




We do it better

**MINERAL RESOURCES
AND MINERAL RESERVES
2015**

MINERAL RESOURCES AND MINERAL RESERVES

Competent Person's Report on Mineral Resources and Mineral Reserves

The report is issued as the annual update of the Mineral Resources and Reserves to inform shareholders and potential investors of the mineral assets held by African Rainbow Minerals Limited (ARM).

Historical ARM Mineral Resources and Reserves statements can be found on www.arm.co.za under Investors and Media, Annual Reports. 

Salient features for F2015

ARM FERROUS

Beeshoek Mine

Measured and Indicated Mineral Resources for Village ore body increased to 51.53 million tonnes at a grade of 64.42% Fe compared to 44.09 million tonnes at 64.36% Fe reported in 2014. The increase was as a result of recent drilling and update of the resource model.

Khumani Mine

The total Mineral Reserves for Khumani decreased from 550.10 million tonnes at 64.41% Fe to 447.95 million tonnes at 64.34% Fe mainly due to re-optimisation of the King Pit at lower iron ore prices and mining depletion.



ARM PLATINUM

Two Rivers Mine

The incorporation of portions 1 to 6 of Kalkfontein Farm, Buffelshoek Farm and Tweefontein Farm into Two Rivers Mine resulted in the UG2 Reef Measured and Indicated Resources tonnage increasing by 48% to 74.94 million tonnes at 5.16 g/t (6E) while Merensky Reef Measured and Indicated Resources tonnage increased by 41% to 60.57 million tonnes at 3.11 g/t (6E). Inferred Mineral Resources also increased to 117.83 million tonnes at 5.75 g/t (6E) for UG2 Reef and 99.19 million tonnes at 3.92 g/t (6E) for Merensky Reef.

Tamboti Platinum

Measured and Indicated Mineral Resources of 15.20 million tonnes at 6.19 g/t (6E) for UG2 Reef and 14.39 million tonnes at 4.31 g/t (6E) for Merensky Reef have been declared for the Kalkfontein Remaining Extent Area adjacent to Two Rivers Mine which was purchased from Tamboti Platinum (Pty) Limited.

Nkomati Mine

Measured and Indicated Resources tonnage decreased by 6% to 226.59 million tonnes at 0.35% Ni grade due to remodelling and mining depletion.

ARM COAL

Goedgevonden Coal Mine

Coal 'Run of Mine' (ROM) Reserves decreased to 331 million tonnes as compared to 371 million tonnes reported in 2014 mainly due to depletion by mining and change in the Eskom yield cut-off.



ARM COPPER

Lubambe Mine

Mineral Reserves increased by 14% to 48.6 million tonnes at a grade of 2.25% total copper (TCu) due to an increase in mining extraction factors in some areas.

F2015 Mineral Resources and Mineral Reserves summary

PLATINUM GROUP ELEMENTS	Mineral Resources (Measured and Indicated)		Mineral Reserves (Proved and Probable)		
	Mt	Grade (g/t)	Mt	Grade (g/t)	Moz
Two Rivers Mine					
UG2	74.94	5.16 (6E)	41.86	3.65 (6E)	4.92 (6E)
Merensky	60.57	3.11 (6E)			
Tamboiti Platinum (Kalkfontein Remaining Extent)					
UG2	15.20	6.19 (6E)			
Merensky	14.39	4.31 (6E)			
Modikwa Mine*					
UG2	136.70	5.91 (4E)	48.13	4.66 (4E)	7.21 (4E)
Merensky	72.00	2.78 (4E)			
Nkomati Mine					
MMZ+PCMZ	226.59	0.96 (4E)	103.79	0.92 (4E)	3.07 (4E)
MMZ Stockpiles			0.17	0.65 (4E)	0.003 (4E)
PCMZ Stockpiles			3.63	0.52 (4E)	0.06 (4E)
Kalplats PGM Prospect	69.91	1.48 (3E)			

6E = platinum+palladium+rhodium+iridium+ruthenium+gold.

4E = platinum+palladium+rhodium+gold.

3E = platinum+palladium+gold.

* The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves, except for Modikwa Mine.

NICKEL	Mineral Resources* (Measured and Indicated)		Mineral Reserves (Proved and Probable)	
	Mt	Ni%	Mt	Ni%
Nkomati Mine				
MMZ+PCMZ	226.59	0.35	103.79	0.32
MMZ Stockpiles			0.17	0.29
PCMZ Stockpiles			3.63	0.21

* The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

MANGANESE	Mineral Resources* (Measured and Indicated)			Mineral Reserves (Proved and Probable)		
	Mt	Mn%	Fe%	Mt	Mn%	Fe%
Nchwaning Mine						
Seam 1	133.02	43.0	9.2	104.21	42.7	9.6
Seam 2	184.16	40.8	17.0	118.53	40.9	16.8
Black Rock (Koppie area)						
Seam 1	43.60	40.6	18.1			
Seam 2	26.81	38.6	19.8			
Gloria Mine						
Seam 1	126.45	36.9	5.1	92.62	36.8	5.3
Seam 2	30.73	28.0	9.7			

* The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

IRON ORE	Mineral Resources* (Measured and Indicated)		Mineral Reserves (Proved and Probable)	
	Mt	Fe%	Mt	Fe%
Beeshoek Mine				
All pits	113.73	64.05	51.50	64.58
Dumps			7.42	55.38
Khumani Mine				
Bruce	202.97	64.46	163.83	64.37
King-Mokaning	397.28	64.21	284.12	64.33
Dumps			4.76	55.79

* The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

CHROMITE	Mineral Resources* (Measured and Indicated)		Mineral Reserves (Proved and Probable)	
	Mt	Cr ₂ O ₃ %	Mt	Cr ₂ O ₃ %
Dwarsrivier Mine				
LG6 Chromitite Seam	53.07	37.89	37.60	34.28
Nkomati Mine				
PCMZ	102.93	11.83	50.51	13.61
Oxidized Massive Chromitite	0.62	28.23	0.57	25.30
Un-Oxidized Massive Chromitite	5.48	29.27	1.21	20.57
Chromite Stockpiles			2.62	20.53

* The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

COAL	COAL RESOURCES*		COAL RESERVES		
	(Measured and Indicated)		Proved and Probable (ROM)		Proved and Probable (Saleable)
	Mt	CV (MJ/kg)	Mt	CV (MJ/kg)	Mt
Goedevonden Coal Mine	555	19.76	331	19.90	206

* The Measured and Indicated Coal Resources are inclusive of those modified to produce Coal Reserves.

COPPER	Mineral Resources* (Measured and Indicated)			Mineral Reserves (Proved and Probable)		
	Mt	TCu%	ASCu%	Mt	TCu%	ASCu%
Lubambe Mine	52.8	2.65	0.43	48.6	2.25	0.34
Lubambe Extension Target Area	90.0	3.73	0.56			

* The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

General statement

ARM's method of reporting Mineral Resources and Mineral Reserves complies with the South African Code for Reporting Exploration Results, Mineral Resources and Mineral Reserves (SAMREC Code), of 2007 as amended in 2009.

The Code sets out minimum standards, recommendations and guidelines for Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves in South Africa.

The convention adopted in this report is that the Measured and Indicated Mineral Resources are reported inclusive of that portion of those converted to a Mineral Reserve, except for Modikwa Platinum Mine where the Measured and Indicated Mineral Resources are reported exclusive of the Mineral Reserves. Resources and Reserves are quoted as at 30 June 2015.

External consulting firms audit the Resources and Reserves of the ARM operations on a three- to-four-year cycle basis or when substantial geological borehole data has been added to the database. Underground Resources are *in-situ* tonnages at the postulated mining width, after deductions for geological losses. Underground Mineral Reserves reflect tonnages that will be mined and processed while surface Mineral Reserves consist of dumps/stockpiles already mined and ready for processing. Both are quoted at the grade fed to the plant. Open-pit Mineral Resources are quoted as *in-situ* tonnages and Mineral Reserves are tonnages falling within an economic pit-shell.

The evaluation method is generally Ordinary Kriging with mining block sizes ranging from 10 x 10 metres to 100 x 100 metres to

250 x 250 metres in the plan view. The blocks vary in thickness from 2.5 to 10 metres. The evaluation process is fully computerised, generally using Datamine Studio 3 and Strat3D software packages.

The classification into Measured, Indicated and Inferred Mineral Resources is done by consideration of geostatistical parameters, spacing of boreholes, geological structures and continuity of the mineralisation.

The Mineral Resources and Mineral Reserves are reported on a total basis, not the attributable beneficial interest that ARM has on the individual projects or mines. When the attributable beneficial interest on a mine or project is less than 100%, the actual percentage of the attributable interest is specified. Maps, plans and reports supporting Resources and Reserves are available for inspection at ARM's registered office and at the relevant mines.

ARM operations have already had their conversions from Old Order Mining Licences to New Order Mining Rights approved, with only a few in the process of registration.

Rounding of figures may result in computational discrepancies on the Mineral Resources and Reserves tabulations.



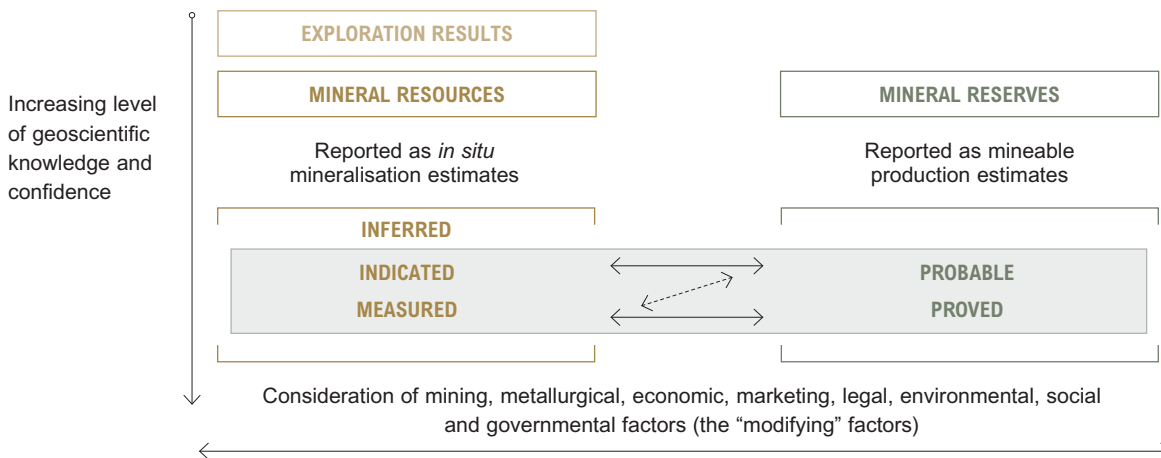
Ore transportation at Nkomati Nickel Mine

Definitions

The definitions of Mineral Resources and Reserves, quoted from the SAMREC Code (2007, as amended in July 2009), are as follows:

A ‘Mineral Resource’	is a concentration or occurrence of material of economic interest in or on the earth’s crust in such form, quality and quantity that there are reasonable and realistic prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, or estimated from specific geological evidence, sampling and knowledge interpreted from an appropriately constrained and portrayed geological model. Mineral Resources are subdivided, and must be so reported, in order of increasing confidence in respect of geoscientific evidence, into Inferred, Indicated or Measured categories.
An ‘Inferred Mineral Resource’	is that part of a Mineral Resource for which volume or tonnage, grade and mineral content can be estimated with only a low level of confidence. It is inferred from geological evidence and sampling and assumed but not verified geologically or through analysis of grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that may be limited in scope or of uncertain quality and reliability.
An ‘Indicated Mineral Resource’	is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on information from exploration, sampling and testing of material gathered from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological or grade continuity but are spaced closely enough for continuity to be assumed.
A ‘Measured Mineral Resource’	is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable information from exploration, sampling and testing of material from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.
A ‘Mineral Reserve’	is the economically mineable material derived from a Measured or Indicated Mineral Resource or both. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments to a minimum of a Pre-Feasibility Study for a project and a Life-of-Mine Plan for an operation must have been completed, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors). Such modifying factors must be disclosed.
A ‘Probable Mineral Reserve’	is the economically mineable material derived from a Measured or Indicated Mineral Resource or both. It is estimated with a lower level of confidence than a Proved Mineral Reserve. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments to a minimum of a Pre-Feasibility Study for a project or a Life-of-Mine Plan for an operation must have been carried out, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Such modifying factors must be disclosed.
A ‘Proved Mineral Reserve’	is the economically mineable material derived from a Measured Mineral Resource. It is estimated with a high level of confidence. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments to a minimum of a Pre-Feasibility Study for a project or a Life-of-Mine Plan for an operation must have been carried out, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Such modifying factors must be disclosed.

RELATIONSHIP BETWEEN EXPLORATION RESULTS, MINERAL RESOURCES AND MINERAL RESERVES



Competence

The Competent Person with overall responsibility for the compilation of the 2015 Mineral Resources and Reserves Report is Shepherd Kadzviti, Pr.Sci.Nat, an ARM employee. He confirms that the information in this report complies with the SAMREC Code and that it may be published in the form and context in which it was intended.

Shepherd Kadzviti graduated with a BSc (Geology and Mathematics) and MSc in Exploration Geology from the University of Zimbabwe. He later completed a Graduate Diploma in Mining Engineering (GDE) at the University of the Witwatersrand. He worked at RioZim's Renco Gold Mine for 14 years in various capacities of Geologist, Technical Services Superintendent and Mine Manager. In 2005, he joined Anglo American Platinum at Union Mine as an Evaluation Geologist with responsibilities for geological database management and mineral resource estimation. After two years at the mine, he was transferred to Anglo American Platinum corporate office where he was appointed Resource Geologist. He then joined African Rainbow Minerals (ARM) as Mineral Resources Specialist in 2008 where he was involved in the evaluation of the various mineral deposits for the group. In 2012, he was appointed Group Mineral Resources Manager for ARM. He is registered with the South African Council for Natural Scientific Professions (SACNASP) as a Professional Natural Scientist (Pri.Sci.Nat) in the field of practice of geological science, registration number 400164/05, and as such is considered to be a Competent Person. SACNASP is based in the Council for Geosciences Buildings, 3rd Floor, 280 Pretoria Road, Silverton, 0127, South Africa.

All Competent Persons at the operations have sufficient relevant experience in the type of deposit and in the activity for which they have taken responsibility. Details of ARM's Competent Persons are available from the Company Secretary on written request.

The following Competent Persons were involved in the calculation of Mineral Resources and Reserves. They are employed by ARM or its subsidiaries and joint venture (JV) partners:

M A Burger	Pr.Sci.Nat	Iron
S v Niekerk	Pr.Sci.Nat	Iron
B Ruzive	Pr.Sci.Nat	Manganese
A Pretorius*	Pr.Sci.Nat	Chrome
M A J Burger	Pr.Sci.Nat	Iron
M Hlangwane	Pr.Sci.Nat	Iron
M Davidson	Pr.Sci.Nat	Nickel
J de Kock	SAIMM	PGM#
M Cowell	Pr.Sci.Nat	PGM
M Smith^	Pr.Sci.Nat	Coal
AMEC*		Copper
C Rose	Pr.Sci.Nat	Copper

* External consultants.

^ Glencore Operations South Africa.

PGM – Platinum Group Metals.

Anglo American Platinum and Glencore provide Mineral Resources and Reserves for Modikwa and Goedgevonden Mines respectively.

Shepherd Kadzviti Pri.Sci.Nat
Group Mineral Resources Manager
African Rainbow Minerals
24 Impala Road, Chislehurst, Sandton, South Africa.

14 October 2015

ARM Ferrous

ASSMANG PROPRIETARY LIMITED (ASSMANG) OPERATIONS

ARM's attributable beneficial interest in Assmang operations is 50%. The other 50% is held by Assore Limited.

MANGANESE MINES

Locality

The manganese mines are situated in the Northern Cape province in South Africa, approximately 80 kilometres north-west of the town of Kuruman. Located at latitude 27°07'50"S and longitude 22°50'50"E, the site is accessed via the national N14 route between Johannesburg and Kuruman, and the provincial R31 road.

History

In 1940, ARM Ferrous acquired a manganese ore outcrop on a small hillock known as Black Rock. Several large properties underlain by ore were subsequently found and acquired. Today, the Black Rock area is considered to be one of the largest and richest manganese deposits in the world. Manganese mining operations were extended and today include the Gloria and Nchwaning underground mines. Manganese ore is supplied locally to Assmang-owned Cato Ridge Smelter, and is mainly exported through Port Elizabeth as well as Durban and Richards Bay.

Mining authorisation

The Converted Mining Right for the Black Rock Mine Operations was executed on 13 July 2011. Registration of right is in process.

Geology

The manganese ores of the Kalahari Manganese field are contained within sediments of the Hotazel Formation of the Griqualand West Sequence, a sub-division of the Proterozoic Transvaal Supergroup. At Black Rock, Belgravia and Nchwaning farms, the Hotazel, Mapedi and Lucknow Formations have been duplicated by thrusting. The thrustured ore bodies comprising Black Rock (Koppie), Belgravia 1 and Belgravia 2 are collectively known as Black Rock ore bodies. The average thickness of the Hotazel Formation is approximately 40 metres. The manganese ore bodies exhibit a complex mineralogy and more than 200 mineral species have been identified. Hydrothermal upgrading has resulted in zoning of the ore body adjacent to fault positions. Distal areas exhibit more original and low-grade kutnohorite and braunite assemblages, while areas immediately adjacent to faults exhibit high-grade hausmannite rich ore. The intermediate areas exhibit a very complex mineralogy, which includes bixbyite, braunite and jacobsite among a host of other manganese-bearing minerals. Similar zonation also exists in the vertical sense. At the top and bottom contacts it is common to have high iron (Fe) and low manganese (Mn) contents while the reverse is true towards the centre of the seam. This vertical zoning has given rise to a mining practice where only the 3.5 to 4.5 metre-high centre portion of the seam is being mined. At Gloria Mine, the intensity of faulting is much less, which may explain the lower grade.

Two manganese seams are present. The lowermost (Seam 1) at Nchwaning 3 is up to 6 metres thick, of which up to 4.5 metres

is mined. There is, therefore, minimum dilution. Limited mining of Nchwaning Seam 2 has been done, while no mining has been undertaken to date on Gloria Seam 2. Gloria Seam 1 is approximately 14 metres thick, but only an optimum cut of 3.5m is mined.

Nchwaning Mine Mineral Resources and Reserves

Mineral Resource classification at Nchwaning Mine is based on a number of parameters: kriging variance, kriging efficiency, regression slope, geological continuity of the manganese seams, geological structures and quality of assay data. Each of these parameters contributes to the overall classification depending on a weighting assigned to each of the parameters. Measured and Indicated Resources have been defined for Nchwaning. Geological losses are incorporated into the grade models.

Nchwaning Mine was diamond drilled from surface at 330 metre grid centres and the data is captured in a Geological Database Management System (GDMS) developed by Datamine. The core was logged and 0.5 metre-long, half-core, diamond-saw cut samples were submitted to Assmang's laboratory at Black Rock for X-ray fluorescence (XRF) analyses. Mn and Fe values were checked by Wet Chemical analyses. Several standards are used to calibrate the XRF equipment, and results are compared with other laboratories on a regular basis.

At Nchwaning, boreholes and underground sample sections were considered in the geological and modelling and grade estimation for Nchwaning Seam 1 and Seam 2 resource modelling. The underground sample sections that were used were sampled at intervals of 0.3 metres rather than one composite value for the whole section, providing data that could be used in modelling the seams at a composite width of 0.5 metres. The geological resource modelling was undertaken using Datamine Strat3D software and Studio 3 for the grade estimation. The resource models were built on 50 x 50 x 0.5 metre blocks allowing for sub-splitting in the X and Y directions for the model to accurately follow the geological boundaries. The full vertical extent of both Seam 1 and Seam 2 are modelled respectively. Statistical and geostatistical analysis was done on the following variables: Mn, Fe, Al₂O₃, BaO, CaO, K₂O, MgO, Na₂O, P, S and SiO₂. Ordinary Kriging interpolation within Datamine Studio 3 was used to estimate the grade of each 50 x 50 x 0.5 metre blocks each identifiable by the layer number within the Seam. Borehole and/or underground sample data with corresponding layer numbers was used in the estimation of grades. The relative density of the Nchwaning manganese Seams 1 and 2 was determined as 4.3 t/m³. Seam 1 and Seam 2 were modelled separately. The resource model for use in the evaluation was selected over a thickness of 4.5 metres (Nchwaning 3, Seam 1) and 3.5 metres for the rest of Nchwaning (Seams 1 and 2), based on the best Mn values and/or Mn/Fe ratios.

Trackless mechanised equipment is used in the bord and pillar mining method. Mining in the eastern extremity of Nchwaning occurs at a depth of 200 metres while the deepest (current) excavations are at a depth of 519 metres below surface. Ore from Nchwaning No 2 Mine is crushed underground before being hoisted to a surface stockpile via a vertical shaft. Similarly, ore from the Nchwaning No 3 Mine is crushed underground

ARM Ferrous continued

before being conveyed to a surface stockpile via a declined conveyor system. Ore is withdrawn from the surface stockpile and undergoes two stages of crushing, dry screening and wet screening to yield lumpy and fine products.

