



AVALON MINERALS LTD SEPTEMBER 2007 QUARTERLY REPORT

HIGHLIGHTS

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ASX Code: AVI
44 million shares
11 million unlisted options
Nil convertible notes

Market Cap
A\$11 million

Cash
A\$2.5 million

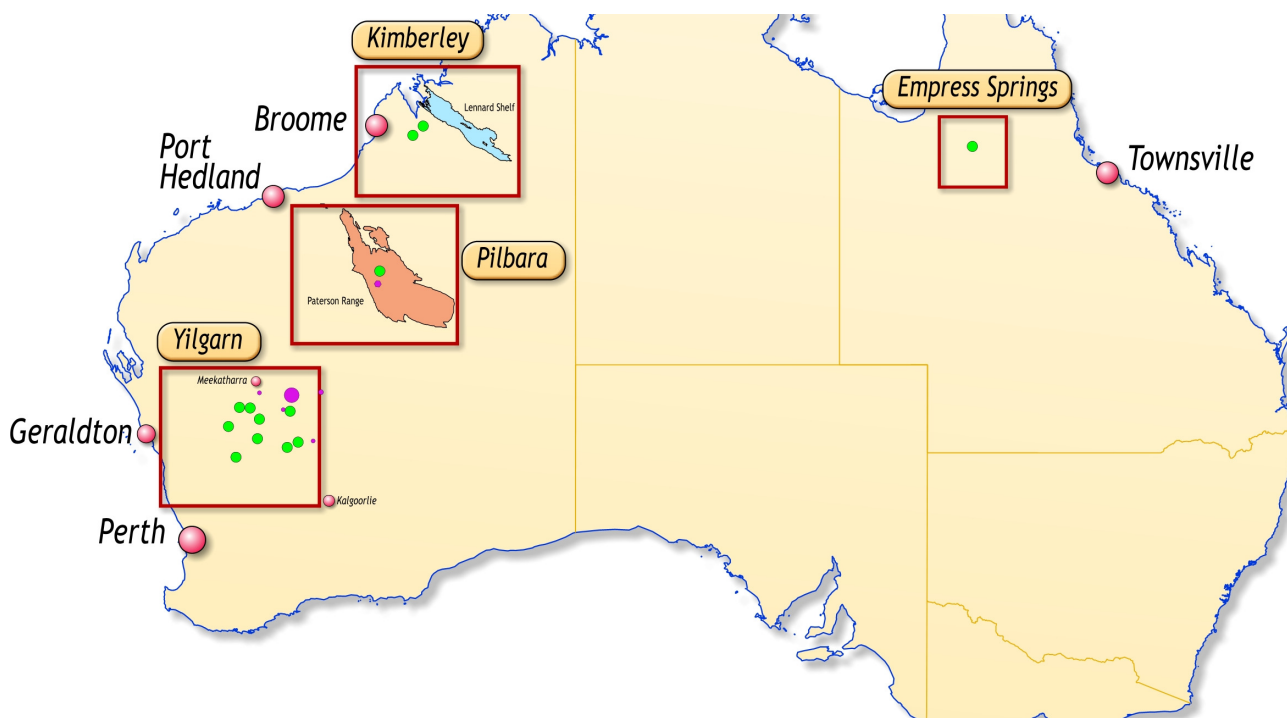
Directors
David McSweeney (Executive
Chairman)
Stephen Stone (Director)
Gary Steinepreis (Director)

- Joint Venture Agreement signed with ASX-listed Rox Resources to earn up to 60% interest in the Lennard Shelf Zinc Project.
- Heritage clearances being finalised prior to commencement of NITON soil sampling program over 12 priority targets at Lennard Shelf.
- Key Heritage Agreements signed for the 900km² Marloo project, clearing the way for exploration to commence.
- Questem EM data interpretation leads to the identification of three prospective conductors at Marloo.
- Three-dimensional interpretation of the Empress Springs Project in Queensland completed to generate exploration targets.
- Comprehensive independent geological review of Resource Properties Uranium Portfolio in WA completed.
- Several priority uranium exploration targets identified, with initial programs of aircore drilling planned.
- Experienced Geologist, Mr Geoff Hewlett, appointed as Avalon's Exploration Manager.
- Additional new project development and acquisition opportunities reviewed, both in Australia and overseas.

