

Industry news

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This article covers the period October 2014 to early January 2015 and is compiled from information publicly released by companies. Readers should refer to the latest information available on company websites, particularly in regard to making any forward investment decisions. Resource and work area locations are shown in Figure 1.

Adelaide Resources

www.adelaideresources.com.au

Funds recently raised by Adelaide Resources Limited will enable the company to restart drilling and early-stage target testing at its Moonta copper–gold project on Yorke Peninsula. Drilling programs have been designed for Alford West and Tomahawk prospects and are expected to commence once the annual cereal harvest finishes (ASX release 31 October 2014).

In late November 2014 the company reported that harvesting around the Alford West prospect was complete and a short drilling program was underway to test for extensions to mineralisation at the Bruce, Larwood and Six Ways zones (ASX release 25 November 2014).

Alliance–Quasar

www.allianceresources.com.au

www.quasarresources.com.au

Alliance Resources Limited has reported significant quarter-on-quarter increases in uranium production from its Four Mile Mine. Production for the three months to September totalled 717 320 lb of uranium, compared to 408 156 lb recorded in the prior quarter. Total production since commencement to 30 September 2014 is 1 125 476 lb of uranium. Alliance's share of production is 281 369 lb (ASX release 23 October 2014).

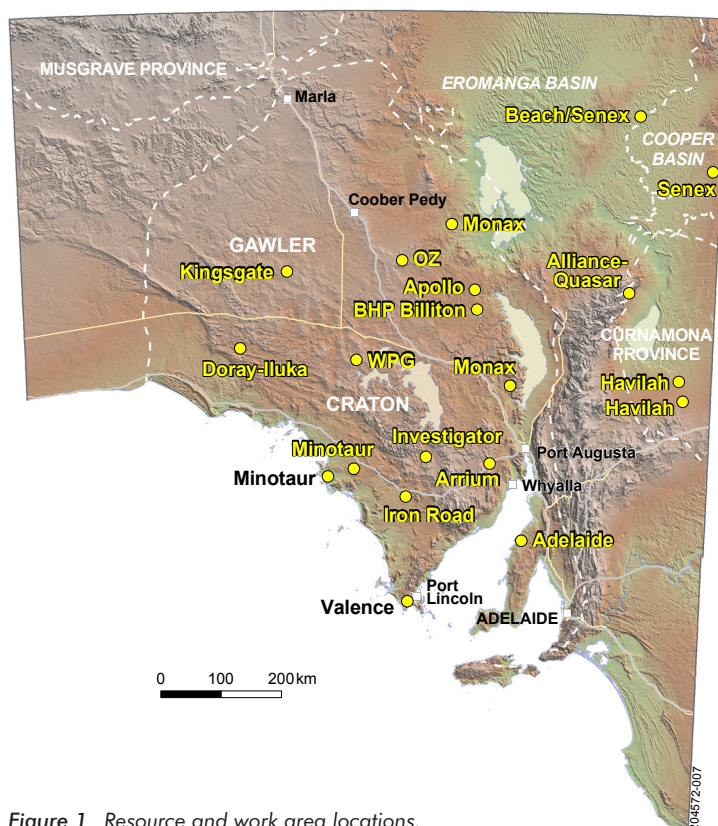


Figure 1 Resource and work area locations.

Apollo Minerals

www.apollominerals.com.au

In an ASX release on 24 November 2014 Apollo Minerals Limited announced the discovery of significant iron oxide – titanium–phosphate mineralisation at the Boulder and Claypan prospects, part of the Titan Project in the Gawler Craton. The cumulative mineralisation drilled totalled:

- 126 m at 22% iron oxide, 12% ilmenite (a titanium-bearing mineral) and 8% apatite (a phosphate mineral)
- 135 m at 20% iron oxide, 8% ilmenite and 6% apatite.

The company notes that the results and supporting geophysics suggest the potential for large mineralised zones within the prospects.

In December 2014 Apollo reported that results from drillhole 14NB001 confirm iron oxide – copper–gold (IOCG) alteration at the NoBrainer prospect (ASX release 11 December 2014). Handheld XRF readings have returned copper grades of up to 2400 ppm in visible sulfide-rich zones. Encouraged by the results, Apollo states it will be assessing a number of priority targets as part of the 2015 exploration program.

Arrium

www.arrium.com

Record iron ore sales were reported by Arrium Mining for the September 2014 quarter but despite lowering costs, margins remain slim (ASX release 20 October 2014). The company shipped 3.45 Mt of iron ore, up 290 000 t on the previous quarter. Sales of 3.29 Mt were down slightly on the previous quarter, though the company achieved the targeted annualised sales rate of 13 Mtpa.

