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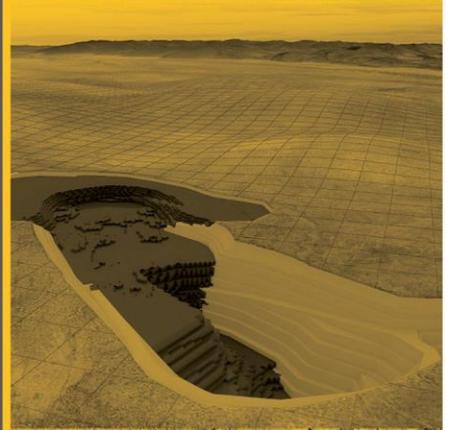
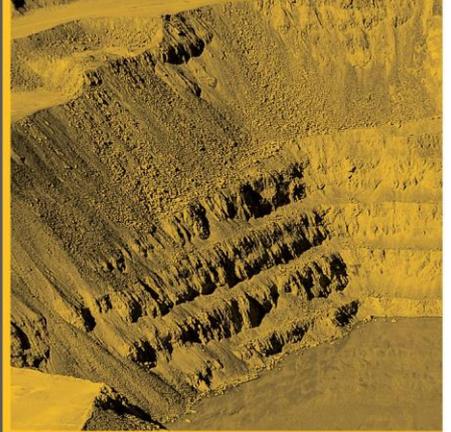
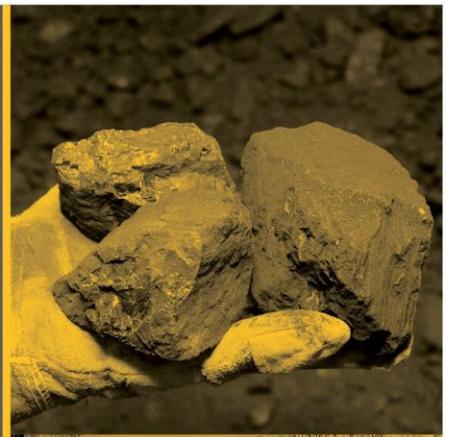
ORE RESERVE REPORT FOR
THE RUSTLERS ROOST AND
QUEST 29 GOLD DEPOSITS
MT BUNDY GOLD PROJECT
PRE-FEASIBILITY STUDY

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Glossary of Acronyms/Abbreviations

AN	Ammonium Nitrate
BCM	Bank Cubic Metres (i.e. In-situ volume)
LCM	Bank Cubic Metres (i.e. In-situ volume)
bgl/mbgl	below ground level/metres below ground level
COG	Break-even Cut-off Grade - Grade above which mineralisation is reported
csv	comma separated values
DCF	Discounted Cash Flow
DDH	Diamond Drill Hole
DGPS	Differential Global Positioning System
DMS	Dense Media Separation
dmt	dry metric tonne (i.e. exclusive of water content)
DTH	down-the-hole
EVOLUTION™	Holistic open pit scheduling tool developed by ORELOGY and acquired by MAPTEK Pty Ltd
FMS	Fleet Management System
FOS	Factor of Safety
GET	Ground Engaging Tools (i.e. loader bucket teeth, grader blades etc.)
GMPS	General Mine Planning Software
Ha	Hectare
HME	Heavy Mining Equipment
HSE	Health, Safety and Environment
IWL	Integrated Waste Landform
JORC	Joint Ore Reserves Committee (Australian reporting standards for mineral projects)
JORC 2012	Current JORC reporting standard
km	Kilometre
lcm	Loose Cubic Metre (after blasting or excavation)
LCM	Loose Cubic Metres (i.e. after blasting and excavation)
LOM	Life of Mine
m	Metres
Mbcm	Million Bank Cubic Metres
Mlcm	Million Loose Cubic Metres



Mt	Million tonnes
Mtpa	Million tonnes per annum
NI 43-101	National Instrument 43-101 (Canadian reporting standards for mineral projects)
NPV	Net Present Value
OSA	Overall Slope Angle - Angle from the upper crest to the toe of the slope at the pit bottom
PER	Public Environmental Review
PFS	Preliminary Feasibility Study
PLT	Point Load Test
PSD	Particle Size Distribution
QA/QC	Quality Assurance / Quality Control
RC	Reverse Circulation
RFI	Request for Information
mRL	Metres Relative Level
RMR	Rock Mass Rating
ROM	Run of Mine (referring to un-processed ex-pit ore materials)
SMU	Selective Mining Unit – The smallest model block size considered practical for selective mining
SR	Strip Ratio (i.e. waste/ore)
t	Tonne (metric)
TSF	Tailings Storage Facility
TKPH	Tonne Kilometre per Hour (a measure of tyre wear)
UCF	Undiscounted Cashflow
VULCAN™	Maptek Geology and Mine Planning Software
WHITTLE™	Geovia Strategic Mine Planning Software
wmt	wet metric tonne (i.e. inclusive of water content)
WRD	Waste Rock Dump



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



1 EXECUTIVE SUMMARY

1.1 Introduction

Primary Gold Pty Ltd (PGL) is in the process of developing the Rustlers Roost and Q29 gold projects (included in the Mt Bundy Gold Project) in the Northern Territory (NT). Q29 is located 11 km to the south-east of Rustlers Roost via a private haul road.

Orelogy Consulting Pty Ltd (Orelogy) was requested to carry out the mining component of a Pre-Feasibility Study (PFS) for the project.

The Ore Reserve for the Project is based on a 5Mtpa CIL gold plant.

This document summarises the assumptions, the process and the results of the Pre-Feasibility Study.

The Mt Bundy Project includes the Rustlers Roost, Quest 29 and Tom's Gully gold deposits. An Ore Reserve Report for the Tom's Gully gold deposit was completed but is not included in this study. Primary is a subsidiary wholly owned by Hanking Australia Investment Pty Ltd (ACN 613 858 843).

1.2 Summary

The Mt Bundy Gold Project is situated within granted mining leases with no issues associated with Native title. The company owns 100% of all leases.

The Pre-Feasibility Study confirmed the development of an open pit mining operation feeding a 5Mtpa carbon-in-leach gold process plant was economical and technically viable. The project would have the following key metrics:

The Base Case summarised in Table 1-2 show:

- 5Mtpa process throughput for a ~11 year mine life.
- \$290 M capital which includes \$10 M for mining (with an additional capital \$54 M for sustaining and additional capital).
- Average mining cost is \$3.79/t mined and average processing cost is \$20.90/t processed.
- Overall in-situ ounces are 1.39 Mozs which produces 1.25 Mozs recovered.
- Total cashflow is \$742 M when evaluated at a gold price of \$2,350/oz.
- NPV at 6% is \$392 M.
- There is approximately 1.3 Mt of inferred ore at 0.7 g/t for 0.03 Mozs contained.

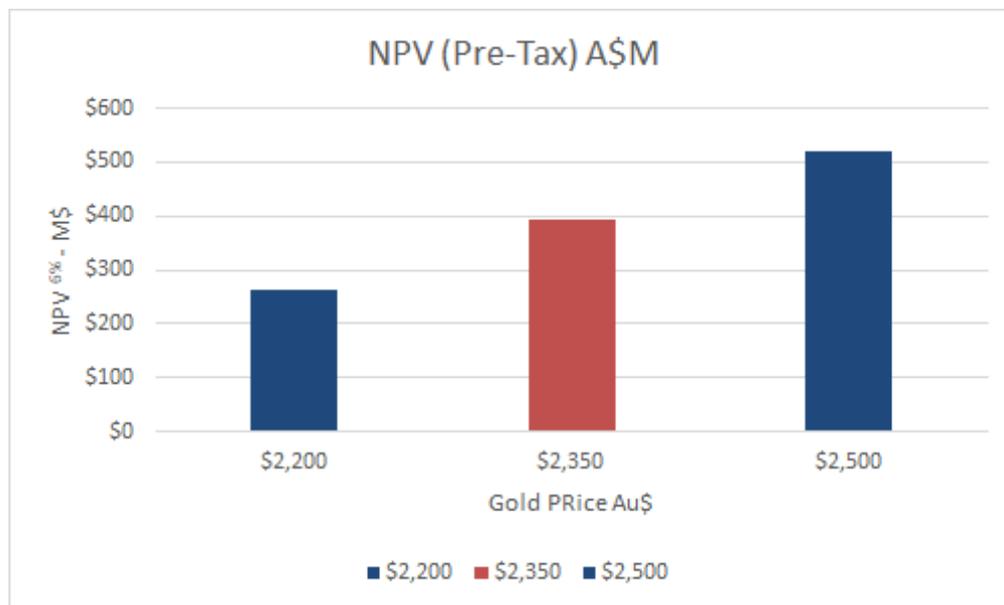
Note, these values do not account for all of the costs associated with financing, depreciation and tax.

The project is sensitive to gold price with NPV varying by $\pm 30\%$ when gold price is varied by $\pm 6\%$ as shown in Figure 1-1.

The selling costs are also based on the net value approach to royalty calculation as this was in most cases the maximum of both the net value versus percentage of metal approach to royalty calculation.

There is a small element of risk associated with the Base Case financial model containing inferred ore, however this risk is minimal as the majority of the inferred ore is mined towards the end of the mine life which provides ample time to drill and increase the confidence of this ore. Finally, the amount of inferred ore represents approximately 2.4% of the total ore within the pit, hence the risk is minimal.

Figure 1-1 NPV^{6%} variation to Gold Price



The ore reserve for the deposit is Probable ore only of 53.6 Mt at 0.8 g/t for 1.39 Mozs contained gold at an average strip ratio of 1.7:1 as summarised and broken down by resource in Table 1-1.

Table 1-1 Ore Reserve Summary – COG = 0.32 g/t Au Rustlers Roost, AO and 0.35 g/t Au Q29.

Description	Units	Rustlers Roost	Annie Oakley	Quest 29	Total
Probable	Mt	47.8	0.664	5.134	53.6
	g/t	0.80	1.04	0.87	0.8
	Mozs	1.228	0.022	0.144	1.39
Waste	Mt	64.1	6.9	17.3	89
Total	Mt	113.0	7.6	22.5	143
Strip Ratio	w:o	1.37	10.4	3.4	1.7

Table 1-2 Base Case – EBITA Financials

PROJECT PHYSICALS	UNITS	Rustlers Roost, AO & Q29
Project Life	Yr	11.0
Total Ore Mined (Mining Inventory)	Mt	54.8
Strip Ratio	waste/ore	1.61
Ore Grade	g/t	0.81
Ounces Contained	oz	1,422,361
Recovery	%	88%
Ounces Recovered	oz	1,251,678
Plant Throughput	Mtpa	5
Annual Ounce Production	ozpa	113,789
PROJECT FINANCIALS		
Development Capital	A\$M	\$287
Pre-Production	A\$M	\$3
Total Pre-Production Costs	A\$M	\$290
Gold Price	A\$/oz	\$2,350
Gold Sales Revenue	A\$M	\$2,941
Mining Costs	A\$M	\$592
Processing Costs	A\$M	\$1,146
Site G&A Costs	A\$M	inc
Royalty (2.5%)	A\$M	\$74
Royalty (NT Govt. MRA Levy)	A\$M	\$93
Mining Sustaining Costs	A\$M	\$5
Project Costs (Pre-Tax)	A\$M	\$2,200
Project Cashflow (Pre-Tax)	A\$M	\$742
NPV ₆ (Pre-Tax)	A\$M	\$392
IRR (Pre-Tax)	%	34%
NPI	index	1.4
COSTS OF PRODUCTION		
Total Cash Cost (C1) Per Rec Ounce	A\$/oz	1,389
Royalties	A\$/oz	\$133.25
Sustaining Costs	A\$/oz	\$3.86
All In Sustaining Cost (ASIC) Per Rec Ounce	A\$/oz	1,526

1.3 Mining Method

Conventional open pit mining has been adopted as the preferred mining method as:

- The ore presents near surface.
- There is space to construct waste dumps.
- It is likely to be socially acceptable.
- It is expected, with a high chance of success, to generate the best value.

The operation is planned to be a mine contractor run operation.

The key mining activities are:

- Clearing of vegetation and topsoil stripping.
- Haul road construction.
- Grade control.
- Waste rock mining.
- Ore mining, stockpiling, rehandling and crusher feeding.
- Pit dewatering.
- Rehabilitation.

Vegetation will be cleared and grubbed prior to topsoil stripping and later used to cover the topsoil stockpiles. Topsoil will be stockpiled around the open pit.

Grade control drilling is contracted to a suitable drilling contractor and samples will be assayed in the site laboratory.

Open pit mining will utilise two 150 t class excavators and 90 t class dump trucks supported by an appropriate ancillary fleet for the first 5 years and will reduce to a single excavator for the remainder of the mine life. This equipment matches the scale of the operation and the mining environment, characterised by predominantly oxide materials without access to fresh rock for road building and seasonable wet periods.

A bench height of 5.0 m, excavated in 2.5 m flitches, was selected to achieve acceptable levels of dilution and ore loss and to match the excavator size.

The study has assumed all material will require some form of drill and blast. Final walls may require wall control blasting (i.e. pre-splitting in fresh material and trim blasting in oxide material).

The operation will employ a strategy of direct tipping 25% of the crusher feed with the remaining 75% coming from ROM crusher rehandling. This stockpiled material will be fed during times when no ore supply is available from the mine (shift change, poor weather/road conditions, lightning with loaded shots).

The main rehabilitation activity involves shaping of the waste dumps into suitable land forms and placing of (stockpiled) topsoil on the final surfaces plus the construction of an abandonment bund around the pit.

1.4 Mining Factors

1.4.1 Tenement Boundaries and Exclusion Zones

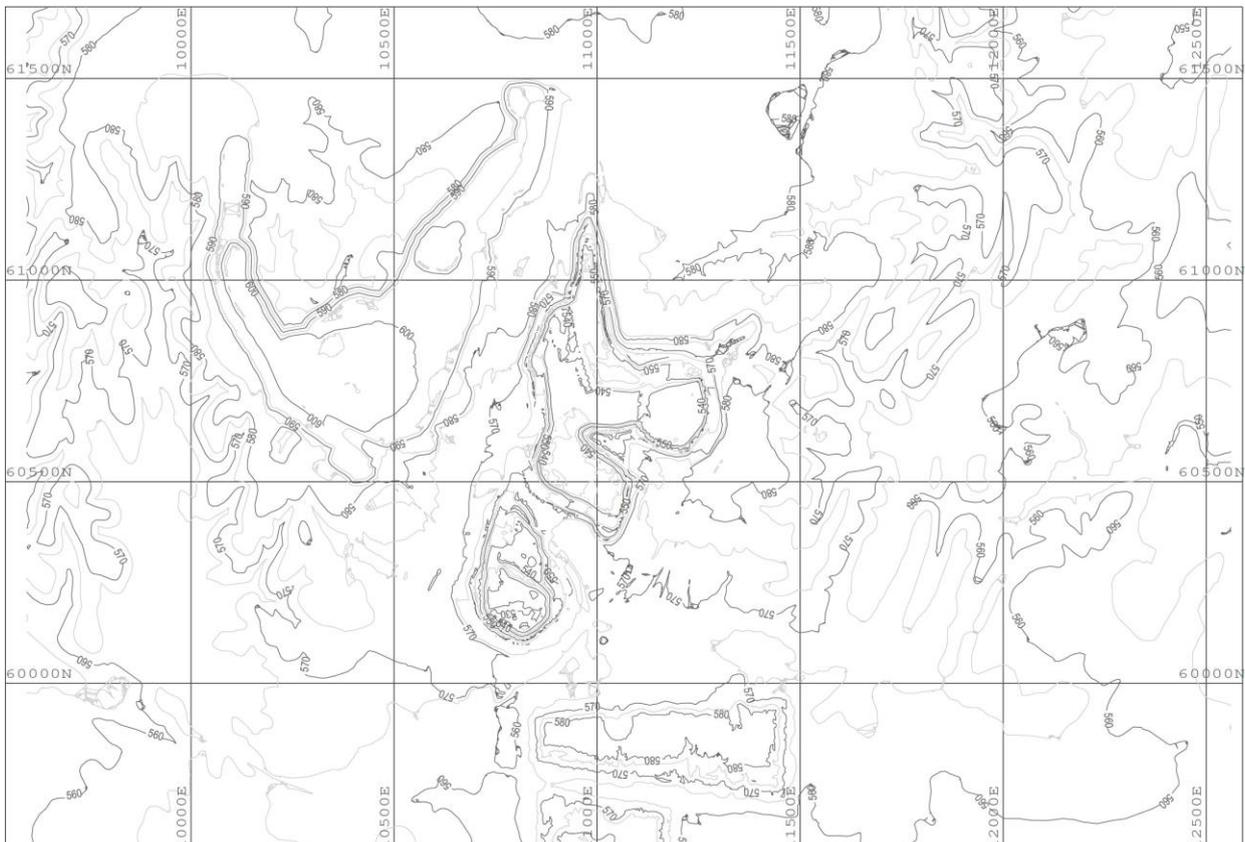
The Rustlers Roost deposit is situated within the mining lease (MLN1083) with 100% being held by Primary Gold.

There are no mining activities planned outside the lease boundaries and Orelogy understands there are no social or environmental exclusions zones within the lease area that affect the mining operation.

1.4.2 Topography

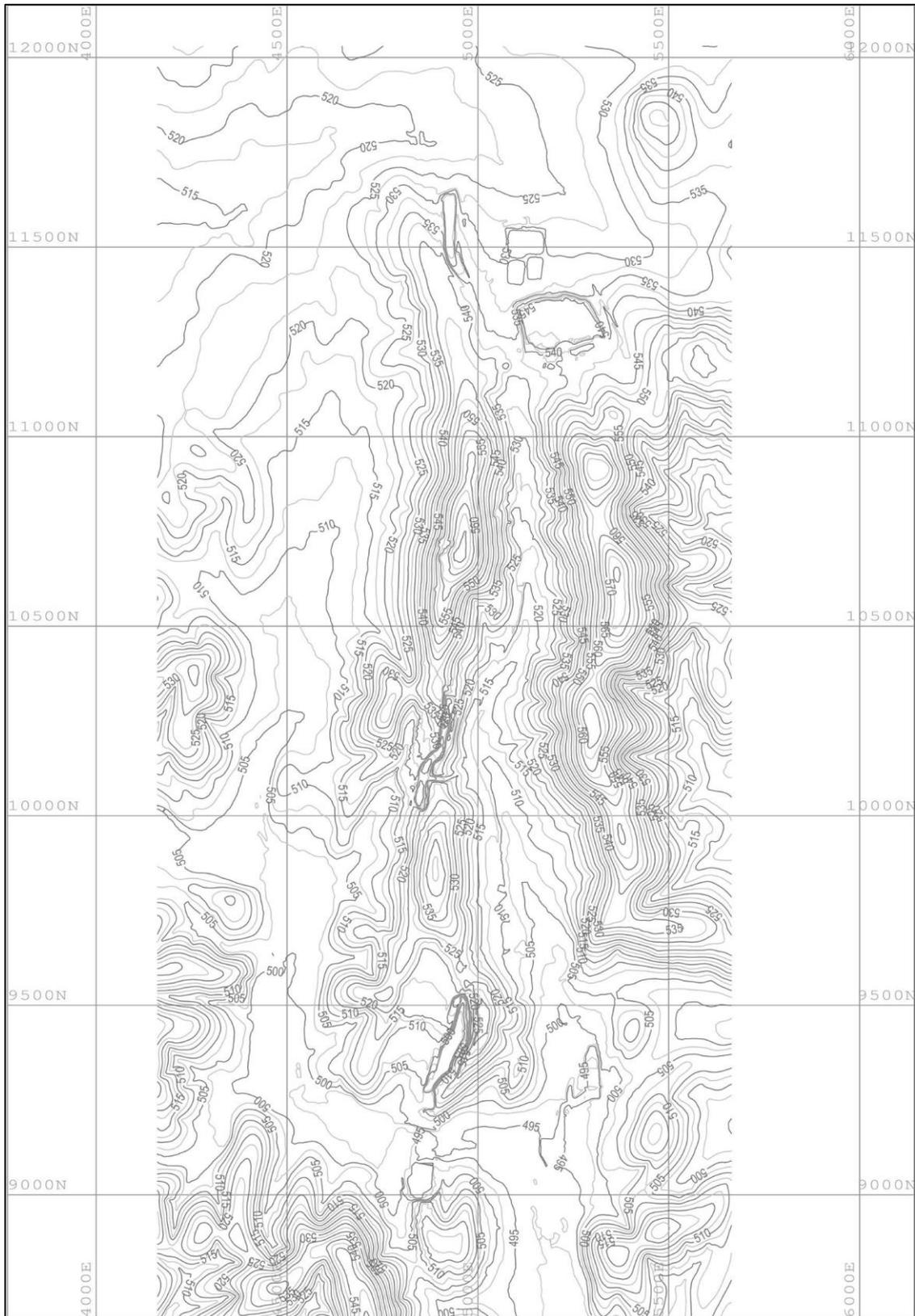
The project was previously mined in the 1980's and is currently filled with good quality, potable water. The local topography has been modified with waste dumps, old heap leach pads and existing mine roads. The natural topography is generally flat and varies from the 550 mRL to the 570 mRL and the as-mined topography highlights the waste dumps have been formed to the 600 mRL (30 m height, 10 m lifts) and the heap leach pads to the 580 mRL (20m height, 10 m lifts) as shown in Figure 1-2.

