



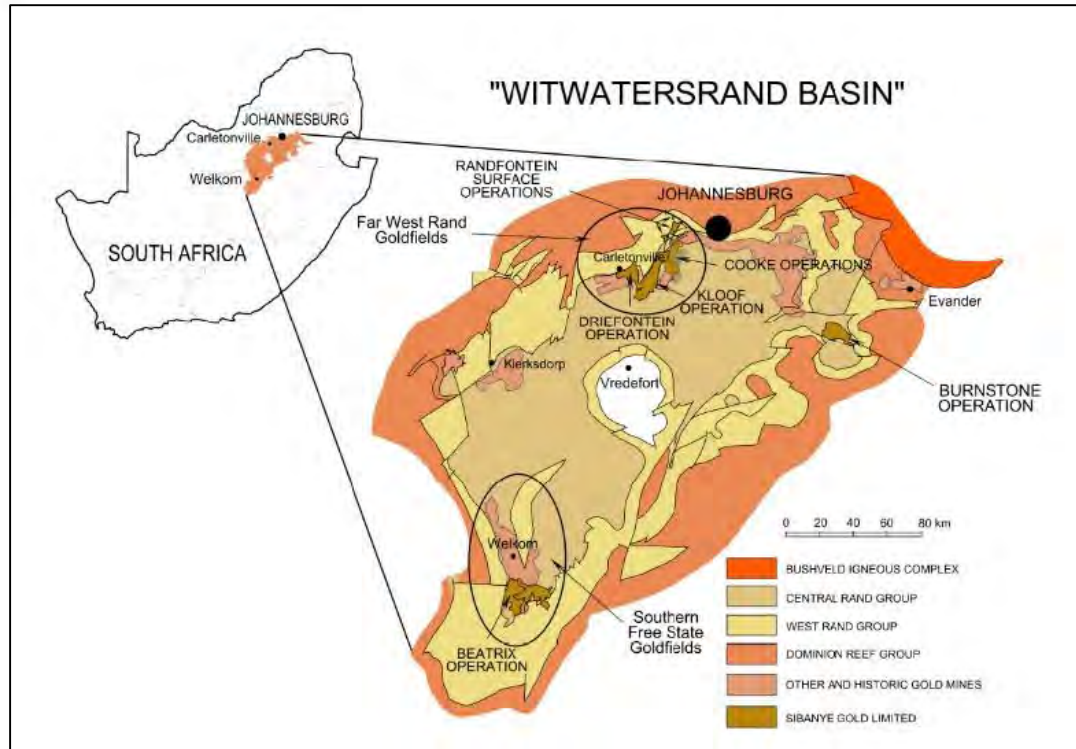
# BURNSTONE PROJECT

## Feasibility study and LoM plan

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- In April 2014, Sibanye exercised its option to acquire the Burnstone operation through a Business Rescue process
- At the time the operation was on care and maintenance with operations having ceased post the expenditure of some \$500m in capital including:
  - a vertical and decline shaft
  - mechanised machinery
  - a 125,000ktpm metallurgical plant
  - tailings facility
  - surface infrastructure
  - fully permitted operation

