Going underground

Mineral resources and ore reserves

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Delivery
is the
only
thing
that
matters
HARMONY

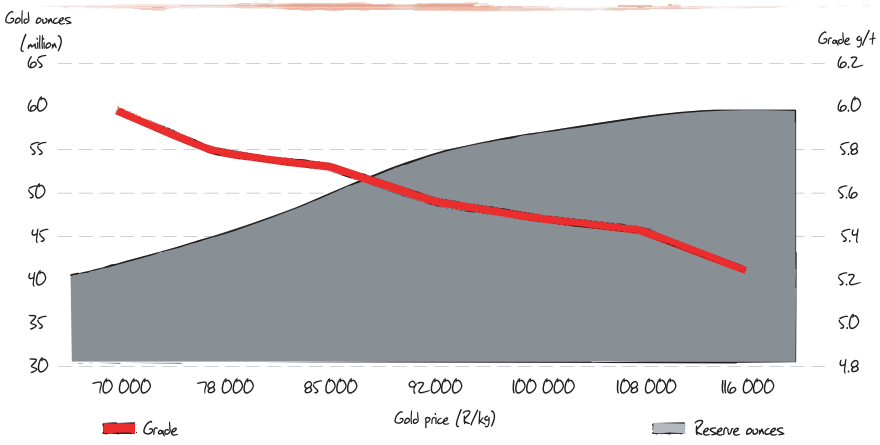
Despite mining 3.1 million mill-delivered ounces in FY2005 and the implementation of a wide-ranging restructuring of our South African operations, Harmony's ore reserves declined by only 13% during the course of the year. As of 30 June 2005, Harmony reported mineral resources of 528.6 million ounces and ore reserves of 54.1 million ounces which includes 9.7 million ounces that is below infrastructure. The measured and indicated mineral resources are inclusive of those mineral resources modified to produce the ore reserves. The ore reserves are reported as mill delivered tonnes at the grade delivered to the mill. There was a marginal increase in the mineral resources owing to the success of geological and geostatistical modelling at Target and an increase in grades at Masimong and Hidden Valley.

Ore reserves reconciliation 2004/2005

The year-on-year comparison alongside reconciles the end-June 2004 ore reserves declaration of Harmony to that at end-June 2005. The gold price used to state our reserves is unchanged at R92 000 per kilogram and continues to be our expectation of the sustainable gold price in real terms. The gold price used is a combination of long-term predictions of US$380 per ounce and an exchange rate of R7.53 per US dollar.

The most significant component of the decrease in our ore reserves arises from the restructuring and downscaling of certain of the South African operations and the consequent downgrade of 3.1 million ounces from ore reserves to mineral resources. Depletion accounts for another 3.1 million ounces. In addition, follow up work carried out in late 2004 resulted in a restatement of the Rolspruit ore reserves which decreased by 2.4 million ounces and the downgrade of 0.7 million ounces of reserves to inferred resources in life-of-mine at Masimong. On the positive side, exploration and more detailed mine planning for the future resulted in the addition of 1.1 million ounces to ore reserves.

Ore reserve sensitivities



The graph shows ore reserve sensitivities to changing gold price below and above R92 000 per kilogram. Note that these sensitivities are approximations only and, accordingly, at different gold prices alternative mining strategies may be persued to exploit payable material in a more optimal manner.

Year-on-year reconciliation of our ore reserves

	Gold (tonnes)	Gold (million ounces)
Balance at June 2004	1 936	62.2
Re-statements	(96)	(3.1)*
Mined during FY2005	(96)	(3.1)**
Less impact of re-structuring shafts	(93)	(3.0)
Added through exploration	33	1.1
Balance at June 2005	1 684	54.1

*Exclusive of deplition.
** Ounces based on ROM grades

Of the company's 54.1 million ounces of ore reserves, 44.4 million ounces are classified as current reserves (above infrastructure) while the balance of 9.7 million ounces is classified as below infrastructure, ie reserves for which the capital expenditure has yet to be approved.

At certain operations in Evander and the Free State, which have aggregate above infrastructure ore reserves totalling 10.1 million ounces, Harmony will have to deliver on its past restructuring plans to drive down the long-term cost structure to levels below those pertaining at the present time in order for those operations to remain profitable at a long-term gold price of R92 000 per kilogram.

Reporting Code

The SAMREC Code, which sets out the internationally recognised procedures and standards for reporting of mineral resources and reserves in South Africa, has been used for the declaration of the Harmony's South African ore reserves and mineral resources. This code was developed by the South African Institute of Mining and Metallurgy and is the recommended guideline for reserve and resource reporting for companies listed on the JSE Limited. (See framework on page 49.)

Harmony's Australian and PNG mineral resources and ore reserves are compliant with the Australian Code for the Reporting of Mineral Resources and Ore Reserves (JORC code) of the Australian Institute of Mining and Metallurgy with respect to the reporting of reserves and resources.

In reporting of reserves, cognisance has been taken of Industry Guide 7 of the United States Securities Exchange Commission.

Harmony uses the term 'ore reserves,' which has the same meaning as 'mineral reserves', as defined in the SAMREC code.

Definitions as per the SAMREC code

Mineral resources

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, estimated from specific geological evidence and knowledge, or interpreted from a well-constrained and portrayed geological model. Mineral resources are sub-divided in order of increasing confidence in respect of geoscientific evidence, into inferred, indicated and measured categories.

An **inferred mineral resource** is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or 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 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 exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

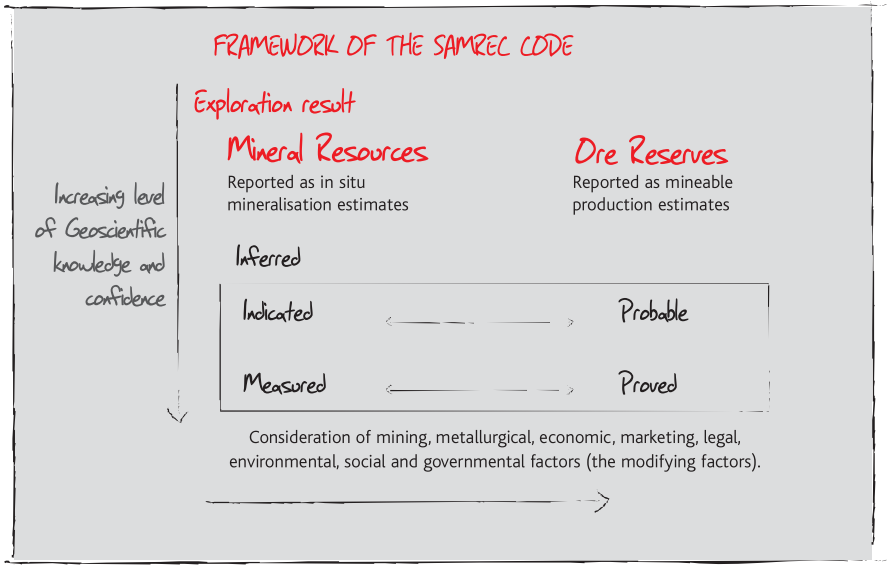
A **measured mineral resource** is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

Mineral (ore) reserves

A **mineral reserve** is the economically mineable material derived from a measured and/or indicated mineral resource. It is inclusive of diluting materials and allows for losses that may occur when the material is mined. Mineral reserves are sub-divided in order of increasing confidence into probable mineral reserves and proven mineral reserves.

The **probable mineral reserve** is the economically mineable material derived from the indicated mineral resource. It is estimated with a lower level of confidence than a proven mineral reserve, is inclusive of diluting materials and allows for losses that may occur when the material is mined.

The **proven mineral reserve** is the economically mineable material derived from the measured mineral resource and is estimated with a high level of confidence. It is inclusive of diluting materials and allows for losses that may occur when the material is mined.



Harmony reporting in compliance with SAMREC

The Harmony mineral resources and reserves, subdivided between underground- and open pit, and surface stockpiles as reported within the framework of the SAMREC code, are shown overleaf.

- The mineral resources have been estimated on the basis of geoscientific knowledge with input from the company's ore reserve managers, geologists and geostatistical staff. Each mine's mineral resources are categorised, blocked-out, and ascribed an estimated value. The majority of mines use computerised estimation processes. Manual valuation techniques which are used at Orkney and St Helena mines are being phased out. The mineral resources are reported at a cut-off grade of 250 cmg/t (approximately 2g/t) which relates to a $1 000 per ounce gold price and exchange rate of R7.53 per US dollar (R242 000 per kilogram) .
- In order to define that portion of a measured and indicated mineral resource that can be converted to a proven and probable ore reserve, Harmony applies the concept of a cut-off grade. This is done by defining the optimal cut-off as the lowest grade at which an orebody can be mined such that the total profits, under a specified set of mining parameters, are maximised. The cut-off grade is determined using the company's Optimiser computer programme which requires the following as input:
  - the database of measured and indicated resource blocks (per shaft section); an assumed gold price which, for this ore reserve statement, was taken as R92 000 per kilogram; planned production rates; the mine recovery factor (MRF) which is equivalent to the mine call factor multiplied by the plant recovery factor; and planned cash operating costs (rand per tonne). Rand per tonne cash operating costs are historically based but take cognisance of distinct changes in the cost environment such as restructuring, right-sizing, and other cost reduction initiatives, and for below infrastructure ounces, a capex estimate.

HARMONY'S RESERVES AND RESOURCES

Underground, open pits and projects (including ounces below infrastructure at Poplar and Rolspruit of 9.7 million ounces)

Increasing level of geoscientific knowledge and confidence

Mineral resources (total)

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
3 691	4.31	15 918	511 784

Reported as in situ mineralisation estimates

Ore reserves (total)

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
265	6.28	1 664	53 527

Reported as mineable production estimates

Inferred

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
2 526	3.83	9 666	310 792

Indicated

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
849	5.14	4 369	140 458

Probable

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
202	6.37	1 286	41 361

Measured

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
316	5.95	1 883	60 534

Proven

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
63	6.02	378	12 166

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors).

Surface stockpile

Increasing level of geoscientific knowledge and confidence

Mineral resources (total)

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
1 775	0.30	524	16 862

Reported as in situ mineralisation estimates

Ore reserves (total)

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
37	0.52	19	613

Reported as mineable production estimates

Inferred

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
1,342	0.26	353	11 383

Indicated

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
378	0.39	146	4 688

Probable

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
10	0.72	7	223

Measured

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
55	0.45	25	791

Proven

Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
27	0.45	12	390

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors).

NB: Rounding of figures may result in slight computational discrepancies

The ore reserves represents that portion of the measured and indicated resources above cut-off in the life-of-mine plan and have been estimated after consideration of the factors affecting extraction, including mining, metallurgical, economic, marketing, legal, environmental, social, and governmental factors. A range of disciplines which includes geology, survey, planning, mining engineering, rock engineering, metallurgy, financial management, and environmental management have been involved at each mine in the life-of-mine planning process and the conversion of resources into reserves.

The oreflow-related modifying factors used to convert the mineral resources to ore reserves through the life-of-mine planning process are stated for each individual shaft. For these factors, 18 month historical information is used, except if there is a valid reason to do otherwise.

Because of depth and rock engineering requirements, some shafts design stope support pillars into their mining layouts which accounts for 7% to 10% discounting. A further 15% discounting is applied as a life-of-mine factor to provide for unpay and off-reef mining. In general, the life-of-mine plan extraction factors do not exceed 85%, and is reflected in the ore reserves.

Auditing

Independent consultant SRK has reviewed the Harmony January 2005 Mineral Resource and Ore Reserves statement. While Harmony's statement reported 55.6 million ounces of reserves, SRK reported 52.2 million ounces. This difference is explained by the differences of opinion with regards to vamping, resource classification, and extraction factors.

The Harmony Resources and Reserves as reported at June 2005 have been audited comprehensively by a team of Harmony competent persons.

Competent persons declaration

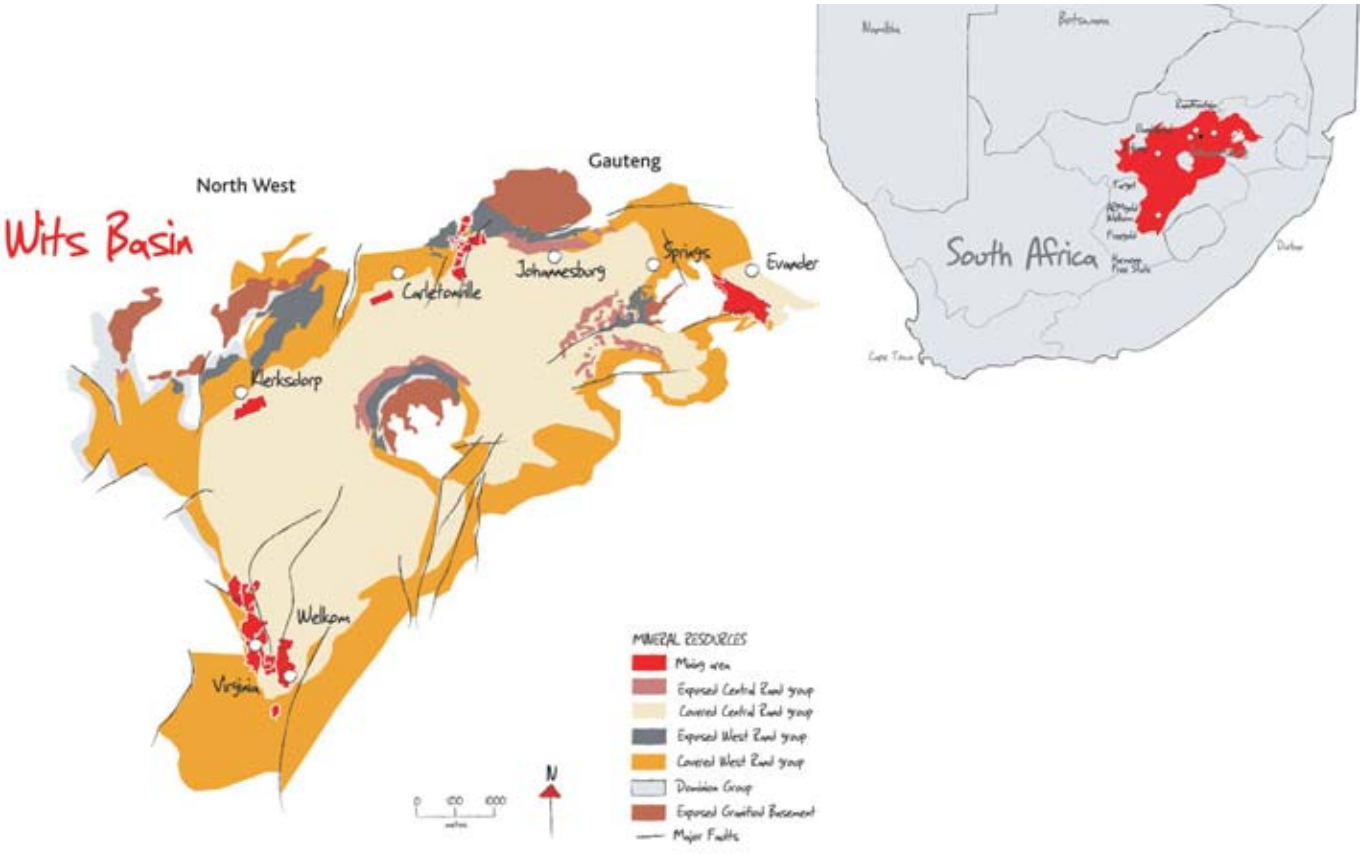
The competent person responsible for the preparation of the company's mineral resources and ore reserves is Jaco Boshoff (Pr.Sci.Nat.) for South Africa. For Australasia, the Competent Persons are Greg Job for the South Kal mines, Scott Huffadine for Mt Magnet and Alf Gilman for Northern Territories and Papua New Guinea.

Ore Resources and Mineral Reserves statement per tax entity

The tables in this section reports the company's mineral resources and ore reserves as at 30 June 2005.

Witwatersrand Basin, South Africa

The Witwatersrand Basin has been filled by a 6 kilometres thick succession of sedimentary rocks, situated on the Kaapvaal Craton, and extending laterally for hundreds of kilometres. The majority of the ore resources tend to be concentrated on one or two unconformaties with a minority of the resources being spread over the other unconformaties (reefs). Mining that has taken place is mostly deep-level underground mining, exploiting the narrow, generally shallow dipping tabular reefs.



Free State operations

GEOLOGY: These operations, which originally exploited the Basal Reef, have also begun mining secondary reefs. Harmony 2 Mine is continuing to mine Basal Reef pillars, but the majority of its production comes from the A Reef, located 140 metres above. The A Reef is highly channelised and mining is confined to these distinct channels. Dips are shallow towards the east, becoming steeper approaching the De Bron Fault in the west. Merriespruit 1 and 3 Mines are exploiting the Basal and Leader reefs, as well as locally developed Middle Reef pockets. Dips tend to be at 20 degrees to the north with very little structure apart from the De Bron Fault in the west. At Unisel, Basal, Middle and Leader reefs are mined, with reefs dipping 30 degrees to the east. The structure is complex due to a number of north-south trending faults as well as sills close to the Basal Reef. Brand 3 Mine is mining Basal pillars together with the A Reef. The structure is dominated by north-south trending faults, often with lateral shift. Brand 2 and 5 have extensive Basal and Leader Reefs, located between the north-south trending Dagbreek and Stuirenenspen faults. The Masimong shafts exhibit intense faulting due to a number of north-south trending faults parallel to the Homestead fault in the west. Reef dips are mainly to the south-east, varying from 5 to 35 degrees. Masimong 5 Mine is currently mining Basal Reef as well as the B Reef. The B Reef is characterised by complex sedimentologically-controlled gold mineralisation within a wide east-west trending channel, which cuts through the lease area. Within this channel, very high grade gravel bars containing abundant kerogen and visible gold were deposited. Masimong 4 and Saaiplaas 3 have mined Basal and A Reef. Mining is dominated by faulting, which results in strong dips (50 degrees) in the west.