Figure 1-2 Rustlers Roost Topography



The natural topography of the Q29 project is generally undulating with elevations ranging from the 500 mRL to the 570 mRL and the as-mined topography highlights the heap leach pads to the 545 mRL shown in Figure 1-3.

Figure 1-3 Q29 Topography



1.4.3 Surface and Groundwater Conditions

The current pit is filled to the 562 mRL and holds approximately 4.5 Mm³ of water that will need to be pumped and drained prior to the commencement of mining.

1.5 Pit Optimisation

Of note, is that between the previous study and now, additional drilling has been completed to improve the confidence of the previously inferred material to indicated status at Rustler Roost. A new model using local uniformed conditioning as the main estimation technique has been prepared by Cube Consulting (Dec 2021). The new Q29 model has a significant level of drilling which has improved the confidence of the resource and hence elevated the resource categories since the last PFS update.

The 2022 pit optimisation parameters were updated with the mining costs adjusted for general CPI increase, updated fuel price and a contract margin from 20%.

All other parameters remained the same.

The open pit optimisation study continues to show a viable project can be developed as highlighted in Table 1-3. The impact of including inferred ore has a much less effect when compared to the previous study with the overall project benefitting significantly from the extra drilling.

Table 1-3 highlights the shells that have been selected for mine design purposes and were based on value maximisation as well as achieving a desired ounce target of over a 1.0 Mozs in-situ.

Key optimisation parameters including gold price (from \$2,200 /oz to \$2,350/oz) and process recovery (85% to 88%) were also updated late in the study. This has improved the economics of the projects and has resulted in larger shells being developed.

Hence:

- There is a reasonable correlation between selected shells and designs and;
- There is the opportunity to increase the ore inventory which will need to be examined in more detail during the next phase of work.

Table 1-3 Shells Selected for Pit Design

Scenario	Description	Selection Basis	Optimal Shell #	Revenue Factor	Material		Cont. Au	Rec. Au	Waste	Total	Financials (Undiscounted)					Discounted Cashflows			Mine Life	Strip Ratio	Cost per Oz.
					Total Ore						Mining Cost	Ore Process Cost	Selling	Revenue	Cashflow	Best Case	Worst Case	Average Case			
					Kt	g/t															
SCN21	\$2350 MI Base Case - 2021 PFS - Updated GRE processing costs and recoveries - no threshold	Best Case	36	1.00	45,215	0.83	1,201,532	1,021,302	66,729	111,944	-\$401.1	-\$948.3	-\$136.0	\$2,399.9	\$914.6	\$693.2	\$585.9	\$639.6	11.30	1.48	1,321
SCN29	\$2350 - SCN29 MI - Feb22 GRE 5Mtpa processing costs and recoveries and gold price no threshold larger mining equipment, increased fuel price	Selected	32	0.92	47,949	0.80	1,231,590	1,085,031	64,486	112,436	-\$377.2	-\$954.8	-\$144.4	\$2,549.7	\$1,073.2	\$836.7	\$731.7	\$784.2	9.59	1.34	1,228
SCN38	\$2350 - SCN38 MI - November 2021 4.5Mtpa GRE processing costs and recoveries and gold price no threshold larger mining equipment, increased fuel price	Best Case	36	1.00	49,226	0.80	1,259,294	1,109,438	70,739	119,965	-\$395.6	-\$1,001.3	-\$147.7	\$2,607.0	\$1,062.4	\$831.6	\$717.2	\$774.4	9.85	1.44	1,259
Scenario 28 2021 PFS	\$2350 SC28 - Q29 MIF - 2021 PFS - Updated GRE costs & Recoveries, gold price with 0.5 g/t threshold	Best Case	35	0.98	3,796	1.15	140,481	119,408	14,955	18,751	-\$63.9	-\$88.2	-\$15.9	\$280.6	\$112.6	\$106.5	\$106.5	\$106.5	0.90	3.94	1,274
SCN35	Q29 - \$2350 - SCN35 MI Q29 Model - 5Mtpa case, Standard mining equipment	Selected	20	0.90	5,009	0.90	144,990	127,737	15,379	20,387	-\$69.1	-\$111.4	-\$17.0	\$300.2	\$102.7	\$88.5	\$78.9	\$83.7	3.40	3.07	1,413
SCN40	Q29 - \$2350 - SCN40 MI Q29 Model - 4.5Mtpa case, Standard mining equipment	Best Case	26	1.00	6,164	0.87	172,490	151,964	21,155	27,319	-\$93.3	-\$139.6	-\$20.2	\$357.1	\$103.9	\$88.5	\$72.3	\$80.4	4.55	3.43	1,533
SCN39	\$2350 - SCN39 MI - Annie Okaley - November 2021 4.5Mtpa GRE processing costs and recoveries and gold price no threshold larger mining equipment	Best Case	33	1.00	909	1.03	30,006	26,039	6,760	7,668	-\$23.3	-\$18.2	-\$3.5	\$61.2	\$16.2	\$16.0	\$16.0	\$16.0	0.18	7.44	1,593
SCN41	\$2350 - SCN41 MI - Annie Okaley - November 2021 4.5Mtpa GRE processing costs and recoveries and gold price no threshold larger mining equipment, flatter slopes	Selected	33	1.00	703	1.00	22,680	19,682	6,080	6,783	-\$20.3	-\$14.1	-\$2.6	\$46.2	\$9.2	\$9.1	\$9.1	\$9.1	0.14	8.65	1,750

1.6 Mine Design

Pits, waste dumps and haul roads were designed for the life of the project as described in Section 6. Design criteria governing slope designs, ramp widths and minimum mining widths were applied.

The Rustlers Roost and Annie Oakley open pits will be developed in four stages which aim to balance the amount of waste stripping in the early years whilst maintaining both a continuous supply of ore at the desired rates and an acceptable vertical rate of advance for each stage. The geotechnical aspects of the ultimate pit design were provided by Peter O’Bryan and Associates. A summary of the pit inventory is outlined in Table 1-4.

Table 1-4 Summary by Resource - Pit Inventories

Description	Units	Rustlers Roost	Annie Oakley	Quest 29	Total
Probable	Mt	47.8	0.664	5.134	53.6
	g/t	0.80	1.04	0.87	0.81
	Mozs	1.228	0.022	0.144	1.39
Inferred	Mt	1.2	0.0	0.1	1.3
	g/t	0.70	0.72	0.75	0.70
	Mozs	0.026	0.001	0.001	0.03
Waste	Mt	64.1	6.9	17.3	88
Total	Mt	113.0	7.6	22.5	143
Strip Ratio	w:o	1.37	10.4	3.4	1.7

Prior to development, or as part of the feasibility study, final limit mine design will need to be revised to ensure a more appropriate utilisation of the resources in relation to the mine planning parameters as the pit designs and inventories were fixed, whilst the pit optimisations were based on a revised gold price and updated process costs and recoveries (as outlined earlier). Whilst economic, improvements can be made to the design to further increase value.

The waste dumps are located to the West of the open pit, with the 1st lift of the tailings storage facility (TSF) also being a destination for suitable waste. The final end of mine site layout is shown in Figure 1-4 and Figure 1-5 for Rustlers Roost and Q29 respectively.

Figure 1-4 Rustlers Roost Site Layout

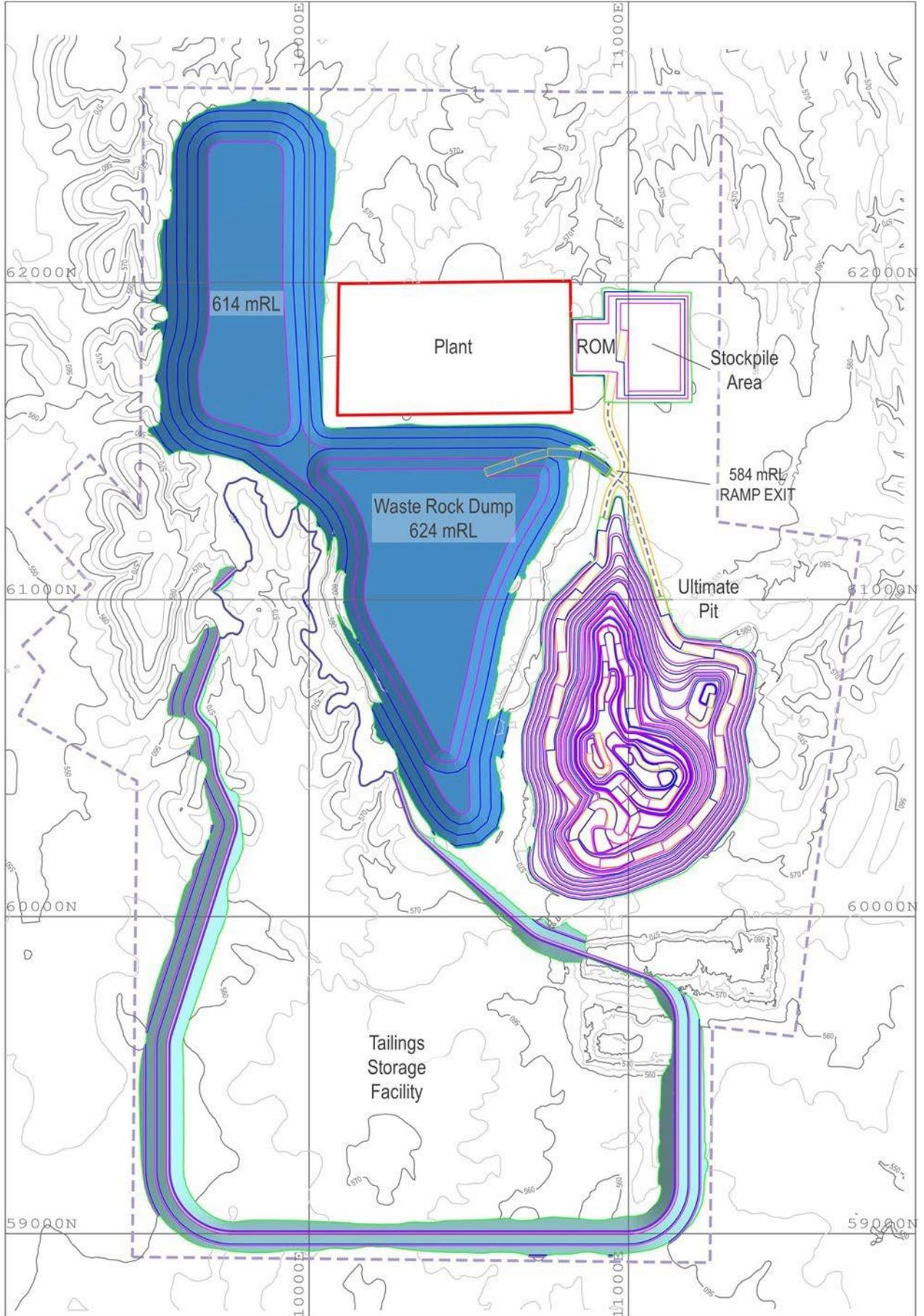
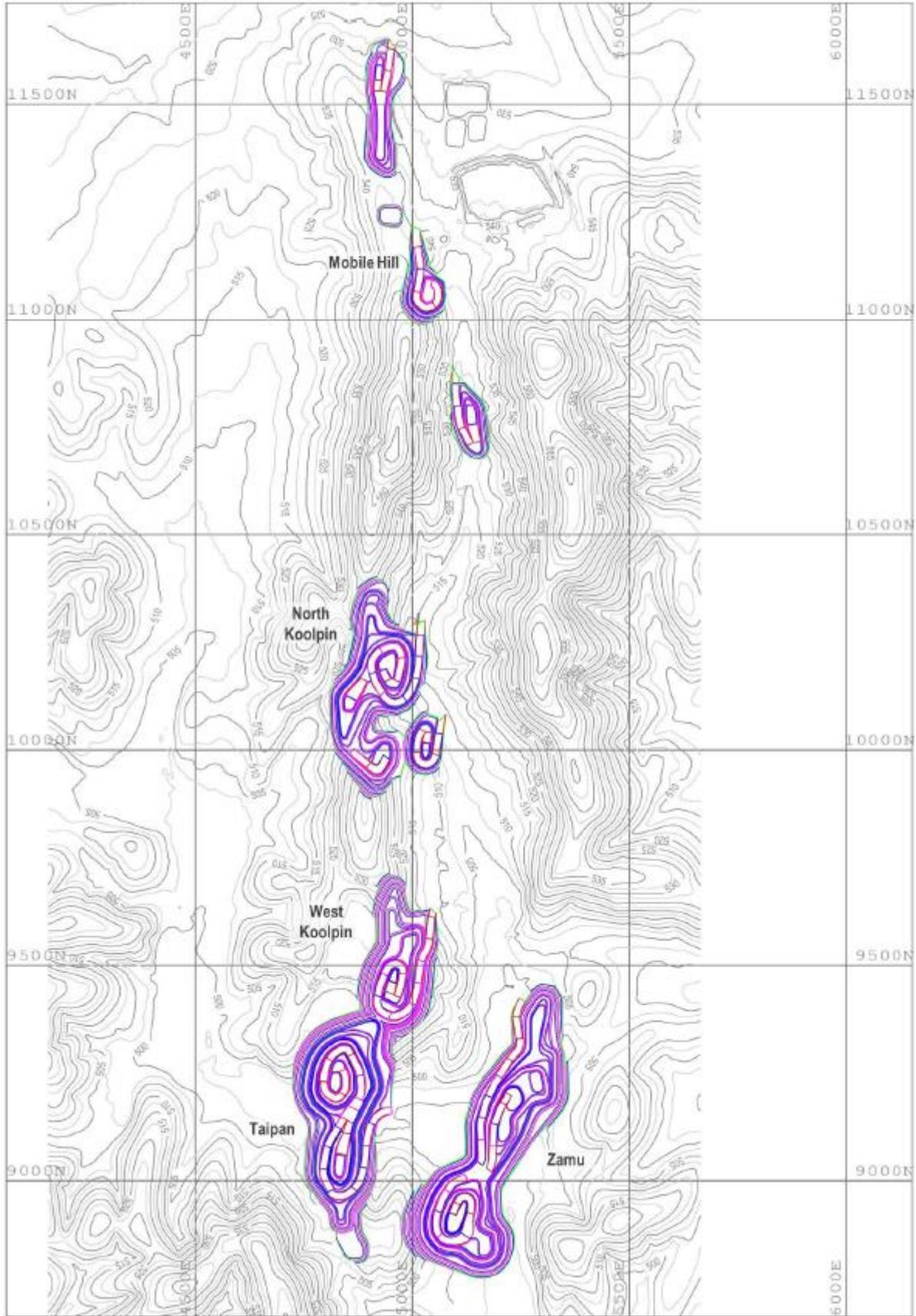


Figure 1-5 Q29 Site Layout



1.7 Mine Production Schedule

The mine scheduling process is described in Section 7. The main aim of the Base Case schedule was to provide up to 5.0 Mtpa ore plant feed while adopting realistic material movements, deferring waste mining as much as possible.

The schedule was in accordance with the final operating scenario outlined in Section 7, with an initial pre-strip in the first quarter of mining before heading into full processing. The schedule was generated in quarterly periods for the first two years and annual thereafter, with the aim to delay waste mining where possible. The mine schedule is underpinned by:

- The Ore Reserve detailed in Section 1.9.
- Productivity assumptions detailed in Section 7.3.
- Mining activities starting with:
 - pumping the existing pit clear of water prior to commencement of mining.
 - commissioning of mobile equipment.
 - training.
 - haul road construction.
- Stripping and clearing of pits and dumps.
- Mining of one quarter of mainly waste during Year 1 to provide start-up process plant feed.
- Approximately 230 kt of ore is mined during this period and will be stockpiled at the ROM Pad.
- Variable cut-off grade strategy to ensure higher grade ore is presented to the mill earlier in the mine schedule with lower grade ore reclaimed towards the end of the mine life
- Commencing the development of Q29 in year 3.

Table 1-5 outlines the schedule for mining with Table 1-6 outlining the processing schedule by period with an average of approximately 142 kozs being mined per year over 10yrs and 114 kozs recovered per year over the ~11 year life of the operation.

Figure 1-6 to Figure 1-10 graphically outline key elements of the mining and processing schedule.

