



## Western Australia's principal mining projects (2017-18)

Western Australia's 127 principal mining projects each produced minerals valued at over \$5 million (or more than 2500oz of gold) in 2017-18.

Collectively, these projects produced 99 per cent of the industry's total production, by value, of \$88.3 billion. Projects on private land, for which production values are not required to be reported, are included where employee numbers were greater than 50.

The State's mining industry also comprises hundreds of quarries and small mines that largely produced the basic raw materials required for the local construction industry. This includes clays, construction materials (aggregate, gravel, rock and sand), dimension stone, gypsum, limestone, limesand and spongolite.

The attached tables provide details of the principal mining projects, as well as the principal producers of basic raw materials and the State's major mineral processing operations.

PRINCIPAL MINING PROJECTS		
Company	Project	Comments
<b>Base metals</b>		
CopperChem Ltd	Jaguar	Acquired by CopperChem Ltd, a subsidiary of Washington H. Soul Pattinson, from Independence Group NL in May 2018.
EMR Capital Pty Ltd	Golden Grove	
Metals X Ltd	Nifty	
Sandfire Resources NL	DeGrussa	
<b>Bauxite</b>		
Alcoa of Australia Ltd	Huntly	
Alcoa of Australia Ltd	Willowdale	
South32 Limited	Boddington	
<b>Coal</b>		
Griffin Coal Mining Company Pty Ltd	Griffin	
Premier Coal Limited	Premier	
<b>Diamonds</b>		
Rio Tinto Ltd	Argyle	
<b>Gold</b>		
AngloGold Ashanti Australia Limited	Sunrise Dam	
AngloGold Ashanti Australia Limited	Tropicana	
Austral Pacific Pty Ltd	Paris	Mining was completed in August 2017 with haulage of stockpiles ongoing.
Billabong Gold Pty Ltd	Plutonic	
Billabong Gold Pty Ltd	Hermes	New project. Mining commenced in October 2017, with first production achieved in January 2018.
Blackham Resources Ltd	Matilda / Wiluna	

Company	Project	Comments
<b>Gold (cont)</b>		
Dacian Gold Limited	Mt Morgans	Re-opened project. Production achieved in the March 2018 quarter.
Doray Minerals Limited	Andy Well	Mining operations suspended in November 2017.
Doray Minerals Limited	Deflector	
Eastern Goldfields Limited	Davyhurst	Re-opened project. Production achieved in October 2017, but was subsequently suspended in September 2018.
Empire Resources Ltd	Penny's Find	New project. First production achieved in October 2017.
Evolution Mining Limited	Mungari	
Excelsior Gold Limited	Kalgoorlie North	
FMR Investments Pty Ltd	Gordon-Sirdar	
Orminex Limited	Comet Vale	Re-opened project. Mining recommenced in May 2018 with first gold pour in August 2018.
Gold Fields Limited	Agnew/Lawlers	
Gold Fields Limited	Granny Smith	
Gold Fields Limited	St Ives	
Hawthorn Resources Ltd	Trouser Legs	New project. Production commenced in March 2018 quarter.
Intermin Resources Ltd	Teal	Mining operations suspended in the June 2018 quarter.
Kalgoorlie Consolidated Gold Mines Pty Ltd	Kalgoorlie Super Pit / Mt Charlotte	
Lukah Mining Pty Ltd	The Mount	Re-opened project.
Matsa Resources Limited	Lake Carey	New project. Mining commenced in July 2017 and was completed in April 2018.
Millennium Minerals Limited	Nullagine	
Minjar Gold Pty Ltd	Golden Dragon	
Mount Hampton Gold Mining Company Pty Ltd	Symes Find	New project. Small campaign mining operation from the September 2017 quarter to the end of 2017.
Newcrest Mining Limited	Telfer	
Newmont Australia Pty Ltd	Boddington	
Northern Star Resources Ltd	Jundee	
Northern Star Resources Ltd	Kanowna Belle	
Northern Star Resources Ltd	Kundana	
Northern Star Resources Ltd	Paulsens	
Northern Star Resources Ltd	South Kalgoorlie	Acquired by Northern Star Resources Ltd from Westgold Resources in April 2018.
Norton Gold Fields Ltd	Paddington	
Pantoro Limited	Halls Creek	
Ramelius Resources Ltd	Edna May	Acquired by Ramelius Resources Ltd from Evolution Mining Limited in October 2017.
Ramelius Resources Ltd	Mt Magnet	
Ramelius Resources Ltd	Vivien	