Arrium also reported that redevelopment of the Iron Knob mining area is continuing as part of its focus on utilising the expanded port capability of ~13 Mtpa. The project comprises three open-cut mine pits (Monarch, Princess East and Princess West) and remains on schedule and budget. First ores are expected in the first half of financial year 2015.

BHP Billiton

www.bhpbilliton.com

BHP Billiton recently reported that although significant improvements have already been achieved at the Olympic Dam Mine a number of key improvements are still required and reaching full capacity with the existing operations is a key priority (*Weekend Australian*, 1 November 2014). By debottlenecking the capacity of the mine the company expects to be able to increase copper production to 235 ktpa from financial year 2018.

BHP Billiton's long-term growth plan for Olympic Dam is currently focused on the evaluation of a low-risk, capital-efficient 21 Mtpa underground expansion with the potential to deliver over 450 ktpa of copper from financial year 2024 (BHPB presentation 24 November 2014).

Doray Minerals – Iluka Resources

www.dorayminerals.com.au

www.iluka.com

Western Australian gold producer Doray Minerals Limited announced in November 2014 that it had signed a farm-in agreement with mineral sands producer Iluka Resources Limited to explore Iluka's highly prospective and virtually unexplored central and western Gawler Craton tenements which total ~21 000 km² (ASX release 17 November 2014). Under the terms of the agreement Doray will have the right to earn up to 80% of any gold discovery by spending \$7 million within six years, with a minimum \$1 million commitment in the first year to earn a 20% interest. Iluka will retain the rights to all other commodities discovered.

Havilah Resources

www.havilah-resources.com.au

In an ASX release on 21 October 2014 Havilah Resources NL announced that the South Australian Government had given full operational approval for its Portia gold project, paving the way for mining at the 67 000 oz open pit. The company is looking to develop Portia as soon as possible to generate a meaningful cash flow that will facilitate the development of its Kalkaroo copper–gold project. Capital expenses for Portia are expected to total \$4 million, with total project costs estimated at \$35.8 million.

More recently Havilah reported that its Kalkaroo mining lease proposal had been posted for public comment on the Department of State Development's website and that the company would now be proceeding towards approval for a program for environment protection and rehabilitation (ASX release 12 December 2014).

Investigator Resources

www.investres.com.au

In recent months Investigator Resources Limited has released a series of results from its Peterlumbo scout drilling program. Initial assessment on results from 50 drillholes indicate a new large Paris-style system at Diomedes (7 km northeast of Paris) and potentially at the undrilled Argos North prospect (5 km northwest of Paris; ASX release 28 October 2014). Best silver and lead intersections included:

- Argos:
 - 42 m at 11.1 g/t Ag, 0.5% Pb and 0.30% Zn from 21 m
 - 6 m at 91.9 g/t Ag, 0.1% Pb and 0.27% Zn from 60 m

- Diomedes:
 - 42 m at 4.7 g/t Ag, 0.84% Pb and 0.47% Zn from 93 m to bottom of hole.

Additional results released from Diomedes indicate further potential of this Paris-style system at depth (ASX release 1 December 2014):

- PPRC322, 21 m at 0.27% Pb from 159 m
- PPRC323:
 - 9 m at 0.24% Pb from surface
 - 33 m at 0.54% Pb from 63 m
 - 30 m at 0.53% Pb and 0.23% Zn from 108 m (including 12 m at 1.02% Pb and 0.4% Zn from 11 m, and 6 m at 0.19% Pb and 0.22% Zn from 126 m.

IronClad Mining – Trafford Resources

www.ironcladmining.com

www.traffordresources.com

In an ASX release on 24 December 2014 Ironclad Mining Limited and Trafford Resources Limited jointly announced they had executed a merger implementation agreement. Under the proposed scheme of arrangement IronClad will offer one IronClad share for every one Trafford share. The companies expect the merger to be completed by mid 2015.

The merger is expected to deliver numerous benefits including broader commodity exposure, strengthened South Australian position in key areas and commodities, lower administrative costs and increased flexibility to advance individual assets as market funds allow.

It is the intention of the merged company to pursue its existing advanced tin and manganese projects with a view to establishing prefeasibility studies on both at the earliest time.

Iron Road

www.ironroadlimited.com.au

In November 2014 Iron Road Limited reported that the South Australian Government had set the assessment level for the infrastructure components of the company's Central Eyre iron project (CEIP) as requiring the preparation of an environmental impact statement (EIS), the most rigorous level of assessment. The decision was in line with Iron Road's expectations, and the EIS document is expected to be submitted to the government in the first quarter of 2015 (ASX release 13 November 2014).