Summary

The September 2007 Quarter was an active and productive period for Avalon Minerals, with Avalon advancing exploration activities across its portfolio of projects in Western Australia and North Queensland. Key activities during the period included the completion of an independent review of the Company's recently acquired Western Australian Uranium Portfolio and completion of an interpretation undertaken in conjunction with Southern Geoscience of historical EM data at its Marloo Uranium-Gold-Copper Project in the Paterson Province.

In addition, SRK Consultants Pty Ltd was engaged to prepare a 3D inversion of the magnetics acquired over the Empress Springs Project in North Queensland as part of a target generation exercise. The Company also continued to actively review a stream of new project opportunities, with a particular emphasis on advanced projects in Australia and overseas.



Avalon Minerals Project Locations

WESTERN AUSTRALIA

Lennard Shelf Project Zinc-Lead Project – Rox Resources Earning 60%

Avalon's 2,594km² Lennard Shelf Project - located in the acclaimed Lennard Shelf zinc province in the East Kimberley region of Western Australia - encompass a number of advanced zinc exploration targets, including the Oscar Range, Barramundi and Lawford Projects.

During the Quarter, Avalon signed a major Joint Venture with Rox Resources Ltd. Under the terms of the Joint Venture, Rox has the right to earn up to a 60% interest in the Lennard Shelf Project by completing a minimum expenditure of \$500,000 within the first 12 months, followed by the payment of

\$300,000 in Rox shares and further exploration expenditure totalling \$2 million over 4 years. Rox is now acting as the manager of the Joint Venture.

The Lennard Shelf exploration program will commence with an initial regional exploration soil sampling program using a hand-held NITON XRF machine over 12 high-priority targets in the Lennard Shelf region. A 3-month field program is planned for the purpose of collecting a total of 9,000 NITON samples and is scheduled to commence upon receipt of heritage approvals from the two key native title holder groups in the area, the Gooniyandi and the Buniba.

During the Quarter, Company representatives met with the Gooniyandi native title group in Fitzroy Crossing to progress heritage clearances for the planned NITON exploration program. Subsequent to the end of the Quarter, the Kimberley Land Council confirmed that the Buniba group had also met to consider the exploration program and that both groups have now appointed heritage clearance teams.

Avalon and Rox expect to conduct the heritage clearances for the NITON soil sampling program in December 2007 in preparation for commencing exploration in the 2008 field season.



Lennard Shelf Project Maps

URANIUM

Resource Properties Pty Ltd (RPPL) ELA's – Uranium

Last Quarter, Avalon strengthened its position in Australian uranium exploration through the acquisition of a substantial exploration portfolio covering 1,900km² in Western Australia's Kimberley and Yilgarn regions through the 100% acquisition of privately held company RPPL.

The RPPL acquisition – comprising 13 Exploration Licence Applications (ELA's) covering some highly prospective uranium acreage – significantly enhances Avalon's existing uranium exploration portfolio.

The portfolio comprises 11 ELA's in proven uranium districts in the Yilgarn region, considered prospective for calcrete-hosted uranium mineralization, and two uranium prospects in the Kimberley region which are considered prospective for roll-front styled uranium deposits.

During the Quarter, Avalon appointed experienced Geologist, Walter Witt, to review its entire uranium portfolio in Western Australia and advise on programs and budgets.

A detailed report prepared by Mr Witt has identified the Altona, Austin Downs and Wonding projects as the priority uranium projects in the Yilgarn for immediate exploration follow up. A summary of the 3 priority projects are presented below.

Altona Project – Avalon 100%

At the Altona project, Mr Witt's report has identified that it incorporates a deltaic environment with the drainage sourced in the same granitic terrain as Yeelirrie; uranium mineralisation occurs in close proximity to the project area at Bolitho Bore.

The Yeelirrie palaeochannel calcrete-hosted uranium deposit is located in another branch of the Raeside palaeochannel, 35km north of Altona. The Bolitho Bore calcrete-hosted uranium deposit is located in the main palaeochannel, 5km southwest of the Altona tenement.