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Harmony 2	5.2	5.35	27.7	890	2.3	2.67	6.0	194	54.7	2.06	112.4	3 615	62.1	2.35	146.2	4 699
Merriespruit 1	11.7	3.96	46.5	1 494	14.0	3.56	50.0	1 607	14.0	3.46	48.3	1 553	39.7	3.64	144.8	4 655
Merriespruit 3	11.2	3.72	41.7	1 341	11.7	3.75	43.9	1 413	17.5	3.74	65.7	2 111	40.5	3.74	151.3	4 865
Unisel	10.8	4.68	50.6	1 628	10.5	4.06	42.5	1 366	60.6	3.85	233.6	7 511	81.9	3.99	326.8	10 505
Brand 2	2.0	5.73	11.7	378	0.6	4.52	2.6	83	0.0	0.00	0.0	0	2.6	5.47	14.3	461
Brand 3	4.5	3.68	16.5	530	3.2	3.47	11.1	355	8.9	3.06	27.1	870	16.5	3.31	54.6	1 755
Brand 5	3.9	5.22	20.5	658	2.5	3.88	9.9	317	14.2	4.08	57.8	1 858	20.6	4.27	88.1	2 833
Masimong 5	4.7	6.91	32.3	1 038	18.8	5.81	109.0	3 503	178.2	4.39	782.3	25 153	201.6	4.58	923.6	29 694
Masimong 4	4.0	5.68	22.9	736	4.7	5.68	26.7	859	155.0	2.60	403.6	12 977	163.7	2.77	453.3	14 572
Saaiplaas 3	6.4	6.05	38.6	1 241	2.8	6.53	18.3	589	38.9	5.36	208.6	6 705	48.1	5.52	265.5	8 536
Total underground	64.5	4.79	309.0	9 934	71.1	4.50	320.0	10 288	541.8	3.58	1 939.4	62 352	677.3	3.79	2 568.3	82 575
Surface stockpile	21.9	0.41	9.0	289	2.9	0.48	1.4	45	391.8	0.26	100.4	3226	416,6	0.27	110.8	3 561
Grand total	86.4		318.0	10 223	74.0		321.4	10,333	933.6		2 039.7	65 578	1 094.0		2 679.1	86 135

Modifying factors

Mine area	Gold price (R/kg)	MCF (%)	SW (cm)	MW (cm)	EP (%)
Harmony 2	92 000	69	184	188	84.5
Merriespruit 1	92 000	70	174	187	85.8
Merriespruit 3	92 000	70	215	246	49.0
Unisel	92 000	83	177	188	84.4
Brand 3	92 000	76	179	191	85.4
Masimong 5	92 000	80	135	170	85.4
Surface stockpile	92 000	100			

MCF = Mine call factor
SW = Stoping width
MW = Milling width
EP = Extraction percentage

Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Harmony 2	0.5	5.57	2.8	89	0.2	3.19	0.6	19	0.7	4.92	3.3	108
Merriespruit 1	2.9	4.00	11.5	369	2.2	4.10	9.1	293	5.1	4.04	20.6	662
Merriespruit 3	0.9	3.70	3.3	105	1.2	3.71	4.6	147	2.1	3.70	7.8	252
Unisel	2.8	5.11	14.3	460	2.4	5.10	12.2	394	5.2	5.10	26.6	854
Brand 3	0.6	5.14	3.1	98	0.5	4.54	2.4	78	1.1	4.85	5.5	176
Masimong 5	2.8	6.23	17.6	567	9.5	5.11	48.6	1 562	12.3	5.37	66.2	2 129
Total underground	10.5	5.01	52.5	1 689	16.1	4.82	77.5	2 491	26.6	4.90	130.0	4 180
Surface stockpile	21.9	0.41	9.0	289	2.6	0.47	1.2	39	24.5	0.42	10.2	328
Grand total	32.4		61.5	1 978	18.7		78.7	2 531	51.1		140.2	4 509

Freegold operations

GEOLOGY: The mines of the Freegold operations -Tshepong, Phakisa, Bambanani, West, Kudu, Sable, Nyala, Eland and St Helena - are located to the north and west of Welkom, while Joel Mine is situated 30 kilometres to the south. Joel is mining the shallow flat-dipping Beatrix/VS5 reef; the other mines primarily exploit the Basal Reef. Limited mining has taken place on Leader Reef, A Reef and B Reef in the past. Kudu, Sable, Nyala, Eland and St Helena are characterised by intense faulting, especially towards the western margin. Tshepong, Phakisa, West and Bambanani are cut by the regional north-south trending faults and, mostly, have shallow dips to the east. B Reef is currently being mined at Tshepong and the potential for it to be exploited elsewhere is being ascertained.

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Bambanani	12.4	9.68	119.9	3 854	21.8	6.00	131.0	4 212	53.5	4.27	228.5	7 345	87.7	5.47	479.3	15 412
Tshepong	8.2	12.62	103.3	3 323	24.8	10.50	260.2	8 364	61.7	7.29	449.7	14 457	94.6	8.59	813.2	26 144
Phakisa	0.0	0.00	0.0	0	20.3	10.78	218.7	7 031	51.6	9.39	484.1	15 563	71.9	9.78	702.7	22 593
West Shaft	9.0	4.38	39.3	1 264	11.9	2.49	29.7	955	38.7	2.00	77.6	2 494	59.6	2.46	146.6	4 713
Eland Shaft	3.7	8.89	33.0	1 060	2.9	5.74	16.5	531	44.4	4.04	179.6	5 776	51.0	4.49	229.1	7 367
Sable/Kudu	8.5	5.01	42.4	1 364	5.0	5.27	26.3	846	41.0	3.08	126.3	4 059	54.4	3.58	195.0	6 269
Nyala Shaft	6.4	6.03	38.5	1 237	4.0	4.62	18.6	599	84.2	3.65	307.6	9 891	94.6	3.86	364.8	11 727
St Helena 2 Shaft	1.5	6.82	9.9	318	6.6	3.71	24.5	788	1.8	3.31	5.9	189	9.8	4.10	40.3	1 295
St Helena 4 Shaft	6.2	5.06	31.3	1 005	2.4	4.82	11.8	379	8.8	4.29	38.0	1 220	17.5	4.64	81.0	2 604
St Helena 8 Shaft	4.9	6.30	30.9	992	1.2	4.49	5.2	168	4.5	4.87	22.2	713	10.6	5.49	58.3	1 873
St Helena 10 Shaft	0.9	3.33	3.1	101	4.0	3.89	15.7	505	18.6	4.09	76.0	2 443	23.6	4.03	94.8	3 049
Joel	5.3	5.68	30.2	970	4.4	5.55	24.6	790	26.6	3.61	96.1	3 091	36.4	4.15	150.9	4 851
Total underground	**66.9**	**7.20**	**481.7**	**15 488**	**109.4**	**7.16**	**782.8**	**25 167**	**435.3**	**4.80**	**2 091.4**	**67 240**	**611.6**	**5.49**	**3 355.9**	**107 897**
Surface stockpile	2.5	0.42	1.0	33	26	0.50	13.2	425	548.7	0.27	145.4	4 675	577.4	0.28	159.7	5 133
Grand total	**69.4**		**482.8**	**15 521**	**135.6**		**796.0**	**25 592**	**984.0**		**2 236.8**	**71 916**	**1 189.0**		**3 515.6**	**113 030**

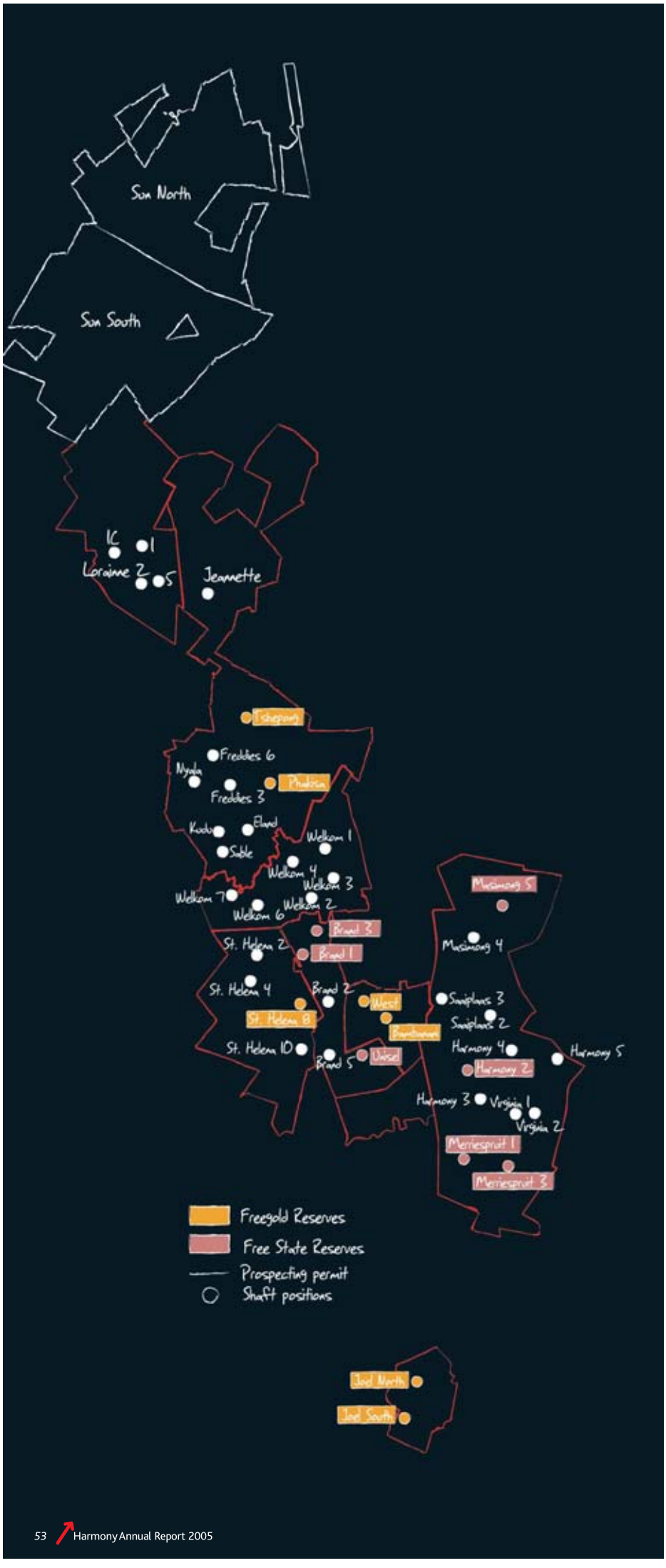
Modifying factors

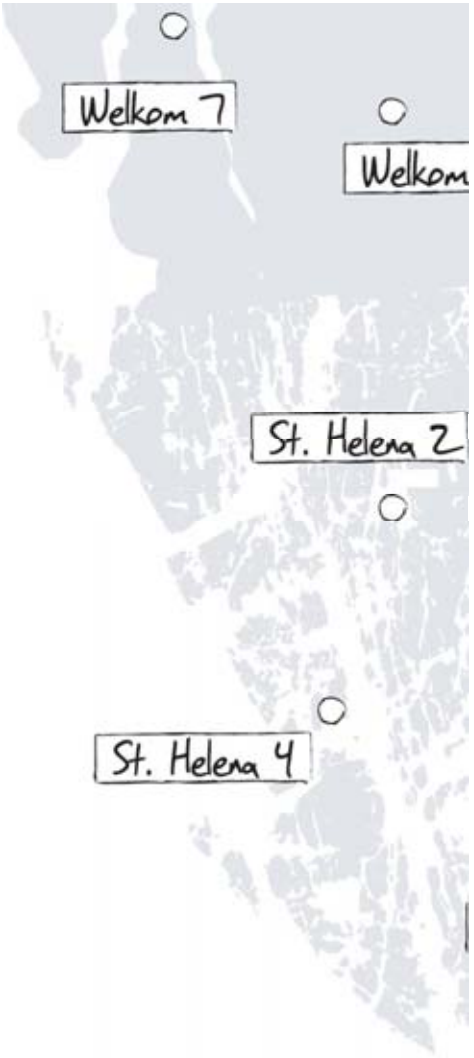
Mine area	Gold price (R/kg)	MCF (%)	SW (cm)	MW (cm)	EP (%)
Bambanani	92000	85	179	209	76.4
West	92000	80	158	155	76.0
Phakisa	92000	83	100	127	76.0
Tshepong	92000	77	102	138	78.0
St Helena 8	92000	88	182	227	55.7
Joel	92000	80	148	156	82.6
Surface stockpile	92000	100			

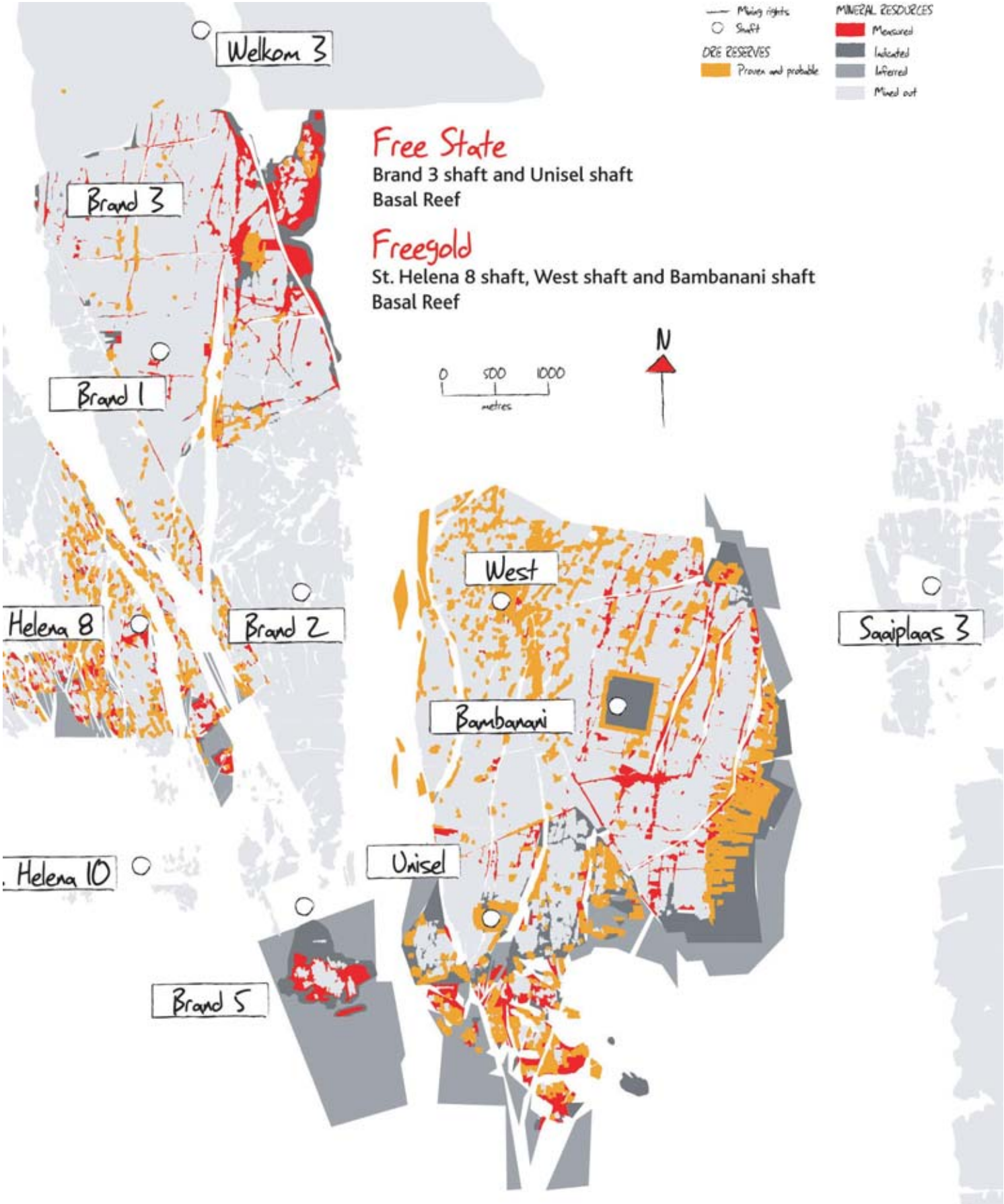
MCF = Mine call factor
SW = Stoping width
MW = Milling width
EP = Extraction percentage

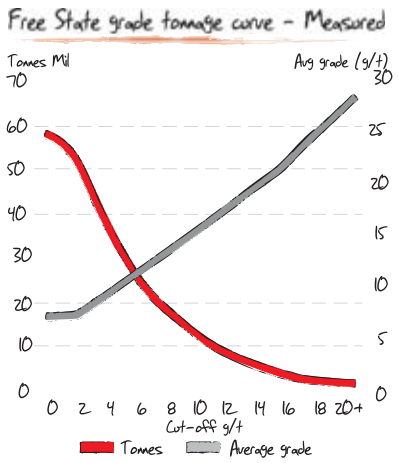
Ore reserves

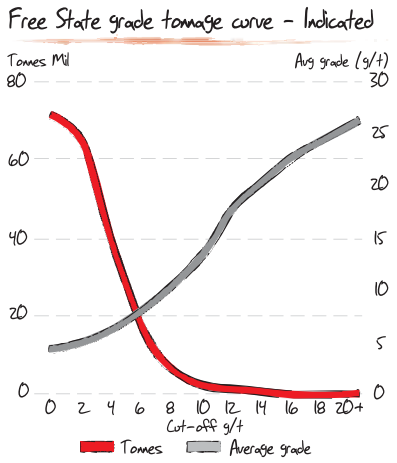
	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Bambanani	4.7	8.25	38.9	1 252	4.8	7.78	37.7	1 212	9.6	8.01	76.6	2 464
West	1.2	6.43	7.8	250	0.2	6.34	1.2	40	1.4	6.42	9.0	290
Phakisa	0.0	0.00	0.0	0	16.7	7.38	123.1	3 959	16.7	7.38	123.1	3 959
Tshepong	7.5	6.77	51.11	1 643	19.0	7.21	136.8	4 397	26.5	7.09	187.9	6 041
St Helena 8	1.2	5.23	6.5	208	0.2	4.67	1.0	31	1.4	5.15	7.4	239
Joel	0.7	4.58	3.0	96	1.3	4.13	5.2	168	1.9	4.28	8.2	264
Total underground	**15.4**	**6.98**	**107.3**	**3 449**	**42.2**	**7.23**	**305.0**	**9 807**	**57.5**	**7.17**	**412.3**	**13 257**
Surface stockpile	2.5	0.42	1.0	33	6.4	0.77	4.9	157	8.8	0.67	5.9	191
Grand total	**17.8**		**108.3**	**3 482**	**48.5**		**309.9**	**9 964**	**66.4**		**418.2**	**13 446**