<b>Company</b>	<b>Project</b>	<b>Comments</b>
<b>Gold (cont)</b>		
Red 5 Limited	Darlot	Acquired by Red 5 Limited from Gold Fields Ltd in October 2017.
Red 5 Limited	King of the Hills	Acquired by Red 5 Limited from Saracen Mineral Holdings Ltd in October 2017. The mine was previously part of the Thunderbox project.
Regis Resources Ltd	Duketon	
Rose Dam Resources NL	Rose Dam	Re-opened project. Mining recommenced in September 2017 and was suspended in February 2018.
Saracen Mineral Holdings Ltd	Carosue Dam	
Saracen Mineral Holdings Ltd	Thunderbox	
Silver Lake Resources Ltd	Mt Monger	
Southern Gold Limited	Bulong	Previously part of the South Kalgoorlie operations. Open pit mining operations were completed in the September 2017 quarter.
St Barbara Mines Ltd	Gwalia	
Tianye Sxo Gold Mining Pty LTd	Southern Cross	
Tyranna Resources Limited	Eureka	Re-opened project. Acquired by Tyranna Resources Limited from Central Iron Ore Limited in December 2017. Campaign mining occurred from January 2018 to April 2018.
Westgold Resources Limited	Meekatharra	Previously part of a combined Central Murchison project with the Cue project. Westgold Resources Limited split the project in June 2018.
Westgold Resources Limited	Cue	Previously part of a combined Central Murchison project with the Meekatharra project. Westgold Resources Limited split the project in June 2018.
Westgold Resources Limited	Higginsville	
Westgold Resources Limited	Fortnum	Re-opened project. Production recommenced on 30 June 2017.
<b>Iron ore</b>		
Atlas Iron Limited	Abydos	Mining operations concluded in the December 2017 quarter.
Atlas Iron Limited	Mt Webber	
BCI Minerals Limited	Iron Valley	BC Iron Limited changed its name to BCI Minerals Limited in November 2017.
BHP Billiton Ltd	Eastern Ridge (Orebody 24 and 25)	
BHP Billiton Ltd	Jimblebar / Wheelara	
BHP Billiton Ltd	Mining Area C	
BHP Billiton Ltd	Mt Whaleback / Orebody 29 / 30 / 35	
BHP Billiton Ltd	Orebody 18	

Company	Project	Comments
<b>Iron ore (cont)</b>		
BHP Billiton Ltd	Yandi	
CITIC Pacific Mining Management Pty Ltd	Sino Iron	
Fortescue Metals Group Ltd	Chichester	Comprises the Christmas Creek and Cloudbreak mines.
Fortescue Metals Group Ltd	Solomon	Comprises the Firetail and Kings mines.
Hancock Prospecting Pty Ltd	Roy Hill	
Karara Mining Limited	Karara	Karara Mining Limited is a joint venture of Anshan Iron and Steel Group (52.16 per cent) and Gindalbie Metals Ltd (47.84 per cent)
Mineral Resources Limited	Carina	Mining operations completed in the March 2018 quarter.
Mineral Resources Limited	Koolyanobbing	Acquired by Mineral Resources Limited from Cleveland-Cliffs Inc. in June 2018.
Mineral Resources Limited	Phil's Creek	Re-opened project. Mining of low-grade material recommenced in September 2017.
Mount Gibson Iron Limited	Iron Hill	Mining operations at Iron Hill commenced in early 2017, replacing production from nearby Extension Hill that concluded in late 2016.
Rio Tinto Ltd	Brockman 2 – Nammuldi - Silvergrass	The Silvergrass mine opened on 30 August 2017.
Rio Tinto Ltd	Brockman 4	
Rio Tinto Ltd	Greater Paraburdoo	Comprises the Paraburdoo, Channar and Eastern Ranges mines.
Rio Tinto Ltd	Hope Downs 1	
Rio Tinto Ltd	Hope Downs 4	
Rio Tinto Ltd	Marandoo	
Rio Tinto Ltd	Mt Tom Price	Includes the Western Turner Syncline mine.
Rio Tinto Ltd	Robe Valley (Mesa A & Mesa J)	
Rio Tinto Ltd	West Angelas	
Rio Tinto Ltd	Yandicoogina	
<b>Lithium-tin-tantalum</b>		
Galaxy Resources Limited	Mt Cattlin	
Global Advanced Metals Pty Ltd	Greenbushes Tantalum	
Mineral Resources Limited	Wodgina	
Pilbara Minerals Limited	Pilgangoora	New project. Sales on unprocessed ore commenced in the June 2018 quarter under a mine gate sales agreement.
Reed Industrial Minerals Pty Ltd	Mt Marion	Reed Industrial Minerals Pty Ltd is a joint venture of Neometals (13.8 per cent), Minerals Resources (43.1 per cent), and Jiangxi Ganfeng Lithium Company (43.1 per cent).

