

ASX and Media Release

Quarterly activities report March quarter 2010

HIGHLIGHTS

- ❖ The Company, Western Plains Resources Ltd (ASX:WPG), has strengthened its balance sheet by raising approximately \$12.6 million prior to costs.
- ❖ The final access and compensation agreement for the development of the Company's flagship DSO iron ore mine at Peculiar Knob has been signed.
- ❖ A further program of drilling for exploration and metallurgical testwork purposes has been completed at Peculiar Knob and the results are now being assessed.
- ❖ Flinders Ports' feasibility study for the use of Port Pirie for the export of iron ore from Peculiar Knob is progressing well and the results are to be presented to the Company early in the June quarter.
- ❖ WPG's goal of having Peculiar Knob fully permitted and financed so that a commitment to project development can be taken early in H2 2010, with sales to commence no more than 12 months later, is on track.
- ❖ A drilling program to better outline the Penrhyn coal deposit has been completed and its results will be assessed when all coal quality analyses are to hand.
- ❖ Applications have been lodged for two new coal exploration licences.
- ❖ The Department of Defence has extended WPG's Hawks Nest access agreement to 28 August 2010.
- ❖ WPG understands the Commonwealth's review of the conditions under which mining activities can be undertaken inside the Woomera Prohibited Area is underway but does not know when it will be finished.

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CORPORATE

Capital Raising

WPG placed 15.8 million new shares to sophisticated and professional investors during April that raised approximately \$12.6 million before costs. Funds raised will strengthen the Company's balance sheet and will be used to advance the Company's flagship Peculiar Knob DSO iron ore project south east of Coober Pedy in South Australia towards development.

SOUTH AUSTRALIAN PROJECT ASSETS

The locations of the Company's South Australian project assets are shown in Figure 1. This drawing shows the Company's granted tenements and also those either under application or subject to an acquisition option held by WPG.