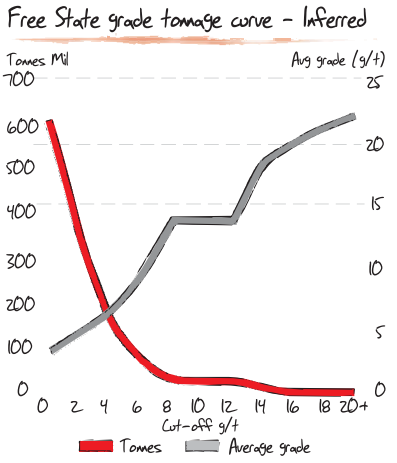

Sun North
Sun South
IC
1
Lorraine 2
5
Jeannette
Freddies 6
Nyala
Freddies 3
Phakisa
Kudu
Eland
Sable
Welkom 1
Welkom 4
Welkom 3
Welkom 7
Welkom 6
Welkom 2
Brand 3
St. Helena 2
Brand 1
St. Helena 4
Brand 2
St. Helena 8
West
St. Helena 10
Brand 5
Unisel
Masimong 5
Masimong 4
Saaiplaas 3
Saaiplaas 2
Harmony 4
Harmony 5
Harmony 2
Harmony 3
Virginia 1
Virginia 2
Merriespruit 1
Merriespruit 3
Freegold Reserves
Free State Reserves
Prospecting permit
Shaft positions
Joel North
Joel South

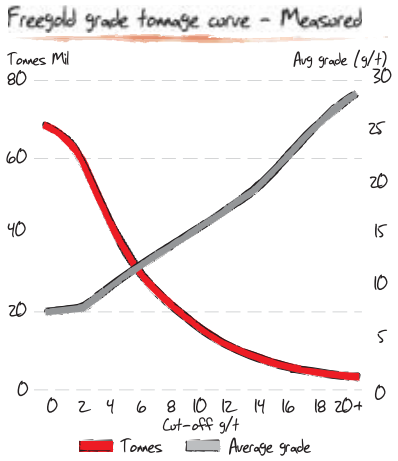

Welkom 7
Welkom
St. Helena 2
St. Helena 4

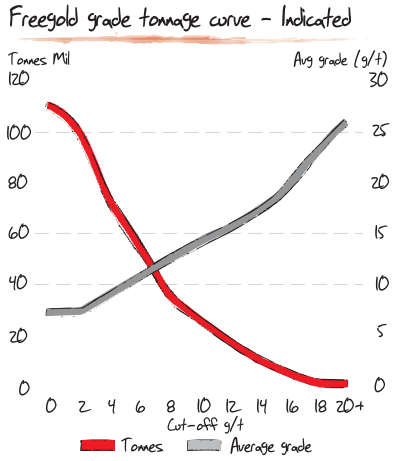

Mining rights
Shaft
ORE RESERVES
Proven and probable
MINERAL RESOURCES
Measured
Indicated
Inferred
Mined out
Welkom 3
Free State
Brand 3 shaft and Unisel shaft
Basal Reef
Brand 3
Freegold
St. Helena 8 shaft, West shaft and Bambanani shaft
Basal Reef
Brand 1
0
500
1000
metres
N
West
Helena 8
Brand 2
Saaiplaas 3
Bambanani
Helena 10
Unisel
Brand 5

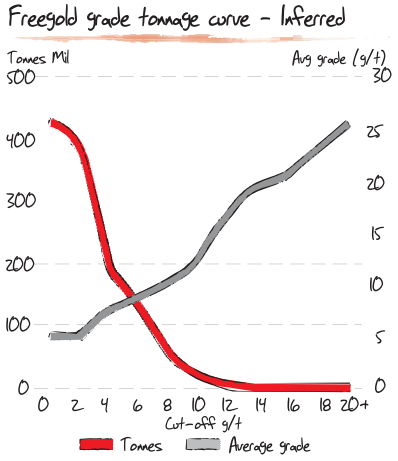






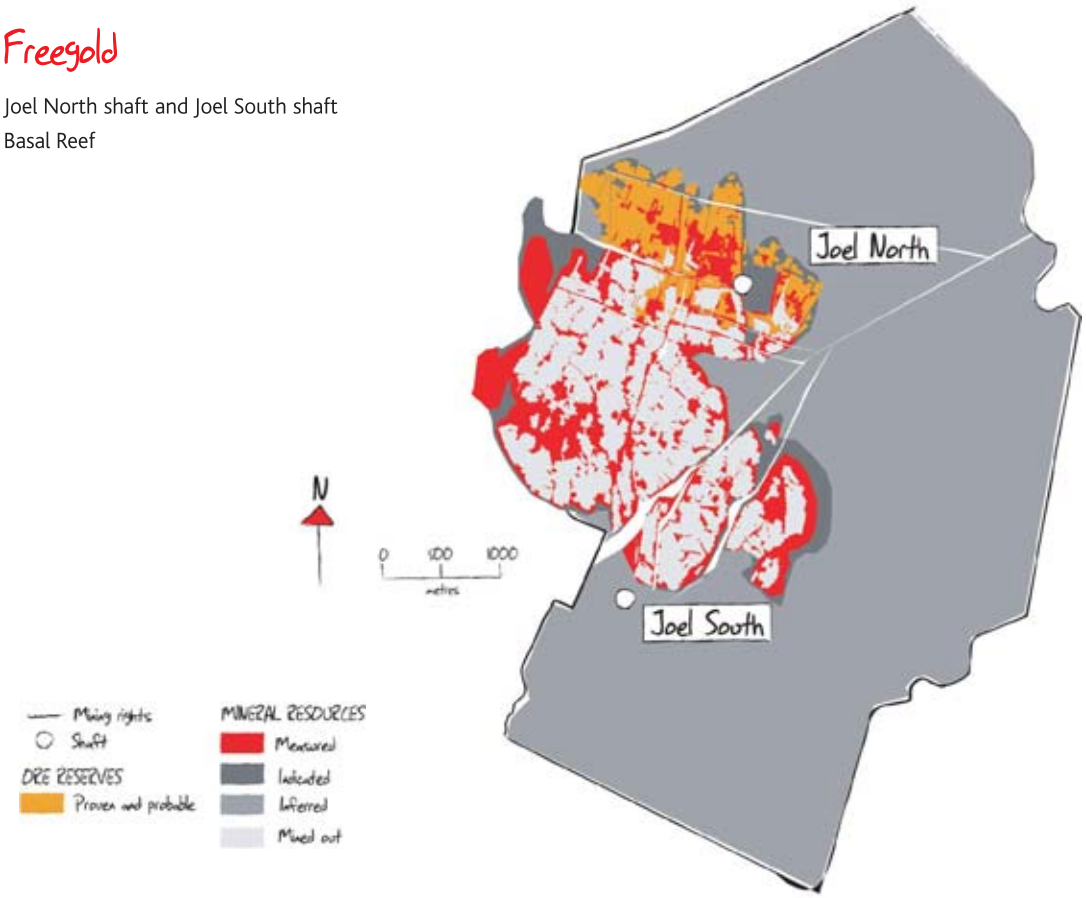






Freegold

Joel North shaft and Joel South shaft
Basal Reef

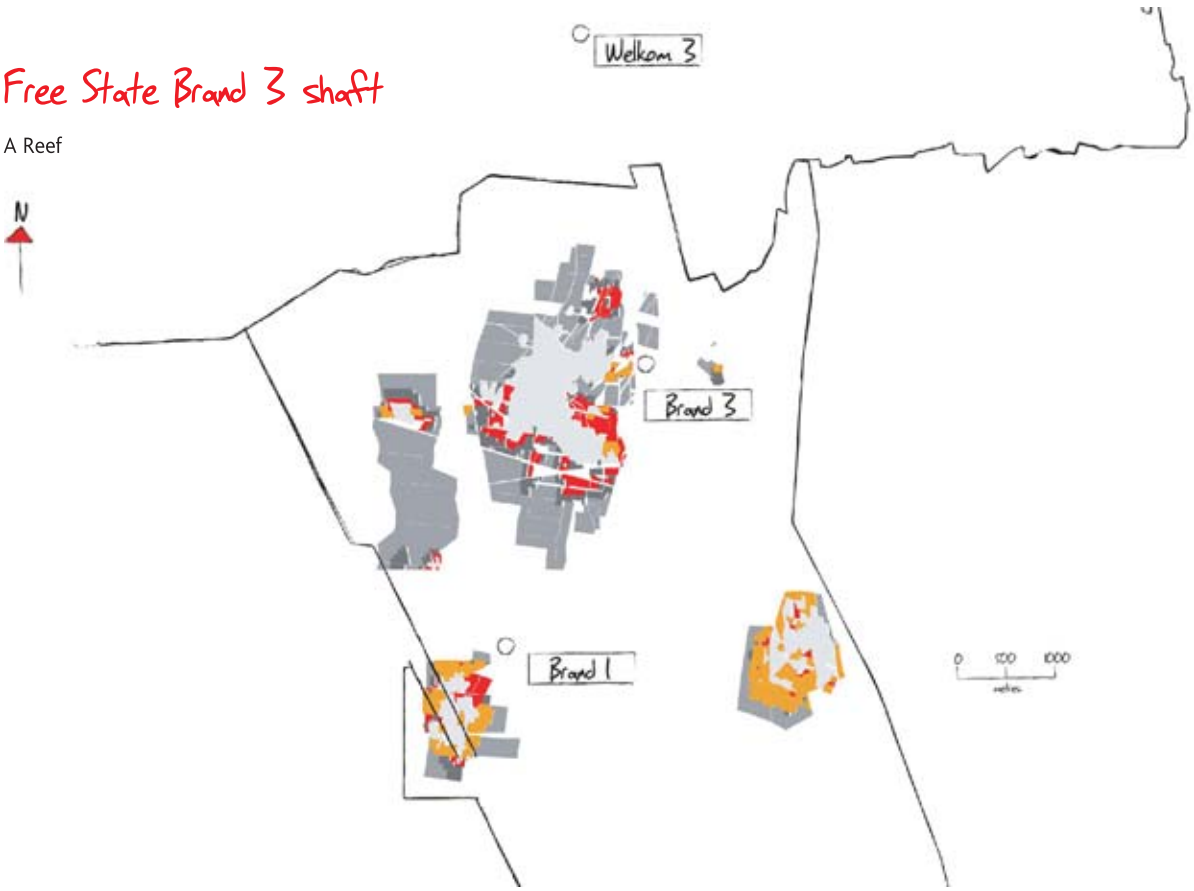


Free State

Masimong 5 shaft, Masimong 4 shaft

Free State Brand 3 shaft

A Reef



Evander operations

GEOLOGY: The Evander Basin is a tectonically preserved sub-basin outside the main Wits Basin, and forms an asymmetric syncline, plunging to the north-east. It is structurally complex, with a series of east-north-east striking normal faults, and in the south-east margin of the basin, vertically to locally overturned reef is present. The only economic reef horizon exploited in the Evander Basin is the Kimberley Reef. The Intermediate Reef is generally poorly mineralised, except where it erodes the subcropping Kimberley Reef in the south and west of the Basin.

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Evander 2	4.4	8.11	35.3	1 136	2.1	8.25	17.3	555	30.4	7.94	241.0	7 749	36.8	7.97	293.6	9 440
Evander 3	1.0	8.59	8.5	274	0.3	6.76	1.8	59	7.4	9.33	68.6	2 205	8.6	9.16	79.0	2 539
Evander 5	3.5	7.64	26.6	855	2.1	6.56	13.7	441	4.9	8.63	42.5	1 367	10.5	7.89	82.8	2 663
Evander 6 Upper	0.0	0.00	0.0	0	0.0	0.00	0.0	0	1.8	6.36	11.3	363	1.8	6.36	11.3	363
Evander 6 Lower	0.5	19.30	9.2	296	0.5	16.96	8.2	263	17.1	7.29	124.8	4 012	18.1	7.86	142.2	4 572
Evander 7	11.6	5.79	67.0	2 155	5.2	8.13	42.3	1 358	32.4	4.20	136.3	4 381	49.2	4.99	245.5	7 894
Evander 8	4.3	7.46	32.4	1 041	37.0	6.94	256.9	8 259	58.4	4.89	285.6	9 183	99.7	5.77	574.9	18 484
Evander 9	5.6	5.41	30.0	966	1.7	4.51	7.5	241	33.5	6.83	228.5	7 347	40.7	6.54	266.1	8 554
Sub Total	30.8	6.79	209.1	6 724	48.8	7.12	347.7	11 178	185.8	6.13	1 138.6	36 607	265.4	6.39	1 695.4	54 510
Projects (Below infrastructure)																
Rolspruit	0.0	0.00	0.0	0	29.1	11.59	337.4	10 847	52.8	2.71	142.9	4 593	81.9	5.87	480.3	15 441
Poplar	0.0	0.00	0.0	0	28.2	6.89	194.0	6 237	0.0	0.00	0.0	0	28.2	6.89	194.0	6 237
Sub total	0.0	0.00	0.0	0	57.3	9.28	531.4	17 084	52.8	2.71	142.9	4 593	110.0	6.13	674.3	21 678
Total underground	**30.8**	**6.79**	**209.1**	**6 724**	**106.1**	**8.29**	**879.1**	**28 262**	**238.6**	**5.37**	**1281.5**	**41 201**	**375.5**	**6.31**	**2 369.7**	**76 188**
Surface stockpile	0.0	0.00	0.0	0	214.2	0.33	71.0	2 284	1.0	0.30	0.3	10	215.2	0.33	71.3	2 294
TOTAL	**30.8**		**209.1**	**6 724**	**320.3**		**950.1**	**30 546**	**239.6**		**1281.8**	**41 210**	**590.6**		**2 441.0**	**78 481**

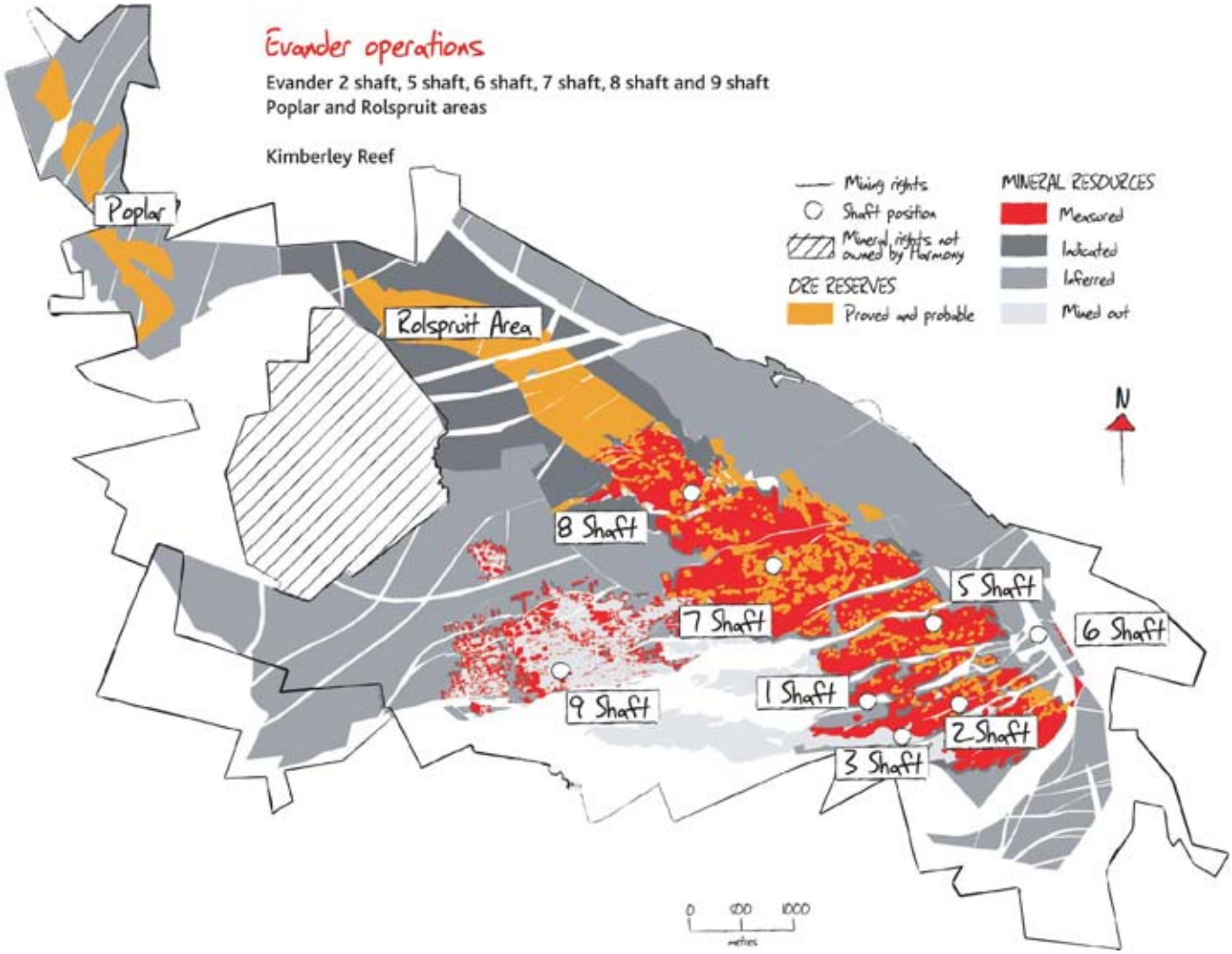
Modifying factors

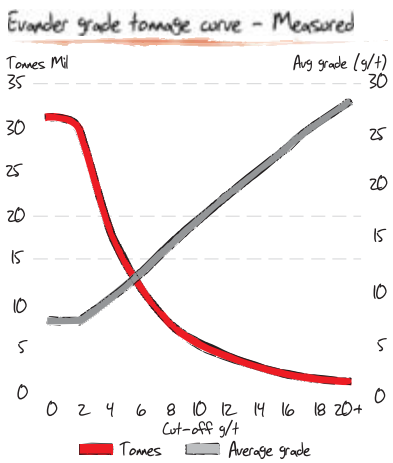
Mine area	Gold price (R/kg)	MCF (%)	SW (cm)	MW (cm)	EP (%)
Evander 2	92 000	70	160	192	83.0
Evander 5	92 000	80	117	147	84.1
Evander 7	92 000	85	140	212	84.4
Evander 8	92 000	76	120	165	68.5
Rolspruit	92 000	75	110	127	85.0
Poplar	92 000	75	100	116	85.1

