

The Potential to Restart Sustainable Gold Production at the Rhythm of the Nation Mine (Mining Right NW30/5/1/2/10052MR).

The location of the ROTN Mining Right in relation to gold bearing geological units

The Rhythm of the Nation (ROTN) Mining Right is fragmented into 6 blocks (Numbered 1 to 6 on Figure 1). Block 1 shares its eastern border with the Eleazer GM while Block 2 lies directly east of Eleazer (Figure 1).

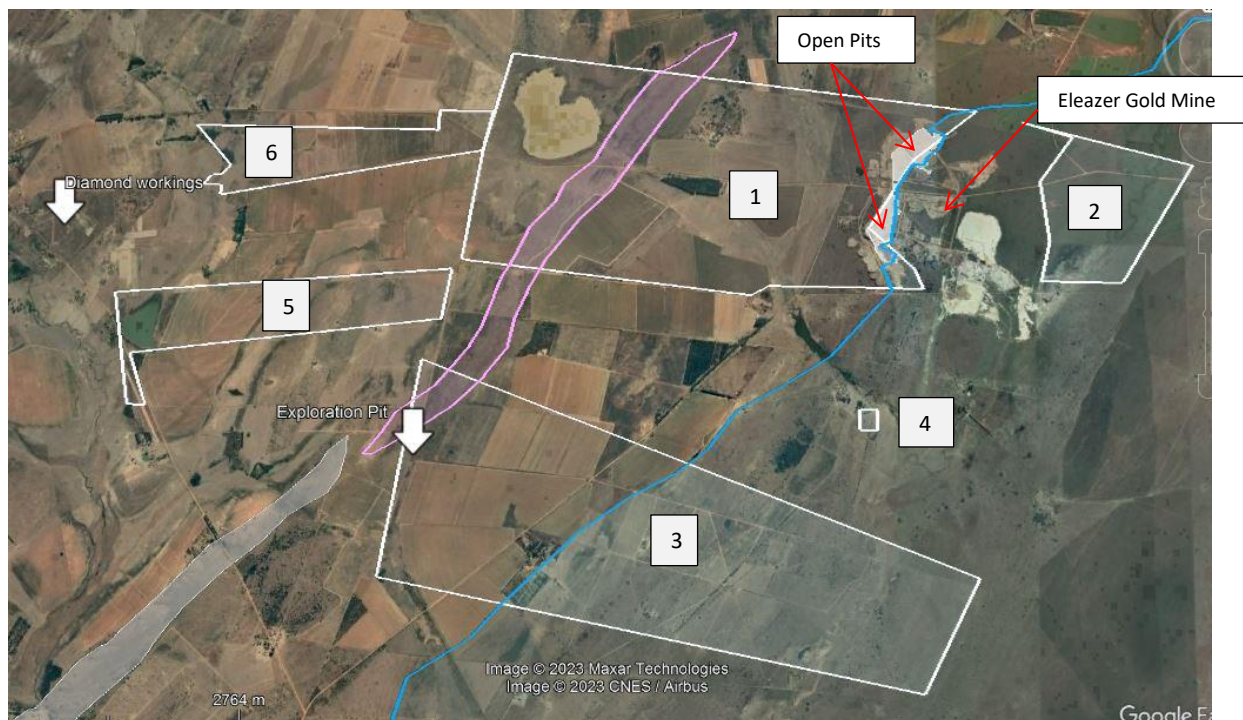


Figure 1: The Rhythm of the Nation Mining Right in relation to the distribution of the Black Reef and possible Buffelsdoorn/Bonanza Reefs

Within the ROTN Mining Right and its vicinity (including the Eleazer G.M.) it is only the Black Reef that has been mined successfully and it this reef is by implication also considered to be the primary target for future mining. The distribution of the Black Reef, in relation to the ROTN Mining Right, is shown on Figure 1. The outcrop of the Black Reef extends NE – SW through the sub-region (Blue line on Figure 1). From this outcrop at surface the reef dips eastwards into the subsurface at 7° to 8° to occur progressively deeper down-dip over the area tinted light blue on Figure 1.

Some potential exist that additional gold bearing reefs such as the Buffelsdoorn and Bonanza Reefs may be developed to the west of the Black Reef outcrop and particularly along a gentle NE – SW trending quartzite ridge (purple strip on Figure 1). There is currently no conclusive evidence that these reefs are indeed present here and this area is considered to at best be a high risk conceptual exploration targets (unless ROTN has information to the contrary).

