

**South Australia's Developing Projects
Resource Estimates and Production Statistics**



Prepared by DSD 19/02/2019

| Developing Projects | Commodity | Status | Total Resource & Ore Reserve (unless otherwise indicated) | Estimated Contained Commodity (from Resource) | Proposed Annual Production |
|---|---|---------------------|---|---|---|
| Kalkaroo – Havilah Resources Limited <i>www.havilah-resources.com.au</i> | Cu-Au | Assessment | copper-gold: 223.8 Mt at 0.49% Cu, 0.36 g/t Au cobalt: 193.3 Mt at 120 ppm Co <i>ASX Release 7/03/2018</i> Ore Reserve 100.1 Mt at 0.47% Cu, 0.44 g/t Au | 1 139 000 t Cu, 2 770 000 oz Au + 515 000 oz Au (in gold cap), 23 200 t Co 474 000 t Cu, 1 407 000 oz Au <i>ASX Release 18/6/2018</i> | proposed: 9 Mtpa ore for 34 000 tpa copper and 104 000 oz pa gold 14+ years |
| Fremantle Doctor – OZ Exploration Pty Ltd <i>www.ozminerals.com</i> | Cu-Au-Ag | JORC Resource | 104 Mt at 0.7% Cu, 0.5g/t Au, 3g/t Ag <i>ASX release 12/11/18</i> | 800 000 t Cu, 2 Moz Au and 10 Moz Ag | N/A |
| Khamsin – OZ Minerals Ltd <i>www.ozminerals.com</i> | Cu-Au-Ag | JORC Resource | 202 Mt at 0.6% Cu, 0.1 g/t Au, 1.7 g/t Ag and 86 ppm U <i>ASX Release 26/05/14</i> | 1.1 Mt Cu, 900 000 oz Au and 110 000 oz Ag | N/A |
| North Portia – Havilah Resources Limited <i>www.havilah-resources.com.au</i> | Cu-Au-Mo | JORC Resource | 12.5 Mt (sulfide) at 0.81 % Cu, 0.6 g/t Au, 452 g/t Mo <i>ASX Release 15/05/18</i> | 101 400 t Cu, 258 800 oz Au, 594 t Co, 5630 t Mo | N/A |
| Bungalow – Centrex Metals Limited <i>www.centrexmetals.com.au</i> | Fe ₃ O ₄ | JORC Resource | 338 Mt at 29.6% Fe (34.3% DTR conc. at 69.7% Fe) includes Minbrie <i>ASX Release 25/05/12</i> | 80 806 000 t Fe (MRD estimate) | 5 Mtpa of magnetite concentrate production to be exported via a 100km slurry pipeline from Port Spencer |
| Snaefell – Cu-River Mining Australia Pty Limited <i>www.curiver.com.au</i> | Fe ₃ O ₄ | JORC Resource | 569 Mt at 27.1% Fe (using 18% Fe cut-off) | <154 000 000 t Fe (MRD estimate) | Stage 3 |
| Fusion – Eyre Iron Pty Ltd <i>www.eyreiron.com.au</i> <i>www.centrexmetals.com.au</i> Wuhan Iron & Steel (Group) Co. | Fe ₃ O ₄ | JORC Resource | 969.4 Mt at 25.5% Fe, 48.7% SiO ₂ (22.4% DTR at 66.9% Fe, 5.2% SiO ₂) includes Koppio, Brennand, Kapperna, Iron Mount and Bald Hill deposits <i>ASX Release 17/09/15</i> | 145 270 406 t Fe (MRD estimate) | N/A |
| Hawks Nest – Central Iron Pty Ltd (Subject to Deed of Company Arrangement) <i>www.simec.com/mining</i> | Fe ₂ O ₃ – Fe ₃ O ₄ | JORC Resource | 102.5 Mt (ind. & inf.) at 37.4% Fe 569 Mt (meas. ind. & inf.) at 35% Fe | 11 080 000 t Fe (hematite) and <199 150 000 t Fe (magnetite) (MRD estimate) | N/A |
