

# ASX and Media Release

## Quarterly activities report December quarter 2007

Western Plains Resources Ltd (ASX:WPG) completed a bankable feasibility study for the Peculiar Knob direct shipping iron ore project in South Australia in September 2007. Since then, fine tuning of the proposed operating plan has been commenced, and engineering design work for the mine site, haul road, crusher and rail loadout facility has commenced. As the Port of Whyalla will not be available in the short term, alternative port option solutions are now under consideration. The drilling program that began at Hawks Nest in October 2007 is continuing, with encouraging results. In addition, good water flows from basement fractures have been reported.

### HIGHLIGHTS

- ❖ The bankable feasibility study (**BFS**) for the Peculiar Knob direct shipping iron ore (**DSO**) project was completed during September 2007 and engineering design work for project development has commenced.
- ❖ The Peculiar Knob mining lease is expected to be granted during the current quarter. Miscellaneous Purposes Licence applications for key infrastructure will be lodged shortly.
- ❖ Changes have been made to the proposed operating plan since the BFS was completed that provide for a higher production rate, a smaller footprint at the mine site, an optimised camp site with better water facilities, and a crushing plant site that is better suited to possible simultaneous mining operations at Peculiar Knob and Hawks Nest.
- ❖ The current drilling program at Hawks Nest has returned encouraging results from the Tui and Buzzard DSO prospects, and good water flows from basement fractures have been recorded.

30 January 2008



**Western Plains  
Resources Ltd**

ABN 51 109 426 502

Level 9, Kyle House

27-31 Macquarie Place

Sydney NSW 2000

Telephone (+612) 9251 1044

Facsimile (+612) 9247 3434

[info@westernplainsresources.com.au](mailto:info@westernplainsresources.com.au)

[www.westernplainsresources.com.au](http://www.westernplainsresources.com.au)

## CORPORATE

### Project Funding

On 12 November 2007 WPG announced that it had secured a \$115 million funding package from Xin Sheng International Private Limited, a Singapore company, for the development of the Peculiar Knob project. In light of the Whyalla access issue (see below), the Company will renegotiate this agreement.

## SOUTH AUSTRALIAN DSO IRON ORE PROJECT

WPG's iron ore projects in South Australia lie on the Peculiar Knob tenement, RL 103, for which the draft mining lease application was lodged in May and the final application in August 2007, and the Hawks Nest tenement, EL 3196 within which two mineral claims, MCs 3809 (Kestrel) and 3810 (Buzzard), have been granted. WPG holds its interests in these tenements through its 100% owned subsidiary Southern Iron Pty Ltd.

### Peculiar Knob Feasibility Study

The Company completed the BFS in September 2007. The BFS envisaged the development of a stand-alone open pit mining project at Peculiar Knob with product being exported to Chinese markets through the Port of Whyalla.

As set out in the BFS, the identified mineral resource estimate for Peculiar Knob is as shown in Table 1. This estimate was prepared using a 55% Fe cut-off grade.

**Table 1**  
**Mineral Resource Estimate – Peculiar Knob**

Category	Million Tonnes	Fe %	P %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %
Measured resource	13.4	63.7	0.01	7.4	0.3	0.5
Indicated resource	4.1	63.4	0.02	8.2	0.2	0.4
Inferred resource	1.5	64.5	0.02	6.0	0.3	0.3
Total resource	19.0	63.7	0.02	7.5	0.3	0.5

The ore reserve estimate for the open pit mine is shown in Table 2.

**Table 2**  
**Ore Reserve Estimate – Peculiar Knob**

Category	Million Tonnes	Fe %	P %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %
Proved ore reserve	13.1	62.7	0.01	7.1	0.3	0.5
Probable ore reserve	2.3	63.0	0.01	7.0	0.2	0.5
Total ore reserve	15.4	62.7	0.01	7.1	0.2	0.5

Capital and operating cost estimates for the project were set out in the Company's ASX releases of 24 September and 25 October 2007.

## Port Options

The BFS was prepared under the assumption that access to the Port of Whyalla would be granted as anticipated. As set out in the Company's ASX release of 20 December 2007, the port's owner advised three days earlier that it was not prepared to make early access available to WPG. This came as a great surprise to the Company as it was contrary to all indications received over the previous 11 months. WPG is disappointed with this decision as the port is an under-utilised asset. The decision will likely impact the development of a number of bulk commodity projects in South Australia in addition to WPG's. WPG hopes that the port's owner can be persuaded to reverse this decision.

