Business review

Northam mine – a shifting production profile

The Northam mine's production at 9 113kg (292 989oz) was 9.7% lower year on year. Twenty-six production days were lost owing to safety-related stoppages, while intermittent power supply constraints also contributed to lower output.

Northam mine – key statistics

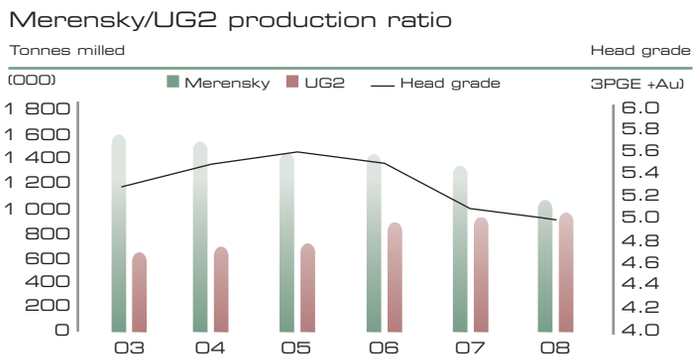
Ownership	Wholly-owned by Northam Platinum Limited
Location	Northern part of the western limb of the Bushveld Complex in Limpopo Province; adjacent to the Anglo Platinum's Amandelbult operation
Access and infrastructure	Well-established infrastructure: tarred roads, railway, water and power
Project extent	7 625 hectares; strike length of 8km
Reserves	9.2Moz*
Resources	30.1Moz*
Life of mine	18 years
Operations	Underground mining operations on the Merensky and UG2 reefs
	Underground equipment driven by hydropower.
	Surface operations include a Merensky and UG2 concentrator plant, a smelter and base metals removal plant (BMR)
Production profile	Steady state output of approx 300 000oz (3PGM+Au) annually
Precious metals refining	Performed by Heraeus in terms of toll-treating agreement
Marketing	In-house, independent marketing to established global customer base
F2008 capex	R265 million
F2009 capex (estimate)	R340 million
F2008 cash costs	R175 197/kg (3PGE+Au)

* 3PGE + Au

The traditional difficulties associated with mining the Merensky pothole facies at Northam persisted in the year, exacerbating the already lower output levels. Year on year, tonnages milled from the Merensky reef horizon were 21.0% lower at 1 059 624 tonnes (F2007: 1 341 057).

A better performance was recorded from the UG2 reef. Tonnages milled from this reef increased by 3.8% to 963 033 (F2007: 928 149), which helped to stem the decline in total tonnages milled, of 2 022 657 tonnes, to 10.9%.

In an effort to ameliorate the lower underground tonnages, a total of 339 584 tonnes (at a grade of 0.85g/t) of waste rock fines were retreated, yielding 202kg of metal in concentrate, supplemented by 135kg emanating from retreatment of slag. Slight fluctuations in the head grades from both reefs, and the higher proportion of UG2 tonnages milled, resulted in a marginally lower combined head grade of 5.02g/t from 5.07g/t in F2007.



MERENSKY REEF

	F2008	F2007
Development metres	**9 615**	11 555
Square metres mined	**205 251**	249 812
Tonnes milled	**1 059 624**	1 341 057
Head grade (g/t 3PGE+Au)	**5.6**	5.6
PGMs in concentrate produced (kg)	**5 051**	6 362
Ore reserve availability (months)	**18**	15

UG2 REEF

	F2008	F2007
Development metres	**3 117**	3 267
Square metres mined	**158 294**	146 698
Tonnes milled	**963 033**	928 149
Head grade (g/t 3PGE+Au)	**4.4**	4.4
PGMs in concentrate produced (kg)	**3 285**	3 327
Ore reserve availability (months)	**21**	24

COMBINED REEFS

	F2008	F2007
Development metres	**12 732**	14 822
Square metres mined	**363 545**	396 510
Tonnes milled	**2 022 657**	2 269 206
Head grade (g/t 3PGE+Au)	**5.0**	5.1
PGMs in conc, produced from u/g mining (kg)	**8 336**	9 689
PGMs in conc. from other sources (kg)	**777**	398
Total (kg)	**9 113**	10 087
PGMs in conc. purchased	**–**	404

Optimising the ore reserve

Exploration drilling has confirmed that the transiton zone to the east has effectively sterilized that area, resulting in the suspension of development and stoping activities on the Merensky reef. This represents a loss of some 1.72Moz to the total resource in the lease area.

