

TOMS GULLY

ORE RESERVE REPORT



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Independence

Orelogy has no beneficial interest in the outcome of this technical study.

1 EXECUTIVE SUMMARY

Orelogy has been engaged by Primary Gold (PGO) to conduct a Mining Study (MS) and updated Mining Ore Reserve estimate for underground mining at Toms Gully (TG). This is based on the re-estimation of the Toms Gully Mineral Resource completed in 2021 by Cube Consulting. Open pit study work has progressed on the Mt Bundy Gold Project in 2021 and 2022.

In its 2023 DFS study, Primary Gold proposes to build a 5Mtpa conventional gold extraction CIL processing plant and TSF at Rustlers Roost, with open pit mining at Rustlers Roost, Q29, and the Annie Okaley. This large processing plant represents an opportunity for the Toms Gully underground where the last Ore Reserve estimate was made by Golders in 2013 when the ore was to be processed at the existing 0.25 Mtpa processing plant at Tom’s Gully.

This mining study and Ore Reserve update are carried out as part of the DFS of the integrated Mt Bundy Gold Project by processing the Tom’s Gully ore at the proposed 5 Mtpa new processing plant and TSF at Rustlers Roost.

The updated December 2021 Mineral Resource estimate completed by Cube includes six additional holes (2018) and updated geological and mineralisation interpretations from the previous 2014 estimate. This update generally extends the footprint west of the interpreted Williams Fault and increases/converts Inferred inventory to Indicated Resources at a slightly lower grade.

A number of mine design, scheduling, and costing scenarios have been completed per Table 1-1 and Figure 1-1 below. The LOM scenario delivers 1.7Mt at 5.4 g/t Au over an 8 year mine life (3 years dewatering, 5 years mining production).

Table 1-1 Study Scenarios

	Scenario	Resource Category
1a	Life of Mine (LOM)	LOM - MII
1b	Life of Mine (LOM) + Re-processing existing tails (TSF1)	LOM - MII
2	Reserves	Reserves - MI

Figure 1-1 Mine Design - Scenario 1 (LOM) – Plan View (Grade)

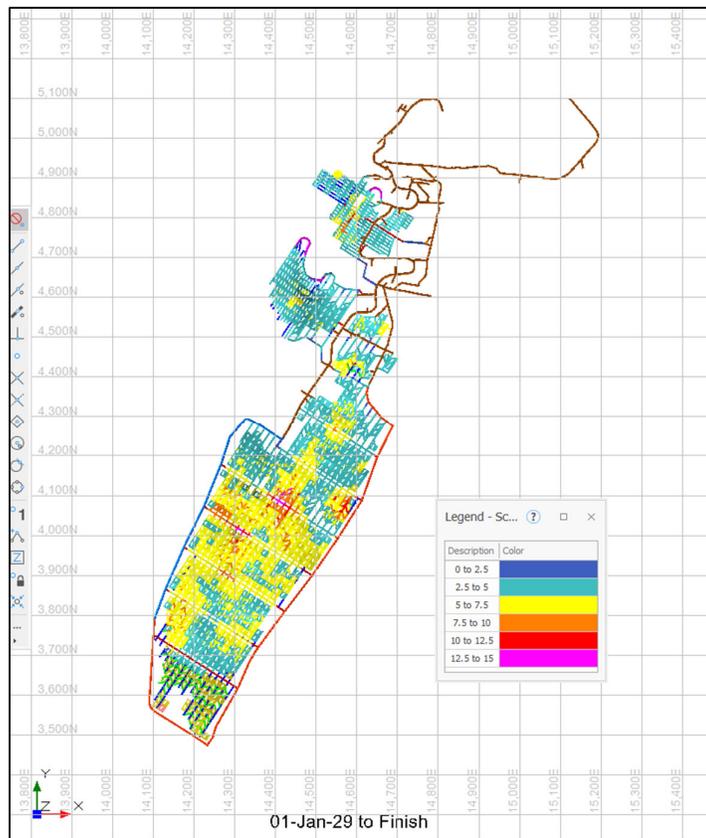


Table 1-2 Scenario Summary - Ore Tonnes and Grade

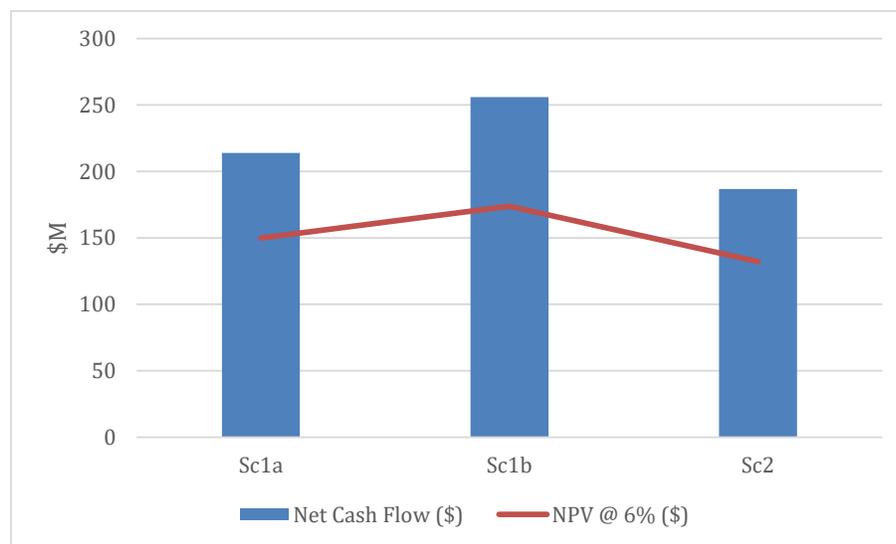
Schedule		Phase			Dewatering			UG Mining				
		Physical	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
1a	Sc1 Life of Mine (LOM)	Total Ore	t	1,658,295	0	0	0	301,839	382,218	334,655	389,528	250,055
		Total Ore Metal	Oz	289,891	0	0	0	43,419	72,529	67,175	70,121	36,648
		Total Ore Grade	g/t	5.4	0	0	0	4.5	5.9	6.2	5.6	4.6
		Development Ore	t	937,959	0	0	0	225,429	284,465	146,985	214,622	66,458
		Development Ore Metal	oz	174,651	0	0	0	32,354	58,865	33,661	39,823	9,948
		Development Ore Grade	g/t	5.8	0	0	0	4.5	6.4	7.1	5.8	4.7
		Stope Ore	t	720,336	0	0	0	76,410	97,753	187,670	174,905	183,597
		Stope Ore Metal	oz	115,240	0	0	0	11,064	13,664	33,515	30,297	26,700
		Stope Ore Grade	g/t	5.0	0	0	0	4.5	4.3	5.6	5.4	4.5
2	Sc2 Reserves	Total Ore	t	1,434,872	0	0	0	304,140	376,704	364,310	362,359	27,359
		Total Ore Metal	Oz	248,113	0	0	0	44,182	72,760	70,961	56,618	3,590
		Total Ore Grade	g/t	5.4	0	0	0	4.52	6.01	6.06	4.9	4.1
		Development Ore	t	824,545	0	0	0	226,040	236,012	201,557	160,935	0
		Development Ore Metal	oz	151,124	0	0	0	32,955	51,907	41,422	24,840	0
		Development Ore Grade	g/t	5.7	0	0	0	4.53	6.84	6.39	4.8	0
		Stope Ore	t	610,327	0	0	0	78,100	140,692	162,753	201,424	27,359
		Stope Ore Metal	oz	96,989	0	0	0	11,227	20,853	29,540	31,778	3,590
		Stope Ore Grade	g/t	4.9	0	0	0	4.5	4.6	5.6	4.9	4.1

The scenarios have been costed and cashflow analysis completed per Table 1-3 and Figure 1-2 below.

Table 1-3 Cashflow Summary – Scenarios

Scenario	Resource Category	Total Cost (%)	Revenue (\$)	Net Cash Flow (\$)	NPV @ 6% (\$)	IRR (%)	
Sc1a	Life of Mine (LOM)	LOM - MII	365,175,921	579,057,800	213,881,879	149,836,375	138
Sc1b	Life of Mine (LOM) + Re-processing existing tails (TSF1)	LOM - MII	376,162,245	632,040,220	255,877,975	173,801,504	139
Sc2	Reserves	Reserves - MI	308,809,080	495,605,327	186,796,248	132,105,772	142

Figure 1-2 Cashflow Summary – Scenarios



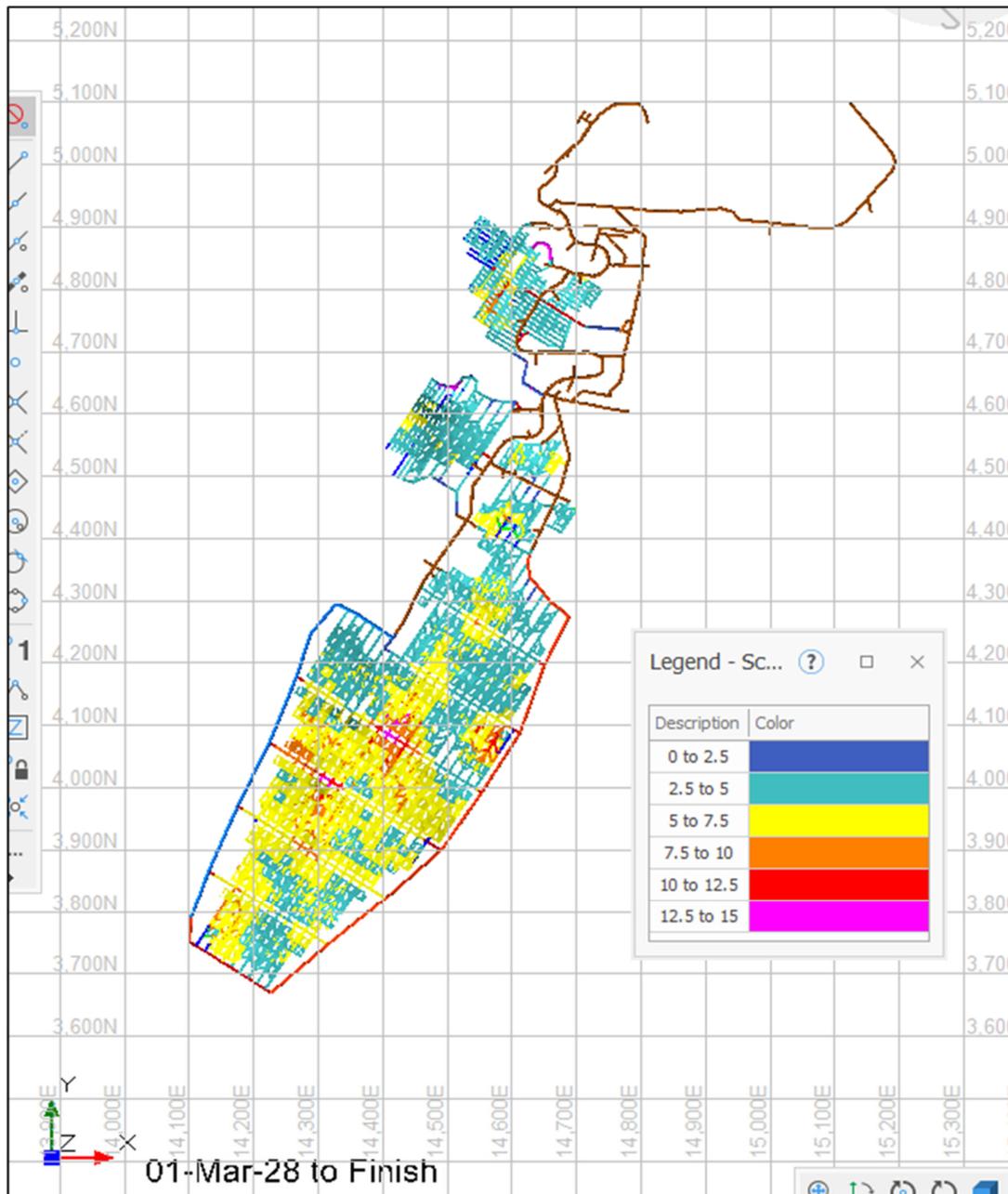
Orelogy have developed an Ore Reserve estimate for TG in accordance with the guidelines of the JORC Code 2012 per Table 1 4 below and Figure 1 2 below.

Table 1-4 Toms Gully Ore Reserve Summary

Area	Deposit	Cut Off Grade (Au g/t)	Proved			Probable			Total Ore Reserve		
			Tonnes (t)	Au (g/t)	Au (Oz)	Tonnes (t)	Au (g/t)	Au (Oz)	Tonnes (t)	Au (g/t)	Au (Oz)
Mount Bundy	Toms Gully UG	3.6	0	0	0	1,435,000	5.4	248,000	1,435,000	5.4	248,000
Total			0	0	0	1,435,000	5.4	248,000	1,435,000	5.4	248,000

The TG resource can sustain an economic and technically feasible underground mine and a JORC compliant Ore Reserve. The addition of retreatment of the TG TSF1 in Scenario 1b adds value.

Figure 1-3 Mine Design - Scenario 2 (Reserves) – Plan View (Grade)



The key risks to the project are:

- Entry and rehab of old workings – Cost, time, and technical risk exists given the unknown conditions that may be encountered.
- Stope stability - Stability of the room and pillar stoping spans will pose a potential significant risk.

The key opportunity is to add minor inventory on the north and north west in areas in close proximity to the open pit and the existing underground accesses and where the orebody increases dip.

2 INTRODUCTION

2.1 Background

The Toms Gully (TG) Project is 100% owned by Primary Gold Pty Ltd (PGO), which is 100% owned by Hanking Australia Investment Pty Ltd and is located approximately 100km east-southeast of Darwin as shown in Figure 2-1 below. The mining lease the project is located on, MLN 1058, is approximately 1.6km west of the Arnhem Highway on Mt Bundey Station (131°34'E and 12°50'S).

Figure 2-1 Toms Gully Project Location



The Tom's Gully project was originally discovered in 1986 by Carpentaria Exploration Company Pty Ltd, a subsidiary of Mount Isa Mines. Toms Gully was then operated as an open cut mine between 1988 and May 1991, with the plant being sold in 1992. Kakadu Resources NL commissioned a CIL tailings retreatment plant and treated 75kt of tailings before activities were suspended. In 1996, Renison Consolidated Mines NL (previously Sirocco Resources NL) acquired the project.

In 2005, Renison refurbished and upgraded the plant, a new portal and decline was developed. In early March 2007, the underground workings were flooded after a significant rainfall event. Renison

was unable to fund the dewatering and GBS Gold Australia Pty Ltd took ownership of the Project in mid-2007. The Project was acquired by Crocodile Gold in mid-June 2009 and Primary Minerals NL in late 2012. Primary Mineral NL is a wholly owned subsidiary of Primary Gold Limited (“Primary”).

2.2 Previous Studies

2.2.1 General

Primary completed a feasibility study in August 2013, when Golder estimated an Ore Reserve of 775k Tonnes of ore at 6.9 g/t for 175k ounce of gold. The 2013 study assumed that the Tom’s Gully open pit would be dewatered and underground access would utilise the historic underground workings.

A drilling program and subsequent Mineral Resource Estimate update was completed in July 2014, with the Resource estimate being prepared by Cube Consulting for Primary. In January 2015, AMC completed a review of the project. Primary Gold was acquired by Hanking Australia in 2018.

Since the take over of Primary Gold by Hanking, Primary Gold have commissioned several studies; mainly exploration, mining, processing and environmental studies to evaluate Primary Gold’s development strategy for Toms Gully. A new resource estimate was made by Cube Consulting in December 2021. The 2021 Resource result is summarised in the Table below This latest resource estimate forms the geological basis for this Ore Reserve update.

Table 2-1 Toms Gully Gold Project - MRE Summary for In situ Resources, as at 15 December 2021

Resource Category	COG	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Oz Au)
Indicated	1.50	2.68	5.7	491,000
	3.00	2.26	6.3	459,000
	6.00	1.12	8.2	293,000
Inferred	1.50	0.31	5.8	58,000
	3.00	0.28	6.1	55,000
	6.00	0.14	7.5	35,000
All Resource	1.50	2.99	5.7	549,000
	3.00	2.54	6.3	514,000
	6.00	1.26	8.1	328,000

2.2.2 Mine Planning

Primary Gold, together with its consultants including Orelogy, examined at various mining options since 2018. One of the options was to access the underground from a new boxcut/portal and decline per Figure 2-2 below by leaving a barrier pillar between the open pit and the new workings. This barrier pillar would sterilise a significant portion of the orebody on the northern extent as can be seen in Figure 2-3 below would not extract the best value from the asset and thus this option was abandoned.

As part of the 2023 DFS of the integrated Mt Bundy Gold Project, where all ores will be processed at the 5Mtpa processing plant at Rustlers Roost and Tom’s Gully will be mined in a method similar to that of the Golders 2013 reserve by dewatering the pit and reusing the existing portals. This uses the synergy of the proposed larger central process plant and TSF at Rustlers Roost and allow the use of the Toms Gully water at the central processing plant. This new mining design and Ore Reserve update are made on this basis.

