

# Potash

## Acquisition of Tenements in South Carnarvon Basin

29 April 2010



ABN 82 000 738 885

### Key Points

- East Coast to acquire a controlling stake in a highly prospective Potash project in Western Australia
- Initially acquiring 49% controlling interest in a grouping of tenements highly prospective for Potash, with potential to move to 70%
- These strategic tenements are located in the Southern Carnarvon Basin of Western Australia and are immediately adjacent to tenements of Reward Minerals Limited who are also exploring for potash deposits;
- Potash is a highly valuable commodity in the Fertiliser Industry with significant growth prospects due to high world-wide demand for potash which has recently resulted in a rapid increase in price;
- China and India keenly sourcing new supplies;
- There are no substitutes for potash as the key ingredient in fertilisers; and
- Funding of the proposed acquisition to come from a major shareholder;
- Acquisition is conditional on shareholder approval.

East Coast Minerals NL(ASX: ECM)(East Coast) is pleased to announce that it has entered into a conditional head of agreement ("HoA") for acquisition from Exchange Minerals Limited ("Exchange") 70% shareholding in a company known as Potash Holdings Pty Limited ("Potash"). In turn, Potash is the owner of 70% of the shares in a company known as West Coast Potash Pty Limited ("WCP") which is the owner of 13 contiguous tenements in the Southern Carnarvon Basin of Western Australia. Below is a map of the location of the tenements. Potash has the right to increase its shareholding in WCP to 100%.

The directors of ECM are excited about the prospects of this proposed investment and believe that a combination of the detailed work previously undertaken on the tenements, together with the fact that Potash is a highly sought after resource will be an attractive proposition investment for ECM. As detailed below, initial funding of the acquisition is to come via Exchange.

## About the project

The project area (Figure 1 and 2) has previously been shown to be very prospective for potash, with drilling in the late sixties intersecting evaporites with reported grades up to 1.9% K on the edge of the interpreted evaporite basin. The discovery hole Yaringa-1 intersected 36.2 metres of evaporites in 1966, but potash (KCl) assays were never publicly reported or submitted to the West Australian Department of Minerals and Petroleum (DMP). Drill core from Yaringa-1 is stored at the West Australian DMP core library, but unfortunately only traces of the drill core remain. These remnants are not enough for assaying nor are they available.

The results from Yaringa-1 generated a Hazen Research report into the viability of solution mining and solar evaporation. The test work by Hazen cost US\$225,000 in 1968 and involved bench scale tests into the viability of solar evaporation and a field test to determine the viability of solution mining.

The next step for East Coast Minerals is to drill a well to immediately adjacent to Yaringa-1 with the aim of defining potash grades in line with the presumed grades (5.3% KCl) used for the Hazen Research study. Key aspects of the tenements are as follows:

- proximity of the project to a major sealed Highway; the North West Coastal Highway bisects the entire length of the project area;
- distance of the project to a major port facility at Geraldton and proposed new port at Oakajee;
- the relatively high potential of an economic potash target occurring in such a large potash project area; and
- exploitation of any potash discovered will use established solution mining techniques. This coupled with an excellent evaporative climate and abundant water supply within the tenements will assist in development of the project, based on successful results.

It is evident that previous work conducted by Continental Oil Company of Australia, Ltd ("Conoco") documenting the initial discovery of salt bearing beds potentially containing potash deposits and the subsequent investigation was completed with good technical standards and attention to detail.

In 1966, Conoco drilled the Yaringa-1 well and intercepted a 36.2 metre section of evaporite beginning at a depth of 1194 metres which contained 8 salt beds in the upper Paleozoic carbonate sequence (the Dirk Hartog Group) in the Southern Carnarvon Basin of Western Australia.