At the plant, the finer fractions are stockpiled while the coarser fractions are extracted from the respective product boxes into

road haulers, sampled, weighed and stored on stacks ahead of despatch. Samples from each stack are analysed for chemical content and size distribution. This ensures good quality control and enables the ore control department to blend various stacks according to customer requirements.

NCHWANING MINE: SEAM 1 MANGANESE MINERAL RESOURCES AND RESERVES

	Mineral Resources				Mineral Reserves		
	Mt	Mn%	Fe%		Mt	Mn%	Fe%
Measured	57.13	44.5	9.8	Proved	45.02	43.9	10.2
Indicated	75.89	41.9	8.8	Probable	59.19	41.8	9.1
Total Resources (Seam 1) 2015	133.02	43.0	9.2	Total Reserves (Seam 1) 2015	104.21	42.7	9.6
Total Resources (Seam 1) 2014	136.58	43.1	9.4	Total Reserves (Seam 1) 2014	102.76	43.2	9.3

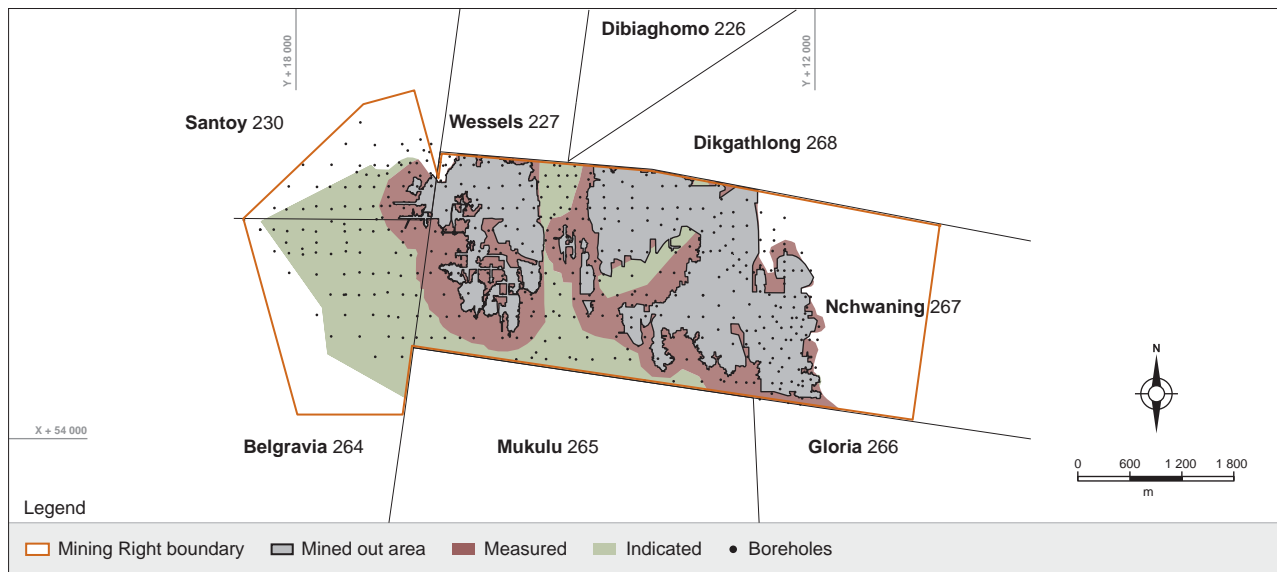
The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

Totals are rounded off.

Modifying factors for the conversion of Mineral Resources to Reserves include: pillar losses, mining losses.

Mineral Resources and Reserves based on 4.5 metres optimum evaluation cut for Seam 1 of Nchwaning 3 and 3.5 metres cut for the rest of Nchwaning.

NCHWANING MANGANESE SEAM 1 MINERAL RESOURCES CLASSIFICATION



NCHWANING MINE: SEAM 2 MANGANESE MINERAL RESOURCES AND RESERVES

	Mineral Resources				Mineral Reserves		
	Mt	Mn%	Fe%		Mt	Mn%	Fe%
Measured	66.31	41.2	17.1	Proved	43.08	41.5	16.9
Indicated	117.85	40.5	16.9	Probable	75.45	40.6	16.7
Total Resources (Seam 2) 2015	184.16	40.8	17.0	Total Reserves (Seam 2) 2015	118.53	40.9	16.8
Total Resources (Seam 2) 2014	182.96	40.7	17.0	Total Reserves (Seam 2) 2014	118.98	40.9	16.7

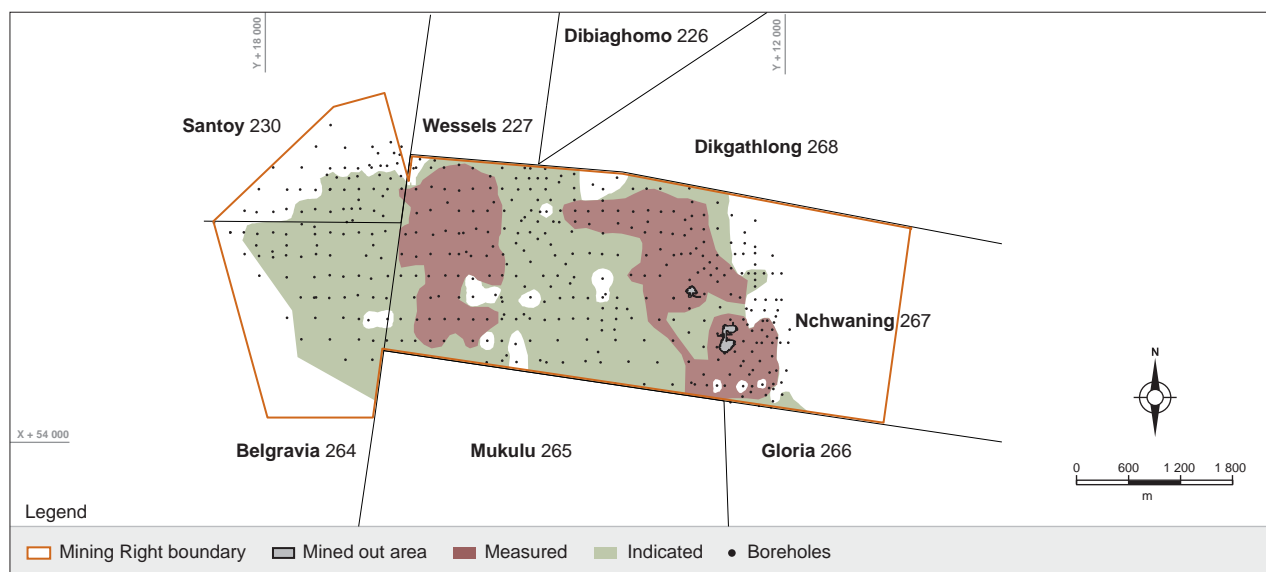
The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

Totals are rounded off.

Modifying factors for the conversion of Mineral Resources to Reserves include: pillar losses, mining losses.

Mineral Resources and Reserves based on 3.5 metres optimum evaluation cut.

NCHWANING MANGANESE SEAM 2 MINERAL RESOURCES CLASSIFICATION



NCHWANING YEAR-ON-YEAR CHANGE

The Mineral Resources for Seam 1 reduced by 3% to 133.02 million tonnes at 43% Mn. Nchwaning Seam 2 Mineral Resources increased from 182.96 to 184.16 million tonnes at 40.8% Mn due to remodelling of the seam.

Mineral Reserves tonnage for Nchwaning Seam 1 increased by 1% to 104.21 million tonnes at 42.7% Mn. Mineral Reserves for Nchwaning Seam 2 remained almost the same as in 2014 at 118.53 million tonnes at 40.9% Mn. A total of 3.05 million tonnes ROM were mined from the two Seams.

BLACK ROCK (KOPPIE AREA): SEAM 2 MANGANESE MINERAL RESOURCES

	Mineral Resources		
	Mt	Mn%	Fe%
Measured	8.23	37.4	19.8
Indicated	18.58	39.2	19.8
Total Resources (Seam 2) 2015	26.81	38.6	19.8
Total Resources (Seam 2) 2014	26.81	38.6	19.8

Totals are rounded off.
Resource defined on a 38% Mn cut-off.

Black Rock Mineral Resources

The Black Rock ore bodies occur in the Black Rock Koppie, Belgravia 1 and Belgravia 2 areas. They are all part of a large thrust complex. Modelling of these ore bodies was undertaken using 151 Nchwaning boreholes that intersected the thrust complex and 174 Black Rock in-fill boreholes. A 38% manganese cut-off was used in the modelling. Seams 1 and 2 were modelled at variable thicknesses. No mining is currently being done at Black Rock Koppie.

BLACK ROCK (KOPPIE AREA): SEAM 1 MANGANESE MINERAL RESOURCES

	Mineral Resources		
	Mt	Mn%	Fe%
Measured	9.03	40.3	18.1
Indicated	34.57	40.7	18.1
Total Resources (Seam 1) 2015	43.60	40.6	18.1
Total Resources (Seam 1) 2014	43.60	40.6	18.1

Totals are rounded off.
Resource defined on a 38% Mn cut-off.

Gloria Mine Mineral Resources and Reserves

Procedures for drilling and assaying at Gloria Mine are the same as at Nchwaning. Both boreholes and underground sample sections were considered in the evaluation of Gloria Seam 1. The underground sampling values represent sampling at 0.3 metre intervals. Gloria was modelled similarly to Nchwaning using Datamine Strat3D software for the geological modelling and Studio 3 for the grade estimation. The geological block model was created for every 0.5 metre layer for the entire Seam 1 and Seam 2 using Datamine Strat3D. Block sizes in the X and Y directions were 50 x 50 metres allowing for sub-splitting. The evaluation width of 3.5 metres was used and the relative density was determined as 3.8 t/m³. The full vertical extent of both Seam 1 and Seam 2 were modelled respectively. Statistical and geostatistical analysis for the following variables: Mn, Fe, Al₂O₃, BaO, CaO, K₂O, MgO, Na₂O, P, S and SiO₂ was undertaken. Ordinary Kriging interpolation within Studio 3 was used to estimate the grade in the 50 x 50 x 0.5 metre blocks each identified by a layer number within the Seam, using borehole and/or underground sample data of the corresponding layer. Mineral Resource classification methods were similar to those applied at Nchwaning Mine.

ARM Ferrous continued

Gloria Mine is extracting manganese at depths that vary between 180 to 250 metres. Ore is crushed underground before being conveyed to a surface stockpile via a decline shaft. Ore is withdrawn from the surface stockpile and forwarded to two stages of crushing, dry screening, and wet screening to yield lumpy and fine products. At the plant, the ore is processed similarly to Nchwanging run of mine ore.

GLORIA MINE: SEAM 1 MANGANESE MINERAL RESOURCES AND RESERVES

	Mineral Resources				Mineral Reserves		
	Mt	Mn%	Fe%		Mt	Mn%	Fe%
Measured	49.01	37.3	4.9	Proved	35.69	37.3	5.2
Indicated	77.44	36.7	5.2	Probable	56.93	36.5	5.3
Total Measured and Indicated (Seam 1) 2015	126.45	36.9	5.1	Total Reserves (Seam 1) 2015	92.62	36.8	5.3
Total Measured and Indicated (Seam 1) 2014	125.68	37.4	4.7	Total Reserves (Seam 1) 2014	100.52	37.5	4.7
Inferred (Seam 1) 2015	42.81	35.7	5.3				
Inferred (Seam 1) 2014	41.36	35.9	5.1				

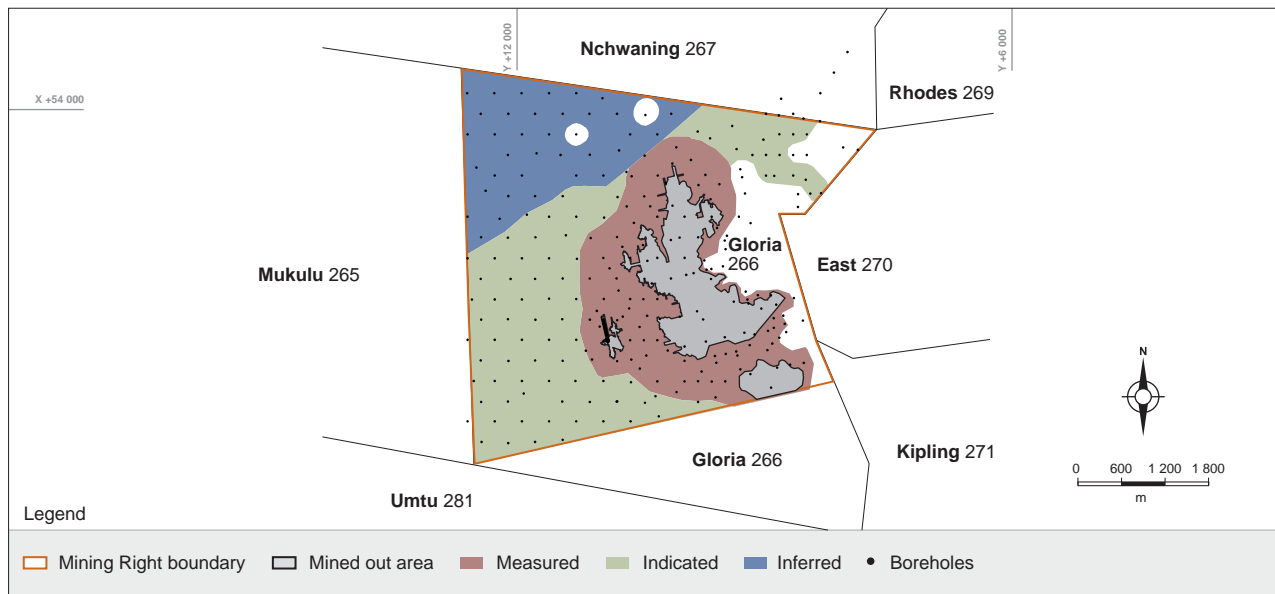
The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

Totals are rounded off.

Modifying factors for the conversion of Mineral Resources to Reserves include: pillar losses, mining losses.

Mineral Resources and Reserves based on 3.5 metres optimum evaluation cut.

GLORIA MANGANESE SEAM 1 MINERAL RESOURCES CLASSIFICATION



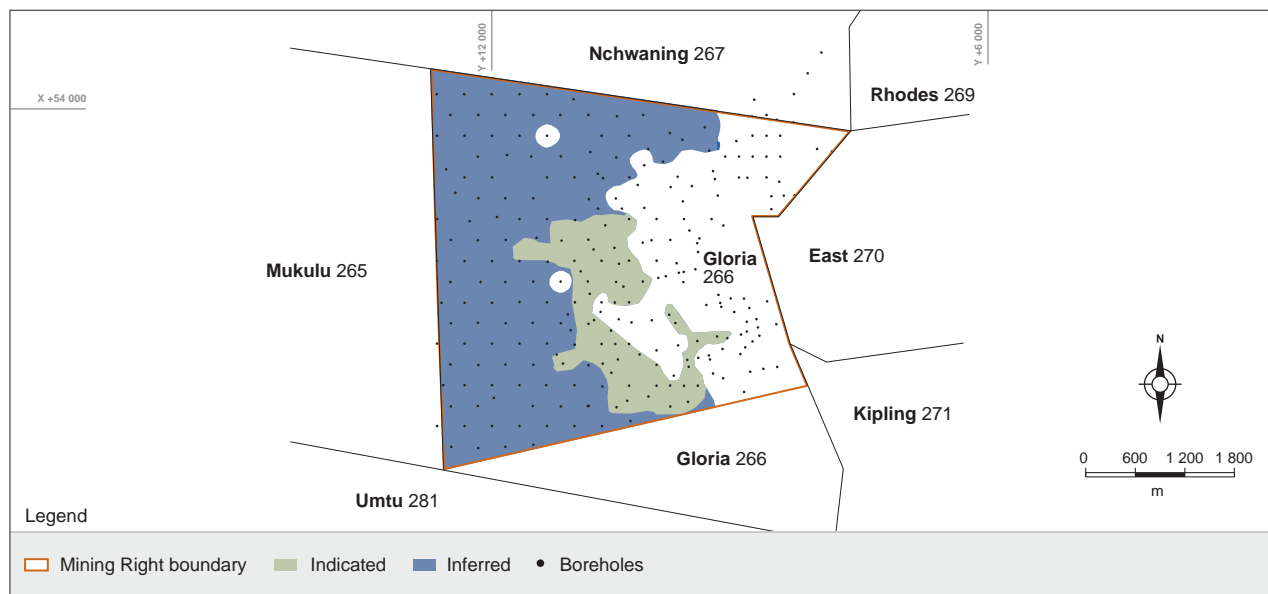
GLORIA MINE: SEAM 2 MANGANESE MINERAL RESOURCES

	Mineral Resources		
	Mt	Mn%	Fe%
Measured			
Indicated	30.73	28.0	9.7
Total Measured and Indicated (Seam 2) 2015	30.73	28.0	9.7
Total Measured and Indicated (Seam 2) 2014	31.55	28.3	9.8
Inferred (Seam 2) 2015	130.08	28.2	11.3
Inferred (Seam 2) 2014	123.86	29.2	10.6

Totals are rounded off.

Mineral Resources based on 3.5 metres optimum evaluation cut.

GLORIA MANGANESE SEAM 2 MINERAL RESOURCES CLASSIFICATION



GLORIA YEAR-ON-YEAR CHANGE

Gloria Seam 1 Reserves were 8% lower than in 2014 at 92.62 million tonnes and a grade of 36.8% Mn. The decrease is mainly due to mining depletion and reduction in mining extraction factor as a consequence of pillar size increase.

HISTORICAL MANGANESE PRODUCTION AT NCHWANING AND GLORIA MINES (SALEABLE PRODUCT)

Financial year	Nchwaniing	Gloria
	Mt	Mt
2010/2011	2.35	0.70
2011/2012	2.46	0.84
2012/2013	2.40	0.75
2013/2014	2.69	0.67
2014/2015	2.48	0.61

HISTORICAL MANGANESE PRODUCTION AT NCHWANING AND GLORIA MINES (ROM)

Financial year	Nchwaniing	Gloria
	Mt	Mt
2013/2014	3.15	0.79
2014/2015	3.05	0.74



Stock Pile at Black Rock Manganese Mine

ARM Ferrous continued

IRON ORE MINES

Locality

The Iron Ore Division is made up of the Beeshoek Mine located on the farms Beeshoek 448 and Olynfontein 475, and the Khumani Mine situated on the farms Bruce 544, King 561 and Mokaning 560. All properties are in the Northern Cape, approximately 200 kilometres west of Kimberley. The Beeshoek open-pit operations are situated 7 kilometres west of Postmasburg and the Khumani open pits are adjacent to, and south-east of, the Sishen Mine, which is operated and owned by Kumba Iron Ore Limited. Beeshoek and Khumani are located at latitude 28°30'00"S/longitude 23°01'00"E, and latitude 27°45'00"S/longitude 23°00'00"E respectively. Khumani Mine supplies iron ore to the export markets. Exports are railed to the iron ore terminal at Saldanha Bay. Beeshoek ore is mainly supplied to local customers, with some exported via Khumani.

History

Mining of iron ore (mainly specularite) was undertaken as early as 40 000 BC on the farm Doornfontein which is due north of Beeshoek. The potential of iron ore in this region was discovered in 1909, but, due to lack of demand and limited infrastructure, this commodity was given little attention. In 1929, the railway line was extended from Koopmansfontein (near Kimberley) to service a manganese mine at Beeshoek. In 1935, the Associated Manganese Mines of South Africa Limited (Assmang) was formed, and in 1964, the Beeshoek Iron Ore Mine was established, with a basic hand-sorting operation. In 1975, a full washing and screening plant was installed at Beeshoek Mine. The Khumani Iron Ore Mine was commissioned in 2007.

Mining authorisation

The Beeshoek Mine Converted Mining Right was executed on 16 March 2012 and registered on 29 May 2013.

The Khumani New Order Mining Right was executed on 25 January 2007 and was registered on 5 March 2007.

Geology

The iron ore deposits are formed within in a sequence of early Proterozoic sediments of the Transvaal Supergroup deposited between 2 500 and 2 200 million years ago. In general, two ore types are present, namely laminated hematite ore forming part of the Manganore Iron Formation and conglomerate ore belonging to the Doornfontein Conglomerate Member at the base of the Gamagara Formation. The older laminated ore types occur in the upper portion of the Manganore Iron Formation as enriched high-grade hematite bodies. The boundaries of high-grade hematite ore bodies crosscut primary sedimentary bedding, indicating that secondary hematitisation of the iron formation took place. In all of these, some of the stratigraphic and sedimentological features of the original iron formation are preserved. The conglomeratic ore is found in the Doornfontein Conglomerate Member of the Gamagara Formation, is lenticular but not consistently developed along strike. It consists of stacked,

upward fining conglomerate-gritstone-shale sedimentary cycles. The lowest conglomerates and gritstones tend to be rich in sub-rounded to rounded hematite ore pebbles and granules and form the main ore bodies. The amount of iron ore pebbles decreases upwards in the sequence so that upper conglomerates normally consist of poorly sorted, angular to rounded chert and banded iron formation pebbles.