The location of the ROTN Mining Right in relation to that of the reef zones implies the following:

- Within Block 1, the Black Reef is limited to a relatively thin strip between the outcrop and the eastern boundary with Eleazer Mine. Importantly, this has been the site of all ROTN's past production, hosting their 2 open pits.
- The entire Blocks 2 and 4 are east of the Black Reef outcrop and therefore have potential for Black Reef at depth over their full extent. However, in being some distance east of the outcrop the Black Reef will most likely be too deep for open pit extraction (240 mbs in Block 2 and 120mbs in Block 4). Both these Block are also by all accounts unexplored (no drilling) and they can currently not be considered to be anything other than relatively deep exploration targets. These blocks are clearly rather risky medium to long term exploration plays.
- In Block 3 the Black Reef outcrops over a strike distance of 2400 m. Given the shallow 8° dip there is a roughly 350 m wide zone along the east of the outcrop where the Black Reef should be between 0 m (at outcrop) and 50 m below surface. On all of the ROTN Mining Right, this zone is considered as having the best potential to contain open pit extractable Black Reef. However, unless conclusive evidence can be presented that this potential has already been confirmed by drilling, then this zone can at best be considered to be a fair exploration target (discussed later).
- Blocks 5 and 6 lie west of the Black Reef outcrop and they have no Black Reef potential.
- The western portions of Blocks 1 and 3 have some unconfirmed potential for Buffelsdoorn or Bonanza Reef (purple area on Figure 1), representing medium term exploration targets.

Available Ore Resource and Short Term Mining Potential

Based on the available information it is concluded that the only firm potential to quickly (within months) restart gold production at the ROTN mine is confined to the eastern extreme of Block 1. In particular, it is only here along the shared boundary with the Eleazer Mine (Figure 2) where there is reasonable certainty that there is unmined Black Reef with gold mineralisation higher than 1 g/t. The two pits have already exploited most of the shallow Black Reef from the outcrop to a position close to the Eleazer boundary with the only remaining ground being the relatively small “extensions” of the two existing pits up to the Eleazer boundary (hatched areas on Figure 2).