Austin Downs Project – Avalon 100%

Mr Witt's review of the Austin Downs project has highlighted that:

- radiometric images indicate significant uranium anomalies associated with drainage on E20/652 and E20/653. Uranium is weaker on E20/665 but this does not discount the possibility of calcrete-hosted uranium under thin cover sediments.
- assays of up to 261ppm U_3O_8 in opaline silica and calcrete on the northern part of E20/665 represent a target to follow up on that tenement.
- three rock chip samples from earlier exploration of opaline silica adjacent to the drainage channel returned values of 129-261ppm U_3O_8 . A calcrete sample from the drainage contained 84ppm U_3O_8 .

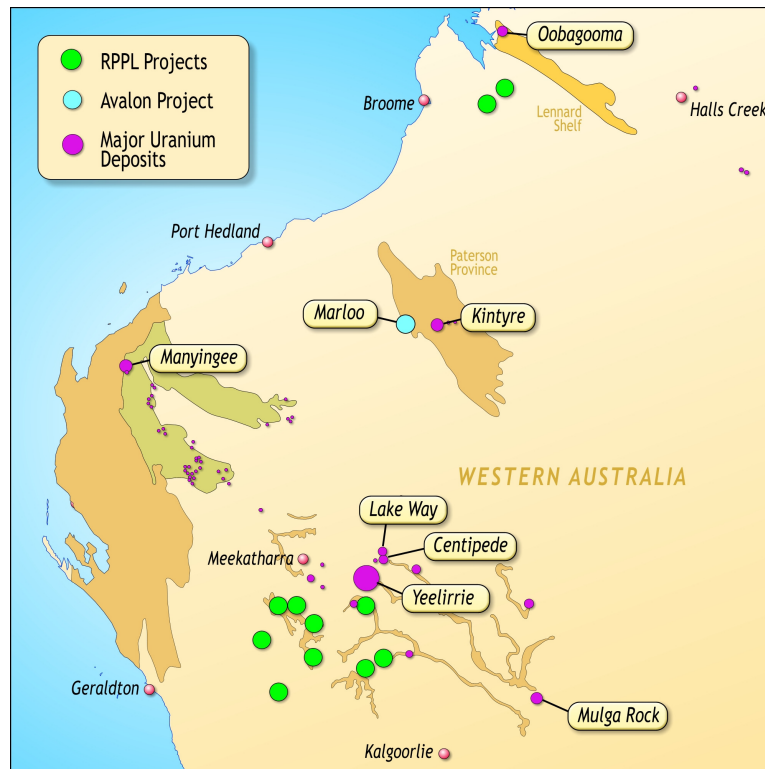
The Lakeside uranium deposit is located 20km southwest of Avalon's Austin Downs tenements. Acclaim Uranium NL reported a JORC-compliant resource of 270 tonnes of U_3O_8 at 0.4 kg/tonne, using a 200ppm cut-off in 1998. The nearby Austin Downs deposit contains a pre-JORC resource of 312 tonnes of uranium at 0.5 kg/tonne. These deposits are currently owned by Energy Metals Limited.

Close to Austin Downs, the Lakeside deposit was identified by Acclaim Uranium NL using historic drill hole data and results of new drilling.

Previous explorers interpreted the Austin Downs and Lakeside uranium deposits to have formed in a zone of restricted groundwater flow caused by channelling of fluids in a narrow conduit prior to debouching into Lake Austin. Similar ponding of groundwater may have occurred at bends and junctions of tributary drainage channels on each of Avalon's Austin Downs tenements. In particular, the junction between three tributaries – one of which is known to contain carnotite occurrences in calcrete – is a priority target on E20/652.

The independent review by Mr Witt has determined that 1,300 metres of air core drilling should be sufficient as a first pass assessment of radiometric anomalies and geological targets on all three Altona tenements.

As well as analyzing drill chip and mud samples, analysis of groundwater from each hole is recommended as an additional tool for vectoring to the more uranium-rich areas of the tenement.



Western Australian Uranium Projects

Wondinong Project – Avalon 100%

The calcrete-hosted Wondinong uranium deposit is associated with a strong radiometric anomaly adjacent to E58/348.