Figure 2-2 Mine Design Layout Including Exclusion Zone

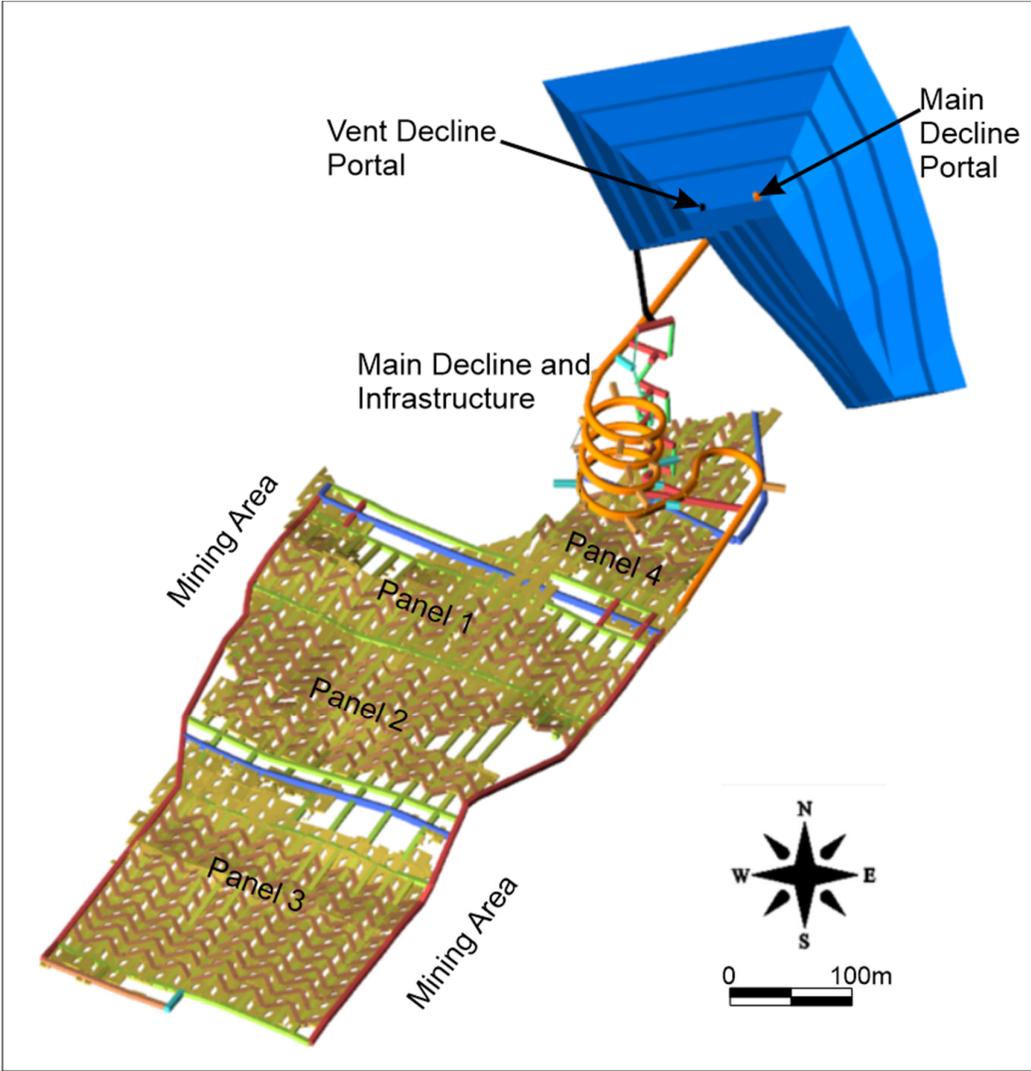
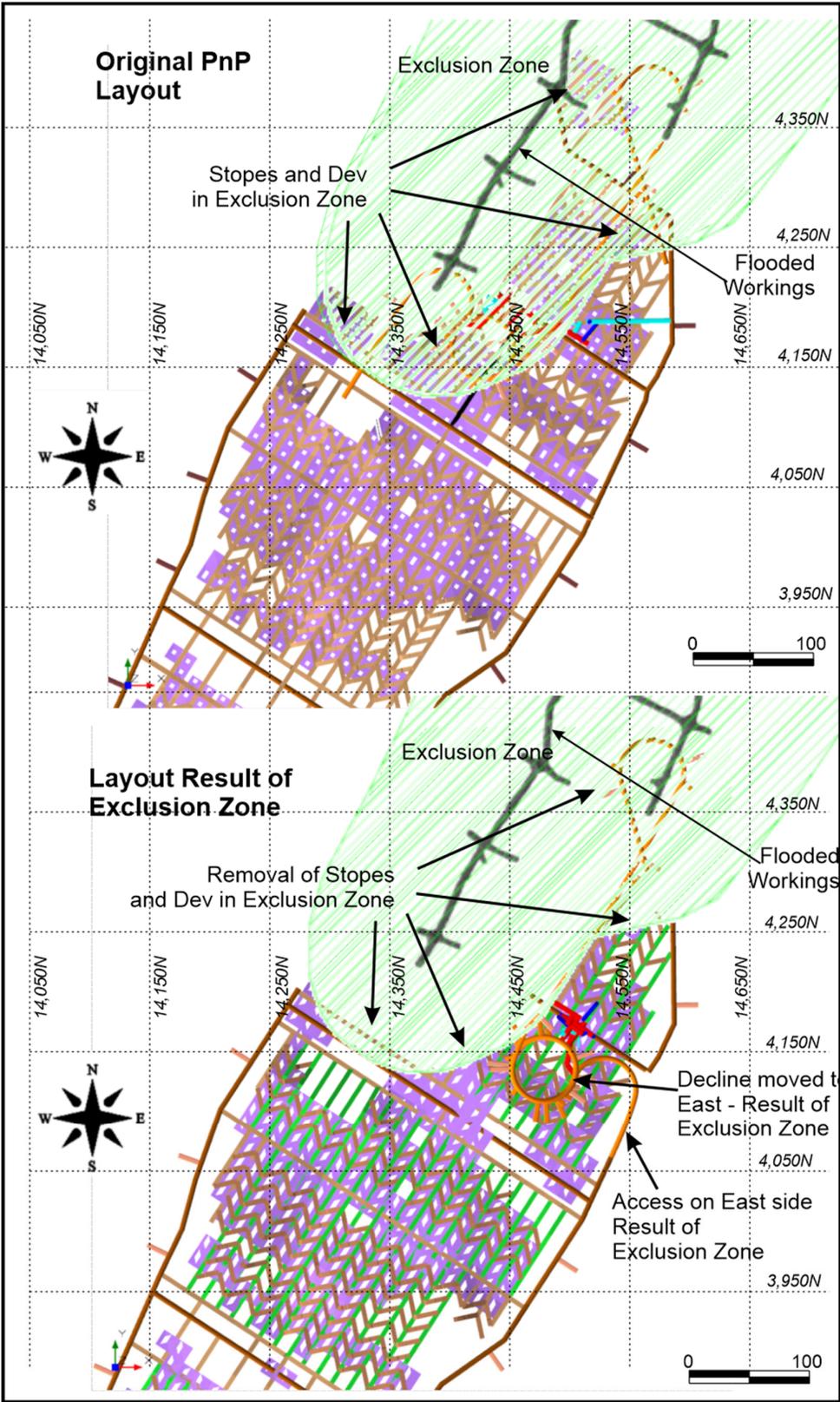


Figure 2-3 The Result of the Exclusion Zone – 100 m Barrier



2.2.3 Mt Bundy Gold Project Open Pits

Open pit study work has progressed on the Mt Bundy Gold Project in 2021 and 2022 with a conventional gold extraction CIL processing plant planned for the open pit mining of Rustlers Roost, Q29, and the Annie Okaley open pits.

In the 2023 DFS, open pit mining costs and mining scheduling have been updated to accommodate the new 5 Mtpa central processing plant and TSF at Rustlers Roost, which represents an opportunity for the TG underground compared to other TG mining options in respect to:

- Processing TG ore at the Rustlers Roost processing plant instead of the legacy TG processing plant. This would remove refurbishment capital for the TG legacy processing plant and decreases processing costs with a new higher throughput plant. Additional surface haulage costs would be incurred however the net economic benefit is likely to still be positive to TG.
- Dewatering the TG open pit and using the water as process water in the Rustlers Roost processing plant. This removes the environmental treatment and discharge costs of dewatering the TG open pit in a stand alone TG scenario. Dewatering the open pit enables:
 - The inclusion of the northern section of the TG orebody that was sterilised in the 2020 TG mining study. With the TG open pit dewatered there is no longer a requirement to leave a barrier pillar between the southern TG underground workings and the open pit. This will add significant inventory.
 - Underground access can be undertaken from the existing workings within the open pit. This removes the capital costs of establishing new boxcut/portal, decline, and primary ventilation systems. Additional refurbishment costs for ground support of the existing workings would be required however this would be significantly less compared to establishing separate and new underground access.

2.3 Project Description

2.3.1 Location

The Tom's Gully gold mine is located 100km ESE of Darwin, in the Northern Territory of Australia on mining lease MLN 1058, approximately 1.6km west of the Arnhem Highway on Mt Bunday Station as shown in Figure 2-4.

Figure 2-4 Location of Toms Gully Mine



2.3.2 Accessibility

The TG project is accessed by sealed highway from Darwin in the Northern Territory by the Stuart Highway heading southeast, then turning left onto the Arnhem Highway after 65.8km. The TG Project is located on the Toms Gully Mine Road which is a right turn off the Arnhem Highway.

2.3.3 Existing Infrastructure

Infrastructure from the historic TG open pit and underground mining remains at the TG site. Access roads, waste dumps, tailings facilities, laydown areas, ROM, etc are still in place. The legacy TG processing plant infrastructure is still onsite. The processing plant would require extensive engineering and refurbishment to be recommissioned.

2.4 Scope of Work

2.4.1 General

Orelogy has been engaged by Hanking to conduct a Mining Study (MS) and updated Mining Ore Reserve estimate for underground mining at the TG project. This is based on the re-estimation of the Mineral Resource completed in 2014 by Cube Consulting.

The main objective of a MS is to generate a robust, holistic mining strategy that will:

- Evaluate and maximise the value of the project and identify risks, opportunities and further work while at the same time;
- Provide the best opportunity to progress the project to Feasibility Study stage; and
- Produce a reportable Ore Reserve.

The overarching strategy for the MS is to:

- Process the underground ore at the nearby Ruster's Roost process plant instead of at TG.
- Pump out the existing open pit water and underground operations in order to gain access to the Underground via existing workings after undertaking rehabilitation works;

Scenarios that have been defined to be evaluated within the MS are detailed in Table 2-2 below.

Table 2-2 Study Scenarios

	Scenario	Resource Category
1a	Life of Mine (LOM)	LOM - MII
1b	Life of Mine (LOM) + Re-processing existing tails (TSF1)	LOM - MII
2	Reserves	Reserves - MI

2.4.2 Mine Planning

Orelogy has undertaken the mine planning for the MS including:

- Cut-off grade (COG) estimation.
- Optimisation and mining method selection.
- Underground mine design.
- Mine scheduling.
- Mine services and infrastructure.
- Cost estimation.
- Underground Ore Reserve Estimate.

- Conclusions, recommendations and forward works program.
- Study Management and Reporting.

2.4.3 Site Visits

A site visit has not been undertaken as at the time of finalisation of this study.

2.4.4 Deliverables

The deliverables for the MS include:

- MS report (.pdf)
- Operating and capital cost estimates $\pm 25\%$ accuracy level (Excel)
- Mine design that supports the mine scheduling and cost estimations (.dxf)
- Mining Schedules in spreadsheet forms (Excel).
- JORC 2012 Ore Reserve Statement.
- Risks and opportunities (within report)
- Further work program to inform future Feasibility studies (within Report)

2.4.5 Exclusions

The scope excludes:

- Capital and operating cost estimates for processing – separate undertaking by PGO.
- Processing recoveries/yields, commodity price forecast, and site processing and G&A cost information were provided by PGO.

2.4.6 Battery Limits

Orology's activities were limited to those outlined in the scope above.

2.5 Conventions

2.5.1 Currency

All costs and prices are in AUD dollars unless otherwise specified.

2.5.2 Units

The units of measure (volume, distance, etc.) used in this report, unless otherwise noted, are metric.

2.5.3 Mine Coordinates

The co-ordinate system used is per the supplied input files from PGO.

2.5.4 Block Dimensions

Three-dimensional entities in this report are described in the format X by Y by Z, where X refers to the Easting or across strike distance in metres; Y refers to the Northing or along strike distance in metres and Z refers to the RL or vertical distance in metres based on elevations above the Height Datum.

2.5.5 Calander – Fiscal Years

Fiscal years (FY) are set up in the cost models per Hanking fiscal years running April to March.

3 RESOURCE MODEL

The block model provided was prepared by Cube Consulting in December 2021. This was an updated December 2021 Mineral Resource estimate that include six additional holes (2018) and updated geological and mineralisation interpretations from the previous 2014 estimate. The Cube report was entitled, "Toms Gully Gold Project, Mt Bundy Projects, Northern Territory, Australia". The Block Model was provided as a Surpac file, "cube_tg_3d_20211105.mdl".

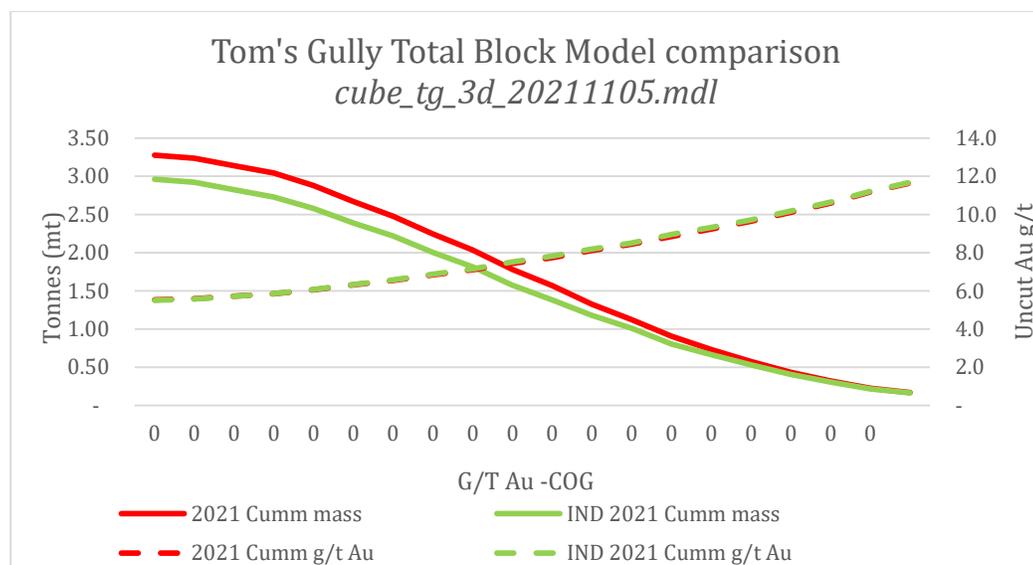
The summary of the December 2021 Block Model as presented in the above mentioned report is shown in Table 3-1.

This update generally extends the footprint west of the interpreted Williams Fault and increases/converts Inferred inventory to Indicated Resources at a slightly lower grade.

Table 3-1 Toms Gully Gold Project - MRE Summary for In situ Resources, as at 15 December 2021

Resource Category	COG	Tonnes (Mt)	Grade (g/t Au)	Contained Metal (Oz Au)
Indicated	1.50	2.68	5.7	491,000
	3.00	2.26	6.3	459,000
	6.00	1.12	8.2	293,000
Inferred	1.50	0.31	5.8	58,000
	3.00	0.28	6.1	55,000
	6.00	0.14	7.5	35,000
All Resource	1.50	2.99	5.7	549,000
	3.00	2.54	6.3	514,000
	6.00	1.26	8.1	328,000

Figure 3-1 Toms Gully-Block Model – GT Curve Comparison for All Resources (red) vs Indicated Resources (green)



4 GEOLOGY

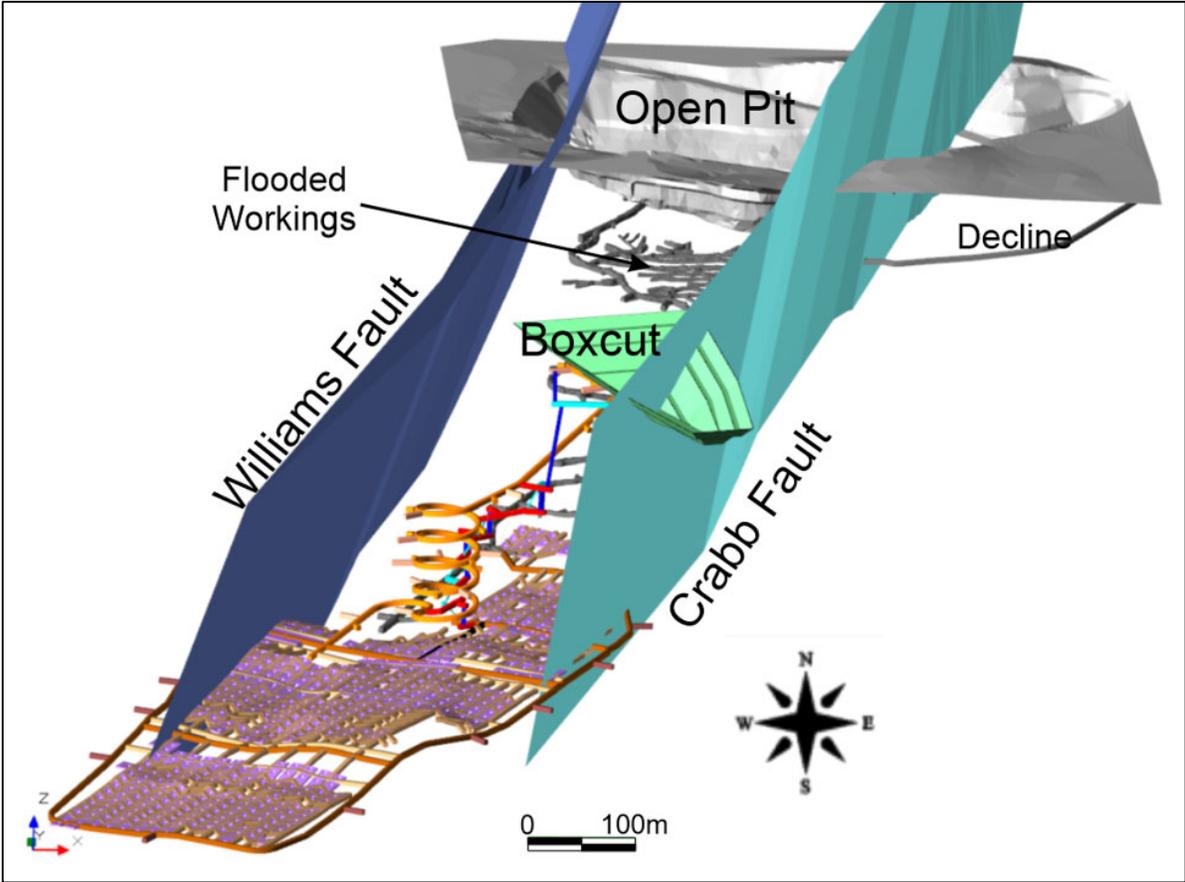
The Toms Gully mineralisation consists of a shallow dipping quartz reef hosted in graphitic shale and siltstone of the Wildman Siltstone. The gold mineralization occurs in an 800 m wide, planar quartz-sulphide reef which strikes east-west and dips south at about 30° at surface flattening to nearly horizontal at about 1,500 m down dip (280 m vertical depth). The quartz reef is largely conformable with the sedimentary rocks and close to the reef deformation consisting of shearing and brecciation are common.

The gold-bearing reef is associated with possible thrust-related brecciation and recrystallization of an earlier barren zone of quartz veining. Gold mineralisation is not well developed where the earlier generation of quartz is absent, indicating that the secondary brittle fracturing was essential for sulphide and gold deposition. Gold also occurs in the enveloping sheared and brecciated wall rocks so that the mineralized envelope averages around 2 m in thickness. The sub-vertically dipping south-southwest striking Crabb and Williams Faults bound the reef to the east and west.

The sulphide shoots in the quartz reef are predominantly carried by the blue-grey cherty quartz with associated pyrite, arsenopyrite, loellingite and gold along with minor pyrrhotite, galena, chalcopyrite and rare sphalerite. Sulphides comprise 10% to 40% of the reef, with the ratio of pyrite to arsenopyrite between 2:1 and 5:1. Within the sulphide shoots, gold grades typically range from 3 g/t Au to 30 g/t Au. The mineralized quartz reef is from 0.5 m up to 4.0 m thick with a known strike length of 800 m. Numerous narrow lamprophyre dykes have been intersected in drilling and are visible in the walls of the open pit. The dykes are thought to be sub-parallel to the Crabb and Williams Faults. The dykes are locally well mineralized when in contact with the quartz reef.

Figure 4-1 below shows the Williams and Crabb faults defining the east and west boundaries of the mining. These faults need further definition as they intersect the proposed airways on the boundaries of the ore body.

Figure 4-1 3-D View of the 2020 PnP Design with the Two Major Faults



5 HYDROLOGY AND HYDROGEOLOGY

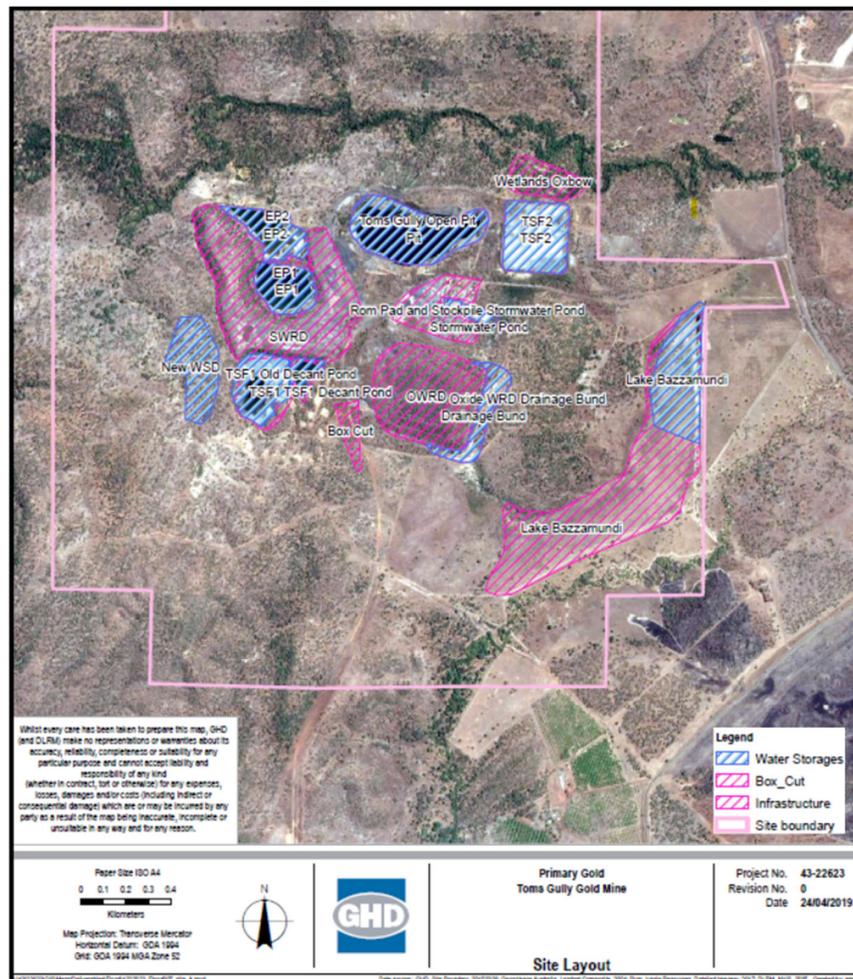
5.1 General

As part of the Environmental Impact Assessment and permitting process, a number of hydrogeological studies have recently been undertaken:

- Toms Gully EIS - Baseline Studies Flooding, GHD Pty Ltd, dated May 2019;
- Toms Gully EIS - Baseline Studies Groundwater Assessment & Modelling, GHD Pty Ltd, dated March 2018;
- Dewatering Assessment, Toms Gully Gold Mine, N.T. - Australasian Groundwater and Environmental Consultants Pty Ltd, dated June 2019.

