

# South Australia's Major Operating/Approved Mines Resource Estimates and Production Statistics



Government of South Australia  
Department for Energy and Mining

Prepared by DEM 09/01/2025

Major Operating/Approved Mines	Commodity	Status	Total Resource (unless otherwise stated)	Ore Reserve	Contained Commodity (from Resource)
Olympic Dam – BHP Group Olympic Dam Operations Pty Ltd <a href="http://www.bhp.com">www.bhp.com</a>	Copper (Cu), Uranium (U <sub>3</sub> O <sub>8</sub> ), Gold (Au), Silver (Ag)	Operating	9,640 Mt (OC sulphide) at 0.58% Cu, 0.19 kg/t U <sub>3</sub> O <sub>8</sub> , 0.26 g/t Au, 1.0 g/t Ag 1,740 Mt (UG sulphide) at 1.49% Cu, 0.44 kg/t U <sub>3</sub> O <sub>8</sub> , 0.58 g/t Au, 3.0 g/t Ag <i>BHP Annual Report 2023</i>	590 Mt (UG sulphide) at 1.82% Cu, 0.58 kg/t U <sub>3</sub> O <sub>8</sub> , 0.67 g/t Au, 4.0 g/t Ag 44 Mt (low grade) at 0.79% Cu, 0.27 kg/t U <sub>3</sub> O <sub>8</sub> , 0.34 g/t Au, 2.0 g/t Ag <i>BHP Annual Report 2023</i>	OC sulphide total resource: 55,912,000 t Cu, 1,831,600 t U <sub>3</sub> O <sub>8</sub> , 80,582,500 oz Au, 30,932,700 oz Ag UG sulphide total resource: 25,926,000 t Cu, 765,600 t U <sub>3</sub> O <sub>8</sub> , 32,446,400 oz Au, 167,826,600 oz Ag <i>BHP Annual Report 2023</i> UG sulphide total reserve: 10,738,000 t Cu, 342,200 t U <sub>3</sub> O <sub>8</sub> , 12,709,200 oz Au, 75,875,700 oz Ag Low grade total reserve: 347,600 t Cu, 11,880 t U <sub>3</sub> O <sub>8</sub> , 481,000 oz Au, 2,829,300 oz Ag <i>BHP Annual Report 2023</i>
Carrapateena – BHP Group Pty Ltd <a href="http://www.bhp.com">www.bhp.com</a>	Copper (Cu), Gold (Au), Silver (Ag)	Operating	900 Mt at 0.56% Cu, 0.24 g/t Au, 3 g/t Ag <i>ASX Release 30/06/23</i>	189 Mt at 1.04% Cu, 0.41 g/t Au, 4 g/t Ag <i>ASX Release 30/06/23</i>	Total resource: 5,040,000 t Cu, 6,944,600 oz Au, 86,806,900 oz Ag <i>ASX Release 30/06/23</i> Reserve: 1,965,600 t Cu, 2,491,400 oz Au, 24,305,900 oz Ag <i>ASX Release 30/06/23</i>
Prominent Hill – BHP Group Pty Ltd <a href="http://www.bhp.com">www.bhp.com</a>	Copper (Cu), Gold (Au), Silver (Ag)	Operating	Underground: 162 Mt at 0.94% Cu, 0.81 g/t Au, 3 g/t Ag Surface stocks: 6.6 Mt at 0.18% Cu, 0.5 g/t Au, 0.53 g/t Ag <i>ASX Release 30/06/23</i>	Underground: 54 Mt at 0.99% Cu, 0.64 g/t Au, 3 g/t Ag Surface stocks: 6.6 Mt at 0.18% Cu, 0.5 g/t Au, 0.53 g/t Ag <i>ASX Release 30/06/23</i>	Total resource: 1,534,700 t Cu, 4,324,900 oz Au, 15,737,700 oz Ag <i>ASX Release 30/06/23</i> Total reserve: 546,600 t Cu, 1,225,700 oz Au, 5,318,400 oz Ag <i>ASX Release 30/06/23</i>
Hillside – Rex Minerals Ltd <a href="http://www.rexminerals.com.au">www.rexminerals.com.au</a>	Copper (Cu), Gold (Au)	Approved	337 Mt at 0.56% Cu, 0.14 g/t Au <i>ASX release 14/12/22</i>	186 Mt at 0.55% Cu, 0.14 g/t Au <i>ASX release 14/12/22</i>	Total Resource: 1,897,000 t Cu and 1,528,000 oz Au <i>ASX release 14/12/22</i> Total reserve: 989,000 t Cu, 834,000 oz t Au <i>ASX release 14/12/22</i>
Kanmantoo – Hillgrove Resources Limited <a href="http://www.hillgroveresources.com.au">www.hillgroveresources.com.au</a>	Copper (Cu), Gold (Au)	Operating	Kavanagh lode: 5,750,000 t at 1.1% Cu and 0.10 g/t Au Nugent lode (underground): 659,000 t at 1.32% Cu and 0.61 g/t Au <i>ASX Release 11/05/22</i>		Resources: Kavanagh 61,000 t Cu and 18,500 oz Au Nugent 8,700 t Cu and 13,000 oz Au <i>ASX Release 11/05/22</i>
