

## **IRVINE ISLAND - EXPLORATION UPDATE**

### **ISTHMUS REGION DIAMOND DRILLING ASSAY RESULTS**

**September 5<sup>th</sup>, 2011, Melbourne:** The Directors of Pluton Resources Limited (“Pluton”) (ASX: PLV) have received additional assay results from the current Phase II diamond drilling program at the Isthmus Region on Irvine Island, Western Australia (E04/1172). Irvine Island is Pluton’s flagship iron ore development project.

#### **HIGHLIGHTS**

- **Significant assay results have been received from five of seven diamond drill holes collared in the Isthmus Region.**
- **The assay results indicate potential for an increased total iron grade in the western area of the Isthmus Region.**
- **The Isthmus Region currently estimated to have a total Inferred Mineral Resource of 17 Mt @ 32% total iron, reported in accordance with the JORC Code<sup>1</sup>.**

#### **Isthmus Region Assay Results**

The initial Phase II diamond drilling program has been completed at the Isthmus Region.

To date, a total of fifty-four (54) holes at twenty-one sites have been completed for a total advance of approximately 6,608 metres (Figure 1). Diamond drilling has been completed for resource definition, metallurgical test work, hydrological and environmental purposes at the Isthmus Region.

Significant assay results have been received from five of seven recently completed diamond drill holes.

Pluton Resources Managing Director, Tony Schoer said:

“The latest assay results from the Isthmus Region provide further encouragement and indicate a positive impact on the overall total iron grade for the western area of the Isthmus deposit when the next Mineral Resource estimation is completed”.

“From these results we hope to convert a significant proportion of the Inferred Mineral Resource to higher confidence Indicated Mineral Resource which will enable the Stage 1 Ore Reserve estimate previously defined at the Hardstaff Peninsula (ASX announcement June 6<sup>th</sup>, 2011) to be expanded to include the Indicated Mineral Resources defined at the Isthmus Region, thereby increasing the Ore Reserve base and mine life of the Project.”

<sup>1</sup>Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2004 Edition, prepared by the Joint Ore Reserves Committee of the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.

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## Detailed Analysis of Results

Final assay results are summarised in Table 1 below.

True thickness estimates have been included in the tables where possible for all holes based on the geological interpretation contained in the latest Inferred Mineral Resource estimate for the Isthmus Region.

In some cases, the true thickness is reported at a greater width than the mineralised iron ore intersection. This is a direct result of the diamond drill holes being collared internally to the iron ore horizon.

True thickness has only been reported for one interval in drill hole 11DDH084 (EOH 257.10m). The multiple intervals reported were intersected within the limb of a fold structure. The total true width of the fold structure is estimated to be forty metres. The high grade iron intersections are contained within the fold structure each of which is separated by lower grade iron mineralised intervals.

Two diamond drill holes (11DDH85 and 11DDH086) did not intersect significant zones of iron mineralisation greater than 40% iron across a minimum continuous interval of four metres.

Drill hole 11DDH087 was completed as a short depth, vertical environmental monitoring hole. The final drill hole depth for 11DDH087 was 40.2m.

### Yampi Member

**Table 1: Composite Drill hole results through the Yampi Member, Isthmus Region, Irvine Island, Western Australia (E04/1172).**

Hole	Interval (m)	From (m)	To (m)	True Thickness (m)	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	S%	LOI
11DDH084	4.2	29.2	33.4	-	40.7	36.4	1.93	0.043	0.018	2.04
	8.8	38.2	47.0		47.9	29.7	0.37	0.023	0.011	0.78
	28.0	54.0	82.0		41.5	30.8	1.54	0.023	0.003	0.66
incl	12.2	61.8	74.0		50.7	26.0	0.23	0.017	0.004	0.27
	13.3	90	103.3		49.7	28.4	0.28	0.011	0.008	-0.30
	5.0	130	135.0		45.7	30.9	1.91	0.040	0.013	-0.13
	13.1	151	164.1		43.9	32.9	1.62	0.030	0.096	0.34
	9.9	171.0	180.9		8.5	41.5	33.9	3.04	0.027	0.010

Hole	Interval (m)	From (m)	To (m)	True Thickness (m)	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	S%	LOI
11DDH087	16.6	8.0	24.6	16.6	41.8	31.9	1.96	0.019	0.069	1.18

