

Impala Operations (ex-mine) key statistics

		December 2017	December 2016	Var %
Mining revenue	(Rm)	6 685	7 078	(5.6)
Platinum		3 382	4 467	(24.3)
Palladium		1 747	1 396	25.1
Rhodium		784	356	120.2
Nickel		260	219	18.7
Other		512	640	(20.0)
Mining cost of sales		(7 811)	(8 362)	6.6
On-mine operations		(6 268)	(5 588)	(12.2)
Processing operations		(1 557)	(1 435)	(8.5)
Refining and selling operations		(338)	(304)	(11.2)
Corporate costs		(104)	(100)	(4.0)
Share-based payments		(23)	(68)	66.2
Depreciation		(1 380)	(1 219)	(13.2)
Increase in metal inventories		1 859	352	428.1
Mining gross profit		(1 126)	(1 284)	12.3
Royalty expense		(80)	(179)	55.3
Profit from metal purchased transactions		221	(14)	1 678.6
Sale of metals purchased		10 100	10 842	(6.8)
Cost of metals purchased		(9 881)	(10 859)	9.0
Change in metal inventories		2	3	(33.3)
Gross margin ex-mine	(%)	(16.8)	(18.1)	7.2
Sales volumes ex-mine				
Platinum	(000 oz)	266.2	318.7	(16.5)
Palladium		145.6	148.7	(2.1)
Rhodium		50.5	37.5	34.7
Nickel	(tonnes)	1 879	1 651	13.8
Sales volumes metals purchased – IRS				
Platinum	(000 oz)	382.6	417.0	(8.2)
Palladium		265.6	284.6	(6.7)
Rhodium		49.7	56.2	(11.6)
Nickel	(tonnes)	4 651	4 733	(1.7)
Prices achieved ex-mine				
Platinum	(US\$/oz)	940	1 001	(6.1)
Palladium	(US\$/oz)	896	672	33.3
Rhodium		1 147	677	69.4
Nickel	(US\$/t)	10 308	9 244	11.5
Exchange rate achieved ex-mine	(R/US\$)	13.46	14.00	(3.86)

Impala Operations (ex-mine) key statistics

		December 2017	December 2016	Var %
Production ex mine				
Tonnes milled	(000 t)	5 671	5 046	12.4
% UG2 milled	(%)	58.2	60.0	(3.0)
Development metres (total)	(metres)	50 681	43 227	17.2
Head grade (5PGE+Au)	(g/t)	4.05	4.15	(2.4)
Platinum in concentrate	(000 oz)	348.3	318.4	9.4
Platinum refined	(000 oz)	271.9	318.7	(14.7)
Palladium refined		159.8	148.7	7.5
Rhodium refined		43.0	43.9	(2.1)
Nickel refined	(000 t)	2 313	1 651	40.1
PGM refined production	(000 oz)	539.8	612.5	(11.9)
Total cost				
	(Rm)	8 267	7 427	(11.3)
	(US\$m)	617	529	(16.7)
per tonne milled*	(R/t)	1 458	1 472	1.0
	(US\$/t)	109	105	(3.8)
per PGM ounce refined*	(R/oz)	15 315	12 126	(26.3)
	(US\$/oz)	1 143	863	(32.4)
per platinum ounce refined*	(R/oz)	30 405	23 304	(30.5)
	(US\$/oz)	2 269	1 659	(36.8)
net of revenue received for other metals*	(R/oz)	18 257	15 111	(20.8)
	(US\$/oz)	1 363	1 076	(26.6)
Capital expenditure				
	(Rm)	1 442	1 197	20.5
	(US\$m)	108	85	26.3
Labour including capital at period end				
	(no)	41 914	41 383	(1.3)
Own employees		31 021	31 514	1.6
Contractors		10 893	9 869	(10.4)
Centares per panel man per month	(m ² /man)	22.0	20.2	8.9
Tonnes milled per employee costed**	(t/man/annum)	275.25	252.68	8.93

* Excluding share-based compensation.