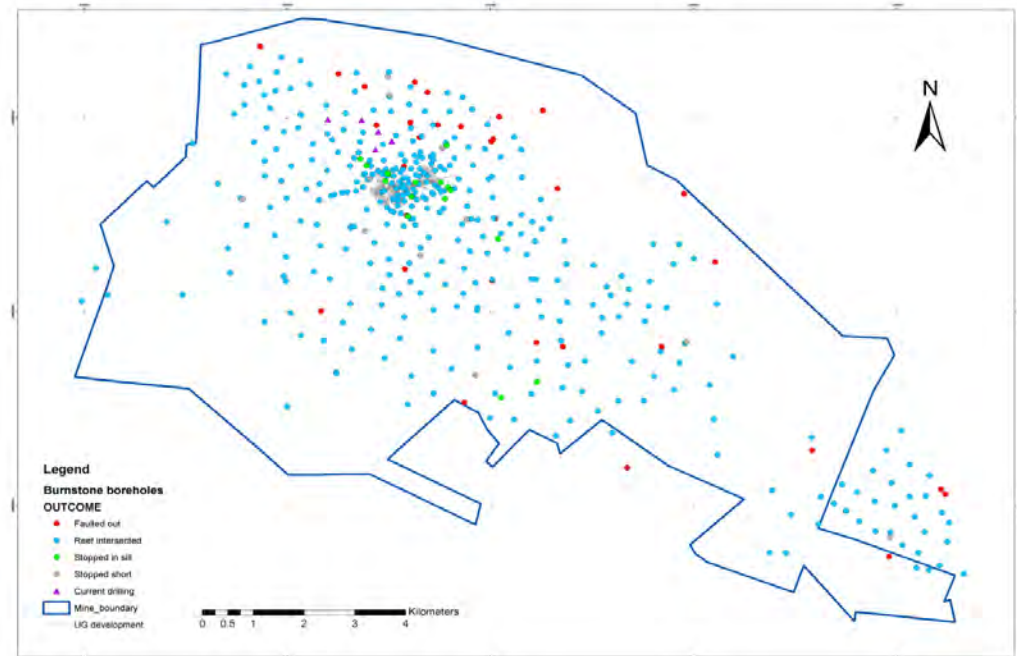


# Key terms of the Burnstone acquisition

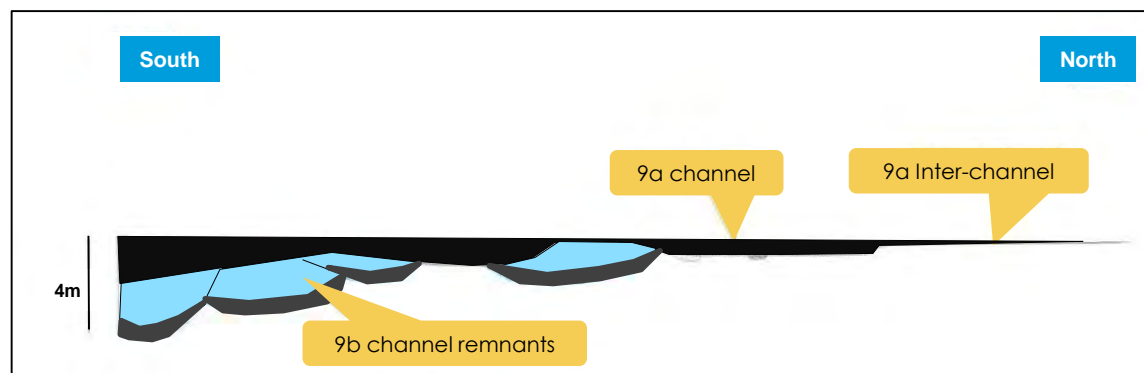


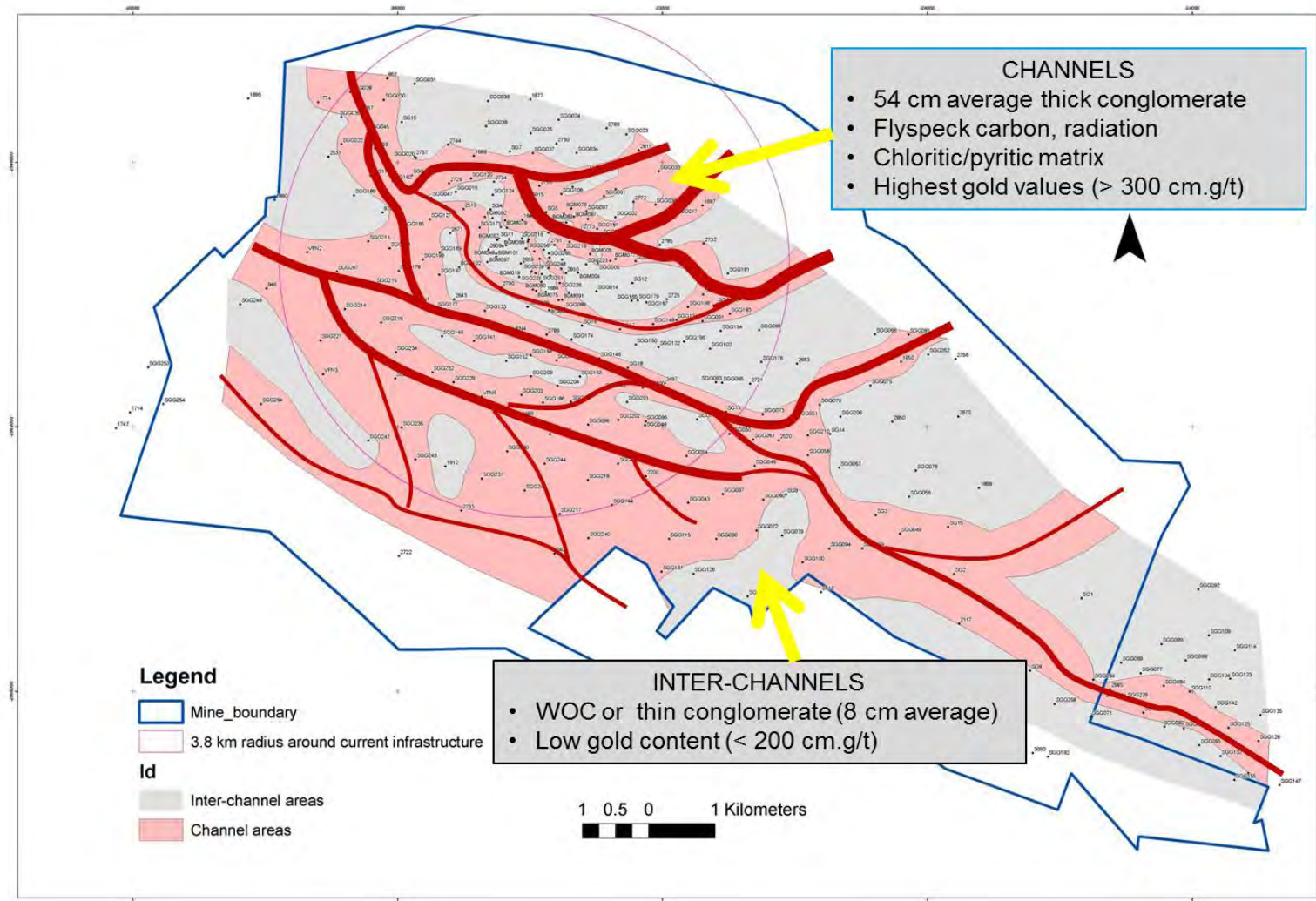
<b>Offer</b>	<ul style="list-style-type: none"><li>• Sibanye acquires 100% of issued share capital of Southgold (sole owner of Burnstone mine and assets)</li><li>• All shareholder loans and inter-group loans against Southgold</li></ul>
<b>Offer consideration</b>	<ul style="list-style-type: none"><li>• <b>Payment of \$7.25 million</b> on completion of transaction</li><li>• <b>Total debt reduced by 55% to \$177.3 million</b>, back-ranked to new funding and ring-fenced to and repaid from Burnstone free cash flow</li></ul>
<b>New funding</b>	<ul style="list-style-type: none"><li>• Sibanye to <b>provide up to R 950 million, over time, as working capital</b> to support chosen production plan</li><li>• Sibanye loan attracts interest at JIBAR +4% (~9.5%)</li><li>• <b>Sibanye loan to be repaid first:</b><ul style="list-style-type: none"><li>• 90% free cash to shareholder loan; 10% to debt</li></ul></li></ul>
<b>Debt settlement</b>	<ul style="list-style-type: none"><li>• On settlement of the Sibanye loan and interest, debt will be repaid from free cash flow:<ul style="list-style-type: none"><li>• 70% to shareholder loan; 30% to debt</li><li>• moratorium on interest and capital repayments for 36 months from transaction completion</li></ul></li><li>• Debt attracts interest at LIBOR +4% (~4.5%)</li><li>• Option to settle outstanding balances at any time without penalty</li><li>• Bank debt ring-fenced to Burnstone</li></ul>

- Infrastructure and access to reef
- **Re-evaluate the geological model**
  - one of the most **extensively drilled** projects in the Wits Basin
  - **access to underground** workings to ground truth modelling
  - understanding the **sedimentology** and associated gold distribution
  - remodel the **structural** geology, fault blocks and reef orientation
- Undertake new feasibility study considering **conventional stopping** through mechanised footwall development