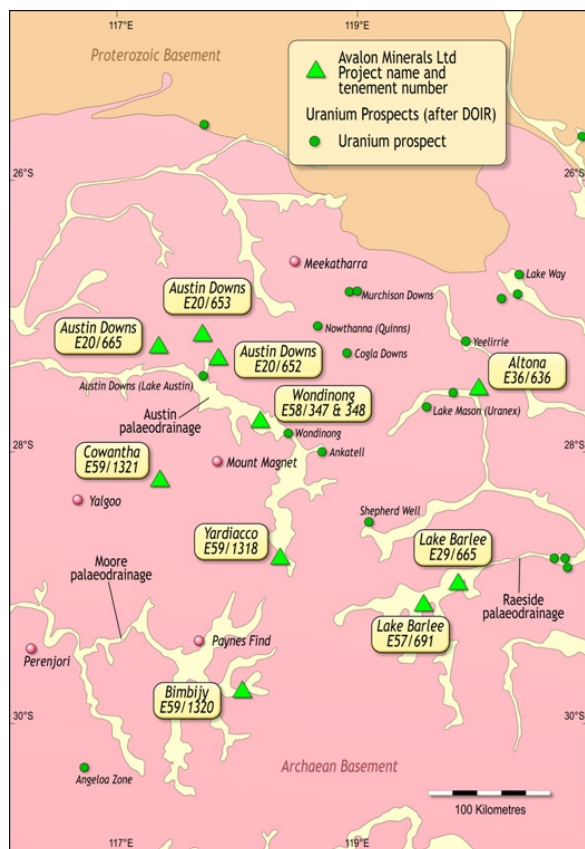
During the 1970's, several companies explored the Lake Austin palaeochannel and its tributaries, upstream from Avalon's Wondinong Project. This phase of exploration identified the Wondinong, Ankatell and Windimurra uranium deposits, and several other uranium-enriched calcrete occurrences within the broader Lake Austin palaeochannel system.

In the northern part of E58/347, radiometric anomalies along the northern margin of the Lake Austin palaeochannel may indicate uranium-enriched calcrete or lake sediments. These represent another target for Avalon's uranium exploration.

There are dispersed radiometric anomalies over the north-flowing tributary channel on E58/348 which will also warrant investigation as a possible source of uranium.

Reconnaissance aircore drilling will be required to explore for uranium-enriched calcrete beneath shallow cover on the eastern Wondinong Project area. First pass aircore drilling should also be sufficient to test radiometric anomalies on the northern margin of Lake Austin and the north-flowing tributary.

A total of 4,000 metres of aircore drilling is planned.