** Average working cost employees.

Zimplats key statistics

		December 2017	December 2016	Var %
Revenue	(Rm)	3 834	3 352	14.4
Platinum		1 499	1 637	(8.4)
Palladium		1 379	994	38.7
Rhodium		231	110	110.0
Nickel		319	276	15.6
Other		406	335	21.2
Cost of sales		(2 872)	(2 889)	0.6
On-mine operations		(1 482)	(1 423)	(4.1)
Processing operations		(766)	(751)	(2.0)
Corporate costs		(190)	(200)	5.0
Share-based payments		(7)	(6)	(16.7)
Treatment charges		(31)	(16)	
Depreciation		(451)	(544)	17.1
Change in inventories		55	51	7.8
Gross profit/(loss)		962	463	107.8
Intercompany adjustment*		(327)	(65)	(403.1)
Adjusted gross profit		635	398	59.5
Royalty expense		(63)	(55)	(14.5)
Gross margin	(%)	25.1	13.8	81.9
Sales volumes in matte				
Platinum	(000 oz)	132.8	136.2	(2.5)
Palladium		110.5	112.0	(1.3)
Rhodium		11.5	11.9	(3.4)
Nickel	(t)	2 533	2 412	5.0
Prices achieved in matte				
Platinum	(US\$/oz)	842	855	(1.5)
Palladium		931	632	47.3
Rhodium		1 495	659	126.9
Nickel	(US\$/t)	9 405	8 145	15.5
Exchange rate achieved	(R/US\$)	13.40	14.04	(4.6)

* The adjustment relates to sales by Zimplats to the Implats Group which were still in the pipeline at period end.

Production

Zimplats key statistics

		December 2017	December 2016	Var %
Tonnes milled	(000 t)	3 333	3 306	0.8
Head grade (5PGE+Au)	(g/t)	3.49	3.48	0.3
Platinum in concentrate	(000 oz)	139.7	138.6	0.8
Platinum in matte	(000 oz)	136.2	137.1	(0.7)
Palladium in matte		112.8	112.2	0.5
Rhodium in matte		11.8	12.0	(1.7)
Nickel in matte	(t)	2 172	2 433	(10.7)
PGM in matte	(000 oz)	290.2	291.3	(0.4)
Total cost	(Rm)	2 438	2 374	(2.7)
	(US\$/t)	182	169	(7.7)
per tonne milled**	(R/t)	731	718	(1.8)
	(US\$/t)	55	51	(7.8)
per PGM ounce in matte**	(R/oz)	8 401	8 150	(3.1)
	(US\$/oz)	627	580	(8.1)
per platinum ounce in matte**	(R/oz)	17 900	17 316	(3.4)
	(US\$/oz)	1 336	1 233	(8.4)
net of revenue received for other metals**	(R/oz)	756	4 807	84.3
	(US\$/oz)	56	342	83.5
Capital expenditure	(Rm)	432	353	22.4
	(US\$m)	32.3	25.1	28.7
Labour including capital at period end	(no)	5 997	5 887	(1.9)
Own employees		3 159	3 029	(4.3)
Contractors		2 838	2 858	0.7
Tonnes milled per employee costed***	(t/man/annum)	1 242.6	1 246.5	(0.3)

** Excluding share-based compensation.

*** Average working cost employees.

Marula key statistics

		December 2017	December 2016	Var %
Revenue	(Rm)	1 242	971	27.9
Platinum		470	488	(3.7)
Palladium		530	356	48.9
Rhodium		172	76	126.3
Nickel		15	14	7.1
Other		55	37	48.6
Cost of sales		(1 174)	(1 144)	(2.6)
On-mine operations		(956)	(925)	(3.4)
Processing operations		(122)	(112)	(8.9)
Share-based payments		(2)	(5)	60.0
Treatment charges		(2)	(2)	–
Depreciation		(92)	(100)	8.0
Gross (loss)		68	(173)	139.3
Intercompany adjustment*		0	0	
Adjusted gross loss		68	(173)	139.3
Royalty expense		(36)	(25)	(44.0)
Gross margin	(%)	5.5	(17.8)	130.9
Sales volumes in concentrate				
Platinum	(000 oz)	43.7	41.6	5.0
Palladium		44.9	42.5	5.6
Rhodium		9.1	8.7	4.6
Nickel	(t)	130	133	(2.3)
Prices achieved in concentrate				
Platinum	(US\$/oz)	799	837	(4.5)
Palladium		861	603	42.8
Rhodium		1 363	622	119.1
Nickel	(US\$/t)	8 587	7 726	11.1
Exchange rate achieved	(R/US\$)	13.62	13.97	(2.5)

* The adjustment relates to sales by Marula to the Implats Group which were still in the pipeline at period end.