Kalkaroo – Havilah Resources Limited <a href="http://www.havilah-resources.com.au">www.havilah-resources.com.au</a>	Copper (Cu), Gold (Au), Cobalt (Co), Rare Earth Elements (REE)	Approved	copper-gold: 223.8 Mt at 0.49% Cu, 0.36 g/t Au gold: 21.68 Mt at 0.74 g/t Au cobalt: 193.3 Mt at 120 ppm Co <i>ASX Release 07/03/2018</i>	100.1 Mt at 0.47% Cu, 0.44 g/t Au <i>ASX Release 18/06/2018</i>	Resource: 1,139,000 t Cu, 2,770,000 oz Au + 514,500 oz Au (in gold cap) + 23,200 t Co <i>ASX Release 07/03/2018</i> Reserve: 474,000 t Cu, 1,407,000 oz Au <i>ASX Release 18/06/2018</i>
Middleback Range – SIMEC Mining <a href="http://www.simec.com/mining">www.simec.com/mining</a>	Hematite (Fe <sub>2</sub> O <sub>3</sub> ), Magnetite (Fe <sub>3</sub> O <sub>4</sub> )	Operating	Hematite (DSO): ~100 Mt at 57.25% Fe Magnetite: 1.54 Bt at 34.34% mass recovery (DTR) <i>SAEMC Presentation 2023</i>	Hematite reserves 23.1 Mt at 57.9% Fe, 5.8% SiO <sub>2</sub> , 2.8% Al <sub>2</sub> O <sub>3</sub> , 0.05% P Magnetite reserves 61.9 Mt at 39.6% DTR and 38.3% Fe, 19.9% SiO <sub>2</sub> Beneficiated hematite stockpile 15.9 Mt (52% recovery) 61.0% Fe <i>ASX release 19/08/15</i>	
Cairn Hill – Cu-River Mining Australia Pty Limited	Magnetite (Fe <sub>3</sub> O <sub>4</sub> ), Copper (Cu), Gold (Au)	Care and Maintenance	11.4 Mt at 49.5% Fe (magnetite) 0.4% Cu and 0.1 g/t Au <i>IMX Resources website (c. 2009)</i>	6.9 Mt at 51.2% Fe, 0.43% Cu, 0.13 g/t Au (Phase 1 pit area 28/12/09)	5 643 000 t Fe, 45,200 t Cu and 1130 kg Au <i>(MRD estimate)</i>
Peculiar Knob – Peak Iron Mines Pty Ltd <a href="http://www.peakiron.com">www.peakiron.com</a>	Hematite (Fe <sub>2</sub> O <sub>3</sub> )	Operating	Remaining mineable resource 7.2 Mt at ~63% Fe (8.97% SiO <sub>2</sub> , 0.25 Al <sub>2</sub> O <sub>3</sub> & 0.016% P) <i>2021 website</i>		
Central Eyre Iron Project – Iron Road Limited <a href="http://www.ironroadlimited.com.au">www.ironroadlimited.com.au</a>	Magnetite (Fe <sub>3</sub> O <sub>4</sub> )	ML granted (PEPR pending)	4 510 Mt (meas. ind. & inf.) at 16.0% Fe, 53.0% SiO <sub>2</sub> , 13.0% Al <sub>2</sub> O <sub>3</sub> , 0.08% P and 3.5% LOI <i>ASX release 27/02/15</i>	3 681 Mt (prov. and prob.) at 15.07% Fe, 53.7% SiO <sub>2</sub> , 12.06% Al <sub>2</sub> O <sub>3</sub>	~721 600 000 t Fe (resource) <i>(MRD estimate)</i> ~554 700 000 t Fe (reserve)
Wilgerup – SIMEC Mining <a href="http://www.simec.com/mining/">www.simec.com/mining/</a>	Hematite (Fe <sub>2</sub> O <sub>3</sub> )	Approved	13.3 Mt (ind.) at 57.7% Fe, 4.9% SiO <sub>2</sub> , 2.8% Al <sub>2</sub> O <sub>3</sub> , 5.1% LOI, 0.5% P <i>Annual Report 2015 (fmr owner Centrex Metals)</i>		7 616 400 t Fe <i>(MRD estimate)</i>
Buzzard – Peak Iron Mines Pty Ltd <a href="http://www.peakiron.com">www.peakiron.com</a>	Hematite (Fe <sub>2</sub> O <sub>3</sub> )	Operating	18.98 Mt at 60.48% Fe, 9.7% SiO <sub>2</sub> , 1.62% Al <sub>2</sub> O <sub>3</sub> , 1.06% LOI, 0.07% P, 0.03% Mn, 0.2% CaO, 0.24% K <sub>2</sub> O <i>Mining Proposal MC 4508</i>		