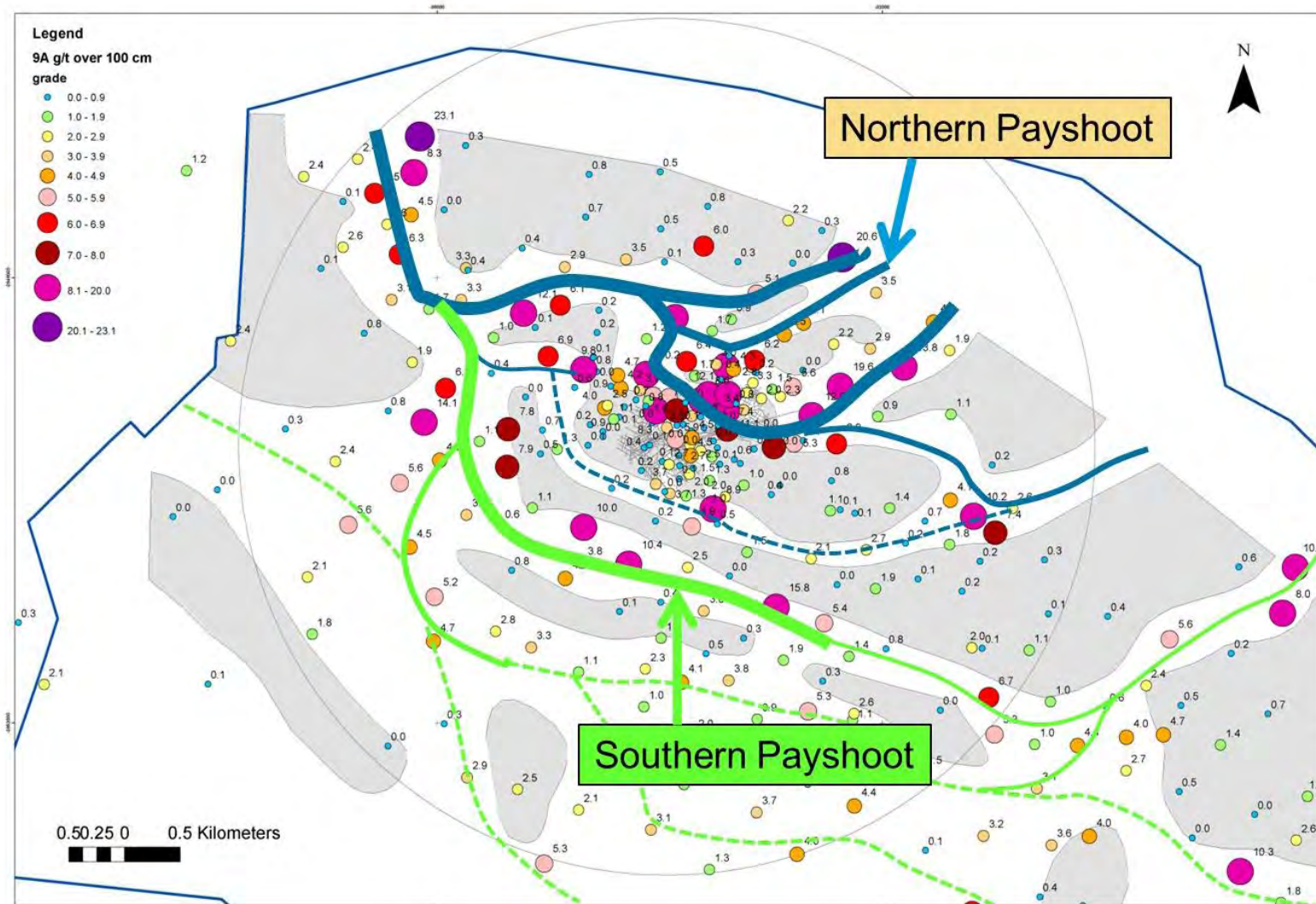


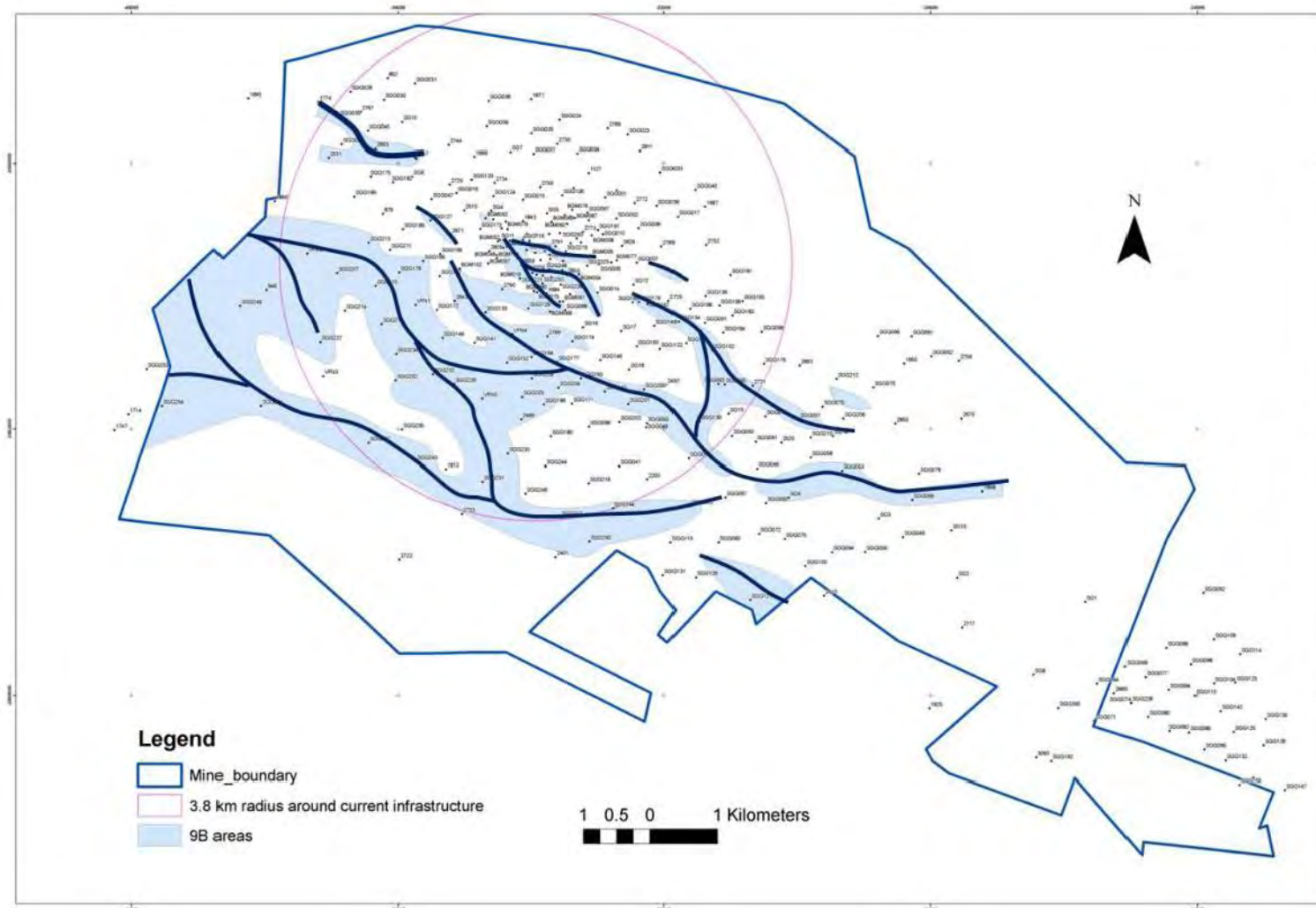
- Geological evaluation work included:
  - re-logging of each individual borehole (441 surface boreholes)
  - re-sampling of selected boreholes as well as many previously not sampled boreholes
  - channel and inter-channel areas delineated
  - completed infill-drilling (5 boreholes) in critical area
- Geological structural model built from first principals based on underground mapping and borehole intersections
  - produced new 3-D DataMine model
- All models ground-truthed through underground investigations where possible
- Complete re-run of mineral resource estimates