The main surface water features and the position of the boxcut form the 2020 study are shown in Figure 5 1.

Figure 5-1 Toms Gully Main Surface Water Features



5.2 Hydrogeology and Geological Structures

Previous work by AGECE (2004) and Rockwater (1994) has identified three broad groundwater systems and/or hydrogeological units within the project area. They are:

- Upper weathered profile in the Wildman Siltstone and more distance metasediments and igneous rocks, with relatively low permeability;
- “Fresh” Wildman Siltstone and other fractured rock aquifers with moderate to high permeability; and
- The highly permeable ore body fault zone and the Crabb Fault.

The fresh Wildman Siltstone acts as a fractured rock aquifer with little to no primary porosity between fracture zones. Typical of fractured rock aquifers, the permeability is dependent of regional tectonic fracturing, characterised by vertical jointing and the discrete faulting noted above, overprinted with extensive sub-horizontal jointing associated with stress relief as overlying rock is removed by erosion. Fracturing is more intense along fold axes (Coffey, 2015). The main geological structures are:

5.2.1 Folding

A series of gentle folds are mapped across the Project site including a fold in the pit wall. The fold axes trend north-northeast and plunge gently to the south, parallel to the plunge of the quartz vein.

5.2.2 The Crabb Fault

The Crabb Fault is a south-southwest trending fault which dips to the west at approximately 80 degrees and intersects the eastern end of Toms Gully Open Pit and represents the eastern extent of gold mineralisation. Although, the apparent displacement of the Crabb Fault is small, the quartz vein steepens significantly to the east of the fault and changes in strike from east-west to northeast-southwest. The nature of the Crabb Fault zone is highly variable, at the Open Pit high wall the fault is a fractured rock mass up to 15 m wide and has resulted in slope failures during mining. However, at the low wall there is little evidence of the fault. Where the fault has been intruded by dykes, the material is often highly weathered and of very low strength. It contains sulphides, fractured quartz and laminated black shale.

5.2.3 The Williams Fault

The Williams Fault is located approximately 400 m west of the Crabb Fault and is believed to be the western extent of the ore zone. Previous investigations suggest that there is approximately 15 m displacement along the Williams Fault at the Project Site. Dyke intrusions have been identified at random locations along the fault trace, with localised quartz infilling.

The Crabb Fault, approximately 15 m wide, is also highly permeable in places (AGECE, 2004) whereas the Williams fault is considered to be a low-permeability flow barrier.

5.2.4 The Ore Zone Fault

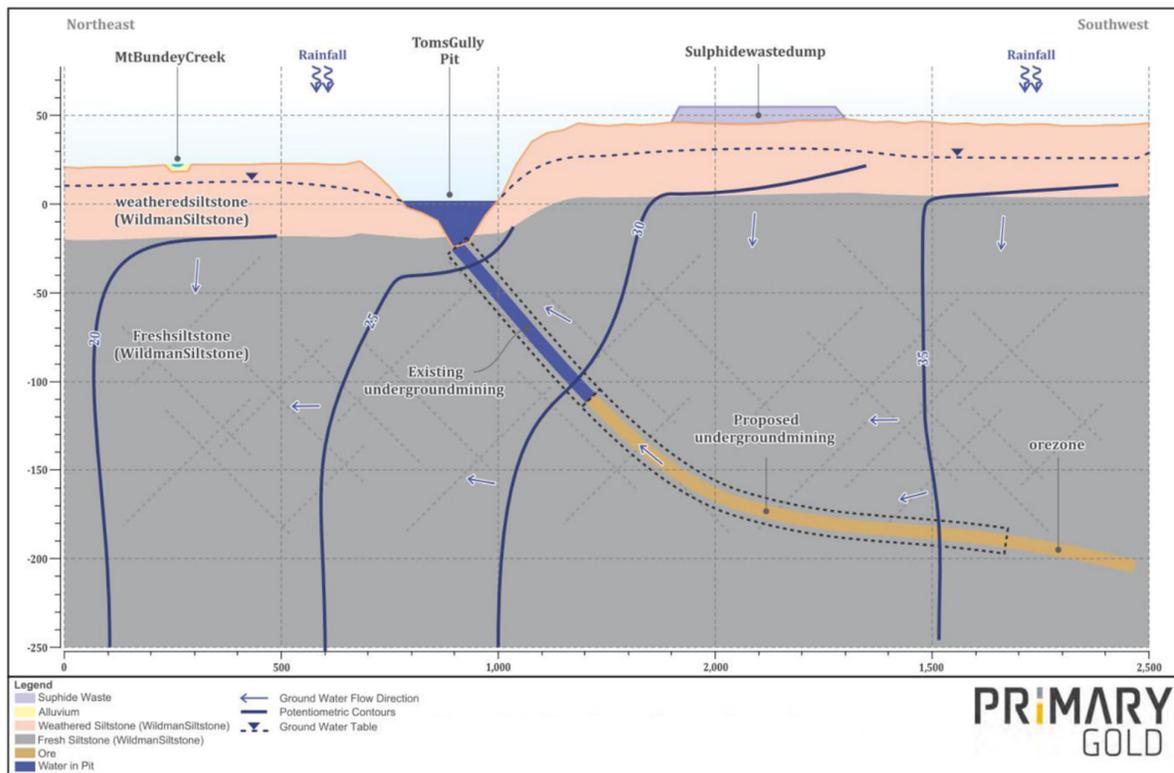
The Ore Zone Fault is marked by a 0.5 to 4 m-thick, quartz-filled breccia zone, with associated arsenopyrite and pyrite, along an unnamed thrust fault, dipping at a shallow angle to the south. It extends at least 1,500 m down dip from the open cut.

The ore zone is bounded to the west by the Williams Fault and to the east by the Crabb Fault and is the primary aquifer at the site. It dips initially at around 30° to the south at the sub/outcropping, northern end (~30 mAHD), and flattening out to less than 10° at the southern end, from around 400 m down-dip, at a depth of around 200 m (-210 to -230 mAHD). Airlifted yields from exploration boreholes drilled in the ore zone were relatively high, at up to 25 L/s with an average of 5 L/s.

The Crabb Fault and the Ore Zone Fault are the potential sources of water when intersecting development on the eastern boundaries of the orebody and in the stopes.

The groundwater flow around the orebody is shown in Figure 5-2 below.

Figure 5-2 Groundwater Flow and Direction in and around the Orebody



6 GEOTECHNICAL CONSIDERATIONS

6.1 General

A number of geotechnical investigations and assessments have been undertaken for Toms Gully, namely:

- Geotechnical Consulting Pty Ltd (GC)
 - Updated Interpretation of Ground Conditions and Stable Slope Dimensions, May 2013;
 - Ground Control Management Plan; August 2008;
- Tom's Gully Underground Mine Geotechnical Review -Kevin Rosengren & Associates Pty Ltd (KRA), November 2004.

The geotechnical assessments were carried out under the original underground mining plan to access the ore body via the open pit after dewatering. In the "Toms Gully Independent Technical Review", AMC January 2015, the following conclusions and recommendations were made:

- Several of the rock mass classification inputs are under-estimated.
- The assumed stress field is unrealistic and will not allow pillars to fail in shear which could be a significant condition at Toms Gully.
- Triaxial test results were not used as inputs to the modelling.
- The numerical modelling method adopted (Phase2) is not applicable to this situation.
- Tributary area numerical modelling is not applicable to this situation.
- Six metre bulbed cable bolts be considered for all wide spans.
- At least five successful uniaxial compressive tests be conducted in the ore for input to the pillar strength analysis.
- Triaxial tests be conducted (six per rock type) for input to the 3D modelling to confirm the geotechnical designs;

The 2020 review conducted by Oreology involved the mine design and layout being changed to access the ore body via a surface boxcut and abandoning the previous underground workings due to the high cost of dewatering the open pit. There were two geotechnical assessments on the new mining layout and the boxcut carried out by Keogh Geotechnical Consulting (KGC):

- Toms Gully Project - Barrier Pillar Between Old and Proposed New Workings, dated November 2019;
- Toms Gully Project - Portal Ground Conditions Borehole Assessment, dated December 2019;

However this method left a significant amount of gold inaccessible due to the stand-off required from the old workings with the water being left in the Open Pit.

6.2 2018 Geotechnical Update

Entech completed a geotechnical update in 2018 that covered the following main points:

- Review historical reports
- Review rock mass characterisation work
- R&P mining geotechnical research
- R&P operational bench marking
- 3D numerical modelling
- Pillar design

The key guidelines from the report include:

- 36m² (6m x 6m) square pillar layout meets the design criteria.
- Barrier Pillars reconfigured across dip, as opposed to down dip.
- Recommended that declines be situated outside of orebody.
- Barrier pillars are by design indestructible (w/h of 10), but potentially recoverable.
- Barrier pillars compartmentalise mining areas in the event of a "pillar run".
- Barriers every 200m, 30m wide edge to edge, with access drive through centre.
- The full report is in APPENDIX A.

7 MINING METHODOLOGY

7.1 Operating Strategy

For the MS a contractor mining methodology has been selected based on:

- Lower capital costs prior to ore production and revenue.
- Expected mine life is in the order of 4-5 years and would not justify the purchase and sourcing of equipment and personnel as an owner operator.
- Current challenging market environment for skilled personnel, lead times on equipment, and skillsets to set up and establish owner operator mining equipment, personnel, systems, and processes.

Ore will be hauled to the surface, stockpiled, then rehandled and hauled with surface trucks to the Rustlers Roost processing facility.

7.2 Mining Method

The planned mining method is room and pillar stoping, which is appropriate for the flat dipping ore body. This mining method has been selected in all mining studies to date and there is no new information or mining methods that are considered appropriate.

The factors influencing the mining method used are:

- Narrow ore width with an average of 1.6 m from previous study work.
- The ore body dips at less than 10° in the northern part of the ore body and then flattens out to a near horizontal dip in the southern part of the orebody.
- The Bord and Pillar layout is based on 16 m centres.
- Bords are 4.5 m x 4.2 m developed with Resue mining method.
- The ore in the pillars are recovered and 48 m² rhombic (6 m x 8 m) pillars remaining as support. This is an increase from the geotechnical guidance and is described in Section 7.3 below.

7.3 Pillars and Barrier Pillars

The geotechnical guidance in Section 6.2 detailed 36m² (6m x 6m) square pillars. That assessment was based on perpendicular ore drives. With the change to a herring-bone ore drive pattern the pillars were increased to 48m² (6m x 8m) rhombic pillars.

The board and pillar layout consists of primary ore drives, developed on dip, and secondary ore drives, developed off the primary drive, in a herring-bone pattern. The herring bone pattern has been used to negotiate the dip and strike changes of the undulating ore body and is considered the more

appropriate ore drive arrangement. The increased pillar size increases the inventory within the final pillars, but the difference is marginal. A sensitivity on the difference to the mined tonnes and grade for Scenario 1 is outlined below in Table 7-1 and demonstrates the negligible impact of this design change. This assessment was completed on a preliminary design and not on the final LOM or Reserves design. A similar variance ratio and negligible impact would be the outcome analysing on the final designs.

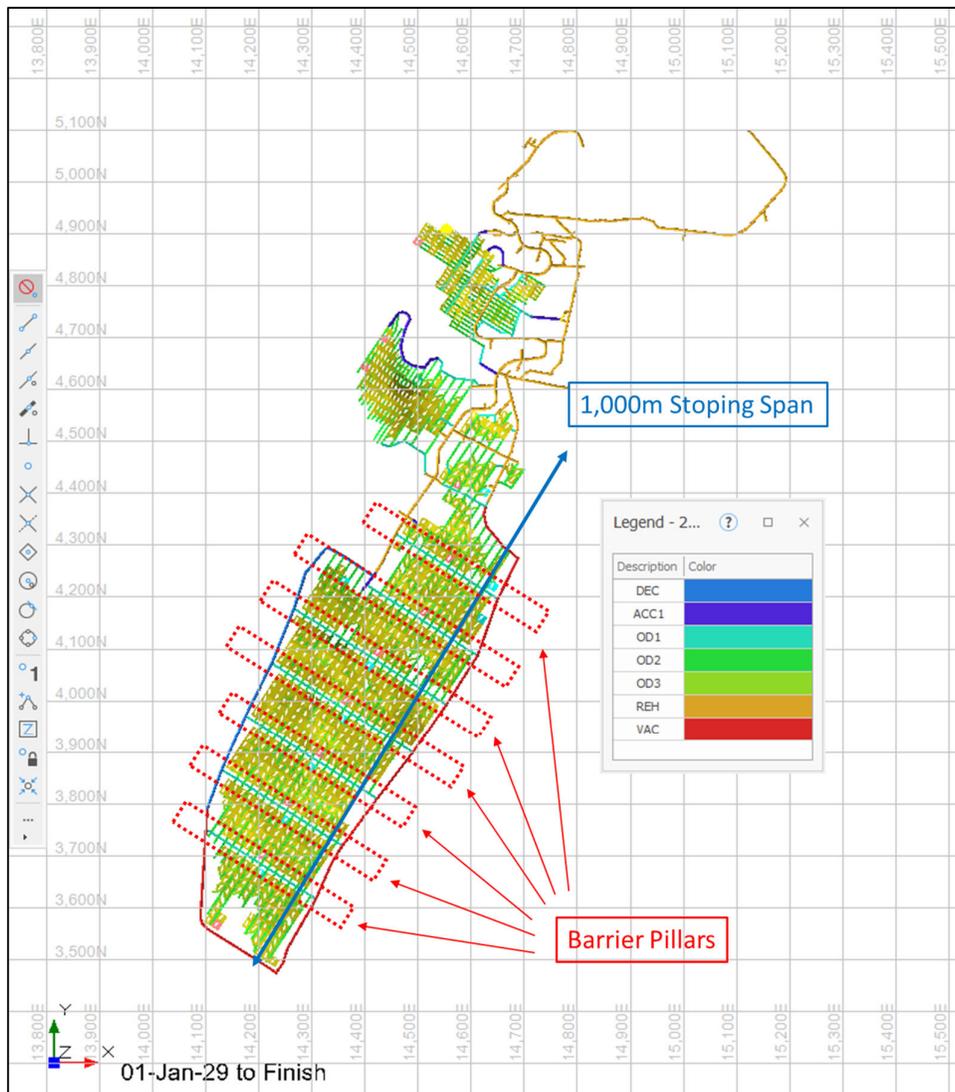
With the removal of the northern exclusion zone and barrier pillar the footprint of the orebody extends to the north increasing the overall footprint of the mining area. The herring-bone secondary ore development and 48m² (6m x 8m) rhombic pillars have been used in this northern area, the same as in the south. The very northern section of the orebody has a steeper dip and the primary ore development has been designed closer together removing the need for secondary herringbone ore drives. Pillar stripping will be completed directly from the primary ore drive.

The Scenario 1 design (LOM) has an approximately 1,000 metre span of stoping area uninterrupted by pillars running north to south. This can be seen in Figure 7-1 below. This represents a potential risk of a “pillar run” where multiple pillars fail. Barrier pillars have been incorporated to mitigate this risk in the design by not stripping the pillars in the east/west vent drives. These drives are situated approximately every 120m along the orebody as an east to west throughfare and ventilation connection across the orebody. Given the ore drives are designed at 16 metre centres these pillars are 28 meters wide with an access dive in the centre.

Table 7-1 Tonnage and Grade Curve

Pillar Size (m ²)	Ore Tonnes (t)	Grade (Au g/t)	Au metal (oz)
6x8=48	1,046,599	2.22	200,541
6x6=36	1,054,266	2.22	201,940
Variance	7,667	0	1,399

Figure 7-1 Barrier Pillars – Scenario 1 – LOM – Plan View



7.4 Modifying Factors

The key modifying factors for the mining are shown in Table 7-2 below.

Table 7-2 Modifying Factors

Modifying Factors	Factor Value
Au Pillar Factor	1
Dilution development	1
Dilution RAP (Stoping)	1.05
Dilution Resue (Ore Development)	1.2
Recovery development	0.95
Recovery RAP	0.93

8 UNDERGROUND OPTIMISATION

8.1 Methodology and Approach

Underground stope optimisation has been undertaken for this study using Deswik Stope Optimiser (SO). The approach taken is to undertake preliminary optimisations across the entire TG resource model and range the key optimisation inputs to conduct sensitivity analysis on the resultant inventories. From the sensitivity analysis optimisation inputs will be selected to be used in the final optimisation process.

The key optimisation inputs that have been identified for TG are the cut-off grade (COG) and the minimum mining width (MMW).

The MMW is a key input given the narrow and high grade nature of the TG orebody and the lack of low grade ore on the periphery of the orebody.

8.2 Cut-off Grades

Cut off grades for underground mining have been calculated and a sensitivity completed on the underground mining costs per Table 8-1 and Figure 8-1 below. The COG process is based on the gold grade. Inputs for the COG were sourced from:

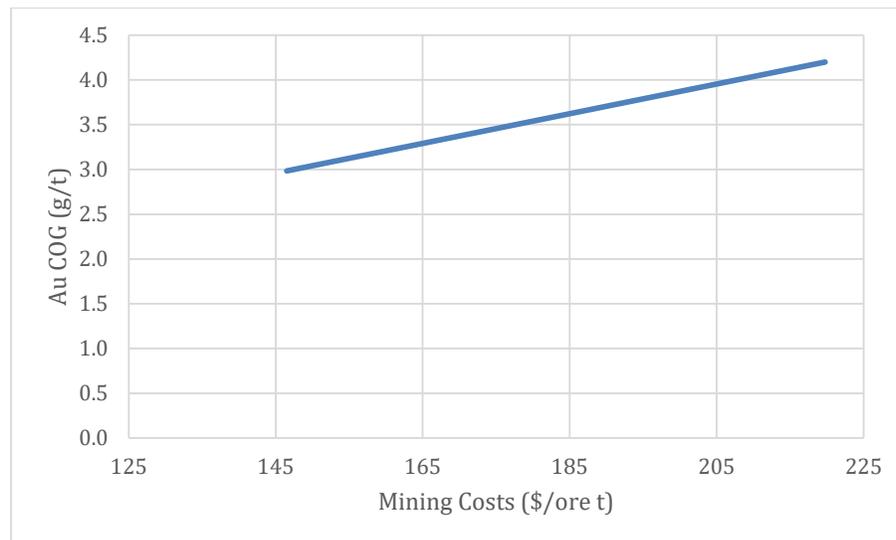
- Mining Costs from the Orelogy 2020 study. \$176.09/t mining operating costs escalated by 4% to \$183.12/t. The 2020 mining operating cost was based on underground contractor mining costs developed by Pit N Portal.
- Processing and G&A costs were provided by Hanking based on recent cost estimation work from Mintrex.
- Processing recovery was provided by Hanking based on Rustlers Roost processing plant PFS engineering.