Hole	Interval (m)	From (m)	To (m)	True Thickness (m)	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	S%	LOI
11DDH088	18.4	12.9	31.0	20.0	43.6	33.7	1.04	0.030	0.189	0.92

**Table 1 (continued):**

<i>Hole</i>	<i>Interval (m)</i>	<i>From (m)</i>	<i>To (m)</i>	<i>True Thickness (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>S%</i>	<i>LOI</i>
11DDH089	8.6	28.4	37.0	8.6	46.1	32.9	0.275	0.021	0.002	0.23

<i>Hole</i>	<i>Interval (m)</i>	<i>From (m)</i>	<i>To (m)</i>	<i>True Thickness (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>S%</i>	<i>LOI</i>
11DDH090	10.7	0	11.0	10.7	45.7	28.4	3.79	0.027	0.003	1.38

Supporting Notes for Table 1

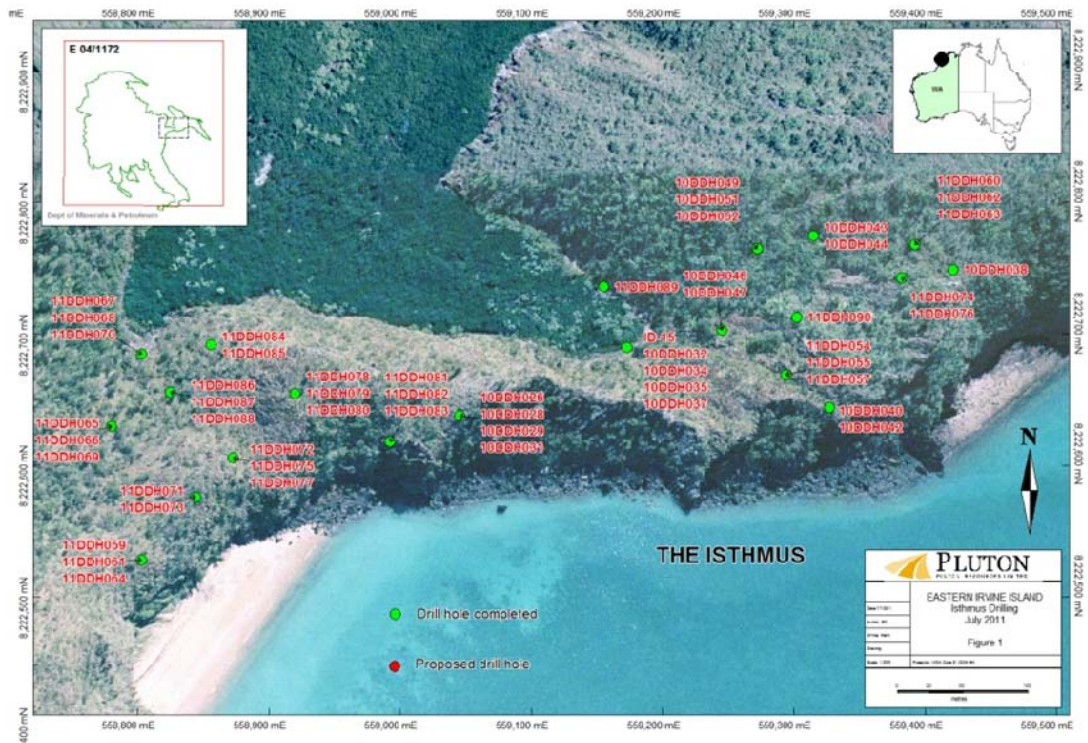
- Results shown are weighted averages of contiguous samples.
- The following drill holes were completed as angled drill holes: 11DDH084, 11DDH086, 11DDH088 and 11DDH090.
- The following drill holes were completed as vertical drill holes: 11DDH085, 11DDH087 and 11DDH089.
- Drill hole 11DDH087 was drilled as environmental monitoring hole and submitted for assay. Final hole depth was 40.20m.
- Drill holes 11DDH085 and 11DDH086 did not contain contiguous widths of mineralisation greater than 40% Fe over intervals greater than four metres.

**For more information please contact:**

**Investors and Analysts**

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**Figure 1: Drill Hole Sites and Collar Locations, Isthmus Region, Irvine Island.**

*The information in this statement relates to Mineral Resources, Exploration Results and Targets for the Irvine Island Project is based on information compiled by Mr A Griffith, who is a Member of the Australasian Institute of Mining and Metallurgy and is a full-time employee of the Company. Mr A Griffith 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'*

**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).