Marula key statistics

		December 2017	December 2016	Var %
Production				
Tonnes milled	(000 t)	941	909	3.5
Head grade (5PGE+Au)	(g/t)	4.36	4.42	(1.5)
Platinum in concentrate	(000 oz)	43.2	43.1	0.2
Palladium in concentrate		44.4	44.1	0.7
Rhodium in concentrate		9.0	8.9	1.1
Nickel in concentrate	(t)	129	137	(5.8)
PGM in concentrate	(000 oz)	113.3	112.7	0.5
Total cost				
	(Rm)	1 078	1 037	(4.0)
	(US\$m)	80	74	(8.1)
per tonne milled**	(R/t)	1 146	1 141	(0.4)
	(US\$/t)	86	81	(6.2)
per PGM ounce in concentrate**	(R/oz)	9 515	9 201	(3.4)
	(US\$/oz)	710	655	(8.4)
per platinum ounce in concentrate**	(R/oz)	24 954	24 060	(3.7)
	(US\$/oz)	1 862	1 713	(8.7)
net of revenue received for other metals**	(R/oz)	7 083	12 854	44.9
	(US\$/oz)	529	915	42.2
Capital expenditure				
	(Rm)	29	58	50.0
	(US\$m)	2.2	4.1	46.3
Labour including capital at period end				
	(no)	3 998	4 738	15.6
Own employees		3 280	3 626	9.5
Contractors		718	1 112	35.4
Centares per panel man per month	(m ² /man)	23.4	26.1	(10.3)
Tonnes milled per employee costed***	(t/man/annum)	484.7	392.0	23.6

** Excluding share-based compensation.

*** Average working cost employees.

Mimosa key statistics

		December 2017	December 2016	Var %
Revenue	(Rm)	1 905	1 788	6.5
Platinum		731	805	(9.2)
Palladium		568	436	30.3
Rhodium		74	42	76.2
Nickel		258	240	7.5
Other		274	265	3.4
Cost of sales		(1 593)	(1 777)	10.4
On-mine operations		(869)	(936)	7.2
Processing operations		(292)	(300)	2.7
Corporate costs		(87)	(80)	(8.8)
Treatment charges		(143)	(161)	11.2
Depreciation		(233)	(321)	27.4
Change in inventories		31	21	47.6
Gross profit		312	11	2 736.4
Royalty expense		(53)	(112)	52.7
Gross margin	(%)	16.4	0.6	2 633.3
Profit for the six months	(Rm)	156	124	25.8
50% attributable to Implats		78	62	25.8
Intercompany adjustment*		(11)	–	–
Share of profit in Implats Group		67	62	8.1
Sales volumes in concentrate				
Platinum	(000 oz)	57.4	57.2	0.3
Palladium		45.7	46.1	(0.9)
Rhodium		4.7	4.6	2.2
Nickel	(t)	1 674	1 572	6.5
Prices achieved in concentrate				
Platinum	(US\$/oz)	949	1 002	(5.3)
Palladium		929	673	38.0
Rhodium		1 160	647	79.3
Nickel	(US\$/t)	11 489	10 870	5.7
Exchange rate achieved	(R/US\$)	13.40	14.04	(4.6)

* The adjustment relates to sales by Mimosa to the Implats Group which were still in the pipeline at period end.

Mimosa key statistics

		December 2017	December 2016	Var %
Production				
Tonnes milled	(000 t)	1 407	1 366	2.9
Head grade (5PGE+Au)	(g/t)	3.85	3.83	0.5
Platinum in concentrate	(000 oz)	63.0	60.9	3.4
Palladium in concentrate		49.7	48.6	2.3
Rhodium in concentrate		5.5	5.2	5.8
Nickel in concentrate	(t)	1 835	1 717	6.9
PGM in concentrate	(000 oz)	133.7	129.8	3.0
Total cost				
	(Rm)	1 248	1 316	5.2
	(US\$/t)	93	94	0.6
per tonne milled	(R/t)	887	963	7.9
	(US\$/t)	66.2	68.6	3.5
per PGM ounce in concentrate	(R/oz)	9 334	10 139	7.9
	(US\$/oz)	697	722	3.5
per platinum ounce in concentrate	(R/oz)	19 810	21 609	8.3
	(US\$/oz)	1 479	1 539	3.9
net of revenue received for other metals	(R/oz)	1 175	5 468	78.5
	(US\$/oz)	88	389	77.5
Capital expenditure				
	(Rm)	263	248	6.0
	(US\$m)	19.6	17.7	10.7
Labour including capital				
	(no)	1 354	1 348	(0.5)
Own employees		1 354	1 348	(0.5)

Two Rivers key statistics

		December 2017	December 2016	Var %
Revenue	(Rm)	1 911	2 128	(10.2)
Platinum		864	1 089	(20.7)
Palladium		565	470	20.2
Rhodium		264	144	83.3
Nickel		41	40	2.5
Other		177	385	(54.0)
Cost of sales		(1 386)	(1 478)	6.2
On-mine operations		(1 016)	(960)	(5.8)
Processing operations		(209)	(217)	3.7
Treatment charges		(16)	(16)	–
Chrome costs		(26)	(117)	
Depreciation		(156)	(132)	(18.2)
Change in inventory		37	(36)	202.8
Gross profit		525	650	(19.2)
Royalty expense		(46)	(80)	42.5
Gross margin	(%)	27.5	30.5	(9.8)
Profit for the six months	(Rm)	336	402	(16.4)
46%/49%/45% attributable to Implats		155	197	(21.3)
Intercompany adjustment*		(36)	20	(280.0)
Share of profit in Implats Group		119	217	(45.2)
Sales volumes in concentrate				
Platinum	(000 oz)	82.2	94.8	(13.3)
Palladium		48.6	55.9	(13.2)
Rhodium		14.4	16.6	(13.2)
Nickel	(t)	294.4	318.1	(7.4)
Prices achieved in concentrate				
Platinum	(US\$/oz)	784	822	(4.7)
Palladium		868	602	44.3
Rhodium		1 369	619	121.1
Nickel	(US\$/t)	10 456	9 041	15.7
Exchange rate achieved	(R/US\$)	13.41	13.97	(4.0)