Table 1-5 Mt Bundy Mining Base Case Schedule

Description		Units	Period	Prestrip	Y1				Y2				Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4									
Basis	Stage		Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Rustlers Roost	1	Mt	1.3	1.3																	
	2	Mt	19.5	3.1	2.8	4.5	5.3	3.7													
	3	Mt	29.7			1.4	0.9	2.4	5.5	2.4	2.9	2.1	6.3	5.4	0.4						
	4	Mt	62.5						0.6	2.2	1.7	2.5	5.7	8.1	4.7	8.5	12.3	8.8	7.7		
Annie Okaley	13	Mt	7.6	4.2	3.2	0.2															
Quest 29	5	Mt	0.5											0.5							
	6	Mt	0.4												0.4						
	7	Mt	0.0												0.0						
	8	Mt	0.3										0.3								
	9	Mt	2.5												2.3	0.2					
	10	Mt	6.9												3.3	3.6					
	11	Mt	7.9											6.2	1.7						
12	Mt	4.0												2.8	1.2						
Total		Mt	143	8.6	6.0	6.1	6.2	6.2	6.0	4.6	4.6	4.6	18.4	18.5	12.3	12.3	12.3	8.8	7.7	0	0
Probable	Ore	Mt	53.6	1.5	0.8	2.8	3.7	3.3	2.0	1.0	1.5	1.3	5.8	7.2	3.0	4.2	4.7	5.0	5.7		
	Au Grade	g/t	0.81	0.72	0.78	0.77	0.91	0.99	0.68	0.62	0.73	0.75	0.91	0.86	0.77	0.75	0.80	0.83	0.70		
	% Ore Mined	%	98%	99%	98%	100%	100%	100%	100%	100%	100%	100%	100%	99%	97%	97%	90%	95%	99%		
Inferred	Ore	Mt	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.3	0.1		
	Au Grade	g/t	0.70	0.54	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.47	0.49	0.40	0.75	0.85	0.76		
	% Ore Mined	%	2%	1%	2%								0%	1%	3%	3%	10%	5%	1%		
Total	Ore	Mt	54.8	1.5	0.8	2.8	3.7	3.3	2.0	1.0	1.5	1.3	5.8	7.2	3.1	4.4	5.3	5.3	5.8		
	Au Grade	g/t	0.81	0.72	0.78	0.77	0.91	0.99	0.68	0.62	0.73	0.75	0.91	0.86	0.77	0.75	0.80	0.83	0.70		
Total Waste Mined		Mt	88	7.1	5.2	3.3	2.5	2.9	4.1	3.6	3.1	3.3	12.6	11.2	9.1	7.9	7.0	3.5	1.8	0.0	0.0
Total Probable Ore		Mt	53.6	1.5	0.8	2.8	3.7	3.3	2.0	1.0	1.5	1.3	5.8	7.2	3.0	4.2	4.7	5.0	5.7	0.0	0.0
Total Inferred Ore		Mt	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.3	0.1	0.0	0.0
Strip Ratio		W:O	1.61	4.72	6.46	1.17	0.66	0.90	2.07	3.49	2.05	2.50	2.18	1.55	2.92	1.81	1.33	0.66	0.32	0.00	0.00

Table 1-6 Mt Bundy Project Processing Schedule – Base Case Summary

Description		Units	Period	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12
			Total	0	1	2	3	4	5	6	7	8	9	10	11
Processing HG	Tonnes	Mt	17.7	0.0	3.8	2.3	2.6	2.7	0.8	1.0	1.6	1.8	0.9	0.0	0.0
	Cont. Metal Au	Mg	21.4	0.0	4.7	2.7	3.2	3.4	1.0	1.3	1.9	2.1	0.9	0.0	0.0
	Grade Au	g/t	1.21	0	1.23	1.18	1.23	1.24	1.23	1.26	1.18	1.18	1.07	0	0
	Cont. Ounce	Moz	0.69	0.00	0.15	0.09	0.10	0.11	0.03	0.04	0.06	0.07	0.03	0.00	0.00
	Recovered Ounce	Moz	0.60	0.00	0.13	0.08	0.09	0.10	0.03	0.04	0.06	0.06	0.03	0.00	0.00
Processing MG	Tonnes	t	12.0	0.0	0.9	2.7	1.6	1.5	0.7	0.8	1.4	1.4	1.1	0.0	0.0
	Cont. Metal Au	g	9.5	0.0	0.7	2.2	1.2	1.2	0.5	0.6	1.1	1.1	0.9	0.0	0.0
	Grade Au	g/t	0.8	0	0.79	0.8	0.8	0.8	0.8	0.79	0.8	0.79	0.8	0	0
	Cont. Ounce	Oz	0.31	0.00	0.02	0.07	0.04	0.04	0.02	0.02	0.04	0.04	0.03	0.00	0.00
	Recovered Ounce	Oz	0.27	0.00	0.02	0.06	0.04	0.03	0.01	0.02	0.03	0.03	0.02	0.00	0.00
Processing LG	Tonnes	t	21.0	0.0	0.1	0.0	0.8	0.8	3.6	3.1	2.0	1.8	3.0	5.0	0.8
	Cont. Metal Au	g	11.8	0.0	0.0	0.0	0.5	0.4	2.0	1.7	1.1	1.0	1.9	2.8	0.4
	Grade Au	g/t	0.56	0	0.54	0	0.56	0.56	0.55	0.54	0.55	0.57	0.62	0.56	0.56
	Cont. Ounce	Oz	0.38	0.00	0.00	0.00	0.02	0.01	0.06	0.05	0.03	0.03	0.06	0.09	0.01
	Recovered Ounce	Oz	0.33	0.00	0.00	0.00	0.01	0.01	0.06	0.05	0.03	0.03	0.05	0.08	0.01
Processing MW	Tonnes	t	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
	Cont. Metal Au	g	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
	Grade Au	g/t	0.37	0	0	0	0	0	0	0	0	0	0	0	0.37
	Cont. Ounce	Oz	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	Recovered Ounce	Oz	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
TOTAL	Tonnes	t	54.8	0.0	4.8	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Cont. Metal Au	g	44.2	0.0	5.5	4.9	4.9	5.0	3.4	3.7	4.1	4.3	3.7	2.8	2.0
	Grade Au	g/t	0.81	0	1.14	0.97	0.98	1	0.69	0.73	0.83	0.85	0.73	0.56	0.4
	Cont. Ounce	Oz	1.42	0.00	0.18	0.16	0.16	0.16	0.11	0.12	0.13	0.14	0.12	0.09	0.06
	Recovered Ounce	Oz	1.25	0.00	0.16	0.14	0.14	0.14	0.10	0.10	0.12	0.12	0.10	0.08	0.06

Figure 1-6 Ore Movement by Stage & overall grade profile – Base Case Schedule

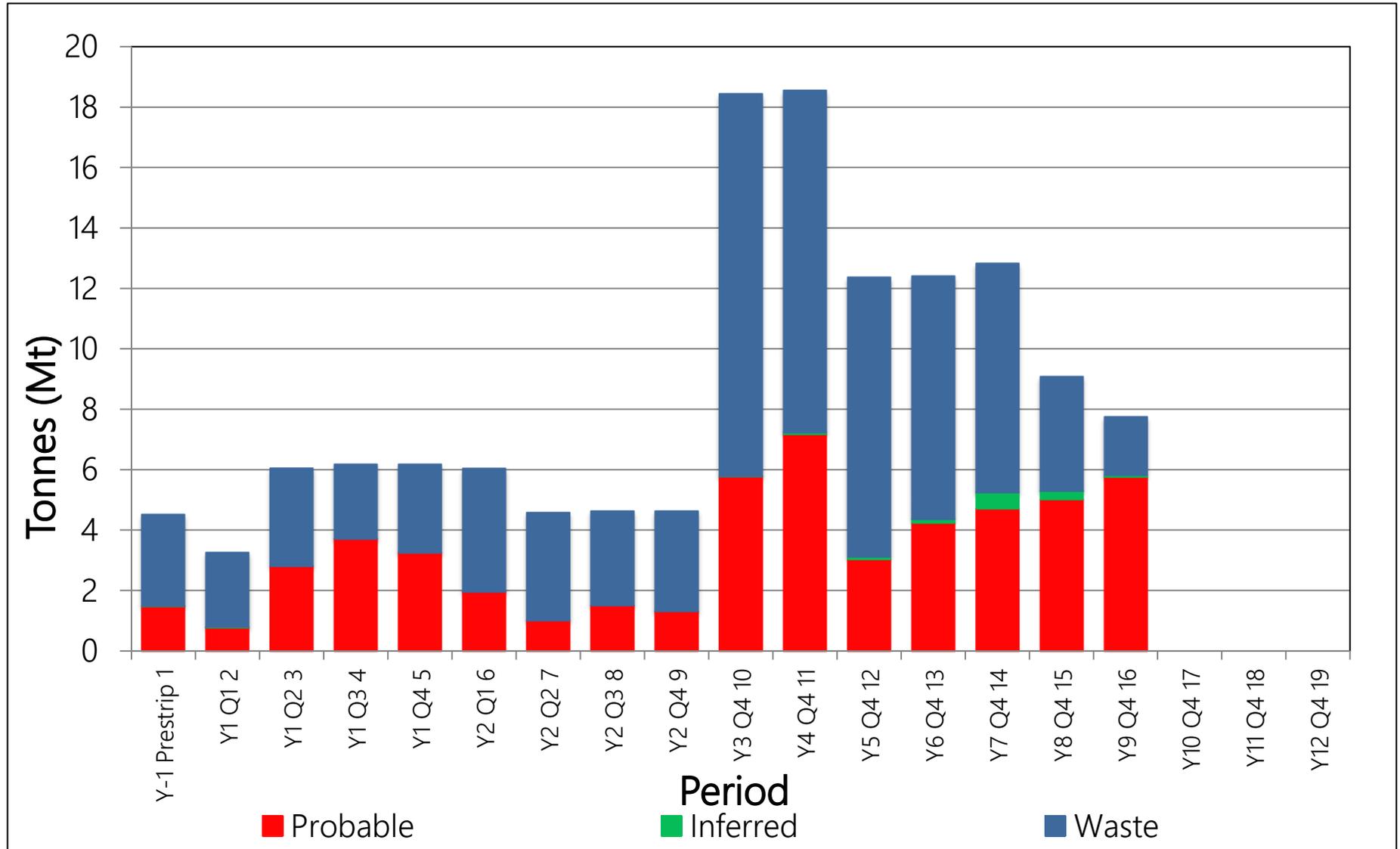


Figure 1-7 Total Material Movement by Stage – Base Case Schedule

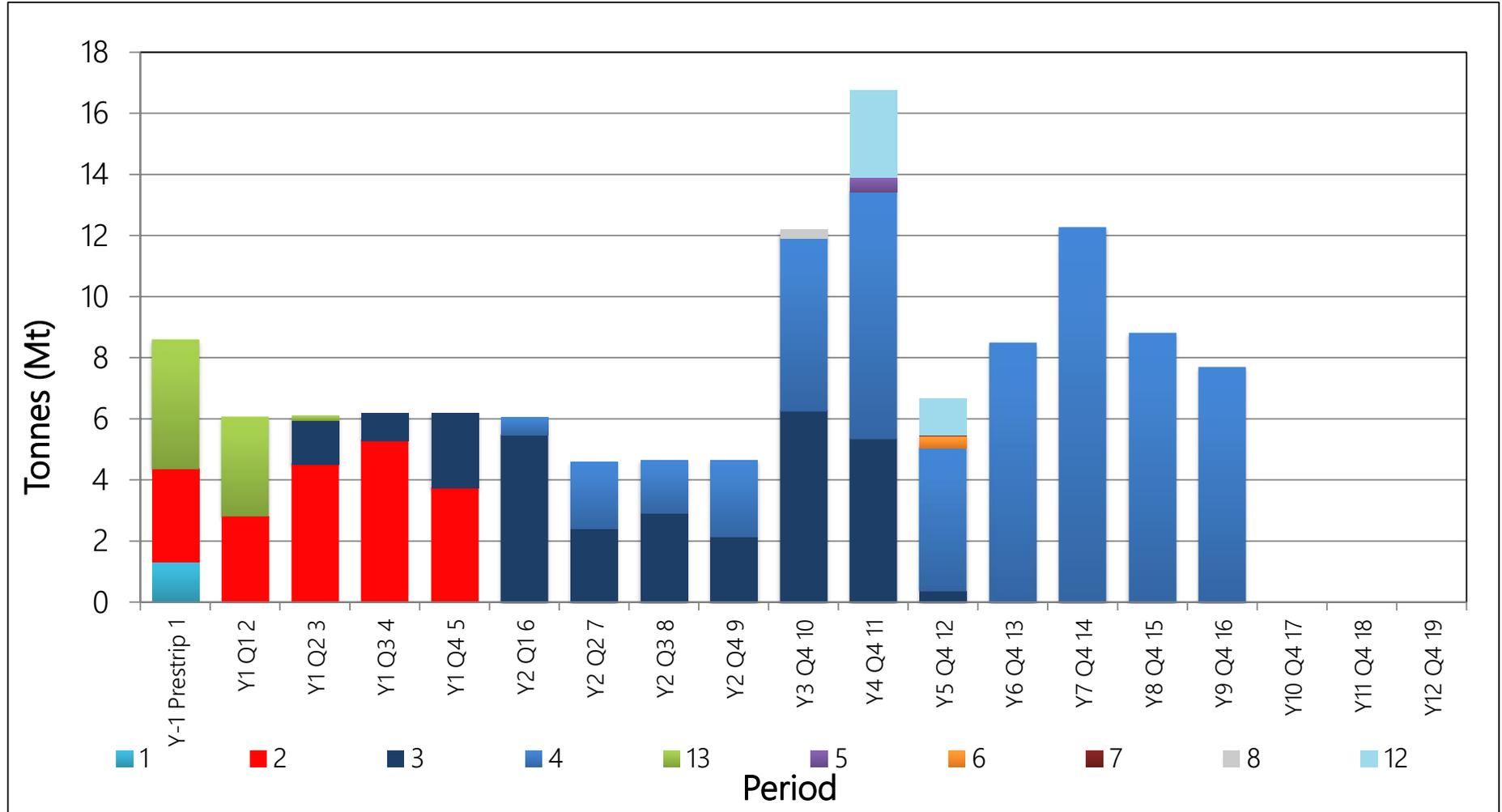


Figure 1-8 Ore Processed & overall grade profile – Base Case Schedule by Year

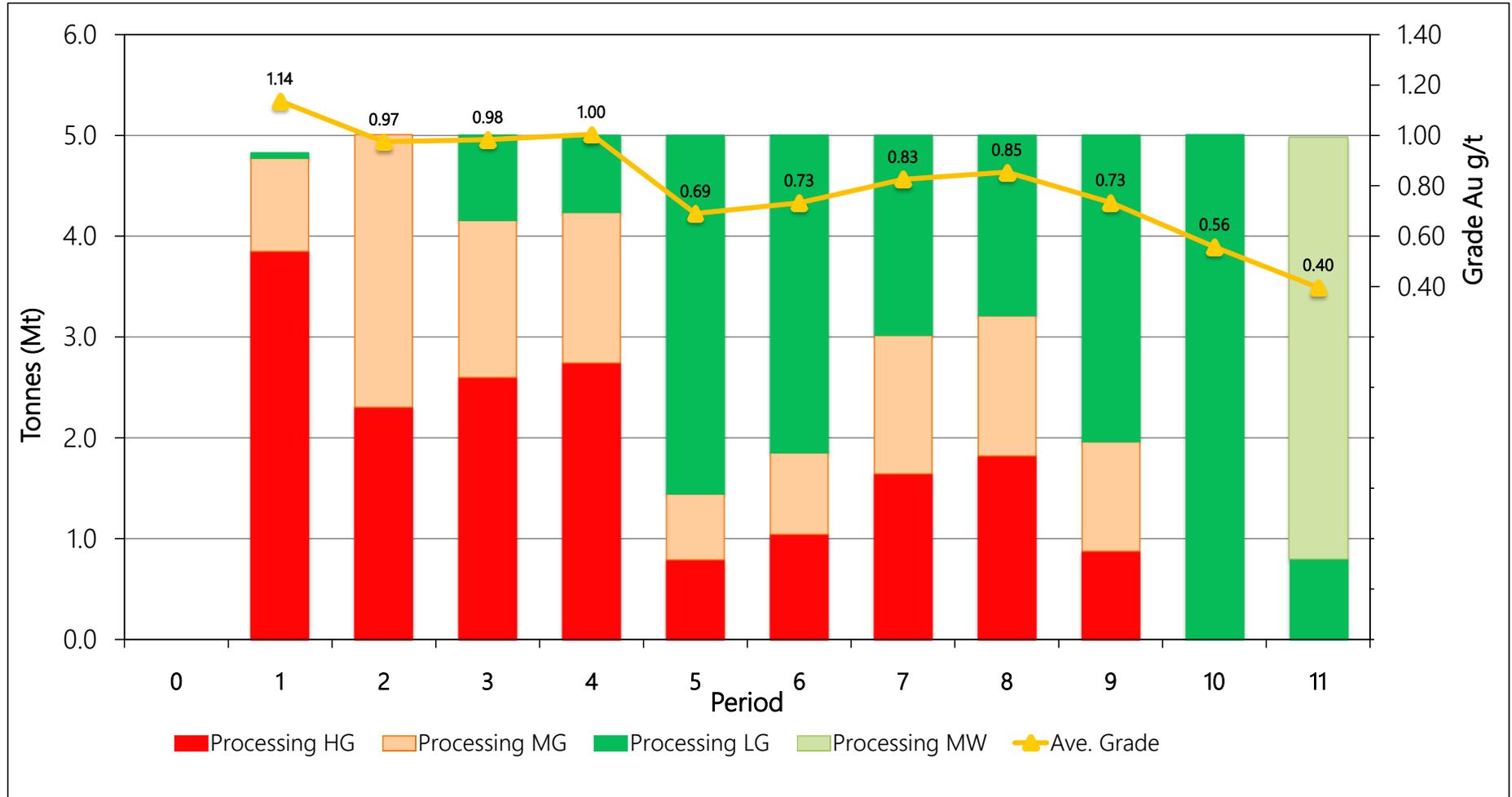


Figure 1-9 Stockpile Balance – Base Case Schedule

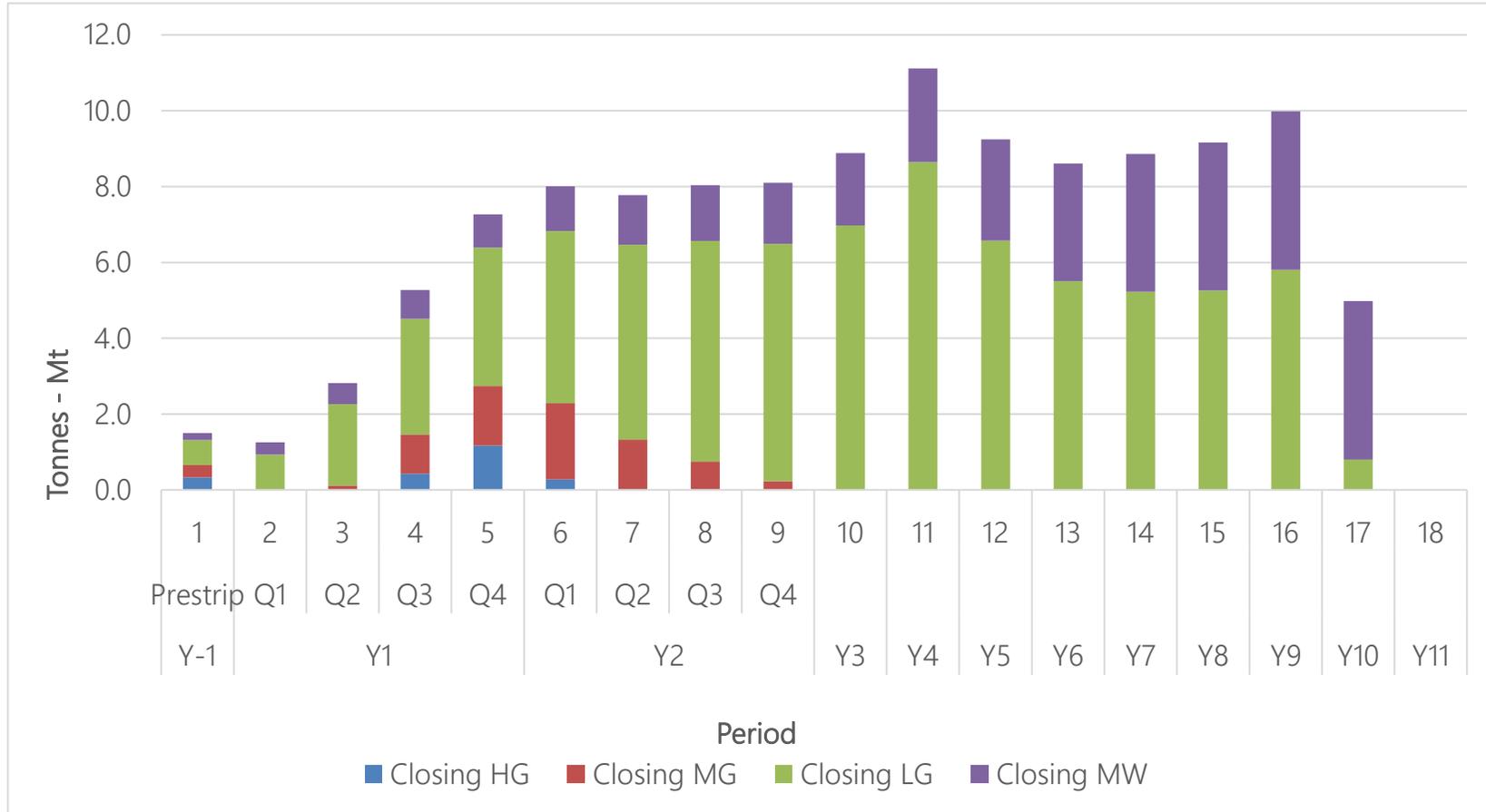
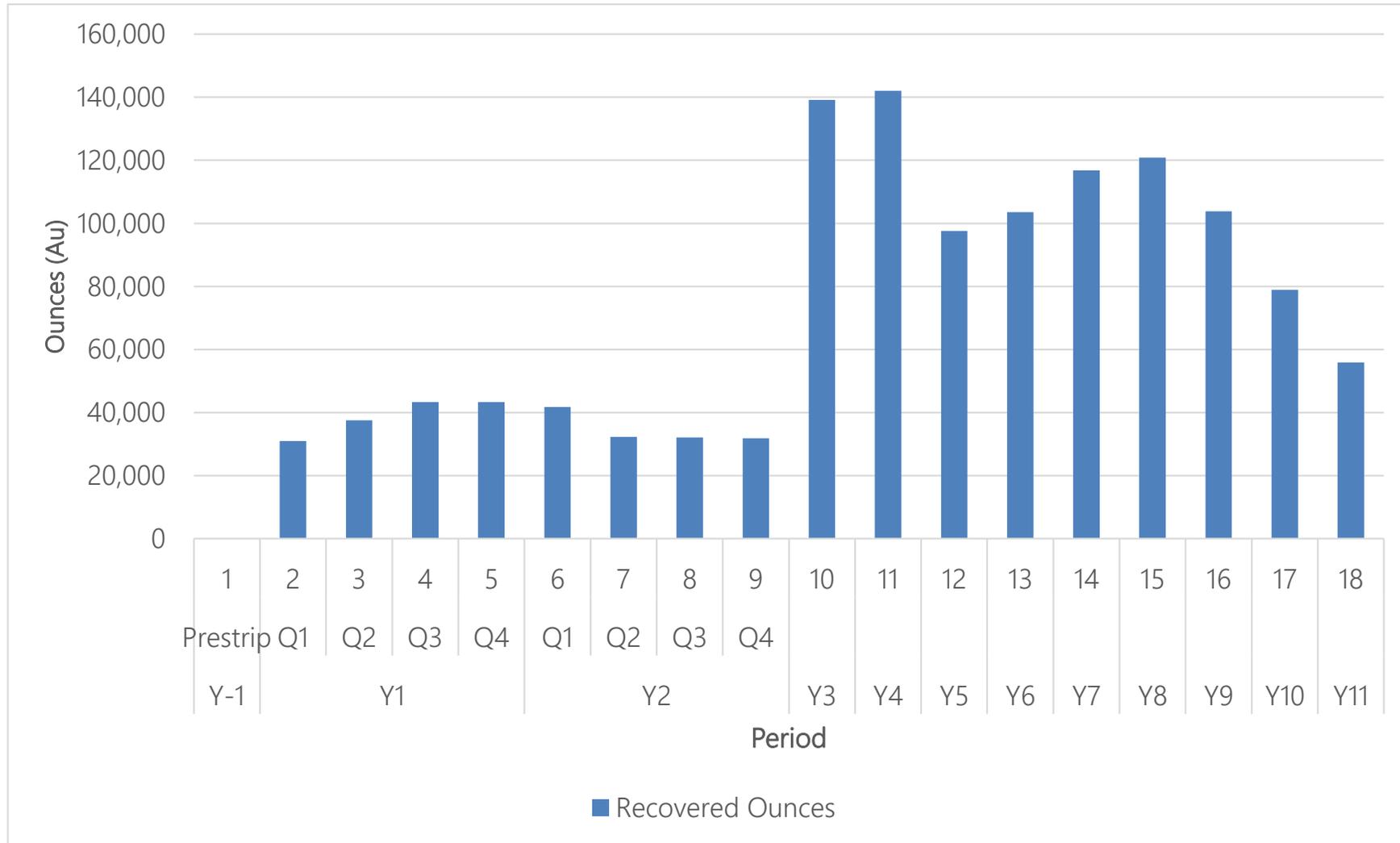