WPG has been very active since late December assessing alternative port options. Port Pirie is a possibility, but there is a shortage of suitable land there on which to construct a large storage shed, the rail line to the port area is close to the CBD, and the distance to the transshipment point in Spencer Gulf is much further than from Whyalla. Darwin is also a possibility and the Darwin port authorities are keen to secure new business. However the rail freight for the 2,200 km trip to Darwin is high when compared with the approximately 600 km trip to the southern ports of Whyalla, Port Pirie or Port Bonython. Recent ship charter rates have been at record high levels and the shorter sea voyage to China from Darwin makes Darwin an attractive alternative option on a landed cost basis under current conditions. However these high ship charter rates are not expected to persist for more than a few years, by which time a southern port will offer the lowest operating costs, both on an FOB and a CIF basis.

Port Bonython is about 30 kilometres from Whyalla, as shown in Figure 1. It is currently used for the export of crude oil and LPG from the Cooper Basin. The existing 2 km jetty allows for the berthing of Capesize vessels. It could easily be connected to the existing standard gauge rail network. Several other land-use issues need to be addressed before Port Bonython can be developed for the export of dry bulk commodities.



**Figure 1**  
**Port Bonython and Whyalla Port Areas**

## **Developments Since Completion of BFS**

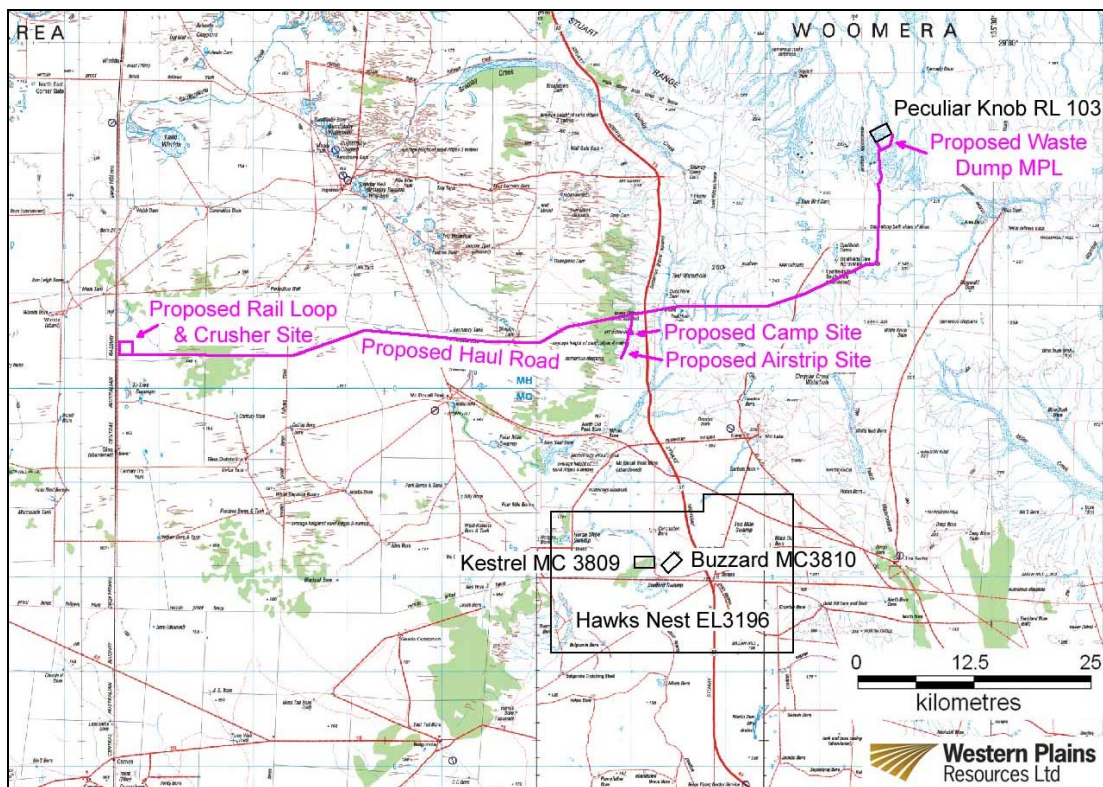
Since the completion of the BFS, the Company has fine-tuned its proposed operating plan, with the key changes being:

