

28th April 2011

QUARTERLY ACTIVITIES REPORT – MARCH 2011

Highlights

- The global Indicated and Inferred Mineral Resource tonnes reported in accordance with the JORC Code now stand at 547 Mt for the Hardstaff Peninsula, an increase of 64Mt.
- Approximately 90% of the Mineral Resource (490 Mt) reported is in the Indicated Mineral Resource category.
- Yampi Member Indicated Mineral Resource now stands at 153 Mt @ 34% total iron and 37.7% weight recovery (at a cut-off grade of 10% total iron), and includes 54 Mt @ 51% total iron and 52.5% weight recovery (at a cut-off grade of 50% total iron).
- Wonganin Sandstone Indicated Mineral Resource is 337 Mt at 21% total iron (no cut-off grade applied).
- Assaying of Davis Tube concentrates from the Yampi Member average 69% Fe with low impurity levels including silica.
- Dry magnetic separation test results indicate that a +40% Fe pre-concentrate can be produced at 1mm grind size.

<u>Irvine Island – Western Australia (E04/1172) – Pluton 100%</u>

Exploration

Drilling on the diamond hole program continued in the March quarter with operations recommencing on the 3rd January 2011 following the Christmas-New Year shutdown.

At the Hardstaff Peninsula, a total of three diamond drill holes (two for resource definition and one for environmental monitoring) were completed during the quarter prior to the rig being mobilised across to the Isthmus Region to accelerate the drilling program. The total number of holes completed at the Hardstaff Peninsula to date now stands at thirty-seven for an approximate advance of 7,859 metres.

Drilling operations are scheduled to recommence later in the year at the Hardstaff Peninsula after the completion of the Phase III drilling program.

Pluton Resources Limited

Level 4, 468 St Kilda Rd Melbourne Vic 3004 PO Box 255 Seddon West Victoria 3011 Ph: (03) 9820 3802 • Fax: (03) 9867 8587







At the Isthmus Region, a total of nineteen resource and environmental monitoring diamond drill holes have been completed during the quarter. At the time of writing, the total number of holes completed at the Isthmus Region to date now stands at forty-one for an approximate advance of 4,887 metres.

Drilling at the Isthmus Region with two rigs double shifting continues at a steady rate.

The following tables summarise the work program for the quarter:

Table 3: Hardstaff Peninsula, Diamond Drilling Completed Quarter 1, 2011.

Hole Number	Site Number	Metres Drilled	Status	Purpose	Comment
11DDH053	Y2-5	221.60	Drilled	Resource definition	Assays reported
11DDH056	Y2-5	40.00	Drilled	Environmental	Hole not assayed
11DDH058	Y2-7	221.20	Drilled	Resource definition	Assays reported
Total		482.80			

Table 4: Isthmus Region, Diamond Drilling Completed Quarter 1, 2011.

Hole Number Site Number		Metres Drilled	Status	Purpose	Comment		
10DDH052	Y2I-23	128.90	Drilled	Resource definition	Assays reported		
11DDH054	Y2I-17	90.80	Drilled	Resource definition	Assays reported		
11DDH055	Y2I-17	212.10	Drilled	Resource definition	Assays reported		
11DDH057	Y2I-17	186.40	Drilled	Resource definition	Assays reported		
11DDH059	Y2I-2	84.00	Drilled	Resource definition	Assays reported		
11DDH060	Y2I-25	190.80	Drilled	Resource definition	Assays pending		
11DDH061	Y2I-2	160.90	Drilled	Resource definition	Assays pending		
11DDH062	Y2I-25	103.70	Drilled	Resource definition	Assays pending		
11DDH063	Y2I-25	36.50	Drilled	Abandoned`	Assays pending		
11DDH064	Y2I-2	40.10	Drilled	Environmental	Assays pending		
11DDH065	Y2I-3	152.00	Drilled	Resource definition	Assays pending		
11DDH066	Y2I-3	120.00	Drilled	Resource definition	Assays pending		
11DDH067	Y2I-7	187.40	Drilled	Resource definition	Assays pending		
11DDH068	Y2I-7	18.30	Drilled	Environmental	Assays pending		
11DDH069	Y2I-3	12.80	Drilled	Environmental	Hole not assayed		
11DDH070	Y2I-7	102.00	Drilled	Resource definition	Assays pending		
11DDH071	Y2I-4	149.40	Drilled	Resource definition	Assays pending		
11DDH072	N	140.00	Drilled	Resource definition	Assays pending		
11DDH073	Y2I-4	42.60	Drilled	Environmental	Assays pending		
Total		2,158.70					



During the quarter, and up to the time of writing, assay results were received and announced from six drill holes completed at the Hardstaff Peninsula. Holes 10DDH041, 10DDH045, 10DDH048, 10DDH050, 11DDH053 and 11DDH058 continue to intersect both the Wonganin Sandstone and the Yampi Member.