Based on the technical success of the Yaringa 1 well, Conoco commissioned Hazen Research of Golden, Colorado to conduct bench scale tests to determine the feasibility of solar evaporation of brines presuming a head grade of 5.3% KCl. The study compared the economics of the then current potash solution mines in the Dead Sea and Utah and concluded that the South Carnarvon

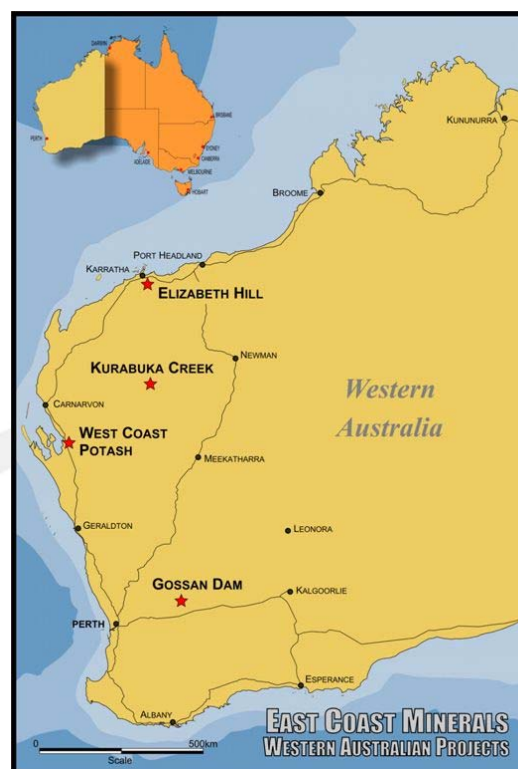


Figure 1: Project locations.

project appeared to be economically feasible based on the presumed grade of 5.3% KCl and the relatively low potash price (~\$200) at the time. Following the Hazen study, Conoco conducted a field test in a potash district in New Mexico to determine the viability of solution mining.

Both studies for which Conoco expended \$225,000 (in 1968 dollars) were deemed successful.

In 1968, Conoco drilled two offset wells, respectively 25 km northwest (Hamelin Pool-1) and 9 km south (Hamelin Pool-2) of the Yaringa-1 discovery well (refer to Figure 3). The wells, drilled specifically for potash intercepted respectively 7 potassium bearing salt beds in Hamelin Pool 1 (22.9 metres) and three beds in Hamelin Pool 2 (5.2 metres) at similar depths to Yaringa-1.

Potassium grades for one foot assay intervals from Hamelin Pool 1 reached 1.9% as reported by Conoco (if all the K is expressed as potash then this is equivalent to 3.6% KCl). Bromine which is an excellent geochemical pathfinder for potash reached concentrations of 450 ppm from sample intervals in Hamelin Pool 1, indicating potential proximal potash.

Interpreted gravity data (Bouger 1VD, Figure 3) for the Southern Carnarvon Basin indicates that the Yaringa 1 well was sighted on the southwest margin of a sub-basin with a depo-center lying to the north northeast of Yaringa 1, the most prospective area for thickened evaporite horizons. Data suggests the sub-basin is up to 75 km long by 40 km wide.

The Hamelin Pool 1 well was located on the south-western margin of the sub-basin, outside the depo-center, and the Hamelin Pool 2 well was clearly spudded in at the southeast edge of the sub-basin.

Stratigraphic, tectonic, interpreted paleo-environmental and other geologic evidence for the evolution of the Southern Carnarvon Basin provides compelling support for the development of marine evaporite basins. Deposition of evaporites including potash is believed to have occurred in a barred basin, similar to evaporites and potash beds deposited in the Paradox Basin of Utah.

Although sylvite (KCl) was not logged in Conoco well completion reports, the logs documented the presence of anhydrite (CaSO<sub>4</sub>) and halite (NaCl) with anomalous bromine (Br) concentrations greater than 200 ppm. The presence of bromine above 200 ppm is believed by many potash experts and researchers to be indicative of an environment permissible for potash deposition and is highly encouraging in view of potash being intersected in Hamelin Pool-1 and the presumed grades of 5.3% KCl from Yaringa-1.

Tenement	Status	Area (blocks)	Lodgement	Commencement	Expiry
E09/1463	Live	84	16/05/2007	3/07/2008	6/03/2013
E09/1476	Live	62	29/06/2007	5/07/2008	5/06/2013
E09/1482	Live	65	30/07/2007	23/10/2009	22/10/2014
E 09/1519	Live	51	1/04/2008	14/12/2009	13/12/2014
E09/1528	Live	194	20/05/2008	24/12/2009	23/12/2014
E09/1539	Live	138	3/06/2008	14/12/2009	13/12/2014
E09/1540	Live	193	3/06/2008	14/12/2009	13/12/2014
E09/1541	Live	199	3/06/2008	14/12/2009	13/12/2014
E 09/1542	Live	199	3/06/2008	14/12/2009	13/12/2014
E 09/1543	Live	94	3/06/2008	24/12/2009	23/12/2014
E 09/1544	Live	92	3/06/2008	07/01/2010	06/01/2015
E09/1545	Live	11	3/06/2008	14/12/2009	13/12/2014
E 09/1571	Live	145	5/08/2008	14/12/2009	13/12/2014
TOTAL		1,527			

