

WESTERN AUSTRALIA

Exciting discoveries continue to be made in a huge state (2 500 000 km²)
80% is classified as greenfields

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Corunna Downs: Definitive feasibility study based on reserves of 21 Mt at 57% Fe supports a 6-year mine life with annual production of 4 Mt of direct-shipping ore (DSO) for a capital expenditure between A\$47–53M. (Atlas Iron Ltd)

Pilgangoora: Reserves more than doubled to 69.8 Mt at 1.26% Li₂O and 132 ppm Ta₂O₅ for a contained 0.883 Mt of Li₂O and 20.3 Mlbs of Ta₂O₅. (Pilbara Minerals)

Turner River – Indee: New lode discovered north of **Mt Berghaus**. Drilling intersections for the **North Lode** include 17 m at 2.08 g/t Au. (De Grey Mining)

Salt Creek: High-grade zinc and copper assays for **Salt Creek** at Whim Creek have confirmed the extension of mineralization in three zones. Assays have demonstrated that the prospectivity of the VMS system continues to improve with depth. Best intersections include 18.7 m at 2.42% Cu, and 9.85 m at 8.76% Zn and 1.44% Pb. (Venturex Resources)

Karlawinda: Bibra open pit resource increased by 40% to 25.5 Moz at 1.1 g/t Au. (Capricorn Metals Ltd)

Springfield: A maiden JORC resource has been released for the high-grade **Monty** deposit with 99 000 t of copper and 55 000 oz of gold. (Sandfire Resources/Talisman Mining)

Matilda: Gold production at **Matilda** began in October 2016. The combined resource for the **Matilda/Wiluna** operation increased to 58 Mt at 3.2 g/t Au. (Blackham Resources Ltd)

Yangibana: Total resource updated to 13.4 Mt at 1.18% total rare earth oxide (TREO), including 0.39% Nd₂O₃+Pr₂O₃. Includes maiden measured resource of 2.16 Mt at 1.01% TREO (including 0.42% Nd₂O₃+Pr₂O₃) located at **Bald Hill** and **Frasers**. (Hastings Rare Metals Ltd)

Gabanintha: As lead-up to a feasibility study at **Gabanintha**, Australian Vanadium Ltd signed up on a collaboration on future vanadium redox flow battery installations and electrolyte production in Australia, and recently purchased a vanadium electrolyte pilot plant. (Australian Vanadium Ltd)

Mt Alexander: High-grade nickel sulfides confirmed at **Cathedrals** and **Investigators**. Drilling results include 2.06 m at 6.35% Ni, 3.20% Cu, 0.21% Co and 4.08 g/t total platinum group elements (PGEs) at **Cathedrals**, and 1 m at 7.88% Ni, 3.11% Cu, 0.24% Co and 5.04 g/t total PGEs at **Investigators**. (St George Mining Ltd.)

Mt Marion: RC drilling at **Area 2 West** has intercepted significant, deep, spodumene-bearing pegmatite in consecutive drillholes along a southwesterly trend with best grades so far of 186 m at 1.82% Li₂O from 95 m. Resources have been boosted by 160% to 60.5 Mt at 1.36% Li₂O. (Neometals, Mineral Resources, and Jiangxi Ganfeng Lithium)

Deflector: Western Australia's newest Au–Cu mine opened in May 2016 with an initial mine life of six years and a current resource of 2.9 Mt at 6.4 g/t Au and 0.9 % Cu. (Doray Minerals Ltd)

Pioneer Dome: The **Sinclair Zone** is a recently discovered zone of the cesium mineral pollucite, surrounded by an outer rim of predominantly lithium-mica. Indicative grades for the cesium-rich core are 12 m at 15.8% Cs₂O and Li-mica rich layer 13 m at 2.13% Li₂O. This zone falls within a larger pegmatite that also contains spodumene- and/or petalite-rich zones grading 11 m at 2.63% Li₂O, and is one of only three known cesium deposits in the world. (Pioneer Resources)