- An increase in the mining rate to 3 mtpa;
- An increase in projected sales to 3 mtpa, in line with production volumes and rail capacity;
- The camp site has been moved from within the proposed mining lease at Peculiar Knob to a site closer to Hawks Nest with the advantage, amongst other things, that the operation will have a smaller footprint in the sensitive mesa country near the mine;
- The new camp site is closer to the sealed Stuart Highway, provides for a better living environment, is better located in relation to water sources, and is closer to the centre of gravity of the mine and crushing plant site; and



- A new haul road alignment has been designed (and is presently being surveyed in the field) that will facilitate easier road construction than the previously proposed route from the mine to Wirrida siding.

The current site infrastructure proposal is shown in Figure 2.



**Figure 2**  
**Proposed Infrastructure for the Peculiar Knob Mine**

Engineering design work has commenced for the mine site, camp, haul road, crushing plant and rail loadout facility. Design work for the infrastructure at Whyalla, including the rail loop, tip pocket, storage shed, barge loader and associated conveyor systems has been suspended.

The Company is also studying the costs and benefits of increasing the capacity of the crushing plant by 50% to 4.5 mtpa to enable simultaneous DSO operations at Peculiar Knob and Hawks Nest.

## Other Issues

### *Native Title*

The Company's mining agreement with the Antakirinja Matu-Yankunytjatjara native title claim group and other key parties has been registered.

### ***Mining Lease and Other Tenements***

WPG expects its application for a mining lease at Peculiar Knob will be granted during the current quarter.

Miscellaneous Purpose Licence applications for the proposed waste dump, haul road and crushing plant site will be lodged during the current quarter.

### ***Contractor Negotiations***

The Company remains well advanced with its commercial negotiations with a number of key parties including mining contractors, trucking and rail haulage operators but is unable to complete these negotiations and award contracts until the port access issue is settled.

### ***Department of Defence***

Discussions and negotiations with the Department of Defence for access for mining purposes to the Woomera Prohibited Area are continuing.

### ***Development Timetable***

WPG had previously expected that the mine will be in production during the current calendar year with exports commencing early in 2009. This expectation assumed that access to the Port of Whyalla would be granted as anticipated.

Until the port issue is settled the Company is unable to provide guidance on the likely development timetable.

### **Hawks Nest DSO**

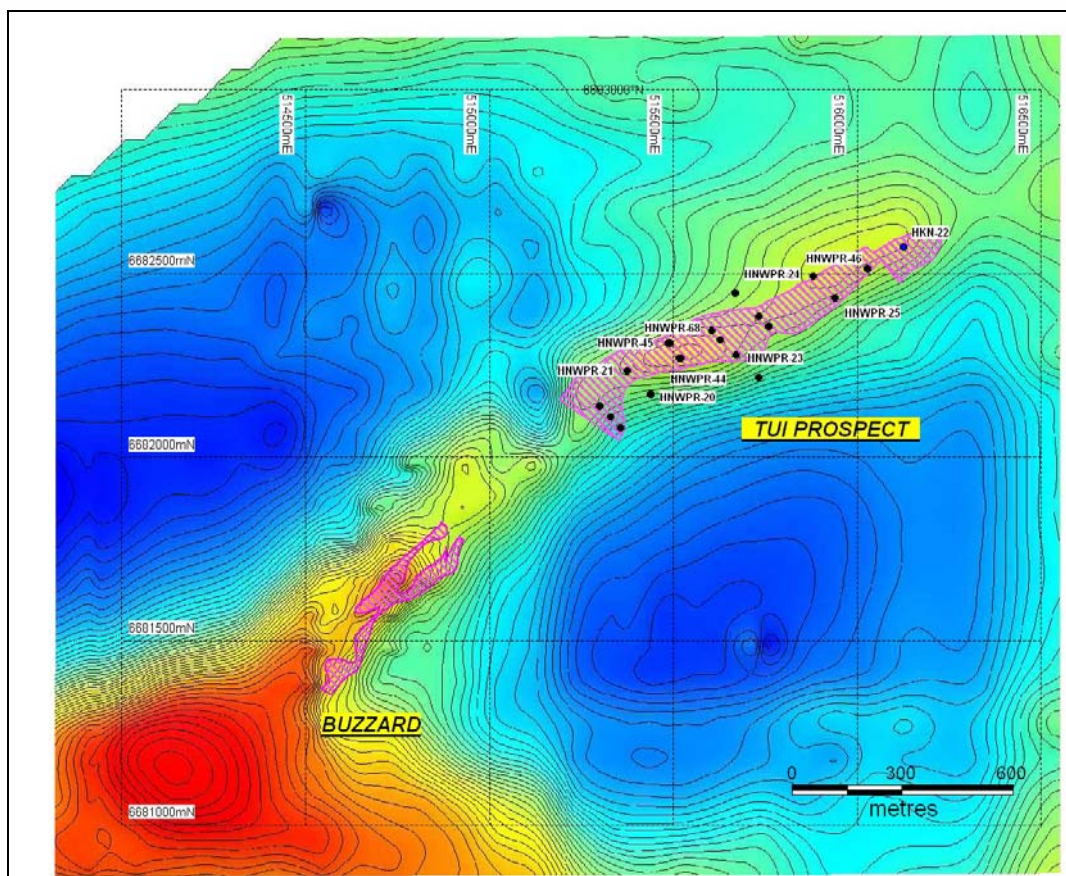
Haematite deposits have been drilled in the past at the ***Buzzard prospect*** at Hawks Nest. The identified mineral resource estimate for Buzzard is set out in Table 3. As with Peculiar Knob, this estimate is based on a 55% Fe cut-off grade.