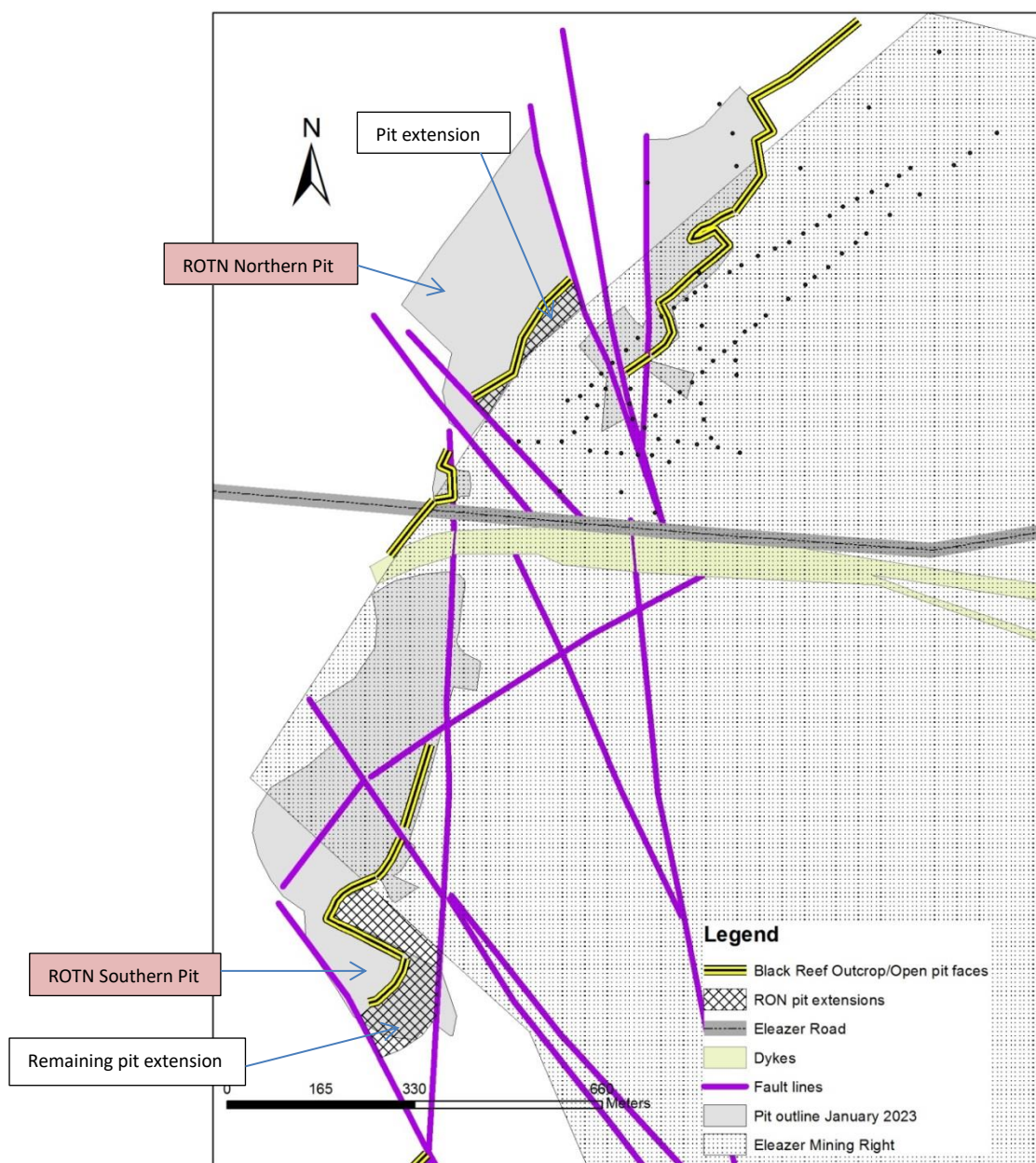


Figure 2: Location of short term mining areas on the Rhythm of the Nation Mining Right

The start-up potential of the two pits areas are as follows:

The ROTN Northern Pit Area

The ROTN Northern pit lies within a fault block, between two NW-SE trending faults (Figure 2), that extends eastwards into the Eleazer Mine. On the ROTN lease, this fault block has largely been mined out from the ROTN Northern Pit with only a narrow sliver of ground remaining between the pit face and the boundary with Eleazer. Old underground stopes have been encountered in the open pit which means that a portion of the Black Reef has already been exploited within this fault block. Problematic is that the exact amount of underground stoping is uncertain, and the associated down-side risk is that there may only be as little as 15% of the Black Reef remaining within the old support pillars. Drilling done within this fault block at Eleazer yielded an average gold grade of around 2.2 g/t over 1 m (220 cm.g/t). A range estimate (considering variable percentages of underground stoping) indicates that there may be between 6 kg and 29 kg gold left in the ROTN North pit sliver of ground up to the Eleazer boundary (Table 1).

<i>Total area (m²)</i>	<i>% pillar area</i>	<i>Gold grade (g/t)</i>	<i>Reef thickness (cm)</i>	<i>Rock density</i>	<i>Tonnes ore</i>	<i>Gold content (kg)</i>	<i>Rand Value (million)</i>
6977	70	2.2	100	2.7	13187	29	27.4
6977	50	2.2	100	2.7	9419	21	19.5
6977	30	2.2	100	2.7	5651	12	11.7
6977	15	2.2	100	2.7	2826	6	5.9

Table 1: Estimated gold content range within the ROTN Northern Pit extension area

The overburden within the remaining piece of ground (“extension area”) has been partially stripped to form a stability bench and extraction of the reef in this ground by expanding the open pit will require for similar benches to be extended into the Eleazer Lease. Expansion of the ROTN open pit up to the boundary will require that some 320 000 tonnes of barren overburden will have to be stripped. As part of this stripping it is likely that drilling and blasting of a 2 to 3 m thick quartzite around 10 m above the reef will be required.

Noteworthy, is that the fault block within which the ROTN Northern Pit lies, continues eastwards into the Eleazer Lease where it presents a significant mining target at that mine (Figure 2). The ROTN Pit if restarted may potentially continue seamlessly into Eleazer (depending on its profitability). Alternatively, the ROTN pit’s high wall may serve as a portal to a decline into the Eleazer Block from which the remaining ROTN ground as well as the larger Eleazer portion of the fault block can be mined from underground. The ROTN Northern pit, “in the bigger picture”, may be of strategic value. The viability of any of the above mentioned mining options will need to be tested by feasibility studies before any mining decisions are made.