In addition, during the quarter assay results were received and announced from fourteen drill holes completed at the Isthmus Region. Holes 10DDH038, 10DDH040, 10DDH042, 10DDH043, 10DDH044, 10DDH046, 10DDH047, 10DDH049, 10DDH051, 10DDH052, 11DDH054, 11DDH055, 11DDH057 and 11DDH059 continue to intersect mineralisation in the Yampi Member. Drill holes 10DDH040, 10DDH042, 10DDH047 and 11DDH055 encountered high grade hematite mineralisation that may be suitable as direct ship ore with all impurities apart from silica remaining universally low. In addition, zones of iron mineralisation were encountered in the remaining holes listed above that are suitable for beneficiation along with the Hardstaff Peninsula ore.

Resource Update

On the 8th April 2011, Pluton announced an Indicated and Inferred Mineral Resource statement for the Hardstaff Peninsula.

In response to a query, AMC has reviewed the estimation and consequently advised Pluton of an error in the weight recovery estimation for the material contained in the >10% iron to less than 30% iron in the Yampi Member for both the Indicated and Inferred Mineral Resource categories.

AMC has amended the weight recovery estimation for the Indicated and Inferred Mineral Resource for the material contained in the >10% iron to less than 30% iron in the Yampi Member only. No further changes are required for the reported Mineral Resource for the Yampi Member or Wonganin Sandstone.

An amended Indicated and Inferred Mineral Resources statement was issued on the 27th April 2011.

This amendment is not considered significant as it only impacts the grade calculation in the Indicated and Inferred Mineral Resources category in the low grade range from >10% iron to less than 30% iron.

The tables below summarise the current Indicated and Inferred Mineral Resources for the Hardstaff Peninsula.



Table 1: Yampi Member Mineral Resource, Hardstaff Peninsula, Irvine Island, Western Australia (E04/1172).

			Total Wt Rec* (%)	Total Mineralisation			Magnetite Mineralisation		
Classification	COG Fe (%)	Tonnes (Mt)		Iron (%)	SiO2 (%)	LOI at 950° C	Wt Rec (%)	Fe by DTR (%)	SiO2 by DTR (%)
Indicated >40% iron (Lens 1)	40	4	45.6	46	30.4	1.2	24.6	68	3.8
Indicated >50% iron (Lens 2)	50	54	52.5	51	25.5	0.7	32.3	69	3.2
Indicated >30% and <50% Iron (Lens 2)	30	39	39.2	33	47.9	1.0	31.3	69	3.4
Sub Total Indicated (Lens 1 and 2)		97	46.9	43	34.7	0.9	31.5	69	3.3
Indicated >10% iron and < 30% iron ^	10	56	22.0	18	62.0	1.8	19.2	68	4.0
Inferred>40% iron (Lens 1)	40	-	-	-	-	-	-	-	-
Inferred >50% iron (Lens 2)	50	7	50.0	51	24.6	0.6	26.9	69	3.6
Inferred >30% and <50% Iron (Lens 2)	30	5	37.6	34	46.0	1.0	25.8	69	3.6
Sub Total Inferred (Lens 1 and 2)		12	44.7	44	33.8	0.8	26.4	69	3.6
Inferred >10% iron and < 30% iron ^	10	9	20.0	16	63.8	1.5	17.0	68	4.0
Total Indicated	-	153	37.7	34	44.7	1.2	27.0	69	3.6
Total Inferred	-	21	34.5	33	46.2	1.1	22.5	69	3.8

Supporting Notes for Table 1.

Table 2: Wonganin Sandstone Mineral Resource, Hardstaff Peninsula, Irvine Island, Western Australia (E04/1172).

Classification	cog	Tonnes	Iron	SiO2	Al2O3	S	Р	LOI at
	Fe (%)	(Mt)	(%)	(%)	(%)	(%)	(%)	950° C
Indicated Wonganin Sandstone	-	337	21	61.5	4.15	0.09	0.032	2.0
Inferred Wonganin Sandstone	-	36	21	61.7	3.69	0.08	0.032	1.6

Supporting Notes for Table 2.

A mineral resource estimate for the Isthmus region is expected to be announced towards the end of May 2011.

¹ The Mineral Resource is reported in accordance with the JORC Code¹

² All resources have been rounded to the nearest 1 million tonnes

³ CoG is defined as cut-off grade

^{4 *}Total weight recovery includes both the magnetite and hematite mineralisation. A 50% recovery for hematite is based on metallurgical test work.

^{5 ^} Mineralisation not reported in previous resource estimations as Davis Tube analysis had not been completed.

¹ The Mineral Resource is reported in accordance with the JORC Code¹

² All resources have been rounded to the nearest 1 million tonnes

³ CoG is defined as cut-off grade

⁴ No cut-off grade has been applied to the Wonganin Sandstone Indicated and Inferred Mineral Resource estimation



Metallurgical Testing

Positive Davis Tube analysis and metallurgical test work results were received from drill core submitted during the quarter.

Davis tube assaying of one hundred and fifty-six composite drill core samples and XRF analysis of the resultant concentrate was completed from within the Yampi Member at the Hardstaff Peninsula. The composites that were assayed were contiguous within the Yampi Member.

