



# PALADIN ENERGY LTD

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Company Announcements Office  
Australian Stock Exchange Limited  
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By Electronic Lodgement

Dear Sir/Madam

## LARGE RESOURCE UPGRADE FOR LANGER HEINRICH

- **Resource upgrade delineates world class uranium deposit**
- **Confirms Langer Heinrich as the largest calcrete hosted uranium deposit in the world**
- **46% increase in the Measured and Indicated Resources**
- **64% increase in the Inferred Resources**
- **Overall grade remains at 0.06% U<sub>3</sub>O<sub>8</sub>**

Paladin Energy Ltd is pleased to advise that the 2007/08 resource drilling of the mineralised palaeochannel in all Details has returned highly encouraging results. This drilling programme of 17,751m of RC drilling from 717 holes is shown on the map below. A revised mineral resource estimate for the Langer Heinrich Deposit conforming to both the JORC and NI 43-101 codes has now been completed and the results are reported below using a 250ppm U<sub>3</sub>O<sub>8</sub> cut off. This now means that the entire deposit has been re-estimated since the previous resource estimate was reported in 2006, also at a cut off of 250ppm U<sub>3</sub>O<sub>8</sub>.

### New Mineral Resource Estimate for Details 1 to 7, (250ppm U<sub>3</sub>O<sub>8</sub> Cut Off, depleted for mining)

| 250ppm Cut-off              | M t         | Grade % U <sub>3</sub> O <sub>8</sub> | t U <sub>3</sub> O <sub>8</sub> | Mlb U <sub>3</sub> O <sub>8</sub> |
|-----------------------------|-------------|---------------------------------------|---------------------------------|-----------------------------------|
| Measured Resources          | 32.8        | 0.06                                  | 19,582                          | 43.158                            |
| Indicated Resources         | 23.6        | 0.06                                  | 13,276                          | 29.260                            |
| <b>Measured + Indicated</b> | <b>56.4</b> | <b>0.06</b>                           | <b>32,858</b>                   | <b>72.418 (46% increase)</b>      |
| <b>Inferred Resources</b>   | <b>70.7</b> | <b>0.06</b>                           | <b>41,557</b>                   | <b>91.591 (64% increase)</b>      |

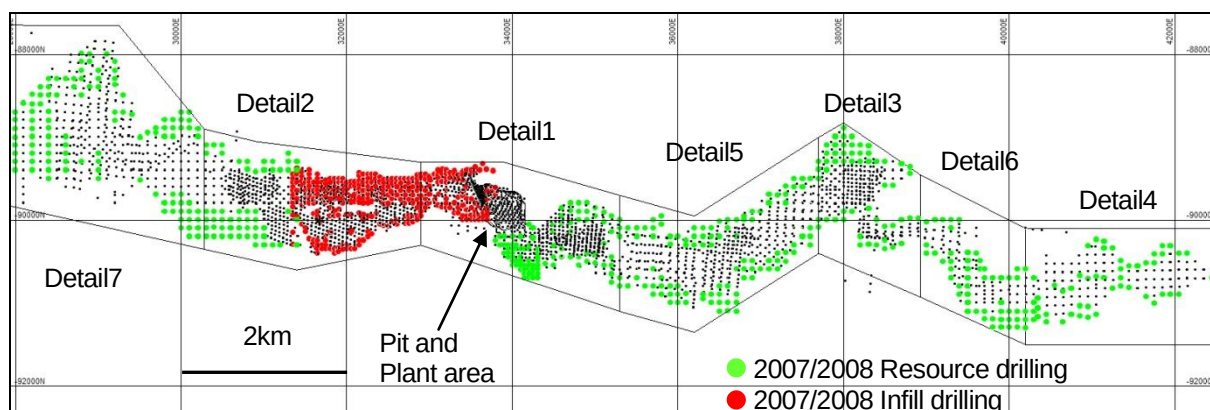
Compared to the previous Mineral Resources announced in 2006 the new 2008 resource estimates outlined herein represent a 55% increase in contained U<sub>3</sub>O<sub>8</sub> and comprise.

- 46% increase in the Measured and Indicated Resources from 22,548t (49.7Mlb) to 32,858t (72.4Mlb) contained U<sub>3</sub>O<sub>8</sub>, after depletion for mining.
- 64% increase in the Inferred Resources from 25,308t (55.8Mlb) to 41,557t (91.6Mlb) contained U<sub>3</sub>O<sub>8</sub>.

A substantial portion of the resources are in the Measured and Indicated Resources categories, representing 44% of the overall resources identified for Langer Heinrich and confirms the very robust nature of the deposit. The infill drilling in Details 1 and 2 has shown an excellent conversion rate of Inferred to Measured and Indicated categories giving confidence that future campaigns will achieve similar results.