Figure 1-10 Recovered Ounce Profile – Base Case Schedule



1.8 Mine Cost Estimation

Estimation of mining costs has been outlined in Section 8. The cost estimate was developed from first principles for an owner operator arrangement with a margin added to reflect the use of a mining contractor and was based on the following general inputs and assumptions:

- All costs in Australian dollars.
- Budget capital for mining equipment is based on new OEM based pricing
- Operating costs estimated by Orelogy.
- Base costs of variable personnel (operators & maintainers), operational personnel, management and technical services determined by Orelogy.
- Diesel price of \$1.40 per litre based on price level at the time, after which the diesel rebate of \$0.416 per litre is applied.
- Allowances for ore rehandle on the Run-of-Mine (ROM) stockpile.
- Allowance for road building, clearing and rehabilitation works.
- All costs increased by 0.9% to allow for CPI increases.
- Margin of 20% added to all contractor cost centres.

The estimated accuracy of the costs is +/-25% and is suitable for use in the PFS.

1.8.1 Capex

Capital expenditure, summarised in Table 1-7, outlines the capitalised components of the mining study either calculated from first principles or from the Orelogy database.

Table 1-7 Mining Capital Expenditure

AREA	Capital Cost A\$M	
	Initial Capital	Sustaining Capital
MINING FLEET	8.4	49.3
REPLACEMENT	0.0	2.1
ANCILLARY & MINOR	0.2	0.0
INITIAL DEWATERING	0.9	0.1
CLEARING	0.5	1.5
ROAD BUILDING	0.3	0.1
REHAB		0.5
DEMOBILISATION		0.6
TOTAL	10.2	54.2

1.8.2 Opex

Operational expenditure, summarised by activity in Table 1-8, is calculated from the scheduled quantities and rates detailed in the Section 8.

The mining operating costs are built up from first principles and includes the following:

- Schedule of quantities multiplied by the mining costs by oxide/transitional/fresh for both ore and waste for each bench mined.
- Personnel.
- Equipment inclusive of owner’s costs (i.e. purchase cost, delivery and commissioning).
- Clearing costs of the open pit.
- Drill and blast.
- Grade control.
- Load and haul (note haulage is based on variable fuel burns by elevation and distance)
- Both crusher and low grade stockpile rehandle.
- Dewatering.

A breakdown by each activity is highlighted in Figure 1-11.

Overall operating costs are \$3.79/t mined (TMM) including margin, as a LOM unit mining cost for the project.

Table 1-8 breaks down the operating and capital cost by year in detail. Overall total cost per ore tonne mined is \$9.9/t mined and includes capital. Key project financial outcomes are summarised in Table 1-9.

Figure 1-11 Breakdown of Mine Operating Cost per Ore Tonne

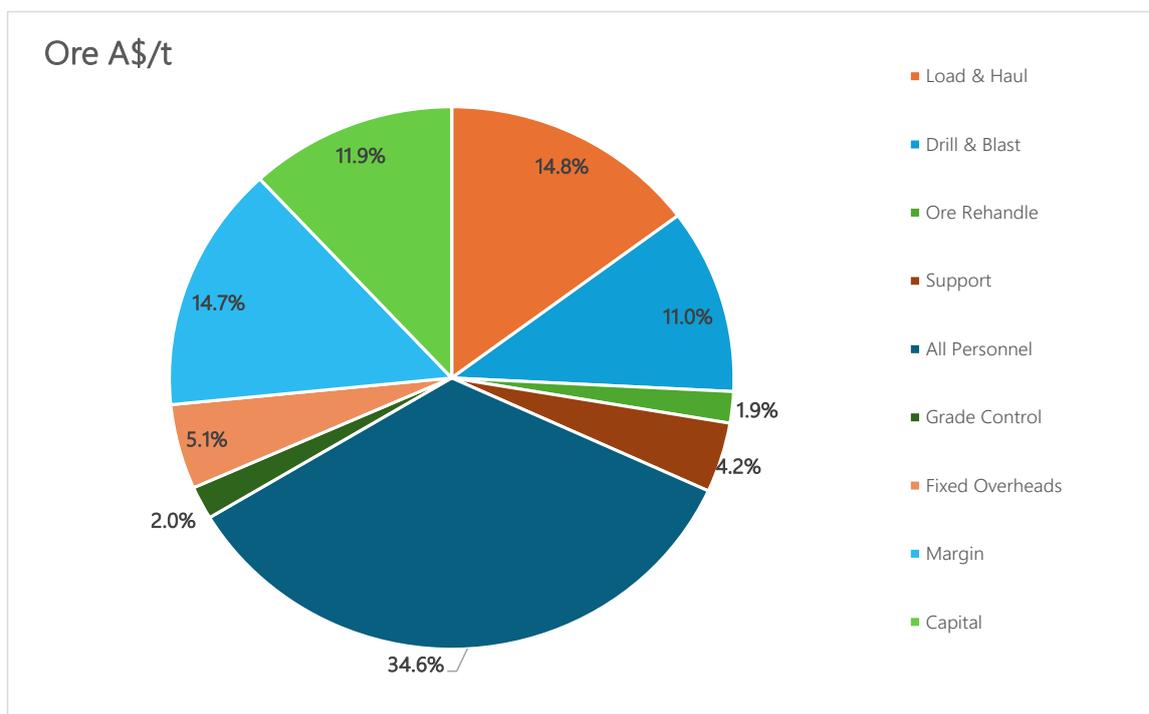


Table 1-8 Total Operating and Capital cost by Year Base Case – M\$

PERIOD	COST CENTRE	TOTAL	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
ORE	LOADING	\$9.9	\$0.3	\$1.9	\$1.1	\$1.0	\$1.3	\$0.6	\$0.8	\$0.9	\$0.9	\$1.0	\$0.0	\$0.0	\$0.0
	HAULING	\$25.2	\$0.3	\$3.6	\$3.0	\$2.2	\$2.7	\$1.7	\$1.8	\$2.0	\$2.1	\$1.8	\$2.0	\$2.0	\$0.0
	SUPPORT	\$9.3	\$0.3	\$0.8	\$0.6	\$0.6	\$0.8	\$0.5	\$0.7	\$0.8	\$1.2	\$1.0	\$1.0	\$1.0	\$0.0
	DRILLING	\$7.7	\$0.1	\$1.3	\$0.7	\$0.8	\$1.0	\$0.3	\$0.5	\$0.9	\$1.0	\$1.1	\$0.0	\$0.0	\$0.0
	BLASTING	\$17.5	\$0.3	\$3.2	\$1.7	\$1.9	\$2.3	\$0.9	\$1.3	\$1.8	\$1.9	\$2.1	\$0.0	\$0.0	\$0.0
	PERSONNEL COST	\$79.5	\$2.4	\$8.9	\$5.9	\$6.4	\$7.9	\$4.6	\$6.6	\$8.2	\$9.2	\$8.9	\$5.6	\$4.4	\$0.5
	GRADE CONTROL	\$10.7	\$0.3	\$2.1	\$1.2	\$1.1	\$1.4	\$0.6	\$0.9	\$1.0	\$1.0	\$1.1	\$0.0	\$0.0	\$0.0
	ORE REHANDLE	\$10.1	\$0.0	\$0.9	\$0.8	\$1.0	\$1.0	\$0.9	\$0.9	\$1.0	\$1.0	\$1.0	\$0.7	\$0.7	\$0.1
	FIXED OVERHEADS (Inc. Ancillary)	\$27.4	\$0.3	\$3.2	\$3.2	\$3.2	\$3.2	\$2.4	\$2.4	\$2.4	\$2.4	\$1.6	\$1.6	\$1.6	\$0.0
TOTAL	\$197.3	\$4.4	\$25.9	\$18.1	\$18.3	\$21.6	\$12.4	\$15.9	\$19.0	\$20.7	\$19.6	\$11.0	\$9.8	\$0.6	
WASTE	LOADING	\$15.9	\$1.3	\$2.5	\$2.5	\$2.3	\$2.0	\$1.6	\$1.4	\$1.3	\$0.6	\$0.3	\$0.0	\$0.0	\$0.0
	HAULING	\$29.1	\$1.1	\$4.0	\$4.6	\$4.0	\$3.7	\$2.6	\$3.0	\$3.2	\$1.8	\$1.1	\$0.0	\$0.0	\$0.0
	SUPPORT	\$13.2	\$1.8	\$1.3	\$1.6	\$1.5	\$1.4	\$1.7	\$1.4	\$1.3	\$0.9	\$0.4	\$0.0	\$0.0	\$0.0
	DRILLING	\$9.7	\$0.5	\$1.3	\$1.4	\$1.4	\$1.1	\$0.9	\$1.0	\$1.2	\$0.7	\$0.4	\$0.0	\$0.0	\$0.0
	BLASTING	\$24.7	\$1.6	\$3.5	\$3.7	\$3.4	\$3.0	\$2.5	\$2.5	\$2.5	\$1.3	\$0.7	\$0.0	\$0.0	\$0.0
	PERSONNEL COST	\$107.8	\$11.3	\$11.5	\$14.2	\$13.8	\$12.2	\$13.3	\$11.8	\$10.8	\$6.0	\$2.8	\$0.0	\$0.0	\$0.0
	TOTAL	\$200.5	\$17.5	\$24.1	\$28.0	\$26.4	\$23.4	\$22.5	\$21.2	\$20.3	\$11.4	\$5.7	\$0.0	\$0.0	\$0.0
TOTAL	LOADING	\$25.8	\$1.6	\$4.4	\$3.6	\$3.3	\$3.3	\$2.2	\$2.2	\$2.2	\$1.6	\$1.4	\$0.0	\$0.0	\$0.0
	HAULING	\$54.4	\$1.3	\$7.6	\$7.5	\$6.0	\$6.3	\$4.2	\$4.7	\$5.0	\$4.1	\$3.1	\$2.4	\$2.4	\$0.0
	SUPPORT	\$22.6	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$1.5	\$1.1	\$1.1	\$0.0
	DRILLING	\$17.4	\$0.6	\$2.6	\$2.0	\$2.2	\$2.1	\$1.2	\$1.5	\$2.1	\$1.6	\$1.4	\$0.0	\$0.0	\$0.0
	BLASTING	\$42.3	\$1.9	\$6.8	\$5.4	\$5.4	\$5.3	\$3.4	\$3.8	\$4.4	\$3.2	\$2.8	\$0.0	\$0.0	\$0.0
	PERSONNEL COST	\$187.2	\$13.7	\$20.4	\$20.1	\$20.1	\$20.1	\$17.9	\$18.4	\$19.0	\$15.2	\$11.7	\$5.6	\$4.4	\$0.5
	DEWATERING (Inc. in Fixed costs)														
	GRADE CONTROL	\$10.7	\$0.3	\$2.1	\$1.2	\$1.1	\$1.4	\$0.6	\$0.9	\$1.0	\$1.0	\$1.1	\$0.0	\$0.0	\$0.0
	ORE REHANDLE	\$10.1	\$0.0	\$0.9	\$0.8	\$1.0	\$1.0	\$0.9	\$0.9	\$1.0	\$1.0	\$1.0	\$0.7	\$0.7	\$0.1
FIXED OVERHEADS (Inc. Ancillary)	\$27.4	\$0.3	\$3.2	\$3.2	\$3.2	\$3.2	\$2.4	\$2.4	\$2.4	\$2.4	\$1.6	\$1.6	\$1.6	\$0.0	
TOTAL	\$397.8	\$21.7	\$50.0	\$45.9	\$44.4	\$44.8	\$34.8	\$36.9	\$39.1	\$32.3	\$25.6	\$11.4	\$10.2	\$0.6	
MARGIN	TOTAL	\$79.6	\$4.3	\$10.0	\$9.2	\$8.9	\$9.0	\$7.0	\$7.4	\$7.8	\$6.5	\$5.1	\$2.3	\$2.0	\$0.1
CAPITAL	MINING FLEET	\$57.7	\$10.2	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$2.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	REPLACEMENT	\$2.1	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.0
	ANCILLARY & MINOR	\$0.2	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	INITIAL DEWATERING	\$1.0	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	CLEARING	\$2.0	\$0.6	\$0.4	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	\$0.0	\$0.2	\$0.0	\$0.0
	ROAD BUILDING	\$0.3	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	REHAB	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	\$0.2	\$0.1	\$0.1	\$0.0	\$0.0	\$0.0
	DEMOBILISATION	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	\$0.0	\$0.0
TOTAL	\$64.4	\$12.5	\$9.6	\$9.7	\$9.2	\$9.2	\$9.2	\$9.2	\$2.7	\$0.6	\$0.3	\$0.5	\$0.7	\$0.2	\$0.0
GRAND TOTAL	TOTAL	\$541.8	\$38.6	\$69.6	\$64.8	\$62.5	\$63.0	\$51.0	\$47.0	\$47.6	\$39.0	\$31.2	\$14.4	\$12.5	\$0.7

Table 1-9 Base Case – EBITA Financials

PROJECT PHYSICALS	UNITS	Rustlers Roost, AO & Q29
Project Life	Yr	11.0
Total Ore Mined (Mining Inventory)	Mt	54.8
Strip Ratio	waste/ore	1.61
Ore Grade	g/t	0.81
Ounces Contained	oz	1,422,361
Recovery	%	88%
Ounces Recovered	oz	1,251,678
Plant Throughput	Mtpa	5
Annual Ounce Production	ozpa	113,789
PROJECT FINANCIALS		
Development Capital	A\$M	\$280
Pre-Production & Mining Fleet	A\$M	\$10
Total Pre-Production Costs	A\$M	\$290
Gold Price	A\$/oz	\$2,350
Gold Sales Revenue	A\$M	\$2,941
Mining Costs	A\$M	\$592
Processing Costs	A\$M	\$1,146
Site G&A Costs	A\$M	inc
Royalty (2.5%)	A\$M	\$74
Royalty (NT Govt. MRA Levy)	A\$M	\$93
Mining Sustaining Costs	A\$M	\$5
Project Costs (Pre-Tax)	A\$M	\$2,200
Project Cashflow (Pre-Tax)	A\$M	\$742
NPV ₆ (Pre-Tax)	A\$M	\$392
IRR (Pre-Tax)	%	34%
NPI	index	1.4
COSTS OF PRODUCTION		
Total Cash Cost (C1) Per Rec Ounce	A\$/oz	1,389
Royalties	A\$/oz	\$133.25
Sustaining Costs	A\$/oz	\$3.86
All In Sustaining Cost (ASIC) Per Rec Ounce	A\$/oz	1,526

1.9 Ore Reserve Statement

The PFS is based on the design of a 5Mtpa carbon-in-leach gold processing plant.

The mine planning process has relied on inputs from other disciplines. The key inputs are:

- The resource model provided by Cube Consulting.
- Slope design criteria, provided by Peter O'Bryan & Associates.
- Orelogy Consulting completed the modifying factors associated with dilution and mining recovery estimates.
- Processing costs, processing recoveries and concentrate grade provided by GR Engineering.
- Metal prices, royalties and concentrate payability provided by Primary Gold Limited.

The mine planning component of this study involved mine cost estimation, pit optimisation, mine design and scheduling. The ore reserve for the deposit is 53.6 Mt at 0.8 g/t for 1.39 Mozs contained gold at an average strip ratio of 1.7:1 as summarised and broken down by resource in Table 1-10. Included within the pit design inventory but not the ore reserve is ~1.3 Mt of inferred material at 0.7 g/t as highlighted in Table 1-11.

Table 1-10 Ore Reserve Summary – COG = 0.32 g/t Au Rustlers Roost ,AO and 0.35 g/t Au Q29.

Description	Units	Rustlers Roost	Annie Oakley	Quest 29	Total
Probable	Mt	47.8	0.664	5.134	53.6
	g/t	0.80	1.04	0.87	0.81
	Mozs	1.228	0.022	0.144	1.39
Waste	Mt	64.1	6.9	17.3	89
Total	Mt	113.0	7.6	22.5	143
Strip Ratio	w:o	1.4	10.4	3.4	1.7

Description	Units	Rustlers Roost	Annie Oakley	Quest 29	Total
Probable	Mt	47.8	0.664	5.134	53.6
	g/t	0.80	1.04	0.87	0.81
	Mozs	1,228	0.022	0.144	1.39
Inferred	Mt	1.2	0.0	0.1	1.3
	g/t	0.70	0.72	0.75	0.70
	Mozs	0.026	0.001	0.001	0.03
Waste	Mt	64.1	6.9	17.3	88
Total	Mt	113.0	7.6	22.5	143
Strip Ratio	w:o	1.37	10.4	3.4	1.7

Proved Ore Reserves are based on Measured resource materials and Probable Ore Reserves are based on Indicated resource materials, reported within the pit design.

The competent person for the reserve estimate is Mr Stephen Craig, Managing Director with Orelogy. Mr Craig is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Craig has sufficient experience relevant to the style of mineralisation, the type of deposit and the activities planned at Rustlers Roost to qualify as a Competent Person as defined in the 2012 JORC Code.

