

INITIAL INFERRED IRON ORE RESOURCE DELINEATED AT IRVINE ISLAND, WESTERN AUSTRALIA: EXPLORATION TARGETING 60-100MT

9th February, 2009, Melbourne: Pluton Resources Limited, (“Pluton”) (ASX:PLV) provides the following results from the 2008 Phase 1 exploration drilling campaign on Irvine Island, Western Australia (50% Pluton, 50% Cliffs Natural Resources):

Highlights:

- An initial **Inferred Mineral Resource** of **13Mt at 54.4% iron (Fe)** has been extrapolated from drilling on Hardstaff Peninsula region of Irvine Island. This resource is limited only by the extent of the current drilling.
- Drilling intersected mineralisation grading >60% Fe at both Hardstaff Peninsula and the Isthmus regions of Irvine Island.
- Assays show low concentrations of phosphorous (P), alumina (Al) and sulphur (S).
- Test work to concentrate (beneficiate) iron mineralisation from Hardstaff Peninsula is targeting a further **15-20Mt** grading 44-48% Fe from within the outline of the current Inferred Resource. No further drilling is required to complete the current test work.
- Results indicate that future drilling to the west and north of the current resource on Hardstaff Peninsula can target **60-100Mt** of iron mineralisation at grades ranging from 44–50 % Fe.
- High grade iron mineralisation at the Isthmus region of Irvine Island remains largely untested and is additional to that identified to date at Hardstaff Peninsula.

Initial Inferred Mineral Resource on Hardstaff Peninsula

On behalf of Pluton Resources, Snowden Mining Industry Consultants (“Snowden”) have completed a preliminary geological model of the iron mineralisation in the Hardstaff region of Irvine Island in northwest Western Australia (Figure 1). The interpretation developed by Snowden was derived from data obtained from 6 drill holes and geological mapping information supplied by Pluton Resources.

Four different geological units were identified and modelled:

1. Pentecost Sandstone
2. Pentecost Siltstone
3. Yampi Conglomerate / Sandstone
4. Elgee Siltstone

Mineralisation, although present in places within the Pentecost Sandstone, is contained primarily within the Yampi Member. A consistent zone of mineralisation grading greater than >35% Fe (iron) and ranging from 40m to 60m in thickness has been identified from the limited drilling currently completed. The mineralisation dips consistently at 20 to 25 degrees to the southwest and outcrops on the eastern edge of Irvine Island on Hardstaff Peninsula. Within this broad zone of mineralisation two higher grade (>50% Fe) lenses have been identified.

A review of the assays associated with these higher grade lenses indicates Fe grades which are typically greater than 50% Fe and low concentrations of phosphorous (P), alumina (Al) and sulphur (S).

An inferred mineral resource of **13 Mt at 54.4% iron (Fe)** has been extrapolated within two high grade lenses (> 50% Fe) identified at the Hardstaff Peninsula region on Irvine Island (Table 1).

Table 1 Inferred Mineral Resource* – Hardstaff Region, Irvine Island, as at February 2009.

	Density (g/cm ³)	Tonnes (Mt)	Fe (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	P (%)	MgO (%)	S (%)	LOI (%)
Total	4.0	13	54.4%	21.3%	0.23%	0.01%	0.11%	0.04%	1.07%

*Nominal cut-off grade 50 % Fe

Summary statistics, methods and background information are presented in full in Appendix 1. Summary assay data from interpreted high grade geological solid for the Yampi Member, Hardstaff Peninsula region are included in Appendix 2.

Test work commences on concentrating (beneficiating) low grade iron

A consistent zone of mineralisation grading approximately 44-48% Fe and ranging from 40m to 60m in thickness encloses the interpreted high grade lenses. Mineralisation is associated with low concentrations of phosphorous (P), alumina (Al) and sulphur (S), with silica (SiO₂) being the predominant impurity.

Historic beneficiation test work undertaken on equivalent rocks from the region has yielded encouraging results using conventional methods.

Test work on material from Irvine Island will be focusing on the removal of silica to determine if iron mineralisation can be concentrated to a marketable grade fines product of >60% Fe.

This test work is targeting a further **15-20Mt** at a grade range of 44-48 % Fe from within the outline of the current Inferred Resource. Mineralisation remains open outside of this resource area.

Summary assay data from the interpreted low grade geological solid for the Yampi Member, Hardstaff Peninsula region are included in Appendix 3.

Rocks overlying the Yampi Member also contain additional mineralisation grading between 25-27% Fe. This is rock that would otherwise be mined as overburden or waste and is additional to that derived from the underlying Yampi Member. Extracting iron from overburden may have the additional benefits of reducing stripping ratios and increasing accessibility to both higher and lower grade iron lenses within the underlying Yampi Member.

