

OPERATIONAL PROFILE

2013



Situated in the northern goldfields of Western Australia, 220km northeast of Kalgoorlie, and 55km south of Laverton, Sunrise Dam is wholly owned by AngloGold Ashanti.

The gold deposit at Sunrise Dam was discovered in August 1988 and operations started in 1996 with the mining of the Cleo pit, which was later expanded through cut backs to form the Mega Pit. Underground mining began in 2003.

PERFORMANCE IN 2013

From start-up to 2013, Sunrise Dam has produced almost 6Moz of gold. The transition to a purely underground operation from a combination of both open pit and underground mining was completed in 2013 and the mine will be solely an underground operation.

During the year, changes to underground grade control and mine design, combined with improved productivity, resulted in a substantial improvement in underground mining costs.

Capital expenditure of \$39m at Sunrise Dam was primarily on the plant expansion.

The focus will remain on reducing underground mining costs through a multi-pronged project focused on productivity improvements and an innovative approach to grade control and mine design based on a systematic reverse circulation drilling strategy.

From 2014 the operation is targeting consistent underground production in excess of 2Mtpa, with additional mill capacity filled by the substantial surface stockpiles. The potential for mine-life extensions remains high, with mineralisation remaining open below a depth of 1,500m.

With open pit mining coming to an end at Sunrise Dam, progressive bulk earthworks have been completed on the waste dumps and the operation's initial tailings storage facility has been fully rehabilitated.

HIGHLIGHTS OF THE YEAR

- Production up on improved grades
- Open-pit mining completed – underground mining only from 2014 onwards
- An average of 457 employees achieved a productivity rate of 50.22oz/total employee costed (TEC) – the best in the group
- Costs declined for the second consecutive year
- As at 31 December 2013, Sunrise Dam's Mineral Resource of 3.19Moz accounted for 37% of the Australasia region's Mineral Resource
- Focus remains on economic development opportunities for indigenous communities, particularly young people
- Decline in water consumption continues

Sunrise Dam – key statistics

	Units	2013	2012	2011
Operational performance				
Pay limit	oz/t	0.10	0.08	0.010
	g/t	2.98	2.42	3.00
Recovered grade	oz/t	0.072	0.069	0.063
	g/t	2.46	2.39	2.16
Tonnes treated/milled	Mt	3.5	3.4	3.6
Gold production	000oz	276	258	246
Total cash cost	\$/oz produced	1,110	1,126	1,367
All-in sustaining cost ⁽¹⁾	\$/oz sold	1,321	1,470	
Capital expenditure	\$m	39	49	27
Productivity	oz/TEC	50.22	43.46	40.29
Safety				
No. of fatalities		0	0	0
All injury frequency rate (AIFR)	per million hours worked	10.63	5.46	19.40
People				
Total average no. of employees		457	621	509
– Permanent		107	237	101
– Contractors		350	384	408
Environment				
Total water usage	ML	2,731	3,104	4,059
Total water usage intensity per tonne treated	kL/t	0.79	0.92	1.14
Total energy usage	PJ	2.07	2.08	2.14
Total energy intensity per tonne treated	GJ/t	0.60	0.62	0.60
Total greenhouse gas (GHG) emissions (CO ₂ e)	000t	123 ⁽²⁾	125 ⁽²⁾	130 ⁽²⁾
Total GHG emissions per tonne treated	t CO ₂ e/t	0.04	0.04	0.04
Cyanide usage	t	1,121	1,331	1,379
No. of reportable environmental incidents		0	1	1
Total rehabilitation liabilities	\$m	29	62	42

⁽¹⁾ Excludes stockpile write-offs.

⁽²⁾ GHG emissions changed due to the restatement of energy usage.

For more detailed information from an operational and sustainability perspective, please see the Australia country fact sheet which is available at www.aga-reports.com.