<b>Company</b>	<b>Project</b>	<b>Comments</b>
<b>Lithium-tin-tantalum (cont)</b>		
Talison Lithium Australia Pty Ltd	Greenbushes Lithium	Talison Lithium Australia Pty Ltd is a joint venture of Tianqi Lithium (51 per cent) and Albermarle Corporation (49 per cent).
Tawana Resources NL	Bald Hill	New project. Shipments commenced in May 2018.
<b>Manganese</b>		
Pilbara Manganese Pty Ltd	Woodie Woodie	Pilbara Manganese Pty Ltd is a subsidiary of Consolidated Minerals Pty Ltd. Woodie Woodie recommenced mining operations in October 2017 after they were suspended in February 2016.
Horseshoe Manganese Pty Ltd	Horseshoe Range	New project. Campaign mining occurred from September 2017 to January 2018.
<b>Mineral sands</b>		
Cristal Mining Australia Ltd	Wonnerup mine and North Shore mineral separation plant	Cristal Mining Australia Ltd is a joint venture of the National Titanium Dioxide Company (79 per cent) and the Gulf Investment Company (21 per cent). Tronox Limited acquired Cristal Mining in February 2017, subject to regulatory approvals.
Doral Mineral Sands Pty Ltd	Yoongarillup mine and Picton dry separation plant	Mining operations at Yoongarillup commenced in the December 2017 quarter. The Dardanup mine ceased in December 2015. The processing of stockpiles from Dardanup continued during 2016-17 with the value of sales less than \$5 million.
GMA Garnet Pty Ltd	Port Gregory	
Iluka Resources Ltd	South West	Project renamed from Capel following the completion of mining at Tutunup South in March 2018. Active operations comprise the Capel dry plant, the North Capel mineral separation plant, and one of two synthetic rutile kilns at North Capel.
Iluka Resources Ltd	Mid West	Project renamed from Eneabba. The Narngulu mineral separation plant is the only active operation with the Eneabba mine and Narngulu synthetic rutile plant both remaining on care and maintenance.
MZI Resources Ltd	Keysbrook	Project on private land.
Tronox Limited	Cooljarloo mine and Chandala mineral separation plant	
<b>Nickel</b>		
BHP Billiton Ltd	Cliffs	
BHP Billiton Ltd	Leinster	
BHP Billiton Ltd	Mt Keith	
First Quantum Minerals Australia Pty Ltd	Ravensthorpe	Mining operations suspended in October 2017.

<b>Company</b>	<b>Project</b>	<b>Comments</b>
<b>Nickel (cont)</b>		
Independence Group NL	Long	Mining operations suspended in June 2018.
Independence Group NL	Nova	
Minara Resources Ltd	Murrin Murrin	
Salt Lake Mining Pty Ltd	Beta-Hunt	Salt Lake Mining Pty Ltd is a subsidiary of Royal Nickel Corporation.
Western Areas Ltd	Forrestania	
<b>Rare earths</b>		
Lynas Corporation Ltd	Mt Weld	
<b>Salt</b>		
Dampier Salt Ltd	Dampier	Dampier Salt Ltd is a joint venture of Rio Tinto (68 per cent), Marubeni Corporation (22 per cent) and Sojitz Corporation (10 per cent).
Dampier Salt Ltd	Lake MacLeod	
Dampier Salt Ltd	Port Hedland	
Onslow Salt Pty Ltd	Onslow	
Shark Bay Salt Pty Ltd	Shark Bay	
WA Salt Koolyanobbing Pty Ltd	Lake Deborah	
<b>Silica sand</b>		
Hanson Construction Materials Pty Ltd	Gnangara	
Simcoa Operations Pty Ltd	Moora	
T T Sand Pty Ltd	Mindijup	
<b>Talc</b>		
Imerys Talc Australia Pty Ltd	Three Springs	

<b>PRINCIPAL PRODUCERS OF BASIC RAW MATERIALS</b>	
<b>Company</b>	<b>Location</b>
BGC Contracting Pty Ltd	Chidlow
Boral Resources (WA) Ltd	Ashburton, Kalgoorlie, Kununurra, Mt Regal, Orange Grove, Port Hedland (Turner River), Pilbara (Tabba Tabba)
Cockburn Cement Ltd	Cockburn, Dongara, Parkeston, Woodman Point
Hanson Construction Materials Pty Ltd	Bunbury, Byford, Learmonth, Mt Barker, Mt Regal, Perth (North), Perth (South), Red Hill
Holcim (Australia) Pty Ltd	Albany, Baldivis, Bunbury, Esperance, Gosnells, Geraldton, Jandabup, Kalgoorlie Boulder, Karratha, Newman, Port Hedland
Limestone Building Blocks Company Pty Ltd	Nowergup
Mobile Concreting Solutions Pty Ltd	Indee, Tom Price
WA Bluemetal	Byford
WA Limestone	North Metro, Onslow, Perth Metro, Port Hedland, Roebourne, South Metro
Westdeen Holdings Pty Ltd	Cowcowing, Dongara, Jurien Bay, Lancelin

<b>PRINCIPAL MINERAL PROCESSING OPERATIONS</b>	
<b>Company</b>	<b>Project</b>
<b>Alumina</b>	
Alcoa of Australia Ltd	Kwinana alumina refinery
Alcoa of Australia Ltd	Pinjarra alumina refinery
Alcoa of Australia Ltd	Wagerup alumina refinery
South32 Limited	Worsley alumina refinery
<b>Gold</b>	
Gold Corporation	Perth Mint
<b>Nickel</b>	
BHP Billiton Ltd	Kalgoorlie nickel smelter
BHP Billiton Ltd	Kambalda nickel concentrator
BHP Billiton Ltd	Kwinana nickel refinery
<b>Mineral sands</b>	
Tronox Limited	Kwinana pigment plant
<b>Silica sand</b>	
Simcoa Operations Pty Ltd	Kemerton silicon smelter