The calculated COG for TG is 3.6 g/t Au. The development COG used within the schedule is set at 1.3 g/t Au.

Table 8-1 Underground COG – Mining Cost Sensitivity

Parameter	Units	UG Base	UG Mining Costs Sensitivity				
			0.8	0.9	1.0	1.1	1.2
Opex Costs							
Average Mining Cost	\$ / t ore	183.13	146.50	164.82	183.13	201.44	219.76
Processing Cost	\$ / t ore	27.70	27.70	27.70	27.70	27.70	27.70
Surface Haulage	\$ / t ore	3.30	3.30	3.30	3.30	3.30	3.30
G&A	\$ / t ore	2.46	2.46	2.46	2.46	2.46	2.46
TOTAL	\$ / t ore	216.59	179.96	198.28	216.59	234.90	253.22
Revenue Factors							
Gold Price	AUD/oz	2,350	2,350	2,350	2,350	2,350	2,350
Refining Cost	AUD/oz	10	10	10	10	10	10
Royalty (%)	%	0	0	0	0	0	0
Royalty (%)	AUD/oz	133	133	133	133	133	133
Processing recovery	%	0.85	0.85	0.85	0.85	0.85	0.85
Oz Conversion	g/Oz	31.1035	31.1035	31.1035	31.1035	31.1035	31.1035
Net Revenue							
Net Revenue	AUD/oz	2,207	2,207	2,207	2,207	2,207	2,207
Net Revenue	AUD/g	70.9	70.9	70.9	70.9	70.9	70.9
Mining Cut Off Grade							
Au COG	g/ t ore	3.59	2.98	3.29	3.59	3.90	4.20

Figure 8-1 Underground COG – Mining Cost Sensitivity



8.3 Optimisation Sensitivities

Optimisation sensitivities have been undertaken ranging the Au % COG and the MMW and are summarised in Table 8-2 below. The results show that:

- The inventory is relatively insensitive to the changes in COG in Scenario 1.
- The inventory is similar at 1.2 and 1.6 meter MMW but starts dropping off at 2.0 meters MMW as more waste is incorporated into the stope shapes in Scenario 2.

8.4 Final Optimisation Parameters

The final optimisations that inform the mine design are based on the following parameters:

- COG of 3.6 g/t Au.
- MMW of 1.0 meters plus 0.6m dilution skins (0.3m hangingwall, 0.3m footwall).

Table 8-2 Optimisation Sensitivity Summary

Scenario	Parameters			Indicated			Inferred			Unclassified			Total		
	Resource Category	COG (AU g/t)	MMW	Tonnes (t)	Au (g/t)	Au metal (oz)	Tonnes (t)	Au (g/t)	Au metal (oz)	Tonnes (t)	Au (g/t)	Au metal (oz)	Tonnes (t)	Au (g/t)	Au metal (oz)
1a	MIIU	3.2	1.0	1,348,931	5.6	244,874	472,042	5.2	79,823	195,398	5.1	32,716	2,016,372	5.5	357,414
1b	MIIU	3.6	1.0	1,274,821	5.8	239,250	424,855	5.5	75,977	170,355	5.3	29,682	1,870,032	5.7	344,908
1c	MIIU	4.0	1.0	1,166,060	6.0	228,544	392,866	5.7	73,045	142,868	5.6	26,083	1,701,794	5.9	327,671
2a	MIIU	3.6	1.2	1,257,133	5.8	235,673	410,463	5.6	73,875	185,494	5.2	31,797	1,853,090	5.7	341,344
2b	MIIU	3.6	1.6	1,162,598	5.8	216,331	397,491	5.5	70,586	246,993	4.9	39,701	1,807,082	5.6	326,618
2c	MIIU	3.6	2.0	1,011,410	5.5	180,488	373,847	5.2	63,285	380,052	4.6	57,013	1,765,309	5.3	300,786

9 MINE DESIGN

9.1 Mine Design Criteria

The mine design is based on the criteria detailed in Sections 6 and 7 above.

9.2 Mine Design Scenarios

The mine design scenarios completed for this study are outlined in Table 9-1 below and shown in Figure 9-1 and Figure 9-4. The mine design is the same for Scenario 1a and 1b.

Table 9-1 Study Scenarios

Scenario		Resource Category
#	Description	
1a	Life of Mine (LOM)	LOM - MII
1b	Life of Mine (LOM) + Re-processing existing tails (TSF1)	LOM - MII
2	Reserves	Reserves - MI

Key points in the design scenarios include:

- Mine design for both scenarios are essentially the same.
- Scenario 2 (Reserves) does not extend to the south as far as Scenario 1 (LOM) and does not include a stoping area on the north west.

Figure 9-1 Mine Design - Scenario 1 (LOM) – Plan View (Grade)

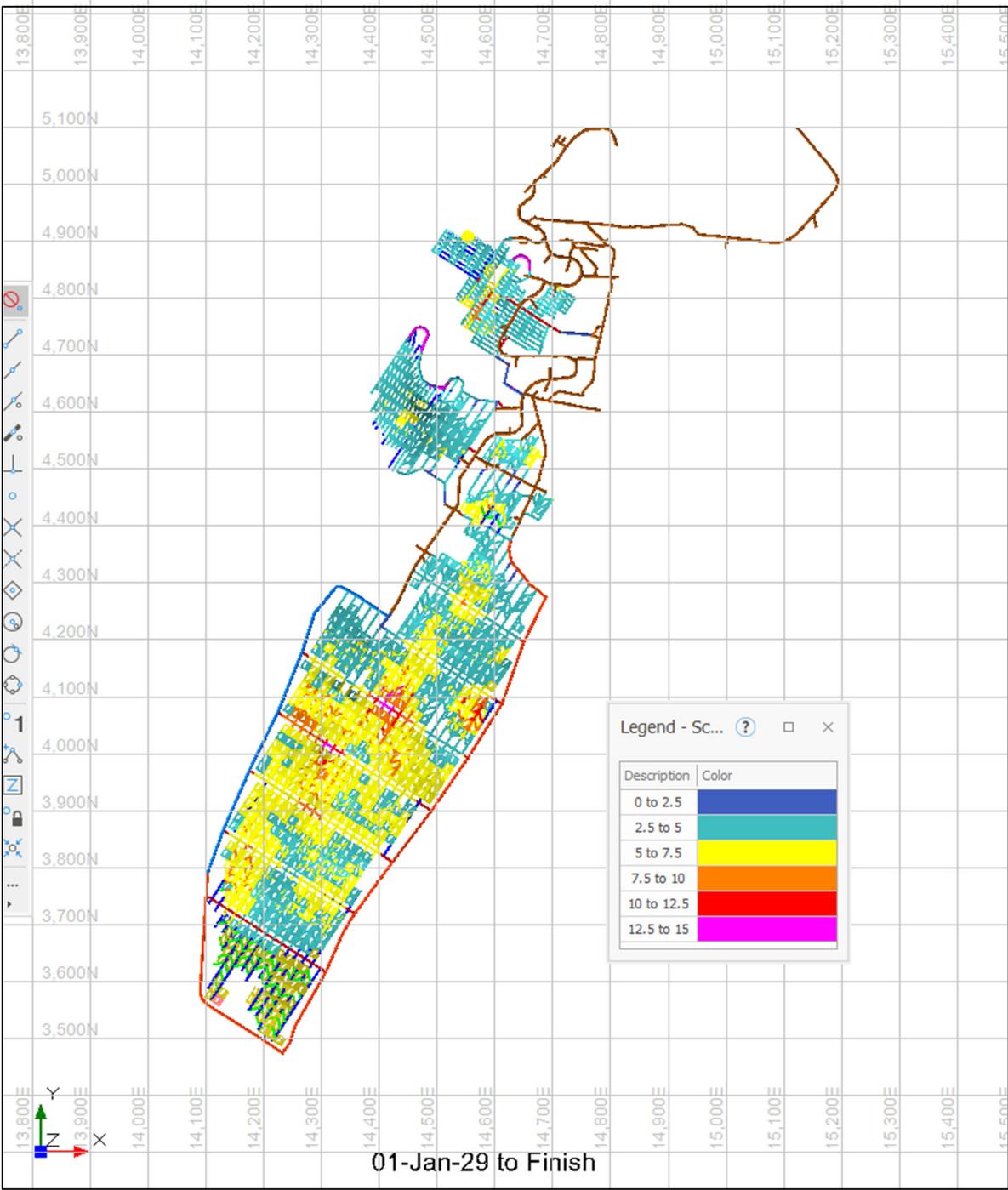


Figure 9-2 Mine Design - Scenario 1 (LOM) – Plan View (Resource Classification)

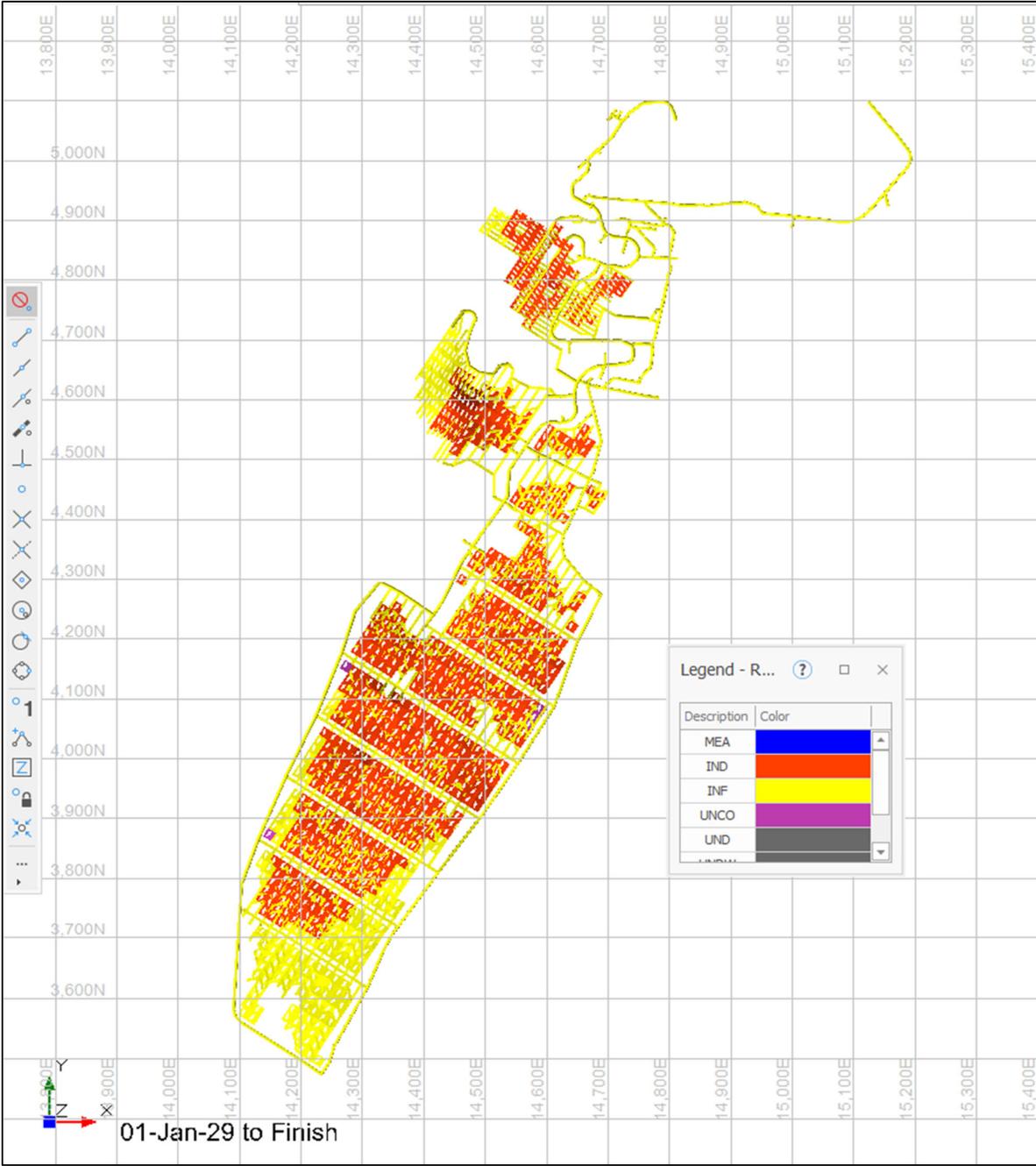


Figure 9-3 Mine Design - Scenario 1 (LOM) – Plan View (Mining Activity)

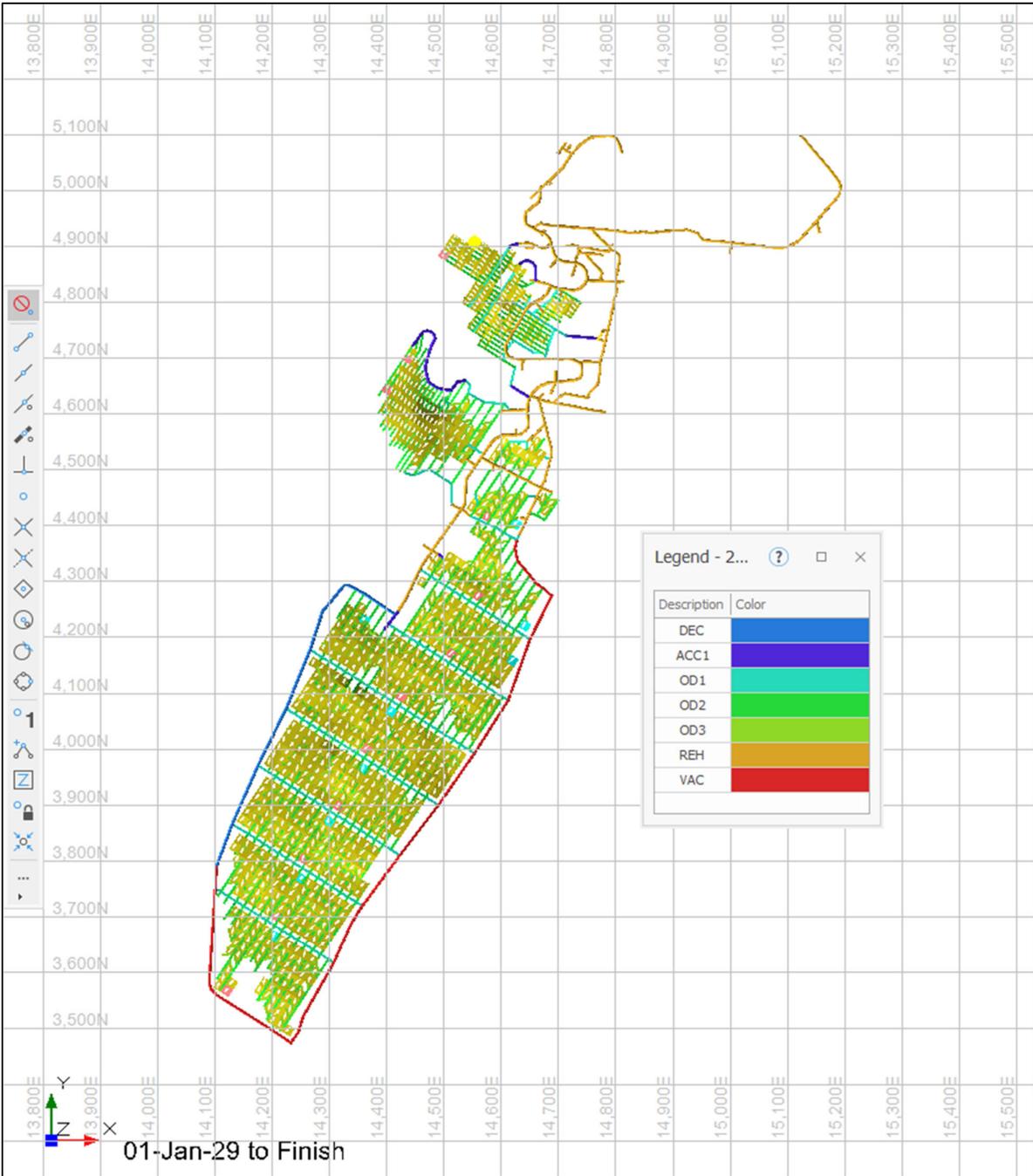


Figure 9-4 Mine Design - Scenario 2 (Reserves) – Plan View (Grade)

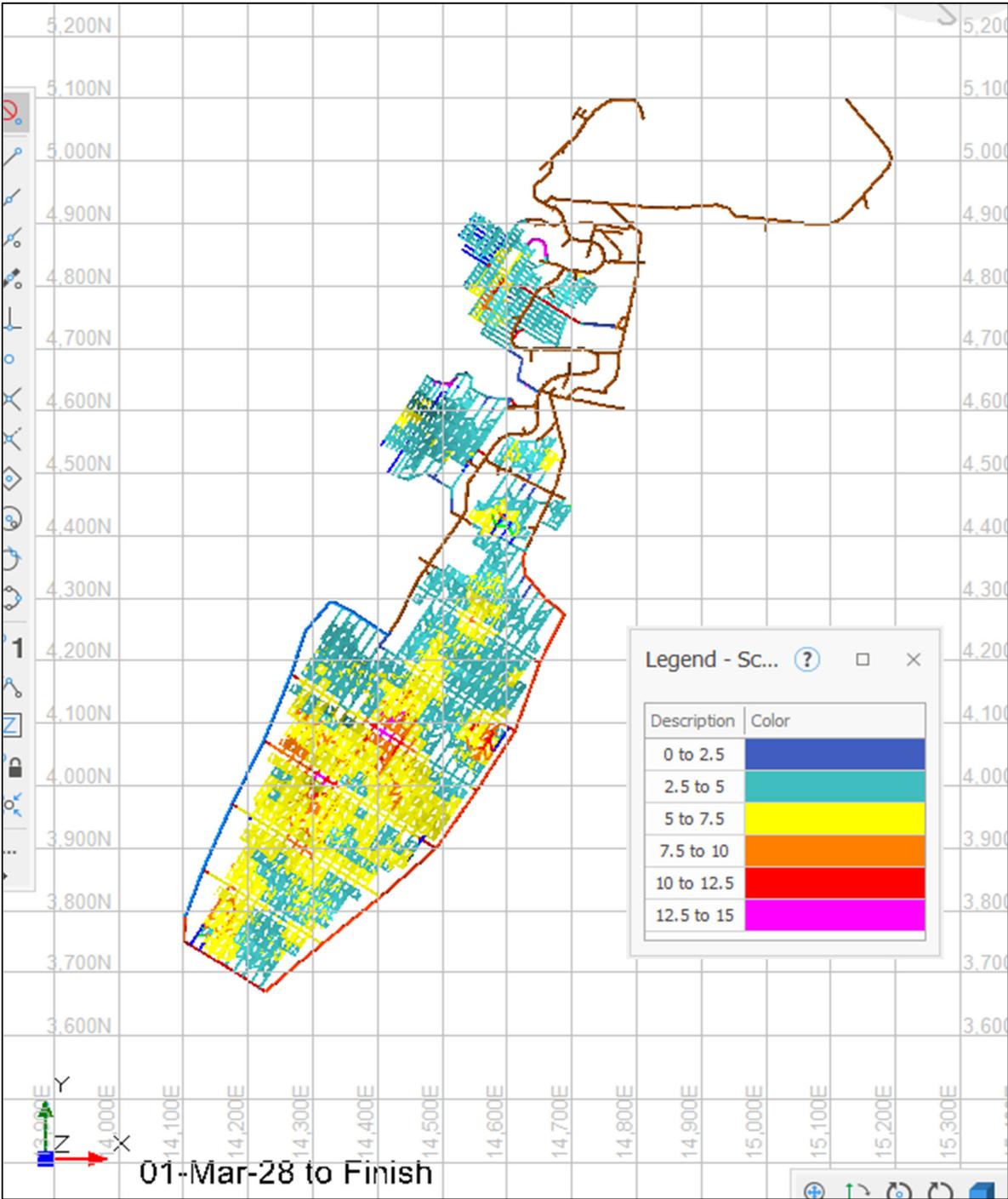


Figure 9-5 Mine Design - Scenario 2 (Reserves) – Plan View (Resource Classification)