Oxley: Scoping study for potassium nitrate fertilizer operation based on inferred resource of 38 Mt at 10% K₂O, part of a total resource of 155 Mt at 8.3% K₂O. (Centrex Metals Ltd)

Dandaragan Trough: Further drilling confirms the continuation of phosphate and potash mineralization to 10 km south of **Dinner Hill**; significant intersections include 40 m at 4.4% K₂O and 34 m at 4.7% K₂O from new prospects. (Potash West NL)

Calingiri: Maiden resource (74% indicated) released including 251 Mt at 0.34% Cu for 0.84 Mt contained copper. (First Quantum Minerals – Caravel Minerals Ltd)

Boonanarring: Resources at **Boonanarring** doubled to 43.7 Mt at 5.6% HM, due to delineation of a lower grade zone above the high-grade mineralization and application of a lower cut-off grade of 2.0% HM. (Image Resources NL)

Mt Holland: Maiden combined resource for **Earl Grey** of 128 Mt at 1.44% Li₂O for 1.84 Mt of contained Li₂O (4.54 Mt lithium carbonate equivalent (LCE)) announced. Kidman has secured an exclusive 3 year lease option to use Poseidon Nickel's Lake Johnston processing plant to produce spodumene concentrate. (Kidman Resources)

Keysbrook: Increased performance at **Keysbrook** wet concentrator plant enabled bulk shipments of leucoxene products (6243 t L88 – 88% TiO₂) and zircon concentrate (1011 t) in December 2016, with additional bulk shipments of leucoxene L70 (70% TiO₂; approx. 6500 t) and zircon concentrate (approx. 1000 t) before end of 2016. (MZI Resources Ltd)

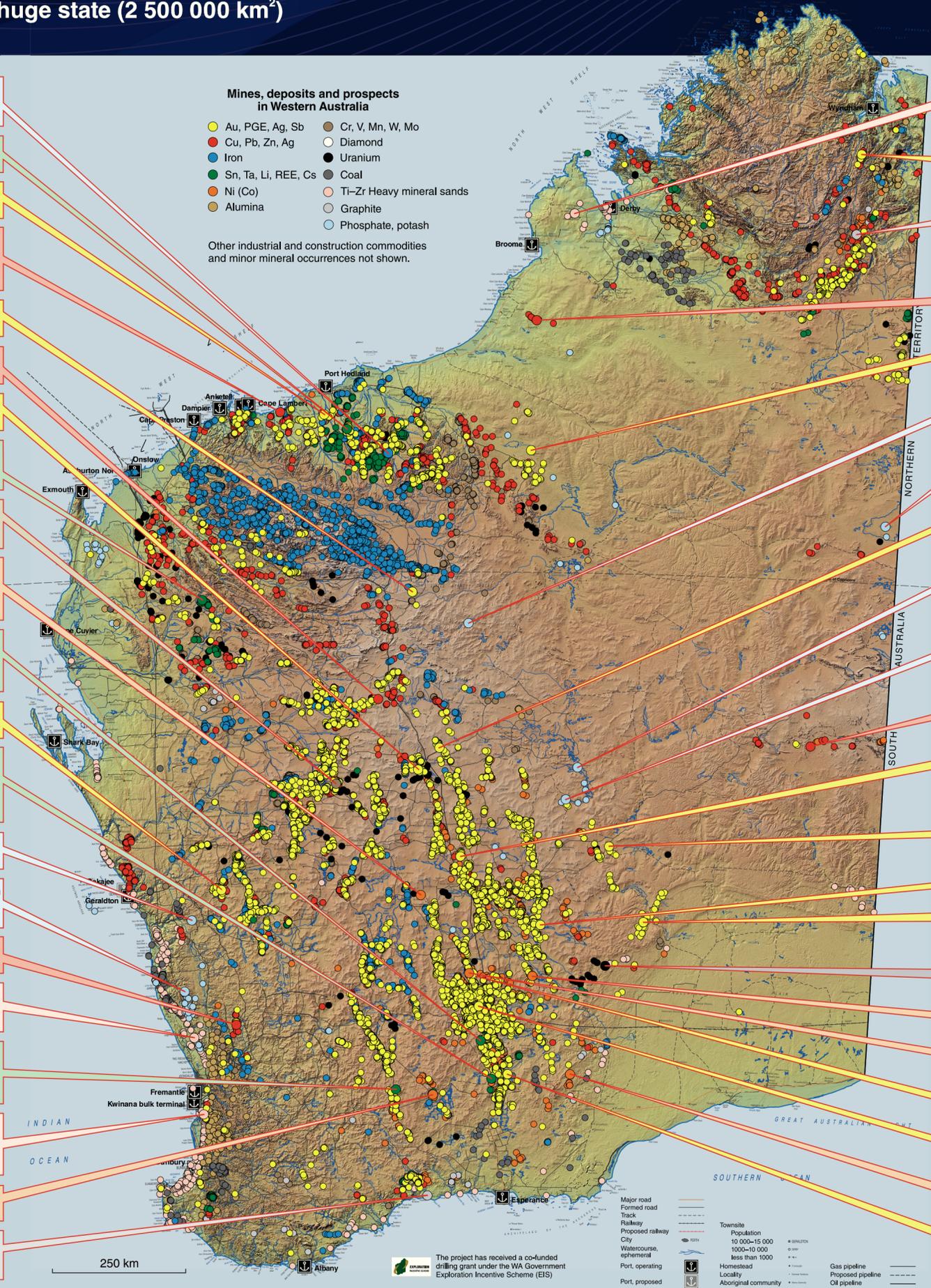
Lake Johnston: **Abi Rose** massive and stringer sulfide zone discovered close to existing **Emily Ann** infrastructure. Intersections include 10.48 m at 3.20% Ni. (Poseidon Nickel Ltd)