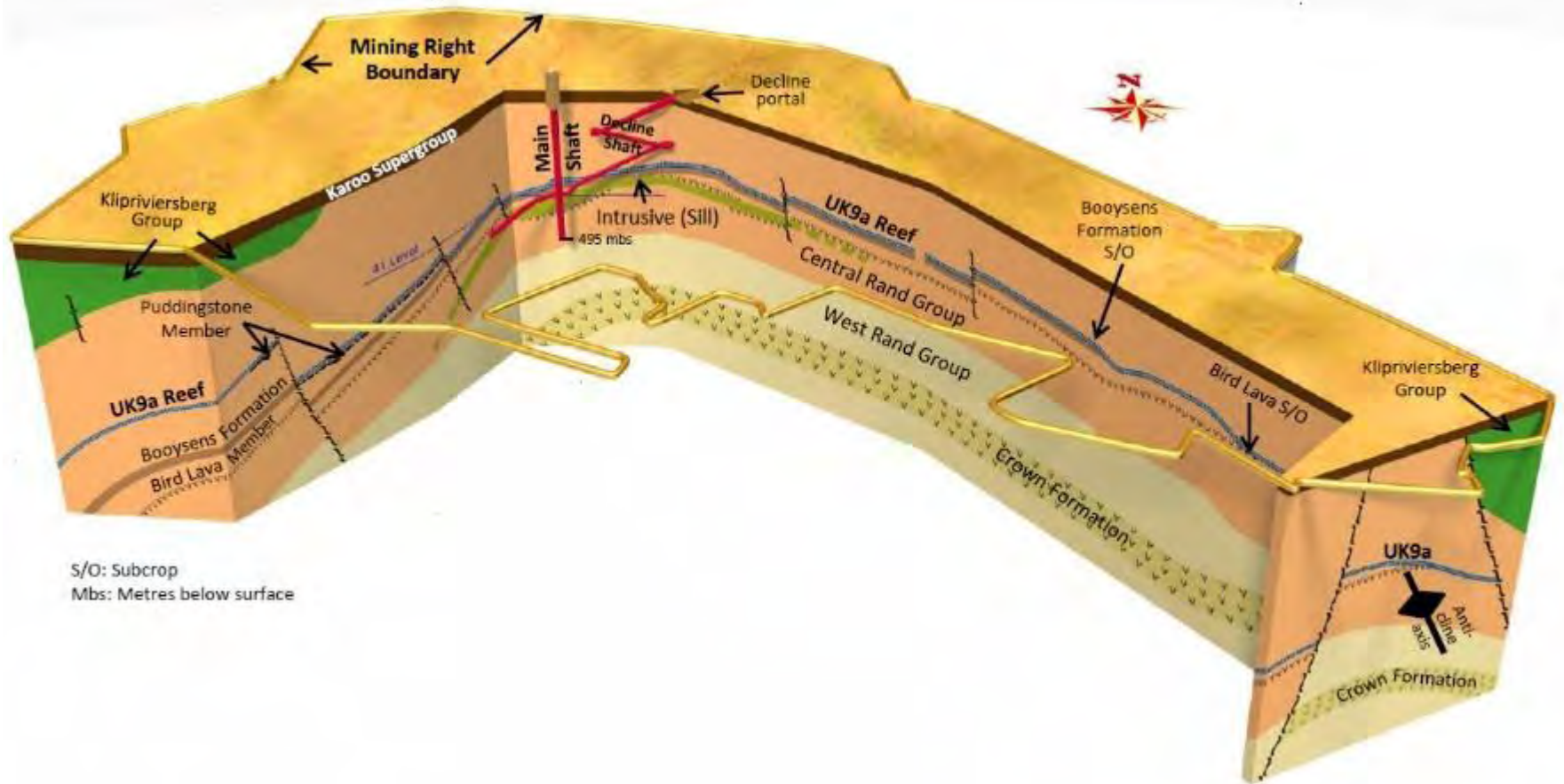


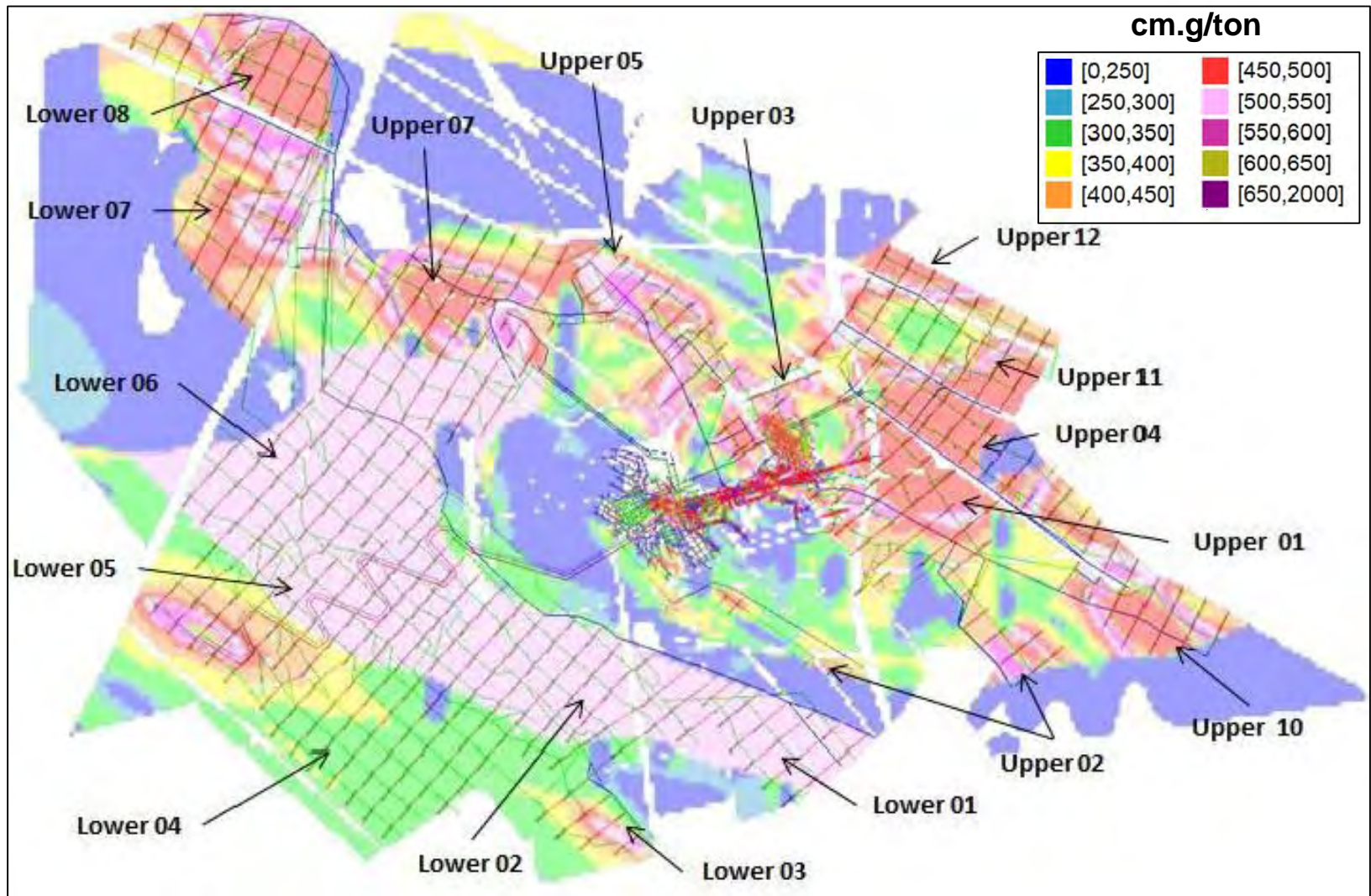






