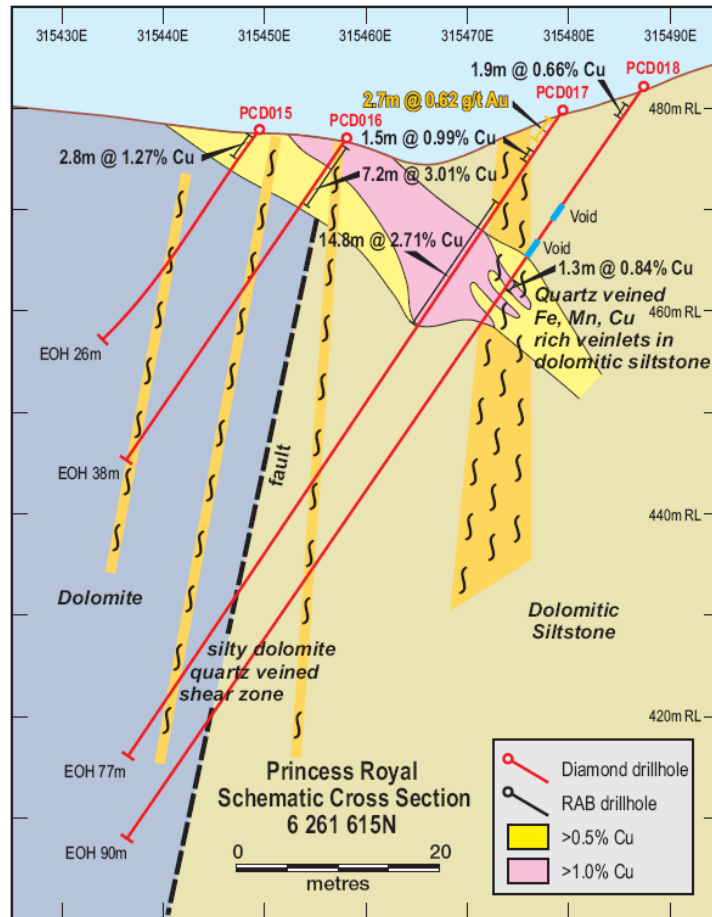


Figure 4: Cross Section 6261615N (GDA94 Zone 54), 4925N Local

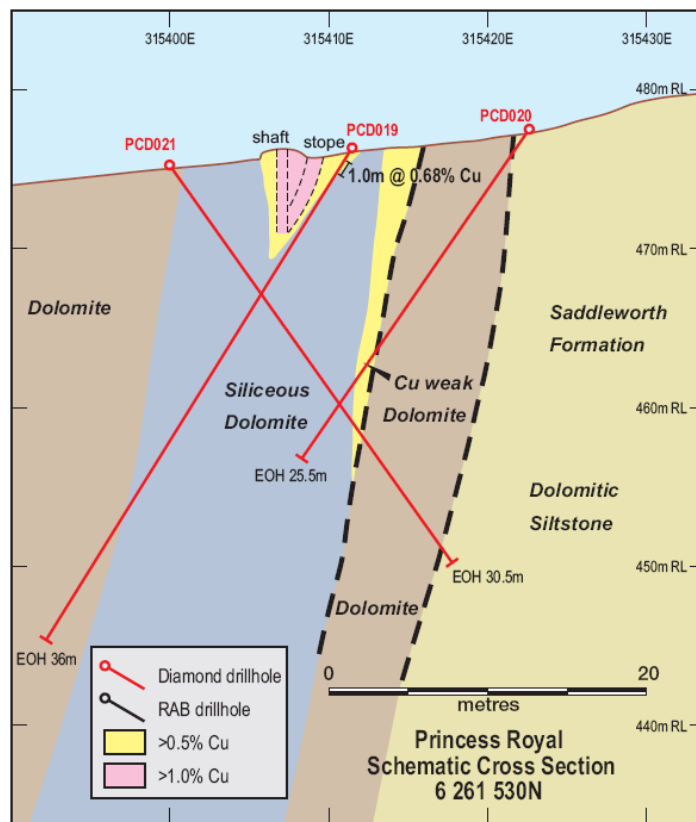


Figure 5: Cross Section 6261530N (GDA94 Zone 54), 4830N Local

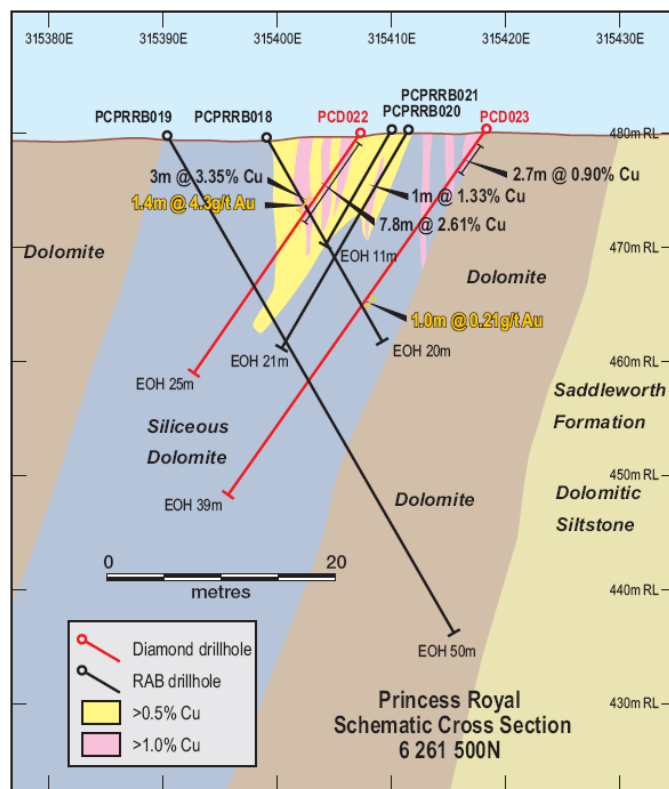
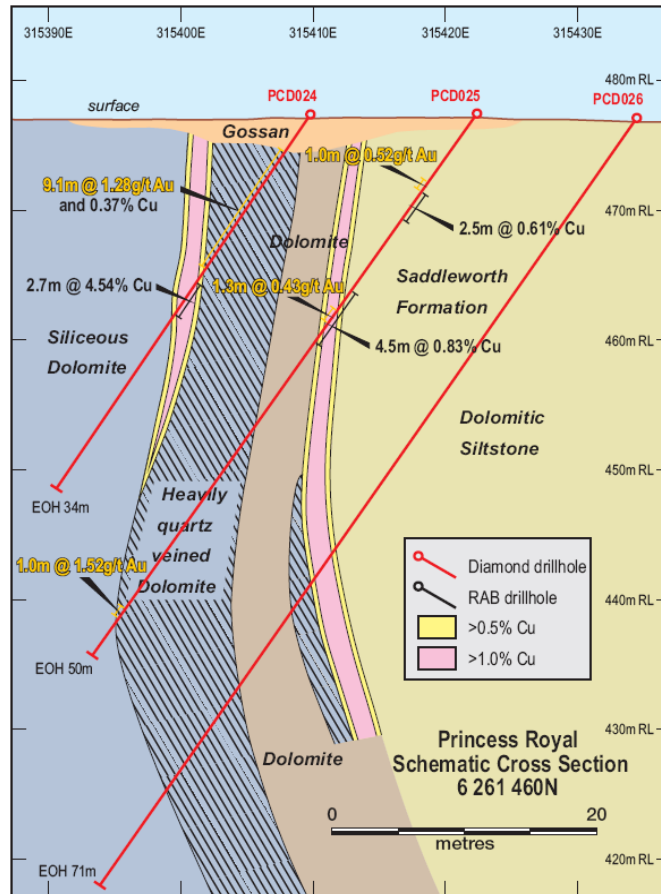


Figure 6: Cross Section 6261500N (GDA94 Zone 54), 4795N Local



**Figure 7: Cross Section 6261460N (GDA94 Zone 54), 4750N Local**

## Competent Person Statement

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mark Manly who is a member of the Australasian Institute of Mining and Metallurgy. Mark Manly is a full-time employee of Phoenix Copper. Mark Manly 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'. Mark Manly consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

For further information, please contact:

**Paul J Dowd**  
 Managing Director

Phone: +61 (0) 437 380 007  
 +61 (0) 8364 3188