The erosion of the northern Khumani deposit is less than in the southern Beeshoek area. This results in Khumani being characterised by larger stratiform bodies and prominent hangingwall outcrops. The down-dip portions are well preserved and developed, but in outcrop the deposits are thin and isolated. Numerous deeper iron ore extensions occur into the basins due to karst development. A prominent north-south strike of the ore bodies dipping to the west is notable. The southern Beeshoek ore bodies were exposed to more erosion and hence are more localised and smaller. Outcrops are limited to the higher topography on the eastern side of the properties. Down-dip to the west, the ore is thin and deep. The strike of the ore bodies is also in a north-south direction dipping to the west, but less continuous.

Hematite is the predominant ore mineral, but limonite and specularite also occur. Mining operations are all open pit, based on the conventional drill-and-blast, truck-and-shovel operations. Run-of-mine ore is crushed and stored as 'on-' or 'off-grade' on blending stockpiles. Ore from the stockpiles is either sent to the wash-and-screen plants or, if 'off-grade', to the beneficiation plants. The washing and screening plants consist primarily of tertiary crushing, washing, screening, conveying and stacking equipment. The beneficiation plants consist of tertiary crushers; scrubbers; coarse and fine jigs; lumpy and fines product stockpiles; and a rapid load-out facility. No chemicals are being used in any of the treatment plants.

Mineral Resources and Reserves

Only Measured and Indicated Resources are converted to Proved and Probable Reserves respectively. Modifying factors are applied to these resources and financially optimised. The optimised financial parameters are used to define the optimal pit. The resources within this mining constraint (optimised pit shell) are defined as reserves. These are categorised into different product types, destined for the different plant processes and then scheduled for mining.

The methodology followed to identify exploration targets is initiated with geological mapping, followed by geophysics (ground magnetics and gravity). Numerous exploration programmes have been completed in the last 40 years. Percussion drilling is used to pilot holes through overlying waste rock down to the iron ore bodies. Diamond drilling is the next phase, which is usually on a 200 x 200 metre grid. Further in-fill drilling is carried out at spacing ranging from 100 x 100 metres to 25 x 25 metres, depending on the complexity of the geological structures. Core samples are logged and split by means of a diamond saw and the half-core is sampled at 0.5 metre intervals. The half-cores are crushed, split and pulverised and submitted to the owner-managed laboratory

for assaying. All holes and blast holes in ore are sampled and analysed for Fe, potassium oxide (K₂O), sodium oxide (Na₂O), silica (SiO₂), aluminium oxide (Al₂O₃), phosphorus (P), sulphur (S), CaO, MgO, Mn and barium oxide (BaO). The analytical technique for elemental analyses is XRF spectroscopy. Volumetric titration is used as verification method for the determination of total iron in the ore. International standards (e.g. SARM11) and in-house iron standards are used for the calibration of the XRF spectrometer. The Khumani laboratory undertakes stringent quality control and assurance methods, including 'round robin' analysis with 11 laboratories for verification of assay results.

Samples with values larger than 60% Fe cut-off are included in the definition of the ore bodies. Any lower-grade samples inside the ore body are defined as internal waste and modelled separately. Each zone is modelled per section, and then wireframed to get a three-dimensional (3D) model. Ordinary Kriging interpolation is used to estimate the grade of each 25 x 25 x 10 metre block generated within the geological model. Estimation is also undertaken outside the 60% Fe envelope within the limits of the ore body stratigraphy. Densities in the resource model are calculated using a fourth degree polynomial fit applied to the estimated Fe grade. Densities range from 4.38 t/m³ (60% Fe) to 5.01 t/m³ (68% Fe)

BEESHOEK IRON ORE MINE: MINERAL RESOURCES AND RESERVES

Pit/Area	Measured Resources		Indicated Resources		Total Measured and Indicated Resources		Inferred Resources		Proved Reserves		Probable Reserves		Total Reserves	
	Mt	Fe%	Mt	Fe%	Mt	Fe%	Mt	Fe%	Mt	Fe%	Mt	Fe%	Mt	Fe%
BN Pit	16.09	63.17			16.09	63.17			9.92	63.36			9.92	63.36
HF/HB Pit	16.00	64.10			16.00	64.10			6.87	64.27			6.87	64.27
BF Pit	7.57	63.51	0.23	63.54	7.80	63.51	0.001	65.24	0.67	61.59			0.67	61.59
East Pit	7.33	64.86	0.03	64.31	7.36	64.86			4.50	64.83	0.01	63.68	4.51	64.83
Village Pit	42.27	64.55	9.26	63.83	51.53	64.42			25.68	65.26	3.85	63.95	29.53	65.09
GF Pit	3.13	63.81	0.09	61.80	3.22	63.75								
HH Ext Pit	0.28	62.63			0.28	62.63								
HL Pit	1.98	64.82	0.02	65.21	2.00	64.82								
West Pit	9.45	63.19			9.45	63.19	0.050	61.88						
Detrital*							2.500	60.00						
Total 2015	104.10	64.07	9.63	63.81	113.73	64.05	2.551	60.04	47.64	64.63	3.86	63.95	51.50	64.58
Total 2014	96.87	63.99	13.46	64.25	110.33	64.02	3.251	61.01	37.18	64.29	8.95	64.37	46.13	64.31

The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

Totals are rounded off.

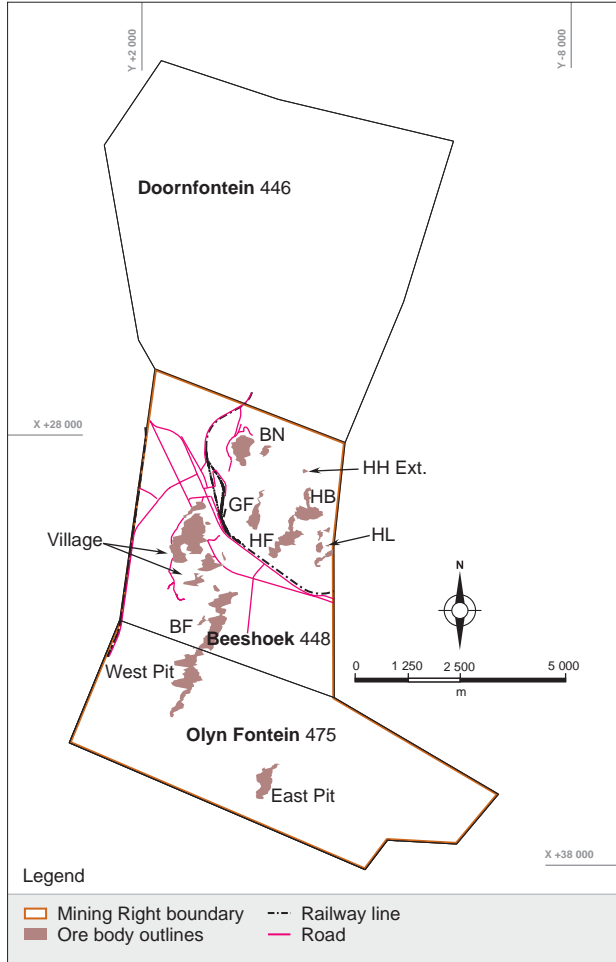
Modifying factors for the conversion of Mineral Resources to Reserves include: economic pit design, customer product specifications, mining dilution.

Cut-off grade 60% Fe.

* Detrital is loose fragmented material occurring in various areas at Beeshoek.

ARM Ferrous continued

BEESHOEK ORE BODY LOCALITY MAP



BEESHOEK DUMPS

Area	Proved Reserves		Probable Reserves		Total Reserves	
	Mt	Fe%	Mt	Fe%	Mt	Fe%
North Mine (ROM On-Grade)			0.13	64.00	0.13	64.00
North Mine (B Dump Off-Grade)			0.05	55.00	0.05	55.00
North Mine (C Dump)			1.69	55.00	1.69	55.00
South Mine (ROM On-Grade)			0.18	64.00	0.18	64.00
South Mine (B Dump Off-Grade)			0.04	55.00	0.04	55.00
South Mine (C Dump)			5.33	55.00	5.33	55.00
Total 2015 Dumps*			7.42	55.38	7.42	55.38
Total 2014 Dumps*			7.50	55.17	7.50	55.17

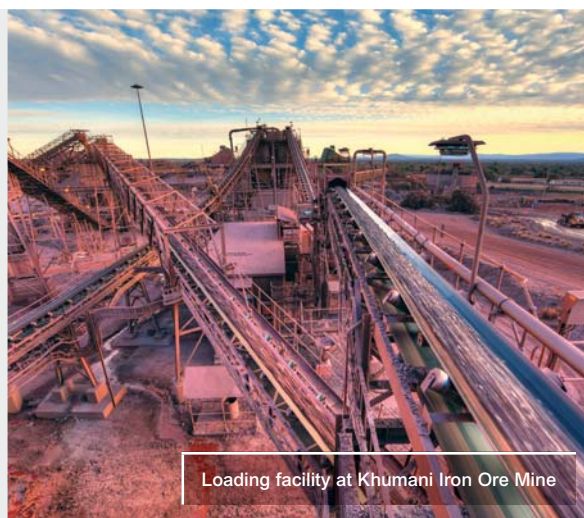
Totals are rounded off.

* Dumps are beneficiated to produce a saleable product.

BEESHOEK YEAR-ON-YEAR CHANGE

Measured and Indicated Resources for Beeshoek Mine increased by 3% to 113.73 million tonnes. The increase in the Mineral Resources can be attributed to Village Pit. Geological remodelling of the Village ore body resulted in the Measured and Indicated Resources increasing from 44.09 million tonnes at a grade of 64.36% Fe to 51.53 million tonnes at 64.42% Fe.

Measured and Indicated Mineral Resources for BN reduced by 14% to 16.09 million tonnes and Reserves by 4% to 9.92 million tonnes due to remodelling of the ore body and mining depletion. All the other pits decreased as a result of mining depletion. Village Pit is the largest contributor to the increase in Mineral Reserves, having increased by 32% from 22.44 million tonnes at 64.65% Fe to 29.53 million tonnes at 65.09% Fe. Mining of the Village Pit has commenced.



Loading facility at Khumani Iron Ore Mine

KHUMANI IRON ORE MINE: MINERAL RESOURCES AND RESERVES

Pit/Area	Measured Resources		Indicated Resources		Total Measured and Indicated Resources		Inferred Resources		Proved Reserves		Probable Reserves		Total Reserves	
	Mt	Fe%	Mt	Fe%	Mt	Fe%	Mt	Fe%	Mt	Fe%	Mt	Fe%	Mt	Fe%
Bruce A	39.33	64.41	64.32	64.66	103.65	64.57			32.30	64.36	56.77	64.72	89.07	64.59
Bruce B	67.81	64.53	19.07	63.59	86.88	64.32	1.75	61.21	53.37	64.33	16.71	63.17	70.08	64.05
Bruce C	12.44	64.47			12.44	64.47			4.68	65.07			4.68	65.07
Total for Bruce Pits	119.58	64.48	83.39	64.42	202.97	64.46	1.75	61.21	90.35	64.38	73.48	64.37	163.83	64.37
King – Mokaning	301.04	64.23	96.24	64.13	397.28	64.21	12.64	62.95	274.72	64.30	9.40	65.11	284.12	64.33
Total 2015	420.62	64.30	179.63	64.26	600.25	64.29	14.39	62.74	365.07	64.32	82.88	64.45	447.95	64.34
Total 2014	363.29	64.51	283.11	63.93	646.40	64.25	32.02	62.95	319.27	64.56	230.83	64.20	550.10	64.41

The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

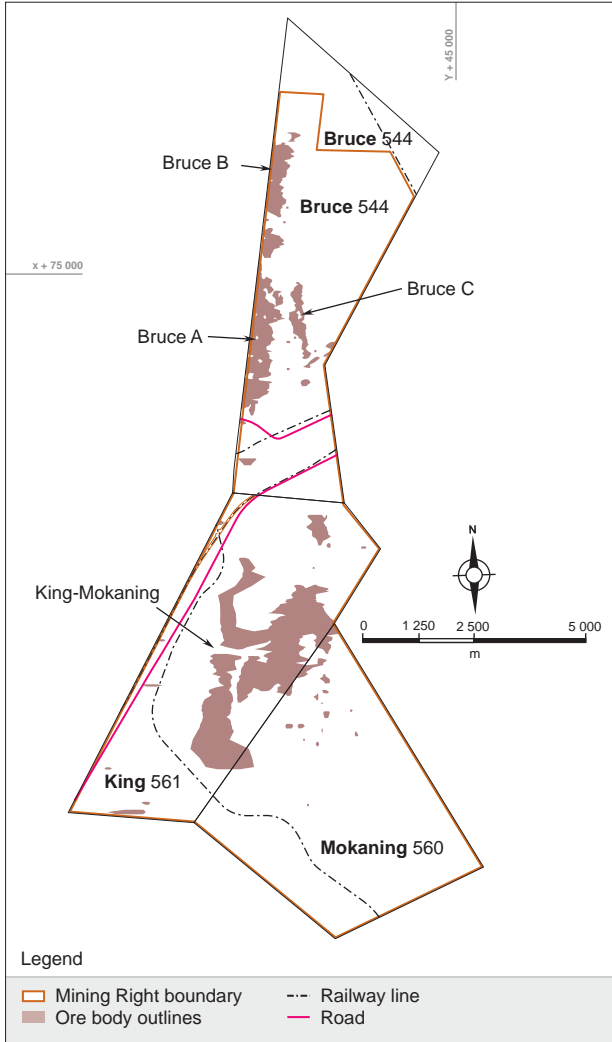
Totals are rounded off.

Modifying factors for the conversion of Mineral Resources to Reserves: economic pit design, customer product specifications, mining dilution.

Cut-off grade 60% Fe.

ARM Ferrous continued

KHUMANI ORE BODY LOCALITY MAP



KHUMANI DUMPS

Area	Proved Reserves		Probable Reserves		Total Reserves	
	Mt	Fe%	Mt	Fe%	Mt	Fe%
Bruce (ROM On-Grade)			0.11	64.00	0.11	64.00
Bruce (B Dump Off-grade)			2.68	55.00	2.68	55.00
King (ROM On-Grade)			0.20	64.00	0.20	64.00
King (B Dump Off-grade)			1.58	55.00	1.58	55.00
King (Detrital)			0.19	60.00	0.19	60.00
Total 2015 Dumps*			4.76	55.79	4.76	55.79
Total 2014 Dumps			5.59	56.70	5.59	56.70

Totals are rounded off.

* Dumps are beneficiated to produce a saleable product.

KHUMANI YEAR-ON-YEAR CHANGE

Measured and Indicated Resources decreased by 7% to 600.25 million tonnes mainly due to geological remodelling of all the ore bodies (Bruce A, B, C and King-Mokaning) as well as mining depletion. There was insignificant change in grade. Total Mineral Reserves also decreased from 550.10 to 447.95 million tonnes mainly due to re-optimisation of the King Pit at lower iron ore prices and mining depletion.

HISTORICAL PRODUCTION AT BEESHOEK AND KHUMANI MINES (SALEABLE PRODUCT)

Financial year	Beeshoek	Khumani
	Mt	Mt
2010/2011	0.96	8.73
2011/2012	2.10	11.60
2012/2013	2.94	13.17
2013/2014	3.12	12.93
2014/2015	3.43	12.65

HISTORICAL PRODUCTION AT BEESHOEK AND KHUMANI MINES (ROM)

Financial year	Beeshoek	Khumani
	Mt	Mt
2013/2014	2.06	19.12
2014/2015	3.35	19.06



Drilling and loading at Khumani Iron Ore Mine

ARM Ferrous continued

DWARSRIVIER CHROMITE MINE

Locality

The Dwarsrivier Chromite Mine is situated on the farm Dwarsrivier 372KT, approximately 30 kilometres from Steelpoort and 60 kilometres from Lydenburg, Mpumalanga province, South Africa. Located at longitude 30°05'00"E/latitude 24°59'00"S, Assmang purchased the farm from Gold Fields Limited, together with all surface and Mineral Rights in October 1998.

History

Neighbouring properties to the north and south of Dwarsrivier had existing chrome mining operations at the time of purchase. A feasibility study of the plant, tailings dam and designs for the open pit and underground mines was undertaken. After the completion of the feasibility study, approval to proceed with the final design and construction work was given in July 1999. Chromite was mined from the open pit areas at a rate of approximately 0.9 million tonnes a year and these areas were mined out within five years. Underground mining commenced in 2005 at a rate of 1.2 million tonnes ROM a year. Dwarsrivier Mine was specifically geared to deliver high-quality metallurgical grade chromite. In addition, the plant has been designed to produce chemical grade products for export.

Mining authorisation

Dwarsrivier Mine Converted Mining Right was executed on 15 May 2013 and registered on 2 June 2015.

Geology

Dwarsrivier Mine is situated in the eastern limb of the Bushveld Complex, which comprises persistent layers of mafic and ultramafic rocks, containing the world's largest known resources of platinum group metals, chromium and vanadium. The mafic rocks termed the Rustenburg Layered Suite, are approximately 8 kilometres thick in the eastern lobe, and are divided formally into five zones. The rocks of the Marginal Zone at the base of the succession consist mainly of pyroxenites with some dunites and harzburgites. Above the Marginal Zone, the Lower Zone comprises mainly pyroxenites, harzburgites and dunite, and is present only in the northern part of the Eastern Lobe, and only as far south as Steelpoort.

The appearance of chromitite layers marks the start of the Critical Zone, economically the most important zone. The layers within this zone are grouped into three sets termed the Lower, Middle and Upper Groups. The sixth chromitite seam in the Lower Group (LG6), is an important source of chromite ore and defines the ore body that is mined at Dwarsrivier Mine. In the Eastern Lobe, in the vicinity of Dwarsrivier, the strike is nearly north-south, with a dip of approximately 10 degrees towards the west. Average thickness of the LG6 seam is about 1.86 metres in the Dwarsrivier area. Pipe-like dunite intrusions are evident in

the area, as well as dolerite dykes that normally strike north-east south-west. No significant vertical grade variation is evident in the ore seam in the Dwarsrivier resource.

Mineral Resources and Reserves

Mineral Resources were estimated from boreholes on 150 to 300 metre grid spacing. All Mineral Resources down to a mineable depth of 350 metres below surface have been considered. Vertical diamond drill holes are used for geological and grade modelling. The Mineral Resources at Dwarsrivier Mine are based on a total of 334 diamond boreholes, which have been used for ore body modelling and grade estimation purposes. The drill core is NQ size and is geologically and geotechnically logged. The collar position of the drill holes are surveyed, but no down-hole surveys are done, as the holes are assumed to have minimal deflection. The chromitite seam is bounded above and below by pyroxenites, and as such, the ore horizon is clearly defined. The core is sampled from the top contact downwards at 0.5 metre intervals. The core is split and half is retained as reference material. The other half is crushed and split into representative samples, which are crushed and pulverised for chemical analysis. The samples are analysed using fusion/ICP-OES for chrome oxide (Cr_2O_3), SiO_2 , FeO , Al_2O_3 , MgO and CaO . Three laboratories, all ISO 17025 accredited for this method, are used. Every tenth sample is analysed in duplicate. The density for each sample is measured using a gas pycnometer.

The LG6 layer, other chromitite layers above the LG6, i.e. MG1 to MG4 chromitites, as well as prominent faults were geologically modelled in Strat3D. Mineral Resources have been estimated using Ordinary Kriging, where Cr_2O_3 , FeO , Al_2O_3 , MnO and MgO contents of the LG6 seam and densities were determined, using parent block size of 50 x 50 x 4 metres. Immediately above the LG6, there is a 30 to 50 centimetre-thick pyroxenite that is capped by a thin chromitite layer, locally known as the "false hanging wall". This unit is mined for geotechnical reasons as it creates an unstable hanging wall if left behind. This unit forms part of the dilution in the conversion from Resources to Reserves.

A run-of-mine ore inclusive of the "false hanging wall" is fed to the beneficiation plant. In the dense media separation part of the plant, the coarse fraction is upgraded to 40% Cr_2O_3 , with a yield of 80%. In the spiral section of the plant the finer fraction is upgraded to metallurgical and chemical grade fines of 44% Cr_2O_3 , and 46% Cr_2O_3 respectively. A 67% yield is achieved in the spiral circuit.

The Resource classification was done by considering geological and geostatistical parameters. Geological aspects include the continuity of the LG6 layer and the influence of geological structures such as dykes and faults. Geostatistical parameters such as kriging efficiency, kriging variance, number of samples used in estimation, search volume and regression slope were also considered in the Resource classification.