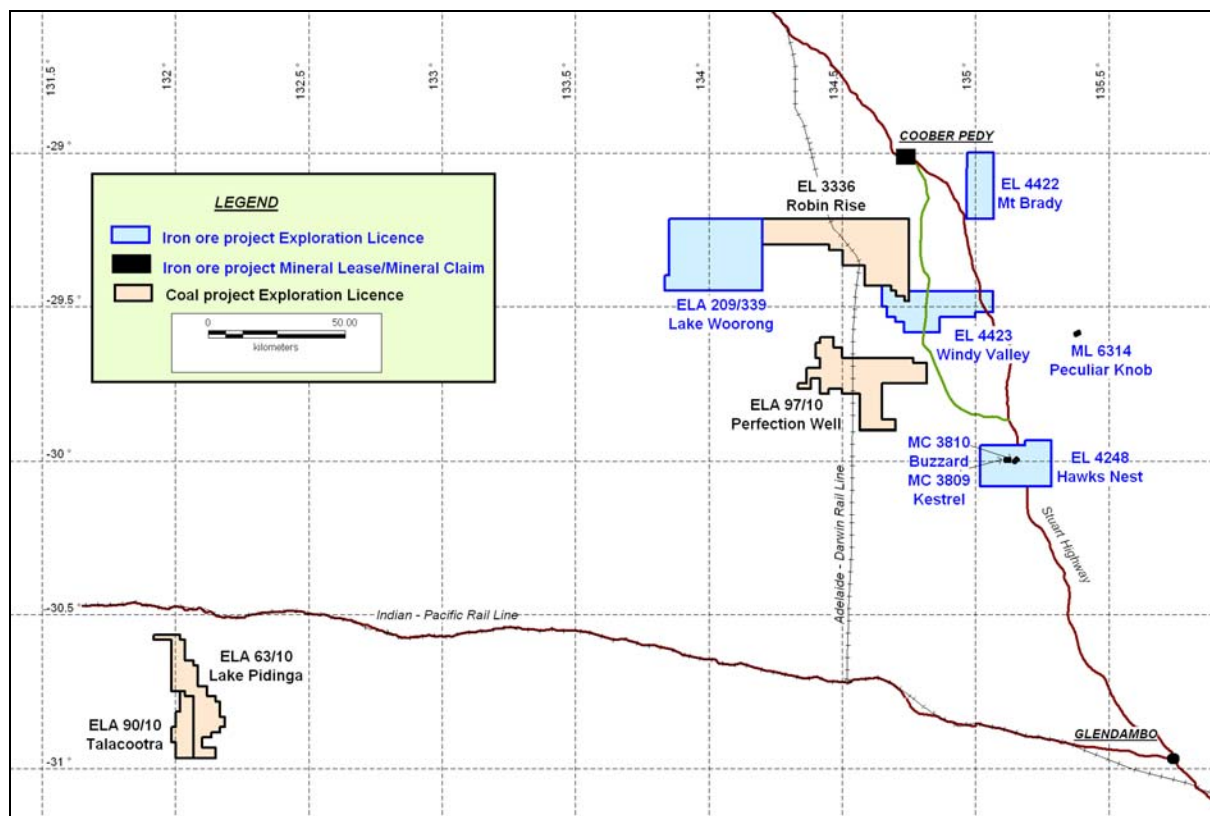


Figure 1
Location of WPG's Project Assets in South Australia

SOUTH AUSTRALIAN DSO IRON ORE PROJECT

WPG's direct shipping (**DSO**) iron ore projects in South Australia lie on the Peculiar Knob mineral lease, ML 6314 and on the Buzzard mineral claim MC 3810 at Hawks Nest. WPG holds its interests in all these tenements through its 100% owned subsidiary Southern Iron Pty Ltd.

The locations of these tenements and the infrastructure required to enable the development of the Peculiar Knob deposit are shown in Figure 2.

