

## IRVINE ISLAND ASSAY RESULTS

**March 19, 2010, Melbourne:** Pluton Resources Ltd ("Pluton") (ASX:PLV) has received assay results for the first 2 holes of Phase II drilling on Hardstaff Peninsula, Irvine Island, Western Australia (E04/1172).

### Summary

- Results for the Yampi Member (16m @ 49.05% iron, 18m @ 50.22% iron) are consistent with targeted extensions of the current Inferred Resource of 54Mt @ 49% iron (Fe), including 25Mt @ 54% iron (Fe).
- Results from the Wonganin Sandstones are slightly better than expected, with selected intersections of higher grade than those previously tested as being suitable as feed ores for concentration by the CSIRO.

### Background

A second phase of drilling on Irvine Island is targeting an extension to an Inferred Resource of 54Mt at 49% iron (Fe) identified from drilling in 2008. Phase II drilling is targeting a total of >100Mt at Hardstaff Peninsula of mixed grade Direct Shipping Ore and feed ore for beneficiation, and up to a further 30Mt of predominantly Direct Shipping Ore from the Isthmus region.

Phase II drilling is primarily targeting iron mineralisation contained within a rock unit called the Yampi Member. This is the same unit that is mined on the adjacent Cockatoo and Koolan Islands.

Test work by the CSIRO has shown that lower grade feed ores from the Yampi Member ranging in grade between 28.6% iron and 46.8% iron (Fe) are well suited to concentration (beneficiation) using conventional methods. These ores have been shown to produce concentrates of >66% iron (Fe) at high mass and iron recoveries.

Test work has shown that additional concentrate can be produced from rocks overlying the Yampi Member. These rocks are referred to as the Wonganin Sandstones. The Wonganin Sandstones were originally considered as waste, but feed materials grading between 25.4% iron and 32.2% iron have yielded iron concentrates of >66% iron (Fe). They are now considered as an additional resource target to the Yampi Member.

### Results

#### *Yampi Member*

Table 1. Composite results through the Yampi Member for drill holes 29 and 33, Irvine Island, Western Australia\*.

|           | Hole | Interval (m) | From (m) | Fe %  | SiO <sub>2</sub> % | Al <sub>2</sub> O <sub>3</sub> % | P %  | MgO % | S %  | LOI % |
|-----------|------|--------------|----------|-------|--------------------|----------------------------------|------|-------|------|-------|
|           | 29   | 16           | 125      | 49.05 | 27.59              | 0.65                             | 0.01 | 0.06  | 0.08 | 0.92  |
| including | 29   | 6            | 133      | 53.31 | 22.20              | 0.17                             | 0.01 | 0.04  | 0.05 | 0.91  |

|           |           |           |            |              |              |             |             |             |             |             |
|-----------|-----------|-----------|------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|
|           | <b>33</b> | <b>18</b> | <b>134</b> | <b>50.22</b> | <b>25.62</b> | <b>0.87</b> | <b>0.02</b> | <b>0.08</b> | <b>0.03</b> | <b>0.95</b> |
| including | 33        | 13        | 137        | 55.08        | 19.38        | 0.45        | 0.02        | 0.04        | 0.01        | 0.72        |

### *Wonganin Sandstones*

Table 2. Composite results through the Wonganin Sandstone for drill holes 29 and 33, Irvine Island, Western Australia\*.

|               | <i>Hole</i> | <i>Interval (m)</i> | <i>From (m)</i> | <i>Fe %</i>  | <i>SiO<sub>2</sub> %</i> | <i>Al<sub>2</sub>O<sub>3</sub> %</i> | <i>P %</i>  | <i>MgO %</i> | <i>S %</i>  | <i>LOI %</i> |
|---------------|-------------|---------------------|-----------------|--------------|--------------------------|--------------------------------------|-------------|--------------|-------------|--------------|
|               | <b>29</b>   | <b>64</b>           | <b>9</b>        | <b>25.38</b> | <b>56.82</b>             | <b>4.07</b>                          | <b>0.03</b> | <b>0.18</b>  | <b>0.01</b> | <b>1.16</b>  |
| including     | 29          | 6                   | 60              | 36.28        | 37.26                    | 6.73                                 | 0.04        | 0.35         | 0.00        | 1.23         |
|               | <b>33</b>   | <b>52</b>           | <b>29</b>       | <b>28.21</b> | <b>33.43</b>             | <b>3.91</b>                          | <b>0.04</b> | <b>0.16</b>  | <b>0.02</b> | <b>1.45</b>  |
| Including (a) | 33          | 11                  | 46              | 34.91        | 43.71                    | 3.23                                 | 0.06        | 0.08         | 0.01        | 2.38         |
| Including (b) | 33          | 8                   | 73              | 37.57        | 36.61                    | 5.46                                 | 0.04        | 0.29         | 0.11        | 1.18         |

\* results shown are unweighted averages of contiguous samples.

### **Conclusions**

Results from the Yampi Member are consistent with expectations and the existing Inferred Resource of 54Mt @ 49% iron (Fe).

Results from the Wonganin Sandstones are slightly better than expected, with selected intersections of significantly higher grade than those tested by the CSIRO. Higher feed grades can ultimately result in higher mass recoveries and lowered costs during iron concentration.

Levels of impurities other than silica remain universally low.