Springdale: A new graphite discovery located 50 km SW of the **Munglinup** graphite deposits. Maiden drilling gave significant intersections including 10 m at 9.7% TGC and 18 m at 6.7% TGC. **Springdale** occurs as a shallow graphite horizon within limestone. (Comet Resources Pty Ltd)

Mines, deposits and prospects in Western Australia

- Au, PGE, Ag, Sb
- Cu, Pb, Zn, Ag
- Iron
- Sn, Ta, Li, REE, Cs
- Ni (Co)
- Alumina
- Cr, V, Mn, W, Mo
- Diamond
- Uranium
- Coal
- Ti–Zr Heavy mineral sands
- Graphite
- Phosphate, potash

Other industrial and construction commodities and minor mineral occurrences not shown.



Thunderbird: Metallurgical test work recently completed for bankable feasibility study indicate high-grade ilmenite (56% TiO₂) and ceramic-grade zircon (66% ZrO₂) products. Resource currently at 3230 Mt at 6.9% heavy mineral (HM) for 223 Mt contained HM, including measured resource at 510 Mt at 8.9% HM. (Sheffield Resources Ltd)

Speewah: Rock-chip sampling of epithermal veins at **Catto West** returned high-grade values including 2060 g/t Ag, 7.6% Sb and 8 g/t Au. (King River Copper Ltd)

McIntosh Graphite: Stage 1 of pre-feasibility study at **McIntosh** released. Bulk-scale testing gave outstanding results for graphene and graphite. **McIntosh** is the largest JORC-compliant flake graphite resource in Australia. Total resource is 17.2 Mt at 4.63% Total Graphitic Carbon (TGC) (0.797 Mt of contained graphite) over four deposits – **Emperor**, **Longtom**, **Wahoo** and **Barracuda** – which occur along a regional anticlinal fold hinge. (Hexagon Resources Ltd)

Admiral Bay: The new inferred resource for **Admiral Bay** is 170 Mt at 7.5% zinc equivalent. The resource is 4.1% zinc, 2.7% lead and 25 g/t silver for 12.75 Mt contained zinc equivalent. The grade has increased by about 30%, while the contained zinc equivalent has doubled. (Metalicity Limited)

North Telfer: Drilling indicates gold mineralization at **WACA** extends vertically for 300 m. Results include 8 m at 21.04 g/t Au and 0.56% Cu. (Antipa Minerals Ltd)