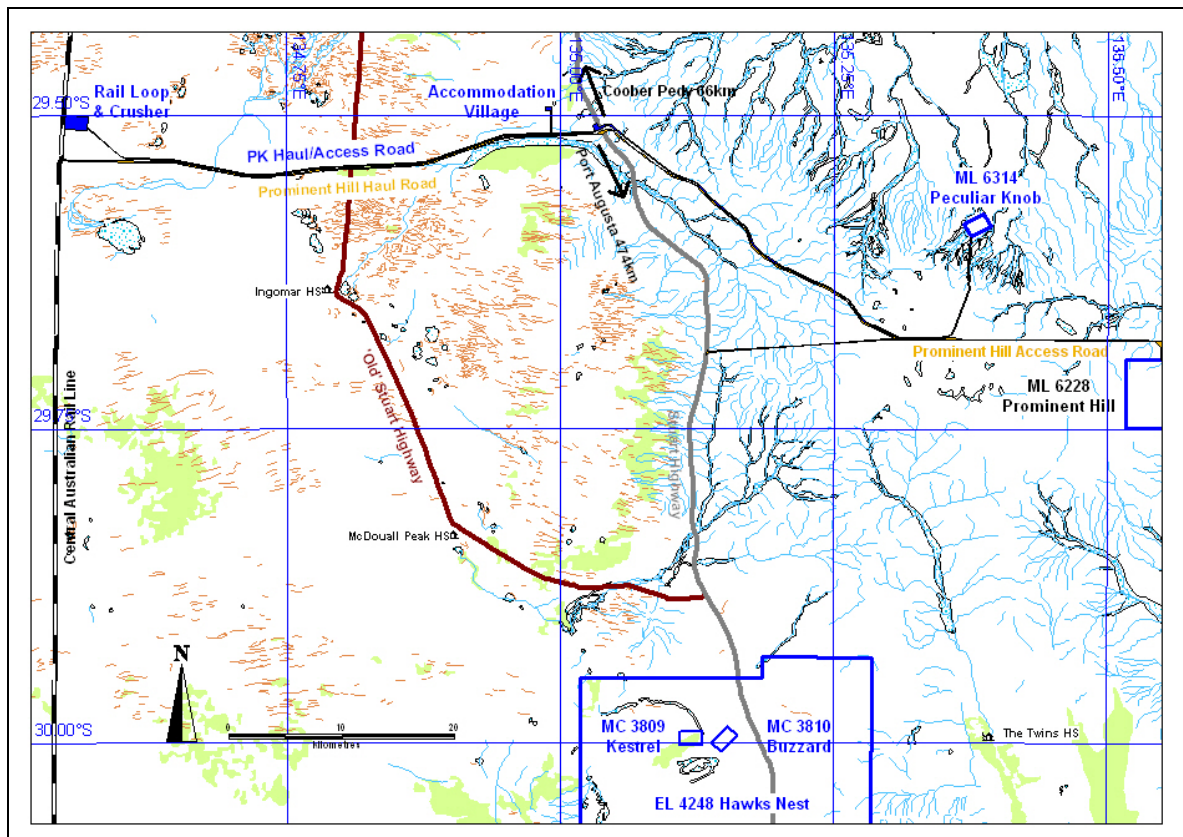


Figure 2
Peculiar Knob Tenement Locations and Proposed Infrastructure

March quarter exploration drilling program

Five exploration RC holes for a total of 891 metres were drilled at Peculiar Knob during the quarter at the north-eastern end of the deposit to test a revised geological interpretation that the massive haematite lode had been offset to the north-west by cross faults. All of the holes intersected narrow intervals of massive haematite mineralisation interspersed with intervals of granite and magnetite quartzite. Results have confirmed the interpretation. The thickness and continuity of the mineralisation indicates that the orebody has tapered down at this end.

Summary assays for holes PK-111 to PK-114 are set out in Table 1. Assays for six one metre samples for the interval 65 – 71 metres from hole PK-115 are still outstanding.

Table 1
Peculiar Knob DSO Haematite Project
2010 RC Drilling - Mineralised Intersection Summary

Hole Number	Grid East m	Grid North m	Depth m	From m	To m	Interval m	Fe %	SiO2 %	Al2O3 %	P %	LOI %
PK-111	10550	10113	180	123	125	2	55.8	14.7	1.11	0.04	2.65
				138	144	6	63.8	7.1	0.18	0.01	0.85
				146	148	2	45.2	29.7	0.66	0.09	2.83
				152	157	5	46.9	20.5	2.11	0.12	5.85
PK-112	10550	10168	246	52	61	9	49.8	25.1	0.71	0.02	1.43
				66	70	4	57.6	15.0	0.01	0.02	0.60
			Incl.	66	69	3	63.5	7.7	0.37	0.02	0.45
				73	81	8	51.0	24.5	0.84	0.03	0.41
PK-113	10550	10212	165	129	131	2	63.8	8.3	1.02	0.03	-2.23
				135	137	2	59.9	12.4	0.50	0.06	0.11
PK-114	10600	10179	120	97	101	4	62.2	8.3	0.40	0.03	0.84

Metallurgical drilling program

Five large diameter (PQ) inclined diamond core holes for a total of 607.1 metres were drilled into the upper part of the Peculiar Knob orebody during the quarter. These holes were designed to provide supplementary geological information and to obtain samples for additional metallurgical test work. The grid location of the holes and the intervals of massive haematite mineralisation that were intersected are shown in Table 2.

Table 2
Metallurgical Drilling Program

Hole Number	Grid East m	Grid North m	Depth m	From m	To m	Interval m
PK-106	9600	9988	104.6	79.54	96.68	17.14
PK-107	10000	9946	104.6	45.62	75.02	29.40
				77.20	101.24	24.04
PK-108	10150	10035	163.3	33.80	39.16	5.36
				43.87	58.87	15.00
				122.04	159.98	37.94
PK-109	10250	10062	88.0	52.66	71.89	19.23
PK-110	10400	10048	146.6	68.94	72.20	3.26
				84.30	97.30	13.00
				104.70	138.83	34.13

All mineralised core has been sent to Amdel Laboratories in Perth where the program of metallurgical testing and assaying has commenced. There was a total of 198.5 metres of massive haematite that weighed 5,703.8 kg recovered from the five holes.

The revised geological map of the deposit that incorporates the results of this recent drilling program is shown in Figure 3.