It is anticipated that the benefits of the close proximity of ore to deep water, existing ports and Asian markets would offset any additional cost of concentrating iron mineralisation in any mining operation.

Initial testing of lower grade iron mineralisation from Irvine Island will be done at CSIRO's Iron Ore division in Brisbane. Test work has commenced using existing drill core.

The market will be informed of the results of test work in due course.

Ongoing exploration

Hardstaff Peninsula

The Inferred Resource outlined on Hardstaff Peninsula is limited only by the extent of the current drilling. Snowden and Pluton resources are confident that further drilling at Irvine Island will add to the existing resource.

It is anticipated that future drilling on Hardstaff Peninsula will be down dip and to the west of the existing Inferred Resource. Drilling will initially target **60-100Mt** of iron mineralisation grading (combined high and low grade lenses) 44-50% Fe, with mineralisation continuing to remain open at depth to the west and north.

Higher grade lenses of iron ore are also present within the Yampi Member on Hardstaff Peninsula and would be targeted as part of this drilling program. Results to date include;

Drill hole ID27, Hardstaff Peninsula

Interval (m)	From (m)	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	MgO %	S %	LOI %
15	68	62.5	9.6	0.18	0.007	0.03	0.010	0.74

Drill hole ID28, Hardstaff Peninsula

Interval (m)	From (m)	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	MgO %	S %	LOI %
9	178	60.67	13.7	0.14	0.011	0.29	0.040	0.00

Summary assay data from the interpreted high and low grade geological solids for the Yampi Member, Hardstaff Peninsula region are included in Appendices 2 and 3.

Unlike the nearby Cockatoo and Koolan Islands, mineralisation on Hardstaff Peninsula is oriented in such a way that sea-walls are not considered necessary for mining. Mineralisation is located less than 500m from deep water and existing shipping lanes.

Furthermore, a preliminary appraisal by Snowden of the shape and orientation of the mineralised layers on Hardstaff Peninsula indicates mineralisation accessible through underground mining is a valid exploration target.

The process of gaining approval for a second phase of drilling on Irvine Island commenced in 2008. To date, the Phase II drilling program has received approvals from the native title claimant group, the Mayala people and from the Minister of Indigenous Affairs.

Isthmus Region

Outcropping iron mineralisation at the Isthmus region (Figure 1) of Irvine Island is in addition to that at Hardstaff Peninsula and remains largely untested.

Mineralisation at the Isthmus is exposed at surface over an area of about 600m by 75m. However, only one hole has been drilled to date, with drilling abandoned in 2008 due to the onset of an early cyclone season. Results are encouraging with ID15 intersecting low impurity iron mineralisation from surface, including;

Drill hole ID15, Isthmus Region

Interval (m)	From (m)	Fe %	SiO₂ %	Al₂O₃ %	P %	MgO %	S %	LOI %
19	0 [#]	55	18	1.72	0.027	0.05	0.008	1.07

including;

Interval (m)	From (m)	Fe %	SiO₂ %	Al₂O₃ %	P %	MgO %	S %	LOI %
8	10	62.5	10.2	0.20	0.016	0.02	0.004	0.362

affected by surface weathering.

It is anticipated that drilling will recommence as part of a second phase of exploration on Irvine Island.

For more information contact Managing Director, Mr. Tony Schoer, on 0411 232 711.

Competency statement: The information in this statement that relates to Mineral Resources is based on information compiled under the direction of Michael Andrew, who is a member of the Australasian Institute of Mining and Metallurgy. Mr Andrew is a full time employee of Snowden Mining Industry Consultants. Mr Andrew 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'. Mr Andrew consents to the inclusion in the statement of the matters based on his information in the form and context in which it appears.

The information in this statement that relates to Exploration Results and Exploration 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 prospective for iron ore, where Pluton has earned a 50% interest from its joint venture partner Portman Iron Ore Limited. 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

