

## South Australia's Major Operating Mines and Mineral Development Projects Resource Estimates and Production Statistics

Mineral Development Projects	Commodity	Total Resource (unless otherwise indicated)	Ore Reserve	Estimated Contained Commodity	Proposed Annual Production
<b>Olympic Dam Expansion</b> – BHP Billiton Ltd www.bhpbilliton.com.au 30/06/09	Cu, U <sub>3</sub> O <sub>8</sub> , Au, Ag	9080 Mt at 0.87% Cu, 0.28 kg/t U <sub>3</sub> O <sub>8</sub> , 0.31 g/t Au, 1.5 g/t Ag 151 Mt (gold only) at 1.0 g/t Au	473 Mt at 1.86% Cu, 0.6 kg/t U <sub>3</sub> O <sub>8</sub> , 0.76 g/t Au, 3.95 g/t Ag	(from total resource) 73 383 200 t Cu 83 112 573 oz Au 2 334 920 t U <sub>3</sub> O <sub>8</sub> 402 157 610 oz Ag	72 Mtpa ore 750 000 tpa Cu, 19 000 tpa U <sub>3</sub> O <sub>8</sub> , 800 000 ozpa Au, 2 900 000 ozpa Ag incl. 2 400 000 tpa Cu conc. (on-site and overseas production)
<b>Kalkaroo</b> – Havilah Resources NL www.havilah-resources.com.au 7/5/09	Cu, Au, Mo	(measured) 62 Mt at 0.55% Cu, 0.44 g/t Au		340 000 t Cu 900 000 oz Au	31 000 t Cu, 95 000 oz Au, 820 000 kg Mo
<b>Carrapateena</b> – Teck Resources Ltd/RMG Services Pty Ltd www.teckcominco.com	Cu, Au	no resource defined			
<b>Hillside</b> - Rex Minerals www.rexminerals.com.au 6/12/10	Cu, Au, U	170 Mt (inf.) at 0.7% Cu and 0.2 g/t Au		1 200 000 t Cu 1 100 000 oz Au	
<b>Gum Flat</b> - Lincoln Minerals www.lincolnminerals.com.au 1/06/10	Fe, magnetite Fe, haematite	99.3 Mt (inf.) at 24.4% Fe (20.6% DTR conc. At 66.7% Fe) Barns (ind.) - 0.9Mt at 54.2% Fe Total haematite (ind. & inf.) - 3.6 Mt at 46.2% Fe			
<b>Hawks Nest</b> - Western Plains Resources NL www.westernplainsresources.com.au 8/12/2008 (ht) & ~2007 (mt)	Fe, hematite Fe, magnetite	102.5 Mt (ind. & inf.) at 37.4% Fe 569 Mt (meas. ind. & inf.) at 35% Fe			(if approved - will be mined after Peculiar Knob)
<b>Peculiar Knob, Buzzard &amp; Tui (DSO)</b> Western Plains Resources NL www.westernplainsresources.com.au 24/08/2010 (PK) & 22/2/08 (reserve)	Fe, hematite	PK only - 19.2Mt at 64.0% Fe, 7.16%SiO <sub>2</sub> , 0.25% Al <sub>2</sub> O <sub>3</sub> , 0.01% P and 0.4 LOI Total DSO - 37.6 Mt at 62.8% Fe, 8.0%SiO <sub>2</sub> , 0.8% Al <sub>2</sub> O <sub>3</sub> , 0.03% P	PK - 15.4 Mt at 62.7% Fe Buzzard - 12.8 Mt at 60.3%		3-4 Mtpa DSO iron ore 7year mine life
<b>Razorback Ridge</b> Royal Resources www.royalresources.com.au 25/08/10	Fe, magnetite	277 Mt (inf.) at 25.9% Fe, 41.4% SiO <sub>2</sub> , 6.7% Al <sub>2</sub> O <sub>3</sub> , 0.2% P, 3.53% CaO <sub>3</sub> and 0.455 TiO <sub>2</sub> .			