Drilling on Irvine Island is continuing. Samples have been submitted from Holes ID12A and ID12B. These holes extend to the western edges of Hardstaff Peninsula and outside the current Inferred Resource area of 54Mt at 49% Fe. Visual interpretations of these holes are positive and results are pending.

For more information contact Managing Director, Mr. Tony Schoer, on 0411 232 711 or [tschoer@plutonresources.com](mailto:tschoer@plutonresources.com).

Tony Schoer  
Managing Director and Chief Executive Officer

*Information in this statement that relates to Exploration Results and Targets is based on information compiled by Dr Alistair Reed who is an employee of the company. Dr Reed is a Member of the Australian Institute of Geoscientists and 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 Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves."*

**About Pluton:** Pluton Resources Limited is listed on the Australian Stock Exchange (ASX Code "PLV"). Pluton has assembled a diversified portfolio of interests in tenements in Western Australia and Tasmania. Tenements in Western Australia are 100% owned by Pluton, which includes the Irvine Island iron ore project. Tenements located in Tasmania are prospective for

high grade or bulk tonnage copper, gold and silver. Further details on Pluton can be found at [www.plutonresources.com](http://www.plutonresources.com).

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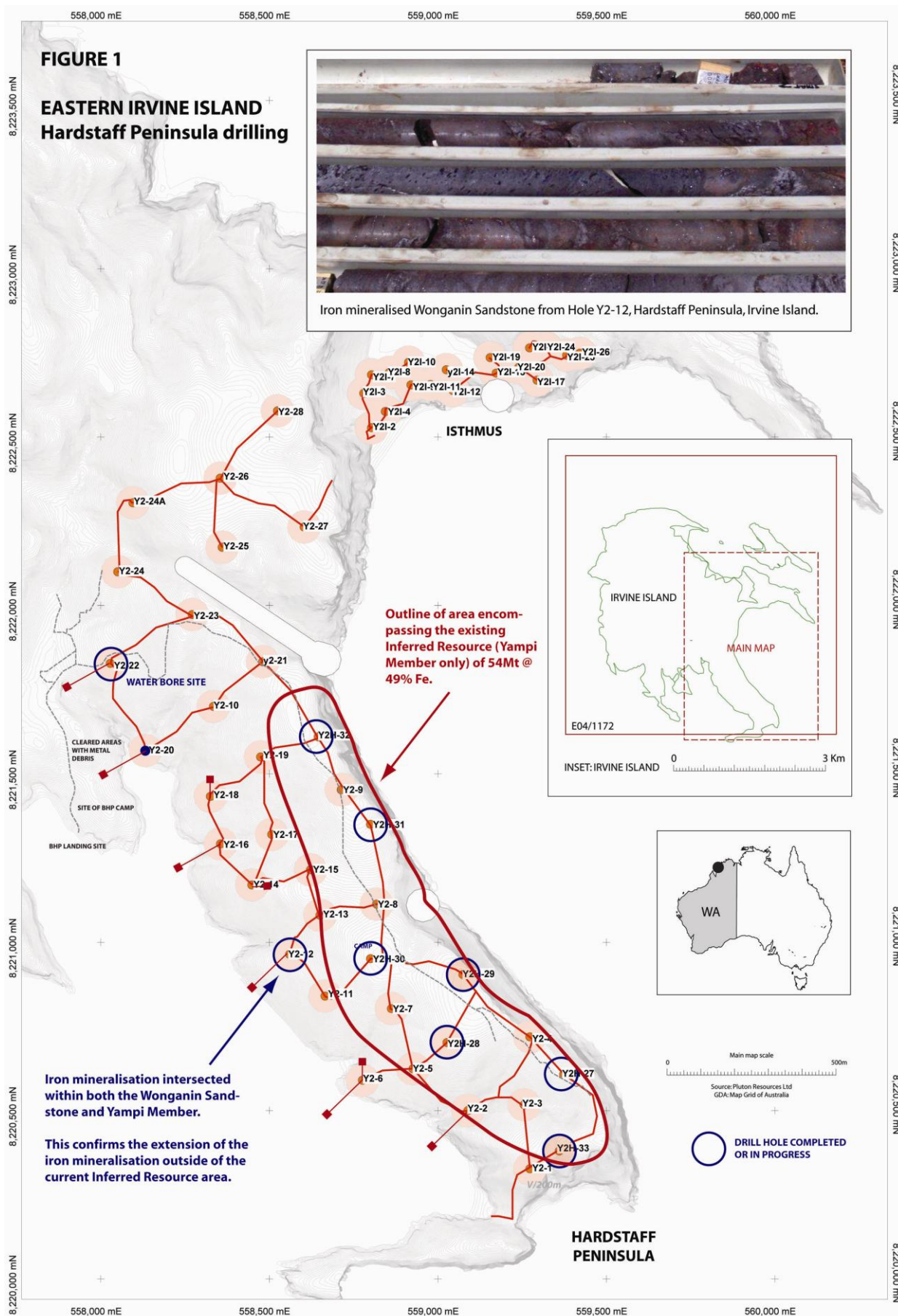


Figure 1. Drilling plan of eastern Irvine Island, showing locations of drill holes 29 and 33 and extension of drilling and iron mineralisation outside of the area of the current Inferred Resource for the Yampi Member.