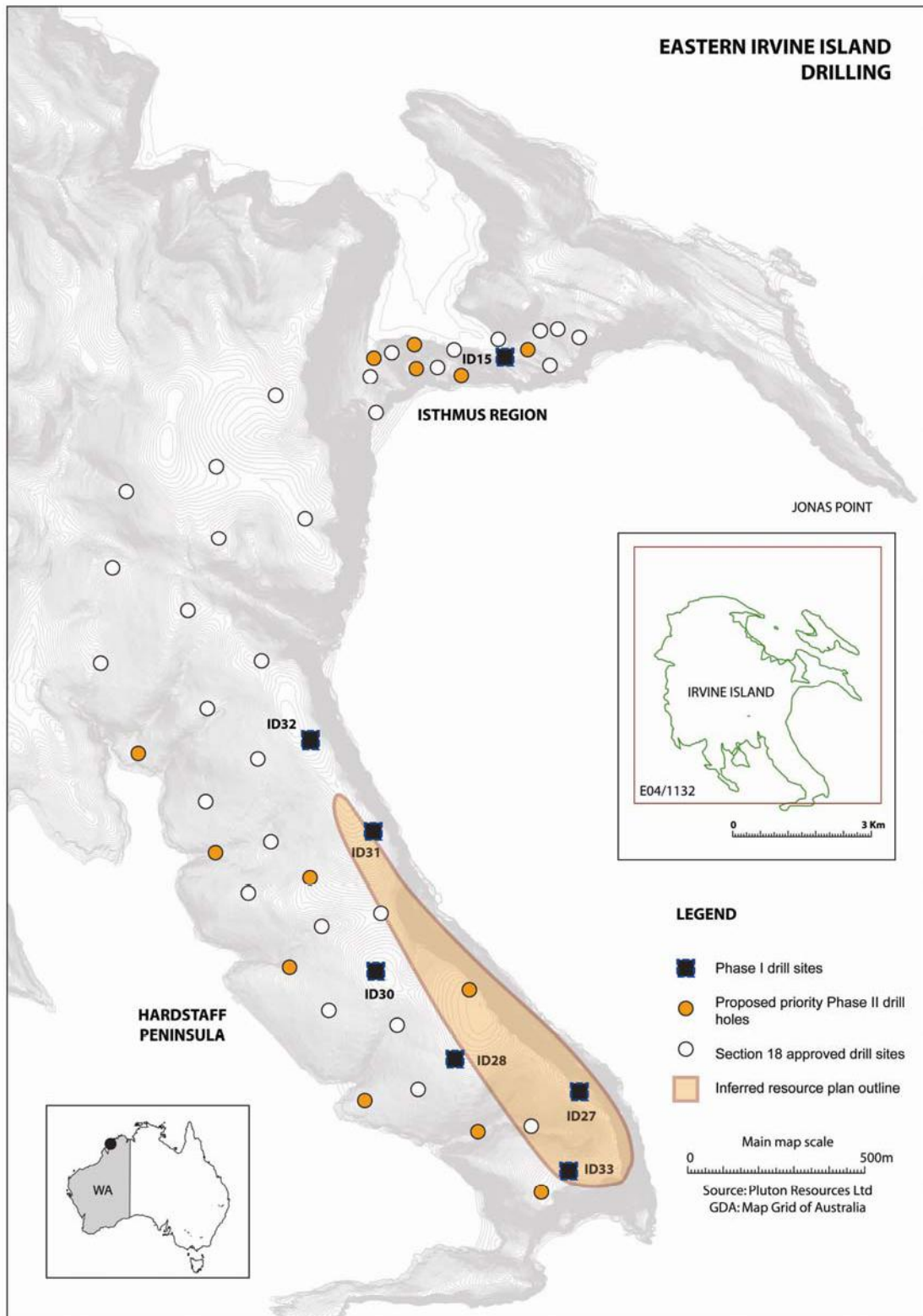


Figure 1. Map showing Inferred Resource plan outline, and drill holes by classification, Irvine Island, Western Australia.

Appendix 1

Background information and summary statistics of assay data for the Hardstaff Region, Irvine Island.

All information supplied to Snowden by Pluton Resources was reviewed, checked and imported into an Access database within Snowden's Brisbane office. Checks were completed against the original assay files supplied by Ultratrace Laboratories in Perth to ensure all assays were correct.

Following the data validation checks, geological interpretation was completed using all available assay, geophysical and logging data.

The interpreted high grade lenses (> 50 % Fe) which range in thickness from 10m to 20m, dip consistently 20-25 degrees to the southwest and outcrop on the eastern edge of Irvine Island. Geological interpretation has been based on information derived from 6 diamond drill holes spaced 200m to 400m apart and geological mapping undertaken over the Hardstaff region of Irvine Island. Drill hole sampling has been consistently completed at 1.0m lengths throughout the mineralised zones and core recovery averaged 90 %. The extrapolated grade and tonnage has been derived from the average assay and average density values of the 78 samples present within the interpreted high grade lenses (Table A1.1).