Also in November, Iron Road announced that results from its Stage IX (Gap/Boo-Loo East) drilling program at the CEIP had confirmed the extension and thickening of the Boo-Loo mineralisation at depth (ASX release 17 November 2014). Best results included:

- 288 m at 15.6% Fe, 78 m at 18.8% Fe, 284 m at 14.9% Fe and 42 m at 18.5% Fe.

The company will include the results in a re-estimation of the Boo-Loo mineral resource, producing an expected increase in size and upgrade of resource category for the existing inferred mineral resource. In addition to supporting the overall resource base at CEIP and the objective of building a 25+ year mine life at an increased annual output of ~24 Mtpa, information from the Stage IX drilling program will be used to refine and update the mine design and planning.

Kingsgate Consolidated

www.kingsgate.com.au

Kingsgate Consolidated Limited's Challenger gold mine reached a major production milestone in November 2014 with the pouring of its one millionth ounce of gold (ASX release 21 November 2014; Fig. 2). The achievement came some 12 years after production at the remote South Australian mine commenced in 2002.

Figure 2 A major production milestone was reached at the Challenger gold mine in November 2014 with the pouring of its one millionth ounce of gold. Steve Jeffers, Kingsgate Consolidated General Manager, holds a gold bar worth \$990 000. (Courtesy of NewsPix)



The mine commenced operation targeting production of just 105 000 oz over 18 months from open-pit mining. During this period underground resources were successfully delineated and the mine moved underground in February 2004 and is still operating today.

Minotaur Exploration

www.minotaurexploration.com.au

In an ASX release on 20 October 2014 Minotaur Exploration Limited announced the sale of its Lake Purdilla gypsum deposits (Exploration Licences 4697 and 5398) on western Eyre Peninsula.

In November 2014 an Innovation Grant from the Department of State Development Premier's Research and Industry Fund was awarded to Minotaur Exploration to advance their Poochera kaolin project at Streaky Bay. The grant of \$36 000 will be matched by the company to support new test work on the suitability of the project's kaolin for the manufacture of ceramic proppants for the oil and gas industry (ASX release 24 November 2014).

Monax Mining

www.monaxmining.com.au

Monax Mining Limited recently announced the discovery of a potential kimberlite on its Margaret Dam tenement, located south of William Creek in the Far North (ASX release 13 November 2014). A follow-up review of regional aeromagnetic data by the company has identified more potential kimberlites (ASX release 1 December 2014).

On 4 December 2014 (ASX release) Monax released the latest drilling assays from its Punt Hill copper-gold project. Highlights included:

- 96 m at 0.47% Cu, 0.12 g/t Au and 5.3 g/t Ag, including 26 m at 1% Cu, 0.23 g/t Au and 8.5 g/t Ag.

The company also reported that its strategic alliance with Chilean major Antofagasta ended on 24 November 2014. Over the life of the alliance Monax reviewed numerous South Australian projects and, with Antofagasta approval, identified the Millers Creek and Musgrave designated projects which are fully funded by Antofagasta up to US\$4 million. The two parties are also joint venture partners in the Punt Hill Project (ASX release 15 December 2014).

OZ Minerals

www.ozminerals.com

In November 2014 OZ Minerals Limited released its annual resource and reserve update for Prominent

Hill. The overall mineral resource base is 178 Mt at 1.1% Cu and 0.7 g/t Au for 1.9 Mt of contained copper and 4.0 Moz of contained gold (ASX release 20 November 2014). Within this are ore reserves of 79 Mt at 1.0% Cu and 0.6 g/t Au for 800 000 t of contained copper and 1.4 Moz of contained gold.

This update brings OZ Minerals' global mineral resource base, including the Carrapateena and Khamsin deposits, to 1.2 Bt at 0.8% Cu and 0.3 g/t Au for 9.3 Mt of contained copper and 13.2 Moz of contained gold.

It also brings OZ Minerals' global ore reserve base, including Prominent Hill and Carrapateena, to 349 Mt at 0.9% Cu and 0.4 g/t Au for 3.3 Mt of contained copper and 4.9 Moz of contained gold.

Senex Energy

www.senexenergy.com.au

Senex Energy Limited has reported it has commenced commercial production of gas from the Hornet Field in the South Australian Cooper Basin, marking its inaugural gas sales. The Hornet 1 gas well in Petroleum Retention Licence 105 (Senex 100%) tested at a flow rate of more than 2 mmscf/d in pre-commissioning, with the Kingston Rule 1 well currently awaiting workover and production expected in early 2015. Gas from the Hornet Field is being sold to the Santos-operated South Australian Cooper Basin Joint Venture under a gas sales agreement providing for the supply of unprocessed raw gas on a discretionary basis, with up to 10 mmscf/d able to be supplied (ASX release 1 December 2014).