DWARSRIEVIER CHROMITE MINE: LG6 CHROMITITE MINERAL RESOURCES AND RESERVES

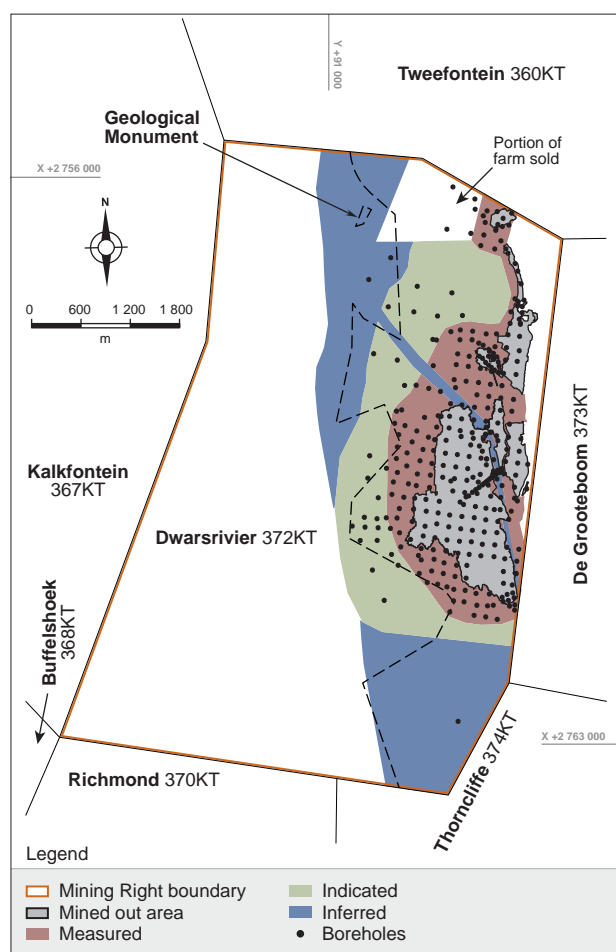
	Mineral Resources				Mineral Reserves		
	Mt	Cr ₂ O ₃ %	FeO%		Mt	Cr ₂ O ₃ %	FeO%
Measured	22.34	37.92	22.75	Proved	14.32	33.88	21.47
Indicated	30.73	37.87	22.87	Probable	23.28	34.53	21.79
Total Measured and Indicated 2015	53.07	37.89	22.82	Total Reserves 2015	37.60	34.28	21.67
Total Measured and Indicated 2014	51.00	38.14	22.55	Total Reserves 2014	35.02	34.12	21.30
Inferred 2015	43.21	38.33	22.60				
Inferred 2014	48.01	38.35	22.96				

The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

Totals are rounded off.

Modifying factors for the conversion of Mineral Resources to Reserves include: pillar losses, mining losses, mining dilution.

DWARSRIEVIER MINE LG6 CHROMITITE MINERAL RESOURCES CLASSIFICATION



YEAR-ON-YEAR CHANGE

Measured and Indicated Mineral Resources increased to 53.07 million tonnes at 37.89% Cr₂O₃ from 51.00 million tonnes at a grade of 38.14% Cr₂O₃ due to the remodelling of the LG6 chromitite layer after drilling a total of 46 new boreholes. Mineral Reserves also increased by 7% to 37.60 million tonnes at 34.28% Cr₂O₃.

HISTORICAL PRODUCTION AT DWARSRIEVIER CHROMITE MINE (ROM)

Financial year	Mt
2010/2011	1.25
2011/2012	1.50
2012/2013	1.60
2013/2014	1.61
2014/2015	1.77



ARM Platinum

NKOMATI NICKEL-COPPER-COBALT-PGM-CHROMITE MINE

ARM's attributable beneficial interest in Nkomati operation is 50%. The other 50% is held by Norilsk Nickel Africa (Pty) Limited.

Locality

Nkomati Nickel Mine is located some 300 kilometres east of Johannesburg in Mpumalanga province in South Africa. Situated at latitude 25°40'S and longitude 30°30'E, the site is accessed via the national N4 highway between Johannesburg and Machadodorp, the R341 provincial road and the R351 tarred road.

History

Nickel, copper, cobalt, PGM and chromite mineralisation is hosted by the Uitkomst Complex, a layered mafic-ultramafic, Bushveld satellite intrusion. The Uitkomst Complex outcrops on the farms Slaaihoek 540JT and Nkomati 770JT. In 1929, the Mineral Rights on Slaaihoek were purchased by ETC, an Anglovaal subsidiary, to mine gold at the old Mamre and Slaaihoek Mines. In the early 1970s, an Anglo American/INCO joint venture began exploring Uitkomst for nickel. In 1990, Anglo American (AAC) completed a feasibility study on an open-pit operation exploiting the large disseminated sulphide resource on Uitkomst, with negative results.

Exploration on Slaaihoek by Anglovaal began in 1989, and in 1991, the massive sulphide body (MSB) was discovered by surface drilling. In 1995, the Nkomati JV between Anglovaal and AAC was formed and in January 1997, underground production started on the MSB. In 2004, Anglovaal acquired AAC's interest and in 2005 following the merger of Anglovaal and ARM, a 50:50 JV was formed between ARM and LionOre, then a global nickel producer and owner of the Activox technology. In February 2006, Nkomati approved the Phase 1 expansion project to exploit the Main Mineralised Zone (MMZ), one of the disseminated sulphide ore bodies, by underground and open-pit mining at a rate of 100 000 tonnes per month of ore to maintain annual nickel production at approximately 5 000 tonnes in concentrate after output from the MSB started declining. The project was completed in 2007 and in the same year, Norilsk Nickel acquired LionOre, together with its 50% share in Nkomati. The MSB ore body is now completely mined out.

The Phase 2a expansion project, increasing MMZ ore production to 375 000 tonnes per month with the construction of a new plant, was commissioned during 2010. The Phase 2b expansion, involving the upgrading of the 100 000 tonnes per month MMZ plant to a 250 000 tonnes per month Chromititic Peridotite Mineralised Zone (PCMZ) plant was completed during the 2010/2011 year. The PCMZ, which is being mined only in the open pit, is a disseminated chromite-rich sulphide body within the Chromititic Peridotite (PCR) Unit (overlying the MMZ), which has to be treated separately to liberate the chromite fines.

Nkomati has also been producing lumpy chromite, chips and fines from the Oxidized Massive Chromitite since 2006, a layer which overlies the PCMZ ore body. A chrome washing plant to treat the fines stockpile was commissioned in 2008. In addition, the Oxidized PCR, which is the highly weathered PCR Unit

immediately below the Oxidized Massive Chromitite, is being stockpiled for future processing for its chromite content.

Mining authorisation

Nkomati was granted New Order Mining Rights 146 MR and 147 MR on 6 June 2012 over the area, and for the minerals, as previously held under its Old Order Mining Licence.

Geology

The Uitkomst Complex is a Bushveld-age layered, mafic-ultramafic body intruded into the basal sediments of the Transvaal Supergroup, which lies unconformably on an Archean granitic basement. The complex is a long linear body, which outcrops in the Slaaihoek valley for approximately 8 kilometres and dips below an escarpment where it has been drilled at depth for an additional 4 kilometres. The complex, which dips at approximately 4 degrees to the north-west, is still open-ended.

From the base to top, the stratigraphy of the Uitkomst Complex comprises the Basal Gabbro Unit (up to 15 metres thick), the Lower Pyroxenite Unit (average 35 metres), the Chromititic Peridotite Unit (30 to 60 metres), the Massive Chromitite Unit (up to 10 metres), the Peridotite Unit (330 metres), the Upper Pyroxenite Unit (65 metres), the Gabbro Unit (250 metres), and the Upper Gabbro Unit (50 metres). The complex and surrounding sediments are intruded by numerous diabase sills up to 30 metres in thickness.

There are five sulphide zones in the Uitkomst Complex: the MSB, situated at and below the base of the complex, but which has now been mined out; the Basal Mineralised Zone (BMZ) within the Basal Gabbro; the MMZ, occurring within the Lower Pyroxenite, the PCMZ, which occurs with the Chromititic Peridotite (PCR), and the Peridotite Mineralised Zone (PRDMZ), which occurs in the Peridotite Unit, but which is not yet included in the mine's resource base. In addition, the Massive Chromitite Unit (MCHR), situated at the top of the PCR Unit, is mined where it is fully oxidized (weathered) in the open-pit area. The dominant sulphide minerals are pyrrhotite, pentlandite and chalcopyrite; cobalt is mostly in solid solution in the pentlandite, and the PGMs occur as separate minerals, merenskyite being dominant.

Mineral Resources and Reserves

There has been numerous diamond, percussion and Reverse Circulation (RC) drilling campaigns since 1972. Consequently, various sampling and assaying protocols as well as varying standards of QA/QC have been used. Core sizes are mainly NQ and TNW. Before 1990 (Anglo American boreholes), half core samples over widths ranging from 1 metre to 5 metres were taken. Samples were assayed at Anglo American Research Laboratory (AARL) for total nickel, copper and cobalt using AA and for "sulphide" nickel using a peroxide leach/AA finish. Composite samples were assayed for platinum and palladium by Pb-collection fire assay/ICP, S by combustion, and a range of major elements by fusion, and RD using the Archimedes bath method. Between 1990 and 1997 (Anglovaal boreholes), assays were carried out at the Anglovaal Research Laboratory (AVRL), with internal standard checks. Nickel analyses were also carried out by the partial digestion methods. Comparisons between AARL and AVRL were undertaken to ensure that the data was compatible.

In 2003, a 50 metre-spaced drilling programme was carried out in the shallow open pit area. Samples from this drilling were analysed at AVRIL for nickel, copper and cobalt using an aqua regia partial extraction/AA finish. Platinum, palladium, rhodium and gold were analysed by Pb collection fire-assay/AA finish. Analyses also included Cr₂O₃, MgO, FeO, S. Density is also determined by gas pyconometer. Duplicates and internal standards were used and a suite of referee samples were analysed at Genalysis Laboratory in Perth. Comparisons indicated good correlations between laboratories. In 2005, it was decided to resample many of the Anglo American drill holes to improve the sample density for PGEs in the open pit area. Drill core was resampled (quarter core) at 1 metre intervals. Assays were carried out by SGS Laboratory in Johannesburg for Pt, Pd and Au by Pb-collection fire assay/AA finish and for Ni, Cu and Co by aqua regia leach/AA finish. Blanks, duplicates and AMIS standards were included for quality control.

In 2007/2008, a 50 metre in-fill diamond drilling programme (116 holes – 18 000 metres) was completed in the shallower part of Pit 3. In the Pit 2 area, another 44 holes (3 450 metres) were added to the database. Half-core samples from the Pit 3 drilling were analysed at Genalysis Laboratory Services in Perth for Ni, Cu and Co by aqua regia partial digestion/ICP finish; for Pt, Pd and Au by Pb collection fire assay/ICP finish; high chrome samples for Cr₂O₃ by fusion/ICP and SG by gas pyconometer. AMIS standards, duplicates and blank samples were used for internal QA/QC. Half-core samples from the Pit 2 drilling were analysed at Nkomati's mine laboratory for Ni, Cu and Co by aqua regia partial digestion/AA finish.

The underground MMZ and PCMZ Mineral Resources are based on surface and underground diamond drilling as well as RC

holes. Underground holes are spaced 10 to 20 metres apart and the drill core is sampled at 1 metre intervals. The Nkomati mine laboratory analyses samples for Ni, Cu and Co using aqua regia leach/ICP finish, while the PGE assays are carried out by SGS and Mintek Laboratories in Johannesburg. Both laboratories use blanks, standards and check assays for quality control.

Geological wireframe models are generated from the entire borehole database (boreholes and RC holes) in Datamine Studio 3. Grade cut-offs used for the Mineral Resources are 0.16% Ni for MMZ, and PCMZ. All data is used for the variography. Grade estimation is by Ordinary Kriging. Block sizes for the resource model are at 50 x 50 x 2.5 metres for poorly informed areas, 25 x 25 x 2.5 metres for moderately informed areas and 12.5 x 12.5 x 2.5 metres for well-informed areas. Mineral Resource classification is based on borehole spacing and geological continuity of the mineralisation. In general, the area with in-fill drilling 50 x 50 metres and/or the area covered by RC drilling was classified as Measured, and where the drilling spacing was up to 100 x 100 metres was classified as Indicated. Down-dip portion of the underground model with up to 500 x 100 metres borehole spacing was classified as Inferred.

The open-pit and underground Resources and Reserves are based on the 2015 Resource model which was created on-mine and internally reviewed.

Mining operations to date comprise a mechanised underground and open-pit mining operation which feeds two concentrators (MMZ and PCMZ) producing concentrate containing PGMs, nickel, copper and cobalt. Final products are transported to various third parties for toll smelting and refining. Chrome products from oxidized massive chromitite and the PCMZ are sold to local and export markets.

NKOMATI MINE: MINERAL RESOURCES (NI, PGEs, CU, CO, CR₂O₃)

	Measured Resources						Indicated Resources						Total Resources (Measured and Indicated)						Inferred Resources						
	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	
Underground Mine																									
MMZ (Cut-off 0.30% Ni)	16.19	0.53	0.19	0.02	0.99		36.17	0.48	0.22	0.02	1.12		52.36	0.50	0.21	0.02	1.08		0.96	0.36	0.16	0.01	0.66		
PCMZ (Cut-off 0.30% Ni)	3.84	0.37	0.12	0.01	0.84	13.29	28.84	0.37	0.13	0.01	0.78	10.09	32.68	0.37	0.13	0.01	0.79	10.47	26.59	0.42	0.13	0.01	0.98	11.61	
Open Pit																									
MMZ Pit 3 (Cut-off 0.16% Ni)	50.83	0.36	0.16	0.02	0.93		20.47	0.37	0.16	0.02	0.90		71.30	0.36	0.16	0.02	0.92								
PCMZ Pit 3 (Cut-off 0.16% Ni)	42.79	0.23	0.07	0.01	0.74	12.79	27.46	0.21	0.06	0.01	1.34	11.95	70.25	0.22	0.07	0.01	0.97	12.46							
Total 2015 Mineral Resources	113.65	0.34	0.13	0.02	0.86		112.94	0.37	0.15	0.02	1.05		226.59	0.35	0.14	0.02	0.96		27.55	0.42	0.13	0.01	0.97		
Total 2014 Mineral Resources	79.32	0.34	0.13	0.02	0.87		162.54	0.34	0.13	0.01	0.99		241.86	0.34	0.13	0.02	0.95		37.28	0.40	0.10	0.01	0.94		

4E = platinum+palladium+rhodium+gold.

The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

Totals are rounded off.

ARM Platinum continued

NKOMATI MINE: CHROMITE MINERAL RESOURCES

	Measured Resources		Indicated Resources		Total Resources (Measured and Indicated)		Inferred Resources	
	Mt	Cr ₂ O ₃ %	Mt	Cr ₂ O ₃ %	Mt	Cr ₂ O ₃ %	Mt	Cr ₂ O ₃ %
Total 2015 Oxidized Massive Chromitite Pit 3 (Cut-off 20% Cr₂O₃)	0.62	28.23			0.62	28.23		
Total 2015 Un-oxidized (fresh) Massive Chromitite Pit 3 (Cut-off 20% Cr₂O₃)	5.48	29.27			5.48	29.27		
Total 2014 Oxidized Massive Chromitite (PCR) Pit 3 (Cut-off 20% Cr ₂ O ₃)	1.25	30.64			1.25	30.64		
Total 2014 Un-oxidized Massive Chromitite (PCR) Pit 3 (Cut-off 20% Cr ₂ O ₃)	3.90	29.79			3.90	29.79		

The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves. Totals are rounded off.

NKOMATI MINE: MINERAL RESERVES (NI, PGEs, CU, CO, CR₂O₃)

	Proved Reserves						Probable Reserves						Total Reserves						
	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	
Underground Mine																			
MMZ (Cut-off 0.35% Ni)	0.66	0.57	0.22	0.02	1.14		9.15	0.56	0.22	0.02	1.15		9.81	0.56	0.22	0.02	1.15		
Open Pit																			
MMZ Pit 3 (Cut-off 0.16% Ni)	36.62	0.38	0.15	0.02	0.97		6.85	0.37	0.14	0.02	0.89		43.47	0.37	0.15	0.02	0.95		
PCMZ Pit 3 (Cut-off 0.16% Ni)	36.38	0.23	0.07	0.01	0.70	14.04	14.13	0.22	0.07	0.01	1.24	12.50	50.51	0.22	0.07	0.01	0.85	13.61	
Total 2015 Mineral Reserves	73.66	0.30	0.11	0.02	0.84		30.13	0.36	0.13	0.02	1.13		103.79	0.32	0.12	0.02	0.92		
Total 2014 Mineral Reserves	59.69	0.31	0.11	0.02	0.85		54.79	0.32	0.12	0.02	0.99		114.48	0.31	0.12	0.02	0.92		

4E = platinum+palladium+rhodium+gold.

Totals are rounded off.

Modifying factors for the conversion of Mineral Resources to Reserves include: economic pit design, mining losses, mining dilution, metallurgical, geotechnical.

NKOMATI MINE: MMZ STOCKPILE MINERAL RESERVES

	Proved Reserves						Probable Reserves						Total Reserves					
	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %
Total 2015 MMZ Stockpiles (Cut-off 0.16% Ni)	0.17	0.29	0.10	0.01	0.65								0.17	0.29	0.10	0.01	0.65	

4E = platinum+palladium+rhodium+gold.

Totals are rounded off.

2014 MMZ stockpiles were not separately reported hence no comparison to previous year in the table above.

NKOMATI MINE: PCMZ STOCKPILE MINERAL RESERVES

	Proved Reserves						Probable Reserves						Total Reserves					
	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %	Mt	Ni%	Cu%	Co%	4E g/t	Cr ₂ O ₃ %
Total 2015 PCMZ Stockpiles (Cut-off 0.16% Ni)	3.63	0.21	0.05	0.01	0.52	13.98							3.63	0.21	0.05	0.01	0.52	13.98

4E = platinum+palladium+rhodium+gold.

Totals are rounded off.

2014 PCMZ stockpiles were not separately reported hence no comparison to previous year in the table above.

NKOMATI MINE: CHROMITE MINERAL RESERVES

	Proved Reserves		Probable Reserves		Total Reserves	
	Mt	Cr ₂ O ₃ %	Mt	Cr ₂ O ₃ %	Mt	Cr ₂ O ₃ %
Total 2015 Oxidized Massive Chromitite Pit 3 (Cut-off 20% Cr₂O₃)	0.18	25.42	0.39	25.25	0.57	25.30
*Total 2015 Un-oxidized (Fresh) Massive Chromitite Pit 3 (Cut-off 20% Cr₂O₃)	0.81	19.56	0.40	22.62	1.21	20.57
Total 2014 Oxidized Massive Chromitite Pit 3 (Cut-off 20% Cr ₂ O ₃)	0.59	24.81	0.51	25.97	1.10	25.35

* Un-oxidized Massive Chromitite not reported in 2014.

Totals are rounded off.

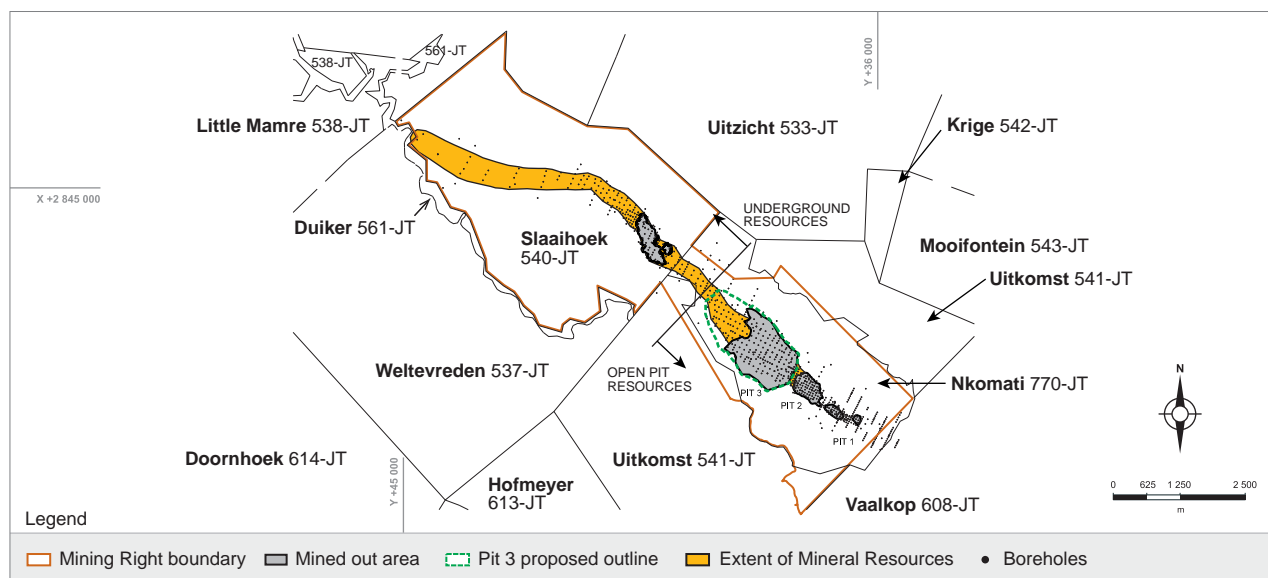
Modifying factors for the conversion of Mineral Resources to Reserves include: economic pit design, mining losses, mining dilution, metallurgical, geotechnical.

NKOMATI MINE: CHROMITE STOCKPILE MINERAL RESERVES

	Proved Reserves		Probable Reserves		Total Reserves	
	Mt	Cr ₂ O ₃ %	Mt	Cr ₂ O ₃ %	Mt	Cr ₂ O ₃ %
PCR Stockpile	2.30	19.20			2.30	19.20
Uncrushed ROM Stockpile	0.30	30.21			0.30	30.21
Other Chrome Stock (Lump-old Fines Dump)	0.02	28.85			0.02	28.85
2015 Total Stockpile Reserves	2.62	20.53			2.62	20.53
2014 Total Stockpile Reserves	2.51	20.44			2.51	20.44

Totals are rounded off.