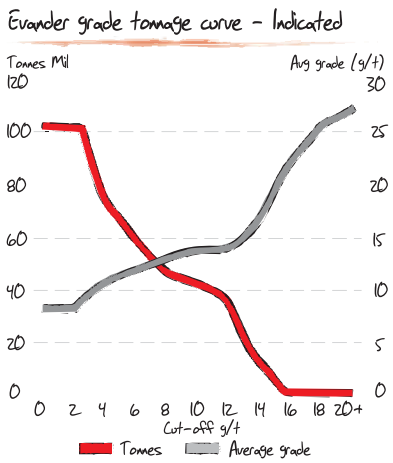
MCF = Mine call factor
SW = Stoping width
MW = Milling width
EP = Extraction percentage

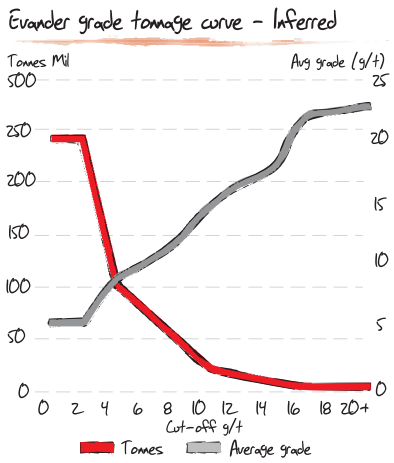
Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Evander 2	1.1	7.09	7.9	255	0.8	6.01	4.8	156	1.9	6.64	12.8	411
Evander 5	1.0	8.84	8.9	285	0.5	8.66	4.3	139	1.5	8.78	13.2	424
Evander 7	5.0	5.47	27.4	881	3.1	7.68	24.0	770	8.1	6.32	51.4	1 652
Evander 8	0.5	6.87	3.4	109	13.8	6.67	91.8	2 951	14.2	6.68	95.2	3 060
Total underground	7.6	6.24	47.6	1 530	18.2	6.87	124.9	4 016	25.8	6.69	172.5	5 546
Projects (below infrastructure)												
Rolspruit	0.0	0.00	0.0	0	27.0	7.78	209.8	6 747	27.0	7.78	209.8	6 747
Poplar	0.0	0.00	0.0	0	13.5	6.99	94.3	3 032	13.5	6.99	94.3	3 032
Total projects	0.0	0.00	0.0	0	40.5	7.52	304.2	9 779	40.5	7.52	304.2	9 779
Grand total	**7.6**	**6.24**	**47.6**	**1 530**	**58.6**	**7.32**	**429.1**	**13 795**	**66.3**	**7.19**	**476.6**	**15 325**


Evander operations
Evander 2 shaft, 5 shaft, 6 shaft, 7 shaft, 8 shaft and 9 shaft
Poplar and Rolspruit areas
Kimberley Reef
Poplar
Rolspruit Area
Mining rights
Shaft position
Mineral rights not owned by Harmony
ORE RESERVES
Proved and probable
MINERAL RESOURCES
Measured
Indicated
Inferred
Mined out
N
8 Shaft
7 Shaft
5 Shaft
6 Shaft
9 Shaft
1 Shaft
2 Shaft
3 Shaft
0
500
1000
metres


Evander grade tonnage curve - Measured
Tonnes Mil
Avg grade (g/t)
35
30
25
20
15
10
5
0
30
25
20
15
10
5
0
0 2 4 6 8 10 12 14 16 18 20+
Cut-off g/t
Tonnes
Average grade


Evander grade tonnage curve - Indicated
Tonnes Mil
Avg grade (g/t)
120
100
80
60
40
20
0
30
25
20
15
10
5
0
0 2 4 6 8 10 12 14 16 18 20+
Cut-off g/t
Tonnes
Average grade


Evander grade tonnage curve - Inferred
Tonnes Mil
Avg grade (g/t)
300
250
200
150
100
50
0
25
20
15
10
5
0
0 2 4 6 8 10 12 14 16 18 20+
Cut-off g/t
Tonnes
Average grade

Randfontein

GEOLOGY: The structure of the West Rand Goldfield is dominated by the Witpoortjie and Panvlakte Horst blocks, which are superimposed over broad folding associated with the south-east plunging West Rand syncline. At Cooke mines, two major fault trends are present. The first is parallel to the Panvlakte Fault and strike north-northeast, having small throws and no lateral shift. The second trend north-west to west, has small throws, but significant lateral shift, resulting in the payshoots becoming displaced. The main orebodies mined at Cooke 1, 2 and 3 Mines are the UE1A and Elsburg A5 Reefs. Cooke 4 mined 10 individual reef horizons, including Mondeor Reefs, Elsburg Reefs and the VCR, which also occurs on the western portion of Cooke 3. At Doornkop Mine, the Kimberley Reefs and the South Reef are being exploited.

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Cooke 1	10.0	5.39	53.8	1 730	10.7	3.70	39.5	1 271	142.0	2.17	308.7	9 926	162.6	2.47	402.1	12 927
Cooke 2	10.6	4.08	43.1	1 385	9.3	2.94	27.2	874	83.4	1.40	116.4	3 741	103.2	1.81	186.6	6 000
Cooke 3	15.5	5.88	91.1	2 930	31.8	4.56	145.0	4 663	163.7	3.03	496.3	15 958	211.0	3.47	732.5	23 552
Doornkop																
Kimberley Reef	9.4	3.22	30.1	968	11.6	3.16	36.8	1 183	278.5	2.22	617.9	19 865	299.5	2.29	684.8	22 016
Doornkop South Reef	0.3	7.79	2.0	63	1.6	10.39	17.1	551	67.1	5.39	361.5	11 622	69.0	5.52	380.6	12 236
Total underground	45.7	4.82	220.1	7 076	65.0	4.09	265.7	8 543	734.6	2.59	1 900.8	61 112	845.3	2.82	2 386.6	76 732
Surface stockpile	29.7	0.47	13.8	445	132.7	0.44	58.7	1 888	255.4	0.27	68.7	2 208	417.8	0.34	141.2	4 541
Grand total	**75.3**		**233.9**	**7 521**	**197.7**		**324.4**	**10 431**	**990.0**		**1 969.5**	**63 320**	**1 263.1**		**2 527.9**	**81 273**

Modifying factors

Mine area	Gold price (R/kg)	MCF (%)	SW (cm)	MW (cm)	EP (%)
Cooke 1	92 000	80	170	203	76.7
Cooke 2	92 000	56	173	191	75.8
Cooke 3	92 000	61	185	213	74.2
Doornkop					
Kimberley Reef	92 000	76	153	154	80.7
Doornkop South Reef	92 000	75	110	154	86.4
Surface stockpile	92 000	90			

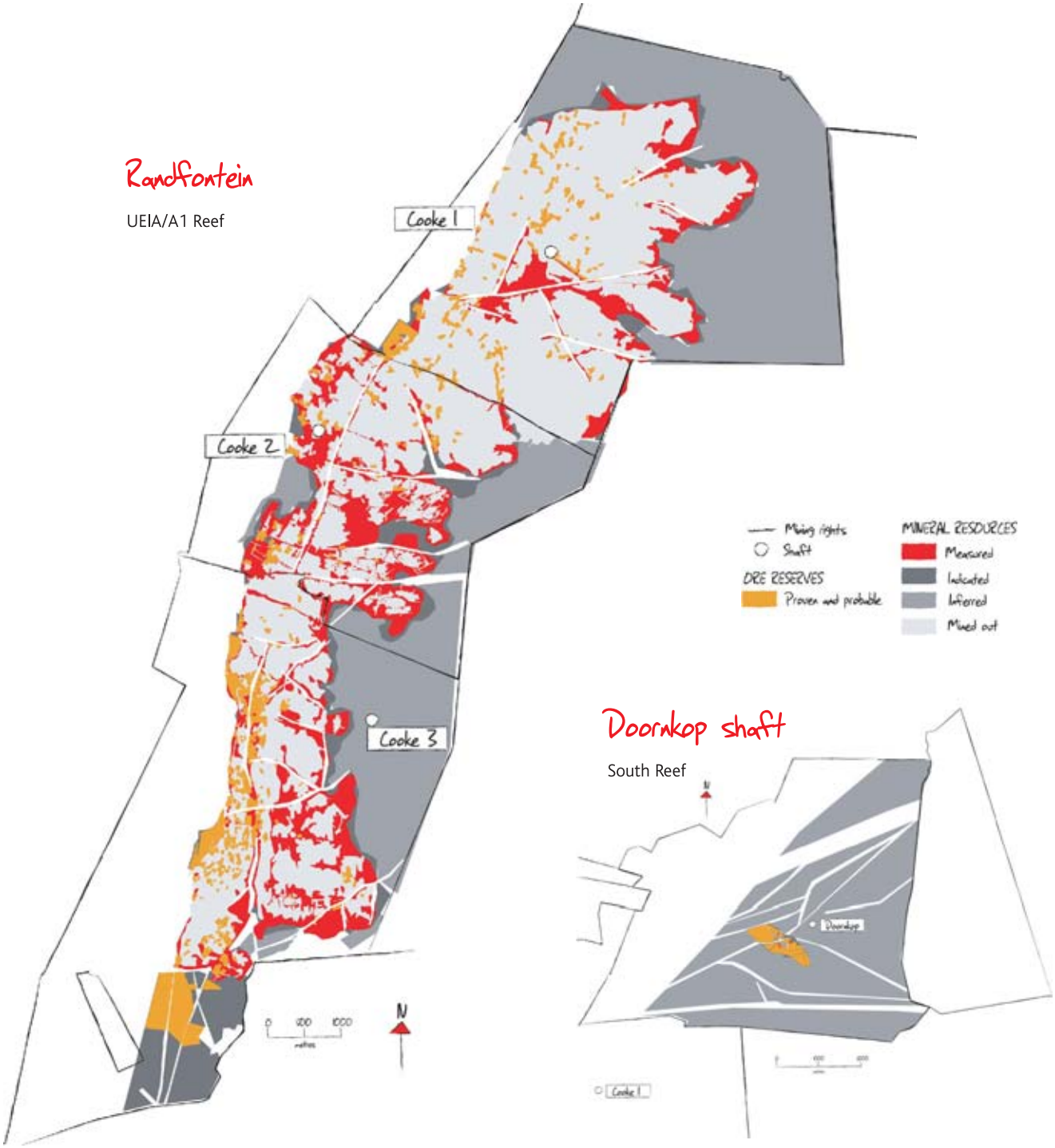
MCF = Mine call factor
SW = Stoping width
MW = Milling width
EP = Extraction percentage

Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Cooke 1	0.7	8.92	6.5	210	0.9	4.49	3.9	127	1.6	6.51	10.5	337
Cooke 2	1.1	5.10	5.7	183	0.7	4.55	3.0	95	1.8	4.90	8.6	278
Cooke 3	2.2	6.42	14.4	463	8.1	4.47	36.1	1 162	10.3	4.90	50.6	1 625
Doornkop												
Kimberley Reef	0.5	3.54	1.9	62	0.2	3.57	0.7	24	0.8	3.55	2.7	86
Doornkop South Reef	0.1	6.94	0.7	22	1.5	7.36	10.7	343	1.6	7.33	11.4	365
Total underground	**4.7**	**6.18**	**29.3**	**941**	**11.3**	**4.83**	**54.5**	**1 751**	**16.0**	**5.23**	**83.7**	**2 691**
Surface stockpile	2.0	0.72	1.4	45	0.5	1.47	0.7	23	2.4	0.87	2.1	68
Grand total	**6.7**		**30.7**	**986**	**11.7**		**55.2**	**1 774**	**18.4**		**85.8**	**2 759**

Randfontein

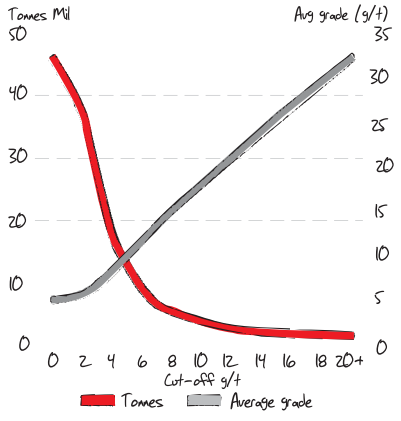
UEIA/A1 Reef



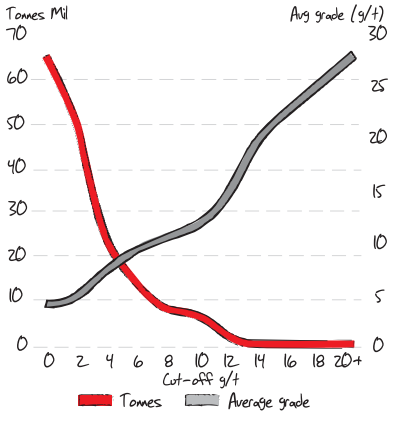
Doornkop shaft

South Reef

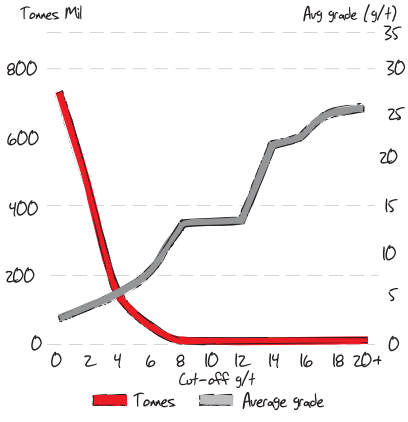
Randfontein tonnage curve – Measured



Randfontein grade tonnage curve – Indicated



Randfontein grade tonnage curve – Inferred



Elandskraal

GEOLOGY: The structure on the Far West Rand is dominated by a series of east trending normal faults with throws of up to 40 metres, as well as a series of north-northeast striking normal faults with generally smaller displacements in the north-west. Faulting is generally less prevalent than in other Wits goldfields. The primary reefs exploited are the VCR and the Carbon Leader, separated by 900 to 1 300 metres, increasing from east to west. Secondary targets are the Middlevlei Reef (50 to 75 metres above the Carbon Leader) and the Mondeor Conglomerate Reef Zone, which subcrops beneath the VCR at Deelkraal and the western side of Elandsrand.

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Elandsrand	22.5	8.10	182.6	5 870	45.2	8.26	373.3	12 002	8.7	6.89	60.0	1 929	76.4	8.06	615.9	19 802
Deelkraal	6.5	6.60	43.0	1 384	4.5	5.63	25.4	817	33.4	4.82	161.0	5 176	44.4	5.16	229.4	7 377
Total underground	**29.1**	**7.77**	**225.6**	**7 254**	**49.7**	**8.03**	**398.7**	**12 820**	**42.1**	**5.25**	**221.0**	**7 105**	**120.8**	**7.00**	**845.4**	**27 179**
Surface stockpile	0.0	0.00	0.0	0	0.8	0.40	0.3	10	0.0	0.00	0.0	0	0.8	0.40	0.3	10
Grand total	**29.1**		**225.6**	**7 254**	**50.5**		**399.1**	**12 830**	**42.1**		**221.0**	**7 105**	**121.6**		**845.7**	**27 189**

Modifying factors

Mine area	Gold price (R/kg)	MCF (%)	SW (cm)	MW (cm)	EP (%)
Elandsrand	92 000	88	133	152	65.3

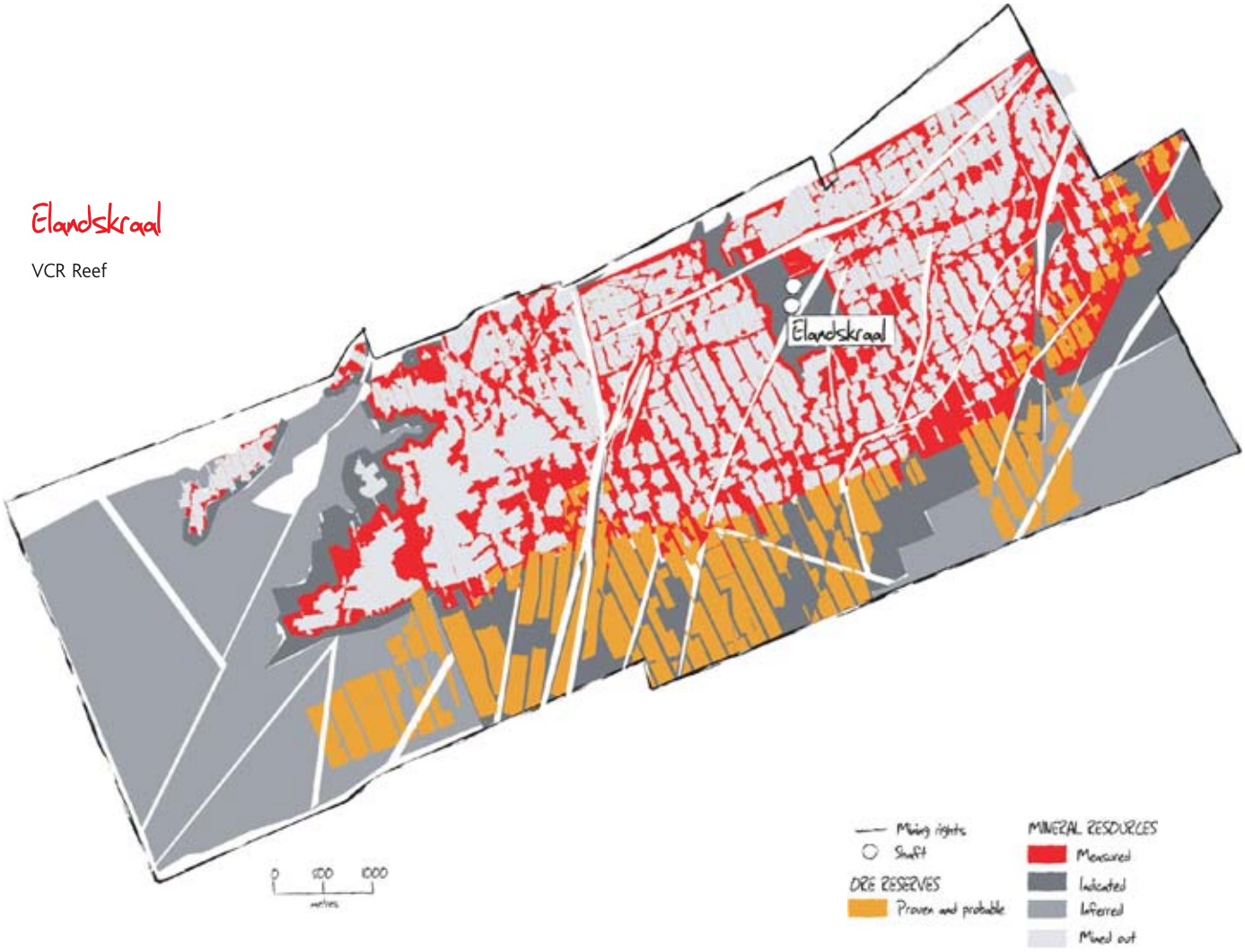
MCF = Mine call factor
SW = Stoping width
MW = Milling width
EP = Extraction percentage