Geological logging and magnetic susceptibility measurements have identified the presence of magnetite within drill hole ID28 and drill hole ID30 at a vertical depth of approximately 200m. Mineralisation intersected above this depth in the other 4 drill holes is dominated by the presence of hematite. Current evidence from limited drilling suggests that the amount of magnetite increases with depth.

Table A1.1. Summary of assays within > 50 % Fe lenses

		Drillhole Samples	Minimum	Maximum	Mean	Median
1 Upper Lens	RECOVERY (%)	49	45	100	93	98
	Fe (%)	51	7.4	67.4	54.9	58.2
	FeO (%)	51	0.1	21.4	6.0	2.5
	SiO ₂	51	3.1	86.7	20.7	17.5
	P (%)	51	0.00	0.05	0.01	0.01
	Al ₂ O ₃ (%)	51	0.08	0.77	0.21	0.16
	MgO (%)	51	0.01	0.55	0.08	0.03
	S	51	0.00	0.33	0.04	0.01
	TiO ₂	51	0.01	0.65	0.12	0.11
	K ₂ O	51	0.00	0.21	0.01	0.00
	LOI	35	0.03	8.94	1.13	0.51
DENSITY (g/cm ³)	49	2.7	4.9	4.1	4.2	
2 Lower Lens	RECOVERY (%)	27	30	100	85	96
	Fe (%)	27	36.1	62.5	53.5	54.5
	FeO (%)	27	0.1	21.3	8.4	6.7
	SiO ₂	27	9.9	47.2	22.5	22.6
	P (%)	27	0.01	0.06	0.02	0.01
	Al ₂ O ₃ (%)	27	0.11	0.86	0.28	0.22
	MgO (%)	27	0.01	0.60	0.15	0.06
	S	27	0.01	0.24	0.05	0.03
	TiO ₂	27	0.07	0.45	0.18	0.16
	K ₂ O	27	0.00	0.02	0.00	0.00
	LOI	11	0.05	2.41	0.91	0.59
DENSITY (g/cm ³)	27	2.3	4.5	3.8	4.0	
Total	RECOVERY (%)	76	30	100	90	97
	Fe (%)	78	7.4	67.4	54.4	56.6
	FeO (%)	78	0.1	21.4	6.8	3.8
	SiO ₂	78	3.1	86.7	21.3	18.3
	P (%)	78	0.00	0.06	0.01	0.01
	Al ₂ O ₃ (%)	78	0.08	0.86	0.23	0.18
	MgO (%)	78	0.01	0.60	0.11	0.03
	S	78	0.00	0.33	0.04	0.02
	TiO ₂	78	0.01	0.65	0.14	0.12
	K ₂ O	78	0.00	0.21	0.01	0.00
	LOI	46	0.03	8.94	1.07	0.53
DENSITY (g/cm ³)	76	2.3	4.9	4.0	4.1	

Appendix 2

Summary assay data from an interpreted *high grade geological solid* for the Yampi Member, Hardstaff Peninsula region, Irvine Island, Western Australia.

	Hole	Interval (m)	From (m)	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	MgO %	S %	LOI %
Hardstaff	27	16	68	61.9	10.4	0.18	0.007	0.03	0.01	0.73
Hardstaff	28	11	176	59.9	14.9	0.15	0.011	0.29	0.057	0
Hardstaff	28	10	196	52.8	24.4	0.21	0.016	0.25	0.029	0
Hardstaff	30	5	190	56.7	18.4	0.15	0.013	0.01	0.022	0.23
Hardstaff	30	13	201	55.8	19.1	0.37	0.017	0.09	0.076	0.31
Hardstaff	32	5	216	54.7	20.6	0.19	0.017	0.01	0.004	0.77

Appendix 3

Summary assay data from an interpreted *low grade geological solid* (inclusive of the *high grade geological solid*) for the Yampi Member, Hardstaff Peninsula region, Irvine Island, Western Australia.

	Hole	Interval (m)	From (m)	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	MgO %	S %	LOI %
Hardstaff	27	24	67	55.5	19.5	0.2	0.007	0.03	0.017	0.73
Hardstaff	28	38	168	49	29.5	0.27	0.016	0.34	0.147	0.13
Hardstaff	30	32	185	49.3	28.7	0.28	0.014	0.07	0.06	0.2
Hardstaff	31	17	160	43	36.5	0.3	0.014	0.04	0.006	1.03
Hardstaff	32	15	213	47.4	29.9	0.78	0.016	0.03	0.065	0.74
Hardstaff *	33	3	119	48.4	28.9	0.19	0.013	0.01	0.297	9.41

*abandoned at the top of the Yampi Member.