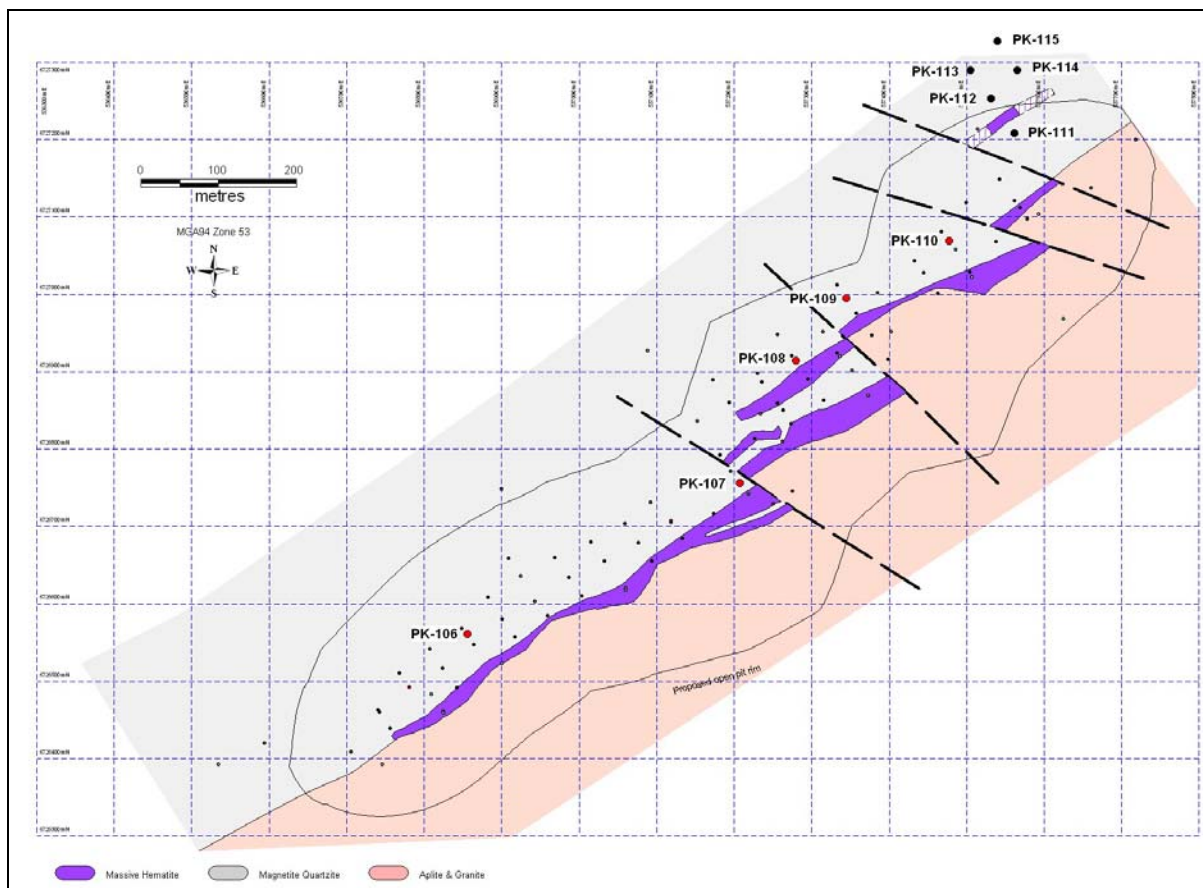


Figure 3
Peculiar Knob Drilling Program and Geology

Magnetic susceptibility

Magnetic susceptibility readings were carried out on 1 metre samples from all the recently completed drilling and previous RC and geotechnical diamond holes drilled by WPG. The data comprising 8,855 individual readings has been edited and added to the Peculiar Knob data base. Results will be evaluated during the June quarter.

Exploratory water drilling

Five exploratory water bores were completed during the quarter. The objective of this program was to locate additional water to supplement that in the Company's licensed Stafford borefield at Hawks Nest and to be used principally for dust suppression purposes. Three of the test sites were based on recommendations by the Company's hydrological consultants and were located along the route of the planned Peculiar Knob haul road. Water was located at two of the sites and the holes were cased in preparation for pump testing planned to be carried out during the June quarter.

Final access and compensation agreement with pastoralist

During the quarter the Company signed the last of the access and compensation agreements for the development of the Peculiar Knob mine. This agreement relates to the mine itself, the haul road generally east of the Stuart Highway, and the Stafford borefield at Hawks Nest.

Port Pirie

WPG and Flinders Ports Pty Ltd entered an MOU agreement for the interim handling, storage and shiploading of iron ore from Peculiar Knob early in the quarter.

Pursuant to the MOU agreement, the parties will cooperate to develop a detailed set of protocols backed by appropriate contracts between them for the export of ore through Port Pirie or Port Adelaide, existing ports owned by Flinders Ports, before the end of H1 2010.

Flinders Ports is responsible for facilitating all third party and regulatory approvals necessary to give effect to the agreement.

WPG understands that Flinders Ports is making good progress with its Port Pirie feasibility study and that it will present its preliminary findings early in the June quarter.

WPG still believes that a new iron ore export facility should be built at Port Bonython but is not prepared to wait until it becomes available before developing Peculiar Knob.

Logistics proposals

WPG called for proposals from rail operators and transshipment contractors during the quarter. The Company has drawn up short lists of preferred tenderers and has commenced detailed negotiations with them.