**Table 3**  
**Mineral Resource Estimate – Buzzard**

Category	Million Tonnes	Fe %	P %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %
Measured resource	2.1	61.7	0.03	9.3	1.1	0.8
Indicated resource	4.5	59.8	0.05	11.1	1.4	1.1
Inferred resource	2.5	59.2	0.06	9.7	2.6	2.0
Total resource	9.1	60.1	0.05	10.3	1.7	1.3

WPG commenced an RC percussion and diamond drilling program in late October 2007 with the objective of locating and defining additional DSO hematite mineralisation. To date a total of 50 holes for 6,900 metres have been completed. The program will continue until late February 2008.

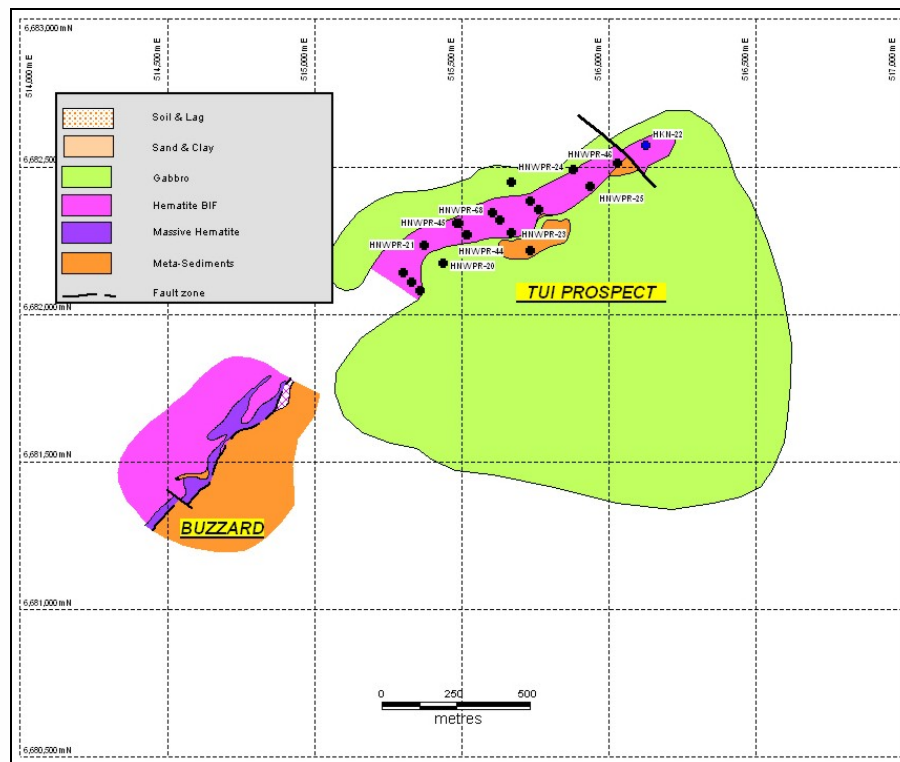
Drilling in the area north east of the Buzzard DSO deposit has located a new large zone of hematite BIF at the **Tui prospect**. This target was identified following a review of past drilling information, and analysis of geophysical data. A residual gravity map for the Buzzard-Tui area showing the target zones is shown in Figure 3, and the interpreted bedrock geology is shown in Figure 4.