<b>Warrambo (Boo-Loo)</b> - Iron Road Ltd www.ironroadlimited.com.au 30/06/10	Fe, magnetite	328 Mt (inf.) at 17.3% Fe, 52.4% SiO <sub>2</sub> , 11.5% Al <sub>2</sub> O <sub>3</sub> , 0.095% P and 2.1% LOI			
<b>Wilcherry Hill</b> – IronClad Mining Ltd www.ironcladmining.com 22/12/08	Fe, magnetite	59.9 Mt (ind.and inf.) at 30.6% Fe			1-2 Mtpa 4-6Mtpa stage 2
<b>Wilgerup</b> – Centrex Metals Ltd www.centrexmetals.com.au 17/07/08	Fe, hematite	13.2 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			2 Mtpa
<b>Crocker Well</b> – Sinosteel PepinNini Curnamona Mgmt. Pty Ltd www.pepinini.com.au; wwwcrockerwell.com.au 28/04/2010	U <sub>3</sub> O <sub>8</sub>	18.8 Mt (ind. & inf.) at 281ppm U <sub>3</sub> O <sub>8</sub>		5290 t U <sub>3</sub> O <sub>8</sub>	200-400 tpa 7 year mine life
<b>Four Mile</b> – Quasar / Alliance Resources Ltd www.allianceresources.com.au 27/01/2010	U <sub>3</sub> O <sub>8</sub>	9.8 Mt at 0.33% U <sub>3</sub> O <sub>8</sub>		32 000 t U <sub>3</sub> O <sub>8</sub>	1360 tpa U <sub>3</sub> O <sub>8</sub> (aiming for production in 2010)
<b>Oban</b> – Curnamona Energy Ltd www.curnamona-energy.com.au 4/06/09	U <sub>3</sub> O <sub>8</sub>	8.2 Mt at 260ppm eU <sub>3</sub> O <sub>8</sub>		2100 t eU <sub>3</sub> O <sub>8</sub>	200 tpa
<b>Mullaquana</b> - UraniumSA www.uraniumsa.com.au 5/05/09	U <sub>3</sub> O <sub>8</sub>	12 Mt at 0.02% eU <sub>3</sub> O <sub>8</sub>		2 700 t U <sub>3</sub> O <sub>8</sub>	
<b>Triptaka</b> – Iluka Resources Ltd www.iluka.com 27/09/06	HM	39.5 Mt (ind.) at 2.3% HM, 0.91 Mt in-situ HM, 65% zircon, 5% rutile, 18% ilmenite/leucocoxene		650 000 t zircon	
<b>Typhoon</b> – Iluka Resources Ltd www.iluka.com 15/07/10	HM	22 Mt (inf.) at 6.1% HM, 1.34 Mt in-situ HM, 14% zircon, 1% rutile, 76% ilmenite/leucocoxene			
<b>Tunkillia</b> – Minotaur Exploration Ltd/Helix Resources Ltd www.minotaurexploration.com.au / www.helix.net.au 3/08/09	Au, Ag	6.3 Mt (oxide) at 1.1 g/t Au 9.3 Mt (primary) at 1.9 g/t Au, 5.5 g/t Ag		803 000 oz Au, 1.658 Moz Ag	
<b>Portia</b> - Havilah Resources NL www.havilah-resources.com 25/6/09	Au	720 000t at 2.9 g/t Au		67 000 oz Au	50 000 oz Au in first full year of operation
<b>Bird in Hand</b> – Maximus Resources Ltd www.maximusresources.com.au 8/08/08	Au	598 000 t at 12.3 g/t Au		237 000 oz Au	
<b>Menninnie Dam</b> – Terramin Australia Ltd www.terramin.com.au 22/02/08	Pb, Zn, Ag	3.8 Mt (inf.) at 3.2% Pb, 4.0% Zn, 34 g/t Ag			
<b>Flinders-Reliance</b> – Perilya Ltd www.perilya.com.au 12/06/08	Zn	277 000 t (ind.) at 29% Zn 31 000 t (inf.) at 18.5% Zn		86 000 t Zn	