Indicative development timetable

WPG's strategy to have Peculiar Knob fully permitted and financed so that the decision to commit to project development can be taken in H2 2010 remains on track. Sales are projected to commence no more than 12 months later.

SOUTH AUSTRALIAN MAGNETITE PROJECT

The Company's magnetite project in South Australia lies on the Hawks Nest exploration licence EL 4248 and the Kestrel mineral claim MC 3809, both of which are subject to the WISCO joint venture. These tenements are also owned by Southern Iron Pty Ltd.

No technical work was conducted on this project and its technical status remains as summarised in the Company's June 2009 quarterly report.

Hawks Nest access agreement

During the quarter the Department of Defence extended WPG's access agreement for exploration activities at Hawks Nest until 28 August 2010.

WISCO joint venture

WPG and WISCO have agreed to a further extension to the period in which all of the conditions precedent must be satisfied in order for the joint venture between them to proceed. The extended period now expires on 31 August 2010.

Commonwealth of Australia – whole of Government review of exploration and mining activities inside the WPA

WPG understands that the Commonwealth has appointed an eminent person to review of the rules of engagement for future exploration and mining activities in the WPA. WPG does not know when this review will be finalised.

WPG continued its advocacy program during the quarter that's designed to assist Defence and other Commonwealth departments and agencies to understand the likely size and scale of the Hawks Nest magnetite project if it proceeds and its economic impact on South Australia's and the Commonwealth's revenues, job creation opportunities, its impact on the development of infrastructure (including its role in underpinning the development of the iron ore export facility at Port Bonython) in rural and remote parts of the state, and the importance of the royalty revenue stream to the well being and future development of the native title claimants on whose land the project lies.

WPG is convinced that mining and Defence activities can coexist within all parts of the WPA.

NORTHERN GAWLER CRATON EXPLORATION PROJECT

Mt Brady Windy Valley

Exploration licences 4422 Mt Brady and 4423 Windy Valley have been granted by PIRSA.

A site visit was made to the Mt. Brady prospect during the quarter and all of the collar positions of the previous drill holes have been located in the field. Preliminary discussions have been held with several potential joint venture farm-in partners for the Mt Brady project. Both tenements cover zones of complex magnetic character that indicate potential for banded iron formation and DSO haematite iron ore deposits. A review of previous company and government geophysical survey data will be completed during the June quarter.

SOUTH AUSTRALIAN ENERGY COAL PROJECTS

WPG's South Australian energy coal projects consist of its option to acquire the Penrhyn coal deposit and its applications for three new coal exploration tenements at Perfection Well and Pidinga. These assets will be held by the Company's 100% owned subsidiary, Southern Coal Holdings Pty Ltd.

Penrhyn Coal Project

WPG has an option to acquire EL 3336 Robins Rise and ELA 339/09 Lake Woorong from Stellar Resources Limited. These adjoining tenements cover an area of 1,707 square kilometres and are situated south of Coober Pedy in close proximity to the Company's other projects in the northern Gawler Craton.

During the quarter the Company completed a program of exploration diamond and rotary/mud drilling within EL 3336 that comprised four holes for a total of 507 metres. The holes were designed to provide information concerning the width of the coal bearing basinal structure near its interpreted central point and were sited at 1 kilometre intervals on a NE-SW oriented cross traverse perpendicular to the interpreted elongate trend of the basin.

Brief summary results for each of the holes are as follows:

Hole PCWP-001. (465 221E, 6753 128N) This hole was sited in the central part of the basin 1km SW of hole CPC5 previously drilled by PIRSA (formerly MESA). Six seams for a total coal thickness of ~10 metres were intersected within the Permian Mt Toondina Formation between depths of 72.93 and 121.02 metres. A number of other thin seams (less than 30 centimetres) were also intersected. The hole was completed at 150 metres.

Hole PCWP-002. (466 635E, 6754 542N) This hole was sited 1 kilometre NE of CPC5 and intersected two coal seams for a total thickness of 3.60 metres before the hole had to be abandoned at 123 metres due to extensive washout of unconsolidated sands.

Hole PCWP-003. (467 342E, 6755 249N) This hole was sited 2 kilometres NE of CPC5 and intersected a thin interval of the Mt Toondina Formation with no significant coal seams. The hole was completed at 123 metres in deltaic cross bedded sediments of the Stuart Range Formation.