**Figure 3**  
**Buzzard-Tui Area – Residual Gravity**

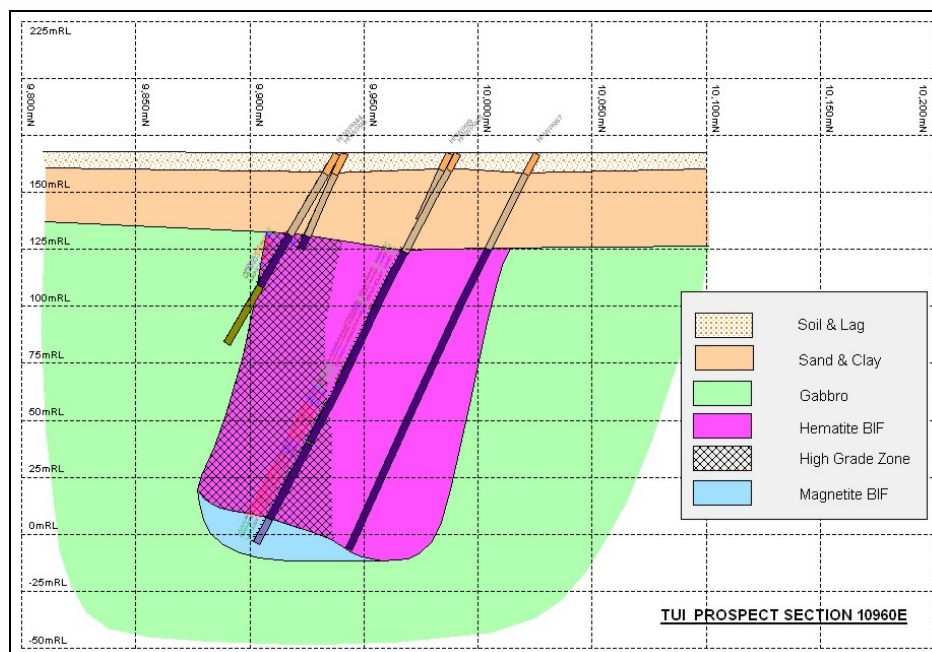
The Tui mineralisation appears to be contained within a graben-like structure formed by a large gabbro intrusion. It has a northeast-southwest strike direction and residual gravity data indicates it is most likely a continuation of the hematite BIF and massive hematite zone at Buzzard. The overall tenor of the mineralisation intersected in the 7 holes at Tui for which results have been received to date is in the range of 35-45% Fe, but a zone of high grade, potential DSO material, was recorded from holes HNWPR-44 (18 metres averaging 55.6% Fe) and HNWPR-45 (64 metres averaging 61.3% Fe). This high grade mineralisation is located along the southern contact of the Tui structure and has been followed up with an additional 11 holes for which assay results have yet to be received.





**Figure 4**  
**Buzzard-Tui Area – Interpreted Bedrock Geology**

A cross section through one of the drill traverses at Tui is shown in Figure 5.



**Figure 5**  
**Tui Prospect – Drill Section 10,960 mE**



Nineteen RC percussion holes for 2,835 metres have been completed at the Buzzard prospect. This drilling was designed to test for extensions to the known mineralisation at both ends of the deposit and to provide additional geological and assay information in key areas. Results will enable better geological definition and an upgrade in the status of the known resource. Three large diameter diamond core holes are also planned to provide samples for metallurgical testwork and to provide structural information for rock mechanics studies. The most significant results received to date from the Buzzard drilling during the current program are as follows:

- HNWPR-39                      80 metres averaging 65.8% Fe
- HNWPR-50                    26 metres averaging 65.4% Fe
- HNWPR-52                    30 metres averaging 63.3% Fe
- HNWPR-55                    46 metres averaging 61.1% Fe

Results to date have closed off the high-grade massive hematite zone at the north eastern end of the deposit however the south western end remains open and further drilling is continuing in this area.