| Maldorky – Havilah Resources Limited <i>www.havilah-resources.com.au</i> | Fe ₃ O ₄ | Assessment | 147 Mt (ind.) at 30.1% Fe <i>ASX Release 10/6/11</i> | <44 247 000 t Fe (MRD estimate) | 2.4 Mtpa. Start-up 1 Mtpa; studying options to 40 Mtpa |
| Mutooroo Magnetite – Minotaur Exploration Pty Ltd <i>www.minotaurexploration.com.au</i> | Fe ₃ O ₄ | JORC Resource | 1.5 Bt magnetite at 15.2% Fe DTR and 69.8% Fe <i>ASX Release 24/11/11</i> | <159 000 000 t Fe (magnetite) (MRD estimate) | N/A |
| Razorback – Magnetite Mines Limited <i>www.magnetitemines.com</i> MOU with Sinosteel Resources | Fe ₃ O ₄ | Feasibility Studies | 2 732 Mt (ind. & inf.) at 15.3% eDTR, 18.2% Fe, 48.1% SiO ₂ , 8.0% Al ₂ O ₃ , 0.18% P = 418 Mt (contained conc. equivalent)16.5% at 67.4 % Fe, 4.74% SiO ₂ , 0.54% Al ₂ O ₃ , 0.016% P and 0.003% S Ironback 1.187(inf.)at 21% Fe, 44.1 SiO ₂ ,7.2% Al ₂ O ₃ , 0.21% P <i>ASX Release 11/06/13</i> | Razorback 281 732 000 t Fe (MRD estimate) | 9.3 Mtpa magnetite concentrate (67.4% Fe), proposed +25 year mine life |
| Crocker Well – Sinosteel Uranium SA Pty Ltd | U | JORC Resource | 18.84 Mt (ind. & inf.) at 0.03% U ₃ O ₈ 250 000t (inf.) at 0.16% U ₃ O ₈ | 5290 t U ₃ O ₈ | N/A |
| Gould's Dam – Boss Uranium Pty Ltd <i>www.bossresources.com.au</i> | U | JORC Resource | 22.1 Mt (ind and inf) at 510 ppm eU ₃ O ₈ <i>ASX release 01/04/2016</i> | 11 340 t U ₃ O ₈ <i>ASX release 8/04/16</i> | N/A |
| Junction Dam – Marmota Energy Limited <i>www.marmotaenergy.com.au</i> | U | JORC Resource | 4.36 Mt at 0.044% (basal) and 0.025% (upper) eU ₃ O ₈ <i>ASX Release 18/11/11</i> | 1 510 t eU ₃ O ₈ | N/A |
| Samphire – Samphire Uranium Ltd <i>www.samphireuranium.com.au</i> | U | JORC Resource | 64.5 Mt at 230ppm (100ppm eU ₃ O ₈ cut-off grade-Blackbush deposit) <i>ASX release 27/09/13</i> | 14 850 t eU ₃ O ₈ | N/A |
| Atacama – Iluka (Eucla Basin) Pty Ltd <i>www.iluka.com</i> | HM | Feasibility Studies | 93.0 Mt (inf.) at 8.2 % HM, 7.63 Mt in-situ HM, 13% zircon, 2% rutile, 69% ilmenite <i>ASX Release 20/02/2017</i> | 7 626 000 t HM, 1 442 210 t zircon, 152 520 t rutile, 1 006 020 t ilmenite (MRD estimate) | N/A |
| Sonoran – Iluka Resources Limited <i>www.iluka.com</i> | HM | Feasibility Studies | 27.9 Mt (inf.) at 7.4% HM, 2 Mt in-situ HM, 17% zircon, 2% rutile, 67% ilmenite <i>ASX Release 20/02/2017</i> | 2 064 600 t HM, 398 873 t zircon, 30 868 t rutile, 1 369 180 t ilmenite (MRD estimate) | N/A |