Beyondie Potash: Kalium Lakes is planning to develop its **Beyondie** sulfate of potash (SOP) deposit. The maiden **Beyondie** SOP resource includes an Indicated resource of 0.93 Mt at 7.1 kg/m³ potassium and Inferred resource of 18.9 Mt at 6.0 kg/m³ potassium. (Kalium Lakes Ltd)

Lake Mackay: Scoping study supports a sulfate of potash (SOP) production rate of 370 000 tpa over a 20-year life. Current indicated and inferred resources total 23.2 Mt of SOP at 8.31 kg/m³ SOP. (Agrimin Ltd)

Jundee–Nimry: Armada and Westside mineralization discovered 400 m below existing workings. **Armada** intersections include 11.9 m at 8.8 g/t Au. (Northern Star Resources Ltd)

Lake Wells/SLP: Scoping study estimates initial production of 200 000 tpa of sulfate of potash (SOP) from shallow trenching and near surface bore from a measured resource, and later pumping from a deeper inferred resource to increase production to 400 000 tpa of SOP. Total resource of 85 Mt of SOP, at 8.74 kg/m³ K₂SO₄. (Salt Lake Potash Ltd)

Lake Wells/APL: Maiden resource (inferred) for **Lake Wells** of 18.4 Mt at 8.05 kg/m³ sulfate of potash (SOP); including a high-grade western inferred resource of 10.5 Mt at 9.03 kg/m³ SOP. (Australian Potash Ltd)

West Musgrave: Drilling at **One Tree Hill** intersected a 15 m mineralized zone that included 3.25 m of continuous massive sulfides containing 5–10% chalcocite within pyrrhotite. (Oz Minerals/Cassini Resources)

Thunderbox: The redeveloped **Thunderbox** gold mine achieved commercial production in April 2016. Since then project's resources has been increased to 43.13 Mt at 1.68 g/t Au. (Saracen Mineral Holdings)

Yamarna North: Gruyere resource updated to 153.6 Mt at 1.34 g/t Au (6.2 Moz; reserve 91.6 Mt at 1.2 g/t Au). In November 2016, Gold Road entered into a 50:50 joint venture with Gold Fields Ltd for the Gruyere Gold Project, and commencement of construction is planned for Q1 2017. (Gold Road Resources/Gold Fields Ltd)

Lake Carey: Intersections from **Fortitude** include 4.5 m at 21.8 g/t Au. (Matsa Resources Ltd)

Tropicana: Ore reserves at **Tropicana** were increased by 58% to 60.1 Mt at 1.97g/t Au for 3.80 Moz. The total resource is now 148.1 Mt at 1.68 g/t Au. (Independence Group NL)

Mulga Rock: The company announced a probable reserve of 18.7 Mt at 755 ppm U₃O₈ for a total metal content of 31.2 Mlb (14 150 t) of U₃O₈, derived from a revised total resource figure of 67.8 Mt at 510 ppm U₃O₈. Definitive feasibility study due for completion Q1 2017. (Vimy Resources)

Silver Swan: Resource increased by 180% to 136 000 t at 9.08% nickel. (Poseidon Nickel)

Kalgoorlie Nickel Project: Resource estimate released for the cobalt-rich "**Cobalt zone**" within this project, totaling 49.7 Mt at 0.12% Co and 0.86% Ni. (Ardea Resources)

Teal – Peyes Farm: Jacques Find discovered 500 m south of the company's **Teal** mine. Drilling results include 11 m at 7.75 g/t Au. Production at **Teal** began in November 2016. (Intermin Resources Ltd)

Scotia Gold: A maiden resource of 1.1 Mt at 2.1 g/ Au was released for the **Chameleon** gold deposit. (Minotaur Exploration Ltd)

Nova–Bollinger: Mining of development stopes continues and the first Ni concentrate shipped in December 2016. Full production is expected in mid 2017. (Independence Group NL)

Polar Bear: Recent drilling indicates mineralization extends at least 200 m below the 2016 maiden resource of 2.17 Mt at 1.8 g/t Au. (S2 Resources Ltd)

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