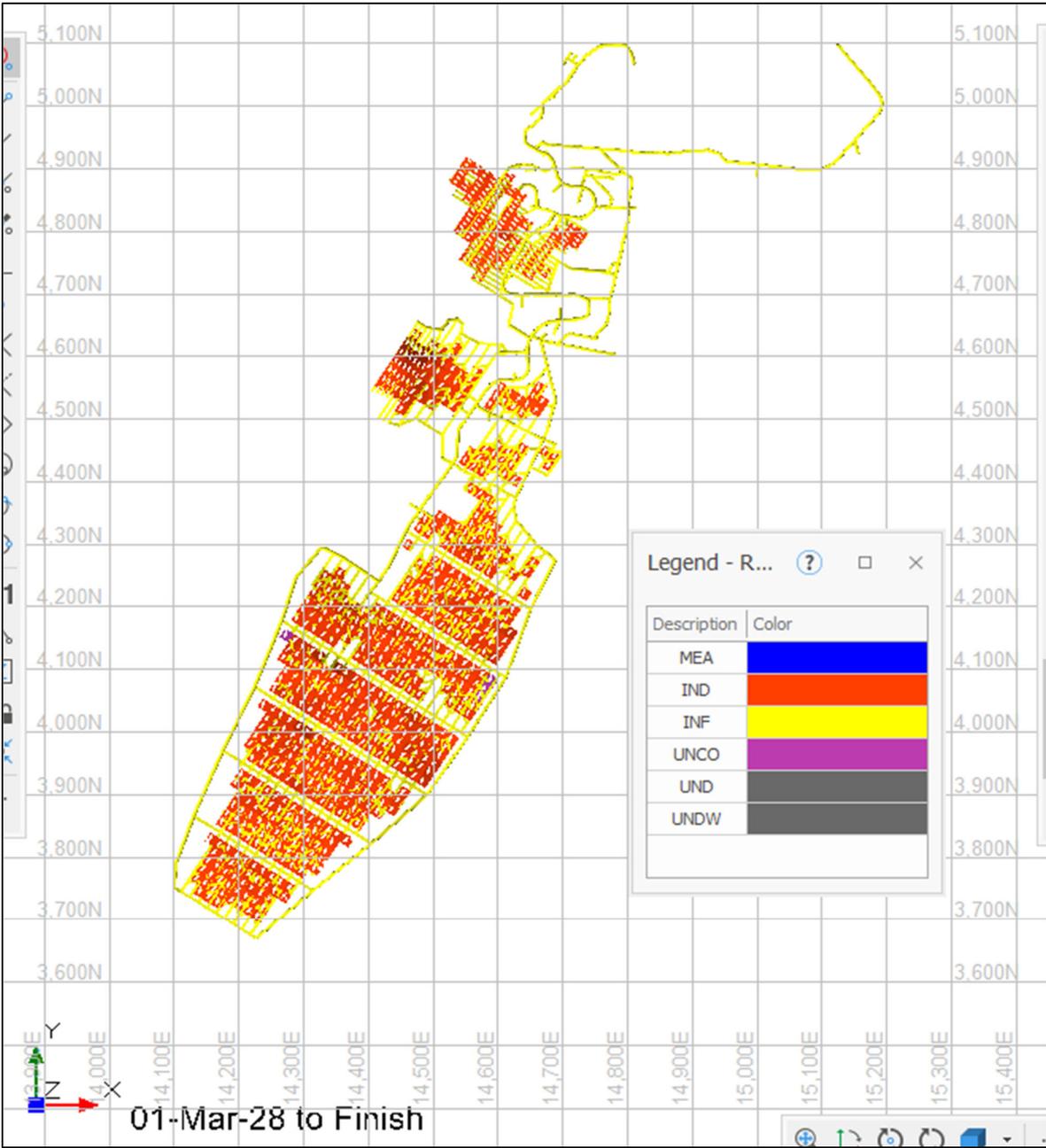
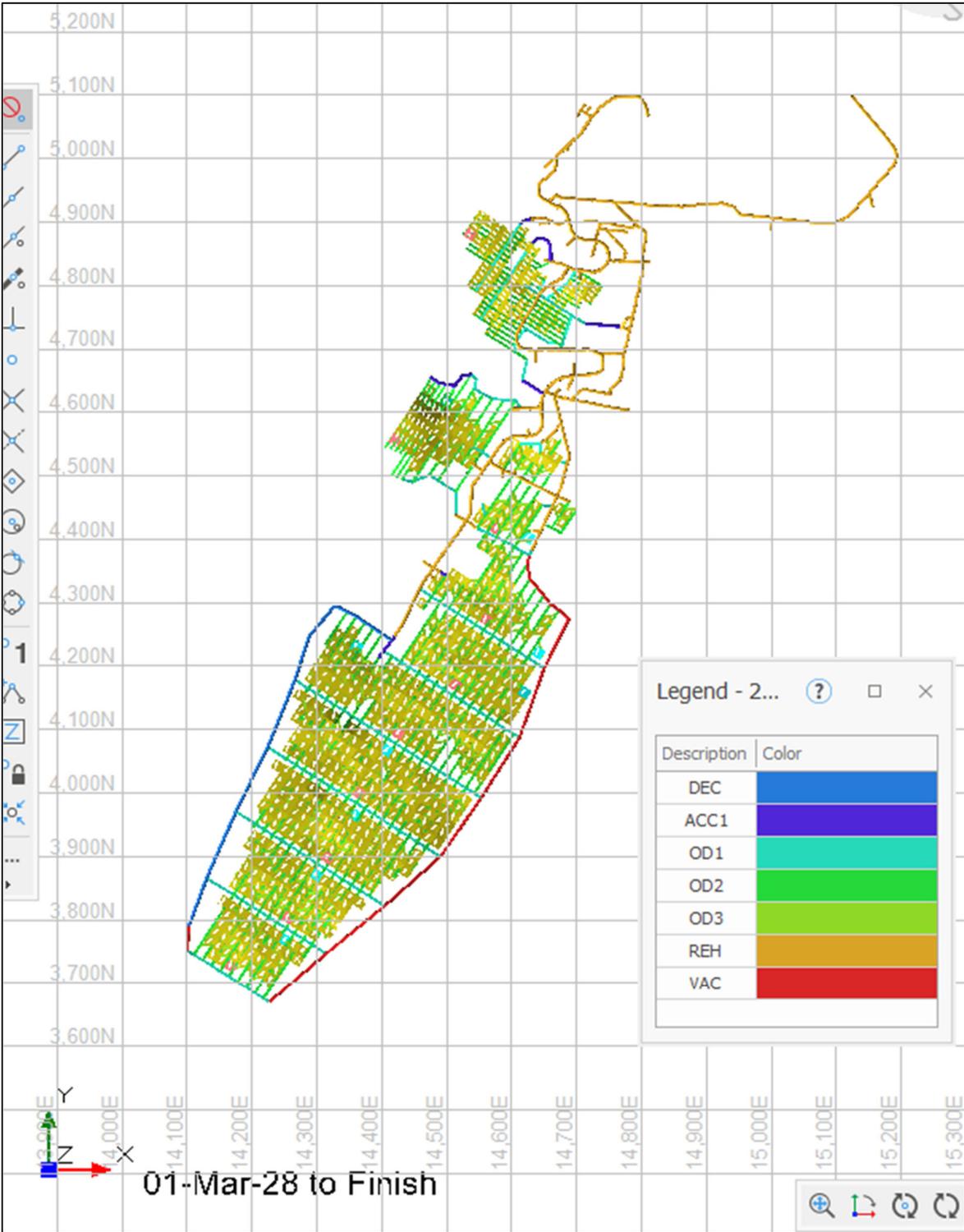


Figure 9-6 Mine Design - Scenario 2 (Reserves) – Plan View (Mining Activity)



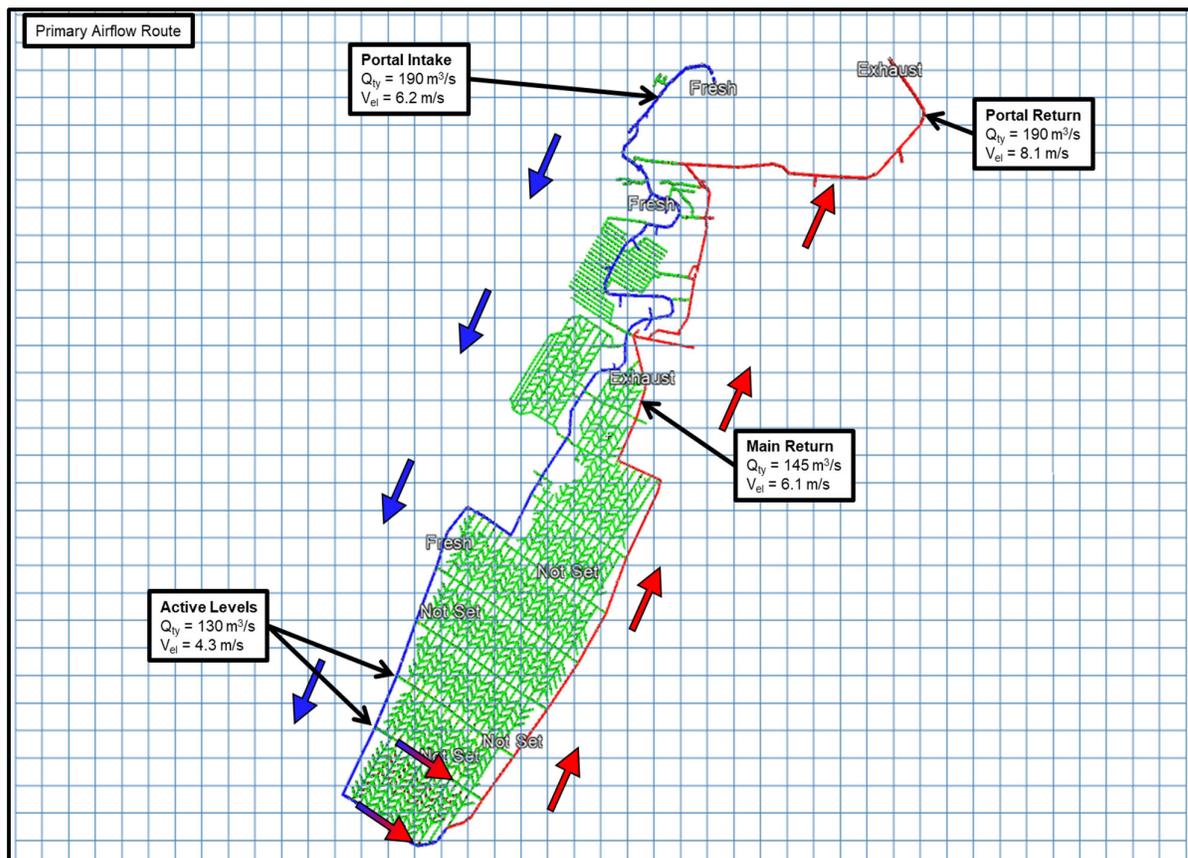
9.3 Ventilation and Egress

The ventilation system strategy is to:

- Use the existing decline and ventilation access and extend the main accesses around the outside of the orebody. Use the decline and the western access as a fresh air intake and the eastern access as a return air exhaust. This is shown in Figure 9-7 below.
- The northern stoping areas will be secondary ventilated from the fresh air decline on the western side of the orebody.
- Establish a primary fan in the ventilation access immediately inside the ventilation access within the open pit.
- Use east-west accesses approximately at 120 meter intervals to segregate and control ventilation through the working areas.

The egress strategy is to use the decline and ventilation access as egress to the surface.

Figure 9-7 Mine Design - Scenario 1 (Preliminary LOM) Ventilation Design– Plan View



9.4 Orebody and Stoping Sequence Constraints and Drivers

The key points of the development and stoping sequence include;

- Initial decline and ventilation access rehabilitation is completed to connect and establish the primary ventilation circuit on the north so the primary ventilation fan can be installed.
- Rehab continues until completed and the decline and ventilation access development is started.
- Stopping areas are broken into semi-independent panels by either pillars in the north or the east/west access drives in the south.
- The decline and ventilation access progress in advance of the stoping.
- Ore development is completed in each panel and the stripping does not take place until the development is completed in the next panel to the south.
- Stripping of the northern most panels in close proximity to the decline access takes place at the end of the mine life given its proximity to the decline.

Figure 9-8 Mine Design - Scenario 1 (LOM) Sequence

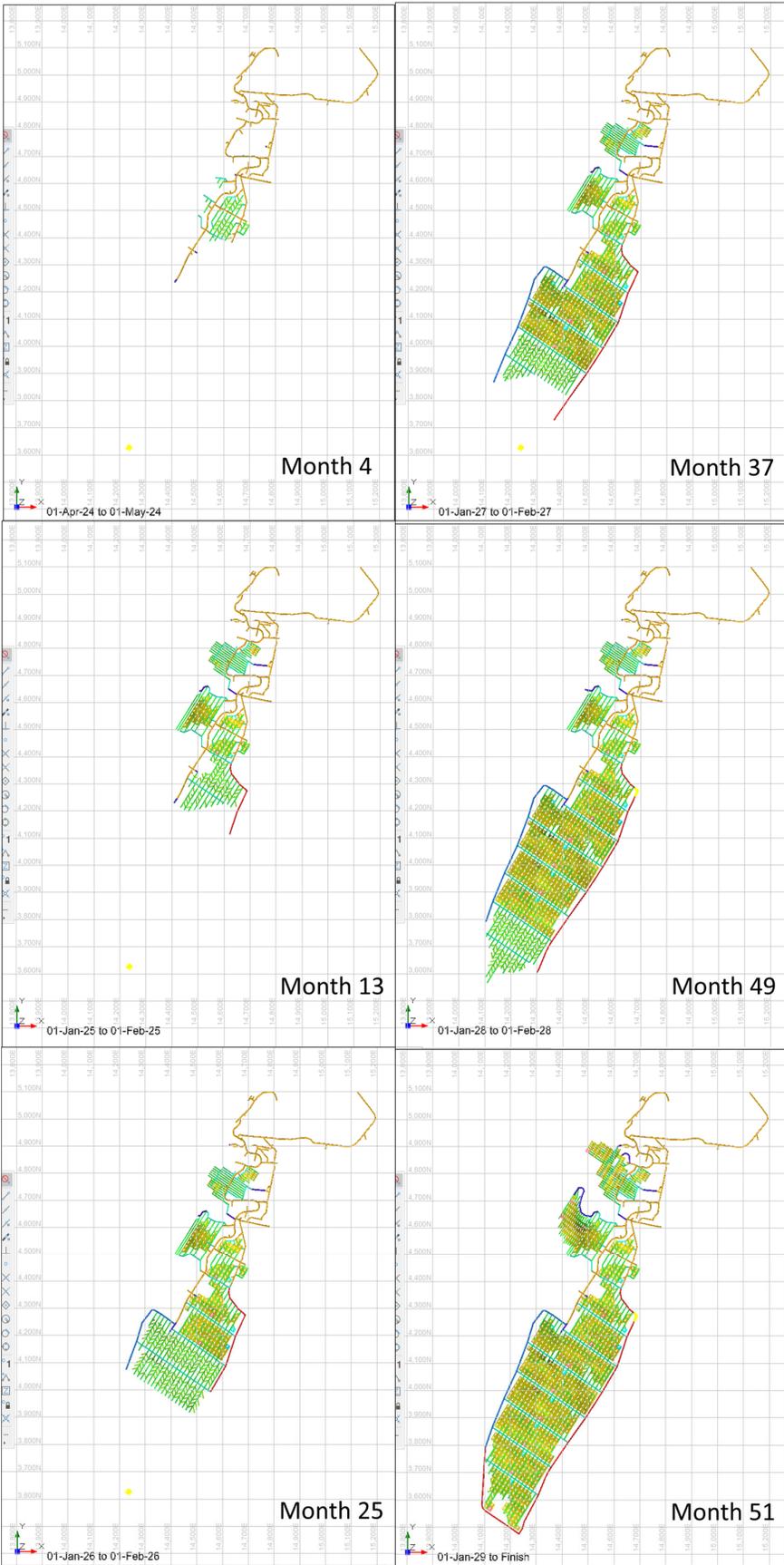
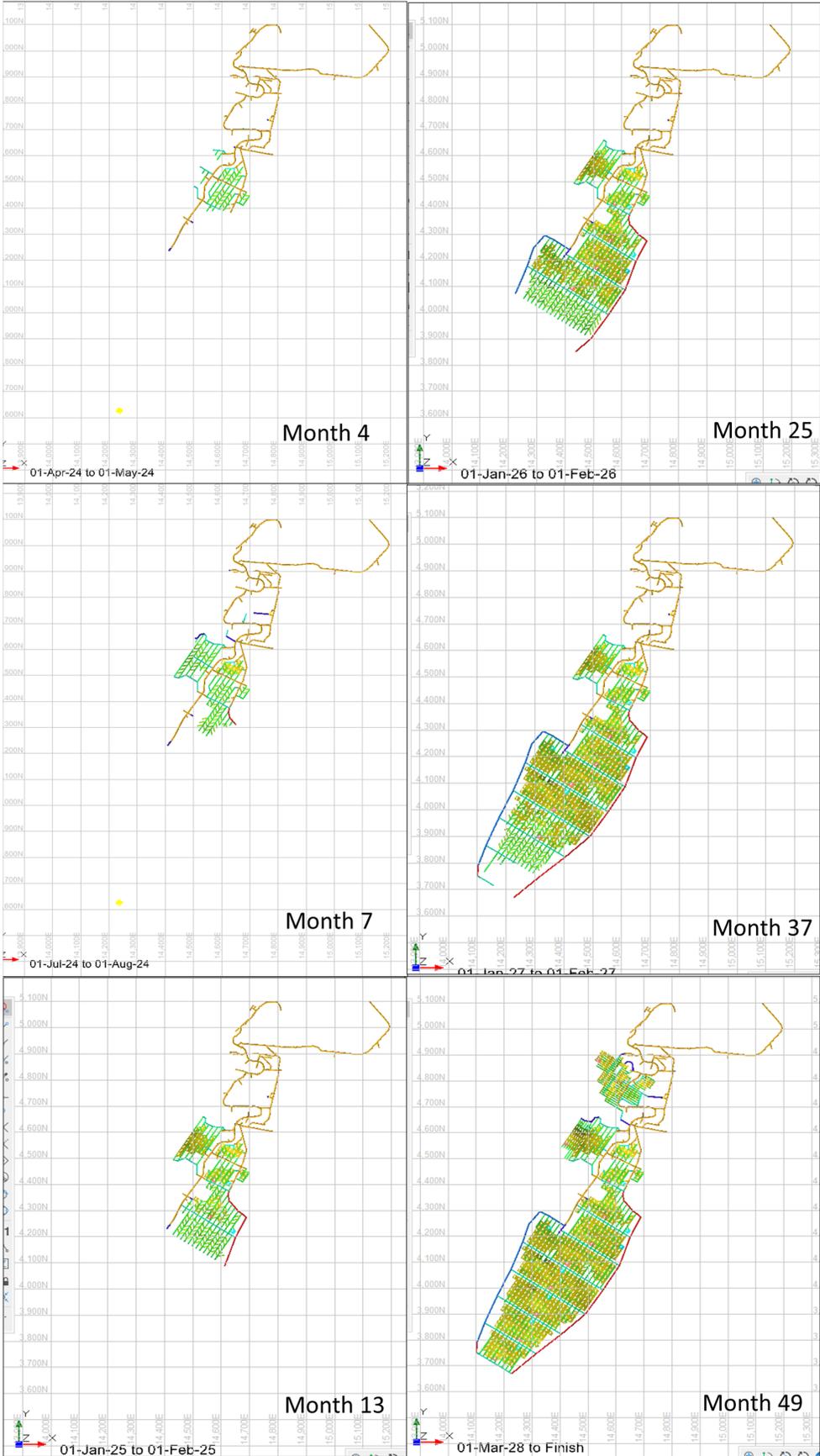


Figure 9-9 Mine Design - Scenario 2 (Reserves) Sequence



10 MINE PRODUCTION SCHEDULES

10.1 Scheduled Strategy and Constraints

The overall scheduling strategy applied to Toms Gully within the constraints of the selected mining method is to:

- Maximise the material movements within the constraints of the existing ventilation infrastructure – to minimise capital expense.