Analysis of the resultant concentrates has shown that a high quality concentrate averaging 69% Fe, with all impurities including silica remaining universally low, can be produced at a relatively coarse grind size of 106 microns. Assaying has shown that a consistent high quality concentrate is produced irrespective of drilling location on the Hardstaff Peninsula.

Pre-Feasibility Study (PFS)

The PFS is on track for completion in May 2011. Originally the PFS was expected to be completed in March 2011; however a delay in receipt of key assay results and the modelling of different available development options resulted in the slippage.

The pre-feasibility study continued to examine different processing options for the Project during the quarter. These included full beneficiation (wet and dry), gravity separation, and the production of preconcentrate using dry methods with final processing to a high grade concentrate offshore. Each option is being assessed as it offers differing capital and operating cost profiles that may impact project economics in a positive manner.

The results received from the dry magnetic separation test work performed on drill core composite samples from the Wonganin Sandstone and Yampi Member indicate that the iron ore is amenable to upgrading to a +40% pre-concentrate at a grind size of 1mm.

The mass recoveries from the samples ranged from 50%(at the lowest sample iron feed grade, up to 90% mass recovery for the highest iron feed grade sample.

Results from the gravity test work are pending.

Native Title

Final drafting of the full Native Title Agreement to be presented to the Mayala community for ratification is almost complete. The compensation terms for mining on Irvine were agreed between Pluton and the Mayala in late December, which cannot change.

The ratification meeting will be held in the current (2nd) quarter 2011.



Environment

The submission document to refer the Irvine project for environmental assessment at both State and Federal Government level is well advanced. It is expected the project will be referred during the current quarter. The referral will initiate the process towards gaining the required environmental approvals for mining on Irvine Island.

Land and marine based environmental surveys continued during the 1st quarter 2011. As expected we continue to find nothing listed as rare or endangered.

Capital Raising

On the 21st April 2011 Pluton announced a Share Purchase Plan (SPP) for current shareholders. Eligible shareholders are entitled to subscribe for up to \$15,000 in new ordinary shares in the Company at 78 cents/share.

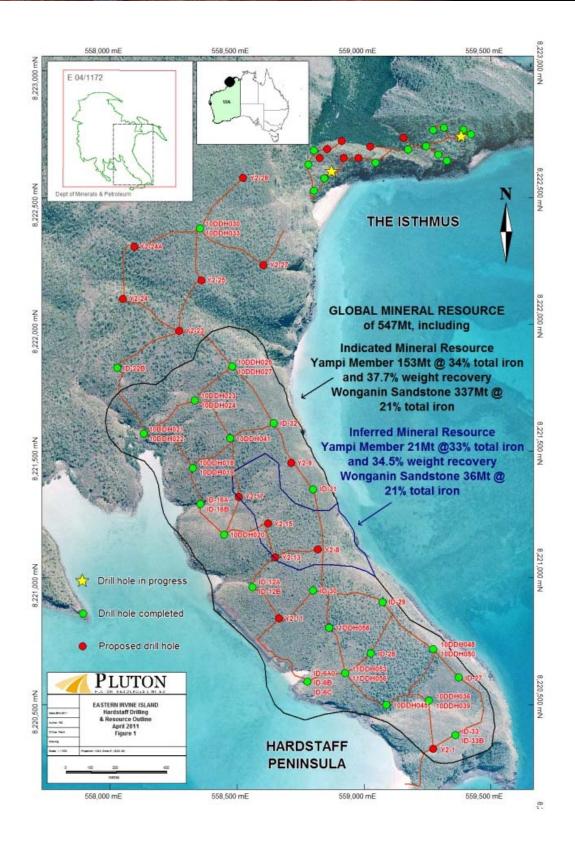
The amount of capital raised in October 2010 was expected to get the company through to the end of the PFS stage, that being March 2011. While there has been a two month delay in the finalisation of the PFS the company continued to spend on exploration and environmental activities on Irvine Island, and therefore needs to top-up cash reserves.

Pluton is aiming to raise \$4 million via the SPP to continue activities through to funding decisions to be made after completion of the PFS and discussions with interested third parties.

Documentation has been sent to all eligible shareholders (those with a registered address in Australia or New Zealand). The SPP opens on 28th April 2011.

At the end of March 2011 Pluton had cash reserves of \$5.877 million.







For more information contact Managing Director, Mr. Tony Schoer, on 0411 232 711 or tschoer@plutonresources.com.

Tony Schoer
Managing Director and Chief Executive Officer

The information in this statement that relates to mineral resource estimates prepared by AMC Consultants Pty Ltd for the Irvine Island Iron Ore Deposit – Hardstaff Peninsula is based on information compiled by Miss T L Burrows, who is a member of the Australasian Institute of Geoscientists and Mr R L Webster, who is a member of The Australasian Institute of Mining and Metallurgy, both are full time employees of the AMC Consultant Pty Ltd. Mr Webster has sufficient experience 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'

The information in this statement relates to Exploration Results and Targets for the Irvine Island and Cethana projects and 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 deposits 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 prospective for iron ore, with the 100% owned Irvine Island iron ore project progressing to the resource definition stage. 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.