Yilgarn Uranium Prospects



Kimberley Uranium Prospects

Base Metals and Uranium

Marloo – Avalon 100%

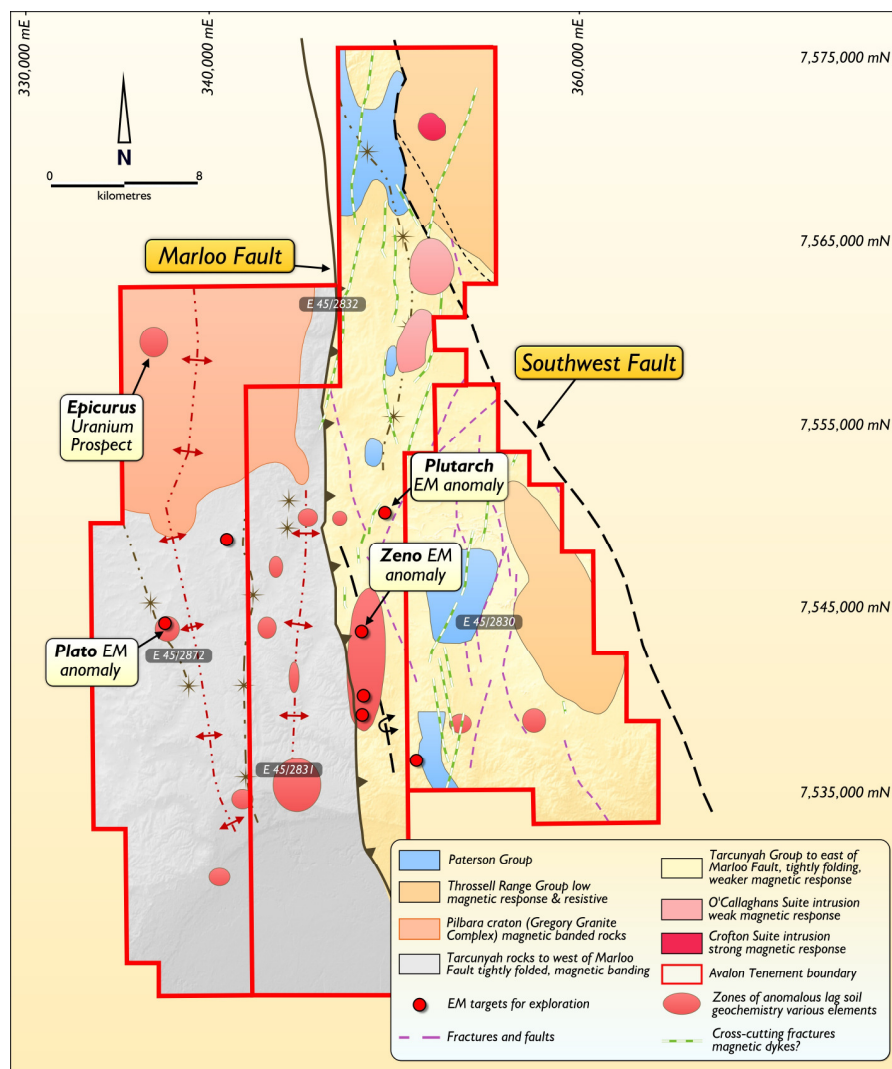
The Marloo Project, covering seven exploration licences over an area of some 900km², forms part of Avalon's three Paterson Projects in Western Australia's mineral-rich Pilbara region. The project area is located 30km south of the 180 million tonne Nifty Copper Mine and 40km west of Rio Tinto's unconformity-styled Kintyre uranium deposit (25,000 tonnes) @ 0.4% U₃O₈.

Exploration will focus on the potential for the discovery of unconformity-styled uranium mineralisation at the Epicurus prospect and base metals associated with three recently identified EM conductors.

Data from a Questem EM survey flown in 1995 by CRAE covering a large part of Avalon's tenement holding was recovered, processed and imaged by geophysical consultants. The three main conductive anomalies; Zeno, Plutarch and Plato appear to be potential targets for base metals such as copper or zinc-lead. Aspects of the anomalies are;

- Zeno measures 3 x 1.5km and is strategically situated adjacent to the main N-S trending basin-margin structure the Marloo Fault, close to a conjunction with a series of NE trending fracture zones. A single line of lag soil sampling covers a part of the anomaly returning anomalous As-Ba-Mo-Cu. Newly acquired satellite imagery indicates the area is partially outcropping but much of the area is covered by sand dunes and wind-blown sand. No other follow-up appears to have been done.
- Plutarch is a sub-parallel conductor situated about 1.3km east of Zeno and measures at least 3 x 0.2km. It appears to follow the stratigraphy in a N-S direction.
- Plato is situated to the west of the Marloo Fault with coincident Cu-Zn-Pb-Ba lag geochemistry it appears to have a stratigraphic aspect to it.

These areas are priority targets for exploration work during the coming year.



New Marloo EM Conductors

During the Quarter, Heritage Agreements were signed with the Western Desert Lands Aboriginal Corporation, enabling the Native Title objections to be withdrawn and the tenements to be granted. These Heritage Agreements are currently being finalised.