With the above strategy in mind and the sequence constraints and drivers as outlined in Section 9.4 above the key scheduling criteria applied into the schedule scenarios is:

- Limit the fleet to the maximum ventilation capacity as detailed in Section 12. The maximum ventilation capacity is constrained by maintaining velocity of 6m/s or less in the western fresh air intake decline. The maximum ventilation capacity is approximately 190m³/s to maintain a maximum 6m/s velocity in the fresh air intake decline. This restricts the fleet to 4 jumbos and 2 trucks.

The schedules are driven by:

- The task and activity rates per Section 10.2 below.
- Time taken to dewater the underground and rehab the existing workings

Initial resourcing and scheduling optimisation and sensitivities were completed to understand the mining physicals and fleet requirements driven by the mine design and sequence. It was found that for:

- Jumbos – development could be achieved sustainably with 5 jumbos. However this was above the capacity of the ventilation system. The jumbo resource was constrained to a maximum of 4 jumbos.

To increase the ventilation capacity to allow a mining fleet in excess of 4 jumbos additional fresh air and return air rises or access would be required to maintain the air velocities within guidelines. Given the short LOM and the additional capital cost this was not considered an acceptable strategy.

10.2 Scheduling Parameters

All design tasks and resources across the mine designs are scheduled with the rates in Table 10-1 and Table 10-2 below.

Table 10-1 Scheduling Parameters – Task Rates

Task	Unit	Rate
decline	m/day	8
level access	m/day	3.5
ore drive 1	m/day	3.5
ore drive 2	m/day	3.5
ore drive 3	m/day	3.5
rehabilitation	m/day	20
vent access	m/day	8
room-and-pillar stripping	m ³ /day	500

Table 10-2 Scheduling Parameters – Resource Rates

Resource	Unit	Rate
Development Jumbo	m/month	250
Rehab Jumbo	m/month	600
Stripping Jumbo	m ³ /day	500

10.3 Scenarios Mining Physicals

The scheduled tonnes and grade for the scenarios are summarised in Table 10-3, Table 10-4, Figure 10-1, and Figure 10-2 below. The key differences between scenarios include:

- Scenario 1 (LOM) and Scenario 2 (Reserves) have similar yearly production rates with the Scenario 1 (LOM) scenario having a higher production rate in the last year.
- Scenario 1 (LOM) has a higher grade in the last two years of production than Scenario 2 (Reserves).

Figure 10-1 Scenario Summary – Total Ore Tonnes



Figure 10-2 Scenario Summary – Total Ore Au Grade



Table 10-3 Scenario Summary - Ore Tonnes and Grade

Schedule	Phase	Units	Total	Dewatering			UG Mining					
				FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	
1a	Sc1 Life of Mine (LOM)	Total Ore	t	1,658,295	0	0	0	301,839	382,218	334,655	389,528	250,055
		Total Ore Metal	Oz	289,891	0	0	0	43,419	72,529	67,175	70,121	36,648
		Total Ore Grade	g/t	5.4	0	0	0	4.5	5.9	6.2	5.6	4.6
		Development Ore	t	937,959	0	0	0	225,429	284,465	146,985	214,622	66,458
		Development Ore Metal	oz	174,651	0	0	0	32,354	58,865	33,661	39,823	9,948
		Development Ore Grade	g/t	5.8	0	0	0	4.5	6.4	7.1	5.8	4.7
		Stope Ore	t	720,336	0	0	0	76,410	97,753	187,670	174,905	183,597
		Stope Ore Metal	oz	115,240	0	0	0	11,064	13,664	33,515	30,297	26,700
		Stope Ore Grade	g/t	5.0	0	0	0	4.5	4.3	5.6	5.4	4.5
2	Sc2 Reserves	Total Ore	t	1,434,872	0	0	0	304,140	376,704	364,310	362,359	27,359
		Total Ore Metal	Oz	248,113	0	0	0	44,182	72,760	70,961	56,618	3,590
		Total Ore Grade	g/t	5.4	0	0	0	4.52	6.01	6.06	4.9	4.1
		Development Ore	t	824,545	0	0	0	226,040	236,012	201,557	160,935	0
		Development Ore Metal	oz	151,124	0	0	0	32,955	51,907	41,422	24,840	0
		Development Ore Grade	g/t	5.7	0	0	0	4.53	6.84	6.39	4.8	0
		Stope Ore	t	610,327	0	0	0	78,100	140,692	162,753	201,424	27,359
		Stope Ore Metal	oz	96,989	0	0	0	11,227	20,853	29,540	31,778	3,590
		Stope Ore Grade	g/t	4.9	0	0	0	4.5	4.6	5.6	4.9	4.1

Table 10-4 Scenario Summary – Material Movements and Lateral Development

Schedule		Phase			Dewatering			UG Mining				
		Physical	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
1a	Sc1 Life of Mine (LOM)	UG Truck Ore Tonnes	t	1,658,295	0	0	0	301,839	382,218	334,655	389,528	250,055
		UG Truck Waste Tonnes	t	844,150	0	0	0	236,648	233,703	127,067	116,142	130,591
		UG Truck Total Tonnes	t	2,502,444	0	0	0	538,487	615,920	461,722	505,669	380,646
		Operating Development	m	33,394	0	0	0	8,647	9,171	4,472	7,034	4,070
		Capital Development	m	2,553	0	0	0	475	506	554	245	772
		Rehab Development	m	4,170	0	0	1,810	2,359	0	0	0	0
		Total Development	m	35,274	0	0	1,810	11,482	9,676	5,026	7,279	4,842
2	Sc2 Reserves	UG Truck Ore Tonnes	t	1,434,872	0	0	0	304,140	376,704	364,310	362,359	27,359
		UG Truck Waste Tonnes	t	715,099	0	0	0	192,606	224,869	157,440	140,183	0
		UG Truck Total Tonnes	t	2,149,971	0	0	0	496,747	601,573	521,750	502,542	27,359
		Operating Development	m	27,372	0	0	0	7,611	7,906	5,918	5,937	0
		Capital Development	m	1,905	0	0	0	373	664	627	241	0
		Rehab Development	m	4,170	0	0	1,810	2,359	0	0	0	0
		Total Development	m	33,447	0	0	1,810	10,343	8,570	6,545	6,178	0

11 PERSONNEL AND EQUIPEMENT SCHEDULE

11.1 Rosters

Toms Gully will operate as a 24/7 FIFO operation operating both day and nightshift 12-hour shifts. Rosters have been assigned to the different work groups to generate manning, flights, and accommodation costs. Rosters assigned are:

- Hanking management and technical staff – 8/6 D/S only, except for the Geology technicians who will work 14/7 roster D/S and N/S.
- Underground Contractor – Underground mining:
 - Management and administration – 8/6 D/S only.
 - Supervisors – 8/6 D/S and N/S.
 - Operators – 14/7 D/S and N/S except for the grader operator and cabolt operator who will work 14/14 D/S and 14/14 N/S (opposite shifts).
 - Maintenance – 14/7 D/S and N/S

11.2 Personnel

11.2.1 General

For the duration of the mine life, the owner will assume responsibility for management, technical services, supervision of the Underground mining contractor, and Underground statutory responsibility.

11.2.2 Owner's Personnel

The Owner's statutory personnel will comprise of an Underground Manager back-to-back with an Alternate Underground Manager. The Owner's full supervisory and technical team will be established and onsite to correspond with first ore development. Owners steady state headcount and rosters are outlined in Table 11-1 below.

Table 11-1 Personnel - Owner

Description	Roster	Headcount
Underground Manager	8/6 D/S Only	1
Alternate Underground Manager	8/6 D/S Only	1
Senior Engineer	8/6 D/S Only	1
Mining Engineer	8/6 D/S Only	1
Mine Geologist	8/6 D/S Only	2
Geology Technician	14/7 D/S N/S	3
Senior Mine Surveyor	8/6 D/S Only	1
Surveyor	8/6 D/S Only	2
Mining Administrator	5/2 D/S Only	1
Electrical Supervisor	8/6 D/S Only	1
Electrician	8/6 D/S Only	1
Total		16

11.2.3 Underground Mining Contractors Personnel

The Underground Mining Contractor's personnel headcount in Table 11-2 below is indicative of steady state production across the scenarios. The manning varies marginally within each scenario depending on timing and activities.

Table 11-2 Personnel – Underground Mining Contractor

Description	Roster	Headcount
Management and Supervision		
Project Manager	8/6 D/S Only	1
Mine Foreman	8/6 D/S Only	1
Site Engineer	8/6 D/S Only	1
Maintenance Supervisor	8/6 D/S & N/S	4
Electrical Supervisor	8/6 D/S Only	1
Shift Supervisor	8/6 D/S & N/S	4
Site Administration	8/6 D/S Only	1
HSE&T Advisor	8/6 D/S Only	1
Operators		
Jumbo Operator	14/14 D/S and N/S	20
Loader Operator - Dev	14/7 D/S and N/S	3
Loader Operator – R&P	14/7 D/S and N/S	3
Charge Up Operator	14/14 D/S and N/S	3
Service Crew	14/14 D/S and N/S	6
Nipper	14/14 D/S and N/S	6
Truck Operator	14/14 D/S and N/S	6
Cabolt Operator	14/14 D/S	2
Grader Operator	14/14 N/S	2
Maintainers		
Leading Hand Fitter	14/7 D/S and N/S	3
Electrician	14/7 D/S and N/S	2
Fitter (Shift and Workshop)	14/7 D/S and N/S	9
Auto Electrician	14/7 D/S and N/S	3
Total		82

11.3 Underground Fleet

11.3.1 Fleet Specifications and Demand

The underground mining fleet selected, and the maximum units required are detailed in Table 11-3 below. The fleet is a standard twin boom, 45t truck fleet configuration common to most mining contractors. The fleet requirements for the major fleet types are detailed in Table 11-3 below. While the maximum number for each fleet is generally the same, the timing is different to reflect the difference underlying schedule physicals.

Table 11-3 Fleet Specifications and Max Units

Type	Model	Units
Two Boom Jumbo	Sandvik DD421-60C	4
Cabotter	Sandvik DS422i	1
Loader	Sandvik LH517	2
Dump Truck	Cat AD45B	2
Charge Wagon	Normet SF050D	1
Integrated Tool Carrier	Volvo IT L120	2
Grader	Cat Grader 12M	1
LV	Toyota 4WD	7

11.3.2 Fleet Productivity

The number of units per fleet have been estimated per the fleet capacities and drivers in Table 11-4 below.

Table 11-4 Fleet Schedule Capacity and Drivers

Type	Model	Capacity/Driver	
		Units	Rate
Two Boom Jumbo – devt.	Sandvik DD421-60C	m/month	250
Two Boom Jumbo – rehab.	Sandvik DD421-60C	m/month	608
Two Boom Jumbo – stripping.	Sandvik DD421-60C	m ³ /month	15,208
Cabotter	Sandvik DS422i	m/month	6,000
Loader - Development	Sandvik LH517	t/month	30,000
Loader – R&P Production	Sandvik LH517	t/month	30,000
Dump Truck	Cat AD45B	tkm/month	100,000
Charge Wagon	Normet SF050D	1 x Dev m or Prod t	
Integrated Tool Carrier - Dev	Volvo IT L120	1 x Dev m	
Integrated Tool Carrier - Prod	Volvo IT L120	1 x R&P Prod t	
Grader	Cat Grader 12M	1 x Dev m or Prod t	
LV - Dev	Toyota 4WD	7 x Dev m or Prod t	

12 VENTILATION

12.1 General

Ventilation modelling has been completed in Ventsim based on the production and equipment schedules for Scenario 1 for the purpose of verifying the ventilation feasibility of the mine design and to size and select primary ventilation fans for costing purposes.

12.2 Air Quantity Estimate

An air quantity estimate has been determined based on the equipment selected in Table 12-2 below. The assumptions applied in the estimate are summarised in Table 12-1 below. The grader and cable bolter are low utilisation equipment, and it has been assumed that each of these units will not work within the same shift. The vent requirements for the grader has been removed from the maximum quantity assuming that either the grader or the cable bolter will be operating, but never together.

Table 12-1 Ventilation Estimate Assumptions

Description	Units	Value
WA Regulatory Air Requirement	m ³ /s per kW	0.06
Leakage	%	20%

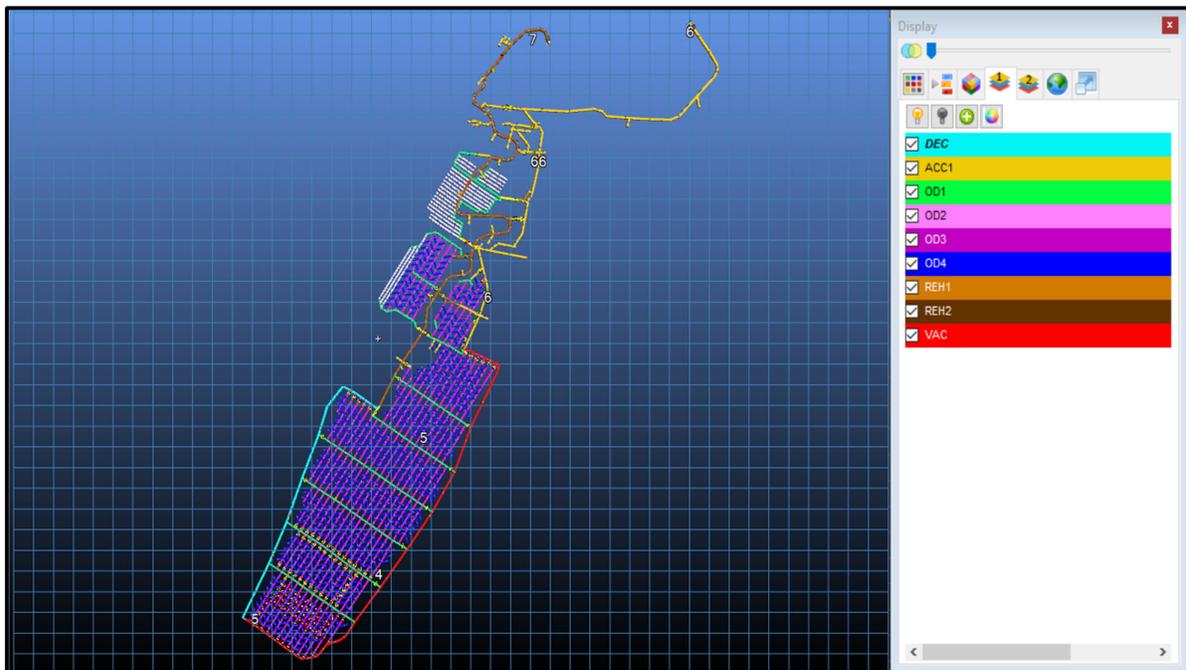
Table 12-2 Equipment Air Requirement

Type	Model	Rated Power (kW)	Qty per Unit (m ³ /s)	Max Fleet	Max Qty (m ³ /s)
Two Boom Jumbo	Sandvik DD421-60C	110	6	4	22
Cablebolter	Sandvik DS422i	120	6	1	6
Loader	Sandvik LH517	315	16	2	32
Dump Truck	Cat AD45B	446	22	2	45
Charge Wagon	Normet SF050D	90	5	1	5
Integrated Tool Carrier	Volvo IT L120	180	9	2	18
Grader	Cat Grader 12M	118	6	1	-
LV	Toyota 4WD	151	8	7	53
Fleet Total				20	179
Leakage - 20%					36
Total					215

12.3 Ventilation Design

Ventilation design has been completed per Figure 12-1 below. The ventilation design was completed on a preliminary Scenario 1 mine design due to timing constraints. There are minor footprint additions to the final Scenario 1 mine design however these additions do not change the fundamentals and scale of the mine design used in the ventilation assessment and is considered appropriate for this level of study.

Figure 12-1 Ventilation Design



12.4 Ventilation Modelling

Ventilation modelling has been completed based on a preliminary Scenario 1 mine design. The ventilation modelling confirms that the ventilation design is feasible when considering the:

- Minimum, maximum velocity's for working areas and infrastructure – declines and RAR/FAR's.
- Required quantities to the extremity/depth if the mine design.
- Temperatures – discussed further in Section 12.5 below.

Scenario 1 key ventilation modelling points:

- 1 X Fresh air intake.
- 1 X Return air exhaust.

- Primary Fan Duty = 190.0 m³/s @ 1420 Pa (Simulated with seals)
- Primary Mass Flow = 210.2 kg/s @ 1.13 kg/m³
- Reject WB temperature In Summer = 25.4 °C (No Cooling & No Equipment)
- Reject WB temperature In Summer = 29.0 °C (No Cooling & Equipment)
- Reject WB temperature In Summer = 27.5 °C (Cooling & Equipment)
- Mine Resistance = 0.03986 Ns²/m⁸ (Excluding Duct)
- 20 % leakage factor considered overall primary flow (UG Fleet requirements + 20%)
- 40 % leakage factor considered for primary flow considering 65% UG Fleet utilisation.
- ±130 m³/s primary flow available at last two panels because of system leakages through seals
(Consider sealing areas with shotcrete walls after panels have been completed)

12.5 Heat Load and Cooling

The temperature and cooling analysis assumed:

- Heat simulation with 2 X Loaders, 2 X Trucks, 4 X Jumbos, 1 X ITCs & 2 LV's
- 1 X Chiller = 1500 kW (24.2 °C / 30.2 °C to 22.3 °C / 23.2 °C)

The resultant WB summer temperatures from the simulation are within manageable limits without the need for cooling:

- Reject WB temperature In Summer = 25.4 °C (No Cooling & No Equipment)
- Reject WB temperature In Summer = 29.0 °C (No Cooling & Equipment)
- Reject WB temperature In Summer = 27.5 °C (Cooling & Equipment)

Figure 12-2 and Figure 12-4 below show the temperatures/volumes by location for simulations with and without chillers. Figure 12-3 and Figure 12-5 below show the temperatures across the year for simulations with and without chillers.