NKOMATI MINE MINERAL RESOURCES LOCALITY MAP



ARM Platinum continued

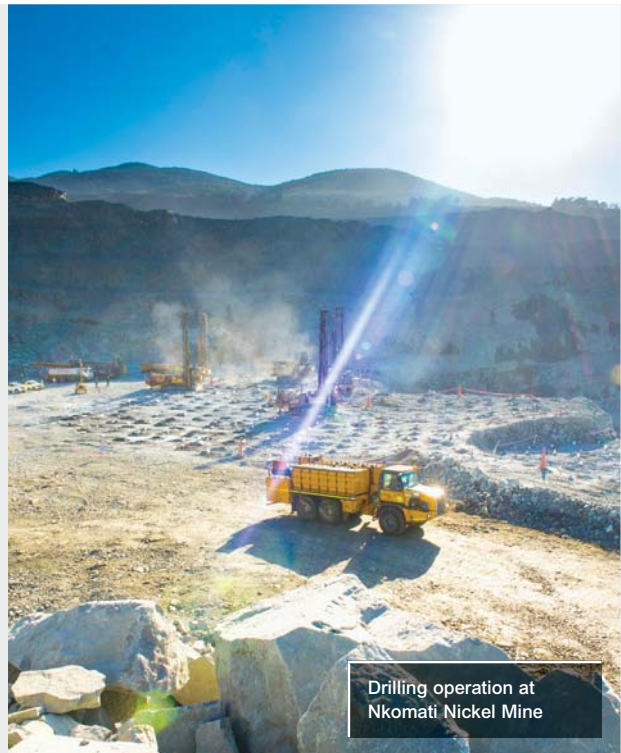
YEAR-ON-YEAR CHANGE

Measured and Indicated Mineral Resources (MMZ and PCMZ) reduced by 6% to 226.59 million tonnes at 0.35% Ni grade. There was a significant upgrade on Indicated Mineral Resources due to additional borehole data that resulted in 113.65 million tonnes at 0.34% Ni Measured Resources being declared, compared to 79.32 million tonnes at 0.34% Ni reported in 2014.

Mineral Reserves (MMZ and PCMZ) reduced to 103.79 million tonnes at 0.32% Ni, compared to 114.48 million tonnes reported in 2014. There is additional material on stockpile as follows: 0.17 million tonnes at 0.29% Ni (MMZ) and 3.63 million tonnes at 0.21% Ni (PCMZ).

HISTORICAL PRODUCTION AT NKOMATI MINE (MILLED MMZ AND PCMZ)

Financial year	Mt
2010/2011	5.3
2011/2012	6.4
2012/2013	7.6
2013/2014	7.9
2014/2015	8.0



Drilling operation at
Nkomati Nickel Mine

TWO RIVERS PLATINUM MINE

ARM's attributable beneficial interest in Two Rivers Platinum Mine (TRP) operations is 51%. The other 49% is held by Impala Platinum. Mining operations comprise a mechanised underground PGMs, nickel, copper and cobalt. Final products are transported to various third parties for toll smelting and refining. A chrome plant is in place to process UG2 chromitite.

Locality

Two Rivers Platinum Mine is located within the southern sector of the Eastern Limb of the Bushveld Complex. The mine was previously located on the farm Dwarsrivier 372KT only, but now extends to portions 1 to 6 of Kalkfontein farm, Tweefontein and Buffelshoek farms which were recently acquired from Implats. The mine is situated at longitude 30°07'E and latitude 24°59'S. The UG2 and Merensky Reefs are present on the farms.

History

Exploration, development and production history in the area dates from the early 1920s. During 1929, Lydenburg Platinum Areas Limited started mining activity, but no records are available.

Following the acquisition by Gold Fields Mining and Development Limited, exploration started up again in 1987 and was mainly directed at the Merensky Reef. Assmang Limited acquired the Dwarsrivier farm in September 1998, primarily to exploit the LG6 chromitite. During 2001, Avmin acquired the PGE rights on the farm from Assmang and targeted the UG2 Reef. In June 2005,

after the ARM/Anglovaal merger, and following a full feasibility study and a period of trial underground mining, the ARM/Impala Joint Venture announced the approval of a 220 000 ounce-per-year PGM mine. As a result, an underground mine was established. The plant was commissioned in July 2006. Two Rivers now incorporates portions 1 to 6 of Kalkfontein farm, Tweefontein and Buffelshoek farms after agreement was reached between ARM and Implats.

Mining authorisation

Two Rivers Mine was granted New Order Mining Right LP 178 on 20 March 2013 over the area, and for the minerals, as previously held under its Old Order Mining Licence.

The acquisition of the Prospecting Right from Implats in respect of portions of the farms Kalkfontein, Tweefontein and Buffelshoek is complete. The incorporation of these areas into the mining right of Two Rivers is also complete.

Geology

The UG2 Reef occurs on all the above-mentioned farms. The reef outcrops in the Klein Dwarsrivier valley on the Dwarsrivier farm, with a north-south strike length of 7.5 kilometres, dipping to the west at between 7 and 10 degrees. The elevated topography results in the UG2 occurring at a depth of 935 metres towards the western boundary. The following reef facies have been defined for the UG2 at Two Rivers:

- UG2 Normal Reef facies which is characterised by a 100 to 120 centimetre-thick chromitite overlain by up to three chromitite 'leaders' collectively termed the UG2A chromitites.
- UG2 Split Reef facies in the southern, west-central and north-eastern parts, characterised by a chromitite seam that is separated by a layer of a fine- to medium-grained internal pyroxenite unit.
- The UG2 Multiple Split Reef facies represented by multiple splitting of the UG2 chromitite by internal pyroxenite. It occurs mainly in the southern section of the mine on the Dwarsrivier farm as well as the east-central section of Buffelshoek farm.

The UG2 is usually bottom loaded with peak PGM values occurring in the basal 10 centimetre portion.

The Merensky Reef consists mainly of orthopyroxene with lesser amounts of plagioclase and clinopyroxene. Thin chromitite layers, usually 1 to 4 millimetres thick, occur near the upper and lower contacts of the reef. Merensky has variable thickness but generally reduces in thickness from the Dwarsrivier farm towards Kalkfontein and Buffelshoek farms.

The regional north-northeast to south-southwest trending Kalkfontein fault, with a vertical displacement of up to 1 000 metres down-thrown to the west, defines the limits of the eastern structural domain for both the UG2 and Merensky Reefs. The ground beyond this fault remains an exploration target where both reefs are at depths in excess of 1 000 metres. Both reefs are affected by the granite intrusion in the southern portion of Buffelshoek farm where both reefs are absent.

Mineral Resources and Reserves

The Two Rivers Mine UG2 and Merensky geological and grade models were updated at the end of 2014 using the borehole data from all the farms: Dwarsrivier, Kalkfontein, Tweefontein and Buffelshoek.

The Mineral Resources for UG2 and Merensky Reefs have been classified into Measured, Indicated and Inferred Resources. Measured Mineral Resources for UG2 reef are in the areas around the North and the Main decline where there is more closely spaced drilling as well as the availability of underground sampling data. Indicated UG2 Mineral Resources have been defined in the southern part of Two Rivers on the Dwarsrivier farm, and on parts of Kalkfontein portions 1 to 6. All UG2 Mineral Resources in the Buffelshoek farm are classified as Inferred. Merensky Reef is classified as Indicated Resources in almost all of Dwarsrivier farm and portions of Kalkfontein. In the western portions on Kalkfontein 1 to 6 and Buffelshoek farms the Merensky Reef is classified as Inferred Mineral Resources. Mineral Resource classification is based on borehole spacing, geological continuity of the UG2 and Merensky Reefs as well as consideration of geostatistical parameters such as kriging variance, regression slope, kriging efficiency and search volume. The faulting in the proximity of the Kalkfontein fault which resulted in significant displacement of the

UG2 and Merensky Reefs resulted in this area being classified in the Inferred Mineral Resources category.

TRP has a large borehole database from drilling undertaken by the Mine (Dwarsrivier farm and portions 4 to 6 of Kalkfontein and Tweefontein), Impala Platinum Limited (Implats) (Kalkfontein portions 1 to 3 and Buffelshoek) and Kameni (Pty) Ltd (Kalkfontein Remaining Extent). The boreholes were drilled to intersect Merensky and UG2 Reefs. The boreholes have an average grid spacing of 500 metres over the whole property and 250 metre grid spacing in some areas. The drill hole spacing is 100 metres on strike and 50 metres on dip in the north-eastern portion of Dwarsrivier farm.

The borehole core drilled by TRP is halved by diamond saw and the half-core sampled at 20 centimetre intervals. Samples for both Merensky and UG2 Reefs are crushed and split and submitted for assaying. All samples from recent drilling at TRP were assayed at Genalysis Laboratory Services (Pty) Ltd (Genalysis) using Ni-sulphide collection fire-assay with an ICP-MS finish to determine Pt, Pd, Rh, Ru, Ir and Au values. Base metals (Ni, Cu, Co) were assayed by aqua regia digestion/OES finish. Duplicate samples and check analyses are carried out. Densities are also determined at the laboratory by pycnometer. The earlier Gold Fields and Assmang samples were assayed by Pb-collector fire-assay with gravimetric finish. In order to combine the data, some of the original core samples were re-assayed by means of Ni-sulphide collection fire-assay and a regression equation was derived, to re-cast the original Pb-collection data as Ni-sulphide assay 'equivalents'. Samples from other drilling campaigns by Implats and Kameni utilised the Genalysis laboratory as well.

Ordinary Kriging interpolation within Datamine Studio 3 was used to estimate the grade of each 50 x 50 x 1 metre blocks generated within the UG2 and Merensky Reefs geological models. Five geological domains separated by major faults (greater than 3 metres vertical displacement) were used in the estimation. Variables estimated were Pt, Pd, Rh, Au, Ru, and Ir, Cu and Ni. Within each of the domains the UG2 chromitite was wireframed and estimated as two units based on the Pt:Pd ratio, one with a ratio greater or equal to 2.75, the other with a ratio less than 2.75. The internal pyroxenite and the leader chromitites were also modelled and estimation undertaken. Sub-cell splitting of blocks was allowed to follow the geological boundaries accurately. Density was estimated by kriging in the resource model. Additional models of the UG2 leaders and the footwall of the UG2 chromitite were created for use in the Mineral Reserve model as mining dilution. The Merensky Resource estimation was done for the five domains based on three mineralised zones that distinctly reflect different PGE grade profiles and styles of mineralization.

Total *in-situ* resources for both UG2 and Merensky were reduced by 30% to account for geological losses due to potholes, faults, dykes and replacement pegmatoids. The Mineral Resources to Reserves conversion for the UG2 was done using the Studio 5D Mine Planning software package.

ARM Platinum continued

TWO RIVERS PLATINUM MINE: UG2 REEF MINERAL RESOURCES

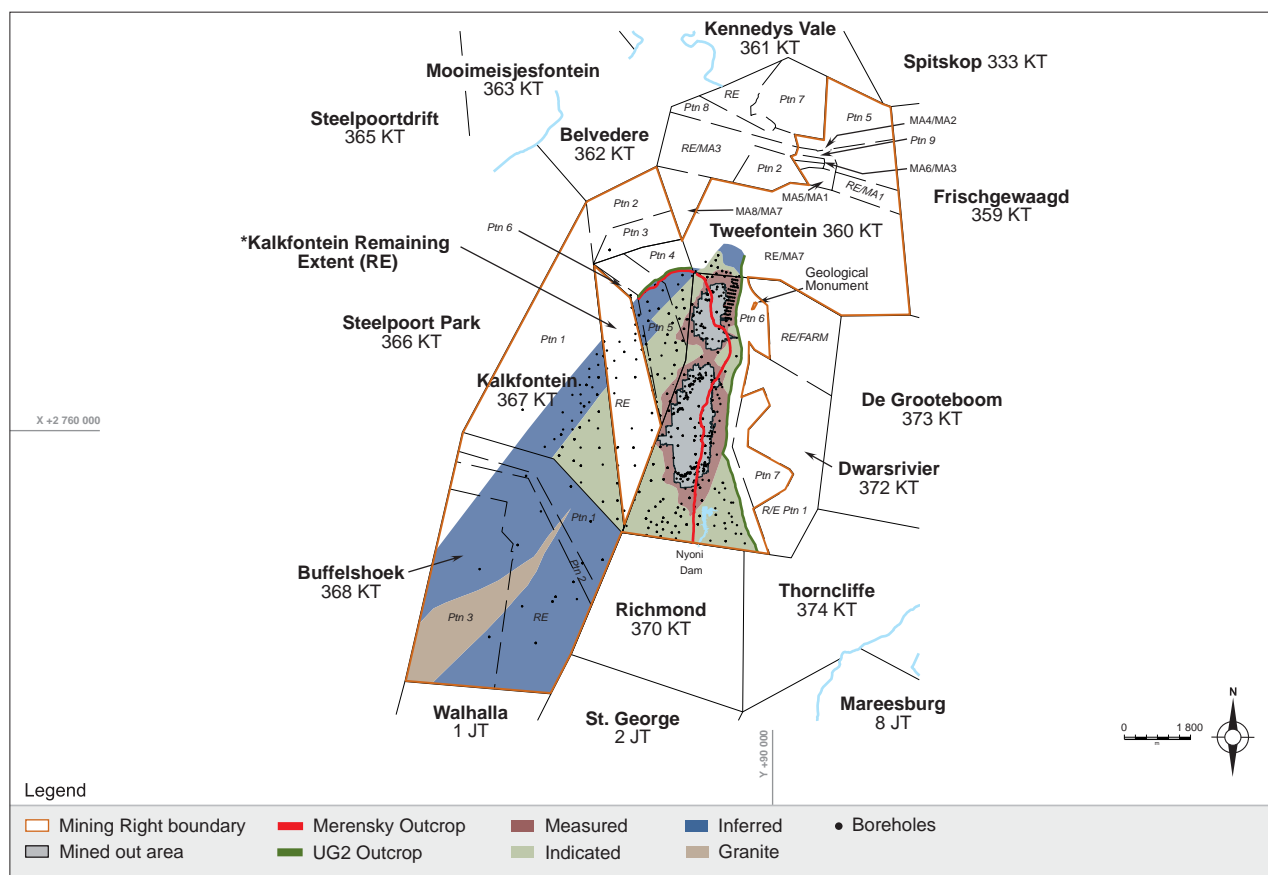
	Mineral Resources								
	Mt	Pt g/t	Pd g/t	Rh g/t	Au g/t	4E g/t	6E g/t	Pt Moz	6E Moz
Two Rivers (Dwarsrivier Farm)									
Measured	13.72	2.63	1.40	0.49	0.04	4.56	5.52	1.16	2.43
Indicated	34.69	2.01	1.19	0.37	0.04	3.61	4.32	2.24	4.82
Measured and Indicated	48.41	2.19	1.25	0.40	0.04	3.88	4.66	3.40	7.25
Inferred	0.02	3.28	2.17	0.57	0.05	6.07	7.27	0.002	0.005
Kalkfontein Ptn 4-6									
Measured	1.65	2.90	1.53	0.52	0.05	5.00	6.19	0.15	0.33
Indicated	7.90	2.72	1.53	0.48	0.05	4.78	5.90	0.69	1.50
Measured and Indicated	9.55	2.75	1.53	0.49	0.05	4.82	5.95	0.84	1.83
Inferred	7.76	2.59	1.69	0.49	0.04	4.81	5.78	0.65	1.44
Twefontein									
Measured	0.22	3.26	1.85	0.60	0.06	5.77	6.99	0.02	0.05
Indicated	1.67	2.76	1.61	0.50	0.05	4.92	5.93	0.15	0.32
Measured and Indicated	1.89	2.82	1.64	0.51	0.05	5.02	6.05	0.17	0.37
Inferred	1.46	3.01	1.38	0.53	0.04	4.96	6.07	0.14	0.28
Kalkfontein Ptn 1-3									
Indicated	15.09	2.76	1.77	0.53	0.05	5.11	6.13	1.34	2.97
Inferred	10.47	3.22	2.22	0.59	0.06	6.09	7.23	1.08	2.43
Buffelshoek									
Inferred	98.12	2.43	1.79	0.45	0.06	4.73	5.58	7.67	17.60
UG2 2015 Total Mineral Resources for Two Rivers Mine									
Total Measured	15.59	2.67	1.42	0.49	0.04	4.62	5.61	1.34	2.81
Total Indicated	59.35	2.32	1.39	0.43	0.04	4.18	5.04	4.42	9.61
Total Measured and Indicated 2015	74.94	2.39	1.40	0.44	0.04	4.28	5.16	5.76	12.42
Total Measured and Indicated 2014	50.63	2.24	1.28	0.43	0.04	4.00	4.80	3.65	7.82
Total Inferred 2015	117.83	2.52	1.82	0.47	0.06	4.86	5.75	9.54	21.77
Total Inferred 2014	0.66	2.24	1.36	0.39	0.05	4.04	4.91	0.05	0.10

4E = platinum+palladium+rhodium+gold; 6E = platinum+palladium+rhodium+iridium+ruthenium+gold.

The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.

Totals are rounded off.

TWO RIVERS PLATINUM MINE UG2 REEF MINERAL RESOURCES CLASSIFICATION



* Kalkfontein Remaining Extent, currently 100% owned by ARM, was acquired as part of the Tamboti Platinum (Pty) Ltd transaction. The Mineral Resources for this portion are reported under Tamboti Platinum on pages 30 to 32 of this report.

TWO RIVERS MINE: UG2 REEF MINERAL RESERVES

	Mineral Reserves								
	Mt	Pt g/t	Pd g/t	Rh g/t	Au g/t	4E g/t	6E g/t	Pt Moz	6E Moz
Two Rivers (Dwarsrivier Farm)									
Proved Reserves (Stockpile)	0.53	1.86	1.06	0.32	0.03	3.27	3.95	0.02	0.07
Proved	9.28	1.80	0.99	0.34	0.03	3.16	3.83	0.54	1.14
Probable	18.08	1.60	0.96	0.30	0.02	2.89	3.47	0.93	2.02
Total Reserves	27.89	1.67	0.98	0.31	0.02	2.99	3.60	1.49	3.23
Kalkfontein Ptn 4-6									
Proved	1.83	1.88	0.98	0.34	0.03	3.23	4.02	0.11	0.24
Probable	9.85	1.67	0.92	0.30	0.03	2.93	3.63	0.53	1.15
Total Reserves	11.68*	1.70	0.93	0.31	0.03	2.98	3.69	0.64	1.38
Tweefontein									
Proved	0.34	1.88	1.03	0.35	0.03	3.29	3.99	0.02	0.04
Probable	1.94	1.92	1.10	0.35	0.04	3.40	4.11	0.12	0.26
Total Reserves	2.29*	1.91	1.09	0.35	0.04	3.38	4.09	0.14	0.30
UG2 Reef Total Mineral Reserves for Two Rivers Mine									
Total Proved 2015	11.98	1.82	1.00	0.34	0.03	3.18	3.87	0.69	1.49
Total Probable 2015	29.88	1.65	0.96	0.30	0.03	2.94	3.57	1.58	3.43
Total Reserves 2015	41.86	1.70	0.97	0.31	0.03	3.00	3.65	2.27	4.92
Total Reserves 2014	30.44	1.72	0.99	0.33	0.03	3.06	3.69	1.68	3.61

4E = platinum+palladium+rhodium+gold; 6E = platinum+palladium+rhodium+iridium+ruthenium+gold.

Totals are rounded off.

Modifying factors for the conversion of Mineral Resources to Reserves include: mining losses, mining dilution, metallurgical and geotechnical.

* Mineral Reserves tonnage increased compared to the Measured and Indicated Resources that were converted due to mining dilution.