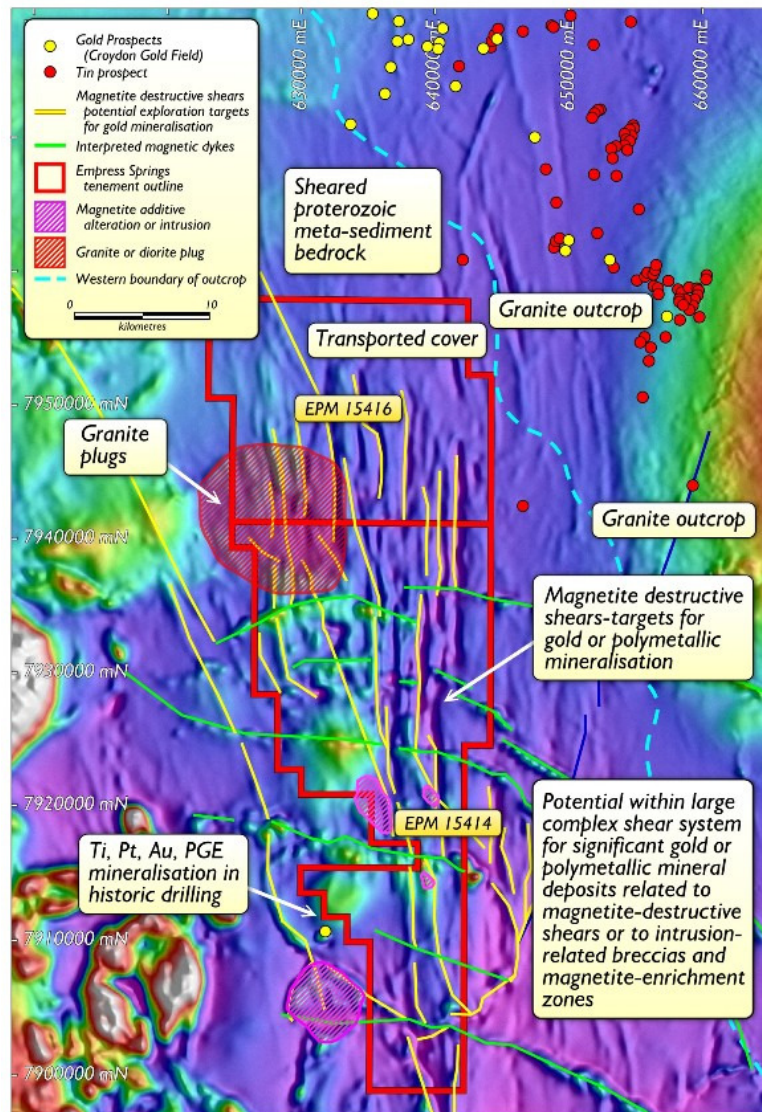
QUEENSLAND

Empress Springs – Gold, Uranium and Base Metals – Avalon 70%

Avalon has entered into a Joint Venture agreement with ASX-listed nickel producer, Independence Group NL, to earn a 70% interest in the Empress Springs gold, base metals and uranium project in North Queensland.

The project, located 40km south of Croydon, comprises two granted exploration licences covering a total area of 833km². The region is a well-known gold producing region with historical production of 750,000oz at Croydon and the more recent discovery by Gold Aura Ltd of polymetallic mineralisation at Wallabadah located 30 km north of Croydon.

During the Quarter, the company appointed SRK Consulting Pty Ltd to complete a 3D inversion of the magnetic data acquired over the Empress Springs project as part of a target generation exercise.



Empress Springs

NEW APPLICATIONS

During the Quarter, the Company withdrew four Exploration Licence Applications previously applied for over areas offered by the Queensland Geological Survey Department, located 150km west of Mt Isa in Northern Queensland.

Applications for two Exploration Licences in the Esperance region with potential for iron ore mineralization were maintained.

PROJECT GENERATION ACTIVITIES

Avalon continued to assess additional mineral project opportunities both in Australia and internationally.

CORPORATE

As at 30 September 2007;

- Avalon has 435 shareholders with the Top 20 holding 63.47% of the Company.
- The Company has A\$2.5 million cash on hand.



David McSweeney
Executive Chairman

Competent Persons Statements

The information in this report relates to Exploration information reviewed by Mr Geoff Hewlett MSc DIC MAIG who is a Member of the Australasian Institute of Mining and Metallurgy and acts as a geological consultant to Avalon Minerals Ltd. Mr Hewlett has over 30 years of exploration experience in a variety of mineral deposit styles including four years relevant experience in exploration for uranium mineralisation and he consents to inclusion of the information in this report in the form and context in which it appears. He qualifies as a Competent Person as defined in the 2004 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves".

- ENDS -

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