1.10 Risks

1.10.1 Execution Risk

The key risks identified to the Mt Bundy Gold Project are summarised as follows:

- There will always be a risk in any mining operation that ore delivered to the process plant will not be of the grade or tonnage as planned (i.e. resource model reconciliation, incorrect ore loss and / or dilution, mining productivities not achieved) These risks have been mitigated by adopting strict grade control practices in advance of mining, and a mining schedule that is not overly aggressive and considered achievable.
- Geotechnical risk associated with open pit workings was identified as this is always a risk associated with open pit workings. The key risks have been mitigated through considerable geotechnical drilling and review conducted as part of the PFS works, the staged pit development approach.
- There is risk associated with project start-up, and the potential of not meeting mining ramp-up requirements. The effective establishment of site access will be crucial.
- Health and safety risks associated with on-going mining operations will be mitigated through the implementation of industry standard procedures and protocols to minimise both the potential for incidents to occur and limit the severity of any incidents.

1.10.2 Cost Risk

Risk in the mining cost estimation is generally a result of:

- Under-estimating costs; and / or
- Over-estimating productivity.

Oreology have developed costs on the basis of costs supplied by OEM suppliers and their own experience and cost database. They consider the underlying assumptions reasonable and the resulting costs to be with PFS levels of confidence. Key cost drivers such as fuel price, personnel costs etc. will be subject to the usual market fluctuations that cannot be predicted.

1.11 Further Work

Given the increase in processing throughput to 5.0 Mtpa, more work is required in matching/improving the mining fleet. At present, a larger excavator may be warranted with a second hand machine used for ancillary works and for production while the main machine is undergoing maintenance. Other areas will include:

- Updating equipment pricing.
- Engaging with mining contractors on an RFQ/tendering basis.
- Update manning schedule and associated costs.
- Update the overall mine design to deal with the larger optimal shells.
- Ensure processing throughputs and cost structures are valid.
- Revise waste dump design in conjunction with TSF design. At present, the capacity of the waste dump is very close to the amount of waste being produced.

2 INTRODUCTION

2.1 Background

Primary Gold Pty Ltd (PGL) is in the process of developing both the Rustlers Roost and Q29 gold projects (combined as the Mt Bundy Gold Project) in the Northern Territory (NT). Q29 is located 11 km to the south-east of Rustlers Roost via a private haul road.

Oreology Consulting Pty Ltd (Oreology) was requested to carry out a Pre-Feasibility Study (PFS) for the mining component of this combined project.

2.2 Scope of Work

2.2.1 General

The mining components include:

- Update the mining cost estimate based on first principals with margin to replicate the use of a mining contractor.
- Using the current knowledge base with regard to hydrogeological and geotechnical information.
- Updated pit optimisation with updated models for the Mt Bundy Gold project.
- Update pit Design and inventory calculation.
- Update mine scheduling and operating and capital cost estimate.
- Standalone report and ore reserve estimate.

2.2.2 Deliverables

The PFS deliverables were:

- Mining cost estimate.
- Optimisation parameters and results in Excel spreadsheet format.
- Optimisation shells in DXF format.
- Waste dump designs in DXF format.
- General arrangement plans of the mine area in PDF format.
- Mine production schedule.
- Operating cost estimate to $\pm 25\%$ level of accuracy.
- Capital cost estimate to $\pm 25\%$ level of accuracy operation.
- Mining cost model in Excel spreadsheet format.
- Mining study report for PFS document in native and PDF formats.
- JORC 2012 Ore reserve estimate and supporting tables.
- Recommendations for future work.

2.3 Conventions

2.3.1 Currency

All costs and prices are in Australian dollars, unless otherwise specified.

2.3.2 Units

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

2.3.3 Mine Coordinates

The coordinate system MGA51 (GDA94) was used. This coordinate system is standard across the project so as to minimise errors when transferring data between study groups.

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 Relative Level (mRL) or vertical distance in metres based on elevations above the Australian Height Datum.

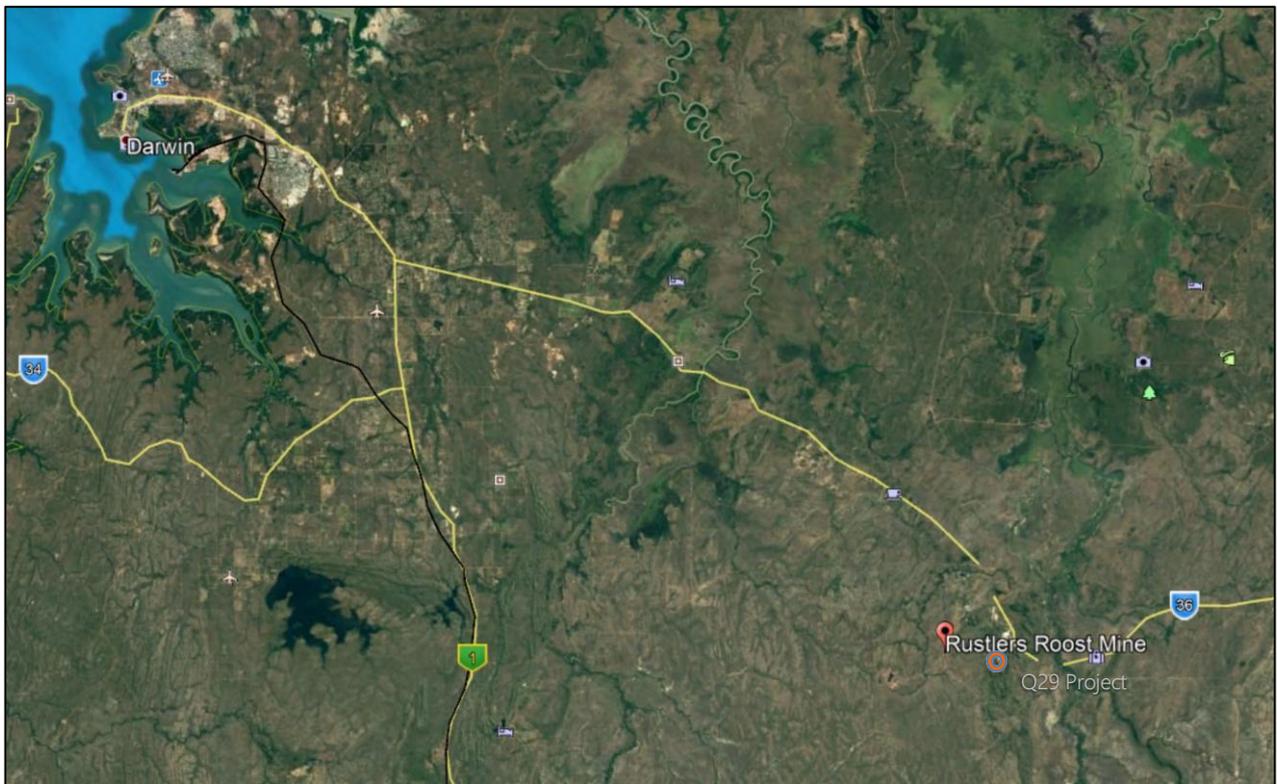
3 MINING FACTORS

3.1 General Design Considerations

3.1.1 Project Location and Accessibility

The Mt Bundy Gold Project is situated 110 km to the southeast of Darwin as indicated in Figure 3-1 below.

Figure 3-1 Location of the Mt Bundy Gold Project



3.1.2 Tenement Boundaries and Royalty Agreements

PGL owns the Mt Bundy Gold project which consists of 11 granted mining and exploration leases as shown in Table 3-1.

Table 3-1 Tenement details

Tenement #	Area (km2)	Grant Date	Expiry Date	Type	Note
EL30809	508.9	3/07/2015	29/06/2025	Exploration Lease	
EL30824	619.38	3/07/2015	2/07/2025	Exploration Lease	
ML29781	1.4	6/02/2013	5/02/2033	Mining lease	
ML29782	0.8	6/02/2013	5/02/2033	Mining lease	
ML29783	2.85	6/02/2013	5/02/2033	Mining lease	Quest29 Deposits
ML29785	0.4	6/02/2013	5/02/2033	Mining lease	
ML29786	1.13	6/02/2013	5/02/2028	Mining lease	
ML29812	1.58	6/02/2013	5/02/2033	Mining lease	
ML29814	0.84	6/02/2013	5/02/2033	Mining lease	
MLN1058	6.82	3/08/1989	2/08/2039	Mining lease Northern	Toms Gully Deposit
MLN1083	7.56	4/03/1991	31/12/2045	Mining lease Northern	Rustlers Roost Deposit

Native title is covered under the Native Title Claim DC 00/31 and as MLN1083 and the adjacent mineral claims were granted prior to the introduction of the Native Title Act and as such are not affected by Native Title issues.

3.1.3 Topography

The Rustlers Roost project was previously mined in the 1980's and is currently filled with potable water. The local topography has been modified with waste dumps, old heap leach pads and existing mine roads as shown in Figure 3-2 to Figure 3-5.

Figure 3-2 Aerial view of the previously mined pit, dumps and leach pads



The natural topography is generally flat and varies from the 550 mRL to the 570 mRL and the as-mined topography highlights the waste dumps have been formed to the 600 mRL (30 m height, 10 m lifts) and the heap leach pads to the 580 mRL (20 m height, 10 m lifts) as shown in Figure 3-3.

Figure 3-3 Rustlers Roost Topography

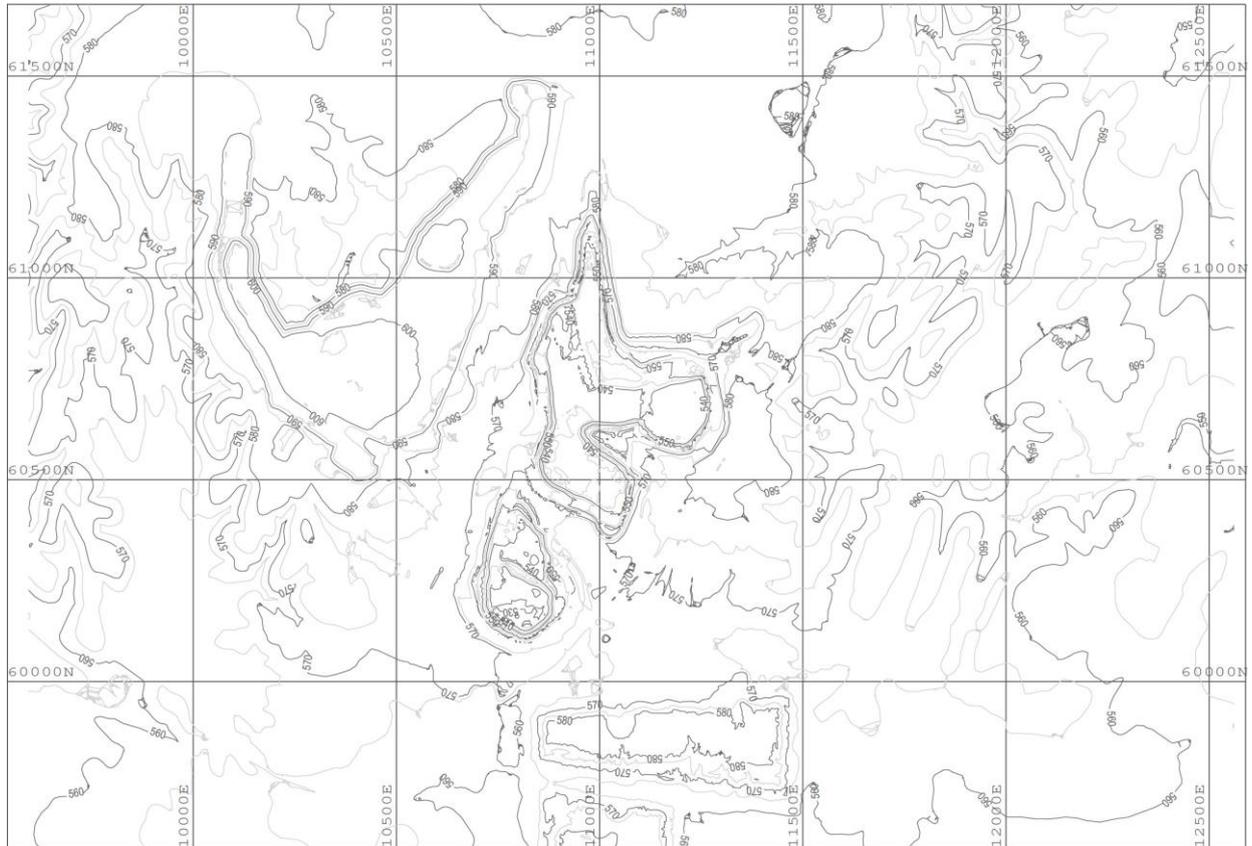
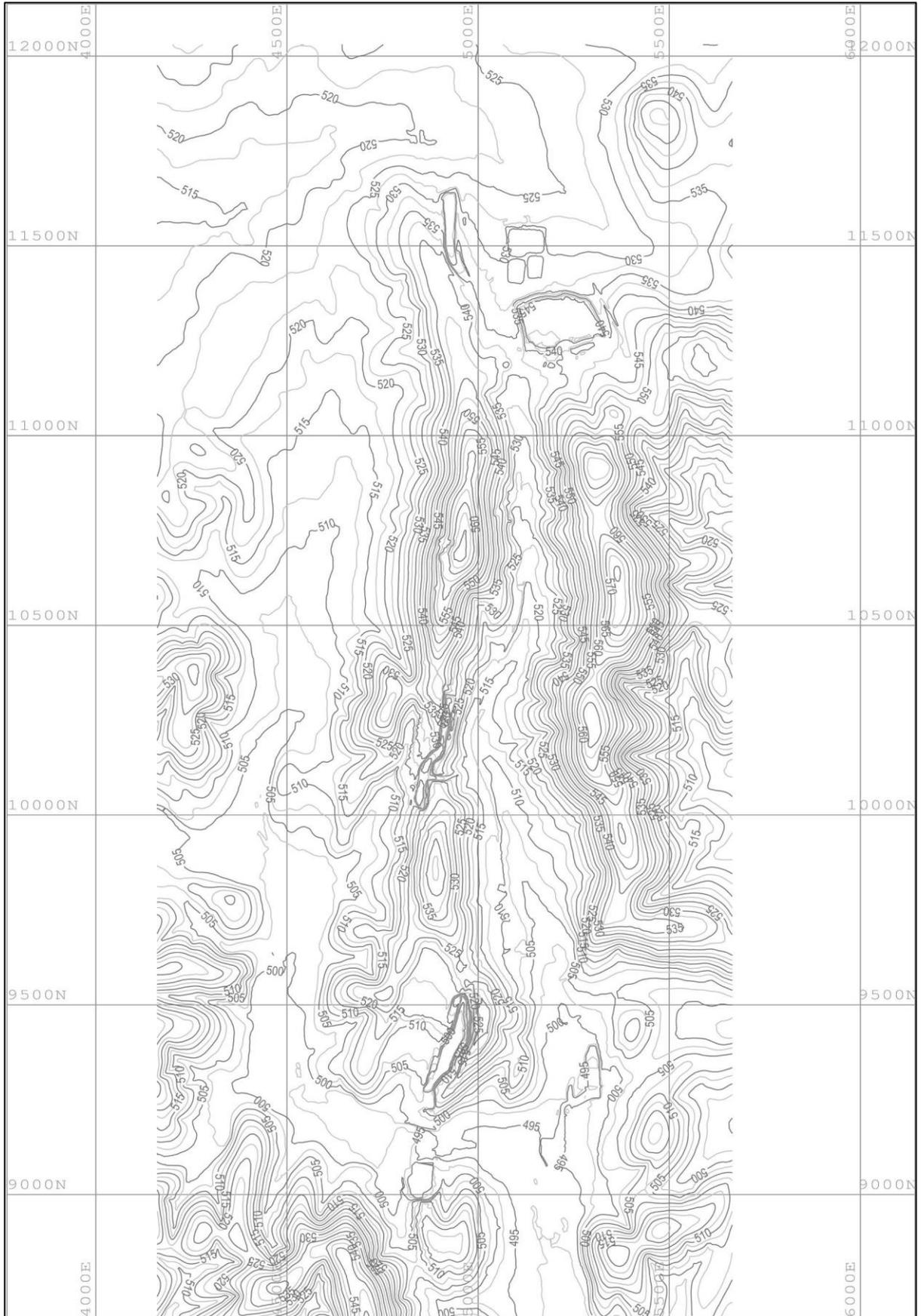


Figure 3-4 Q29 aerial view of the previously mined pit, dumps and leach pads



The natural topography of the project is generally undulating with elevations ranging from the 500 mRL to the 570 mRL and the as-mined topography highlights the heap leach pads to the 545 mRL shown in Figure 3-5.

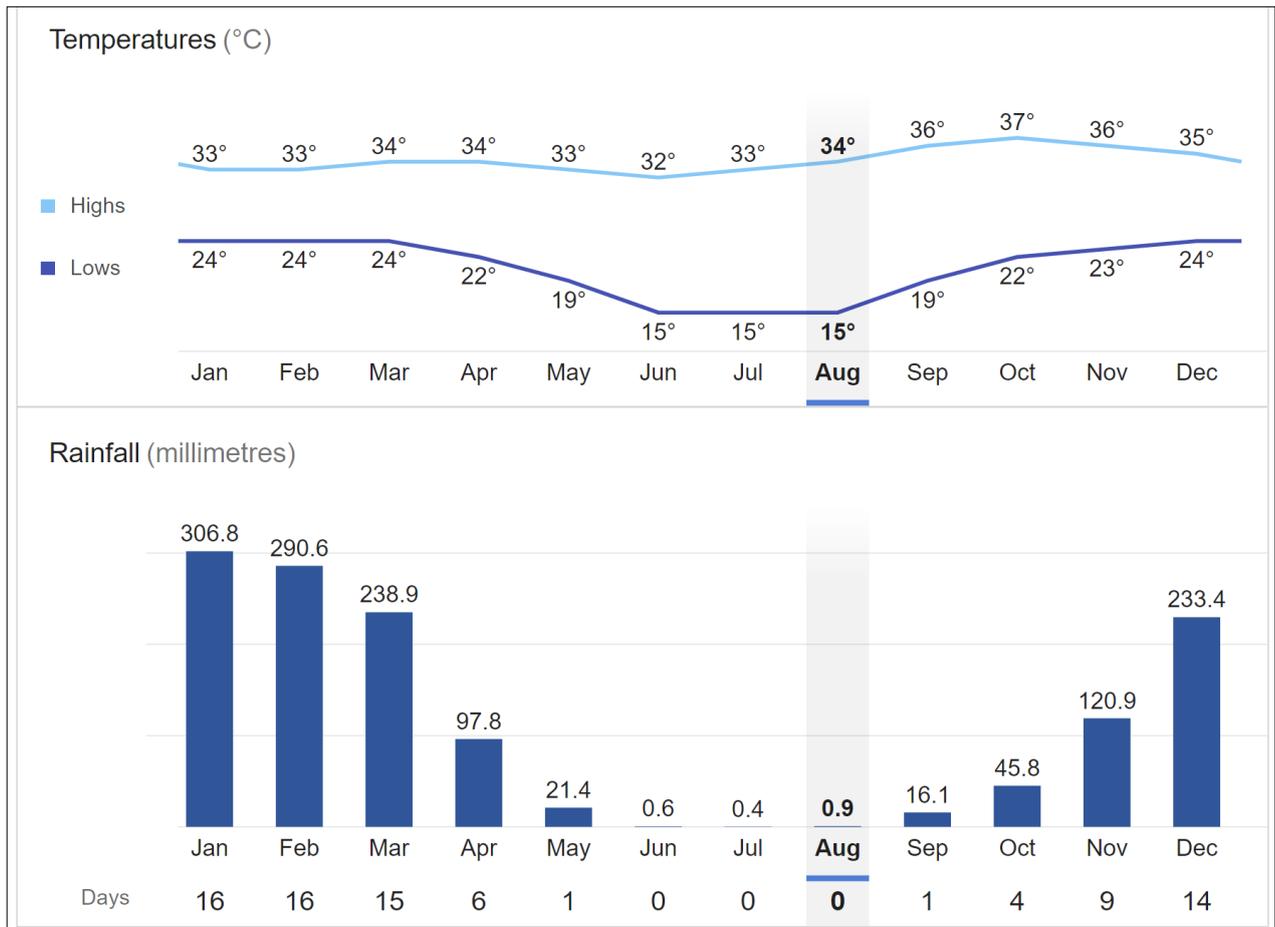
Figure 3-5 Q29 Topography



3.1.4 Climate

The climate of Northern Territory can be described as tropical monsoonal climate with a distinct wet and dry season. Average maximum temperatures do not vary greatly during the year, however, the rainfall and humidity does, with the dry season commencing in May through to October and with the wet season starting from November to April as highlighted in Figure 3-6.