In a further announcement the company reported it has strengthened its producing revenue base with the commencement of production from the recently discovered Martlet oil field in the western flank of the Cooper Basin, located in Petroleum Exploration Licence 104 (Senex 60% and operator, Beach Energy Limited 40%). Martlet 1 flow tested at the equivalent of 5149 bbl of fluid and 2596 bbl of oil per day from the target Namur reservoir on a short-term test. The well was commissioned in early December, with initial production rates post-commissioning constrained to around 50% of capacity to accommodate the significant amount of liquids being produced (averaging around 850 bbl of oil per day). Construction has commenced on water management facilities which, once complete, will increase production capacity from the field during the second half of financial year 2015 (ASX release 10 December 2014).

Valence Industries

www.valenceindustries.com

Following the re-opening of its Uley graphite mine in November 2014 Valence Industries Limited has seen the project quickly progress. In mid December the company achieved a major milestone with the release of its maiden ore reserve for Uley Pit 2 of 261 000 t of graphite with an average grade of 12.9% graphitic carbon. Valence has forecast an initial life of mine of six years for Uley Pit 2, with an initial mine production plan processing over 2 Mt of ore (ASX release 17 December 2014).

On 24 December 2014 (ASX release) Valence announced the company's program for environment protection and rehabilitation plan had been approved by the South Australian Government. The approval allows Valence to commence commercial-scale graphite production from the existing stockpiles through the Phase I plant. The approval also allows the company to construct and operate its Phase II plant expansion and commence mining from Uley Pit 2.

Valence reached another significant milestone in early January (ASX release 2 January 2015) with the release of the Phase II expanded production and Phase III advanced manufacturing feasibility study. The study outlines plans for the significant expansion of its current operations – Phase II being the establishment of the Uley Pit 2 and new processing plant which will increase processing capacity from 14 000 tpa to 64 000 tpa in 2 x 25 000 tpa increments. The combined capital costs for Phase II will be \$37 million over three years.

The company has brought forward the \$13 million development of the advanced product handling facilities consisting of product blending and packaging operations, micronisation plant and a scalable pilot plant.

The feasibility study has also identified a significant reduction in direct operating costs expected to be in the range of \$400–500/t at the mine gate and \$750–950 free on board at Port Adelaide.

WPG Resources

www.wpgresources.com.au

WPG Resources Ltd is now sole owner of the Tunkillia gold project after completing the acquisition of the remaining 30% share owned by joint venture partner Helix Resources Limited. The purchase will set the platform for WPG to redefine the project parameters and advance a new exploration strategy (ASX release 26 November 2014). ■

Premier onshore oil and gas training hub opens

Workers in the oil and gas industry will be able to earn formal qualifications off-site with the official opening of the Onshore Petroleum Centre of Excellence (OPCE) training facility at Tonsley TAFE on 16 February 2015. The purpose-built facility provides a fully immersive, simulated oil and gas production environment for training (*MESA Journal* 72:8–9).

Industry workers are now able to undertake a Certificate II in Process Plant Operations and TAFE is finalising a Certificate IV qualification to meet the skill requirements of the OPCE partners. Previously these qualifications were only available with industry in-house training. A round of pilot training was successfully concluded in November 2014 with 15 employees from Santos, Beach Energy, Senex Energy and Transfield Services, and training formally commenced in February 2015.

The centre is an initiative of South Australia's Mining and Petroleum Services Centre of Excellence and was established under a Deed between the Minister for Mineral Resources and Energy, Santos, Beach Energy, Senex Energy and TAFE SA. It is a testament to the strength of the collaboration between government and these industry partners who have committed significant funds, equipment and expertise.

Industry suppliers providing their expertise and services include Ottoway Engineering, Logicomms, MRC, Bureau Veritas, Transfield Services, GPA Engineering, Inductabend, Whitham Media Australia, Toll Energy, Fyfe Engineering, Centralian Controls, Max Cranes, James Walker Australia, ICE Engineering & Construction, Konnect, Veolia Environmental Services, Toyota Australia, Coventry Fasteners and Central Diesel.

The longer term potential for the centre is also being acknowledged by other organisations, such as Siemens, which is working closely with TAFE SA to include a large compressor rig in the facility, and workplace safety providers who have approached the OPCE Governance Board to discuss the provision of complementary training.

FURTHER INFORMATION

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