Ore reserves

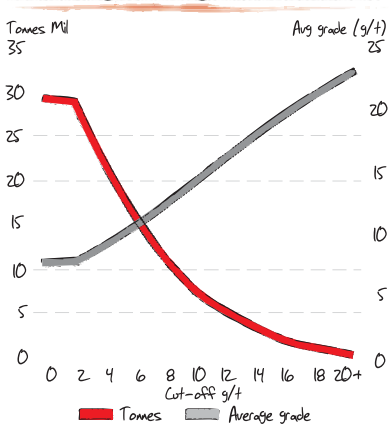
	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Elandsrand	4.3	8.60	36.8	1 184	21.4	9.42	201.5	6 478	25.7	9.28	238.3	7 661
Grand total	**4.3**	**8.60**	**36.8**	**1 184**	**21.4**	**9.42**	**201.5**	**6 478**	**25.7**	**9.28**	**238.3**	**7 661**

Elandskraal

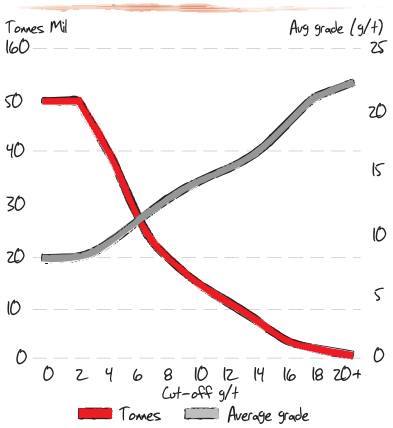
VCR Reef



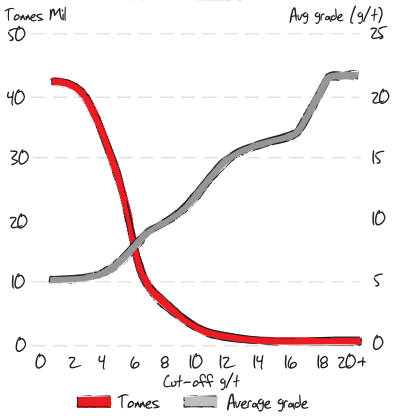
Elandskraal grade tonnage curve - Measured



Elandskraal grade tonnage curve - Indicated



Elandskraal grade tonnage curve - Inferred



Orkney Shafts

GEOLOGY: The Orkney operations are located in the Klerksdorp Goldfields on the north-western margin of the Witwatersrand Basin. The area is cut by north-east striking normal faults, which have throws of several hundreds of metres, producing a series of horsts and grabens. These, in turn, have been cut by small-scale sympathetic faults with throws of tens of metres, resulting in reef blocks of up to only 100 metres in width. The primary gold carriers are the VCR and the Vaal Reef, with the Black Reef, Zandpan Marker and Dennys Reef existing but uneconomic at present. The Elsburg Reefs is the main target at at Orkney 6 and 7 Mine, usually together with the VCR, against which it subcrops along a northeast trending band.

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Orkney 1	1.8	14.74	26.1	838	0.7	14.51	9.9	318	0.6	13.98	9.0	289	3.1	14.53	44.9	1 445
Orkney 2	1.1	16.52	17.6	567	0.2	19.42	3.9	126	0.0	0.00	0.0	0	1.3	16.98	21.6	693
Orkney 3	4.3	7.53	32.2	1 034	2.9	5.08	14.6	470	69.2	3.14	217.1	6 979	76.3	3.46	263.8	8 483
Orkney 4	5.5	9.58	53.1	1 706	3.3	7.03	23.5	755	42.8	3.15	134.8	4 335	51.7	4.09	211.4	6 795
Orkney 5	1.6	12.66	20.9	671	0.2	14.36	2.3	74	3.9	5.17	20.3	651	5.7	7.58	43.4	1 396
Orkney 6&7	1.6	7.28	11.5	369	5.7	5.46	31.1	999	0.0	0.00	0.0	0	7.3	5.86	42.5	1 368
Grand total	**16.0**	**10.16**	**161.0**	**5 184**	**13.0**	**6.59**	**85.0**	**2 741**	**117**	**3.27**	**381.0**	**12 254**	**145.0**	**4.32**	**628.0**	**20 179**

Modifying factors

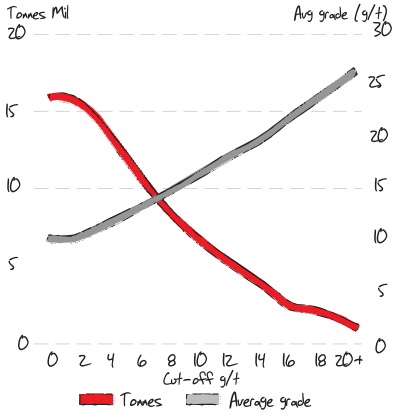
Mine Area	Gold price (R/kg)	MCF (%)	SW (cm)	MW (cm)	EP (%)
Orkney 2	92 000	77	162	262	83.5
Orkney 4	92 000	81	124	199	93.4
Orkney 6&7	92 000	90	154	177	84.0

MCF = Mine call factor
SW = Stoping width
MW = Milling width
EP = Extraction percentage

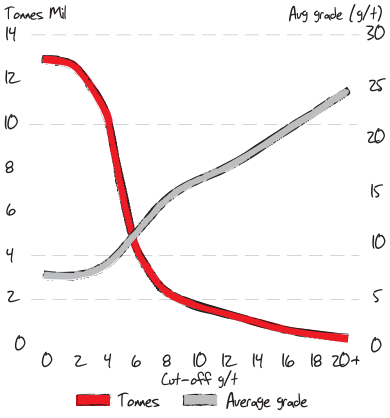
Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Orkney 2	1.6	7.06	11.4	368	0.3	7.06	2.3	75	1.9	7.06	13.8	442
Orkney 4	2.6	6.31	16.4	526	1.1	5.58	6.2	199	3.7	6.09	22.6	726
Orkney 6&7	1.5	5.79	8.7	280	5.4	4.34	23.5	757	6.9	4.66	32.2	1,037
Total underground	**5.7**	**6.38**	**36.5**	**1 174**	**6.9**	**4.67**	**32.1**	**1 031**	**12.6**	**5.45**	**68.6**	**2 205**

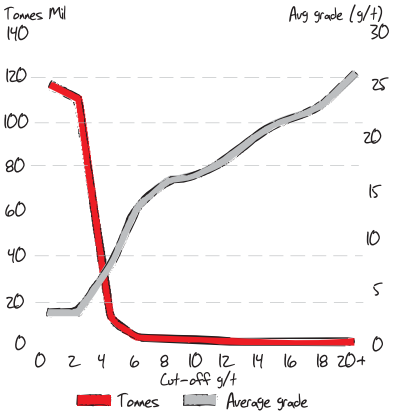
Orkney grade tonnage curve - Measured

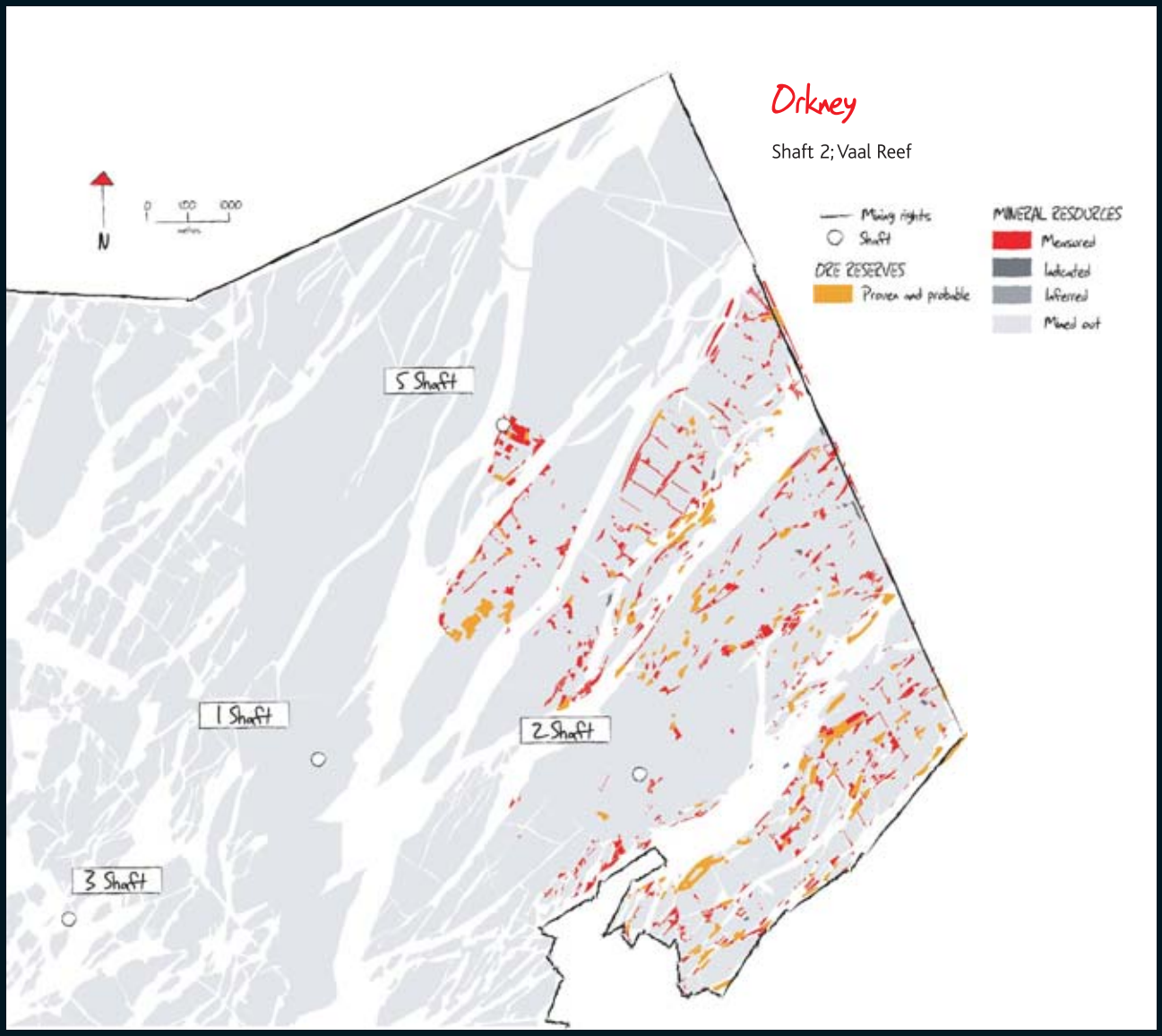


Orkney grade tonnage curve - Indicated



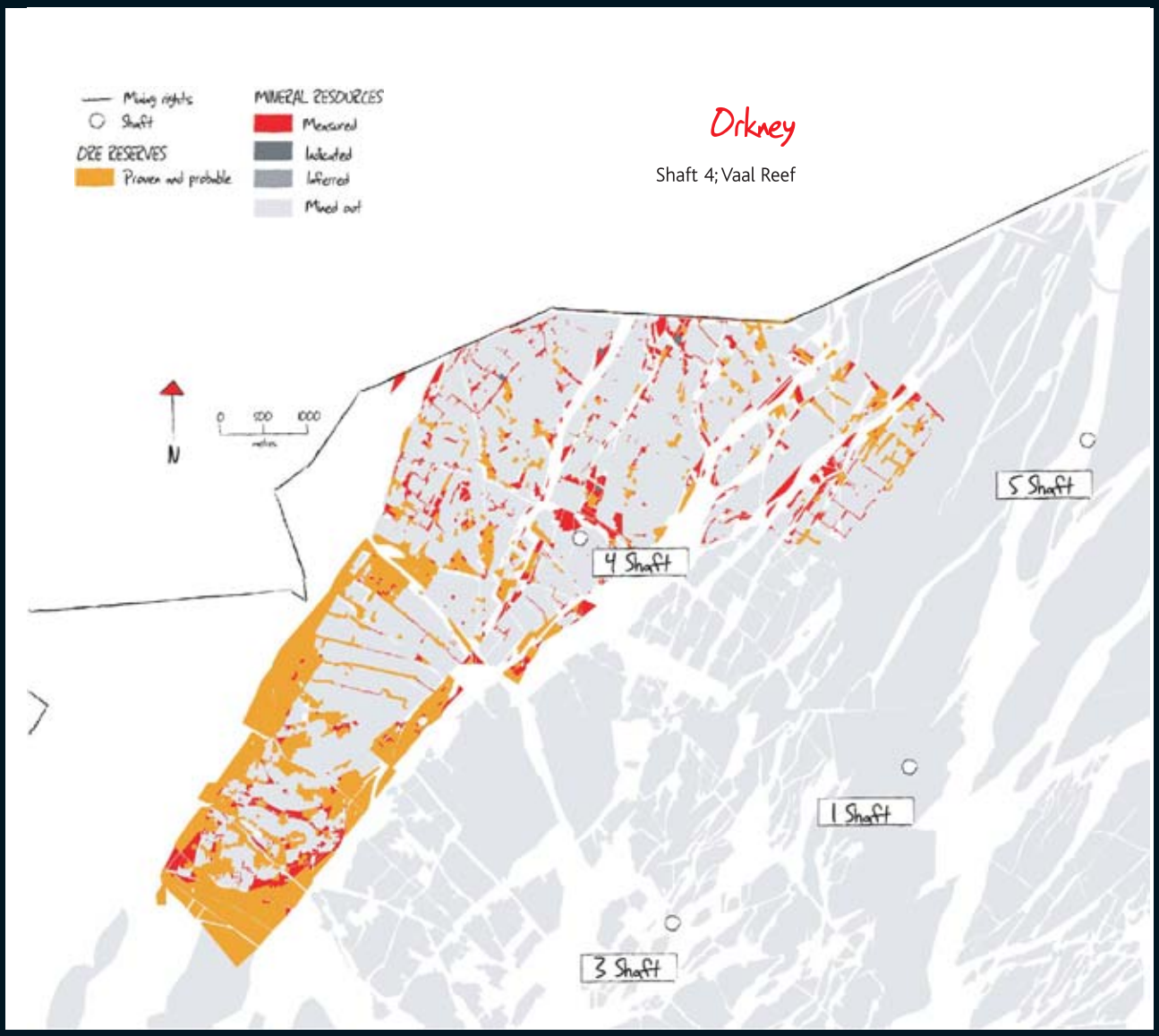
Orkney grade tonnage curve - Inferred




Orkney
Shaft 2; Vaal Reef
N
Mining rights
Shaft
ORE RESERVES
Proven and probable
MINERAL RESOURCES
Measured
Indicated
Inferred
Mined out
5 Shaft
1 Shaft
2 Shaft
3 Shaft

Orkney

Shaft 4; Vaal Reef

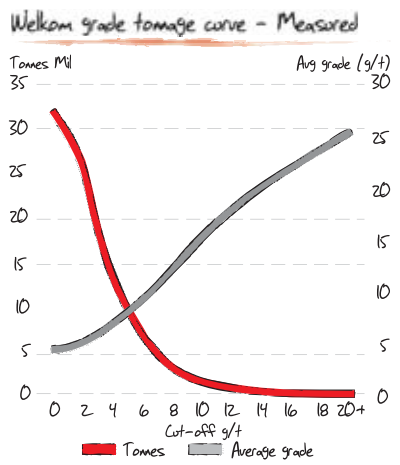


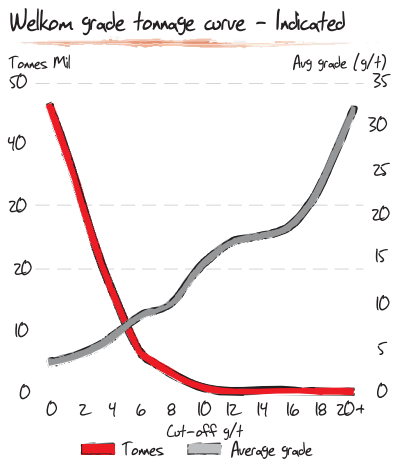
Welkom

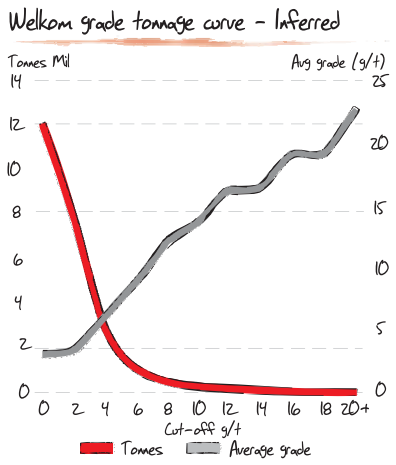
GEOLOGY: The mining right area for the Welkom operations is located centrally within the Free State Goldfields. These operations are mature and all shafts are on care and maintenance. The Basal Reef was the main reef exploited at all operations. It strikes north to north-west and dips to the east between 20 and 40 degrees. It is bounded in the west by the Rheedersdam Fault, and in the east by the De Bron Fault. The area is also cut by similar north-south trending faults, namely the Dagbreek and Ararat. Leader Reef has also been exploited at Welkom 6 Mine, whilst Saaiplaas Reef (a thick low grade channel superimposed on the Basal Reef) has been mined at Welkom 7.