Figure 3-6 Average Temperature & Rainfall Data for the Area



3.1.5 Material Characteristics

The project has a typical oxide/transition and fresh weathering profiles which have been created using drill hole data and has been used to code the block models. This has also been used to set the specific gravity values as well (i.e. oxide = 2.3, transition = 2.5 and fresh = 2.7).

Numerous mineralised domains have also been created and used to define mineralisation envelopes. Of note, is that the bulk of the drilling has been limited to a depth of 100 m below surface.

3.1.6 Surface and Ground Water Considerations

The project is saturated with water which will prove to be a challenge in first dewatering the existing open pit workings as well as keeping them free of water as shown in Figure 3-7 and Figure 3-8.

Figure 3-7 Rustlers Roost Existing open pit filled with water



Figure 3-8 Q29 Zamu open pit filled with water



3.2 Resource Model

3.2.1 Resource Models

The Rustlers Roost mineral resource estimate with the inclusion of the Annie Okaley deposit has been re-estimated (Dec 2021) using additional drilling and is based on a local uniform conditioned (LUC) estimate and has been completed in accordance with JORC 2012. The Q29 resource is based on an ordinary kriged estimate (OK) from the updated resource model also December 2021, both are summarised in Table 3-2.

Table 3-2 Block Model Resources Summary

Model	Resource Category	Tonnes (Mt)	Grade (g/t)	Cont. Metal (Au Moz)
Rustlers Roost & Annie Okaley	Indicated	63.4	0.8	1.53
	Inferred	28.5	0.5	0.49
	Total	91.9	0.7	2.02
Quest 29	Indicated	17.6	0.7	0.38
	Inferred	12.1	0.7	0.29
	Total	29.7	0.7	0.67
TOTAL	Indicated	81.0	0.7	1.92
	Inferred	40.6	0.6	0.78
	Total	121.6	0.7	2.70

3.2.2 Geology

The Rustlers Roost geology is as described in the Cube Mineral Resource Estimate 2021 report and is highlighted below:

The Mt. Bundy project area lies within the Archaean to Early Proterozoic Pine Creek Orogen/Geosyncline. The Pine Creek Geosyncline is a deformed and metamorphosed sedimentary basin up to 14 km maximum thickness covering an area of approximately 66,000 sq. km and extends from Kathleen in the south to Darwin in the north (Figure 3-9).

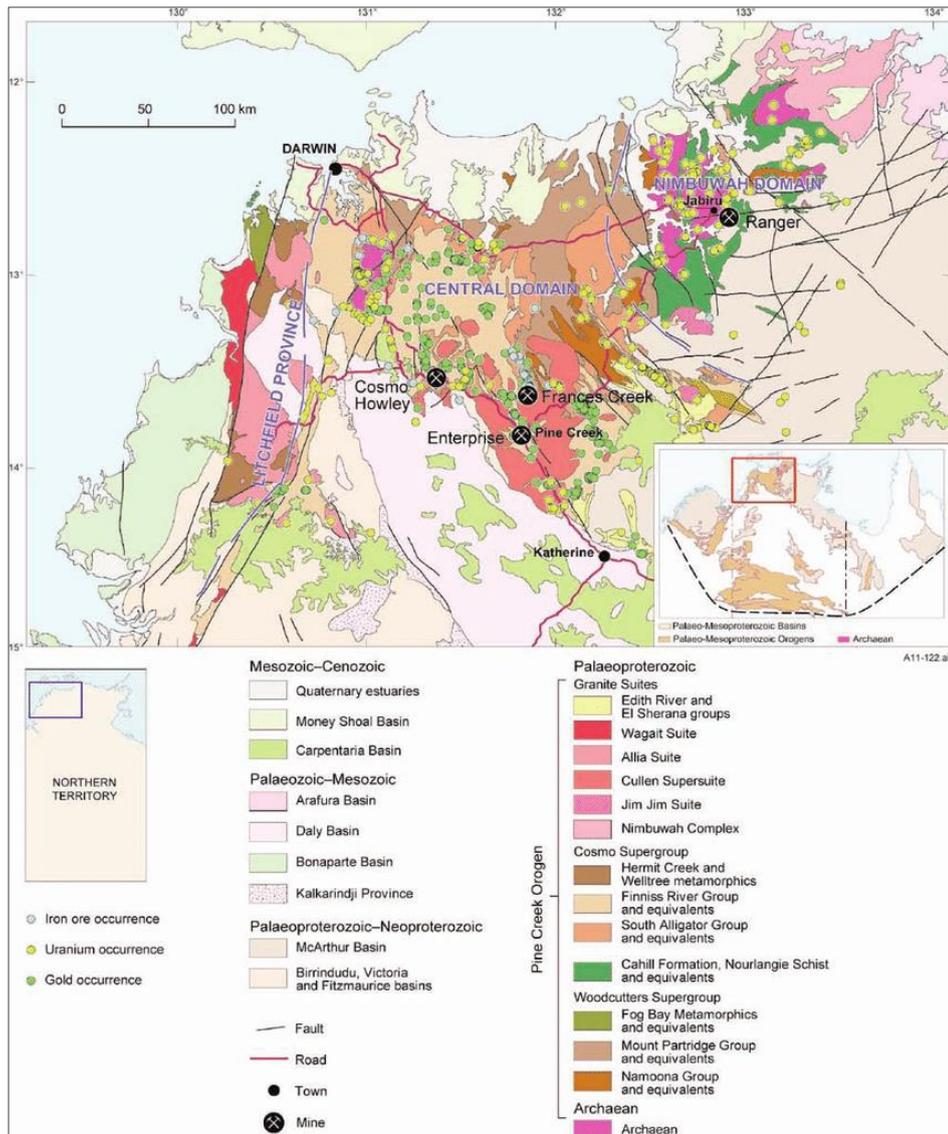
A series of late Archaean granite-gneiss basement domes are overlain by fluvial to marine sedimentary sequences with the central region of the geosyncline dominated by very low-grade metasediments and metavolcanics of the South Alligator and Finniss River groups.

Turbidite sediments of the Burrell Creek Formation underlie most of the tenement area. The turbidite sequence is exposed in the Rustlers Roost area in the southern part of the Mount Bundy tenements. Dolerite sills, such as the Zamu Dolerite at Rustlers Roost, are found within the sedimentary sequence, particularly in the southern part of the area.

Throughout the area, the Burrell Creek Formation is made up of greywackes, sandstones, siltstones and mudstones. The boundary with the Mount Bonnie Formation is defined by the appearance of chert and hematitic chert horizons. The Mount Bonnie Formation is predominately made up of shales, siltstones and mudstones with minor sandstone and volcanogenic tuffs and cherts.

Metamorphic grade is very low in the bulk of the project area (lower greenschist) with some upward gradation towards lower amphibolite facies in the south. Quartz veining, both concordant and discordant, is common in the area, associated with areas of folding stress and faulting.

Figure 3-9 Regional Geology and Gold Deposits of Pine Creek Orogen



For Rustlers Roost, the local geology is as follows:

A turbidite sequence in the Mount Bonnie Formation of the South Alligator Group hosts the Rustlers Roost Deposit. The sequence is at least 1,500m thick and comprises shale, siltstone, minor tuff, greywacke & BIF.

In the Rustlers Roost deposit area, the sequence outcrops as banded carbonaceous siltstone and mudstone. The sediments have undergone regional greenschist grade metamorphism and later contact metamorphic events.

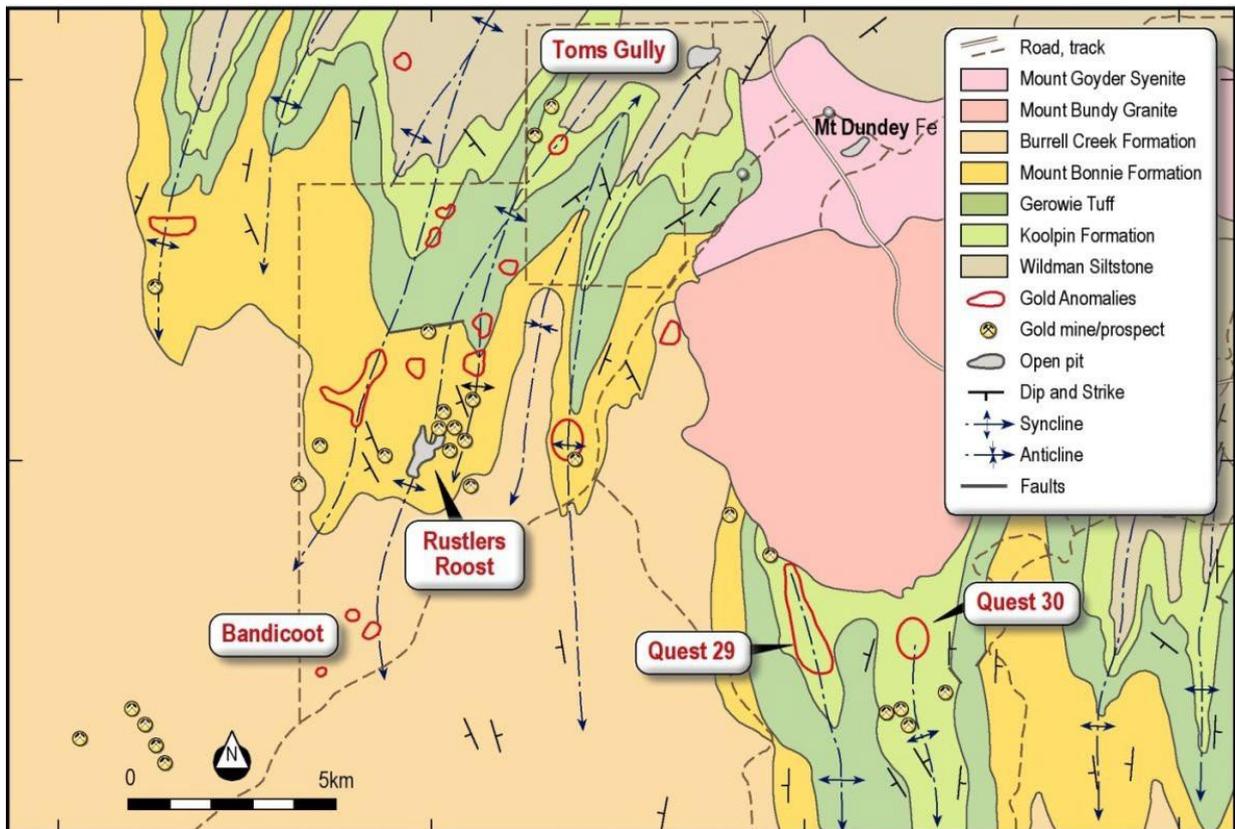
The sediments, volcanics and dolerite sills were then subjected to a major folding episode along the north-northeast trending regional fold axes. The folds are open to tight in style and plunge consistently to the south at approximately 35°. Gold mineralisation is hosted in a planar, south dipping quartz-sulphide vein set that postdates the folding event.

Following the folding, an extensive array of northeast and northwest trending dolerite dykes was intruded during extensional deformation.

For Q29, the local geology is as follows:

The Quest 29 area is mostly underlain by the metasediments of the Koolpin Formation. Minor, though economically important sills of Zamu Dolerite occur within the area. The Mt. Bundy Granite underlies the north eastern most portion of the property as highlighted in Figure 3-10.

Figure 3-10 Geology & Structures of the Mt Bundy Area



The Koolpin Formation is comprised mainly of pyritic and pyrrhotitic, carbonaceous siltstone with andalusite porphyroblasts. Bands of re-crystallised laminated and nodular chert are common along the main ridge running up the western side of the property. The enveloping carbonaceous siltstones are more strongly silicified along this ridge. Thin green-grey layers within the siltstones are possibly iron formations.

The sediments, tuffs and dolerites occupy the core of a regional anticline (the Quest 29 Anticline). The axis of this anticline plunges to the south-southeast at a shallow angle. Gold mineralisation occurs in both the dolerite and the carbonaceous siltstones. The host dolerite dips to the east at 50°-70°.

The Quest 29 sedimentary sequence stretches from south of Taipan through West Koolpin, North Koolpin and BHS in the North prior to being truncated by a regional scale fault of approximately

400 m offset at the northern boundary of the mineral claims. This trend is comprised of the western limb on a south plunging anticlinal fold of Koolpin meta-sediments crosscut in several places by small scale faults.

These faults trend ESE to WNW which offset mineralisation from 5 m to 20 m. This can be seen in the main offset in mineralisation within the West Koolpin Pit and a minor offset between the Taipan and West Koolpin mineralisation around 9000N. These same faults appear to offset mineralisation on current interpretations in 3 areas identified within the North Koolpin Pit.

The Quest 29 sedimentary trend is comprised of folded and faulted Koolpin sediments of low grade metamorphism. These sediments comprise material of variable grain size from mudstone to greywacke, and also highly variable degrees of carbonaceous material. These sediments have been intruded by narrow dolerite sills.

Overlain to the east is a thick dolerite sill intrusion (Zamu Dolerite) on the eastern edge of the main mineralised ridge with many smaller sills throughout the entire length of the ridge.

The gold mineralisation occurs semi-continuously over a strike length of more than 3.5 km along the crest of the Quest 29 anticline. The style of mineralisation throughout the Quest 29 zones is associated with sheeted or stockworked quartz-sulphide veins hosted by dolerite sills or along the sheared contact margins with siltstones and carbonaceous shales.

4 MINING METHODOLOGY

4.1 General

The PFS adopted conventional open pit mining as the preferred mining method due to:

- The ore presentation is near surface,
- There is space to build waste dumps and tailings dams,
- The method is typical for the Australian gold operations, and
- It will generate the best project value with the greatest likelihood of success.

The operation is planned to be a mine contractor run operation.

The various aspects of the mining operation consist of:

- Clearing of vegetation and topsoil stripping,
- Waste rock mining,
- Ore mining, stockpiling, rehandling and crusher feeding,
- Pit dewatering,
- Haul road construction,
- Grade control, and
- Rehabilitation.

Mine operations at both projects will utilise conventional truck and shovel open pit mining methods and technologies proven at other locations throughout region with ore hauled from Q29 to Rustlers via a purpose built haul road.

The top soil component of the overburden will be segregated and stockpiled separately, available for usage during rehabilitation activities.

4.2 Bench Height Selection

A bench height of 5.0 m was selected based on two key aspects:

1. The bench height needs to match the equipment selection and, in turn, the equipment selection needs to match the scale of the operation. The scale of the operation indicates that two 150 t excavators would be sufficient to undertake all mining activities and maintain plant feed. This size of unit can comfortably mine 5.0 m high benches in 2 x 2.5 m flitches or lifts with acceptable productivity.
2. Acceptable levels of dilution and ore loss were estimated adopting a 5.0 m high blasting bench excavated in 2 x 2.5 m flitches.

4.3 Equipment Selection Main Fleet

4.3.1 Excavator

Two 150 t excavators were selected as these have the capacity to excavate the required quantities of ore and waste in an efficient manner. Material will be loaded from a 2.5 m flitch height (plus swell).

4.3.2 Trucks

A 90 t payload haul truck was selected as these units are a suitable match to the excavator.

4.3.3 Ancillary Equipment

To complete the primary production fleet, it was supplemented with a support fleet consisting of:

- 1 x 90 t small excavator for battering and ancillary works.
- 3 x 70 t track dozer for dump and pit floor maintenance.
- 1 x 32 t grader for road maintenance.
- 1 x 50 t water carts for dust suppression. 1 x 100 t front end loaders (FEL) for rehandle on the ROM and as a back-up for the excavator.

4.4 ROM Management

The bulk of the ore will be rehandled at the ROM stockpile. This is based on the crusher operating a nominal throughput of 700 t / operating hour to give an annual production rate up to 5Mtpa.

4.5 Open Pit Water Management

Dewatering via diesel powered in-pit sumps is the assumed approach for the Mt Bundy Gold Project open pits. Sumps will be located at low points in the pit to maximise capture of pit water. Construction and maintenance of the in-pit sumps and of the pumping infrastructure (i.e. pumps and pipework) will be the responsibility of the mining group.

Pit waters will be predominantly a result of direct precipitation from rainfall events, and a minimal amount of surface water from around the pit edge. Bunding will be placed around the pit crest to limit ingress of surface water run-off into the open pit workings.

In addition, mining will endeavour to maintain two to three working benches across the two mining stages at any given time to allow for higher mining levels should the base of the pit become temporarily flooded.

Groundwater inflows will be minimised via implementation of a water bore-field to actively reduce the ground water level adjacent to the pit and also provide water for the process plant.

Water extracted from both the water bore and the in-pit sumps will be pumped to either the river diversion dam or a turkey's nest dam adjacent to the open pit workings. The turkey's nest will be established with a standpipe and associated pumping / pipework such that the stored water can be transferred to the water trucks and utilised for dust suppression purposes when required. The position of the turkey's nest dam will change over the life of the project to ensure it is at the most beneficial location for site wide dust suppression.

4.6 Mine Area Preparation

4.6.1 Clearing and Grubbing

Clearing and grubbing involves the removal of vegetation from within the open pit and waste rock dump (WRD) footprints. Vegetation will be cleared and grubbed prior to topsoil stripping and later used to cover the topsoil stockpiles.

Clearing and stripping has already occurred within the open pit footprint as a result of previous mining activities. Consequently, it has been assumed that only 20% of this area requires clearing and topsoil removal.

A contingency allowance of 10 m wide offset has been added to all the clearing and stripping areas.

4.6.2 Topsoil Removal and Storage

It has been assumed that the surficial 0.2 m of top/subsoil is of use in any post-mining rehabilitation process. It will therefore be removed from within the open pit and waste rock dump (WRD) footprints and stored adjacent to the pits and dumps.

Table 4-1 details the clearing areas and stripping volumes for Mt Bundy Gold Project. The pit area and volume are based only on the material that needs to be cleared to ultimate limits.

Table 4-1 Clearing and Stripping Quantities

Area		Clearing Ha. ¹	Stripping BCM ¹
Rustlers Roost	Pit Total	29.4	58,798
	Waste Rock Dump	94.8	71,049
	ROM	13.1	43,397
	Haul Roads	1.8	219,273
	TSF	241.1	193,153
	Sub-Total	380.1	585,670
Q29	Pit Total	35.1	70,127
	Waste Rock Dump	25.0	50,052
	ROM	1.7	3,396
	Haul Roads	7.1	14,214
	Sub-Total	68.9	137,790
Project	Total	449.0	723,460

¹ includes a 10 m halo

4.7 Grade Control

Grade control costs were estimated as part of the mining costs, based on a reverse-circulation (RC) drilling methodology using a 12.5 m x 12.5 m drilling grid. It is assumed that the drilling component is contracted to a suitable drilling contractor.

Assaying of the samples (1 sample/metre) will take place in the laboratory on site.

4.8 Rehabilitation and Closure

Rehabilitation of the mining area consists of:

- Establishment of a closure bund around the final pits.
- Shaping of the waste dumps into suitable final land forms and placing of topsoil on the final surfaces. This surface area has been calculated as approx. 107 Ha for the Rustlers Roost project area and 24 Ha for the Q29 area.

5 OPEN PIT OPTIMISATION

5.1 Open Pit Optimisation Overview

The first stage of the conversion of a mineral resource into a mineable open pit reserve is the open pit optimisation process. It is at this stage that all the latest physical, technical and economic parameters are applied to the orebody to generate the “ideal” open pit excavation geometry.

If the economics of this “ideal” pit geometry (shell) are favourable, the shell can then be used as a guide in the pit design process (which follows the pit optimisation analysis).

The WHITTLE™ open pit optimisation software tool was utilised by Orelogy to undertake this component of the study. WHITTLE™ is a recognised, off the shelf, optimisation package.

It should be noted that the term “ore” is used in the following sections describing the optimisation process. It is used to describe mineralised material that the optimisation considered potentially economic. It should not be confused with the stricter definition of economically extractable material as denoted by ore in an “Ore Reserve”.