*Table 1: List of Exploration Licenses comprising the Southern Carnarvon Basin Project*

The 13 contiguous Exploration Licenses comprising the Southern Carnarvon Basin Project (Table 1, Figure 2) were acquired by applications submitted by West Coast Potash Pty Ltd in 2007 and 2008.

## About Potash

Potash is important for agriculture because it improves water retention, yield, nutrient value, taste, colour, texture and disease resistance of food crops. It has wide application to fruit and vegetables, rice, wheat and other grains, sugar, corn, soybeans, palm oil and cotton, all of which benefit from the nutrient's quality enhancing properties. There are no substitutes for potash as a key ingredient in fertiliser.

Demand for food and animal feed has been on the rise since 2000. The U.S. Department of Agriculture's Economic Research Service (ERS) attributes the trend to average annual population increases of 75 million people around the world. Geographically, population growth in Brazil, Russia, India and China, known collectively as "BRIC", has greatly contributed to the increased use of potash-based fertiliser. Rising incomes in developing countries also is a factor in the growing potash and fertiliser use. With more money in the household budget, consumers have added more meat and dairy products to their diets. This shift in eating patterns requires more acres to be planted, more fertiliser to be applied and more animals to be fed - all requiring more potash.

Potash prices have soared in recent years. What was once a commodity worth about \$200 a tonne, peaked at US\$872.50 per tonne in 2009, which is a record high. Potash prices are expected to increase significantly by 2020.

## Summary of the proposed acquisition of Potash

The proposed acquisition has been entered into with Exchange, which has been a major supporting shareholder of ECM since late 2008. In addition, Exchange and a number of its contacts have also decided to provide ECM with a \$2 million Convertible Loan facility which is secured by a charge. The proposed acquisition is subject to contract and satisfactory legal documentation and shareholder approval.

Exchange and its principals have a strong track record in the identification and successful value adding of a large number of grass roots mineral projects, many of which have progressed to production, or are significantly advanced into the feasibility stage.

ECM looks forward to the potential value that can be further added for shareholders with the assistance of Exchange.

Exchange will continue to provide development advice and assistance to ECM through the life of the project.

The key terms of the proposed transaction are as follows:

- a 30% carried interest is to be provided to Exchange up till bankable feasibility study;
- a royalty of 1% on gross sales payable to Exchange; and

- repayment of all costs incurred by Exchange in the acquisition of the shares in WCP from an arms length third party, expected to be some \$705,000. The repayment will be largely in the form of addition to the Convertible Note and as a result, this will increase the facility to be approved by shareholders from approximately \$2 million to approximately \$2.7 million.

In addition to the above, the following contractual benefits and obligations will be assumed by ECM in relation to the acquisition by:

- an option to acquire a further 20% of WCP for the sum of \$750,000 payable on or before 19 November 2010. In the event that Potash does not exercise this option, it will have to surrender the initial 70% shareholding to the vendor of WCP. This will also result in a termination of the arrangements with Exchange;
- payment of a success fee of \$3.5 million to the vendor for reaching a target resource of 3.5 million tonnes at a KCI of 1.5% at 1,200 metres;
- a 1% royalty to the vendor of WCP;
- a right to acquire the last 10% of WCP after a bankable feasibility study has been carried out, at an independent valuation; and
- consulting fees of approximately \$13,333 to the vendor of WCP for a period of two years. The fees are to be in connection with the ongoing advancement of the project.

ECM will assume control of both WCP and Potash via the appointment of two of its directors to the board of both companies.

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## About East Coast Minerals

East Coast Minerals NL (ASX:ECM) is an Australian based exploration company, which listed on the ASX in 1970. The company has interests in the Pilbara region of WA, where it is exploring for precious and base metals.

East Coast also has a 56.54% interest in Energie Future which has an advanced Underground Coal Gasification (UCG) project at Rawlins, Wyoming, USA. Rawlins is the site of 3 successful coal gasifications. The company also has applications over the Sydney Basin.