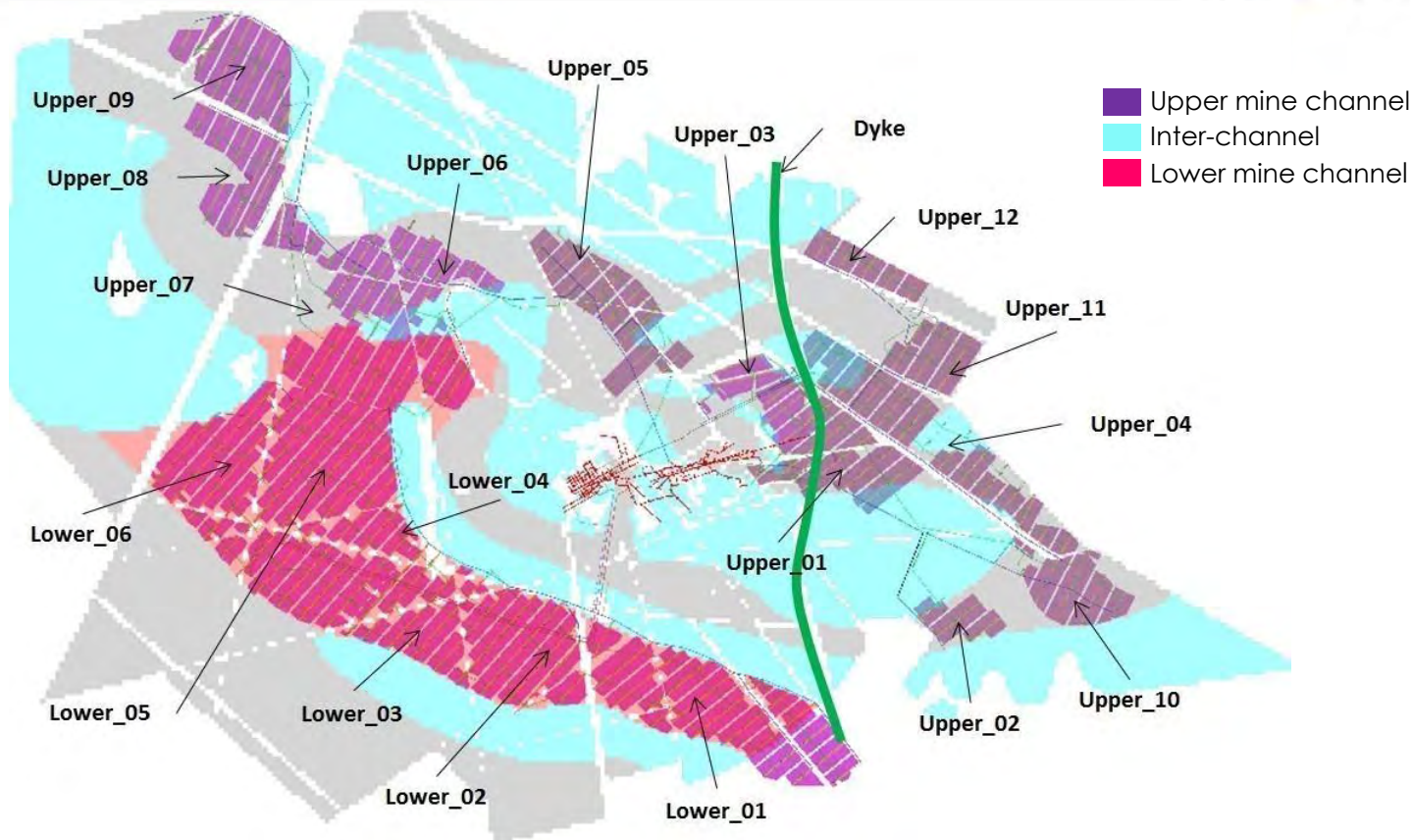
# Simplified geological view of ore body