This potential loss has been countered by the progress of the deepening project, on 18 level which, with each additional level adds 2.5 years (or 0.76Moz) to the life of mine (LOM) estimate. Development is currently in progress on the conveyor decline between 15 and 16 levels, intended ultimately to extend down to 18 level.

The shallowing project on the western side of the mine is also progressing well. The first cross-cut to reef on the new No 1 level has holed, while the ore passes from No 1 to 2 levels are due for completion in calendar 2009.

Some residual problems on the 20 line fissure have persisted, affecting the development progress on 6 and 7 levels, which are now expected to be completed within five and 12 months respectively. All other levels have successfully traversed this feature and ore reserve development to the west of the fissure continues satisfactorily.

Business review *cont*

METAL SALES

	F2008		F2007	
	kg	oz	kg	oz
Platinum	5 275	169 612	6 609	212 484
Palladium	2 523	81 103	3 014	96 888
Rhodium	643	20 666	877	28 180
Gold	145	4 678	203	6 549
Total (3PGE+Au)	8 586	276 059	10 703	344 101
Ruthenium	1 059	34 035	1 046	33 633
Iridium	208	6 700	270	8 687
Osmium	4	116	26	849
Silver	184	5 909	261	8 375
Total	**10 041**	**322 819**	**12 306**	**395 645**
Copper (tonnes)	573		733	
Nickel (tonnes)	1 110		1 301	

Ongoing metallurgical improvements

Continued improvements to the Northam metallurgical infrastructure have been a feature of the past year, driven primarily by the changing production profile, with UG reef growing into an increasingly important source of tonnages.

Having proved the success in reducing chrome levels in smelter feed, a second external sparger column cell has now been installed in the UG2 concentrator plant. With this technology, the ratio of Merensky:UG2 smelter feed has improved from 1.4:1 in F2007 to 1.1:1 in the current year while maintaining chrome levels in smelter feed to below the 1.6% limit.

Shortly after the end of the financial year in July 2008 a new high pressure roll crusher was installed at the UG2 plant. The new installation has already shown encouraging results by improving throughput and reducing power consumption. A further improvement to the processing facilities has been the conversion of the secondary rod mill to a ball mill, ensuring a better grind. Overall, these upgrades should improve recoveries by some 3%, with a positive effect also on operating costs.

As part of the metallurgical upgrade programme, the smelter will be shut down for a two-month period in October and November 2008, allowing for a scheduled rebuild, at a capital cost of some R50 million. At the same time, with the cooling of the furnace, the matte tap holes will be replaced and repairs to the converter precipitators, originally planned for January 2009, will be effected.

Capital expenditure

Total capital expenditure for the year amounted to R265 million. Major capital items were the deepening project (R69 million) and improvements to the metallurgical facilities (R33 million). The balance comprised routine capital expenditure items.

In the year ahead the deepening project is anticipated to gain momentum, with an allocation of R106 million. The cost of the smelter rebuild represents the major part of the metallurgical capital spend of R66 million in the new financial year, with total capital expenditure anticipated at R340 million.

Offtake agreement with Pilanesberg Platinum Mines

A significant development during the year was the conclusion of a metal offtake agreement with Pilanesberg Platinum Mines (Pty) Limited (Pilanesberg) in May 2008. Pilanesberg, an emerging producer in the Platmin stable, is planned to come into production in calendar 2009, and at full production is expected to add some 250,000oz (3PGE+Au), to Northam's sales volumes.

With this agreement Northam has now gained access to a source of feed to the smelter which complements the Northam mine's blend of ore, which will provide further flexibility to the Northam mining operations.

Significantly this development also signals the first step in our strategy of leveraging the existing metallurgical infrastructure and capacity at the Northam mine, and lowers the barriers to entry of smaller producers by providing competitive access to an independent refining and beneficiation channel.

Importantly, in the event of electricity shortfalls to the smelter in the future, Pilanesberg has agreed to bring in alternative power supply.

Booysendal – the key to growth

Further detail on the conclusion and implementation of the Booysendal transaction is discussed in the directors' report on page 40 of this annual report.