Figure 12-2 Heat Modelling – Equipment, No Chillers – Temperatures by Location

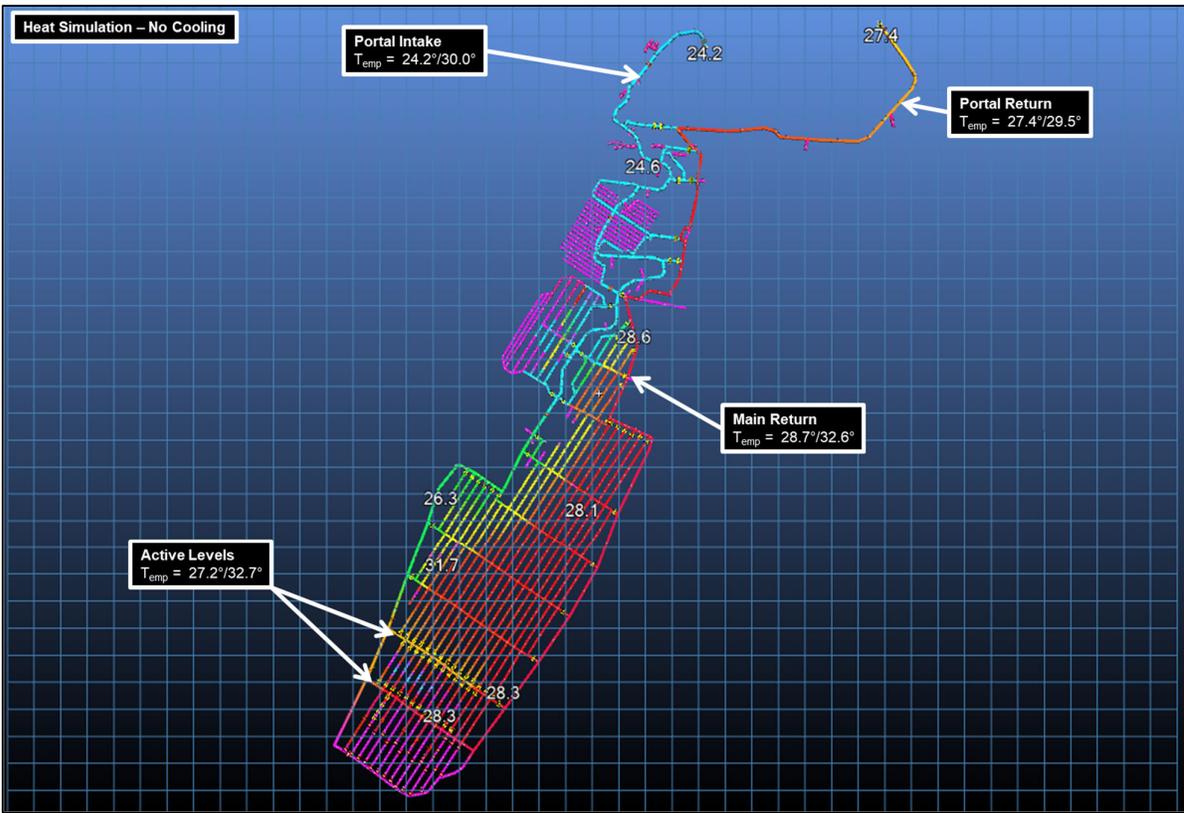


Figure 12-3 Heat Modelling – Equipment, No Chillers – Yearly Temperatures

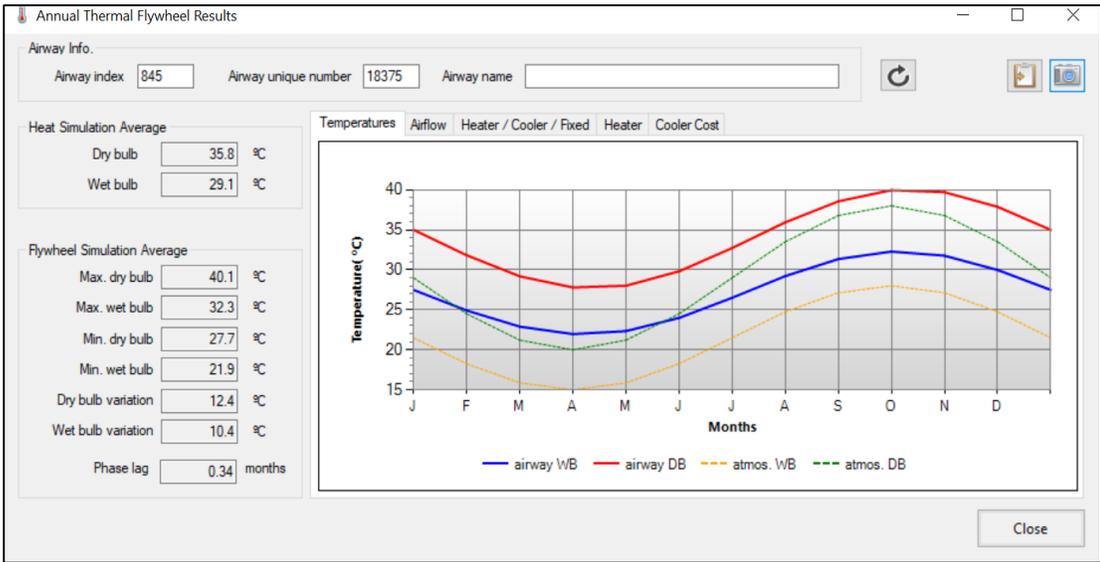


Figure 12-4 Heat Modelling – Equipment, Chillers - Temperatures by Location

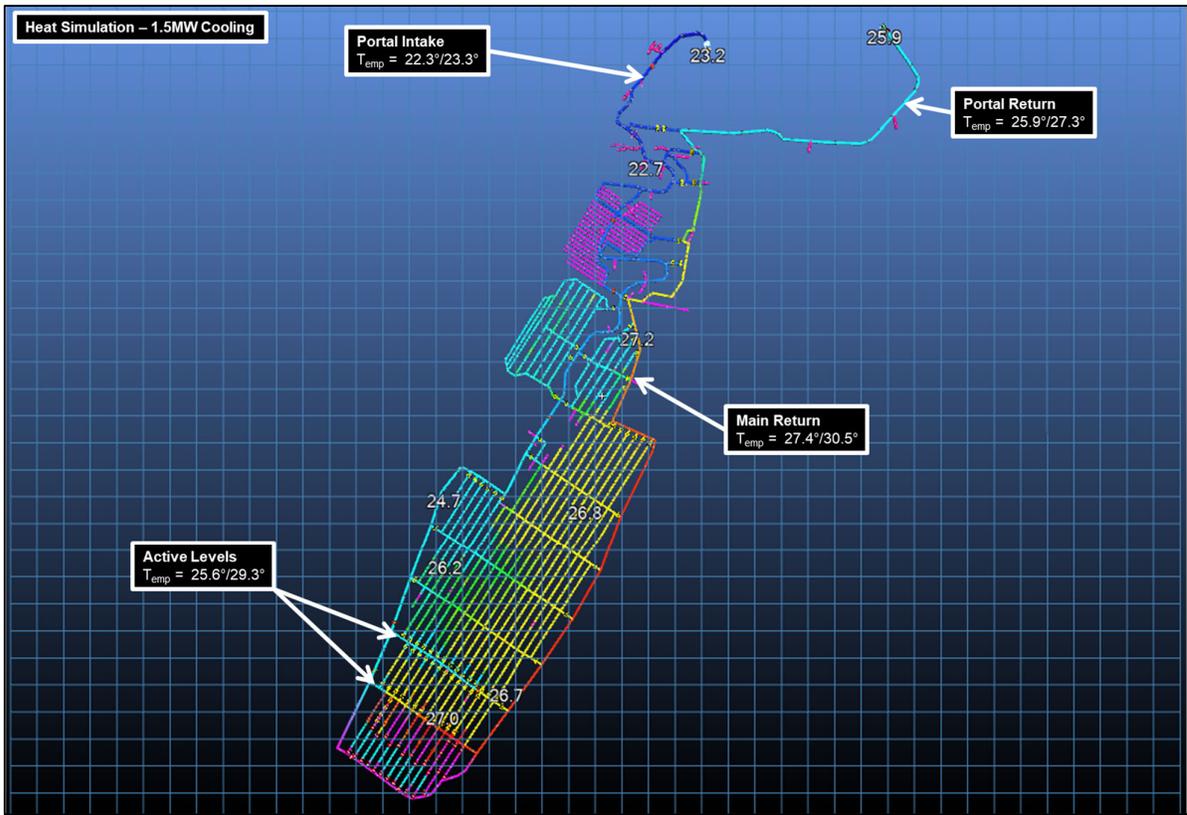
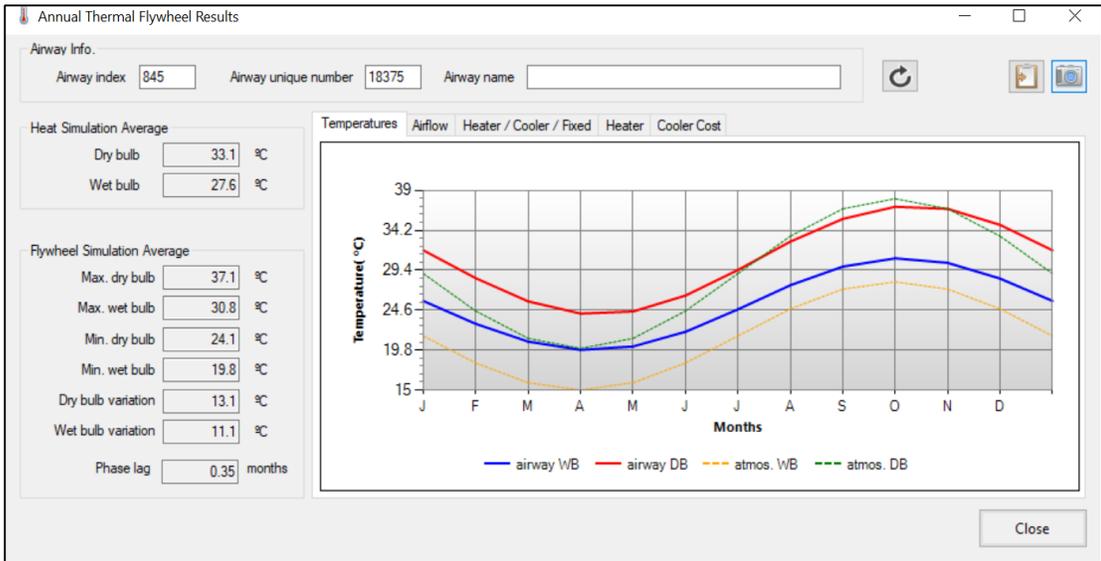


Figure 12-5 Heat Modelling – Equipment, Chillers – Yearly Temperatures



13 MINING COST ESTIMATES

13.1 Introduction

The underground mining capital and operating cost estimates were developed by Orelogy from a range of sources including:

- Costs derived from the Mt Bundy PFS/DFS.
- Quotes and budget pricing obtained from Hanking.
- Request For Budget Pricing (RFBP) issued and received by Orelogy.
- Orelogy cost database.

Budget pricing was obtained for the following major components:

- TSF1 tailings retreatment.
- Open pit dewatering.

The TSF1 tailings retreatment and TG open pit dewatering represent large individual cost components that are performed by specialist contractors, personnel, and equipment. Budget pricing from suppliers was requested and received for these components.

The cost estimate conducted is considered to be of appropriate accuracy for this MS and Reserves Estimation.

A summary of the total capital and operating costs for Scenario 1a, 1b, and 2 are outlined in Table 13-1 and Table 13-2 below.

Mining operating costs have been capitalised in the first 2 months of underground mining as pre-production capital prior to the first ore being produced in month 3.

Table 13-1 Capital Cost Summary – Scenarios

Description	Units	Scenario 1a	Scenario 1b	Scenario 2
UG Owner Infrastructure	(\$)	14,289,421	14,289,421	13,428,320
Rehab and Mine Closure	(\$)	3,289,840	3,289,840	3,289,840
Mobilisation & Establishment	(\$)	535,155	535,155	527,155
Demobilisation	(\$)	0	0	0
Decline & Lateral Development	(\$)	18,192,445	18,192,445	16,117,414
Ground Support - Additional & Rehab	(\$)	1,437,877	1,437,877	1,448,721
Ventilation	(\$)	310,000	310,000	130,000
Egress And Refuge	(\$)	34,904	34,904	34,904
Ancillary Equipment	(\$)	1,257,326	1,257,326	1,029,900
Pre-Production Capex	(\$)	738,119	738,119	716,621
Total	(\$)	40,085,087	40,085,087	36,722,875

Table 13-2 Operating Cost Summary - Scenarios

Description	Units	Scenario 1a	Scenario 1b	Scenario 2
Rehab and Mine Closure	(\$)	0	0	0
Mobilisation & Establishment	(\$)	0	0	0
Demobilisation	(\$)	535,155	535,155	527,155
Decline & Lateral Development (Ground Support Included)	(\$)	106,993,853	106,993,853	87,700,787
Stripping	(\$)	19,990,828	19,990,828	15,667,398
Vertical Development	(\$)	0	0	0
Production Drilling & Charging	(\$)	0	0	0
Materials Handling UG	(\$)	27,016,518	27,016,518	23,066,015
Materials Handling Surface	(\$)	10,944,746	10,944,746	9,470,157
Ground Support - Additional & Rehab	(\$)	16,492,507	16,492,507	13,716,648
Grade Control	(\$)	0	0	0
Ventilation	(\$)	0	0	0
Egress And Refuge	(\$)	0	0	0
Ancillary Equipment	(\$)	885,665	885,665	732,964
Labour	(\$)	14,253,663	14,253,663	12,080,766
Tech Services (Incl. Geology)	(\$)	5,611,009	5,611,009	4,698,437
Mine Services incl. power & fuel	(\$)	21,208,021	21,208,021	17,267,149
Mine Services (Hire costs)	(\$)	0	0	0
Owner & Contractor - Flights	(\$)	5,682,391	5,682,391	4,737,186
Owner & Contractor - Accommodation	(\$)	7,039,923	7,039,923	5,870,198
Pump Tails from TSF1 and TSF2 to Toms Gully Pit	(\$)	2,710,018	917,037	2,710,018
Truck TSF1 tails to Rustler's Roost for Processing	(\$)	0	1,746,250	0
Total	(\$)	239,364,296	239,317,566	198,244,876

13.2 Basis of Estimate

13.2.1 Inputs and Assumptions

The cost estimates have been prepared in accordance with the accuracy required for a Reserves Estimation study. Pre-production capital costs are defined as those operating costs occurring prior to the start of ore production.

13.2.2 Estimation Accuracy

The cost estimate was compiled and presented in Australian Dollars. Prices were obtained in the first half of 2023 with an effective date of Q2 2023. Existing quotes provided to Orelogy were checked for currency and updated if required. The estimate is deemed to have an accuracy of +/-25%.

13.2.3 Battery Limits

The battery limits are defined in Section 2.4.5. The estimates described in this section pertain to these limits.

No capital costs have been included for the processing plant or site services. Capital costs have only been included for establishment and operation of the TG underground mine.

13.3 Capital Cost Estimate

Total capital costs for the scenarios are outlined in Table 13-1 above. The underground owner infrastructure capital is split out and detailed per Table 13-3 below. The pre-production capital is split out and detailed per Table 13-4.

Table 13-3 Capital Cost Summary – UG Owner Infrastructure

Description	Units	Scenario 1a	Scenario 1b	Scenario 2
Environment Re-hab	(\$)	17,364	17,364	17,364
Dewatering	(\$)	5,004,355	5,004,355	5,004,355
Infrastructure	(\$)	586,254	586,254	574,647
Administration & Contractor Offices, ablutions	(\$)	660,000	660,000	660,000
Ventilation	(\$)	3,431,175	3,431,175	3,431,175
Electrical - power supply and reticulation	(\$)	2,739,416	2,739,416	1,889,922
General UG Capital	(\$)	881,294	881,294	881,294
Miscellaneous	(\$)	969,563	969,563	969,563
Total	(\$)	14,289,421	14,289,421	13,428,320

Table 13-4 Capital Cost Summary – Pre Production Capital

Description	Units	Scenario 1a	Scenario 1b	Scenario 2
Labour	(\$)	185,850	185,850	185,850
Tech Services	(\$)	75,000	75,000	75,000
Mine Services incl. power & fuel	(\$)	310,391	310,391	303,513
Owner & Contractor - Flights	(\$)	74,724	74,724	68,901
Owner & Contractor - Accommodation	(\$)	92,154	92,154	83,357
Pump Tails from TSF1 and TSF2 to Toms Gully Pit	(\$)	0	0	0
Total	(\$)	738,119	738,119	716,621

Table 13-5 Capital Cost Summary – Scenario 1a by Year

Description	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
UG Owner Infrastructure	(\$)	14,289,421	1,944,352	1,199,119	1,204,907	7,861,848	781,740	436,354	436,354	424,747	0	0
Rehab and Mine Closure	(\$)	3,289,840	0	400,000	600,000	0	0	0	0	190,820	190,820	1,908,200
Mobilisation & Establishment	(\$)	535,155	0	0	255,868	279,287	0	0	0	0	0	0
Demobilisation	(\$)	0	0	0	0	0	0	0	0	0	0	0
Decline & Lateral Development	(\$)	18,192,445	0	0	4,091,085	6,960,992	1,875,881	1,943,985	845,757	2,474,745	0	0
Ground Support - Additional & Rehab	(\$)	1,437,877	0	0	517,257	812,188	21,686	54,216	32,530	0	0	0
Ventilation	(\$)	310,000	0	0	0	40,000	70,000	50,000	80,000	70,000	0	0
Egress And Refuge	(\$)	34,904	0	0	0	34,904	0	0	0	0	0	0
Ancillary Equipment	(\$)	1,257,326	0	0	13,867	174,557	272,911	272,911	272,911	250,169	0	0
Pre-Production Capex	(\$)	738,119	0	0	346,096	392,022	0	0	0	0	0	0
Total	(\$)	40,085,087	1,944,352	1,599,119	7,029,081	16,555,799	3,022,218	2,757,466	1,667,552	3,410,480	190,820	1,908,200

Table 13-6 Capital Cost Summary – Scenario 1b by Year

Description	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
UG Owner Infrastructure	(\$)	14,289,421	1,944,352	1,199,119	1,204,907	7,861,848	781,740	436,354	436,354	424,747	0	0
Rehab and Mine Closure	(\$)	3,289,840	0	400,000	600,000	0	0	0	0	190,820	572,460	1,526,560
Mobilisation & Establishment	(\$)	535,155	0	0	255,868	279,287	0	0	0	0	0	0
Demobilisation	(\$)	0	0	0	0	0	0	0	0	0	0	0
Decline & Lateral Development	(\$)	18,192,445	0	0	4,091,085	6,960,992	1,875,881	1,943,985	845,757	2,474,745	0	0
Ground Support - Additional & Rehab	(\$)	1,437,877	0	0	517,257	812,188	21,686	54,216	32,530	0	0	0
Ventilation	(\$)	310,000	0	0	0	40,000	70,000	50,000	80,000	70,000	0	0
Egress And Refuge	(\$)	34,904	0	0	0	34,904	0	0	0	0	0	0
Ancillary Equipment	(\$)	1,257,326	0	0	13,867	174,557	272,911	272,911	272,911	250,169	0	0
Pre-Production Capex	(\$)	738,119	0	0	346,096	392,022	0	0	0	0	0	0
Total	(\$)	40,085,087	1,944,352	1,599,119	7,029,081	16,555,799	3,022,218	2,757,466	1,667,552	3,410,480	572,460	1,526,560

Table 13-7 Capital Cost Summary – Scenario 2 by Year

Description	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33
UG Owner - Capex	(\$)	13,428,320	1,944,352	1,199,119	1,204,907	7,861,848	781,740	436,354	0	0	0
UG Owner Capex - Rehab and Mine Closure	(\$)	3,289,840	0	400,000	600,000	0	0	0	0	190,820	2,099,020
UG Contractor - Mobilisation & Establishment	(\$)	527,155	0	0	249,868	277,287	0	0	0	0	0
UG Contractor - Demobilisation	(\$)	0	0	0	0	0	0	0	0	0	0
UG Contractor - Decline & Lateral Development (Ground Sup Inc)	(\$)	16,117,414	0	0	4,091,085	6,632,286	2,386,247	2,235,170	772,626	0	0
UG Contractor - Ground Support - Additional & Rehab	(\$)	1,448,721	0	0	961,828	345,931	43,373	65,059	32,530	0	0
UG Contractor - Ventilation	(\$)	130,000	0	0	0	30,000	40,000	40,000	20,000	0	0
UG Contractor - Egress And Refuge	(\$)	34,904	0	0	0	34,904	0	0	0	0	0
UG Contractor - Ancillary Equipment	(\$)	1,029,900	0	0	13,867	174,557	272,911	272,911	272,911	22,743	0
Pre-Production Capex	(\$)	716,621	0	0	338,787	377,835	0	0	0	0	0
Total	(\$)	36,722,875	1,944,352	1,599,119	7,460,342	15,734,647	3,524,271	3,049,494	1,098,067	213,563	2,099,020

13.4 Operating Cost Estimate

Total operating costs for each scenario are detailed in tables below.