- Feasibility study premised on conventional stoping with mechanised footwall development
- Several scenarios were planned in detail and ultimately optimised
  - raise back length layout of 250m
  - in-situ cut-off grade of 450cmg/t
- Designs:
  - underpinned by revised geological structures and evaluation plan
  - layouts optimised for safety, productivity and extraction ratios
- Current mine plan and reserves were constrained to a 3km radius around the shaft
  - approximately 60% of total mineral resource
- Feasibility study after external review approved by the Sibanye Board
  - project execution started in January 2016

# Resources to feasibility project reserves



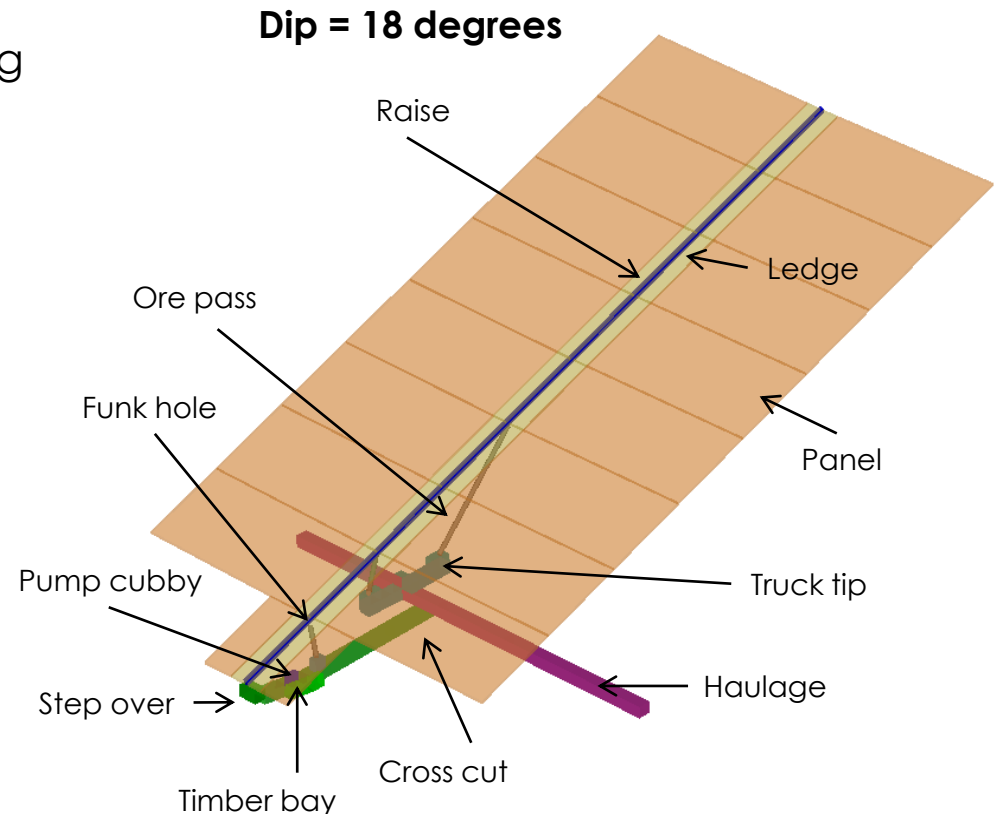
	Tonnes	Grade g/t	Content kg	Content Moz	Remarks
Total Burnstone resources	54,100,000	5.10	275,910	8,890	Feasibility study only considered 60% of the resource within 3km radius of shaft
Feasibility study resources	33,298,925	5.46	181,812	5,662	
<b>Feasibility study reserves</b>	<b>12,987,192</b>	<b>4.14</b>	<b>53,716</b>	<b>1,727*</b>	

\* FS reserves/PRF (96%)= 2016 LoM reserves @ 1.799Moz

# Conversion of resources to reserves

	Tonnes	Grade g/t	Content kg	Content Moz	Remarks
Total Burnstone resource	54,100,000	5.10	275,910	8.890	
Burnstone study resource	33,298,925	5.46	181,812	5.662	3km radius from shaft
Stopes scheduled in situ	10,774,276	6.10	65,711	2.110	High-grade areas targeted
Stopes final	<b>12,477,437</b>	<b>5.27</b>	<b>65,711</b>	<b>2.110</b>	
On-reef development in situ	853,312	1.88	1,604	0.050	
Total reef in situ	13,330,749	5.05	67,315	2.160	
MCF					81.0% Upper Mine 89.0% Lower Mine 85.0% Average
Total reef hoisted	12,987,192	4.31	55,954	1.799	
Plant recovery factor					96%
<b>Gold recovered</b>	<b>12,987,192</b>	<b>4.14</b>	<b>53,716</b>	<b>1.727</b>	

- 250m stope back, cross-cut, tip design
- Crosscut for men and material only
- Loading bays to handle rock separately
- Two ore passes per raise line
- Provision made for water handling
- Design considered both safety and productivity
- Design allows early access to mining blocks