During the year

Previous exploration work on the Booysendal project was conducted by Anglo Platinum, and included the drilling of 282 holes, and a pre-feasibility study. During the year Northam commissioned an independent review of the project area's resource base, and also concluded a review of the previous pre-feasibility study. The Booysendal competent person's report, issued in May this year, is available on the Northam website at www.northam.co.za.

The company has constituted an experienced group of 25 members in a project team, which has now completed a review of the previous pre-feasibility study on the project area. This work includes a review of the geology and resource base; an investigation of mining method and production options; the determination of the principal project elements including metallurgy, bulk infrastructure, engineering and services; human resources and environmental issues and permitting.

Against this background, a total of 11 production scenarios have been investigated, ranging in scale from 120 000 to 480 000 tpm and based on Merensky and UG2 reef standalone mining, and also on a combination of production profiles from both reefs. Initial findings from the pre-feasibiity review process suggests that production from the UG2 reef horizon should possibly be prioritised, while a modular production build-up in units of 120 000 tpm offers flexibility, and mitigates potential risks associated with power and water.

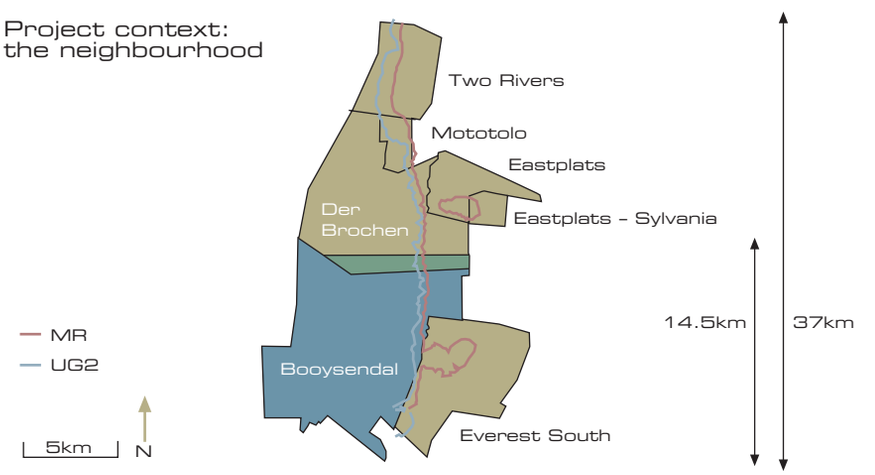
The year ahead

With the completion of the pre-feasibility review, work has moved on seamlessly into the bankable feasibility study, due for completion in the latter part of the 2009 calendar year, at a capital cost of R50 million.

Key project data

Ownership	Northam Platinum Limited
Location	Eastern limb of the Bushveld Complex in Mpumalanga Province; adjacent to the Everest and Mototolo PGM operations. Closest town is Lydenburg.
Access and infrastructure	Tarred road access from Lydenburg and new private road constructed across Der Brochen project area; nearest railway station is at Steelpoort, 43km to the north-east, accessible via tarred road.
	16 MW power available from Mototolo for initial mine construction and development;
	Northam is a member of the Joint Water Forum which will ultimately allocate and distribute water from the De Hoop dam, currently under construction.
Project extent	15 170 hectares; strike length of 14.5km
Resources	103Moz*
Life of mine	50 years and beyond
Project status	Pre-feasibility review process completed in August 2008
	Feasibility study due for completion in second half of calendar 2009; mine construction to start in 2010 with first production in 2011

*3PGE + Au



BOOYSENDAL RESOURCE ESTIMATE

	Tonnes M	Grade (3PGE+Au) g/t	Contained (3PGE+Au) Moz
Merensky reef			
Measured	35.919	4.37	5.046
Indicated	43.385	4.14	5.773
Inferred	214.171	4.39	30.187
Total	**293.475**	**4.35**	**41.007**
UG2 reef			
Measured	18.699	3.82	2.298
Indicated	65.496	4.09	8.627
Inferred	365.900	4.38	51.516
Total	**450.095**	**4.31**	**62.440**
Combined reefs			
Measured	54.618	4.18	7.344
Indicated	108.881	4.11	14.400
Inferred	580.071	4.38	81.703
Total	**743.570**	**4.33**	**103.447**