<b>Mutooroo</b> – Havilah Resources NL www.havilah-resources.com.au 18/10/10	Cu, Co	13.1 Mt at 1.48% Cu, 0.14% Co		192 000 t Cu, 17 500 t Co, 92 000oz Au, 2.5 Mt sulphur	
<b>Arckaringa</b> – Altona Resources Ltd www.altonaresources.com 1/9/08 18/11/09	Coal, CTL	7.8 billion t (nonJORC est.) sub-bituminous coal Wintinna JORC est. 1.287 billion tonne - 187 Mt (meas.), 650 Mt (ind.) and 450 Mt (inf.)			aiming for: 50–100 yrs open cut coal CTL 10 million barrels pa diesel/jet fuel 560 MW co-gen. power facility
<b>Futurgas</b> - Strike Energy Ltd www.strikeenergy.com.au	Coal, CTL	578 Mt lignite			10 000 barrels per day http://www.hybridenergyaustralia.com.au/pdf/2007_08_Activity_Report
<b>Clinton</b> - Syngas www.syngas.com.au	Coal, CTL	558 Mt (ind.& inf.) lignite 56.7% moisture, 7.4% ash, 19.6% volatiles, 16.3% fixed carbon, 1.1% sulphur for 10 MJ/kg			14 600 barrels liquid fuel per day
<b>Poochera</b> - Minotaur Exploration Ltd www.minotaurexploration.com.au	Kaolin	20 Mt very white kaolin within larger 47 Mt of white to off-white kaolinised granite	properties for Poochera hydrous - 90.7 ISO, 0.6 CIE b, 92% -2mm, 99%, qz 0.1% kaolinite, 0.3% Fe <sub>2</sub> O <sub>3</sub> , 43.6%Al <sub>2</sub> O <sub>3</sub> , 0.07% TiO <sub>2</sub> , BDL <1.6ppm lead		

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

\*Expansion studies underway

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



Government of South Australia  
Primary Industries and Resources SA

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Major Operating/Approved Mines	Commodity	Total Resource (unless otherwise stated)	Ore Reserve	Contained Commodity	Annual Production 2009-10**
* <b>Olympic Dam</b> – BHP Billiton Ltd <a href="http://www.bhpbilliton.com.au">www.bhpbilliton.com.au</a> 30/06/10	Cu, U <sub>3</sub> O <sub>8</sub> , Au, Ag	9075 Mt at 0.87% Cu, 0.27 kg/t U <sub>3</sub> O <sub>8</sub> , 0.32 g/t Au, 1.5 g/t Ag 151 Mt (gold only) at 0.99 g/t Au	598 Mt at 1.84% Cu, 0.58 kg/t U <sub>3</sub> O <sub>8</sub> , 0.71 g/t Au, 3.44 g/t Ag 54 year reserve life	(from total resource) 73 383 200 t Cu, 83 112 573 oz Au 2 334 920 t U <sub>3</sub> O <sub>8</sub> , 402 157 610 oz Ag	103 300 t Cu (cathode), 2 279 t U <sub>3</sub> O <sub>8</sub> , 65 494 oz Au (bullion), 500 000 oz Ag (bullion)