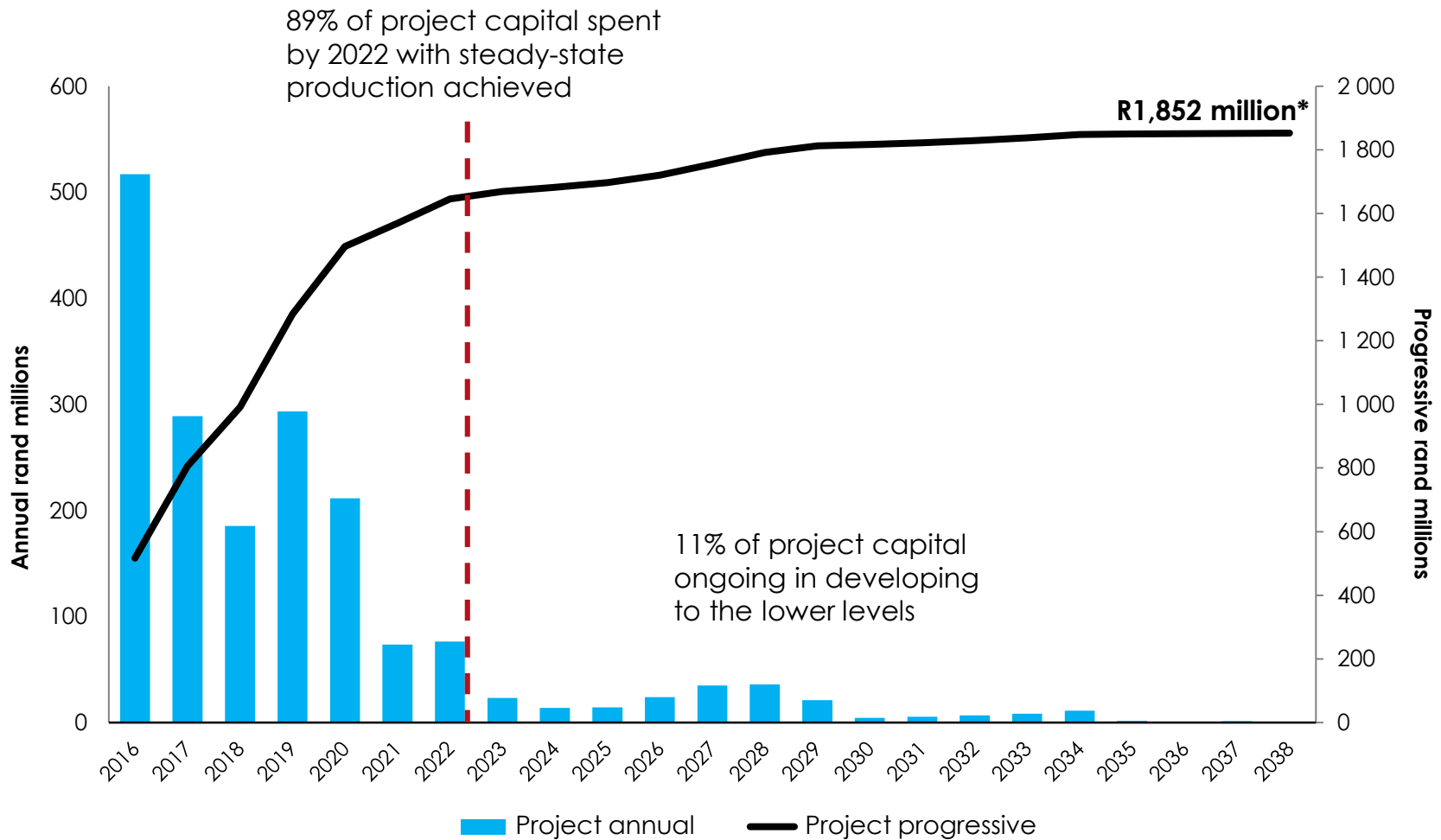


Project metrics (@ R450,000/kg)	Unit	Feasibility study 2038 cut-off
Project life	Year	2038 (23 years at the 3km radius)
Centares mined	m <sup>2</sup>	3,895,614
Tons milled	t	12,987,192
Recovered grade	g/t	4.14
Project capital cost*	Rm	1,852**
Gold produced**	Moz	1.727
Total all inclusive costs*	R/t	1,478
Total all inclusive costs*	R/kg	357,434

\* Pre tax and royalties, costs in 2015 money terms as at time of the feasibility study

\*\* Reserves estimated at 450,000 R/kg

# Feasibility study – project capital



\* Stated in real terms, January 2015 and includes an annual 10% contingency from 2016

# Total operating and ORD expenditure

Operating cost	Total cost million	R/t	R/t @ steady state production (2021-2029)
Labour	5,658	436	371
Power	1,623	125	94
Consumables	3,882	299	303
Total processing	1,417	109	106
<b>Total cost</b>	<b>12,580</b>	<b>969</b>	<b>874</b>

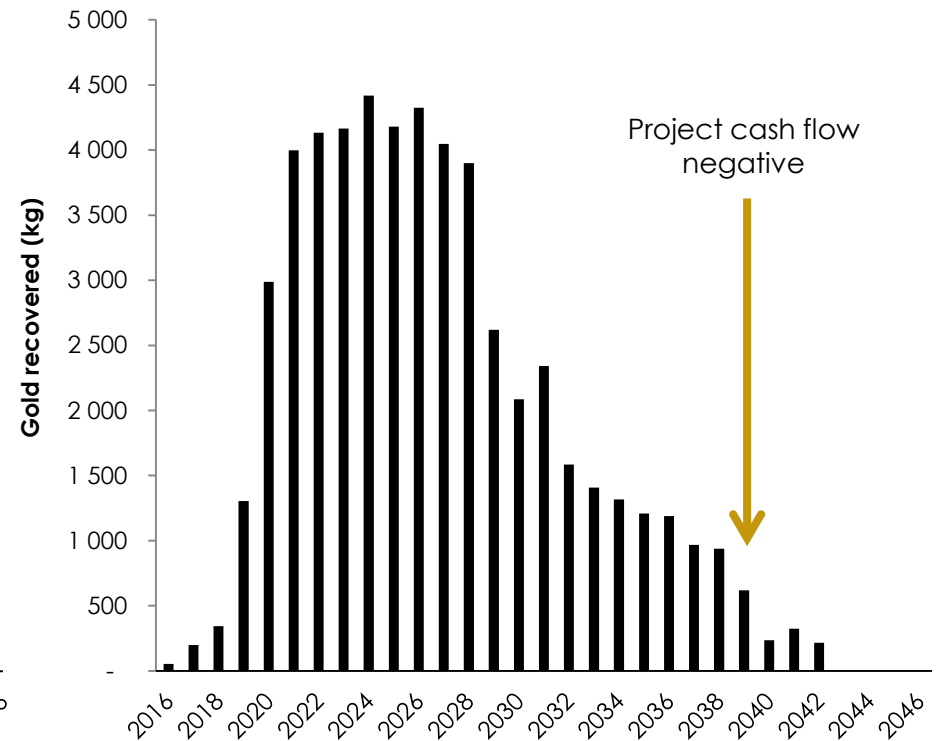
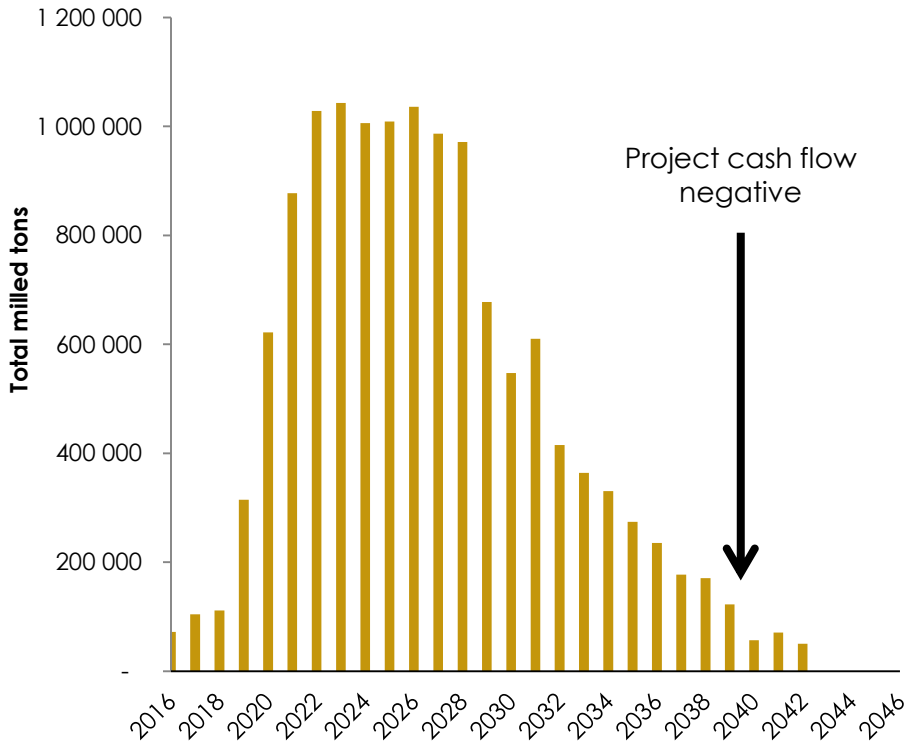
Ore Reserve development (ORD)	Total cost million	R/t	R/t @ steady state production (2021-2029)
Labour	969	75	56
Consumables	3,676	283	212
<b>Total cost</b>	<b>4,646</b>	<b>358</b>	<b>268</b>