## COMPARISON OF NEW AND PREVIOUS RESOURCE ESTIMATES

The tables below show the substantial overall increases in resources in all Details following this re-estimation, using the same cut off grade as used in the 2006 estimate. Minor local reduction in resource grades is a result of a change to the resource variance adjustment based on actual grade control reconciliations. The overall average grade remains at 0.06% U<sub>3</sub>O<sub>8</sub>. Following extensive studies undertaken by Langer Heinrich Minesite, a decision has been taken to change the bulk density used in the resource estimation from 2.1g/cm<sup>3</sup> to 2.4g/cm<sup>3</sup> which has resulted in an approximately 14% increase in tonnes and metal content.



All Details – 250ppm U<sub>3</sub>O<sub>8</sub> Cut Off

| CATEGORY                          | MEASURED       |                                         |                                       | INDICATED      |                                         |                                       | INFERRED       |                                         |                                       |
|-----------------------------------|----------------|-----------------------------------------|---------------------------------------|----------------|-----------------------------------------|---------------------------------------|----------------|-----------------------------------------|---------------------------------------|
|                                   | Tonnes Mt      | Grade ppm U <sub>3</sub> O <sub>8</sub> | Metal t U <sub>3</sub> O <sub>8</sub> | Tonnes Mt      | Grade ppm U <sub>3</sub> O <sub>8</sub> | Metal t U <sub>3</sub> O <sub>8</sub> | Tonnes Mt      | Grade ppm U <sub>3</sub> O <sub>8</sub> | Metal t U <sub>3</sub> O <sub>8</sub> |
| 2006 and 2008 estimate comparison |                |                                         |                                       |                |                                         |                                       |                |                                         |                                       |
| Detail 1 2006                     | 12.15          | 736                                     | 9,200                                 | 4.54           | 602                                     | 2,733                                 | 2.8            | 571                                     | 1,599                                 |
| *Detail 1 2008                    | 18.31          | 659                                     | 12,062                                | 7.24           | 655                                     | 4,741                                 | 1.9            | 824                                     | 1,551                                 |
| <b>Increase/(Decrease)</b>        | <b>50.7%</b>   | <b>(10.5%)</b>                          | <b>31.1%</b>                          | <b>59.5%</b>   | <b>8.8%</b>                             | <b>73.5%</b>                          | <b>(32.1%)</b> | <b>44.3%</b>                            | <b>(3.0%)</b>                         |
| Detail 2 2006                     | 4.79           | 628                                     | 3,008                                 | 5.08           | 565                                     | 2,870                                 | 8.6            | 691                                     | 5,942                                 |
| Detail 2 2008                     | 12.98          | 579                                     | 7,512                                 | 7.54           | 592                                     | 4,467                                 | 11.2           | 682                                     | 7,635                                 |
| <b>Increase/(Decrease)</b>        | <b>171.0%</b>  | <b>(7.8%)</b>                           | <b>149.7%</b>                         | <b>48.4%</b>   | <b>4.8%</b>                             | <b>55.6%</b>                          | <b>30.2%</b>   | <b>(1.3%)</b>                           | <b>28.5%</b>                          |
| Detail 3 2006                     | 2.67           | 576                                     | 1,538                                 | 3.70           | 448                                     | 1,658                                 | 1.1            | 468                                     | 519                                   |
| Detail 3 2008                     | 3.97           | 429                                     | 1,702                                 | 2.65           | 483                                     | 1,277                                 | 2.9            | 612                                     | 1,801                                 |
| <b>Increase/(Decrease)</b>        | <b>48.7%</b>   | <b>(25.5%)</b>                          | <b>10.7%</b>                          | <b>(28.4%)</b> | <b>7.8%</b>                             | <b>(23.0%)</b>                        | <b>163.6%</b>  | <b>30.8%</b>                            | <b>247.0%</b>                         |
| Detail 4 2006                     |                |                                         |                                       |                |                                         |                                       | 9.0            | 437                                     | 3,933                                 |
| Detail 4 2008                     |                |                                         |                                       |                |                                         |                                       | 15.3           | 379                                     | 5,807                                 |
| <b>Increase/(Decrease)</b>        |                |                                         |                                       |                |                                         |                                       | <b>70.0%</b>   | <b>(13.3%)</b>                          | <b>47.6%</b>                          |
| Detail 5 2006                     | 1.66           | 477                                     | 792                                   | 3.11           | 470                                     | 1,461                                 | 5.7            | 464                                     | 2,645                                 |
| Detail 5 2008                     | 1.26           | 455                                     | 574                                   | 6.17           | 453                                     | 2,795                                 | 7.9            | 465                                     | 3,655                                 |
| <b>Increase/(Decrease)</b>        | <b>(24.1%)</b> | <b>(4.6%)</b>                           | <b>(27.5%)</b>                        | <b>98.4%</b>   | <b>(3.6%)</b>                           | <b>91.3%</b>                          | <b>38.6%</b>   | <b>0.02%</b>                            | <b>38.2%</b>                          |
| Detail 6 2006                     |                |                                         |                                       |                |                                         |                                       | 3.0            | 491                                     | 1,473                                 |
| Detail 6 2008                     |                |                                         |                                       |                |                                         |                                       | 5.5            | 459                                     | 2,527                                 |
| <b>Increase/(Decrease)</b>        |                |                                         |                                       |                |                                         |                                       | <b>83.3%</b>   | <b>(6.5%)</b>                           | <b>71.6%</b>                          |
| Detail 7 2006                     |                |                                         |                                       |                |                                         |                                       | 10.1           | 735                                     | 7,424                                 |
| Detail 7 2008                     |                |                                         |                                       |                |                                         |                                       | 25.9           | 716                                     | 18,580                                |
| <b>Increase/(Decrease)</b>        |                |                                         |                                       |                |                                         |                                       | <b>156.4%</b>  | <b>(2.6%)</b>                           | <b>150.3%</b>                         |