A program of 8 shallow RC percussion holes for 486 metres has been completed at the **Kite prospect**. These holes were designed to follow up the encouraging results received from hole HNWPR-6 (12 metres averaging 63.1% Fe) drilled by WPG earlier in 2007. Assay results for the samples from these holes are expected during the current quarter.

Summary results for the holes for which assays have been received are listed in Table 4 (Tui) and Table 5 (Buzzard).

Significant intervals of hematite BIF were intersected in holes HNWPR-58 and HNWPR-59 drilled in a new area located 450 metres south east of the Buzzard deposit. These holes were designed to follow up a high grade intersection (20 metres averaging 57.6% Fe) made in one drill hole (HKN-108) drilled by a previous explorer. Assay results are expected to be received during the March quarter.

Significant quantities of water have been intersected in 19 of the 50 holes so far drilled at Hawks Nest. In some instances the volume of water resulted in the early termination of the hole due to the inability of the air pressure to lift the heavy wet cuttings from the bottom. The majority of this water is located in fractures and faults within the Proterozoic bedrock. The water contained in these structures may be of sufficient quality and quantity to provide potable and process water for development of the DSO project.

WPG has completed a detailed low-level aeromagnetic and radiometric survey over a large area of EL 3196 using a fixed wing aircraft. Results of this survey will be used to assist with the definition of the bedrock geology and to define new targets for DSO hematite and magnetite mineralisation.

**Table 4**  
**Significant Intersections - Tui**

Hole	East m	North m	Depth m	From m	To m	Interval m	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %
HNWPR-8	515515	6682270	46	40	46	6	50.7	23.6	1.08	0.05	1.41
HNWPR-20	515438	6682172	200	112	178	66	34.3	49.9	0.53	0.02	2.21
HNWPR-21	515374	6682235	108	68	98	30	39.4	43.3	0.16	0.01	0.28
HNWPR-22	515628	6682320	168	54	140	86	41.3	39.7	0.66	0.02	0.26
HNWPR-23	515670	6682278	200	54	200	146	40.2	41.3	0.54	0.02	0.21
HNWPR-25	515938	6682434	150	50	96	46	37.6	45.0	0.54	0.01	0.43
HNWPR-44	515520	6682270	96	44	62	18	55.6	16.2	0.63	0.02	2.02
HNWPR-45	515485	6682310	192	52	182	130	52.4	24.3	0.64	0.02	0.66
			Incl.	118	182	64	61.3	12.6	0.61	0.02	0.61
HKN-22*	516126	6682573	150	140	150	10	57.7	16.2	0.43	0.02	0.08

**Table 5**  
**Significant Intersections - Buzzard**

Hole	East m	North m	Depth m	From m	To m	Interval m	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	LOI %
HNWPR-36	514708	6681630	192	16	34	18	60.8	8.2	2.71	0.02	1.45
HNWPR-38	514802	6681704	210	48	64	16	52.7	20.6	1.78	0.05	1.56
				81	98	17	52.5	23.0	0.72	0.04	0.74
				126	147	21	56.7	15.2	1.70	0.06	1.19
HNWPR-39	514886	6681620	192	78	158	80	65.8	2.7	1.39	0.11	0.57
				172	189	17	55.3	16.1	1.74	0.22	0.76
HNWPR-41	514868	6681726	210	126	134	8	62.6	9.0	0.51	0.02	0.56
HNWPR-42	514960	6681718	144	106	110	4	57.2	5.4	3.36	1.25	2.31
HNWPR-43	514900	6681778	210	202	210	8	60.5	17.2	0.85	0.28	5.86
HNWPR-50	514495	6681303	210	52	78	26	65.4	3.8	0.87	0.04	0.95
				132	142	10	60.4	12.5	0.15	0.04	0.62
HNWPR-52	514530	6681340	78	24	54	30	63.3	3.9	2.21	0.01	2.62
HNWPR-53	514571	6681297	150	130	140	10	47.5	29.6	1.49	0.04	0.51
HNWPR-54	514569	6681369	86	20	34	14	57.3	7.8	4.40	0.02	5.04
HNWPR-55	514607	6681333	162	96	106	10	62.1	5.9	2.90	0.07	0.78
				110	156	46	61.1	6.8	2.92	0.04	0.78
HNWPR-56	514650	6681358	156	128	147	19	61.1	5.08	2.64	0.22	1.42
HNWPR-57	514684	6681396	102	80	93	13	61.0	4.9	2.82	0.02	1.75