* The adjustment relates to sales from Two Rivers to the Implats Group which at year end was still in the pipeline.

Two Rivers key statistics

		December 2017	December 2016	Var %
Production				
Tonnes milled ex-mine	(000 t)	1 713	1 747	(1.9)
Head grade (5PGE+Au)	(g/t)	3.70	4.03	(8.2)
Platinum in concentrate	(000 oz)	83.4	96.7	(13.8)
Palladium in concentrate		49.6	56.8	(12.7)
Rhodium in concentrate		14.7	17.0	(13.5)
Nickel in concentrate	(t)	313	313	–
PGM in concentrate	(000 oz)	178.7	207.1	(13.7)
Total cost (excluding Chrome)				
	(Rm)	1 225	1 177	(4.1)
	(US\$/t)	91	84	(8.3)
per tonne milled	(R/t)	715	674	(6.1)
	(US\$/t)	53	48	(10.4)
per PGM ounce in concentrate	(R/oz)	6 855	5 683	(20.6)
	(US\$/oz)	512	405	(26.4)
per platinum ounce in concentrate	(R/oz)	14 688	12 172	(20.7)
	(US\$/oz)	1 096	867	(26.4)
net of revenue received for other metals	(R/oz)	2 446	2 637	7.2
	(US\$/oz)	183	188	2.8
Capital expenditure				
	(Rm)	226	175	29.1
	(US\$m)	17	12	41.7
Labour including capital				
	(no)	3 147	3 183	1.1
Own employees		2 405	2 414	0.4
Contractors		742	769	3.5

Note: These results have been equity accounted.

IRS key statistics

		December 2017	December 2016	Var %
Revenue	(Rm)	10 657	10 916	(2.4)
Platinum		4 781	6 069	(21.2)
Palladium		3 221	2 618	23.0
Rhodium		727	512	42.0
Nickel		666	693	(3.9)
Other		1 262	1 024	23.2
Cost of sales		(9 810)	(10 187)	3.7
Metals purchased		(9 840)	(9 504)	(3.5)
Processing operations		(289)	(212)	(36.3)
Refining and selling operations		(403)	(373)	(8.0)
Corporate costs		(53)	(52)	(1.9)
Depreciation		–	–	
Change in metal inventories		775	(46)	1 784.8
Gross profit		847	729	16.2
Metals purchased – adjustment on metal prices and exchange		(132)	(158)	16.5
Inventory – adjustment on metal prices and exchange		222	207	7.2
Gross profit in Implats Group		937	778	20.4
Metals purchased – fair value adjustment on metal prices		(296)	59	(601.7)
Metals purchased – foreign exchange adjustment		428	99	332.3
Gross margin	(%)	7.9	6.7	17.9
Revenue	(Rm)	10 657	10 916	(2.4)
Direct sales to customers		17	17	–
Sales to Impala		10 184	10 600	(3.9)
Toll income – external		423	281	50.5
Toll income – intercompany		33	18	83.3
Total sales volumes				
Platinum	(000 oz)	382.6	417.0	(8.2)
Palladium		265.6	284.6	(6.7)
Rhodium		49.7	56.2	(11.6)
Nickel	(t)	4 771	4 853	(1.7)
Prices achieved				
Platinum	(US\$/oz)	938	1 024	(8.4)
Palladium		910	648	40.4
Rhodium		1 091	639	70.7
Nickel	(US\$/t)	10 463	10 084	3.8
Exchange rate achieved	(R/US\$)	13.33	14.21	(6.2)
Refined production				
Platinum	(000 oz)	454.8	459.8	(1.1)
Palladium		246.1	319.8	(23.0)
Rhodium		55.8	47.5	17.5
Nickel	(t)	5 594	6 632	(15.7)
PGM refined production	(000 oz)	893.8	940.7	(5.0)
Metal returned				
Platinum	(000 oz)	115.7	0.0	–
Palladium		55.0	0.0	–
Rhodium		19.4	0.0	–
Nickel	(t)	1 765	1 596	10.6