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Welkom1	8.5	5.28	44.6	1 434	11.6	4.25	49.3	1 587	0.9	6.40	5.7	185	21.0	4.75	99.7	3 206
Welkom2	3.4	5.87	19.7	632	2.7	4.64	12.5	403	0.8	4.87	3.8	123	6.8	5.27	36.0	1 158
Welkom 3	4.3	4.46	19.3	621	11.4	4.12	46.7	1 503	0.1	12.23	1.1	36	15.8	4.26	67.2	2 159
Welkom 4	3.8	4.63	17.5	561	1.2	4.04	5.0	161	8.5	2.10	17.8	573	13.5	2.99	40.3	1 295
Welkom 6	6.0	3.32	20.0	642	3.7	3.73	13.7	440	0.0	0.00	0.0	0	9.7	3.47	33.7	1 082
Welkom 7	6.2	3.06	19.0	611	15.6	2.31	35.9	1 155	1.4	3.99	5.8	186	23.2	2.61	60.7	1 951
Total underground	**32.0**	**4.36**	**140**	**4 501**	**46.0**	**3.54**	**163.0**	**5 249**	**12.0**	**2.93**	**34.0**	**1 102**	**90.0**	**3.75**	**338.0**	**10 851**
Surface stockpile									81.1	0.26	20.8	667	81.1	0.26	20.8	667
Grand total	**32.1**		**140.0**	**4 501**	**46.2**		**163.3**	**5 249**	**92.8**		**55.0**	**1 769**	**171.0**		**358.3**	**11 519**







Target

GEOLOGY: The Target operations are located at the northern extent of the Free State Goldfields, some 20 kilometres north of Welkom. The reefs currently exploited are the Elsburg – Dreyerskuil conglomerates, which form a wedge-shaped stacked package, comprising 35 separate reef horizons, often separated by quartzite beds. The Elsburg Reefs are truncated by an unconformity surface at the base of the overlying Dreyerskuil Member. Below the subcrop, the Elsburgs dip steeply to the east, with dips becoming progressively shallower down dip. Close to the subcrop, the thickness of the intervening quartzites reduces, resulting in the Elsburg Reefs coalescing to form composite reef packages that are exploited by massive mining techniques at Target Mine. The Dreyerskuil also consists of stacked reefs dipping shallowly to the east. These reefs tend to be less numerous, but more laterally extensive than the underlying Elsburg Reefs. The Big Pebble Reefs, B Reef and Basal Reef have been exploited at the old Lorraine shafts in the past and potential exists for opening up these old areas.

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Target	7.4	9.25	68.7	2 210	22.8	6.60	150.6	4 842	8.4	5.72	48.0	1 544	38.6	6.92	267.4	8 596
Lorraine	0.1	7.90	0.8	24	20.0	6.62	132.7	4 267	10.4	5.28	55.1	1 771	30.6	6.17	188.5	6 062
Target North	0	0	0	0	84	8.11	682.9	21 956	226	6.23	1 408.2	45 275	310	6.74	2 091.1	67 232
Total underground	7.5	9.24	69.5	2 234	127.1	7.60	966.2	31 064	245.0	6.17	1 511.3	48 590	379.6	6.71	2 547.0	81 889
Surface stockpiles	0	0	0	0	0.22	0.61	0.13	4	64.47	0.29	18.5	5 95	64.7	0.29	18.7	600
Grand total	**7.5**		**69.5**	**2 234**	**127.3**		**966.3**	**31 068**	**309.5**		**1 529.8**	**49 186**	**444.3**		**2 565.7**	**82 489**

Modifying factors

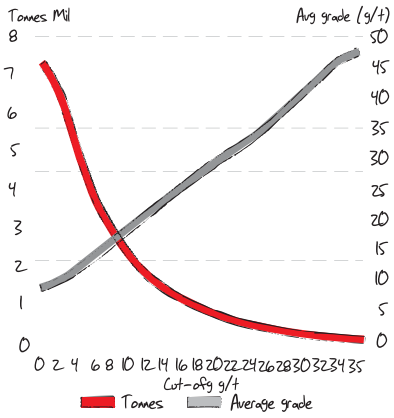
	Gold price (R/kg)	MCF (%)	Dilution
Underground	92 000	95.00	5
Surface	92 000	100	

MCF = Mine call factor

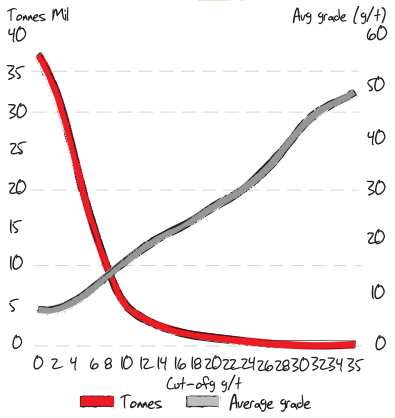
Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Target	7.0	7.07	49.3	1 584	11.1	6.23	69.3	2 228	18.1	6.55	118.6	3 812
Lorraine	0.0	0.00	0.0	0	6.8	4.47	30.2	971	6.8	4.47	30.2	971
Total underground	7.0	7.07	49.3	1 584	17.9	5.56	99.5	3 198	24.9	5.98	148.7	4 782
Surface stockpiles	0.0	0.00	0.0	0	0.2	0.61	0.13	4	0.2	0.61	0.1	4
Grand Total	**7.0**		**49.3**	**1 584**	**18.1**		**99.6**	**3 202**	**25.1**		**148.9**	**4 786**

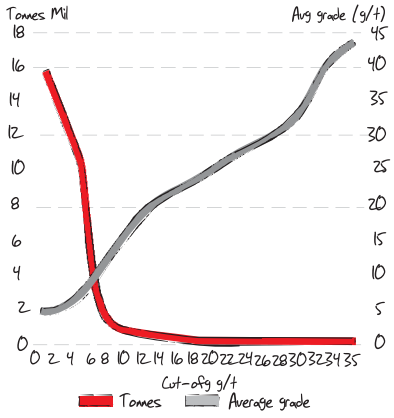
Target grade tonnage curve - Measured

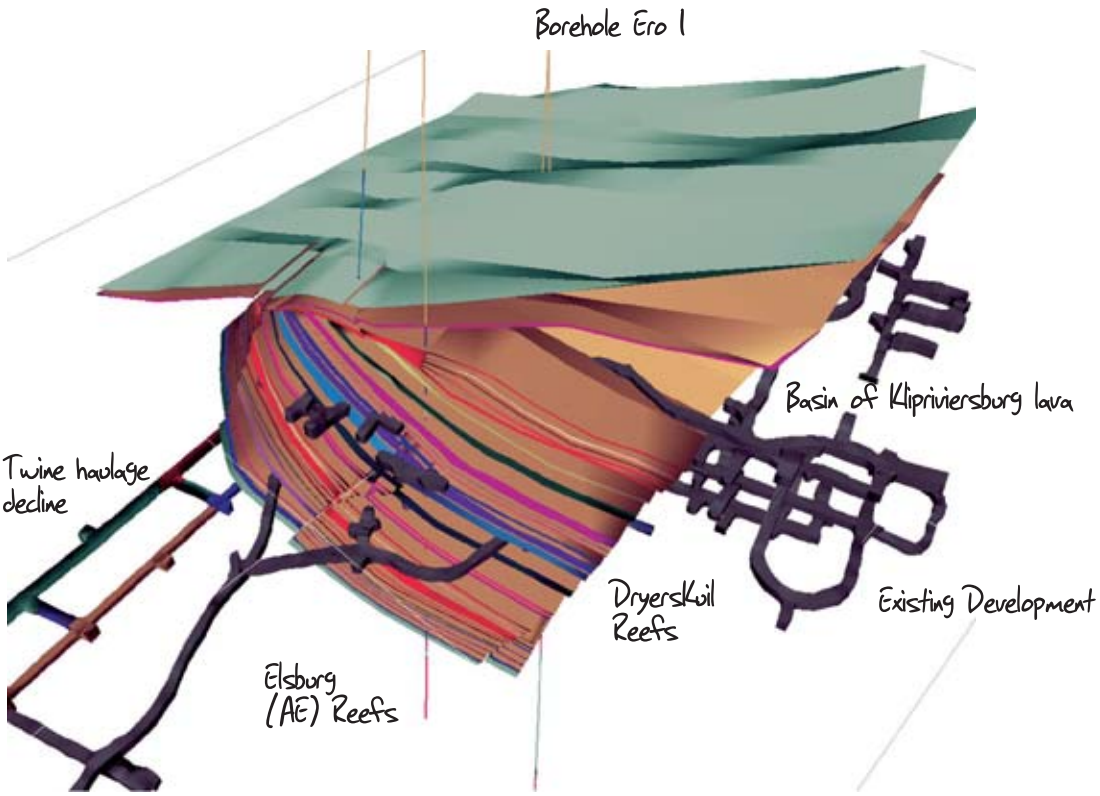


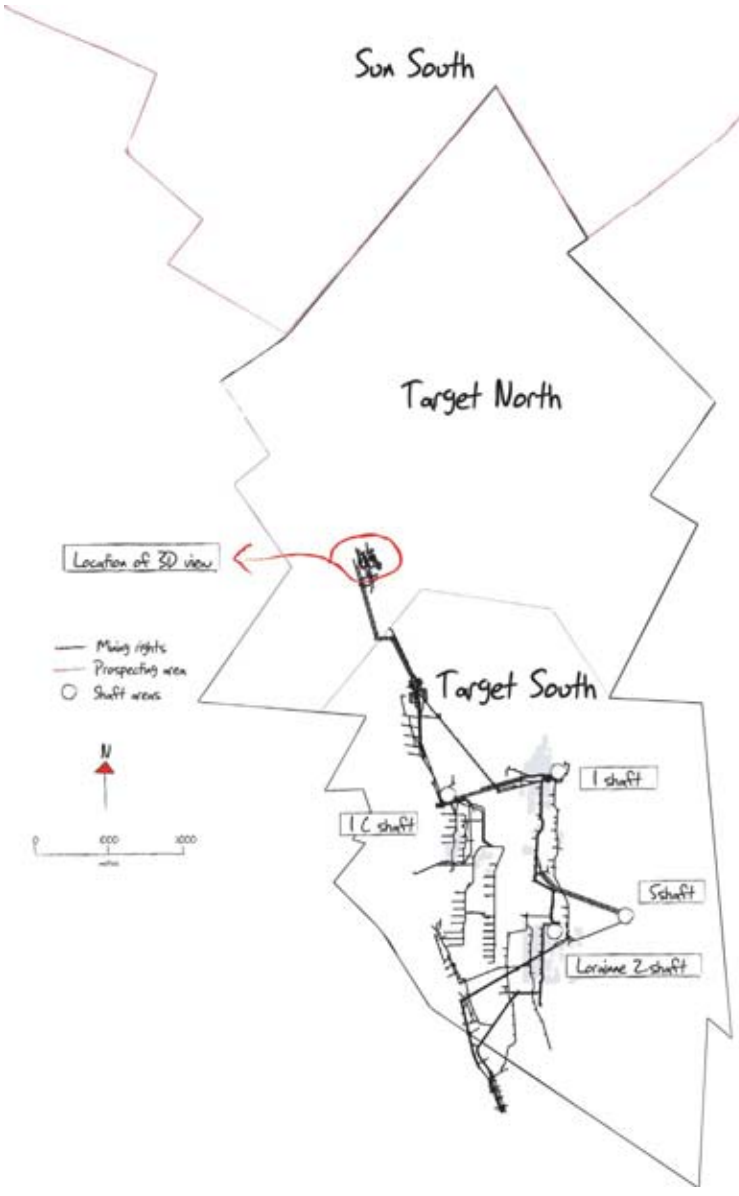
Target grade tonnage curve - Indicated



Target grade tonnage curve - Inferred




Borehole Ero 1
Basin of Klipriviersburg lava
Twine haulage decline
Dryerskuil Reefs
Existing Development
Elsburg (AE) Reefs


Sun South
Target North
Location of 3D view
Mining rights
Prospecting area
Shaft areas
N
Target South
1 shaft
1C shaft
5shaft
Loraine 2 shaft

Kalgold

GEOLOGY: The Kalgold operations are located within the Kraaipan Greenstone Belt, 60 kilometres south of Mafikeng. This is part of the larger Amalia-Kraaipan Greenstone terrain, consisting of north trending linear belts of Archaean meta-volcanic and meta-sedimentary rocks, separated by granitoid units. Mineralisation occurs in shallow dipping quartz veins, which occur in clusters or swarms, within the steeply dipping magnetite-chert banded iron formation. Disseminated sulphide mineralisation, dominated mostly by pyrite, occurs around and between the shallow dipping quartz vein swarms. The D Zone is the largest orebody encountered, and has been extensively mined within a single open pit operation, along a strike length of 1300 metres. Mineralisation has also been found in the Mealie Field Zone (adjacent to the D Zone), the A Zone and A Zone West (along strike to the north of the D Zone), and the Watertank and Watermill areas to the north of the A Zone.

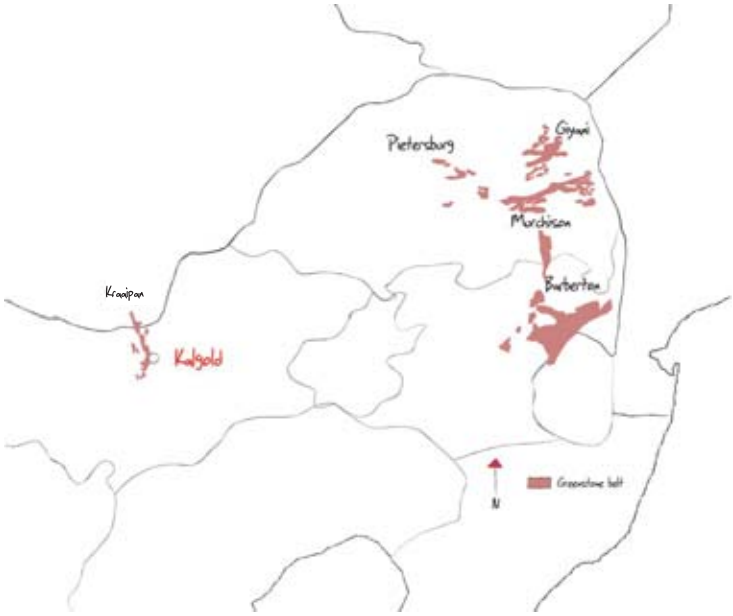
Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Open pit																
Kalgold	5.2	1.49	7.8	251	10.4	1.89	19.6	630	16.7	1.63	27.3	878	32.4	1.69	54.7	1 759
Surface stockpile	0.5	1.41	0.8	24	1.4	0.70	1.0	32	0.0	0.00	0.0	0	2.0	0.90	1.8	56
Grand total	**5.8**		**8.6**	**275**	**11.8**		**20.6**	**662**	**16.7**		**27.3**	**878**	**34.4**		**56.5**	**1 815**

Modifying factors

Mine area	Gold price (R/kg)	MCF (%)	Dilution (%)
Kalgold	92 000	100	10
Surface	92 000	100	0

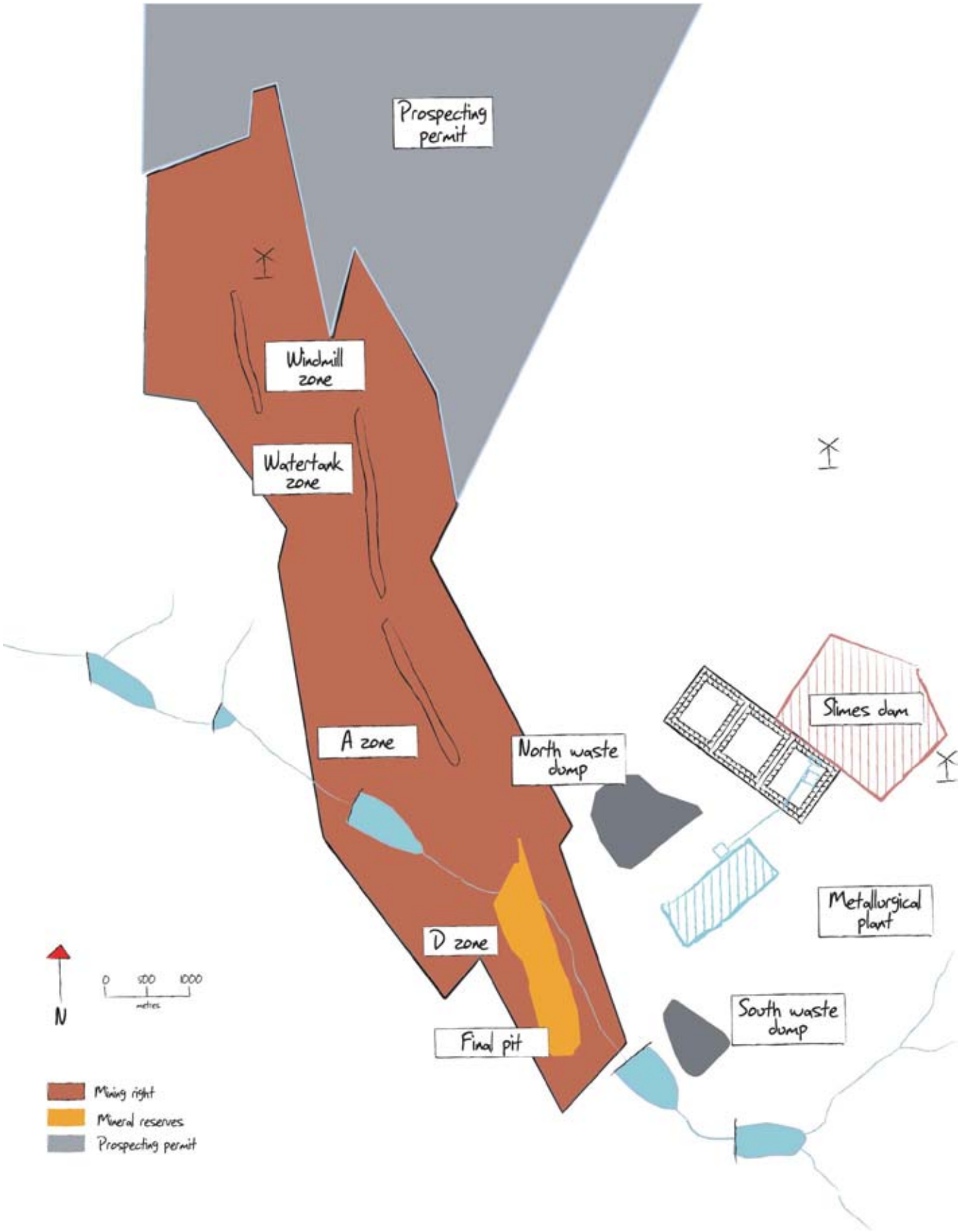
MCF = Mine call factor



Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Open pit												
Kalgold	0.3	2.68	0.7	23	1.5	2.29	3.4	108	1.7	2.35	4.1	131
Surface stockpile	0.5	1.28	0.7	22	0.0	0.00	0.0	0	0.5	1.28	0.7	22
Grand total	**0.8**		**1.4**	**45**	**1.5**		**3.4**	**108**	**2.3**		**4.8**	**153**

Kalgold


Prospecting permit
Windmill zone
Watertank zone
A zone
D zone
Final pit
North waste dump
Slimes dam
Metallurgical plant
South waste dump
N
0
500
1000
metres
Mining right
Mineral reserves
Prospecting permit

Australia

GEOLOGY: The Yilgarn Craton is a large Archaean terrain and comprises an early high grade granite-gneiss metamorphic terrain (the Southwestern Province), and three granite-greenstone terrains (the North-East Goldfields, the Southern Cross and Murchison Provinces). The major gold deposits occur at Kalgoorlie, Kambalda, Mt Magnet, Boddington and Wiluna, and are hosted in greenstone belts. These form linear belts of mafic, ultramafic and felsic volcanics, intercalated with sedimentary sequences, and have been multiply deformed and metamorphosed. The mode of occurrence of the gold mineralisation on the Harmony leases tends to be small to medium-sized structurally controlled lobs, sheers, and quartz veins.