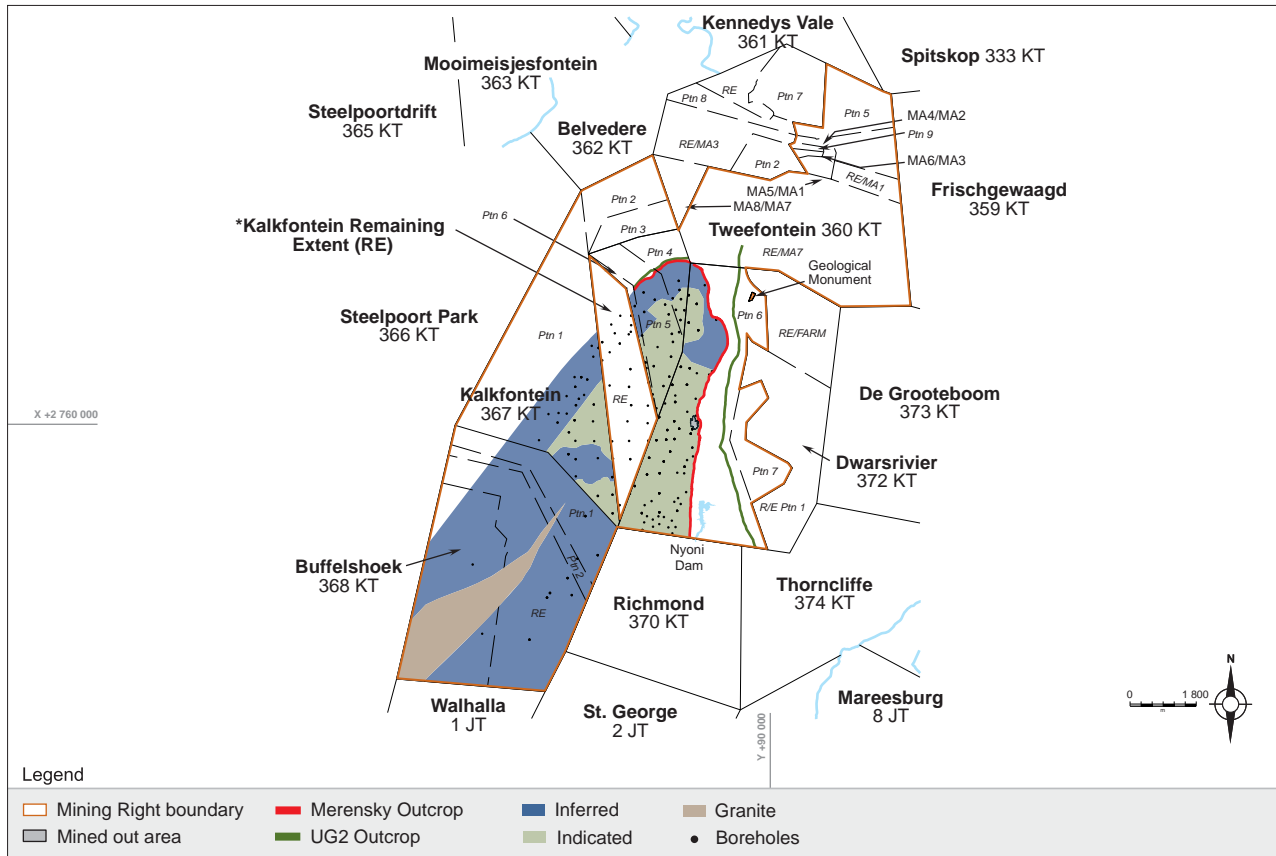
ARM Platinum continued

TWO RIVERS PLATINUM MINE: MERENSKY REEF MINERAL RESOURCES

	Mineral Resources								
	Mt	Pt g/t	Pd g/t	Rh g/t	Au g/t	4E g/t	6E g/t	Pt Moz	6E Moz
Two Rivers (Dwarsrivier Farm)									
Indicated	42.78	1.58	0.86	0.09	0.18	2.71	2.96	2.17	4.07
Inferred	8.63	1.49	0.81	0.10	0.16	2.56	2.80	0.41	0.78
Kalkfontein Ptn 4-6									
Indicated	11.19	1.67	0.82	0.09	0.19	2.77	3.00	0.60	1.08
Inferred	6.87	1.81	0.90	0.11	0.20	3.02	3.31	0.40	0.73
Kalkfontein Ptn 1-3									
Indicated	6.60	2.35	1.11	0.15	0.26	3.87	4.24	0.50	0.90
Inferred	14.52	1.49	0.74	0.09	0.20	2.52	2.76	0.70	1.29
Buffelshoek									
Inferred	69.17	2.32	1.30	0.14	0.27	4.03	4.37	5.16	9.72
Merensky 2015 Total Mineral Resources for Two Rivers Mine									
Total Indicated 2015	60.57	1.68	0.88	0.10	0.19	2.85	3.11	3.27	6.05
Total Indicated 2014	43.10	1.63	0.89	0.09	0.18	2.79	3.04	2.26	4.21
Total Inferred 2015	99.19	2.09	1.15	0.13	0.25	3.61	3.92	6.67	12.51
Total Inferred 2014	11.01	1.40	0.77	0.09	0.17	2.43	2.65	0.50	0.94

4E = platinum+palladium+rhodium+gold; 6E = platinum+palladium+rhodium+iridium+ruthenium+gold.
Totals are rounded off.

TWO RIVERS PLATINUM MINE MERENSKY REEF MINERAL RESOURCES CLASSIFICATION



* Kalkfontein Remaining Extent, currently 100% owned by ARM, was acquired as part of the Tamboti Platinum (Pty) Ltd transaction. The Mineral Resources for this portion are reported under Tamboti Platinum on pages 30 to 32 of this report.

YEAR-ON-YEAR CHANGE

Mineral Resources at Two Rivers Platinum Mine increased after completion of the acquisition of the Prospecting Right from Implats in respect of portions of the farms Kalkfontein, Tweefontein and Buffelshoek and the incorporation of these areas into the Mining Right of the operation. UG2 Reef Measured and Indicated Mineral Resources increased by 48% to 74.94 million tonnes at a grade of 5.16 g/t (6E) while the Inferred UG2 Reef Mineral Resources increased from 0.66 to 117.83 million tonnes at a grade of 5.75 g/t (6E). Merensky Reef Indicated Mineral Resources increased to 60.57 million tonnes at a grade of 3.11 g/t (6E) compared to 43.10 million tonnes reported in 2014. Merensky Reef Inferred Mineral Resources increased to 99.19 million tonnes at a grade of 3.92 g/t (6E) from 11.01 million tonnes at 2.65 g/t (6E).

Mineral Reserves for the UG2 Reef increased by 38% to 41.86 million tonnes at 3.65 g/t (6E) as a result of the incorporation of portions of Kalkfontein Farm and Tweefontein Farm into the Two Rivers Mining Right.

HISTORICAL PRODUCTION AT TWO RIVERS MINE (MILLED)

Financial year	Mt
2010/2011	2.95
2011/2012	3.10
2012/2013	3.17
2013/2014	3.28
2014/2015	3.36



Loading of stockpile ore at Two Rivers Platinum Mine

ARM Platinum continued

TAMBOTI PLATINUM

ARM's interest in Tamboti Platinum is 100% following the acquisition of Tamboti Platinum (Pty) Ltd, holder of a mining right over the Kalkfontein Remaining Extent (RE) adjacent to Two Rivers Mine. ARM is in discussion with Implats to transfer this property into Two Rivers Mine.

Locality

Tamboti Platinum area is located in the Eastern Limb of the Bushveld Complex, contiguous to Two Rivers Mine on Remaining Extent portion of Kalkfontein farm. Both UG2 and Merensky Reefs are present on the Kalkfontein RE.

History

The area has been explored for its mineral potential since the early 1900s. Most of the activity in the area was in the form of erratic exploration activities which included trenching. Recent drilling has been done by Implats and Kameni (Pty) Ltd between 1987 and 2010.

Mining authorisation

Tamboti Platinum (Pty) Ltd was granted Mining Right LP 165 MR on 9 July 2014 over the Remaining Extent of the farm Kalkfontein 367 KT for the minerals as described therein.

Geology

The Kalkfontein RE is underlain by both UG2 and Merensky Reefs. The general dip of reefs is to the west at 7 – 10 degrees. Within 500 metres of the Kalkfontein fault the reef is faulted with vertical up-throw displacements in excess of 20 metres to the west. The reefs are vertically displaced and down-thrown by up to 1 000 metres to the west of Kalkfontein fault. This western domain has been identified as an exploration target in which only four boreholes have intersected UG2 and Merensky Reefs.

The following reef facies, similar to those at Two Rivers Mine, have been defined for the UG2 in the Kalkfontein RE:

- UG2 Normal Reef facies, which is characterised by a 100 to 120 centimetre thick chromitite overlain by up to three chromitite 'leaders' collectively termed the UG2A chromitites.
- UG2 Split Reef facies characterised by a chromitite seam that is separated by a layer of a fine- to medium-grained internal pyroxenite unit.
- The UG2 Multiple Split Reef facies represented by multiple splitting of the UG2 chromitite separated by internal pyroxenite.

The UG2 is usually bottom loaded with peak PGM values occurring in the basal 10 centimetre portion.

The Merensky Reef consists mainly of orthopyroxene with lesser amounts of plagioclase and clinopyroxene. Thin chromitite layers, usually 1 to 4 millimetres thick, occur near the upper and lower contacts of the reef. The regional north-northeast to south-southwest trending Kalkfontein fault, with a vertical displacement

of up to 1 000 metres down-thrown to the west, defines the limits of the eastern structural domain for both the UG2 and Merensky Reefs.

Mineral Resources and Reserves

The Kalkfontein Remaining Extent UG2 and Merensky geological and grade models were created at the end of 2014 together with the models for the adjacent areas of Kalkfontein and Dwarsrivier.

The Mineral Resources for UG2 and Merensky Reefs have been classified into Measured, Indicated and Inferred Resources. Measured Mineral Resources for UG2 Reef are defined in a small area contiguous to Dwarsrivier farm while Indicated UG2 Mineral Resources have been defined for a large portion of the Kalkfontein RE block. Inferred Mineral Resources are on the western portion of Kalkfontein RE due to the complex faulting in the proximity of the Kalkfontein fault which resulted in significant displacement of the UG2 and Merensky Reefs. Mineral Resource classification is based on borehole spacing, geological continuity of the UG2 and Merensky Reefs as well as consideration of geostatistical parameters such as kriging variance, regression slope, kriging efficiency and search volume.

Borehole data provided by Impala and Kameni for the Kalkfontein RE portion together with the data from adjacent farms was used in the estimation of the Kalkfontein RE. These boreholes were drilled to intersect Merensky and UG2 Reefs. The boreholes have an average grid spacing of 500 metres over the whole property and 250 metre grid spacing in some areas.

All samples from historical and recent drilling at Kalkfontein RE were mostly assayed at Genalysis Laboratory Services (Pty) Ltd (Genalysis) using Ni-sulphide collection fire-assay. Some samples in earlier drilling phases were assayed at Impala Laboratory in Springs, South Africa.

Ordinary Kriging interpolation within Datamine Studio 3 was used to estimate the grade of each 50 x 50 x 1 metre block generated within the UG2 and Merensky Reefs' geological models. Five geological domains separated by major faults (greater than 3 metres vertical displacement) were used in the estimation for the Kalkfontein RE and adjacent areas. Variables estimated were Pt, Pd, Rh, Au, Ru, and Ir, Cu and Ni. Within each of the domains the UG2 chromitite was wireframed and estimated as two units based on the Pt:Pd ratio. The internal pyroxenite and the leader chromitites were also modelled and estimation undertaken. Sub-cell splitting of blocks was allowed to follow the geological boundaries accurately. Density was estimated by Kriging in the Resource model. Additional models of the UG2 leaders and the footwall of the UG2 chromitite were created. The Merensky Reef Resource estimation was similarly done for the five structural domains.

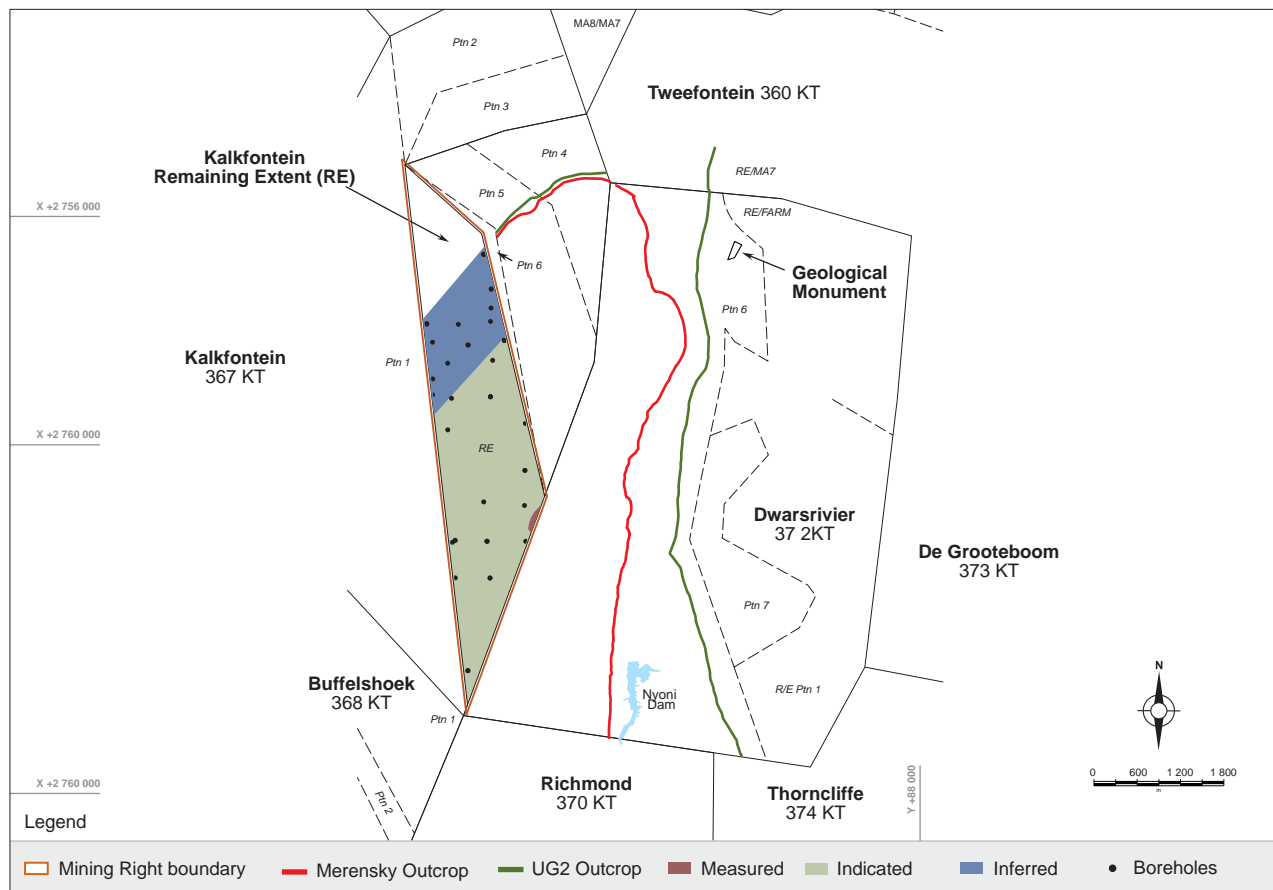
A geological loss factor of 30 % was used for UG2 and Merensky to account for faults, dykes, potholes and replacement pegmatoids.

TAMBOTI PLATINUM (KALKFONTEIN RE): UG2 REEF MINERAL RESOURCES

	Mineral Resources								
	Mt	Pt g/t	Pd g/t	Rh g/t	Au g/t	4E g/t	6E g/t	Pt Moz	6E Moz
Measured	0.09	2.87	1.42	0.51	0.04	4.84	5.89	0.01	0.02
Indicated	15.11	2.84	1.74	0.51	0.05	5.14	6.19	1.38	3.01
Total Measured and Indicated 2015	15.20	2.84	1.74	0.51	0.05	5.14	6.19	1.39	3.02
Inferred 2015	5.18	3.05	1.83	0.56	0.06	5.50	6.69	0.51	1.11

4E = platinum+palladium+rhodium+gold; 6E = platinum+palladium+rhodium+iridium+ruthenium+gold.
Totals are rounded off.

TAMBOTI PLATINUM (KALKFONTEIN RE) UG2 REEF MINERAL RESOURCES CLASSIFICATION



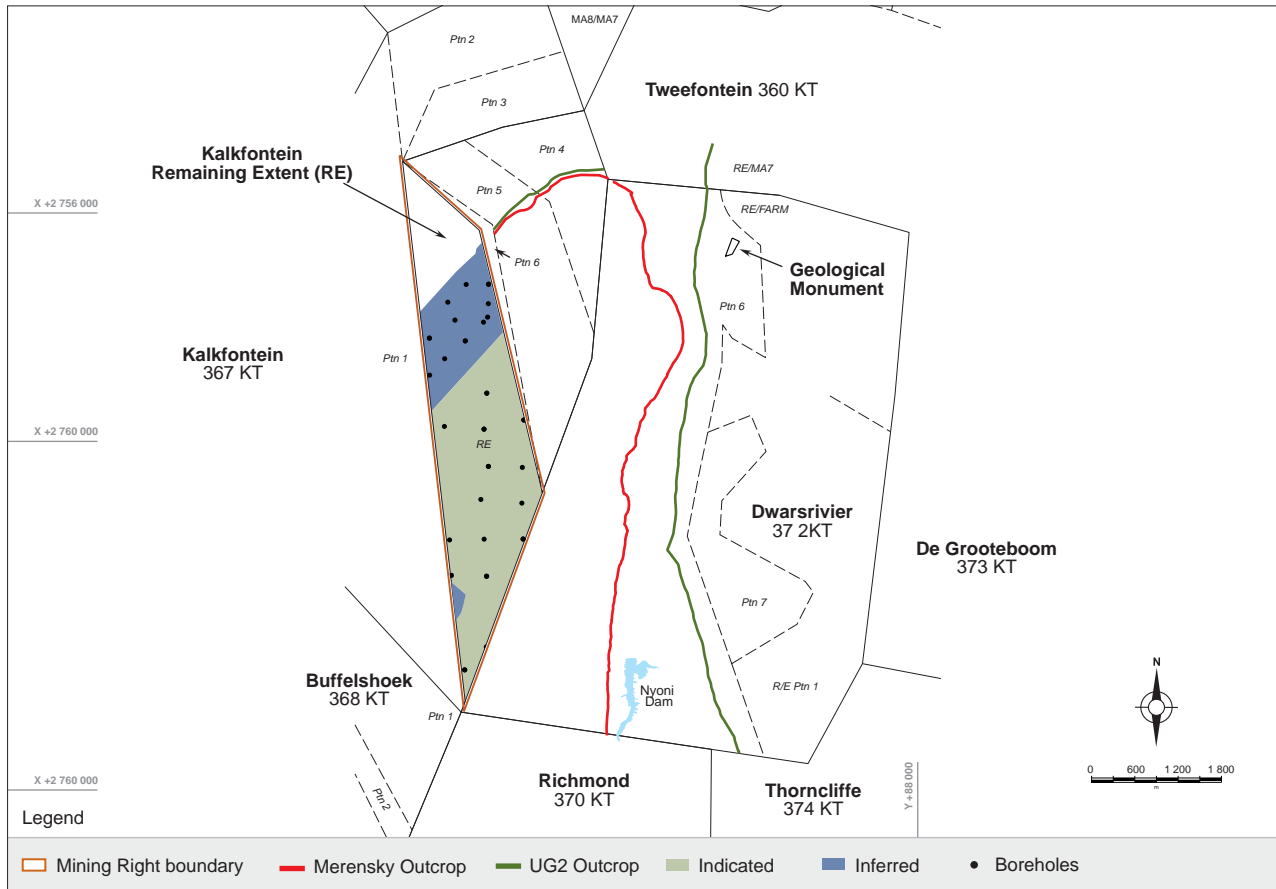
ARM Platinum continued

TAMBOTI PLATINUM (KALKFONTEIN RE): MERENSKY REEF MINERAL RESOURCES

	Mineral Resources								
	Mt	Pt g/t	Pd g/t	Rh g/t	Au g/t	4E g/t	6E g/t	Pt Moz	6E Moz
Total Indicated 2015	14.39	2.37	1.20	0.13	0.28	3.98	4.31	1.10	1.99
Total Inferred 2015	5.50	1.94	0.91	0.11	0.22	3.18	3.44	0.34	0.61

4E = platinum+palladium+rhodium+gold; 6E = platinum+palladium+rhodium+iridium+ruthenium+gold.
Totals are rounded off.

TAMBOTI PLATINUM (KALKFONTEIN RE) MERENSKY REEF MINERAL RESOURCES CLASSIFICATION



YEAR-ON-YEAR CHANGE

The Mineral Resources for Tamboti Platinum are being reported for the first time after ARM's acquisition of Tamboti Platinum (Pty) Ltd.

MODIKWA PLATINUM MINE

ARM's attributable beneficial interest in Modikwa's operations is 41.5%, 8.5% is held by the Modikwa Communities; and 50% is held by Anglo American Platinum.

Locality

Modikwa Platinum Mine is situated some 15 kilometres north of Burgersfort and 15 kilometres north-west of Steelpoort, along the border between the Mpumalanga and Limpopo provinces in South Africa. Located at longitude 30°10'E and latitude 24°40'S, the site is accessed via the R37 road between Polokwane and Burgersfort.

History

Exploration in the area started in the mid 1920s with the discovery of the Merensky Reef. During the late 1980s further drilling was undertaken on the UG2 and Merensky Reefs. In the late 1990s, a feasibility study was completed for the exploitation of the UG2. During 2001, a 50:50 JV agreement was signed between Rustenburg Platinum Mines and ARM Mining Consortium Limited. ARM's effective stake in Modikwa is 41.5%, through its 83% ownership of ARM Mining Consortium. The other 8.5% is held by the Mampudima and Matimatjatji community companies through their 17% shareholding in the ARM Mining Consortium.

Mining authorisation

Modikwa Platinum Mine was granted New Order Mining Right LP 129 MRC on 13 November 2013 over the area, and for the minerals, as previously held under its Old Order Mining Licence.

Geology

The igneous layering at Modikwa Mine is north north-west striking with an average dip of 10 degrees to the west. Both the UG2 and Merensky Reefs are present. The UG2 occurs as a chromitite layer with average thickness of approximately 60 centimetres. Three leader chromitites occur above the main seam. Gentle undulations of the UG2 with amplitudes of less than 2 metres are developed across the mine area. Potholes of varying size appear to be randomly distributed within the North Shaft area. Potholes are less abundant in the South Shaft area, which is more disturbed by faulting. The Onverwacht Hill area in the southern portion of the mine is characterised by the

presence of several large ultramafic pegmatoid intrusions that disrupt, and locally replace, the UG2.