## SOUTH AUSTRALIAN MAGNETITE PROJECT

### Hawks Nest

Mineral resource estimates for the Hawks Nest magnetite deposits, as previously reported, are shown in Table 6.

**Table 6**  
**Mineral Resource Estimates – Magnetite Deposits**

Deposit	Category	Million Tonnes	Fe %	P %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %
Kestrel	Measured resource	100	37	0.06	37	0.83	0.58
	Indicated resource	60	36	0.06	38	1.00	0.79
	Inferred resource	60	36	0.06	39	1.05	0.78
	Total resource	220	36	0.06	38	0.94	0.69
Goshawk	Inferred resource	148	35	-	-	-	-
Harrier	Inferred resource	54	35	-	-	-	-
Eagle	Inferred resource	92	31	-	-	-	-
Kite	Inferred resource	30	51	-	-	-	-
Falcon	Inferred resource	25	32	-	-	-	-
Total measured, indicated and inferred resource		569	35	-	-	-	-

Reviews of previous testwork suggest that the deposits have favourable metallurgical characteristics. When it comes to grind size, iron recovery, mass recovery to concentrate, and iron concentrate grade, the deposits are expected to perform well.

Wire frame models have been built for the Kestrel deposit and consultants have been engaged to prepare metallurgical flowsheets as part of a study now underway for the possible development of a magnetite project at Hawks Nest. A scoping study will be completed during the current quarter.

## **COPPER/GOLD EXPLORATION PROJECTS**

### **Trundle NSW**

EL 4512 – WPG 100%

WPG has farmed-out the Trundle project to Calibre Mining (Australia) Pty Ltd, a wholly owned subsidiary of Canadian company Calibre Mining Corporation that is listed on the TSX Venture Exchange. The Company considers that this region of Ordovician shoshonitic andesitic volcanics and associated intrusions still has considerable potential for the discovery of significant porphyry copper-gold deposits similar to those at Northparkes, Cadia and Cowal. Calibre will manage the joint venture and is committed to conduct a significant amount of drilling during the first year of operation.

EL 6655 Yarrabandai was relinquished during the quarter.

### **Peak Hill East NSW**

ELs 6342 and 6675 – WPG 100%

Discussions with potential joint venture partners for the two Peak Hill tenements continued during the quarter.



**Lake Cargelligo NSW**  
**Euriowie NSW**EL 6367 – WPG 100%  
EL 5771 – WPG 60%

No field work was carried out on the Lake Cargelligo or Euriowie project areas during the December quarter. The Company is seeking joint venture partners for these projects.

EL 6530 Shepherds Hill and EL 6188 Para Bore were relinquished during the quarter.

**Competent Persons**

*The review of exploration activities and results and the mineral resource estimates for the Peculiar Knob deposit contained in this report are based on information compiled by Mr Gary Jones, a Member of the Australasian Institute of Mining and Metallurgy. He is Technical Director of Western Plains Resources Limited and a full time employee of Geonz Associates Limited. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Gary Jones has consented in writing to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

*The ore reserve estimate for the Peculiar Knob deposit contained in this report is based on information compiled by Mr John Wyche, a Member of the Australasian Institute of Mining and Metallurgy. He is a director of Australian Mine Design and Development Pty Ltd. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). John Wyche has consented in writing to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

*The mineral resource estimate for the Buzzard deposit contained in this report is based on information compiled by Mr Arnold van der Heyden, a Member of the Australasian Institute of Mining and Metallurgy. He is an employee of Hellman & Schofield Pty Ltd. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Arnold van der Heyden has consented in writing to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

**Further Information**

For further information please contact WPG's Executive Chairman Bob Duffin, on (02) 9251 1044 or 0412 234 684, or Heath Roberts, Executive Director and Company Secretary on (02) 9247 7359 or 0419 473 925.