Hole PCWP-004. (464 600E, 6752 400N) The fourth hole was sited 2 kilometres SW of CPC5 and also intersected only minor Mt Toondina Formation sediments with no coal seams. The hole was completed at 111 metres in competent sandstone and conglomerate beds of the Boorthanna Formation.

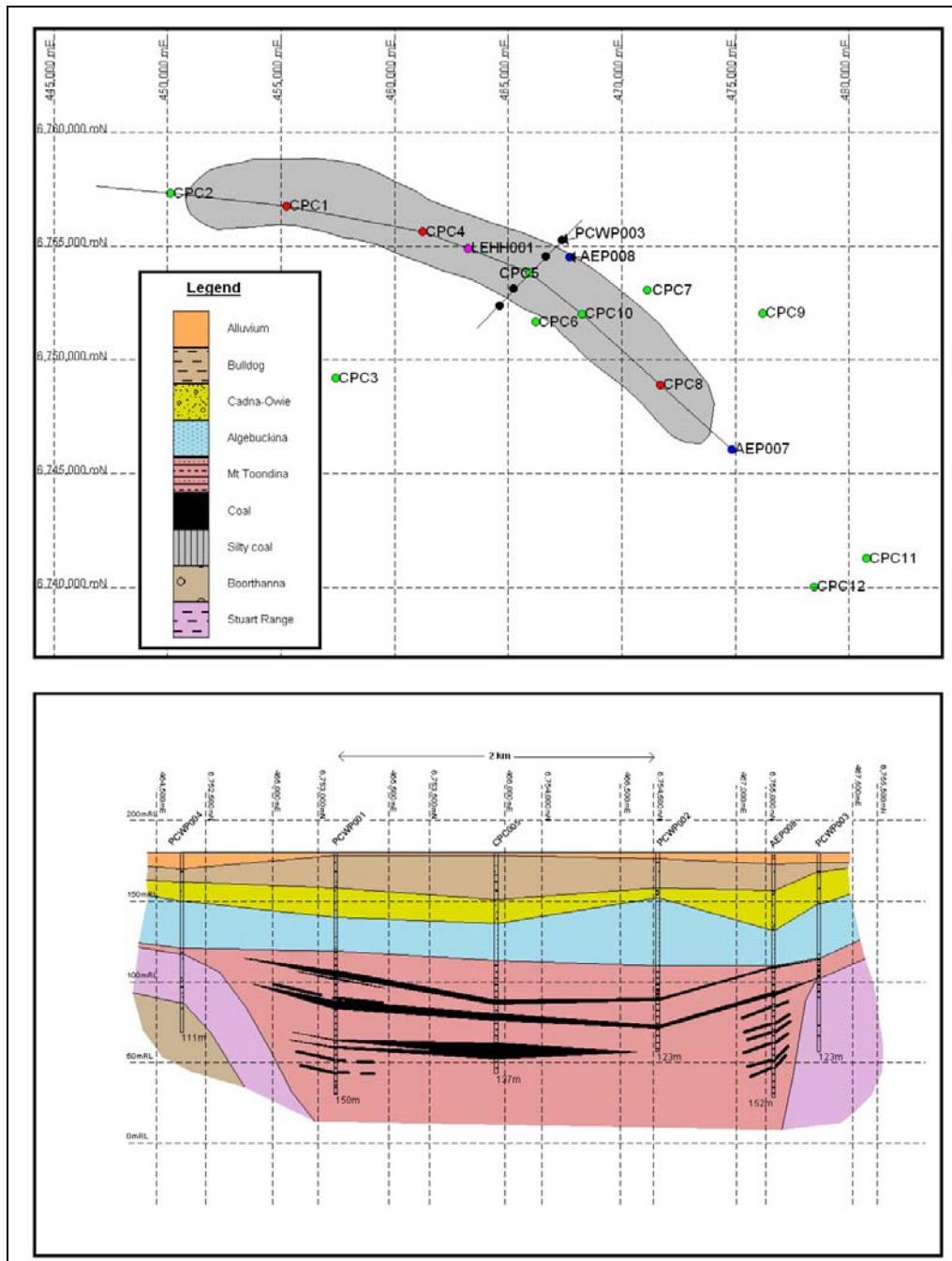


Figure 4
Penrhyn Coal Deposit – Section and Plan

The map and section across the drill traverse are shown in Figure 4.

Results of the drilling indicate the Penrhyn Basin is approximately 2.5 – 3 kilometres wide along the traverse of the five holes. Two significant and relatively thick coal seams show good continuity across and along the basin.