Mineral Resources and Reserves

The Mineral Resource modelling and estimation for Modikwa Mine is done by the Anglo American Platinum Resource modelling team. The Mineral Resource classification is based on data constraints, information risk assessments, geological, geostatistical considerations and review by the Competent Persons Team. The UG2 and Merensky Reef Mineral Resource is based on surface diamond drillholes (mother boreholes and deflections) and underground sample sections. The logs and assay values are kept in separate electronic databases and are combined for estimation purposes after rigorous data validation. Samples are submitted to Anglo Research Laboratories (AR) and Mintek Laboratories (primary laboratories) and to Genalysis (check laboratory) for analysis. The UG2 Resource Cut is divided into three units comprising the UG2 Reef and dilution cuts in the hanging wall and footwall to make up the mining cut. Estimation of the three sub-units in the mining cut is carried out separately and independently. Two-dimensional block models with block sizes of 125 x 125 metres, 250 x 250 metres and 500 x 500 metres, depending on the drillhole/sample section spacing are created. The Pt, Pd, Rh, Au, Cu and Ni grades, width and density are interpolated using Ordinary Kriging. Resources are reported after deduction of geological losses and exclude Resources converted to Reserves, i.e. the reporting is exclusive of Reserves. The geological losses account for losses due to pegmatoid intrusions, faults, dykes and potholes. Part of the Measured and Indicated Mineral Resources are converted to Mineral Reserves by applying appropriate mining, metallurgical and economic factors, i.e. 'modifying factors'.

A minimum mining cut of 102 centimetres is used to calculate the amount of footwall waste that is included in the mining cut. Where the hanging wall and the main seam thickness are greater than 102 centimetres, an additional 5 centimetres of footwall waste is included. The basal contact of the UG2 layer is typically high-grade and it is important that this contact is not left in the footwall during mining. The UG2 is accessed via two primary declines from surface. Mining consists of mechanised development and conventional stoping. Run-of-mine tonnage is processed at the Modikwa concentrator and the PGE rich concentrate is transported to Anglo Platinum's Polokwane smelter and refining facilities.

ARM Platinum continued

*MODIKWA PLATINUM MINE: UG2 REEF MINERAL RESOURCES AND RESERVES

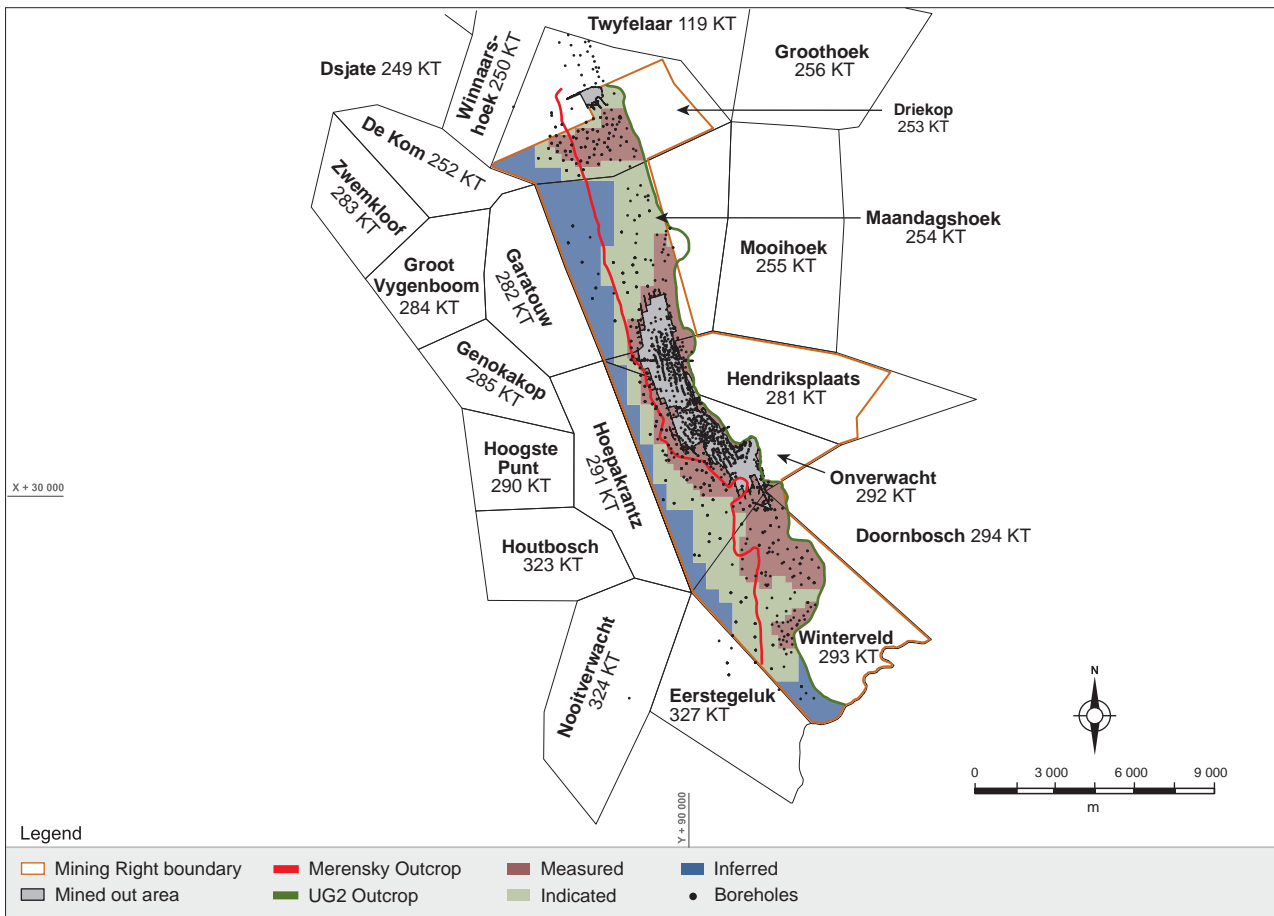
	Mineral Resources				Mineral Reserves		
	Mt	4E g/t	4E Moz		Mt	4E g/t	4E Moz
Measured	49.50	5.90	9.39	Proved	14.13	4.69	2.13
Indicated	87.20	5.92	16.60	Probable	34.00	4.65	5.08
* Total Measured and Indicated 2015	136.70	5.91	25.99	Total Reserves 2015	48.13	4.66	7.21
* Total Measured and Indicated 2014	139.00	5.89	26.33	Total Reserves 2014	58.60	4.63	8.72
Inferred 2015	75.90	6.21	15.15				
Inferred 2014	77.30	6.19	15.38				

4E = platinum+palladium+rhodium+gold.

* The Measured and Indicated Mineral Resources are exclusive of those modified to produce Mineral Reserves.

Modifying factors for the conversion of Mineral Resources to Reserves include: mining losses, mining dilution, metallurgical and geotechnical. Totals are rounded off.

MODIKWA MINE UG2 REEF MINERAL RESOURCES CLASSIFICATION

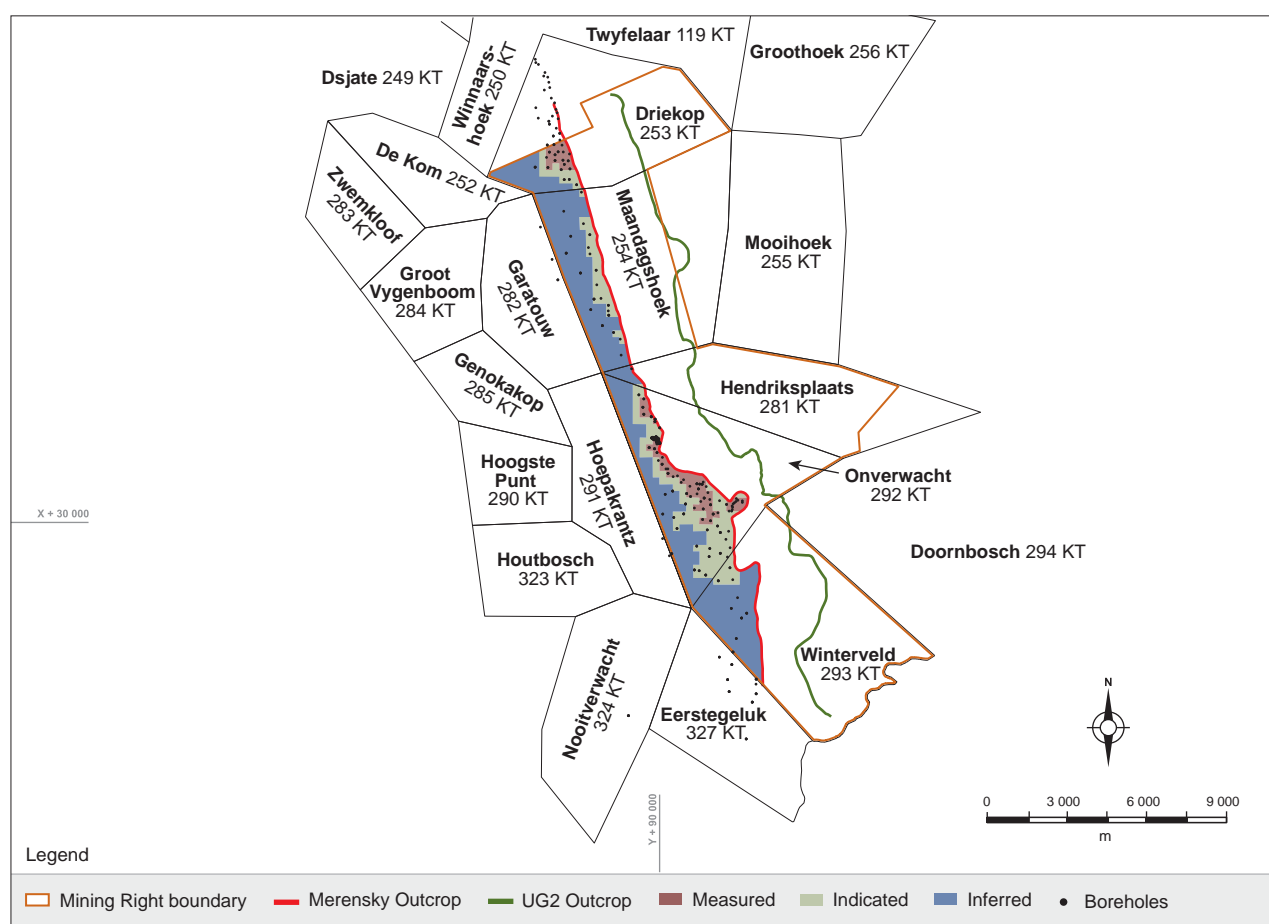


MODIKWA MINE: MERENSKY REEF MINERAL RESOURCES

	Mineral Resources		
	Mt	4E g/t	4E Moz
Measured	17.95	2.94	1.70
Indicated	54.05	2.73	4.74
Total Measured and Indicated 2015	72.00	2.78	6.44
Total Measured and Indicated 2014	72.00	2.78	6.44
Inferred 2015	136.84	2.65	11.66
Inferred 2014	136.84	2.65	11.66

4E = platinum+palladium+rhodium+gold.
Totals are rounded off.

MODIKWA MINE MERENSKY REEF MINERAL RESOURCES CLASSIFICATION



YEAR-ON-YEAR CHANGE

The Measured and Indicated UG2 Reef Mineral Resources marginally reduced by 2% to 136.70 million tonnes at 5.91 g/t (4E). Mineral Reserves decreased from 58.60 at 4.63 g/t (4E) to 48.13 million tonnes at 4.66 g/t (4E) due to the revision of the 2014 survey figures, Marula Reserves depletion and structural model changes.

HISTORICAL PRODUCTION AT MODIKWA MINE (MILLED)

Financial year	Mt
2010/2011	2.30
2011/2012	2.18
2012/2013	2.33
2013/2014	2.11
2014/2015	1.86

ARM Platinum continued

KALPLATS PGM PROSPECT

Kalplats PGM Prospect – ARM Platinum’s attributable beneficial interest is 46%. Platinum Australia Limited (PLA) holds 44% and Anglo American Prospecting Services 10%.

Kalplats Extended Prospect – ARM Platinum’s attributable beneficial interest is 50%. The other 50% is held by PLA.

Locality

The Kalplats Platinum Prospects are situated 330 kilometres west of Johannesburg and some 90 kilometres southwest of Mafikeng in the North West province of South Africa. Situated at latitude 26°30’S and longitude 24°50’E, the project areas are accessed from Stella on the N14 national road linking Mafikeng and Vryburg.

History

Anglo American discovered the Kalplats platinum deposits in the early 1990s and Harmony Gold Mining Company Limited acquired the prospect from Anglo in 1999. Subsequently, ARM acquired the prospect as part of the merger of the Anglovaal, ARM and Harmony assets in 2004. Pre-2004, exploration comprised a combination of rotary air blast (RAB), reverse circulation (RC) and diamond drilling. Anglo drilled a total of 6 000 metres in 133 holes, while Harmony drilled a total of 35 640 metres in 399 holes. Harmony commissioned a feasibility study in 2003 and excavated a 500 tonne bulk sample for metallurgical test work. The study assessed the viability of both an open-pit and underground mining operation. The feasibility study was completed early in 2004.

In 2005, ARM Platinum entered into two joint venture agreements with PLA, one over the “Kalplats PGM Prospect”, which provides for PLA to earn up to 49% by completing a bankable level feasibility study and making the Panton metallurgical process available at no cost. The other joint venture agreement covers the “Kalplats Extended Prospect” (Extended Prospect) in which ARM Platinum and PLA each has a 50% share and contributes equally to the exploration expenditure. Both prospects are managed by PLA.

PLA commenced drilling in 2006 with a combination of diamond and RC drilling focusing on extending the resources on the Vela, Scorpio, Sirius, Mira, Serpens North, Serpens South and Crux deposits. PLA completed 683 drill holes for a total of 92 529 metres. Late in 2009, PLA completed a pre-feasibility study on a 1.5 million tonne of ore per year open-pit mining operation and in 2012, PLA completed a Definitive Feasibility Study.

Prospecting Rights

In September 2006, ARM Platinum was granted a New Order Prospecting Right (PR492 of 2006) over the PGM Prospect covering portions of the farms Groot Gewaagd 270, Gemsbok Pan 309, Koodoos Rand 321 and Papiessvlakte 323 (approximately 3 810 hectares). The Prospecting Right was renewed until 26 July 2012 when it lapsed. ARM Platinum has applied for a Retention Permit over the Kalplats Prospect area.

In April 2007, a New Order Prospecting Right (DME1056) (approximately 62 985 hectares) was granted to ARM Platinum over the Extended Prospect area which covers an additional 20 kilometres of strike to the north and 18 kilometres to the south of the Kalplats Prospect area. The renewal of the Prospecting Right was executed in June 2014.

Geology

PGE mineralisation is hosted mainly by magnetite-rich gabbros within the Stella Layered Intrusion (SLI), a 3.0 billion year old layered complex intruded into the Kraaipan Greenstone Belt. Mineralisation is contained in eight separate, subvertically dipping zones known as Crater, Orion, Vela, Sirius, Mira, Serpens North and Serpens South and Crux, each with strike lengths of between approximately 500 and 1 000 metres and widths of between 15 and 45 metres. In addition, drilling has outlined at least three additional deposits known as Scorpio, Tucana and Pointer.

Three main sub-parallel reef packages within each zone have been recognised. They are the Main Reef (the highest grade reef), Mid Reef and LG Reef. The area is structurally complex, and thrusting has caused duplication of reefs in some cases.

Mineral Resources

Geological modelling and Resource estimation was done by Coffey Mining consultants on all eight major deposits in the Kalplats PGM Prospect. Resources have been calculated to a depth of 200 metres below surface at a cut-off grade of 0.5 g/t 3E. Tonnages and grades are reported only for the entire thickness of a package of seven reefs, namely the UM, UUM, LM, MR, LG, MMW and Main Reef Residual layers.

KALPLATS MINERAL RESOURCES

Deposit	Measured Resources		Indicated Resources		Total Measured and Indicated Resources			Inferred Resources		Total Mineral Resources		
	Mt	3E g/t	Mt	3E g/t	Mt	3E g/t	3E Moz	Mt	3E g/t	Mt	3E g/t	3E Moz
Crater	1.34	1.89	6.22	1.85	7.55	1.86	0.45	18.66	2.11	26.22	2.04	1.72
Orion	4.20	1.57	4.01	1.56	8.21	1.57	0.41	3.64	1.61	11.86	1.58	0.60
Crux	7.70	1.55	10.88	1.40	18.58	1.46	0.87	9.46	1.35	28.04	1.42	1.28
Sirius	0.80	1.52	5.31	1.49	6.11	1.49	0.29	3.38	1.27	9.48	1.41	0.43
Mira			2.71	1.42	2.71	1.42	0.12	3.93	1.44	6.63	1.43	0.31
Vela			21.79	1.36	21.79	1.36	0.95	14.87	1.32	36.66	1.34	1.58
Serpens N			4.96	1.41	4.96	1.41	0.22	2.74	1.47	7.70	1.43	0.35
Serpens S								10.76	1.34	10.76	1.34	0.46
Total 2015	14.04	1.59	55.88	1.46	69.91	1.48	3.33	67.44	1.57	137.36	1.53	6.74
Total 2014	14.04	1.59	55.88	1.46	69.91	1.48	3.33	67.44	1.57	137.36	1.53	6.74

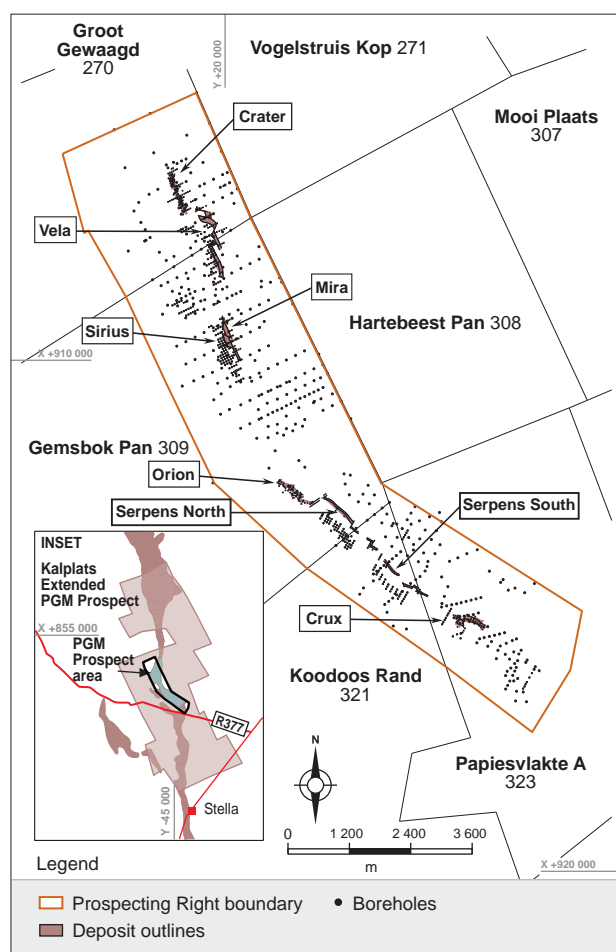
3E = platinum+palladium+gold.

Totals are rounded off.

Resources include UM, UUM, LM, MR, LG, MMW and the Main Reef Residual layers, which is the total mineralised width for all seven layers.

Cut off grade of 0.5 g/t 3E has been applied.

KALPLATS PGM PROSPECT ORE BODY LOCALITY MAP



YEAR-ON-YEAR CHANGE

There were no changes to the Measured, Indicated and Inferred Resources in comparison to 2014.



ARM Coal

GOEDGEVONDEN COAL MINE

ARM's attributable beneficial interest in Goedgevonden's operations is 26%. The other 74% is held by Glencore Operations South Africa. The joint venture with Glencore also includes other coal operations in South Africa, Participating Coal Business (PCB) in which ARM has an economic interest of 20.2%.

Locality

Goedgevonden Mine is situated in the Witbank Coalfield about 7 kilometres south of the town of Ogies in Mpumalanga province in South Africa.

History

A total of 548 surface diamond boreholes were drilled during 1964 to 2004 by Duiker Mining and Xstrata SA. Anglo Coal drilled an additional 102 boreholes for the Zaaiwater area. Most boreholes were drilled down to basement to define the seam locality and basement topography. Owing to the different campaigns, the database had to be validated to produce a consistent set of data.

Mining authorisation

New Order Mining Rights were granted and subsequently registered on 22 August 2008.

Geology

The stratigraphy of the Witbank Coalfield consists of five seams numbered from oldest to youngest: No 1 to No 5 seam. The seams vary in thickness from less than 0.5 metres to over 6 metres and do not exceed 300 metres in depth from surface. The coal seams dip at less than 5 degrees. However, coal seam morphology and qualities may be locally influenced by basement topography, surface weathering and intrusion of dolerite dykes and sills. The coal qualities vary both within and between individual coal seams.