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Razorback – Magnetite Mines Limited <a href="http://www.magnetitemines.com">www.magnetitemines.com</a>	Magnetite (Fe <sub>3</sub> O <sub>4</sub> )	Feasibility Studies	Razorback Ridge: 2740 Mt at 15.4% eDTR, 18% Fe, 48.3% SiO <sub>2</sub> , 8.1% Al <sub>2</sub> O <sub>3</sub> , 0.18% P, 5.4% LOI, 15.2% magnetite Iron Peak: 503 Mt at 19.4% eDTR, 18.2% Fe, 48% SiO <sub>2</sub> , 8.2% Al <sub>2</sub> O <sub>3</sub> , 0.16% P, 5.8% LOI, 16% magnetite <i>ASX Release 09/02/23</i>	Razorback Ridge: 1615 Mt at 14.2% mass recovery Iron Peak: 362 Mt at 16.8% mass recovery <i>ASX Releases 20/03/23 &amp; 09/06/2023</i>	Total Resource: 586 Mt contained Fe <i>ASX Release 09/02/23</i> Total Probable Reserve: 346 Mt contained Fe <i>ASX Release 20/03/23 &amp; 09/06/2023</i>
Four Mile – Heathgate Resources Pty Ltd	Uranium (U <sub>3</sub> O <sub>8</sub> )	Operating		20,366t (44.9 Mlb) U <sub>3</sub> O <sub>8</sub> <i>Annual Compliance Report 2018</i>	
Beverley – Heathgate Resources P/L <a href="http://www.heathgate.com.au">www.heathgate.com.au</a>	Uranium (U <sub>3</sub> O <sub>8</sub> )	Care and Maintenance	Beverley: 7.7 Mt at 0.27% U <sub>3</sub> O <sub>8</sub> Beverley North: 2.2 Mt at 0.18% U <sub>3</sub> O <sub>8</sub>		Beverley: 21 000 t U <sub>3</sub> O <sub>8</sub> Beverley North: 4000 t U <sub>3</sub> O <sub>8</sub> (0.15m% GT cut-off) <i>(MRD estimate)</i>
Honeymoon – Boss Energy Ltd <a href="http://www.bossenergy.com">www.bossenergy.com</a>	Uranium (U <sub>3</sub> O <sub>8</sub> )	Operating	52.4 Mt at 620 ppm U3O8 (includes Honeymoon re-start area, Gould's Dam & Jason's) <i>ASX Release 25/02/19</i>	3.64 Mt (prob) at 0.063% U <i>ASX Release 31/12/12</i>	32,500 t U3O8 (resource) (Total Honeymoon project) <i>ASX Release 25/02/19</i> 2688 t U (reserve) <i>ASX Release 31/12/12</i>
Challenger – Barton Gold Holdings Ltd <a href="http://www.bartongold.com.au">www.bartongold.com.au</a>	Gold (Au)	Care and Maintenance	0.53 Mt at 3.9 g/t Au <i>Company release 5/11/20</i>		(resource) 65 600 oz Au <i>ASX release 05/11/20</i>
Portia – Benagerie Gold & Copper Pty Ltd (Consolidated Mining and Civil) <a href="http://conmc.net.au">conmc.net.au</a>	Gold (Au)	Care and Maintenance	720,000 t at 2.9 g/t Au (inf.)	53,200 oz Au <i>(PEPR 17/12/2014)</i>	67,000 oz Au
White Dam – GMB Resources <a href="https://www.gbmr.com.au/">https://www.gbmr.com.au/</a> Round Oak Minerals Pty Ltd (subsidiary of Washington H Soul Pattinson & Co Ltd)	Gold (Au), Copper (Cu)	Operating	4.6 Mt at 0.7 g/t Au (Total:Hannaford, Vertigo, White Dam North) <i>ASX Release 10/08/20</i>		101,900 oz Au (resource) <i>ASX Release 10/08/20</i>
Tarcoola – Barton Gold Holdings Ltd <a href="http://www.bartongold.com.au">www.bartongold.com.au</a>	Gold (Au), Silver (Ag)	Care and Maintenance	370,000 t at 1.3 g/t Au <i>ASX Release 14/10/2021</i>	567,200 t at 3.0 g/t Au <i>ASX Release 21/09/2017</i>	Resource: 15,800 oz Au <i>ASX Release 14/10/2021</i> Reserve: 54,300 oz Au <i>ASX Release 21/09/2017</i>