\*Detail 1 resources have not been depleted for mining in this comparison

Detail boundaries have been aligned between both resources

Mineral Resources are quoted exclusive of Run of Mine (ROM) stockpiles which, at the end of May 2008, contained 3.5M tonnes at a grade of 514ppm  $U_3O_8$  for 1,796t (3.96Mlb)  $U_3O_8$ . Mineral Resources are quoted inclusive of any Mineral Reserves.

## ADDITIONAL RESOURCE POTENTIAL

The potential for increasing the resource base even further within ML140 is still regarded as high. All Details contain substantial mineralisation which remains in the Inferred category and future drilling will concentrate on raising resource confidence in these areas. Whilst the majority of the mineralisation has been closed off laterally there are still a number of substantial areas which need to be infilled within the main body of the resource.

It should be noted that a considerable amount of currently sub-economic mineralisation exists above a cut off of 100ppm  $U_3O_8$  and below the current economic cut off of 250ppm  $U_3O_8$  which has the potential to be of significant value should heap leach processing of calcrete uranium mineralization to be viable. **The new resource that has been estimated indicates (in the cut off range of 100ppm and 250ppm  $U_3O_8$ ) that there is 29.1Mt at a grade of 176ppm for 11.3Mlb  $U_3O_8$  in the Measured and Indicated categories and 47.5Mt at a grade of 172ppm for 17.9Mlb in the Inferred category.** Heap leach studies are currently underway at Langer Heinrich to determine the feasibility of processing this material.

## CONCLUSION

The resource drilling work has resulted in a significant increase in the mineral resources of the Langer Heinrich Deposit. At present, a total of 74,415t (over 164Mlb) of contained  $U_3O_8$  is now identified in the Measured, Indicated and Inferred Resources categories after depletion for mining. The Langer Heinrich Deposit can now be regarded as a truly world class uranium resource. In the revised resource base there are still 70Mt of Inferred Resources grading at 0.06%  $U_3O_8$  containing 41,557t (91.6Mlb)  $U_3O_8$ . The Directors believe a considerable amount of these Inferred Resources will be able to be converted to Measured and Indicated Resources categories in the future.

Ore Reserve studies involving pit optimization and scheduling based on parameters derived from the proposed 6 Mlbs/a LHU Stage 3 upgrade are currently underway and an updated Ore Reserve is expected to be announced in the near future.

There is strong expectation therefore that these new resource estimates will contribute significantly to extending both minelife of the Project and the subsequent upgrades in production. Additional mine production is regarded as being essential to meet increasing worldwide demand. Therefore the opportunity to readily and substantially expand production of the Langer Heinrich mining operation with long term production output, places Paladin in an excellent position to capitalise on the market opportunities and further benefit its shareholders.

Yours faithfully  
Paladin Energy Ltd

**JOHN BORSHOFF**  
Managing Director

### Declaration

The information in this announcement that relates to mineral resources is based on information compiled by David Princep BSc MAusIMM for the Mineral Resource estimates. Mr Princep 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' and as a Qualified person as defined in NI 43-101. Mr Princep is a full-time employee of Paladin Energy Ltd and consents to the inclusion of the information in this announcement in the form and context in which it appears.

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