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| Tripitaka – Iluka (Eucla Basin) Pty Ltd www.iluka.com | HM | JORC Resource | 53.7 Mt (inf.) at 1.9% HM, 998 kt in-situ HM, 64.8% zircon, 4.8% rutile, 11.1% ilmenite <i>ASX Release 20/02/2017</i> | 1 020 300 t HM, 646 704 t zircon, 47 904 t rutile and 110 778 t ilmenite (MRD estimate) | N/A |
| Typhoon – Iluka Resources Limited www.iluka.com | HM | Feasibility Studies | 26.3 Mt (inf.) at 6.3% HM, 1.49 Mt in-situ HM, 13.2% zircon, 0.9% rutile, 62.7% ilmenite <i>ASX Release 20/02/2017</i> | 1 656 900 t HM, 196 416 t zircon, 13 392 t rutile and 932 976 t ilmenite (MRD estimate) | N/A |
| Bird-in-Hand – Terramin Australia Limited www.terramin.com.au | Au | Developing Mining Proposal | 588 000 t at 13.3 g/t Au and 6.0 g/t Ag <i>ASX release 10/08/16</i> | 252 000 oz Au ASX release 10/08/16 | N/A |
| Barns – Andromeda Metals Ltd www.andromet.com.au | Au | JORC Resource | 2.11 Mt at 1.6 g/t Au | 107 000 oz Au | N/A |
| Tunkillia – WPG Resources Ltd www.wpgresources.com.au | Au-Ag | Developing Mining Proposal | 12.32 Mt at 1.41 g/t Au, 3.7 g/t Ag <i>ASX Release 04/02/15</i> | 558 000 oz Au, 1.5 Moz Ag ASX Release 04/02/15 | proposed 492 000 oz over 6 years ~70 000 ozpa |
| Weednanna – Alliance (SA) Pty Ltd www.allianceresources.com.au Tyranna Resources Limited | Au | JORC Resource | 1.097 Mt at 5.1 g/t Au <i>ASX release 6/09/18</i> | 181,000 oz Au | N/A |
| Flinders – Perilya Freehold Mining Pty Ltd www.perilya.com.au | Zn | JORC Resource | Reliance 308 000 t at 27.9% Zn and 1.5% Pb North Moolooloo (ind.) 214 000 t (ind.) at 34.36% Zn and 1.35% Pb | 73 500 t Zn | N/A |
| Menninnie Dam – Terramin Australia Limited www.terramin.com.au | Zn-Pb-Ag | JORC Resource | 7.7 Mt (inf.) at 3.1% Zn, 2.6% Pb and 27 g/t Ag | 238 700 t Zn, 200 200 t Pb and 6 684 140 oz Ag (MRD estimate) | N/A |
| Paris – Investigator Resources Limited www.investres.com.au | Ag | Feasibility Studies | 9.3 Mt (inf.) at 139 g/t Ag using 50 g/t silver cut-off <i>ASX Release 19/04/17</i> | 42 Moz Ag (inf.) ASX release 19/04/17 | N/A |
| Mount Gunson – Gindalbie Metals Ltd http://www.gindalbie.com.au/ | Cu-Co-Ag | JORC Resource | 2.05Mt at 1.3% Cu, 3.71ppm Co, 14g/t Ag (MG14); 18.7Mt at 1% Cu, 500ppm Co, 10g/t Ag (Windabout) | 26 650t Cu (MG14); 187 000t Cu (Windabout) | |
| Mutooroo – Havilah Resources Limited www.havilah-resources.com.au | Cu-Co | Feasibility Studies | 13.1 Mt at 1.48% Cu, 0.14% Co <i>ASX Release 18/10/10</i> | 192 000 t Cu, 17 500 t Co, 92 000 oz Au, 2.5 Mt sulphur | N/A |
| Arckaringa – Arckaringa Coal Chemical Joint Venture Co Pty Ltd www.altonaenergy.com | coal | JORC Resource | 7.8 billion t (nonJORC est.) sub-bituminous coal Wintinna JORC est. 1.287 billion tonnes – 187 Mt (meas.), 650 Mt (ind.) and 450 Mt (inf.) | Up to 7 Billion barrels of diesel/naphtha | N/A |
| Poochera – Minotaur Exploration Pty Ltd www.minotaurexploration.com.au | kaolin | JORC Resource | Carey's Well – 16.3 Mt (meas.) bright white kaolinised granite yielding 8 Mt of -45micron kaolin within 47.2 Mt (inf.) of white to off-white kaolinised granite Ore Reserve Properties for Poochera hydrous – 90.7 ISO, 0.6 CIE b, 92% -2mm, 99% qz 0.1% kaolinite, 0.3% Fe ₂ O ₃ , 43.6% Al ₂ O ₃ , 0.07% TiO ₂ , BDL <1.6ppm lead | | N/A |
| Oakdale – Oakdale Resources Limited www.oakdaleresources.com.au | graphite | JORC Resource | 6.22 Mt (ind. & inf.) at 4.8% TGC <i>ASX Release 27/10/15</i> | 298 560 t graphitic carbon | 94 500 tpa over 3 years |
| Siviour – Renascor Resources Limited www.renascor.com.au | graphite | Assessment | 80.6 Mt (ind. & inf.) at 7.9% TGC (3% cutoff grade) incl. 30.1 Mt at 10% TGC for 3.0 mt contained graphite <i>ASX Release 15/03/17</i> Ore Reserve 45.2 Mt (prob.) at 7.9% TGC <i>ASX release 14/03/18</i> | 6.4 Mt graphite ASX Release 15/03/17 3.6 Mt graphite ASX Release 14/03/18 | N/A |

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

*Expansion studies underway

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

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