Table 13-8 Operating Cost Summary – Scenario 1a by Year

Description	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Rehab and Mine Closure	(\$)	0	0	0	0	0	0	0	0	0	0	0
Mobilisation & Establishment	(\$)	0	0	0	0	0	0	0	0	0	0	0
Demobilisation	(\$)	535,155	0	0	0	0	0	0	0	535,155	0	0
Decline & Lateral Development (Ground Sup Inc)	(\$)	106,993,853	0	0	0	27,706,266	29,382,908	14,329,453	22,535,784	13,039,441	0	0
Stripping	(\$)	19,990,828	0	0	0	1,974,434	2,503,519	4,857,816	4,468,944	6,186,115	0	0
Vertical Development	(\$)	0	0	0	0	0	0	0	0	0	0	0
Production Drilling & Charging	(\$)	0	0	0	0	0	0	0	0	0	0	0
Materials Handling UG	(\$)	27,016,518	0	0	0	3,429,768	5,037,367	6,431,518	7,117,896	4,999,969	0	0
Materials Handling Surface	(\$)	10,944,746	0	0	0	1,992,139	2,522,637	2,208,726	2,570,882	1,650,362	0	0
Ground Support - Additional & Rehab	(\$)	16,492,507	0	0	0	3,621,629	5,237,266	2,515,622	3,968,611	1,149,379	0	0
Grade Control	(\$)	0	0	0	0	0	0	0	0	0	0	0
Ventilation	(\$)	0	0	0	0	0	0	0	0	0	0	0
Egress And Refuge	(\$)	0	0	0	0	0	0	0	0	0	0	0
Ancillary Equipment	(\$)	885,665	0	0	0	167,971	183,241	183,241	183,241	167,971	0	0
Labour	(\$)	14,253,663	0	0	0	2,754,710	3,016,965	2,904,423	2,985,990	2,591,575	0	0
Tech Services (Incl. Geology)	(\$)	5,611,009	0	0	0	1,153,942	1,332,346	1,110,211	1,167,994	846,516	0	0
Mine Services incl. power & fuel	(\$)	21,208,021	0	0	0	3,944,747	4,503,306	4,246,834	4,528,755	3,984,380	0	0
Mine Services (Hire costs)	(\$)	0	0	0	0	0	0	0	0	0	0	0
Owner & Contractor - Flights	(\$)	5,682,391	0	0	0	1,102,901	1,231,484	1,157,246	1,199,460	991,301	0	0
Owner & Contractor - Accommodation	(\$)	7,039,923	0	0	0	1,370,264	1,538,131	1,430,688	1,489,750	1,211,090	0	0
Pump Tails from TSF1 and TSF2 to Toms Gully Pit	(\$)	2,710,018	0	0	0	0	0	0	0	413,550	2,296,468	0
Truck TSF1 tails to Rustler's Roost for Processing	(\$)	0	0	0	0	0	0	0	0	0	0	0
Total	(\$)	239,364,296	0	0	0	49,218,771	56,489,170	41,375,777	52,217,307	37,766,803	2,296,468	0

Table 13-9 Operating Cost Summary – Scenario 1b by Year

Description	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Rehab and Mine Closure	(\$)	0	0	0	0	0	0	0	0	0	0	0
Mobilisation & Establishment	(\$)	0	0	0	0	0	0	0	0	0	0	0
Demobilisation	(\$)	535,155	0	0	0	0	0	0	0	535,155	0	0
Decline & Lateral Development (Ground Sup Inc	(\$)	106,993,853	0	0	0	27,706,266	29,382,908	14,329,453	22,535,784	13,039,441	0	0
Stripping	(\$)	19,990,828	0	0	0	1,974,434	2,503,519	4,857,816	4,468,944	6,186,115	0	0
Vertical Development	(\$)	0	0	0	0	0	0	0	0	0	0	0
Production Drilling & Charging	(\$)	0	0	0	0	0	0	0	0	0	0	0
Materials Handling UG	(\$)	27,016,518	0	0	0	3,429,768	5,037,367	6,431,518	7,117,896	4,999,969	0	0
Materials Handling Surface	(\$)	10,944,746	0	0	0	1,992,139	2,522,637	2,208,726	2,570,882	1,650,362	0	0
Ground Support - Additional & Rehab	(\$)	16,492,507	0	0	0	3,621,629	5,237,266	2,515,622	3,968,611	1,149,379	0	0
Grade Control	(\$)	0	0	0	0	0	0	0	0	0	0	0
Ventilation	(\$)	0	0	0	0	0	0	0	0	0	0	0
Egress And Refuge	(\$)	0	0	0	0	0	0	0	0	0	0	0
Ancillary Equipment	(\$)	885,665	0	0	0	167,971	183,241	183,241	183,241	167,971	0	0
Labour	(\$)	14,253,663	0	0	0	2,754,710	3,016,965	2,904,423	2,985,990	2,591,575	0	0
Tech Services (Incl. Geology)	(\$)	5,611,009	0	0	0	1,153,942	1,332,346	1,110,211	1,167,994	846,516	0	0
Mine Services incl. power & fuel	(\$)	21,208,021	0	0	0	3,944,747	4,503,306	4,246,834	4,528,755	3,984,380	0	0
Mine Services (Hire costs)	(\$)	0	0	0	0	0	0	0	0	0	0	0
Owner & Contractor - Flights	(\$)	5,682,391	0	0	0	1,102,901	1,231,484	1,157,246	1,199,460	991,301	0	0
Owner & Contractor - Accommodation	(\$)	7,039,923	0	0	0	1,370,264	1,538,131	1,430,688	1,489,750	1,211,090	0	0
Pump Tails from TSF1 and TSF2 to Toms Gully Pit	(\$)	917,037	0	0	0	0	0	0	0	0	917,037	0
Truck TSF1 tails to Rustler's Roost for Processing	(\$)	1,746,250	0	0	0	0	0	0	0	209,550	1,536,700	0
Total	(\$)	239,317,566	0	0	0	49,218,771	56,489,170	41,375,777	52,217,307	37,562,803	2,453,737	0

Table 13-10 Operating Cost Summary – Scenario 2 by Year

Description	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33
Rehab and Mine Closure	(\$)	0	0	0	0	0	0	0	0	0	0
Mobilisation & Establishment	(\$)	0	0	0	0	0	0	0	0	0	0
Demobilisation	(\$)	527,155	0	0	0	0	0	0	156,129	371,026	0
Decline & Lateral Development (Ground Sup Inc)	(\$)	87,700,787	0	0	0	24,385,851	25,329,466	18,962,252	19,023,218	0	0
Stripping	(\$)	15,667,398	0	0	0	2,025,675	3,608,371	4,209,671	5,115,636	708,044	0
Vertical Development	(\$)	0	0	0	0	0	0	0	0	0	0
Production Drilling & Charging	(\$)	0	0	0	0	0	0	0	0	0	0
Materials Handling UG	(\$)	23,066,015	0	0	0	3,626,756	5,740,772	6,474,492	6,609,224	614,770	0
Materials Handling Surface	(\$)	9,470,157	0	0	0	2,007,324	2,486,246	2,404,446	2,391,571	180,570	0
Ground Support - Additional & Rehab	(\$)	13,716,648	0	0	0	4,142,102	4,499,928	3,263,803	1,810,814	0	0
Grade Control	(\$)	0	0	0	0	0	0	0	0	0	0
Ventilation	(\$)	0	0	0	0	0	0	0	0	0	0
Egress And Refuge	(\$)	0	0	0	0	0	0	0	0	0	0
Ancillary Equipment	(\$)	732,964	0	0	0	167,971	183,241	183,241	183,241	15,270	0
Labour	(\$)	12,080,766	0	0	0	2,725,800	3,016,965	3,032,453	3,107,825	197,724	0
Tech Services (Incl. Geology)	(\$)	4,698,437	0	0	0	1,106,547	1,271,855	1,179,023	1,103,512	37,500	0
Mine Services incl. power & fuel	(\$)	17,267,149	0	0	0	3,851,651	4,458,261	4,336,275	4,316,687	304,274	0
Mine Services (Hire costs)	(\$)	0	0	0	0	0	0	0	0	0	0
Owner & Contractor - Flights	(\$)	4,737,186	0	0	0	1,076,699	1,219,839	1,195,093	1,174,228	71,327	0
Owner & Contractor - Accommodation	(\$)	5,870,198	0	0	0	1,332,565	1,520,538	1,484,095	1,449,747	83,253	0
Pump Tails from TSF1 and TSF2 to Toms Gully Pit	(\$)	2,710,018	0	0	0	0	0	0	0	2,710,018	0
Truck TSF1 tails to Rustler's Roost for Processing	(\$)	0	0	0	0	0	0	0	0	0	0
Total	(\$)	198,244,876	0	0	0	46,448,942	53,335,482	46,724,843	46,441,834	5,293,775	0

14 CASHFLOW SUMMARY

A cashflow summary has been completed to understand the economics for each scenario. The cashflows are summarised in Table 14-1 and Figure 14-1 below. The revenue factors used are in Table 14-2 below. These are the same revenue factors used in the initial optimisation process.

Key points for the cashflow analysis include:

- Both the LOM (Sc1a) and Reserves (Sc2) Scenarios are cashflow and NPV positive.
- Addition of retreatment of the TG TSF1 in Scenario 1b adds value.

Table 14-1 Cashflow Summary – Scenarios

Scenario	Resource Category	Total Cost (%)	Revenue (\$)	Net Cash Flow (\$)	NPV @ 6% (\$)	IRR (%)	
Sc1a	Life of Mine (LOM)	LOM - MII	365,175,921	579,057,800	213,881,879	149,836,375	138
Sc1b	Life of Mine (LOM) + Re-processing existing tails (TSF1)	LOM - MII	376,162,245	632,040,220	255,877,975	173,801,504	139
Sc2	Reserves	Reserves - MI	308,809,080	495,605,327	186,796,248	132,105,772	142

Figure 14-1 Cashflow Summary - Scenarios

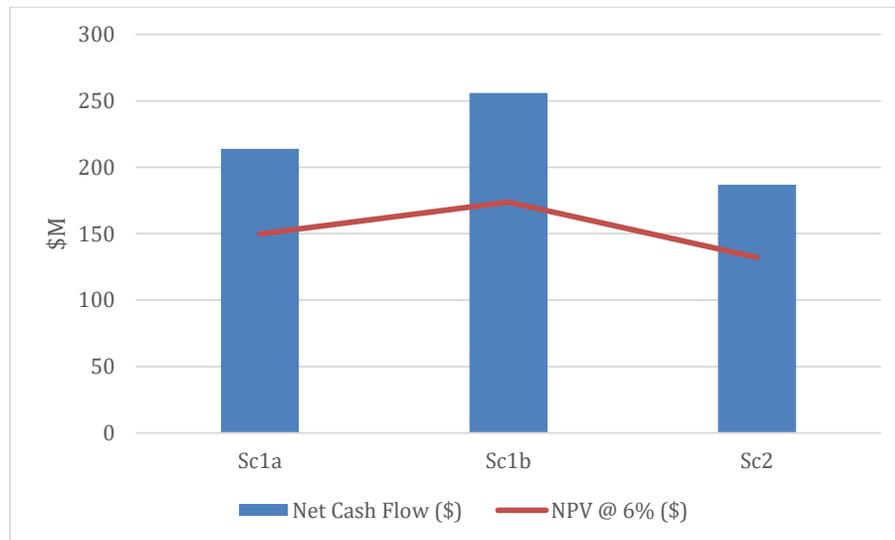


Table 14-2 Cashflow Revenue Factors

Description	Unit	Factor
Site G&A	\$/t Ore	2.46
Processing Cost	\$/t	27.70
Dore Transport Cost	\$/shipment	1,200
Government Royalty - State	%	5.7%
Refining Cost	AUD/oz	10.00
Au Price	\$/Oz	2,350
Processing Recovery	%	85%

The cashflow summaries for each Scenario are below.

Figure 14-2 Cashflow Summary – Scenario 1a

Description	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Costs												
Mining Capex	(\$)	40,085,087	1,944,352	1,599,119	7,029,081	16,555,799	3,022,218	2,757,466	1,667,552	3,410,480	190,820	1,908,200
Mining Opex	(\$)	239,364,296	0	0	0	49,218,771	56,489,170	41,375,777	52,217,307	37,766,803	2,296,468	0
Site G&A	(\$)	4,079,405	0	0	0	742,524	940,256	823,252	958,238	615,135	0	0
Processing	(\$)	45,934,768	0	0	0	8,360,945	10,587,432	9,269,957	10,789,914	6,926,519	0	0
Refining and Dore Transport Costs	(\$)	2,706,070	0	0	0	405,305	677,042	627,066	654,560	342,099	0	0
State Royalties	(\$)	33,006,295	0	0	0	4,943,553	8,257,967	7,648,402	7,983,748	4,172,624	0	0
Total Costs	(\$)	365,175,921	1,944,352	1,599,119	7,029,081	80,226,897	79,974,085	62,501,921	74,271,318	53,233,660	2,487,288	
Revenue												
Au Revenue	(\$)	579,057,800	0	0	0	86,729,008	144,876,609	134,182,499	140,065,759	73,203,925	0	0
Economics												
Cashflow	(\$)	213,881,879	-1,944,352	-1,599,119	-7,029,081	6,502,111	64,902,524	71,680,577	65,794,441	19,970,265	-2,487,288	0
NPV (7%)	(\$)	149,836,375										
IRR	%	138										

Figure 14-3 Cashflow Summary – Scenario 1b

Description	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Costs												
Mining Capex	(\$)	40,085,087	1,944,352	1,599,119	7,029,081	16,555,799	3,022,218	2,757,466	1,667,552	3,410,480	572,460	1,526,560
Mining Opex	(\$)	239,317,566	0	0	0	49,218,771	56,489,170	41,375,777	52,217,307	37,562,803	2,453,737	0
Site G&A	(\$)	4,694,405	0	0	0	742,524	940,256	823,252	958,238	688,935	541,200	0
Processing	(\$)	52,859,768	0	0	0	8,360,945	10,587,432	9,269,957	10,789,914	7,757,519	6,094,000	0
Refining and Dore Transport Costs	(\$)	3,179,127	0	0	0	405,305	677,042	627,066	654,560	398,866	416,289	0
State Royalties	(\$)	36,026,293	0	0	0	4,943,553	8,257,967	7,648,402	7,983,748	4,535,023	2,657,598	0
Total Costs	(\$)	376,162,245	1,944,352	1,599,119	7,029,081	80,226,897	79,974,085	62,501,921	74,271,318	54,353,626	12,735,285	1,526,560
Revenue												
Au Revenue	(\$)	579,057,800	0	0	0	86,729,008	144,876,609	134,182,499	140,065,759	73,203,925	0	0
TSF1 reclaimed	(\$)	52,982,421	0	0	0	0	0	0	0	6,357,890	46,624,530	0
Total Revenue	(\$)	632,040,220	0	0	0	86,729,008	144,876,609	134,182,499	140,065,759	79,561,815	46,624,530	0
Economics												
Cashflow	(\$)	255,877,975	-1,944,352	-1,599,119	-7,029,081	6,502,111	64,902,524	71,680,577	65,794,441	25,208,189	33,889,245	-1,526,560
NPV (7%)	(\$)	173,801,504										
IRR	%	139										

Figure 14-4 Cashflow Summary – Scenario 2

Description	Units	Total	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33
Costs											
Mining Capex	(\$)	36,722,875	1,944,352	1,599,119	7,460,342	15,734,647	3,524,271	3,049,494	1,098,067	213,563	2,099,020
Mining Opex	(\$)	198,244,876	0	0	0	46,448,942	53,335,482	46,724,843	46,441,834	5,293,775	0
Site G&A	(\$)	3,529,786	0	0	0	748,185	926,692	896,202	891,404	67,303	0
Processing	(\$)	39,745,961	0	0	0	8,424,679	10,434,700	10,091,385	10,037,352	757,845	0
Refining and Dore Transport Costs	(\$)	2,316,078	0	0	0	412,430	679,203	662,409	528,519	33,516	0
State Royalties	(\$)	28,249,504	0	0	0	5,030,464	8,284,325	8,079,492	6,446,419	408,804	0
Total Costs	(\$)	308,809,080	1,944,352	1,599,119	7,460,342	76,799,347	77,184,673	69,503,826	65,443,595	6,774,806	2,099,020
Revenue											
Au Revenue	(\$)	495,605,327	0	0	0	88,253,747	145,339,036	141,745,469	113,095,076	7,171,999	0
Economics											
Cashflow	(\$)	186,796,248	-1,944,352	-1,599,119	-7,460,342	11,454,401	68,154,362	72,241,643	47,651,482	397,193	-2,099,020
NPV (7%)	(\$)	132,105,772									
IRR	%	142									

15 ORE RESERVE ESTIMATE

15.1 Competent Person

The Toms Gully Ore Reserve estimation has been completed by Mr Andrew Cooper, Principal Underground Mining Engineer of Mining Consultants Orelogy Pty Ltd. Mr Cooper is a member of the Australian Institute of Mining and Metallurgy and is the Competent Person with respect to the Ore Reserve estimate for the Toms Gully Underground Mine.

15.2 Site Visit

A site visit has not been undertaken by Mr Andrew Cooper, Principal Underground Mining Engineer of Orelogy Mining Consultants at the time of completion of this study.

15.3 Ore Reserves Statement

Orelogy have developed an Ore Reserve estimate for Toms Gully in accordance with the guidelines of the JORC Code 2012. The reported Mineral Resource estimate is inclusive of the resources converted to Ore Reserves. The Toms Gully Mining Study Ore Reserve reported, is summarised in Table 15-1 below. The Ore Reserve consists entirely of Probable reserves from within the Indicated Mineral Resource Category. Appropriate rounding had been applied to the summary.

Table 15-1 Toms Gully Ore Reserve Summary

Area	Deposit	Cut Off Grade (Au g/t)	Proved			Probable			Total Ore Reserve		
			Tonnes (t)	Au (g/t)	Au (Oz)	Tonnes (t)	Au (g/t)	Au (Oz)	Tonnes (t)	Au (g/t)	Au (Oz)
Mount Bundy	Toms Gully UG	3.6	0	0	0	1,435,000	5.4	248,000	1,435,000	5.4	248,000
Total			0	0	0	1,435,000	5.4	248,000	1,435,000	5.4	248,000

15.4 Cost Estimation for Ore Reserves Statement

The cost estimates and cashflow analysis for the Ore Reserve schedule were calculated to support the declaration of a JORC Ore Reserve Estimate in Section 13 and Section 14. All the assumptions and estimation methods are the same with the cost estimation of the production schedule scenarios.

16 CONCLUSIONS AND RECCOMEDATIONS

The TG resource can sustain an economic and technically feasible underground mine and a JORC compliant Ore Reserve.

Addition of retreatment of the TG TSF1 in Scenario 1b adds value.

16.1 Risks and Opportunities

16.1.1 Risks

Key risks to be considered in future technical work include:

- Entry and rehab of old workings – Cost, time, and technical risk exists given the unknown conditions that may be encountered.
 - Action: Scheduling rates and costs to be conservative for the rehab component of the initial development.
- Slope stability - Stability of the room and pillar stoping spans will pose a potential significant risk.
 - Action: Mine designs and schedules to be conservative incorporating barrier pillars.
 - Action: Review what addition geotechnical work may be required for further stages of study.

16.1.2 Opportunities

- Peripheral inventory in the north and north-west – Ore in the north in close proximity to the open pit and the existing underground accesses and in the north-west where the orebody dip increases has not been included in the designs. This represents a minor opportunity to increase inventory that requires detailed costing, design and potentially a higher COG to understand the economics.
 - Action: Future studies or resource model updates to consider the effort/reward of detailed design and analysis to potentially add these areas to the LOM and/or reserves.

APPENDICES

APPENDIX A GEOTECHNICAL REPORT

APPENDIX B TOMS GULLY JORC TABLE 4