* <b>Prominent Hill-Malu</b> - Oz Minerals Ltd <a href="http://www.ozminerals.com">www.ozminerals.com</a> as at 30/6/10 released 9/11/10	Cu, Au, Ag	Malu -50.7 Mt at 1.55% Cu, 0.5 g/t Au, 3.6 g/t Ag P.Hill Total (incl. Ankata, Malu, near surf. & U/G) - 200.3 Mt at 1.23% Cu, 0.5 g/t Au, 3.0 g/t Ag Total gold only - 85.2 Mt at 0.08% Cu, 1.5 g/t Au, 1.0 g/t Ag	Malu Total - 69.6 Mt at 1.12% Cu, 0.68 g/t Au, 3.04 g/t Ag	Malu (reserve) - 781 kt Cu, 1.518 Moz Au, 6.799 Moz Ag P.Hill (Cu resource) 2.473 Mt Cu, 3.1 Moz Au, 19.3 Moz Ag P.Hill (Au resource) - 69 000t Cu, 4.1 Moz Au, 2.7 Moz Ag	Contained metal in concentrate: 124 958t Cu, 142 438 oz Au, 922 520 oz Ag
* <b>Prominent Hill-Ankata</b> – Oz Minerals Ltd <a href="http://www.ozminerals.com">www.ozminerals.com</a> as at 30/6/10 released 9/11/10	Cu, Au, Ag	Ankata Total - 10.5 Mt at 1.94% Cu, 0.3 g/t Au, 3.3 g/t Ag	Ankata Total - 4.9 Mt at 2.52% Cu, 0.48 g/t Au, 3.64 g/t Ag	Ankata (reserve) 124 000t Cu, 76 000 oz Au, 576 000 oz Ag	under construction
<b>Kanmantoo</b> – Hillgrove Resources Ltd <a href="http://www.hillgroveresources.com.au">www.hillgroveresources.com.au</a> 8/12/08 (resource) 4/05/10 (reserve)	Cu, Au, Ag	32.2 Mt at 0.9% Cu, 0.2 g/t Au, 3.2 g/t Ag	14.8 Mt at 0.85% Cu, 0.17 g/t Au, 3.1 g/t Ag	292 200 t Cu, 191 000 oz Au, 3 313 600 oz Ag	anticipated prod. 2.4 Mtpa 20 000 t Cu, 10 000 oz Au, 125 000 oz Ag (in conc.)
* <b>Middleback Range – Project Magnet</b> OneSteel Ltd <a href="http://www.onesteel.com">www.onesteel.com</a> 30/06/10	Fe, hematite Fe, magnetite	Hematite (incl. reserve) 117 Mt at 59.0 % Fe Magnetite (incl. reserve) 238.9 Mt at 38.5% Fe	Hematite reserves 46.2 Mt at 60.9% Fe, 0.09% P Magnetite reserves 83.4 Mt at 40.9% DTR		6 156 884 t hematite 1 529 976 t magnetite
<b>Cairn Hill</b> – IMX Resources NL <a href="http://www.imxresources.com.au">www.imxresources.com.au</a> 28/12/09	Fe, Cu, Au	14.3 Mt at 50.6% Fe, 0.29% Cu, 0.09 g/t Au (28/6/07)	6.9 Mt at 51.2% Fe, 0.43% Cu, 0.13 g/t Au Phase 1 pit area (28/12/09)		first ore 4/06/10 Phase 1 (4.5 yrs) - 1.7 Mtpa direct ship magnetite containing copper and gold
<b>Iron Chieftain - Project Magnet</b> <a href="http://www.onesteel.com">www.onesteel.com</a> 30/06/09	Fe, hematite	18.2 Mt at 58% Fe	7.7 Mt at 60.5% Fe		
* <b>Beverley</b> – Heathgate Resources Ltd <a href="http://www.heathgate.com.au">www.heathgate.com.au</a> 18/10/06	U <sub>3</sub> O <sub>8</sub>	7.7 Mt at 0.27% U <sub>3</sub> O <sub>8</sub>		21 000 t U <sub>3</sub> O <sub>8</sub>	~650 t U <sub>3</sub> O <sub>8</sub>
* <b>Beverley North/Pepegoona</b> – Heathgate Resources Ltd <a href="http://www.heathgate.com.au">www.heathgate.com.au</a> November 2010 - MARP	U <sub>3</sub> O <sub>8</sub>	2.2 Mt at 0.18% U <sub>3</sub> O <sub>8</sub>		4000 t U <sub>3</sub> O <sub>8</sub> (0.15m% GT cut-off)	Field leach trial operation.