5.2 Open Pit Optimisation Methodology

In broad terms, the process that WHITTLE™ undertakes is to vary the base input price by a range of factors (referred to as the Revenue Factors), up and down from a base value of 1. For any given Revenue Factor WHITTLE™ then produces a three-dimensional shape, or “shell”, that generates the maximum possible value for all the input parameters and the associated factored price.

Lower factored prices will produce smaller shells; the higher price factor, the larger the shell. This results in a set of “nested” shells, with each shell lying inside the shell of the next largest Revenue Factor.

The value of each shell is reported at the base price. The effect of this is:

- Shells with a Revenue Factor <1 are smaller and have less ores than the shell with Revenue Factor 1. This reduces the revenue generated and therefore they will have a lower value.
- Shells with a Revenue Factor >1 are bigger and have relatively more waste. This increases the costs and therefore they will have a lower value.
- The result is the classic WHITTLE™ cash flow curve that peaks at the base price (i.e. Revenue Factor 1). The robustness of this shell is reflected in how quickly the value falls away either side of this peak.

These nested shells are important for a number of reasons:

- The smaller shells indicate the areas of highest value in the ore body and therefore give a guide as to where mining should commence.

- The larger shells provide an indication of how much additional mineralisation may become economic, or alternatively what current ore may become unviable, should input parameters (assumptions) change in the future.
- They permit WHITTLE™ to develop a “schedule” for mining the deposit over time and therefore allow a discounted cash flow (DCF) to be generated.

It is important to have some appreciation of how WHITTLE™ generates a DCF as these values are used in this study as a guide to both sensitivity and the shell selected as the basis for pit design. It should be noted that WHITTLE™ cash flows differ from accounting cash flows which include the effects of debt servicing, depreciation and taxation.

WHITTLE™ generates the following two standard DCF's:

Worst Case DCF assumes that, for any given shell, extraction is undertaken bench by bench sequentially from the top to bottom of the pit. This results in a significant amount of any overlying overburden being removed prior to presentation of ore (i.e. a large pre-strip), and there are no initial shells or stages that access higher value ore earlier in the schedule. This is clearly not a preferred pit extraction scenario from a value perspective.

Best Case DCF assumes that, for any given shell, extraction is undertaken sequentially from the smallest shell generated by the optimisation, through all the intervening shells out to the shell selected. This approach focuses on the highest value areas of the orebody and generates the least amount of waste stripping. As such it provides the highest DCF for the selected shell. However, this approach is constrained by practical considerations as it is effectively mining the orebody using an impractically high number of small incremental pushbacks that could not be achieved in reality as:

- The distances between successive shells are invariably too narrow to mine practically,
- The bench turnover required to mine the shell in the time frame is not achievable,
- The base of the shell is too small and constricted to allow for practical access or safe extraction.

Figure 5-1 and Figure 5-2 below give a schematic representation of the Worst Case DCF mining sequence and Best Case DCF mining sequence respectively. The figures show the amount of waste that needs to be moved to access the ore in the Worst Case is significantly more than in the Best Case, hence the two divergent cash flows are generated.

Figure 5-1 Worst Case DCF Mining Sequence

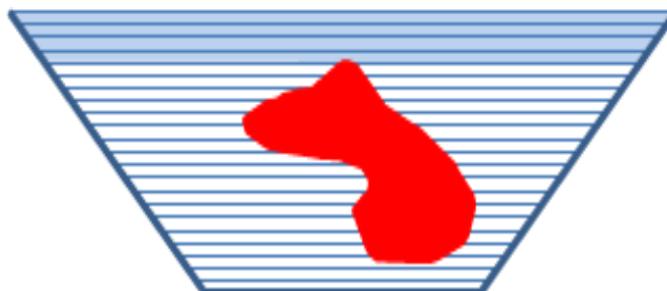
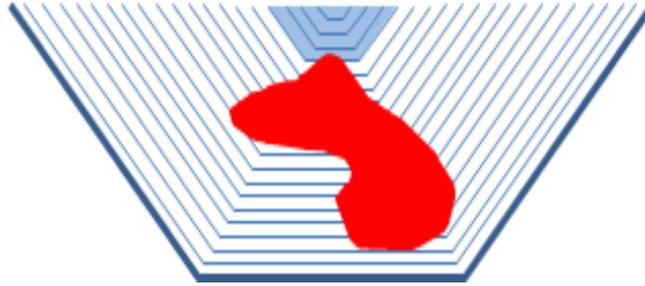


Figure 5-2 Best Case DCF Mining Sequence



In essence, these two DCF's provide the extremities of the theoretical value that can be generated from a deposit. The shell that represents what will happen in reality will in fact lie somewhere between these two endpoints. Consequently, the average of these two DCF's, referred to as the Average Case DCF, has been used as the comparative measure between the different scenarios assessed in this study.

It is important to realise that the cashflows, discounted and undiscounted, reported by WHITTLE™ differ from those in the project's financial model as it:

- Generally excludes financing costs,
- Does not account for the effects of taxation, and
- Is based on a high level annual mining schedule.

Section 5.3 and 5.4 below cover the optimisation work carried out as part of this PFS and detail the inputs and assumptions, results and sensitivity respectively.

5.3 Pit Optimisation - Inputs and Assumptions

5.3.1 Wall Slope Parameters

The wall slope parameter guidance for the open pit optimisation process was provided by independent geotechnical consultants Peter O'Bryan & Associates (Peter O'Bryan and Associates, March 2018). Their guidance provided inter-ramp slope angles for all walls and has been applied to both the Rustlers Roost and Q29 Projects.

The following wall design parameters for these domains are outlined in Figure 5-3.

Figure 5-3 Geotechnical Parameters – All Walls

Note that it is assumed that adequately depressurised wall rock conditions will be achieved.

Recommended *base case* wall design parameter limits for walls in the proposed Rustler’s Roost pit are listed below:

West wall:

	<i>Face height</i>	10m	surface to base of complete oxidation (BOCO)
		20m	BOCO to base of pit
	<i>Face angle</i>	50°	surface to BOCO
		60°	BOCO to top of fresh rock (TOFR)
		65°	TOFR to base of pit
	<i>Berm width</i>	5m	surface to BOCO
		7m	BOCO to base of pit

East wall:

	<i>Face height</i>	10m	surface to BOCO
		20m	BOCO to base of pit
	<i>Face angle</i>	50°	surface to BOCO
		60°	BOCO to base of pit
	<i>Berm width</i>	5m	surface to BOCO
		7m	BOCO to base of pit

All other walls:

	<i>Face height</i>	10m	surface to BOCO
		20m	BOCO to base of pit
	<i>Face angle</i>	50°	surface to BOCO
		60°	BOCO to TOFR
		70°	TOFR to base of pit
	<i>Berm width</i>	5m	surface to BOCO
		7m	BOCO to base of pit

After allowing for 26 m wide ramps on the western wall in the oxide/transitional profiles and on all walls in the fresh profile. A single lane 16 m wide ramp for the final 15 m of vertical development was also allowed for and the overall wall angles for each profile and sector are highlighted in Table 5-1.

Table 5-1 Overall wall slopes

Material	Overall angle ° (E, N, S W azimuths)
Oxide	38.1, 38.2, 39.2, 31.0
Transitional	38.1, 38.2, 39.2, 31.0
Fresh	47.2, 40.9 47.2 40.9

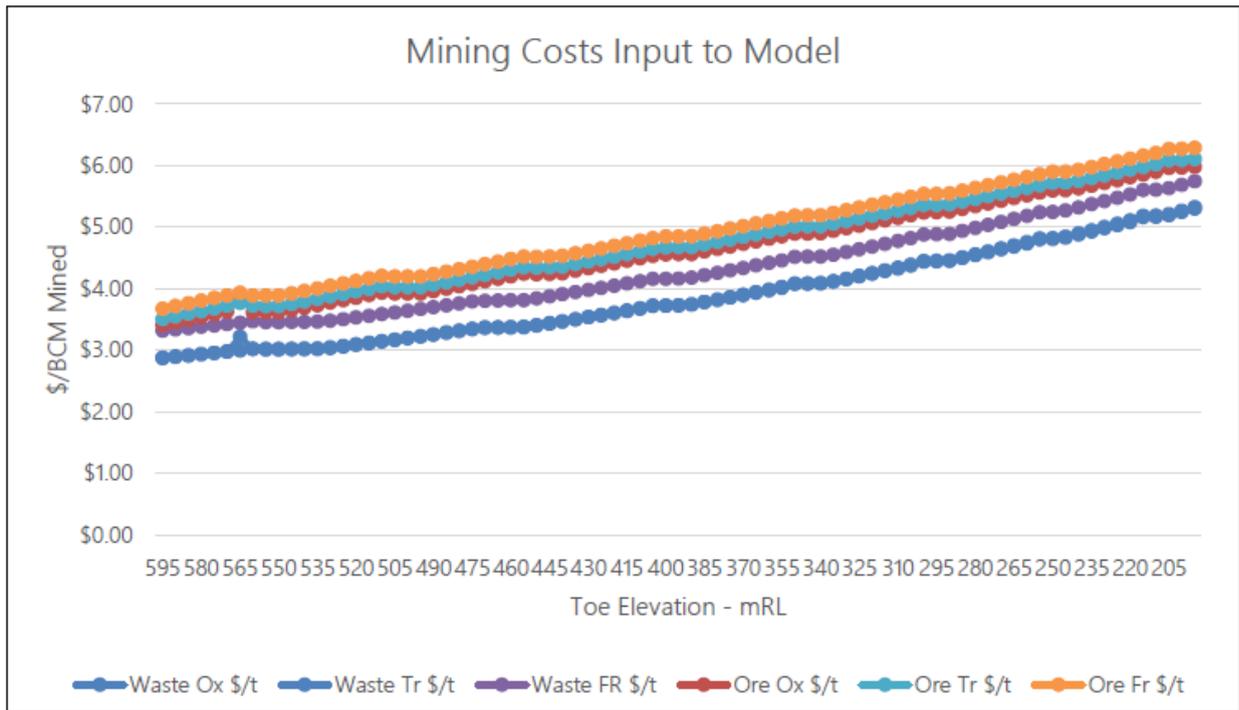
5.3.2 Mining Costs

The PFS cost model has been updated in a number of key parameters including margin and fuel price, with everything else remaining the same.

An owner operator estimate was developed from first principles with an updated margin of 20% added to replicate the use of a mine contractor. The estimate is based on a fixed/variable component and the following:

- 2 weeks on, 1 week off FIFO roster for operations.
- Allowances for owners and contractors fixed costs including labour.
- Adjusted fuel price to \$0.98/l diesel price (after allowing for rebate of \$0.42/l).
- Allowances for inclement weather plus all of the other normal operating delays. These delays are also equipment specific (i.e. loading versus drilling etc).
- Nominal 150 t class excavators loading a 90 t class payload haul truck supported by a standard ancillary equipment fleet. All equipment is new and hourly operating costs have been estimated from the ground up. Hourly operating costs include an allowance for ownership costs built into the hourly rate, so capital does not need to added. All other line items such as tyres, servicing, lubricants, GET and fuel is included. However, fuel for the haul trucks are excluded and added separately depending on the haul profile.
- Other allowances included are:
 - clearing, topsoil and rehabilitation,
 - grade control,
 - drill and blast (changes due to oxidation state),
 - crusher rehandle,
 - stockpile rehandle, and
 - dewatering.
- Haulage is defined by developing a series of haul profiles for a number of elevations which include inpit and expit haulage and are input into Talpac for cycle time calculations and fuel burn calculations. Regressions are fitted and used to code cycle times and fuel burns by bench for the haulage fleet.
- Waste and ore costs are calculated separately for each oxidation state with the difference between the two costs being defined as an ore mining premium (OMP). This OMP is added to the processing cost to calculate a total ore mining and processing cost.
- Contractor margin overheads and margins are added to both ore and waste unit rates.
- The costs are summarised for both ore and waste for each oxidation state in Figure 5-4 and are then imported into the block model which is then used to update the Whittle optimisation model.

Figure 5-4 Mining Cost (\$/t)



5.3.3 Processing Inputs

At the time of conducting the pit optimisation component of the work program, the processing plant throughput rate was set by PGL at 5.0 Mtpa with the process recovery set at 88% for all ore and the processing costs summarised in Table 5-2.

Other additional costs such as grade control, ore rehandling have been added to the mining costs and an ore premium has been calculated which is added to the total processing cost.

Table 5-2 Processing Cost (5.0 Mtpa)

Cost item	\$/t ore
Crushing & Grinding	\$2.82
Leaching & Elution	\$14.60
Tailings	\$0.52
Reagents & operating Consumables	\$0.35
Workshop & Lab	\$1.23
Administration	\$0.75
Total Processing Cost	\$20.27

Note these costs were updated to \$20.9/t ore to reflect changes in sustaining capital and G&A costs but have not been applied as part of the pit optimisation process.

5.3.4 Capital Costs Inputs

Capital has not been applied during the optimisation process but is expected to be ~\$280 M (excluding mining capital).

5.3.5 Revenue Inputs

The concentrate price, royalty assumptions and selling costs were provided by PGL and are summarised in Table 5-3. The NT government allows for two different streams of royalty calculation, with the greater of the following being used:

1. Net value approach.
2. Percentage of the metal.

An initial estimate of the net value based on previous results and updated costs & recoveries showed that the net value approach was always higher with an estimate of 5.67%.

Table 5-3 PFS Gold Price, Royalties and Selling Cost

Revenue Parameters	Unit	Values
Gold Price	AUD/oz	\$2,350.0
	AUD/gm	\$75.55
Govt Royalty (20% of net profit, equivalent of 5.67%)	AUD/gm	\$4.28
Gold Price (net)	AUD/oz	\$2,216.75
	AUD/gm	\$71.27

The optimisation discount rate was set at 6%.

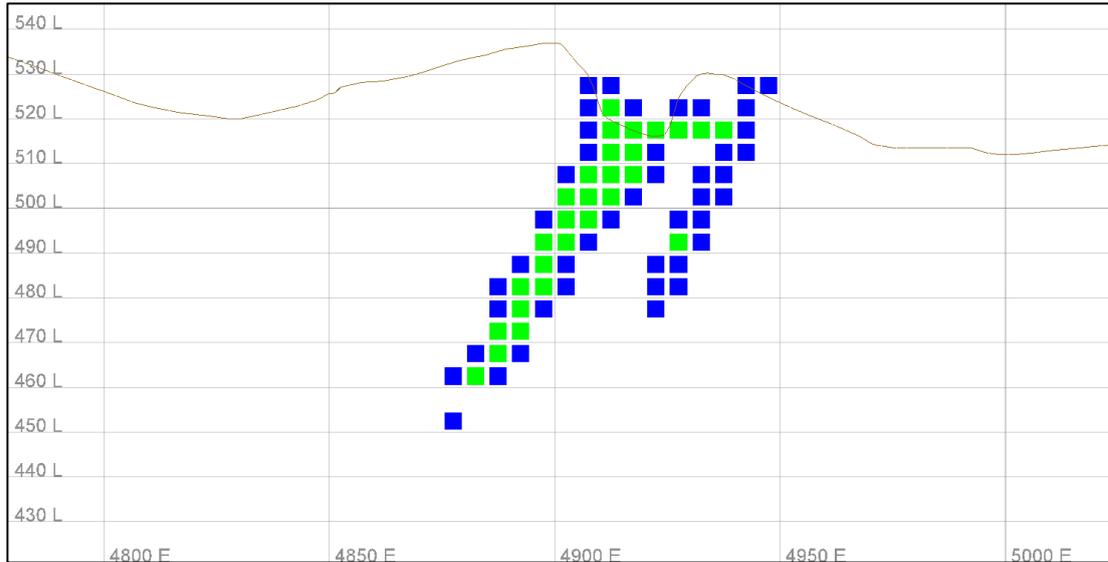
5.3.6 Modifying factors

As the Rustlers Roost model has been updated using the LUC approach, dilution has already been included in the model and a 1.5% ore loss has been allowed for.

Dilution and ore losses for Q29 are added to the geological model by way of an in-house approach developed by Orelogy.

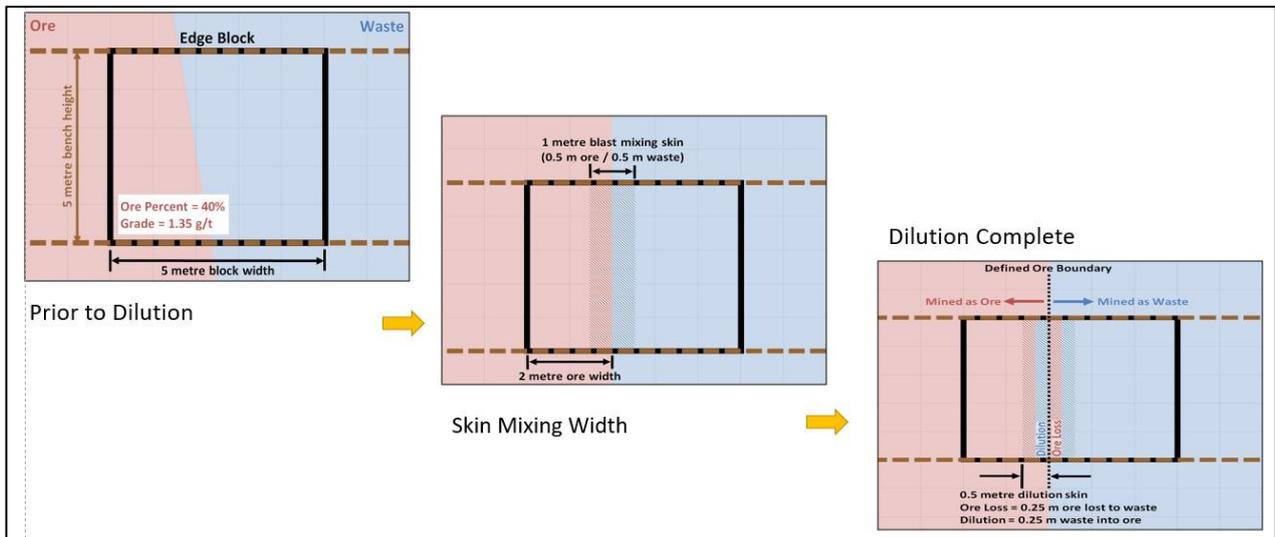
The approach focuses on diluted edge blocks of a mineralised zone as highlighted in Figure 5-5.

Figure 5-5 East section through the block model showing edge blocks



The procedure passes through each bench on each section and identifies these edge blocks and then adds a skin of waste. After mixing, the grade of the block is reduced by adding the diluent material which is outlined in the schematic in Figure 5-6. Hence, an ore loss is calculated as the grade of the block is reduced below a nominated cut-off grade. The skin width is dependent on the overall dip of the mineralisation, bench height and type of equipment being used to load the material.

Figure 5-6 Dilution process



In this process, 52.5% of the blocks were adjusted with the remaining blocks not adjusted. The Table 5-4 highlight the overall results of this process with a dilution factor of -9.6% on the grade and -9.4% loss on tonnage, with the grade of the block being reduced below 0.5 g/t.

Table 5-4 Dilution results at a 0.5 g/t cut-off

MS Undiluted			
Rescat	Tonnes	Au (g/t)	Ounces
I	3,821,538	1.08	132,412
F	2,670,398	0.93	79,476
I+F	6,491,937	1.02	211,893
MS Diluted			
Rescat	Tonnes	Au (g/t)	Ounces
I	3,532,919	1.08	122,275
F	2,349,770	0.92	69,276
I+F	5,882,689	1.01	191,554
Variation			
Rescat	Tonnes	Au (g/t)	Ounces
I	-7.6%	-0.1%	-7.7%
F	-12.0%	-0.9%	-12.8%
I+F	-9.4%	-0.2%	-9.6%

After applying these modifying actors, both models are then uploaded to Whittle 4X ready for optimising.

5.4 Pit Optimisation – Results

The Base Case optimisation has been undertaken using mineral resources after the application of dilution and ore loss.

The Whittle Base Case adopts a single set of input values for the variables described in Section 5.3.

The Whittle output, a series of nested shells, is summarised in Table 5-5, Table 5-6 and Table 5-7 Figure 5-7, Figure 5-8 and Figure 5-9. The following colour coding is used in the table.