Total OPEX & ORD	Total cost million	R/t	R/t @ steady state production (2021-2029)
<b>Total cost</b>	<b>17,226</b>	<b>1,327</b>	<b>1,142*</b>

\* Beatrix MUI, 3 shaft which is at steady state production had an actual average all-in cost of R1,141/tonne for 2015  
All costs in 2015 money terms

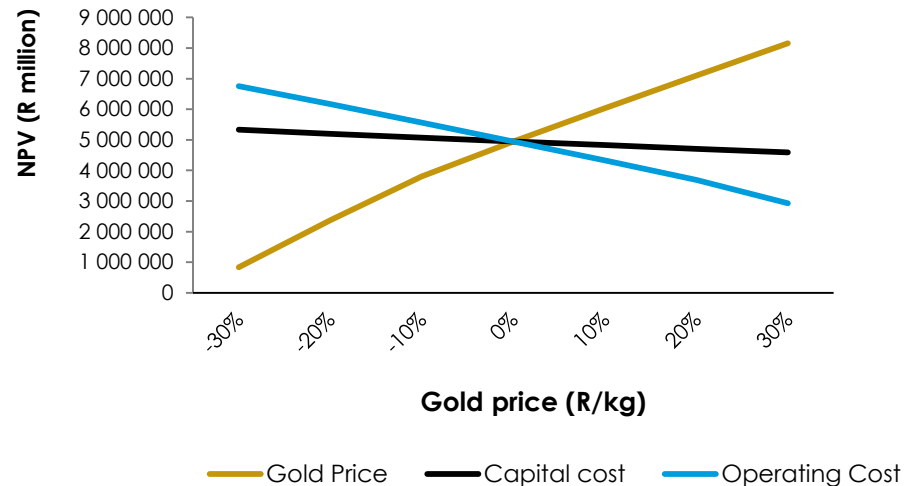
# Total mine tons milled, gold recovered annually

- 1 million reef tons annually at steady state production
- Gold recovered: 4,000kg (125,000oz) annually at steady state production (eight years)

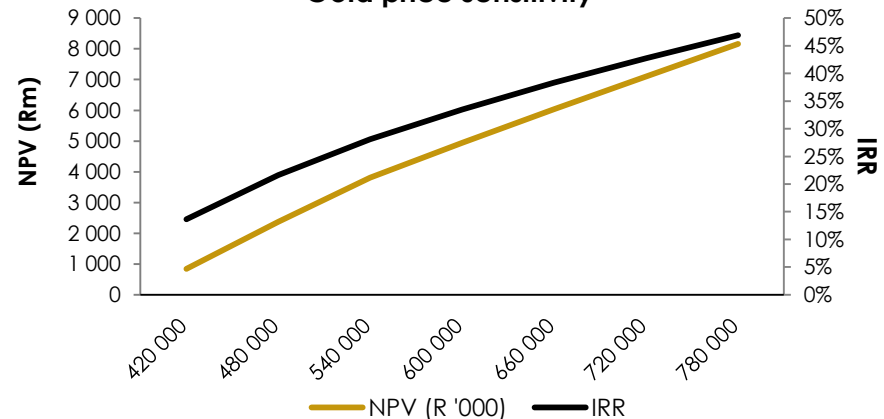


- **R4.95bn** project NPV (post tax) at R600,000/kg (8% discount rate)
  - **R3.38bn** project NPV attributed to Sibanye (post tax, as per Facility Agreement with the Lender's)
- Project meets required hurdle rates at R450,000/kg and has a **33.5% post tax IRR** at R600,000/kg
  - Sibanye's return of attributed cash flow results in a **28% post tax IRR**
- Substantial return on acquisition investment

Sensitivity analysis (R600,000/kg)



Gold price sensitivity



- Feasibility study plan is limited to radius of 3km from shaft
  - 40% increase in resource beyond this area but will require development
- Potential to reduce total development once channels are identified underground
- Overlap between current mine operations and feasibility study is currently being undertaken
  - early production from pillar mining
  - head start on development
- Opportunity to mine the lower-grade UK9b in the lower mine
  - lower mine will be building up to steady state from 2018 to 2021, opportunity to drill and model UK9b



Capital includes:

- 3,368m development
- Pumping and water handling infrastructure including settler installation
- Shaft alignment, steelwork and headgear refurbishment
- Shaft bottom repair
- Refurbished and new TMM fleet
- Care and maintenance costs refer to ongoing 'operating costs'