The ROTN Southern Pit Area

The ROTN Southern Pit seemingly could be extended northwards up to the Eleazer boundary as well as south-eastwards (Figure 2 – “Extension area”) to a depth of around 60 m. Extending the pit northwards up to the boundary with Eleazer will require bench stripping into the Eleazer ground. Extensive historic underground mining occurred within the “extension” area, which again cast uncertainty over the amount of ground that is left in the old support pillars. A positive aspect highlighted by the historic mining information is that the “extension” ground falls within a regional payshoot which has averaged around 7.5 g/t (in-situ) over 120 cm (900 cm.g/t). A range estimate of the potential gold content in the above extension indicates a gold content of between 51 kg and 128 kg (Table 2).

Total area (m ²)	% Pillar area	Gold grade (g/t)	Reef thickness (cm)	Rock density	Tonnes ore	Gold content (kg)	Rand value (million)
25 379	15	5	100	2.7	10278	51	48.5
25 379	17.5	6	110	2.7	13191	79	74.7
25 379	20	7.5	125	2.7	17131	128	121.2

Table 2: Estimated gold content range within the ROTN Southern Pit extension area

Extending the existing ROTN Southern pit up to the Eleazer boundary will require around 2.7 million tonnes of stripping. Again there may be some benefit in a consolidated ROTN and Eleazer mining plan where a northeast trending decline from the ROTN high-wall may enable underground mining of the remaining ROTN ground as well as two of the Eleazer mining blocks. Again feasibility work will be required to investigate all the mining options.

No value can be assigned to these remaining resources at the two current pits until a detailed feasibility has proven that it can practically be mined and also at a profit.

Sustainability of Mining

Even in considering the most optimistic resource scenario at ROTN Mine, i.e. if 150 kg of gold remains within the extensions and it can be mined profitably, it will still only support a few months of production e.g. around 5 months at (30 kg/month). ***There is currently no conclusive evidence available to Zambezi that any other substantial ore resources above 1 g/t have been defined outside of these “Pit Extensions”. Unless new ore resources are quickly discovered, there is therefore the very real risk that any new operation may run out-of ore within months.***

Historic trench and exploration adits as well as more recent “excavator” exploration by ROTN have failed to discover any payable outcropping Black Reef. However, the sub-surface potential of the Black Reef across the ROTN property is largely untested. The shallow zone along the outcrop in Block 3 (Figure 1) presents the best target for open pit extractable resources (generally shallower than 50 m). Exploration directed at this may entail drilling of a widely spaced (50 m apart) strike traverse of 50 m deep boreholes as a first phase, followed by infill drilling of mineralised areas. At an all-in drilling cost (drilling, processing, storing and assaying) of around R1300/m, a 40 borehole programme may cost around R2.6 million. If mineralised channel reef is intersected during the first phase drilling then it may require a similar drill programme to sufficiently infill the first phase drilling in order to define a mineable orebody. Exploring for the Buffelsdoorn and Bonanza Reefs will come at a similar cost. Such an exploration programme and associated work to define an orebody (if it exists) will take around 12 months to complete. ***In addition, the highly erratic mineralization associated with the Black Reef as well as the Buffelsdoorn and Bonanza Reefs make them high risk exploration targets. Exploration success is by no means guaranteed.***

Concluding Remarks

The ROTN Mining Right contains only a relatively small defined gold resource (55 kg and 150 kg in-situ), that may be available for short term mining. There is no concrete evidence available to Zambesi Gold that proves that ROTN has, through properly conducted and documented exploration, defined any additional gold ore resources. A primary risk at the ROTN Mine is that its ore will run out within 5 or 6 months and that an expensive drilling programme may fail to discover new ore resources. ***The sustainability of mining at ROTN is seriously at question and will depend entirely on an exploration programme discovering new shallow resources.***

Therefore, the scope to re-establish a sustainable and profitable gold mining operation on the Rhythm of the Nation Mining Right is at this stage considered to carry a high risk. Realistically, the small currently known ROTN ore resources may best be extracted if it is integrated into an Eleazer Mining Plan. Detailed feasibility work will be required to investigate this option.