Mineral resources

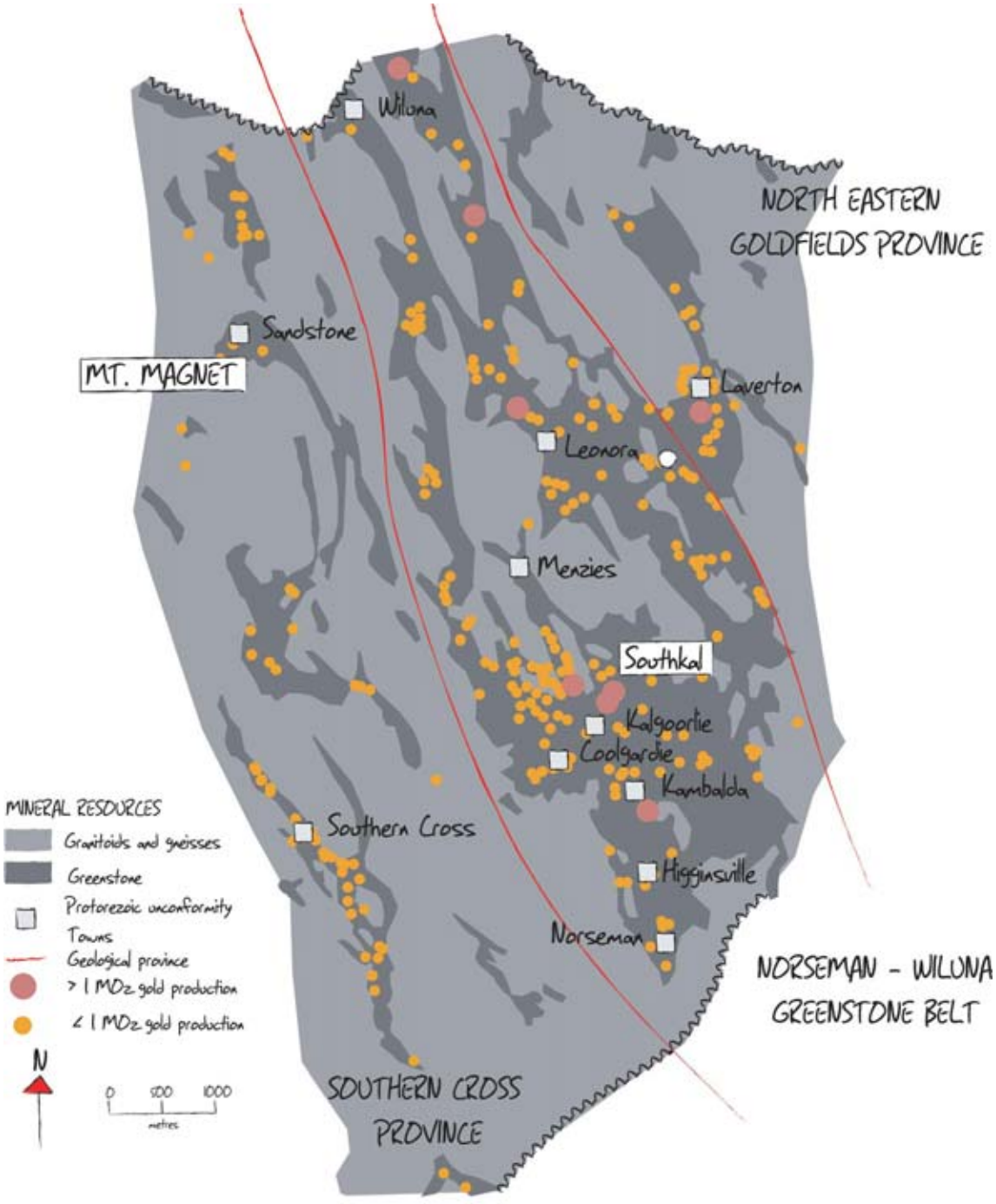
	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Big Bell	3.5	3.63	12.8	413	11.4	2.16	24.5	789	6.6	2.67	17.6	566	21.5	2.56	55.0	1 768
South Kal Mines	6.0	2.39	14.3	460	38.5	1.91	73.3	2 358	48.7	1.44	69.9	2 247	93.1	1.69	157.6	5 066
Northern Territory	0.1	19.34	1.7	55	12.1	2.91	35.2	1 132	16.5	2.29	37.8	1 214	28.7	2.60	74.7	2 402
Mt Magnet	6.0	3.01	18.0	578	27.5	3.21	88.4	2 842	16.6	3.09	51.3	1 650	50.1	3.15	157.7	5 070
Grand total	**15.6**	**3.00**	**46.9**	**1 507**	**89.5**	**2.48**	**221.5**	**7 121**	**88.4**	**2.00**	**176.6**	**5 677**	**193.4**	**2.30**	**444.9**	**14 305**

Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
South Kal Mines	2.0	1.71	3.5	112	2.1	3.11	6.5	209	4.1	2.42	10.0	320
Northern Territory	0.1	13.91	0.8	24	0.9	2.83	2.5	82	1.0	3.46	3.3	106
Mt Magnet	1.8	1.60	3.0	95	3.5	4.71	16.6	532	5.4	3.64	19.5	627
Grand total	**3.9**	**1.83**	**7.2**	**231**	**6.5**	**3.94**	**25.6**	**823**	**10.4**	**3.14**	**32.8**	**1 054**

Australian Operations

Geological plan of the Yilgarn Craton



Papua New Guinea

GEOLOGY: Papua New Guinea (PNG) lies on the northern end of the Australian Plate and has three major components: a continental cratonic platform, an arc of volcanic islands and a central collisional fold belt, consisting of Mesozoic sediments, ophiolite sequences, Tertiary sediments and diorite intrusions. During collision, the Wau Graben, the host of major gold and silver deposits, was formed in the fold belt. It coincided with a phase of volcanic activity, resulting in precious and base metals deposits being formed. These include epithermal gold deposits at Hidden Valley, Hamata, Kerimenge and Wafi and porphyry-style copper deposits such as Golpu. Numerous other gold and copper-gold prospects, which are at various stages of exploration and evaluation, occur at Harmony's leases.

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Hidden Valley-Kav	2.5	3.82	9.6	308	20.3	3.27	66.3	2 132	5.4	2.84	15.2	488	28.1	3.24	91.1	2 928
Hamata	0.7	3.25	2.3	74	2.3	3.48	7.9	254	1.2	3.94	4.7	150	4.2	3.57	14.8	477
Wafi	0.0	0.00	0.0	0	42.6	2.84	121.0	3 890	26.9	2.47	66.5	2 139	69.5	2.70	187.5	6 029
Golpu	0.0	0.00	0.0	0	92.9	0.71	66.0	2 122	21.3	0.73	15.6	500	114.3	0.71	81.5	2 622
Golpu Gold Cap	0.0	0.00	0.0	0	4.0	1.35	5.4	175	0.0	0.00	0.0	0	4.0	1.35	5.4	175
Grand total	**3.2**	**3.69**	**11.9**	**381**	**162.1**	**1.64**	**266.6**	**8 572**	**54.8**	**1.86**	**101.9**	**3 277**	**220.1**	**1.73**	**380.4**	**12 231**

Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Hidden Valley-Kav	2.7	3.39	9.2	296	17.75	2.96	52.5	1 689	20.5	3.02	61.8	1 986
Hamata	0.7	2.74	2.0	66	2.0	2.92	5.9	191	2.8	2.87	8.0	257
Grand total	**3.5**	**3.25**	**11.3**	**362**	**19.8**	**2.96**	**58.5**	**1 881**	**23.3**	**3.00**	**69.8**	**2 243**

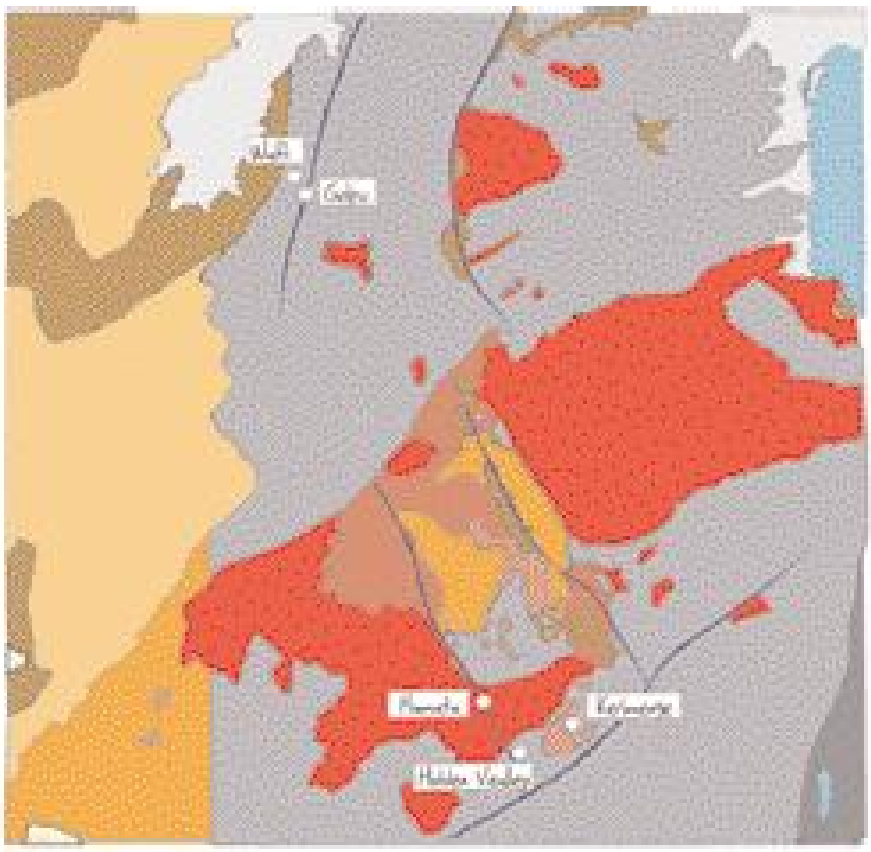
Mineral resources
Silver

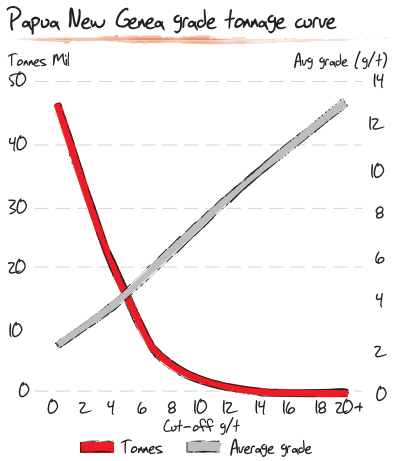
	MEASURED				INDICATED				INFERRED				TOTAL			
Mine area	Tonnes (Mt)	g/t	Silver (000kg)	Silver (000oz)	Tonnes (Mt)	g/t	Silver (000kg)	Silver (000oz)	Tonnes (Mt)	g/t	Silver (000kg)	Silver (000oz)	Tonnes (Mt)	g/t	Silver (000kg)	Silver (000oz)
Hidden Valley-Kav	2.5	59.00	148.0	4 758	20.3	51.96	1 054.1	33 890	5,351	59.70	319 441.6	10 270	5 373.6	59.67	320 643.7	48 919
Grand total	**2.5**	**59.00**	**148.0**	**4 758**	**20.3**	**51.96**	**1 054.1**	**33 890**	**5,351**	**59.70**	**319 441.6**	**10 270**	**5 373.6**	**59.67**	**320 643.7**	**48 919**

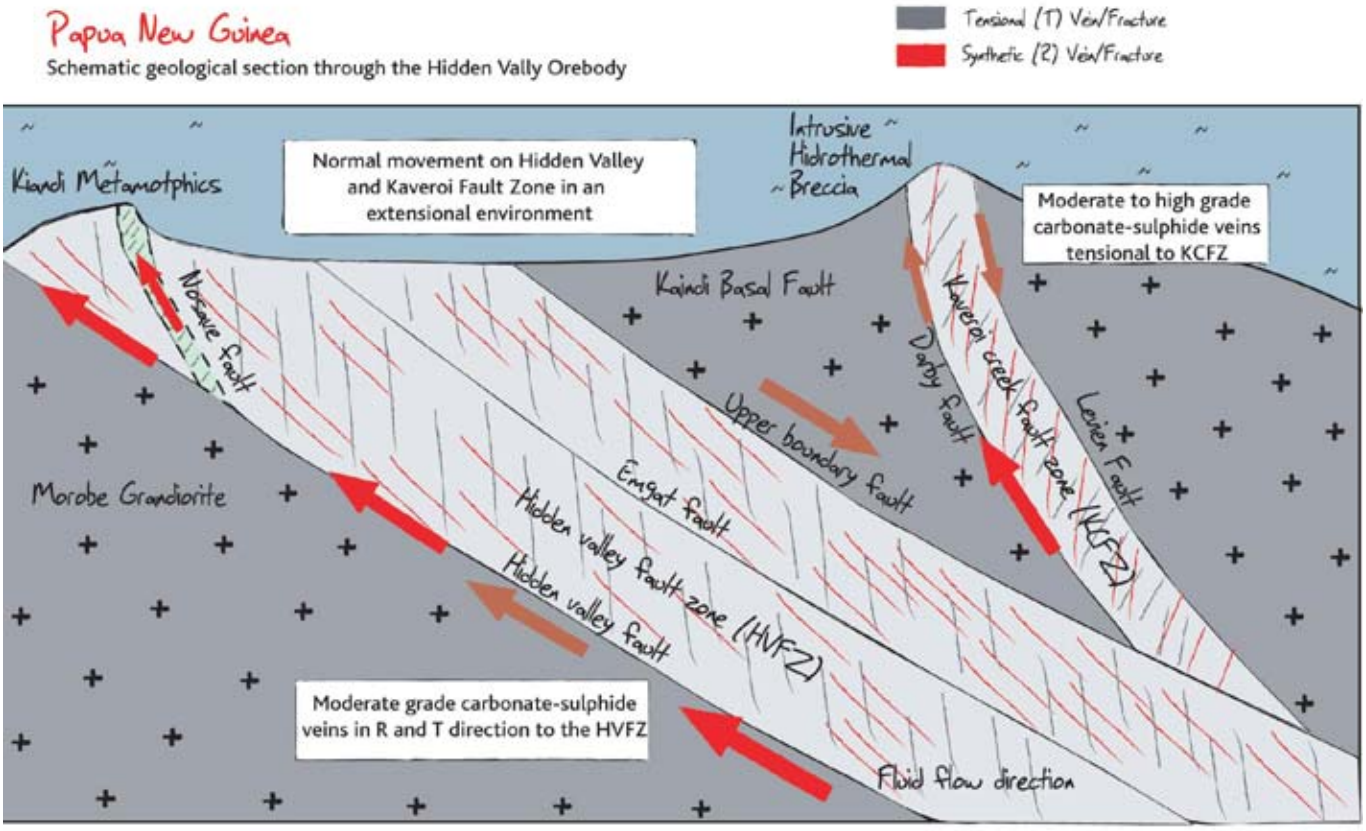
Ore reserves
Silver

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Silver (000kg)	Silver (000oz)	Tonnes (Mt)	g/t	Silver (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Silver (000kg)	Silver (000oz)
Hidden Valley-Kav	2.7	52.47	142.6	4 586	17.8	47.88	849.9	27 328	20.5	48.49	992.6	31 914
Grand total	**2.7**	**52.47**	**142.6**	**4 586**	**17.8**	**47.88**	**849.9**	**27 328**	**20.5**	**48.49**	**992.6**	**31 914**


Papua New Guinea operations




Papua New Genea grade tonnage curve
Tones Mil
Avg grade (g/t)
50
40
30
20
10
0
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16 18 20+
Cut-off g/t
Tones
Average grade


Papua New Guinea
Schematic geological section through the Hidden Vally Orebody
Tensional (T) Vein/Fracture
Synthetic (?) Vein/Fracture
Kiandi Metamotphics
Normal movement on Hidden Valley and Kaveroi Fault Zone in an extensional environment
Intrusive Hidrothermal Breccia
Moderate to high grade carbonate-sulphide veins tensional to KCFZ
Kaindi Basal Fault
Nosave fault
Morobe Grandiorite
Upper boundary fault
Emgat fault
Hidden valley fault zone (HVFZ)
Hidden valley fault
Kaveroi creek fault zone (KCFZ)
Derby fault
Levien Fault
Moderate grade carbonate-sulphide veins in R and T direction to the HVFZ
Fluid flow direction

Mineral resources and ore reserves breakdown by quality, leveraged, and growth shafts

At Harmony we manage and report our South African operations as

- Quality shafts
- Leveraged shafts
- Growth shafts

While mineral resources and ore reserves are required to be reported by tax entity (on previous pages), for ease of use we have provided a breakdown of our mineral resources and ore reserves according to quality, leveraged and growth shafts.