Down-hole geophysical logging was carried out on Holes PCWP-001, PCWP-003 and PCWP-004 by the South Australian Department of Water, Land and Biodiversity Conservation (DWLABC) under contract. Gamma, neutron, calliper, near and far densities were logged. The logs were used to confirm the down-hole depths of the coal seams, other carbonaceous horizons and formation boundaries.

Eighteen coal samples and sixteen roof and floor samples have been submitted to HRL Technology for test work. Coal samples will be tested for thermal and other quality characteristics including total sulphur, chlorine and sodium.

Perfection Well Coal Project

A regional evaluation of the Arckaringa basin coal measures carried out for the Company last year identified an area south of the Lake Phillipson and Penrhyn deposits with exploration potential. WPG has applied for a new tenement, ELA 97/10, at Perfection Well. The location of this tenement application is shown in Figure 5.

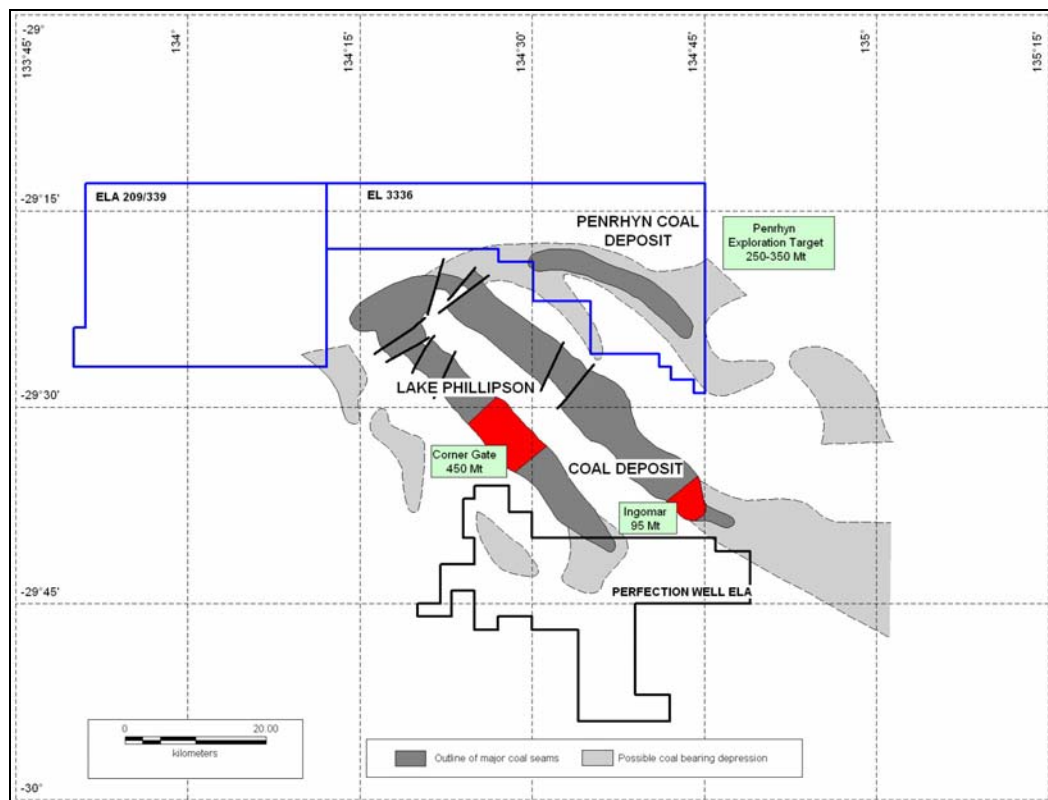


Figure 5
Location of Perfection Well, Penrhyn and Lake Phillipson Coal Deposits

Lake Pidinga Coal Project

During the quarter the Company lodged applications for two contiguous exploration licences in the Lake Pidinga region of South Australia. ELAs 63/10 Lake Pidinga and 90/10 Talacootra cover a combined area of 501 square kilometres and contain known lignite deposits of Middle Eocene age that occur in the Pidinga Formation along the eastern margin of the Eucla Basin and in adjacent palaeodrainage channels. Previous exploration has shown the lignite horizons are widespread but vary in thickness as a result of having been deposited on an undulating Precambrian basement. They contain coal seams that in places are up to 5 metres thick. Lignite occurs just below the surface in several places in this region. The tenements are shown in Figure 6.