<b>Honeymoon</b> – Uranium One Inc/Mitsui & Co Ltd <a href="http://www.uranium1.com">www.uranium1.com</a> / <a href="http://www.mitsui.co.jp">www.mitsui.co.jp</a> 6/10/06	U <sub>3</sub> O <sub>8</sub>	1.2 Mt at 0.24% U <sub>3</sub> O <sub>8</sub> (ind.)		2900 t U <sub>3</sub> O <sub>8</sub>	est. 400 t U <sub>3</sub> O <sub>8</sub> 6 yr mine life
<b>Jacinth and Ambrosia</b> – Iluka Resources Ltd <a href="http://www.iluka.com">www.iluka.com</a> 21/2/08	HM	239.1 Mt material at 4% HM for 9.5 Mt in-situ HM, 48% zircon, 28% Ilmenite, 5% rutile	98.4 Mt at 6.5% HM, for 6.4 Mt HM, 50% zircon, 28% ilmenite, 5% rutile	4 512 000 t zircon, 2 632 000 t ilmenite, 45 700 t rutile	first 6mths to June 2010 (estimated full prod.) 43 500t (~300 000) tpa zircon, 28 600t (~170 000) tpa ilmenite, 5 200t (~45 000) tpa rutile
<b>Challenger</b> – Dominion Mining Ltd <a href="http://www.dml.com.au">www.dml.com.au</a> 29/7/10	Au	4 370 700 t at 6.8 g/t Au	2 309 550 t at 5.7 g/t Au	(from reserve) 420 440 oz Au, (from resource) 950 220 oz Au	80 570 oz Au
<b>White Dam</b> – Polymetals Group Pty Ltd/Exco Resources NL <a href="http://www.polymetals.com">www.polymetals.com</a> / <a href="http://www.excoresources.com.au">www.excoresources.com.au</a> 6/10/09	Au	9.6 Mt at 1.05 g/t Au	4.94 Mt at 1.07 g/t Au	325 000 oz Au (resource) 170 400 oz Au (reserve)	first gold pour 19/04/2010 2 Mtpa heap leach operation 50 000 ozpa, 120 000 oz total 30 mth mine life
<b>Beltana</b> – Perilya Ltd <a href="http://www.perilya.com.au">www.perilya.com.au</a> 31/7/08	Zn	Total resource 972 000 t at 29.8% Zn, (ind.) 375 600 t at 32.6% Zn (remaining) 308 000 at 28% Zn	Stockpile to be depleted by end Sept. qtr 2010		38 247 t contained Zn
<b>Angas</b> – Terramin Australia Ltd <a href="http://www.terramin.com.au">www.terramin.com.au</a> 30/04/09	Zn, Pb, Ag, Au	Excluding reserve 0.53 Mt at 3.3% Zn, 1.6% Pb, 0.1% Cu, 20 g/t Ag, 0.4 g/t Au	Probable 2.15 Mt at 7.55% Zn, 2.91% Pb, 0.24% Cu, 32 g/t Ag, 0.53 g/t Au	Zn conc. 319 300 t, Pb-Cu conc. (47.9% Pb, 3.6% Cu, 446 g/t Ag, 7 g/t Au) 122 300 t	19 908 t Pb conc., 51 785 t Zn conc. contained metal: 22 489t Zn, 10 356t Pb, 134t Cu, 272 845oz Ag, 2 998oz Ag
<b>Leigh Creek</b> – Alinta Energy Group <a href="http://www.alintaenergy.com">www.alintaenergy.com</a> 27/11/09 - presentation	coal	upper series, middle series and lower series 900 Mt	reserves to 2009 were 40Mt		3 734 186 t coal