Quality shafts

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Mine Area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Evander 2	4.4	8.11	35.3	1 136	2.1	8.25	17.3	555	30.4	7.94	241.0	7 749	36.8	7.97	293.6	9 440
Evander 5	3.5	7.64	26.6	855	2.1	6.56	13.7	441	4.9	8.63	42.5	1 367	10.5	7.89	82.8	2 663
Evander 7	11.6	5.79	67.0	2 155	5.2	8.13	42.3	1 358	32.4	4.20	136.3	4 381	49.2	4.99	245.5	7 894
Evander 8	4.3	7.46	32.4	1 041	37.0	6.94	256.9	8 259	58.4	4.89	285.6	9 183	99.7	5.77	574.9	18 484
Cooke 1	10.0	5.39	53.8	1 730	10.7	3.70	39.5	1 271	142.0	2.17	308.7	9 926	162.6	2.47	402.1	12 927
Cooke 2	10.6	4.08	43.1	1 385	9.3	2.94	27.2	874	83.4	1.40	116.4	3 741	103.2	1.81	186.6	6 000
Cooke 3	15.5	5.88	91.1	2 930	31.8	4.56	145.0	4 663	163.7	3.03	496.3	15 958	211.0	3.47	732.5	23 552
Target	7.4	9.25	68.7	2 210	22.8	6.60	150.6	4 842	8.4	5.72	48.0	1 544	38.6	6.92	267.4	8 596
Lorraine	0.1	7.90	0.8	24	20.0	6.62	132.7	4 267	10.4	5.28	55.1	1 771	30.6	6.17	188.5	6 062
Tshepong	8.2	12.62	103.3	3 323	24.8	10.50	260.2	8 364	61.7	7.29	449.7	14 457	94.6	8.59	813.2	26 144
Masimong 5	4.7	6.91	32.3	1 038	18.8	5.81	109.0	3 503	178.2	4.39	782.3	25 153	201.6	4.58	923.6	29 694
Sub Total	80.2	6.91	554.5	17 827	184.6	6.47	1194.3	38 398	773.8	3.83	2961.9	95 229	1038.5	4.54	4710.7	151 455
Projects (Below Infrastructure)																
Rolspruit	0.0	0.00	0.0	0.00	29.1	11.59	337.4	10 847	52.8	2.71	142.9	4 593	81.9	5.87	480.3	15 441
Poplar	0.0	0.00	0.0	0.00	28.2	6.89	194.0	6 237	0.0		0.0	-	28.2	6.89	194.0	6 237
Sub Total	0.0	0.00	0.0	0.00	57.3	9.28	531.4	17 084	52.8	2.71	142.9	4 593	110.0	6.13	674.3	21 678
Grand Total	**80.2**	**6.91**	**554.5**	**17 827**	**241.8**	**7.13**	**1725.7**	**55 482**	**826.5**	**3.76**	**3104.8**	**99 822**	**1148.5**	**4.69**	**5385.0**	**173 133**

Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Evander 2	1.1	7.09	7.9	255	0.8	6.01	4.8	156	1.9	6.64	12.8	411
Evander 5	1.0	8.84	8.9	285	0.5	8.66	4.3	139	1.5	8.78	13.2	424
Evander 7	5.0	5.47	27.4	881	3.1	7.68	24.0	770	8.1	6.32	51.4	1 652
Evander 8	0.5	6.87	3.4	109	13.8	6.67	91.8	2 951	14.2	6.68	95.2	3, 060
Cooke 1	0.7	8.92	6.5	210	0.9	4.49	3.9	127	1.6	6.51	10.5	337
Cooke 2	1.1	5.10	5.7	183	0.7	4.55	3.0	95	1.8	4.90	8.6	278
Cooke 3	2.2	6.42	14.4	463	8.1	4.47	36.1	1 162	10.3	4.90	50.6	1 625
Target	7.0	7.07	49.3	1 584	11.1	6.23	69.3	2 228	18.1	6.55	118.6	3 812
Lorraine	0.0	0.00	0.0	0	6.8	4.47	30.2	971	6.8	4.47	30.2	971
Tshepong	7.5	6.77	51.1	1 643	19.0	7.21	136.8	4 397	26.5	7.09	187.9	6 041
Masimong 5	2.8	6.23	17.6	567	9.5	5.11	48.6	1 562	12.3	5.37	66.2	2 129
Sub Total	29.1	6.61	192.2	6 181	74.1	6.11	452.8	14 557	103.2	6.25	645.0	20 738
Projects (Below Infrastructure)												
Rolspruit	0.0		0.00	0	27.0	7.78	209.8	6 747	27.0	7.78	209.8	6 747
Poplar	0.0		0.00	0	13.5	6.99	94.3	3 032	13.5	6.99	94.3	3 032
Sub Total	0.0		0.00	0	40.5	7.52	304.2	9 779	40.5	7.52	304.2	9 779
Grand Total	**29.1**	**6.61**	**192.2**	**6 181**	**114.6**	**6.60**	**756.9**	**24 336**	**143.7**	**6.61**	**949.2**	**30 517**

Leveraged shafts

Mineral resources

	MEASURED				INDICATED				INFERRED				TOTAL			
Shaft	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Harmony 2	5.2	5.35	27.7	890	2.3	2.67	6.0	194	54.7	2.06	112.4	3 615	62.1	2.35	146.2	4 699
Merriespruit 1	11.7	3.96	46.5	1 494	14.0	3.56	50.0	1 607	14.0	3.46	48.3	1 553	39.7	3.64	144.8	4 655
Merriespruit 3	11.2	3.72	41.7	1 341	11.7	3.75	43.9	1 413	17.5	3.74	65.7	2 111	40.5	3.74	151.3	4 865
Unisel	10.8	4.68	50.6	1 628	10.5	4.06	42.5	1 366	60.6	3.85	233.6	7 511	81.9	3.99	326.8	10 505
Brand 3	4.5	3.68	16.5	530	3.2	3.47	11.1	355	8.9	3.06	27.1	870	16.5	3.31	54.6	1 755
Bambanani	12.4	9.68	119.9	3 854	21.8	6.00	131.0	4 212	53.5	4.27	228.5	7 345	87.7	5.47	479.3	15 412
Joel	5.3	5.68	30.2	970	4.4	5.55	24.6	790	26.6	3.61	96.1	3 091	36.4	4.15	150.9	4 851
West Shaft	9.0	4.38	39.3	1 264	11.9	2.49	29.7	955	38.7	2.00	77.6	2 494	59.6	2.46	146.6	4 713
St Helena 8 Shaft	4.9	6.30	30.9	992	1.2	4.49	5.2	168	4.5	4.87	22.2	713	10.6	5.49	58.3	1 873
Kalgold	5.2	1.49	7.8	251	10.4	1.89	19.6	630	16.7	1.63	27.3	878	32.4	1.69	54.7	1 759
Orkney 2	1.1	16.52	17.6	567	0.2	19.42	3.9	126	0.0	0.00	0.0	0	1.3	16.98	21.6	693
Orkney 4	5.5	9.58	53.1	1 706	3.3	7.03	23.5	755	42.8	3.15	134.8	4 335	51.7	4.09	211.4	6 795
Orkney 6&7	1.6	7.28	11.5	369	5.7	5.46	31.1	999	0.0	0.00	0.0	0	7.3	5.86	42.5	1 368
Total Underground	**88.4**	**5.58**	**493.2**	**15 857**	**100.6**	**4.20**	**422.1**	**13 571**	**338.5**	**3.17**	**1 073.5**	**34 514**	**527.5**	**3.77**	**1 988.8**	**63 942**

Ore reserves

	PROVEN				PROBABLE				TOTAL			
Mine area	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Harmony 2	0.5	5.57	2.8	89	0.2	3.19	0.6	19	0.7	4.92	3.3	108
Merriespruit 1	2.9	4.00	11.5	369	2.2	4.10	9.1	293	5.1	4.04	20.6	662
Merriespruit 3	0.9	3.70	3.3	105	1.2	3.71	4.6	147	2.1	3.70	7.8	252
Unisel	2.8	5.11	14.3	460	2.4	5.10	12.2	394	5.2	5.10	26.6	854
Brand 3	0.6	5.14	3.1	98	0.5	4.54	2.4	78	1.1	4.85	5.5	176
Bambanani	4.7	8.25	38.9	1 252	4.8	7.78	37.7	1 212	9.6	8.01	76.6	2 464
Joel	0.7	4.58	3.0	96	1.3	4.13	5.2	168	1.9	4.28	8.2	264
West	1.2	6.43	7.8	250	0.2	6.34	1.2	40	1.4	6.42	9.0	290
St Helena 8	1.2	5.23	6.5	208	0.2	4.67	1.0	31	1.4	5.15	7.4	239
Kalgold	0.3	2.68	0.7	23	1.5	2.29	3.4	108	1.7	2.35	4.1	131
Orkney 2	1.6	7.06	11.4	368	0.3	7.06	2.3	75	1.9	7.06	13.8	442
Orkney 4	2.6	6.31	16.4	526	1.1	5.58	6.2	199	3.7	6.09	22.6	726
Orkney 6&7	1.5	5.79	8.7	280	5.4	4.34	23.5	757	6.9	4.66	32.2	1 037
Total Underground	**21.5**	**5.98**	**128.3**	**4 124**	**21.4**	**5.11**	**109.5**	**3 519**	**42.9**	**5.55**	**237.7**	**7 643**

Growth shafts

Mineral resources

Mine area	MEASURED Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	INDICATED Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	INFERRED Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	TOTAL Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground																
Doornkop																
Kimberley Reef	9.4	3.22	30.1	968	11.6	3.16	36.8	1 183	278.5	2.22	617.9	19 865	299.5	2.29	684.8	22 016
Doornkop South Reef	0.3	7.79	2.0	63	1.6	10.39	17.1	551	67.1	5.39	361.5	11 622	69.0	5.52	380.6	12 236
Elandsrand	22.5	8.10	182.6	5 870	45.2	8.26	373.3	12 002	8.7	6.89	60.0	1 929	76.4	8.06	615.9	19 802
Phakisa	0.0	0.00	0.0	0	20.3	10.78	218.7	7 031	51.6	9.39	484.1	15 563	71.9	9.78	702.7	22 593
Total Underground	**32.1**	**6.68**	**214.7**	**6 902**	**78.7**	**8.20**	**645.9**	**20 767**	**405.9**	**3.58**	**1523.4**	**48 979**	**516.7**	**4.61**	**2384.0**	**76 648**

Ore reserves

Mine area	PROVEN Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	PROBABLE Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)	TOTAL Tonnes (Mt)	g/t	Gold (000kg)	Gold (000oz)
Underground												
Doornkop												
Kimberley Reef	0.5	3.54	1.9	62	0.2	3.57	0.7	24	0.8	3.55	2.7	86
Doornkop South Reef	0.1	6.94	0.7	22	1.5	7.36	10.7	343	1.6	7.33	11.4	365
Elandsrand	4.3	8.60	36.8	1 184	21.4	9.42	201.5	6 478	25.7	9.28	238.3	7 661
Phakisa	0.0	0.00	0.0	0	16.7	7.38	123.1	3 959	16.7	7.38	123.1	3 959
Total Underground	**4.9**	**8.01**	**39.4**	**1 268**	**39.7**	**8.45**	**336.0**	**10 803**	**44.7**	**8.40**	**375.5**	**12 071**

Ore reserve statement (Imperial)

Operations	PROVEN RESERVES Tons (Mt)	Grade oz/ton	Gold[1] (million ounces)	PROBABLE RESERVES Tons (Mt)	Grade oz/ton	Gold[1] (million ounces)	TOTAL RESERVES Tons (Mt)	Grade oz/ton	Gold[1] (million ounces)
South Africa Underground									
Elandskraal	4.72	0.251	1.18	23.59	0.275	6.48	28.31	0.271	7.66
Free State	11.55	0.146	1.69	17.72	0.141	2.49	29.27	0.143	4.18
Randfontein	5.22	0.180	0.94	12.42	0.141	1.75	17.64	0.153	2.69
Evander	8.40	0.182	1.53	20.04	0.200	4.02	28.44	0.195	5.55
Evander (below infrastructure)				44.61	0.219	9.78	44.61	0.219	9.78
Target	7.68	0.206	1.58	19.72	0.162	3.20	27.40	0.175	4.78
Kalgold (opencast)	0.30	0.078	0.02	1.62	0.067	0.11	1.91	0.069	0.13
Free Gold	16.94	0.204	3.45	46.49	0.211	9.81	63.42	0.209	13.26
Orkney	6.30	0.186	1.17	7.56	0.136	1.03	13.87	0.159	2.20
Total South Africa Underground	**61.12**	**0.189**	**11.57**	**193.76**	**0.200**	**38.66**	**254.88**	**0.197**	**50.23**
SA Surface									
Target				0.24	0.018	0.004	0.24	0.018	0.004
Free State	24.17	0.012	0.29	2.89	0.014	0.04	27.06	0.012	0.33
Randfontein	2.16	0.021	0.05	0.53	0.043	0.02	2.69	0.025	0.07
Kalgold (surface stockpile)	0.59	0.037	0.02				0.59	0.037	0.02
Free Gold	2.73	0.012	0.03	7.00	0.022	0.16	9.73	0.020	0.19
Total South Africa Surface	**29.65**	**0.013**	**0.39**	**10.66**	**0.021**	**0.22**	**40.31**	**0.015**	**0.61**
Australian Operations[2]									
Northern Territory	0.06	0.406	0.02	0.99	0.083	0.08	1.05	0.101	0.11
Mt. Magnet	2.03	0.047	0.10	3.87	0.138	0.53	5.91	0.106	0.63
South Kalgoorlie	2.25	0.050	0.11	2.30	0.091	0.21	4.55	0.070	0.32
Total Australian Operations	**4.34**	**0.053**	**0.23**	**7.16**	**0.115**	**0.82**	**11.50**	**0.092**	**1.05**
Papua New Guinea[3]									
Hidden Valley	3.00	0.099	0.30	19.57	0.086	1.69	22.57	0.088	1.99
Hamata	0.82	0.080	0.07	2.25	0.085	0.19	3.07	0.084	0.26
Total Papua New Guinea	**3.82**	**0.095**	**0.36**	**21.81**	**0.086**	**1.88**	**25.64**	**0.087**	**2.24**
GRAND TOTAL	**98.93**	**0.127**	**12.56**	**233.40**	**0.178**	**41.58**	**332.22**	**0.163**	**54.14**

[1] Gold ounce figures are fully inclusive of all mining dilutions and gold losses, and are reported as mill delivered tons and head grades. Metallurgical recovery factors have not been applied to the reserve figures.
[2] Includes reserves from underground and surface mining at each of the Australian operations.
[3] Includes reserves from underground and surface mining at the operations.
NB Rounding of figures may result in slight computational discrepancies.

Ore reserve statement (Metric)

OPERATIONS	PROVEN RESERVES			PROBABLE RESERVES			TOTAL RESERVES		
Mine Area	Tonnes (Mt)	Grade (g/t)	Gold kg (000)	Tonnes (Mt)	Grade g/t	Gold kg (000)	Tonnes (Mt)	Grade g/t	kg[1] (000)
Underground									
South Africa Underground									
Elandskraal	4.3	8.60	37	21.4	9.42	201	25.7	9.28	238
Free State	10.5	5.01	53	16.1	4.82	77	26.6	4.90	130
Randfontein	4.7	6.18	29	11.3	4.83	54	16.0	5.23	84
Evander	7.6	6.24	48	18.2	6.87	125	25.8	6.69	172
Evander (below infrastructure)				40.5	7.52	304	40.5	7.52	304
Target	7.0	7.07	49	17.9	5.56	99	24.9	5.98	149
Kalgold (opencast)	0.3	2.68	1	1.5	2.29	3	1.7	2.35	4
Free Gold	15.4	6.98	107	42.2	7.23	305	57.5	7.17	412
Orkney	5.7	6.38	37	6.9	4.67	32	12.6	5.45	69
Total South Africa Underground	**55.4**	**6.49**	**360**	**175.8**	**6.84**	**1 202**	**231.2**	**6.76**	**1 562**
South Africa Surface									
Target				0.2	0.61	0.1	0.2	0.61	0.1
Free State	21.9	0.41	9	2.6	0.47	1	24.5	0.42	10
Randfontein	2.0	0.72	1	0.5	1.47	1	2.4	0.87	2
Kalgold (surface stockpile)	0.5	1.28	1				0.5	1.28	1
Free Gold	2.5	0.42	1	6.4	0.77	5	8.8	0.67	6
Total South Africa Surface	**26.9**	**0.45**	**12**	**9.7**	**0.72**	**7**	**36.6**	**0.52**	**19**
Australian Operations[2]									
Northern Territory	0.1	13.91	1	0.9	2.83	3	1.0	3.46	3
Mt. Magnet	1.8	1.60	3	3.5	4.71	17	5.4	3.64	20
South Kalgoorlie	2.0	1.71	3	2.1	3.11	6	4.1	2.42	10
Total Australian Operations	3.9	1.83	7	6.5	3.94	26	10.4	3.14	33
Papua New Guinea[3]									
Hidden Valley	2.7	3.39	9	17.8	2.96	53	20.5	3.02	62
Hamata	0.7	2.74	2	2.0	2.92	6	2.8	2.87	8
Total Papua New Guinea	**3.5**	**3.25**	**11**	**19.8**	**3.00**	**59**	**23.3**	**3.00**	**70**
GRAND TOTAL	**89.7**	**4.35**	**391**	**211.7**	**6.11**	**1 293**	**301.5**	**5.59**	**1 684**

1 Gold kilogram figures are fully inclusive of all mining dilutions and gold losses, and are reported as mill delivered tons and head grades. Metallurgical recovery factors have not been applied to the reserve figures.

2 Includes reserves from underground and surface mining at each of the Australian operations.

3 Includes reserves from underground and surface mining at the operations.

NB Rounding of figures may result in slight computational discrepancies.

Signed by Competent Persons!

Jaco Boshoff; Harmony Group
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Greg Job; South Kal mines

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Glossary of geological terms

Below infrastructure:	That part of a company's ore reserve that can only be accessed following certain capital expenditure which has yet to be approved.
Craton:	A part of the earth's crust that has attained stability and has been little deformed for a long period of geological time.
Diorite:	A group of plutonic rocks intermediate in composition between acidic and basic.
Felsic:	An igneous rock having abundant light coloured minerals.
Graben:	A block of rock that lies between two faults, and has moved downward to form a depression between two adjacent fault blocks.
Greenstone:	A field term for any compact dark green altered or metamorphosed basic igneous rock that owes its colour to chlorite.
Horst:	A block of rock that lies between two faults and has moved upward relative to the two adjacent fault blocks.
Kaapvaal Craton:	The ancient proto-continental basement of South Africa.
Lacustrine:	Pertaining to, formed in lakes.
Mafic:	An igneous rock composed chiefly of dark, ferromagnesium minerals.
Ophiolite:	A group of mafic and ultramafic igneous rocks derived by metamorphism, whose origin is associated with an early phase of the development of a geosyncline.
Plunge:	The inclination of a fold axis or other linear feature, measured in the vertical plane.
Subcrop:	A rock stratum that unconformably underlies another rock stratum.
Syncline:	Concave fold in stratified rock, in which strata dip down to meet in a trough.
Witwatersrand Basin:	A sedimentary basin in South Africa.