

OPERATIONAL PROFILE

2013



Surface Operations comprises the metallurgical surface operations located in the Vaal River and West Wits areas of the South Africa region, and Mine Waste Solutions (MWS). MWS, a subsidiary of First Uranium (Pty) Limited which AngloGold Ashanti acquired in July 2012, is a retreatment facility located in the vicinity of the Vaal River operations.

Surface Operations extracts gold by retreating the tailings from marginal ore dumps and tailings storage facilities on surface at various Vaal River and West Wits operations. Uranium is produced as a by-product, as is backfill that is used as mining support.

PERFORMANCE 2013

The greater volumes treated at Surface Operations, following the optimisation of MWS's processes and systems, made a positive contribution to the increase in volumes treated by the South Africa region as a whole. Volumes treated in 2013 almost doubled to 34.5Mt to yield 240,000oz of gold, an increase of 40%. Surface operations accounted for 19% of production from South Africa.

A project was initiated to increase the monthly processing capacity of the Mponeng gold plant from 160,000t to 210,000t. This will enable the reef mined at the West Wits operations to be treated through a single plant and the marginal ore dump material to be processed through the Savuka gold plant. This will in turn enable the optimisation of each plant according to their feed material.

In 2013, Surface Operations achieved 14 million fatality-free shifts after 17 years. The AIFR at 4.38 per million hours worked and the LTIRF at 1.19 represent substantial improvements compared to 2012.

There were three significant environmental incidents in the South Africa region during the year, all at MWS. Surface Operations is preparing for the certification process for compliance with the International Cyanide Management Code.

HIGHLIGHTS OF THE YEAR

- Production up on higher volumes
- Costs remain stable
- An average of 2,142 employees achieved a productivity rate of 9.35oz per total employee costed (TEC)
- Optimisation and efficiency maximisation programme continues
- As at 31 December 2013, the total Mineral Resource of 8.63Moz for the Surface Operations accounted for 10% of the total South African Mineral Resource

Surface Operations – key statistics

	Units	2013	2012	2011
Operational performance – gold				
Pay limit	oz/t	0.010	0.010	0.010
	g/t	0.269	0.188	0.209
Average recovered grade	oz/t	0.006	0.012	0.014
	g/t	0.22	0.30	0.48
Tonnes treated/milled	Mt	34.5	17.9	10.7
Gold production	000oz	240	172	164
Total cash costs ⁽¹⁾	\$/oz	883	943	660
All-in sustaining costs	\$/oz	969	754	
Total production costs	\$/oz	942	859	683
Capital expenditure ⁽¹⁾	\$m	39	15	5
Productivity (gold and uranium)	oz/TEC	9.35	9.86	21.32
Safety				
No. of fatalities		0	0	1
All injury frequency rate (AIFR)	per million hours worked	5.08	6.71	6.44
People				
Total average no. of employees		2,142	1,874	745
– permanent		1,730	1,568	745
– contractors		412	306	
Environment ⁽²⁾				
No. of reportable environmental incidents		3	7	–
Total water usage	ML	9,737	⁽³⁾ 4,564	–
Total water usage per tonne treated	kL/t	0.41	0.64	–
Total energy usage	PJ	0.62	0.21	–
Total energy usage per tonne treated	GJ/t	0.03	0.03	–
Total greenhouse gas (GHG) emissions (CO ₂ e) ⁽⁴⁾	000t	162	54	–
Total GHG emissions per tonne treated	t CO ₂ e/t	0.01	0.01	–
Cyanide usage	t	5,833	2,152	–
Rehabilitation liabilities	\$m	17	17	10

⁽¹⁾ Restated for 2011 and 2012 in terms of adoption of IFRIC 20.

⁽²⁾ Environmental data applies to MWS alone. Information for the balance of the Surface Operations facilities is included where relevant in either the West Wits or Vaal River data.

⁽³⁾ Restated.

⁽⁴⁾ The Eskom grid emission factor was revised by the National Business Initiative in consultation with Eskom. This led to a reduction in the electricity-related emissions reported for 2011 and 2012. The data reported for 2012 included NUFCOR.

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