Beltana – Perilya Limited <a href="http://www.perilya.com.au">www.perilya.com.au</a>	Zinc (Zn)	Care and Maintenance	Total resource 972 000 t at 29.8% Zn, (ind.) 375 600 t at 32.6% Zn (2009 remaining) 308 000 at 28% Zn	Stockpile depleted by 2011/12	
Angas – Terramin Australia Limited	Zinc (Zn), Lead (Pb), Silver (Ag), Gold (Au), Copper (Cu)	Care and Maintenance	0.91 at 4.2% Zn and 1.7% Pb <i>Annual Report 2017</i>		
Uley – Quantum Graphite Operations Pty Ltd (Subject to Deed of Company Arrangement) <a href="http://www.quantumgraphite.com">www.quantumgraphite.com</a>	Graphite	Care and Maintenance	7.2 Mt at 10.5% TGC (3.5% cut-off) <i>ASX Release 18/11/2021</i>	4.003 Mt at 11.89% TGC (3.5% cut-off) <i>ASX Release 27/11/19</i>	Resource: 757,000 t TGC <i>ASX Release 18/11/2021</i> Reserve: 476,000 t TGC <i>ASX Release 27/11/19</i>
Kookaburra Gully – Lincoln Minerals Limited <a href="http://www.lincolnminerals.com.au">www.lincolnminerals.com.au</a>	Graphite	ML granted (PEPR pending)	2.03 Mt at 15.2% TGC (5% cutoff grade) <i>ASX release 27/11/17</i>	1.34 Mt(probable) at 14.6% TGC (8.5% cut-off) <i>ASX release 27/11/17</i>	308,630 t TGC <i>ASX release 27/11/17</i> 196,600 t TGC <i>ASX release 27/11/17</i>
Campoona – iTech Minerals <a href="https://www.itechminerals.com.au/">https://www.itechminerals.com.au/</a>	Graphite	ML granted (PEPR pending)	8.55 Mt at 9.0% TGC (incl. Campoona Shaft, Central Campoon and Wilco South) <i>ASX release 06/08/14</i>		770 800 t (meas. ind. & inf.) TGC <i>ASX release 06/08/14</i>
Siviour – Renascor Resources Limited <a href="http://www.renascor.com.au">www.renascor.com.au</a>	Graphite	Approved	123.6 Mt (total) at 6.9% TGC (2.3% cutoff grade) <i>ASX Release 14/09/23</i>	61.8 Mt (total) at 7.0% TGC <i>ASX release 24/08/2023</i>	8.5 Mt graphite <i>ASX Release 18/08/22</i> 4.3 Mt graphite <i>ASX Release 14/09/23</i>
Jacinth-Ambrosia – Iluka Resources Limited <a href="http://www.iluka.com">www.iluka.com</a>	Heavy minerals (HM)	Operating	146.8 Mt material for 2.97 Mt in situ HM at 48.7% zircon, 26.4% ilmenite, 4.5% rutile <i>Annual Report 31/12/22</i>	Ambrosia 46.3 Mt material for 1.3 Mt in situ HM at 51% zircon, 23% ilmenite, 5% rutile. Jacinth 3 Mt material for 0.1 Mt in situ HM at 58% zircon, 20% ilmenite, 4% rutile. <i>Annual Report 31/12/22</i>	Total resource: 1,446,400 t zircon, 784,000 t ilmenite, 148,500 t rutile <i>Annual Report 31/12/22</i> Total reserve: 765,000 t zircon, 345,000 t ilmenite, 75,000 t rutile <i>Annual Report 31/12/22</i>

Blank fields indicate parameters that have not been published by the company

\*Expansion underway or in approvals stage

\*\* Annual production published in company reports or reported to DEM if not published

#### Further information and contacts:

Website [www.energymining.sa.gov.au/minerals](http://www.energymining.sa.gov.au/minerals)

Email: [dem.minerals@sa.gov.au](mailto:dem.minerals@sa.gov.au)

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