## Competent Persons Statement

The information in this report that relates to exploration results is based on information compiled by Dr Gregory Pooley who is a member of the Australian Institute of Mining and Metallurgy and is a consultant to East Coast Minerals. Dr Gregory Pooley's services are provided under contract by G D Pooley & Associates, independent consultants. Dr Gregory Pooley 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'. Dr Gregory Pooley consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.



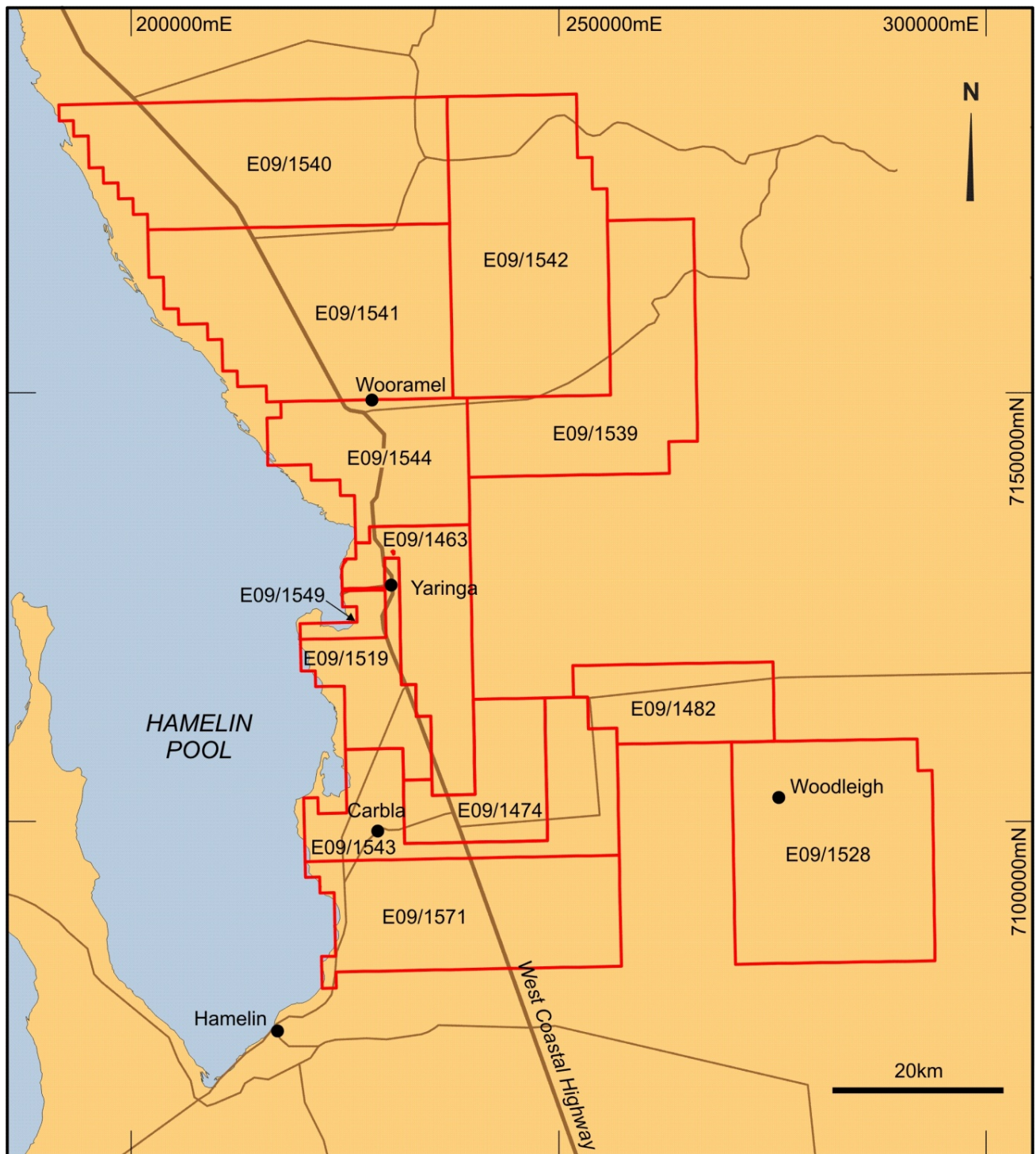
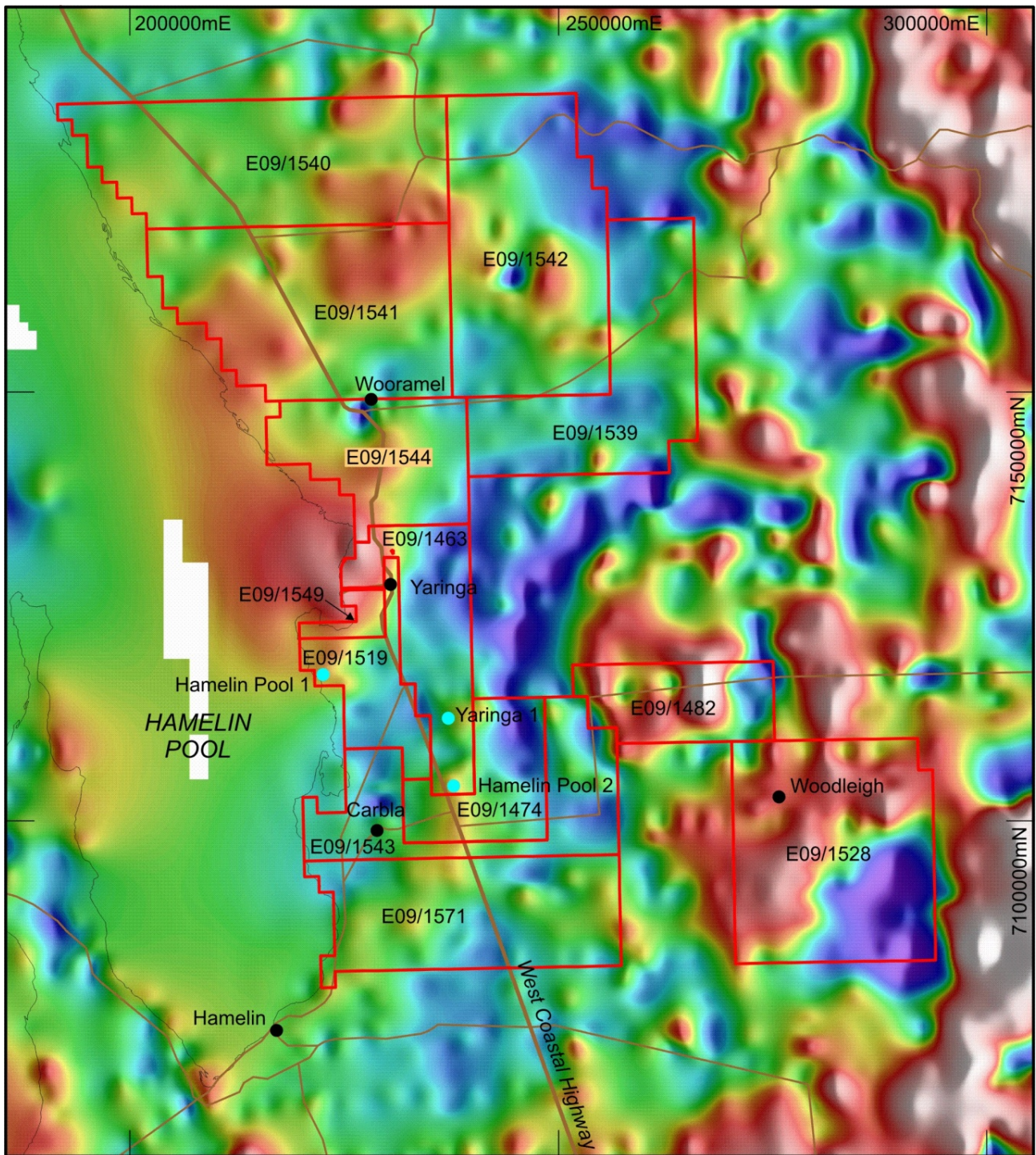


Figure 2: Exploration Licenses of the Southern Carnarvon Basin, West Coast Potash Project.





*Figure 3: Recent regional gravity (Bouger 1VD) data with location of drill holes Yaringa-1 , Hamelin Pool-1 and Hamelin Pool-2.*