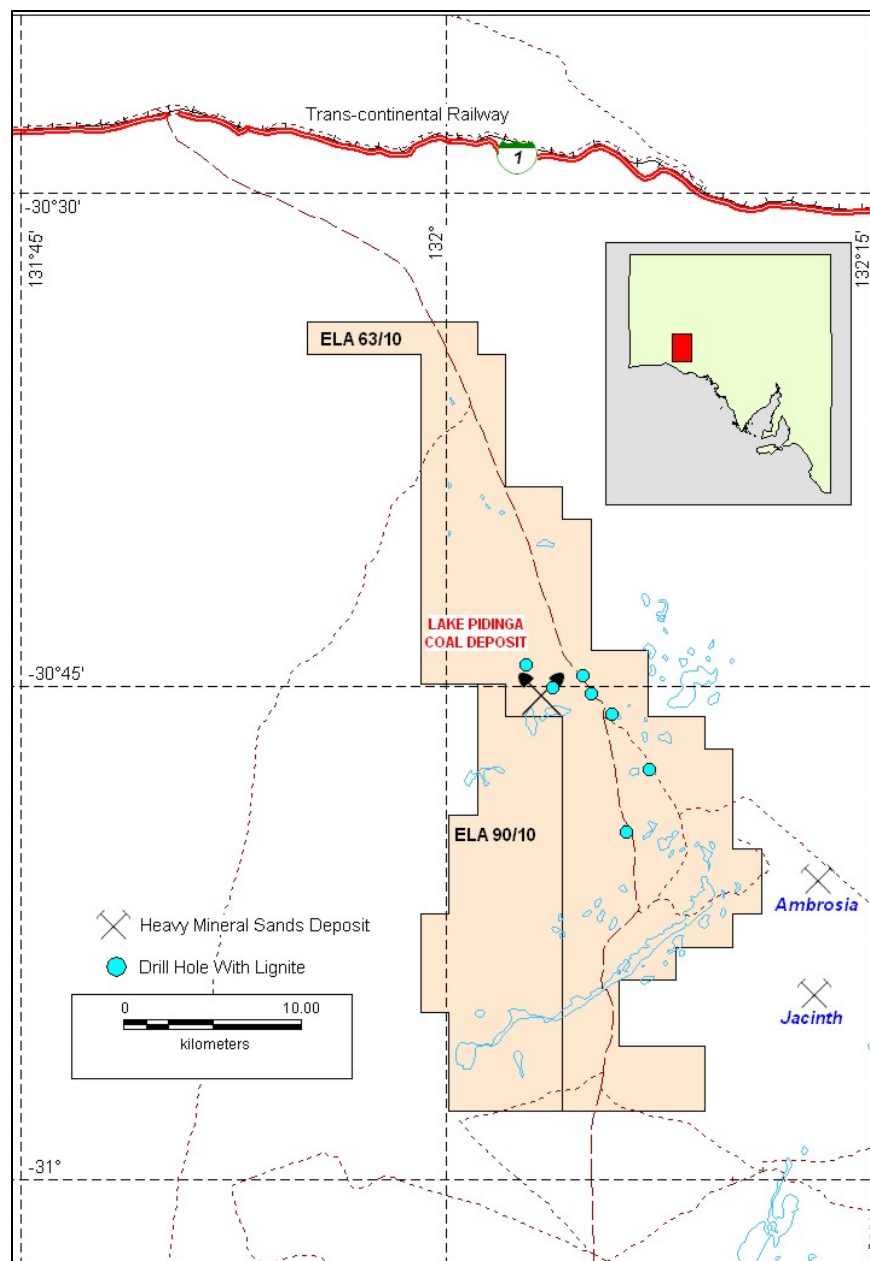


Figure 6
Location of Pidinga Coal Deposit

Competent Persons

The review of hard rock exploration activities and results 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 Geonx 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 review of exploration activities and results for the Penrhyn coal deposit contained in this report are based on information compiled by Mr Tom Bradbury, a Member of the Australasian Institute of Mining and Metallurgy. He is a senior geologist with Geos Mining, and a consultant to the Company. He has sufficient experience which is relevant to the style 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). Tom Bradbury has consented in writing to the inclusion in this announcement 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) 9247 3232 or 0412 234 684, or Heath Roberts, Executive Director and Company Secretary on (02) 9247 7359 or 0419 473 925.