Low-quality coals, suitable for the local steam coal market, have a calorific value of between 18 to 22 Mj/kg, whereas the high-quality export steam coal has a calorific value of greater than 27 Mj/kg.

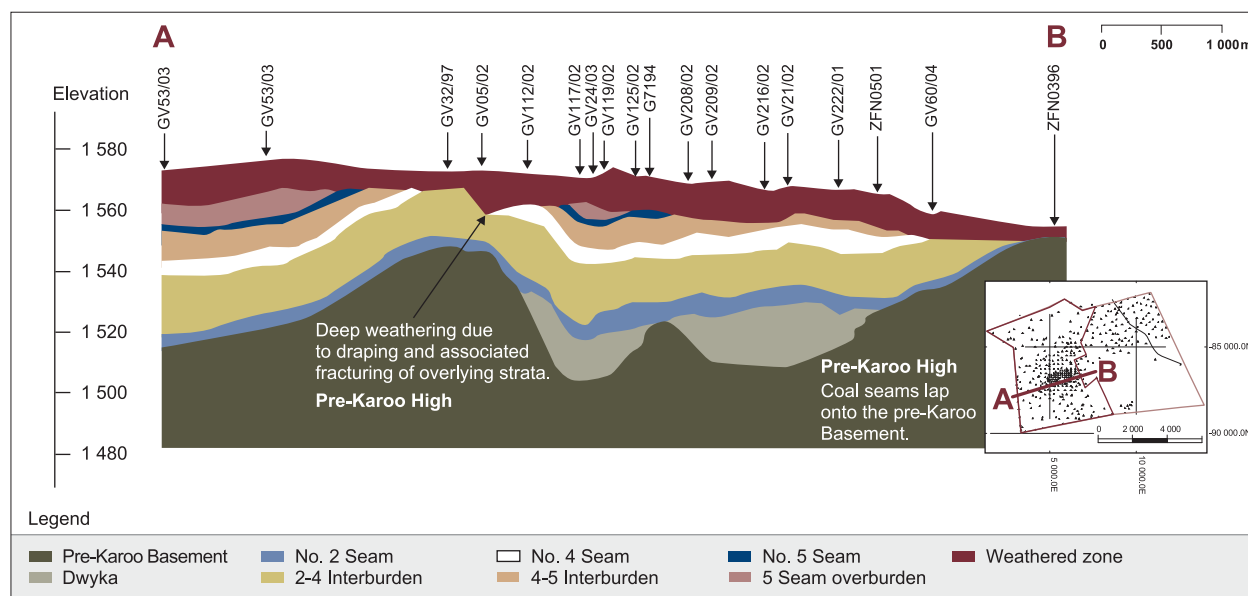
All five coal seams are developed on Goedgevonden. The No 1 seam is of low quality, thin and only developed in paleo-low areas. The No 2 seam is extensively developed and is of good quality and is, on average, 5.5 metres thick. The No 3 seam is of good quality but, with an average thickness of only 0.3 metres, is uneconomic. The No 4 seam, being closer to surface and although of the same thickness as the No 2 seam, is influenced by weathering and is not as extensively developed. The No 5 seam is of good quality, but is preserved as erosional remnants on the high ground only and thus not extensively developed over the area. No major faults, structural disturbances or intrusives were observed in the boreholes drilled to date. Opencast dragline mining operations in the area are extracting the No 2, No 4 and No 5 seams. The open-cut mine produces both export and domestic thermal coal.

Coal Resources and Reserves

Wireframes for the seam composites for the No2, 4 and 5 seams were generated in Datamine Studio 3 (section below shows seams 2, 4 and 5). Two-dimensional block Resource models were generated with block sizes of 50 x 50 metres. All estimations of the individual blocks were done using inverse distance cubed with an isotropic search. Other software packages used in the evaluation are 'Washproduct' and 'Xpac'. The following table shows the Goedgevonden Coal Resources and Reserves obtained from Glencore, reflecting the status as at 31 December 2014. Coal Resources and Reserves of the Glencore Mines are the responsibility of the Glencore Resources and Reserves team.



SECTION SHOWING GOEDGEVONDEN COAL SEAMS



GOEDGEVONDEN MINE: COAL RESOURCES

	Coal Type and Qualities	Coal Resources			
		Measured	Indicated	Measured and Indicated	Inferred
Total 2015	Thermal Coal (Mt)	530	25	555	1
	CV (MJ/kg)	19.76	19.73	19.76	13.86
	Ash (%)	32.56	31.74	32.52	48.49
	VM (%)	21.77	20.96	21.73	18.09
	S (%)	1.15	0.82	1.14	0.80
Total 2014	Thermal Coal (Mt)	540	25	565	1
	CV (MJ/kg)	19.80	19.81	19.80	15.25
	Ash (%)	32.42	31.08	32.36	45.22
	VM (%)	21.83	20.87	21.79	17.52
	S (%)	1.19	0.86	1.18	0.46

Totals are rounded off.

Coal Resources are inclusive of those modified to produce Coal Reserves.

Mining method is open-cut.

CV – Calorific Value.

VM – Volatile Matter.

S – Sulphur.

ARM Coal continued

GOEDGEVONDEN MINE: COAL RESERVES

	Coal Type and Qualities	Coal Reserves (ROM)			Coal Type and Qualities	Coal Reserves (Saleable)		
		Proved	Probable	Total Reserves		Proved	Probable	Total Reserves
Total 2015	Thermal Coal (Mt)	320	11	331	Thermal Coal (Mt)	200	6	206
	CV (MJ/kg)			19.90				
	Ash (%)			32.33	Export (Mt)			89
	VM (%)			21.80	*Export CV (Kcal/kg)			5 900*
	S (%)			1.10	Domestic (Mt)			117
					Domestic CV (MJ/kg)			21.50
Total 2014	Thermal Coal (Mt)	360	11	371	Thermal Coal (Mt)	217	6	223
	CV (MJ/kg)			19.83				
	Ash (%)			32.37	Export (Mt)			96
	VM (%)			21.83	Export CV (MJ/kg)			26.82
	S (%)			1.19	Domestic (Mt)			127
					Domestic CV (MJ/kg)			21.50

Totals are rounded off.

Modifying factors for the conversion of Coal Resources to Reserves: mining losses, economic pit design.

Mining method is open-cut.

* Export coal CV reported as 5 900 Kcal/kg which is equivalent to 26.82 MJ/kg

CV – Calorific Value.

VM – Volatile Matter.

S – Sulphur.

YEAR-ON-YEAR CHANGE

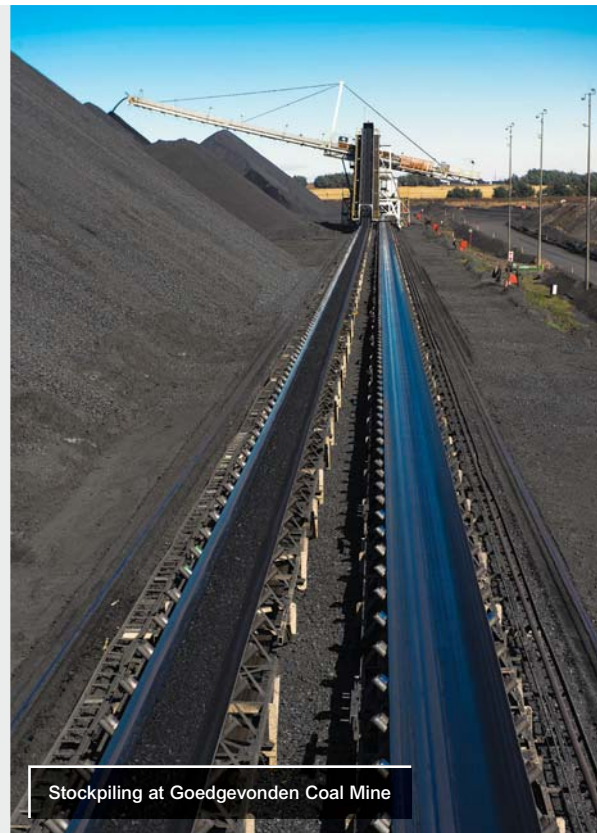
The Coal Measured and Indicated Resources for Goedgevonden reduced to 555 million tonnes mainly due to Resource depletion of 12.2 million tonnes by mining. Coal ROM Reserves decreased from 371 to 331 million tonnes largely due to:

- Mining depletion of 11.4 million tonnes;
- Selective mining of the upper seams which reduced the coal ROM Reserve by 1.5 million tonnes;
- New drilling and remodelling which accounted for a decrease of 4.2 million tonnes; and
- The change in Eskom yield cut-off which reduced the coal ROM Reserve by 19.4 million tonnes.

However, selective mining of the upper seams and the Eskom yield cut-off change have resulted in higher quality plant feed.

HISTORICAL PRODUCTION AT GOEDGEVONDEN MINE (SALEABLE)

Financial year	Mt
2010/2011	5.9
2011/2012	6.4
2012/2013	8.2
2013/2014	7.3
2014/2015	8.3



Stockpiling at Goedgevonden Coal Mine

ARM Copper

THE LUBAMBE COPPER MINE

ARM's attributable beneficial interest in Lubambe Copper Mine is 40%. Vale owns 40% and ZCCM-IH 20%.

Locality

Lubambe Copper Mine is located within the Greater Konkola area of the Zambian Copperbelt in close proximity to the town of Chililabombwe.

History

Prospective outcrop at Lubambe Mine was discovered in 1924. Since then, exploration drilling and production have been undertaken at Lubambe by companies such as Bancroft Mines Limited and ZCCM. On 27 August 2010, the Vale/ARM JV announced the development of Lubambe Copper Mine. Construction work started in September 2010. The mine's design is 2.5 million tonnes of ore per annum to produce 45 000 tonnes of contained copper in concentrate to be toll smelted and refined in Zambia.

Mining authorisation

The revised Large Scale Mining Licence (7061-HQ-LML) for the Lubambe Copper Project was issued in April 2011. The mining licence is bound by the Zambia/DRC border to the west, north and east and the Vedanta's Konkola Copper Mine mining licence to the south.

Geology

The Lubambe copper deposit is one of approximately 30 copper/cobalt deposits occurring within the Central African Copperbelt. It is located at the north-western extremity of the Zambian portion of the Copperbelt. The deposit is hosted within sediments which accumulated in an intracratonic rift, which was subsequently closed during the Lufilian Orogeny. The Lubambe Copper deposit mineralisation is defined as the ore shale (OS) type of mineralisation. Copper mineralisation is largely hosted within the OS1 Member, whose true thickness varies from 3 to 14 metres. The lower-most 1.5 metres of the OS1 Member contains very little copper, due to leaching which preferentially occurs at the base of the OS1 where the contact between the siltstone and conglomerate/arkose represents a permeability channelway. The transition to greater than 1% total copper is abrupt and takes place over centimetres, above a thin red iron oxide-rich marker layer, which probably acted as a redox boundary. The upper contact of the greater than 1% total copper zone (assay hanging wall) is also well-defined in the assay profile, but is not as sharp as the assay footwall contact.

Mineralisation occurs as finely disseminated sulphides along bedding planes and cleavage, in thin veinlets, and in lenticles and stringers, comprising of chalcocite, chalcopyrite, bornite, digenite, covellite, pyrite and carrollite. A large proportion of the non-sulphide copper minerals occur along fractures and veins and consist of malachite, pseudomalachite, chrysocolla, cuprite, azurite and native copper.

Mineral Resources and Reserves

Mineral Resources for Lubambe Mine are based on the 2010 model which has since been updated by the mine using new drilling data and underground mapping information. The 2010 model was done by AMEC E&C Services Inc (AMEC) consultants. A total of 137 boreholes were used in the AMEC estimate but the data has since increased with the addition of underground boreholes. All this data has been used in the Resource model updates at the mine. Although a number of laboratories were used prior to 2007 for sample assaying, ALS Chemex in Johannesburg has been used since then. ALS Chemex laboratory determines total copper (TCu) content by using procedure ME-OG62, a four acid ($\text{HNO}_3\text{-HClO}_4\text{-HF-HCl}$) digestion followed by conventional ICP-AES analysis. Total copper assays include the acid soluble copper (ASCu) assay component. The ASCu content is determined by shaking the sample in 5% sulphuric acid at room temperature. The copper content is then determined by AAS. AMEC estimated TCu and ASCu separately for oxide and sulphide domains using accumulation (grade times thickness). Mineral Resource classification was based on borehole spacing and geological continuity of the copper mineralisation. The Mineral Reserves have been derived from Measured and Indicated Resources within the Life-of-Mine (LOM) design and classified as either Proved or Probable Reserves. The reported resource is based on a cut-off of 1.5% TCu and minimum true thickness of 2 metres.

The Mineral Resource for the Lubambe Extension area which includes the Lubambe Extension Target area was estimated by AMEC with the latest update having been done in February 2014. The Lubambe Extension Target area is subject to ongoing feasibility studies. Since 2007, ALS Chemex has been used as the primary laboratory for determination of the assays from the drilling undertaken in the Lubambe Extension area. The geological model for the ore body was based on a selected mineralised zone (SMZ) determined in each borehole on a 1% total copper grade over a 3 metre true thickness. Estimation into 25 x 25 metre blocks using accumulation (grade times true thickness) for TCu, ASCu and TCo was undertaken. The reported Resource is based on a cut-off of 1.5% TCu and 4 metres true thickness.

ARM Copper continued

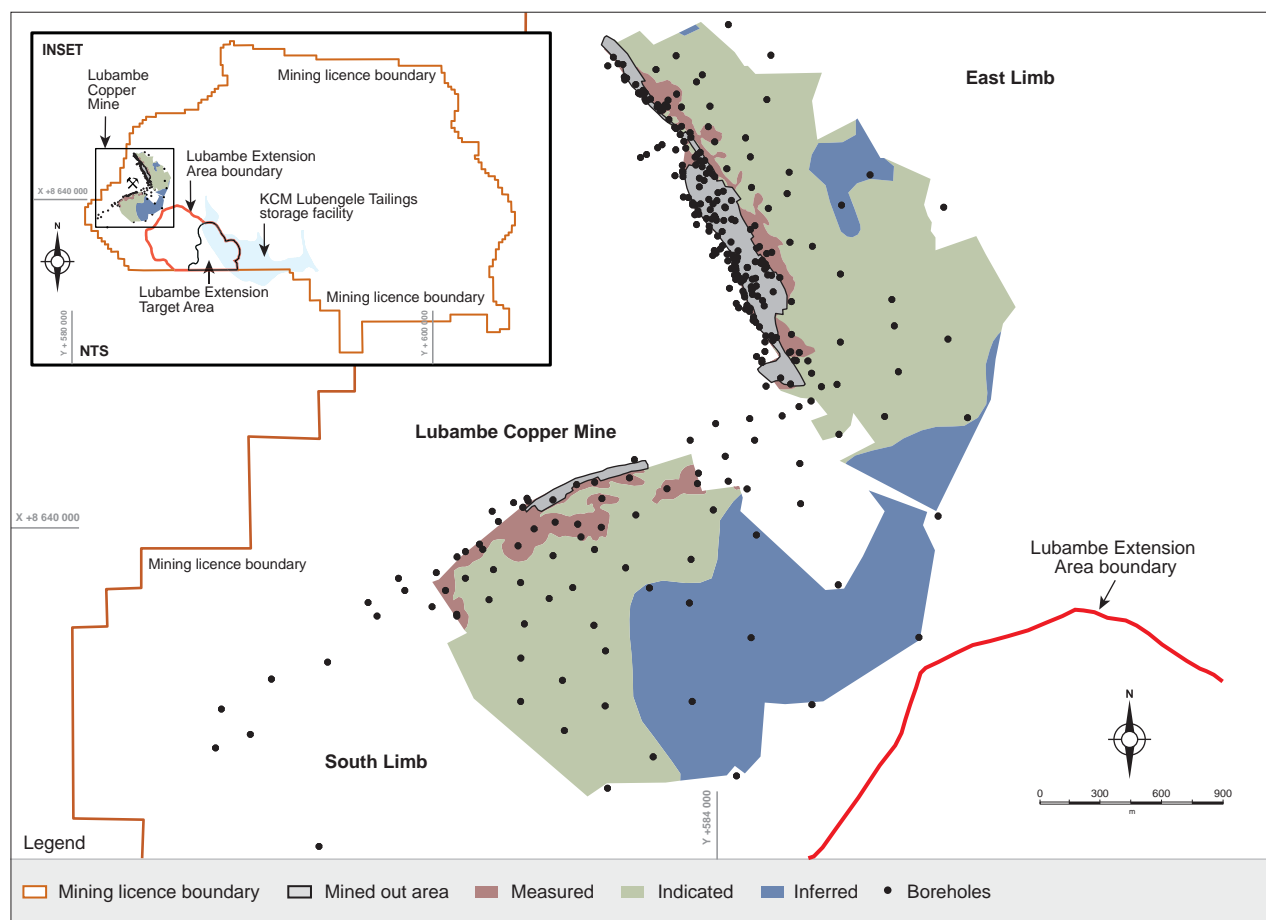
LUBAMBE COPPER MINE: MINERAL RESOURCES

	Mineral Resources			
	Mt	TCu%	*ASCu%	Mt Contained Cu
South Limb				
Measured	3.7	2.42	0.40	0.09
Indicated	19.9	2.37	0.46	0.47
Measured and Indicated	23.6	2.38	0.45	0.56
Inferred	18.9	2.11	0.40	0.40
East Limb				
Measured	2.1	2.86	0.27	0.06
Indicated	27.1	2.88	0.42	0.78
Measured and Indicated	29.2	2.88	0.41	0.84
Inferred	3.0	2.67	0.21	0.08
Lubambe Mine Total Resources				
Total Measured	5.8	2.58	0.35	0.15
Total Indicated	47.0	2.66	0.44	1.25
Total Measured and Indicated 2015	52.8	2.65	0.43	1.40
Total Measured and Indicated 2014	52.1	2.54	**	1.32
Total Inferred 2015	21.9	2.19	0.37	0.48
Total Inferred 2014	24.2	2.33	**	0.56

Cut-off grade 1.5% total copper (TCu) and minimum true thickness of 2 metres.
 The Measured and Indicated Mineral Resources are inclusive of those modified to produce Mineral Reserves.
 Totals are rounded off.
 * ASCu – Acid soluble copper.
 ** Not reported in 2014.



LUBAMBE COPPER MINE MINERAL RESOURCES CLASSIFICATION



LUBAMBE COPPER MINE: MINERAL RESERVES

	Mineral Reserves			
	Mt	TCu%	*ASCu%	Mt Contained Cu
South Limb				
Proved	3.2	2.12	0.36	0.07
Probable	18.9	1.99	0.32	0.38
Proved and Probable 2015	22.1	2.01	0.33	0.45
East Limb				
Proved	1.9	2.52	0.15	0.05
Probable	24.6	2.45	0.36	0.60
Proved and Probable 2015	26.5	2.46	0.34	0.65
Lubambe Mine Total Resources				
Total Proved 2015	5.1	2.27	0.28	0.12
Total Probable 2015	43.5	2.25	0.34	0.98
Total Reserves 2015	48.6	2.25	0.34	1.10
Total Reserves 2014	42.8	2.24	**	0.96

Cut-off grade 1.5% total copper (TCu) and minimum true thickness of 2 metres.

Modifying factors for the conversion of Mineral Resources to Reserves include: mining losses, mining dilution and pillar losses.

Totals are rounded off.

* ASCu – Acid soluble copper.

** Not reported in 2014.

ARM Copper continued

LUBAMBE EXTENSION AREA: MINERAL RESOURCES

	Mineral Resources			
	Mt	TCu%	*ASCu%	Mt Contained Cu
*Lubambe Extension Target Area				
Indicated 2015	90.0	3.73	0.56	3.36
Indicated 2014	90.0	3.73	0.56	3.36
Inferred 2015	44.0	4.78	0.29	2.10
Inferred 2014	44.0	4.78	0.29	2.10
Lubambe Extension (Outside Target Area)				
Inferred 2015	79.0	2.8	1.44	2.21
Inferred 2014	79.0	2.8	1.44	2.21

Cut-off grade 1.5% total copper (TCu) and minimum true thickness of 4 metres.

* Lubambe Extension Target Area is the area currently under feasibility studies and is a portion of the Lubambe Extension Area.

Totals are rounded off.

* ASCu – Acid soluble copper.

YEAR-ON-YEAR CHANGE

The Measured and Indicated Resources for Lubambe Copper Mine slightly increased from 52.1 to 52.8 million tonnes. The Mineral Reserves increased to 48.6 million tonnes at a grade of 2.25% TCu compared to 42.8 million tonnes at 2.24% TCu in 2014 due to an increase in mining extraction factors in some areas. Lubambe Extension Mineral Resources remained unchanged as no additional drilling was undertaken in the area.

HISTORICAL PRODUCTION AT LUBAMBE MINE (ROM)

Financial year	Mt
2011/2012	0.14
2012/2013	0.96
2013/2014	1.56
2014/2015	1.60



Stockpile at Lubambe Copper Mine

GOLD: Harmony

ARM owns 14.6% of Harmony's issued share capital. Harmony, South Africa's third largest gold producer, is separately run by its own management team. Mineral Resources and Reserves of the Harmony mines are the responsibility of the Harmony team and are published in Harmony's Annual Report.