	Maximum Worst Case DCF
	Maximum Best Case DCF
	Maximum Average DCF
	Shell Selected for Design

5.4.1 Shell Selection

A range of optimisations were completed for both the Rustlers Roost, Annie Okaley and Q29 projects.

The selected optimisations were run at a gold price of \$2,350/oz with no threshold grades applied. Pit designs were completed on these runs and were used for ore inventory calculations.

Updated process cost, process recovery data and gold price were received. Further discussion in Section 6.1.6 is also included.

Only Measured and Indicated ore was used for shell selection at a base case price of \$2,350/oz and are highlighted in green in Table 5-5 for Rustlers Roost. The selected shell was chosen to achieve desired target over a 1.0 Mozs in-situ as well as to maintain conservative approach.

All resource categories were used for shell generation for Q29 to assist with mining width with the assumption that the inferred ore would be drilled out prior to development (i.e. it will be mined at the end of Rustlers) with the results highlighted in Table 5-7. A minimum mining width approach was also used due to the nature of the mineralisation with the need to make the shells practical to mine and Shell 21 was selected for Q29 as this also maximised the value of the resource.

For Annie Okaley the shell 33 was selected with revenue factor 1 shell at A\$2,350 gold price, this is shown in Table 5-6.

Table 5-5 Rustlers Roost MIF Optimisation Results

Shell	Revenue Factor	Total Ore				Waste kt	Total kt	Financials (Undiscounted)				Discounted Cashflows			Selection Criteria		Strip Ratio				Mine Life	
		kt	Au oz	Rec Au oz	g/t			Mining Cost \$M	Ore Process Cost \$M	Selling \$M	Revenue \$M	Cashflow \$M	Best Case \$M	Worst Case \$M	Average Case \$M	Undiscounted Profit / Tonne Ore		Strip Ratio		Cost/oz		
																Overall	Incr.	Overall	Incr.	Overall		Incr.
1	0.300	262	11,797	10,393	1.40	51	312	-\$1	-\$5	-\$1	\$24	\$17	\$17	\$17	\$17	\$64.44		0.19		594.29		0.1
2	0.320	414	17,890	15,761	1.34	96	511	-\$2	-\$8	-\$2	\$37	\$25	\$25	\$25	\$25	\$60.59	\$53.99	0.23	0.30	623.72	680.72	0.1
3	0.340	501	21,310	18,774	1.32	110	611	-\$2	-\$10	-\$2	\$44	\$30	\$30	\$30	\$30	\$59.43	\$53.87	0.22	0.16	631.74	673.67	0.1
4	0.360	628	26,031	22,934	1.29	175	802	-\$2	-\$13	-\$3	\$54	\$36	\$36	\$36	\$36	\$57.16	\$48.19	0.28	0.51	652.69	747.24	0.1
5	0.380	991	38,714	34,107	1.22	480	1,471	-\$4	-\$20	-\$5	\$80	\$51	\$51	\$51	\$51	\$51.86	\$42.70	0.48	0.84	710.50	829.17	0.2
6	0.400	1,247	46,979	41,389	1.17	632	1,879	-\$6	-\$25	-\$6	\$97	\$61	\$61	\$61	\$61	\$49.06	\$38.21	0.51	0.59	739.15	873.33	0.2
7	0.420	1,513	55,336	48,751	1.14	782	2,294	-\$7	-\$30	-\$6	\$115	\$71	\$71	\$71	\$71	\$46.87	\$36.61	0.52	0.56	762.56	894.13	0.3
8	0.440	5,987	181,575	159,968	0.94	3,342	9,329	-\$29	-\$119	-\$21	\$376	\$206	\$193	\$193	\$193	\$34.35	\$30.12	0.56	0.57	931.12	1,005.01	1.2
9	0.460	11,904	345,792	304,643	0.90	7,811	19,715	-\$63	-\$237	-\$41	\$716	\$375	\$340	\$337	\$339	\$31.49	\$28.60	0.66	0.76	986.24	1,047.18	2.4
10	0.480	16,641	474,680	418,193	0.89	11,512	28,153	-\$91	-\$332	-\$56	\$983	\$504	\$445	\$439	\$442	\$30.28	\$27.23	0.69	0.78	1,011.92	1,080.83	3.3
11	0.500	20,138	570,085	502,245	0.88	14,742	34,880	-\$114	-\$401	-\$67	\$1,180	\$598	\$518	\$507	\$513	\$29.71	\$27.03	0.73	0.92	1,025.37	1,092.27	4.0
12	0.520	22,426	630,557	555,521	0.87	17,213	39,639	-\$130	-\$447	-\$74	\$1,305	\$655	\$561	\$548	\$554	\$29.20	\$24.68	0.77	1.08	1,037.99	1,156.97	4.5
13	0.540	24,587	685,806	604,195	0.87	19,884	44,471	-\$146	-\$490	-\$80	\$1,420	\$704	\$597	\$579	\$588	\$28.63	\$22.67	0.81	1.24	1,051.85	1,210.01	4.9
14	0.560	27,007	748,822	659,712	0.86	23,451	50,458	-\$166	-\$538	-\$88	\$1,550	\$759	\$636	\$614	\$625	\$28.09	\$22.69	0.87	1.47	1,066.67	1,227.94	5.4
15	0.580	30,901	849,490	748,401	0.86	30,167	61,067	-\$201	-\$616	-\$100	\$1,759	\$843	\$694	\$663	\$678	\$27.27	\$21.57	0.98	1.72	1,090.74	1,269.82	6.2
16	0.600	32,829	894,949	788,450	0.85	32,250	65,079	-\$215	-\$654	-\$105	\$1,853	\$879	\$718	\$684	\$701	\$26.78	\$18.83	0.98	1.08	1,101.90	1,310.32	6.6
17	0.620	36,195	974,757	858,761	0.84	37,144	73,339	-\$243	-\$721	-\$114	\$2,018	\$940	\$757	\$715	\$736	\$25.96	\$18.00	1.03	1.45	1,122.62	1,355.03	7.2
18	0.640	37,852	1,014,502	893,776	0.83	40,381	78,233	-\$260	-\$754	-\$119	\$2,100	\$968	\$775	\$728	\$751	\$25.57	\$17.04	1.07	1.95	1,133.89	1,410.19	7.6
19	0.660	38,488	1,029,767	907,224	0.83	41,721	80,209	-\$266	-\$766	-\$121	\$2,132	\$978	\$781	\$732	\$757	\$25.42	\$16.36	1.08	2.11	1,138.47	1,443.14	7.7
20	0.680	39,247	1,046,601	922,056	0.83	42,952	82,199	-\$273	-\$782	-\$123	\$2,167	\$989	\$788	\$737	\$762	\$25.20	\$14.18	1.09	1.62	1,144.14	1,490.70	7.8
21	0.700	40,398	1,073,678	945,910	0.83	45,774	86,172	-\$287	-\$804	-\$126	\$2,223	\$1,005	\$797	\$740	\$769	\$24.88	\$14.15	1.13	2.45	1,153.97	1,534.26	8.1
22	0.720	43,332	1,138,646	1,003,147	0.82	52,448	95,780	-\$320	-\$863	-\$134	\$2,357	\$1,041	\$818	\$742	\$780	\$24.02	\$12.09	1.21	2.27	1,179.24	1,596.80	8.7
23	0.740	43,493	1,141,787	1,005,914	0.82	52,648	96,140	-\$321	-\$866	-\$134	\$2,364	\$1,042	\$819	\$742	\$781	\$23.97	\$10.35	1.21	1.25	1,180.44	1,615.51	8.7
24	0.760	44,095	1,154,604	1,017,206	0.81	54,051	98,146	-\$328	-\$878	-\$135	\$2,390	\$1,049	\$823	\$742	\$783	\$23.78	\$10.09	1.23	2.33	1,185.97	1,678.43	8.8
25	0.780	44,846	1,171,470	1,032,065	0.81	56,377	101,223	-\$339	-\$893	-\$137	\$2,425	\$1,056	\$827	\$741	\$784	\$23.55	\$10.00	1.26	3.10	1,193.54	1,711.59	9.0
26	0.800	45,337	1,181,753	1,041,124	0.81	57,631	102,969	-\$345	-\$903	-\$139	\$2,447	\$1,060	\$829	\$741	\$785	\$23.39	\$8.65	1.27	2.55	1,198.36	1,747.73	9.1
27	0.820	45,581	1,186,018	1,044,881	0.81	57,930	103,511	-\$347	-\$908	-\$139	\$2,455	\$1,062	\$830	\$741	\$786	\$23.30	\$6.49	1.27	1.22	1,200.50	1,795.04	9.1
28	0.840	45,893	1,191,319	1,049,552	0.81	58,307	104,200	-\$349	-\$914	-\$140	\$2,466	\$1,064	\$831	\$741	\$786	\$23.18	\$5.60	1.27	1.21	1,203.36	1,843.26	9.2
29	0.860	46,385	1,201,306	1,058,350	0.81	59,768	106,153	-\$356	-\$924	-\$141	\$2,487	\$1,067	\$833	\$740	\$786	\$22.99	\$6.05	1.29	2.97	1,208.98	1,878.49	9.3
30	0.880	46,937	1,212,342	1,068,073	0.80	61,480	108,416	-\$364	-\$935	-\$142	\$2,510	\$1,069	\$835	\$737	\$786	\$22.78	\$5.20	1.31	3.10	1,215.46	1,921.35	9.4
31	0.900	47,315	1,219,116	1,074,042	0.80	62,310	109,625	-\$368	-\$942	-\$143	\$2,524	\$1,071	\$835	\$736	\$786	\$22.63	\$3.95	1.32	2.19	1,219.63	1,966.17	9.5
32	0.920	47,949	1,231,590	1,085,031	0.80	64,486	112,436	-\$377	-\$955	-\$144	\$2,550	\$1,073	\$837	\$732	\$784	\$22.38	\$3.61	1.34	3.43	1,227.62	2,008.52	9.6
33	0.940	48,609	1,241,454	1,093,721	0.79	65,260	113,869	-\$382	-\$968	-\$146	\$2,570	\$1,075	\$837	\$730	\$784	\$22.11	\$2.00	1.34	1.17	1,234.27	2,064.63	9.7
34	0.960	49,086	1,249,413	1,100,733	0.79	66,275	115,360	-\$387	-\$977	-\$147	\$2,587	\$1,075	\$838	\$729	\$783	\$21.91	\$1.72	1.35	2.13	1,239.78	2,099.47	9.8
35	0.980	49,927	1,264,628	1,114,137	0.79	68,992	118,920	-\$399	-\$994	-\$148	\$2,618	\$1,076	\$838	\$724	\$781	\$21.56	\$1.07	1.38	3.23	1,250.73	2,149.72	10.0
36	1.000	50,258	1,270,118	1,118,974	0.79	69,826	120,083	-\$403	-\$1,001	-\$149	\$2,629	\$1,076	\$838	\$723	\$780	\$21.42	\$0.43	1.39	2.52	1,254.73	2,175.43	10.1
37	1.020	50,906	1,282,174	1,129,595	0.78	72,302	123,207	-\$414	-\$1,014	-\$150	\$2,654	\$1,076	\$838	\$719	\$778	\$21.14	-\$0.21	1.42	3.82	1,263.89	2,229.46	10.2
38	1.040	51,382	1,290,221	1,136,684	0.78	73,810	125,192	-\$421	-\$1,023	-\$151	\$2,671	\$1,076	\$838	\$716	\$777	\$20.94	-\$1.07	1.44	3.16	1,270.30	2,290.70	10.3
39	1.060	51,879	1,298,230	1,143,741	0.78	75,186	127,065	-\$427	-\$1,033	-\$152	\$2,688	\$1,075	\$837	\$713	\$775	\$20.72	-\$1.69	1.45	2.77	1,276.89	2,338.14	10.4
40	1.080	52,084	1,301,602	1,146,712	0.78	75,868	127,951	-\$430	-\$1,037	-\$153	\$2,695	\$1,074	\$837	\$711	\$774	\$20.63	-\$2.32	1.46	3.33	1,279.76	2,384.97	10.4
41	1.100	52,280	1,304,465	1,149,233	0.78	76,327	128,607	-\$433	-\$1,041	-\$153	\$2,701	\$1,074	\$837	\$709	\$773	\$20.54	-\$2.88	1.46	2.33	1,282.29	2,433.86	10.5
42	1.120	52,534	1,308,767	1,153,024	0.77	77,362	129,896	-\$437	-\$1,046	-\$153	\$2,709	\$1,073	\$836	\$707	\$771	\$20.42	-\$3.91	1.47	4.08	1,286.17	2,462.83	10.5
43	1.140	53,023	1,316,359	1,159,712	0.77	78,969	131,991	-\$444	-\$1,056	-\$154	\$2,725	\$1,071	\$835	\$703	\$769	\$20.19	-\$4.63	1.49	3.29	1,293.47	2,515.95	10.6
44	1.160	53,297	1,320,215	1,163,109	0.77	79,753	133,050	-\$448	-\$1,061	-\$155	\$2,733	\$1,069	\$834	\$700	\$767	\$20.06	-\$4.97	1.50	2.86	1,297.37	2,627.55	10.7
45	1.180	53,496	1,323,123	1,165,671	0.77	80,447	133,943	-\$451	-\$1,065	-\$155	\$2,739	\$1,068	\$834	\$698	\$766	\$19.96	-\$6.55	1.50	3.49	1,300.54	2,741.36	10.7
46	1.200	53,745	1,326,882	1,168,983	0.77	81,364	135,109	-\$455	-\$1,070	-\$156	\$2,747	\$1,066	\$833	\$696	\$764	\$19.84	-\$7.07	1.51	3.68	1,304.59	2,731.40	10.7

Figure 5-7 Rustlers Roost MIF Optimisation Results

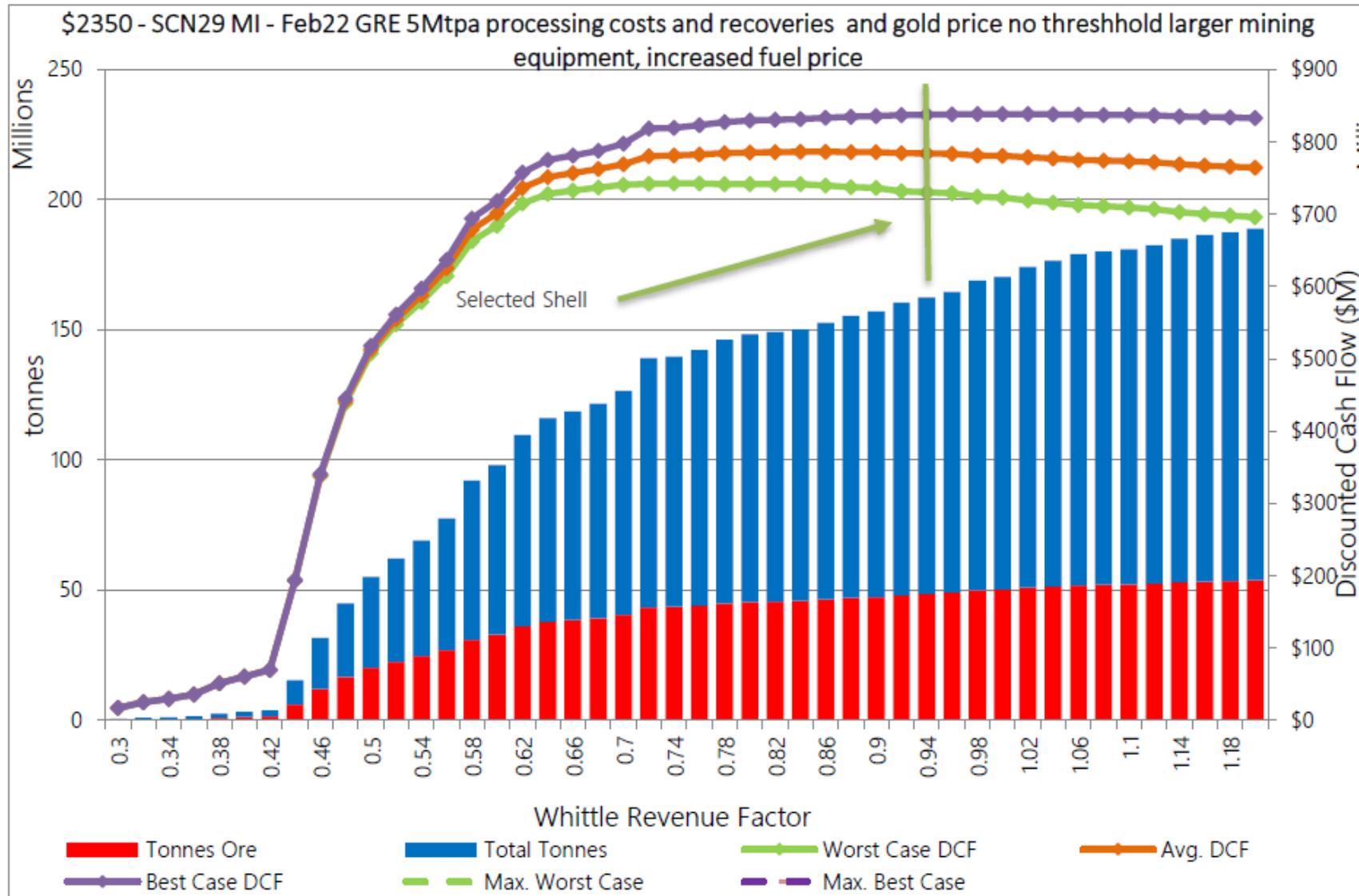


Table 5-6 Annie Okaley MIF Optimisation Results

Shell	Revenue Factor							Financials (Undiscounted)					Discounted Cashflows			Selection Criteria				Mine Life		
		Total Ore				Waste	Total	Mining Cost	Ore Process Cost	Selling	Revenue	Cashflow	Best Case	Worst Case	Average Case	Undiscounted Profit / Tonne Ore		Strip Ratio			Cost/oz	
		kt	Au oz	Rec Au oz	g/t	kt	kt	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M	Overall	Incr.	Overall	Incr.		Overall	Incr.
1	0.300	11	573	498	1.67	11	21	\$0	\$0	\$0	\$1	\$1	\$1	\$1	\$1	\$77.69		1.01		552.38		0.0
2	0.320	13	696	604	1.64	14	27	\$0	\$0	\$0	\$1	\$1	\$1	\$1	\$1	\$75.73	\$67.45	1.07	1.31	565.78	628.16	0.0
3	0.340	15	752	653	1.60	15	29	\$0	\$0	\$0	\$2	\$1	\$1	\$1	\$1	\$73.26	\$50.55	1.00	0.44	576.96	716.49	0.0
4	0.360	15	764	663	1.60	15	30	\$0	\$0	\$0	\$2	\$1	\$1	\$1	\$1	\$72.94	\$55.95	1.00	0.87	578.67	691.70	0.0
5	0.380	16	791	686	1.58	15	31	\$0	\$0	\$0	\$2	\$1	\$1	\$1	\$1	\$71.81	\$48.27	0.97	0.41	584.10	737.45	0.0
6	0.400	16	812	704	1.56	16	32	\$0	\$0	\$0	\$2	\$1	\$1	\$1	\$1	\$71.02	\$48.14	0.99	1.45	589.65	797.98	0.0
7	0.420	17	867	752	1.54	19	36	\$0	\$0	\$0	\$2	\$1	\$1	\$1	\$1	\$69.34	\$49.27	1.08	2.20	604.67	826.27	0.0
8	0.440	18	882	765	1.54	20	38	\$0	\$0	\$0	\$2	\$1	\$1	\$1	\$1	\$68.92	\$48.51	1.13	3.17	609.41	882.04	0.0
9	0.480	19	914	793	1.52	22	41	\$0	\$0	\$0	\$2	\$1	\$1	\$1	\$1	\$67.50	\$39.33	1.17	2.01	620.76	935.69	0.0
10	0.500	114	5,132	4,453	1.40	629	743	-\$2	-\$2	-\$1	\$10	\$5	\$5	\$5	\$5	\$47.38	\$43.43	5.51	6.36	1,001.29	1,083.71	0.0
11	0.520	120	5,457	4,735	1.41	685	806	-\$2	-\$2	-\$1	\$11	\$6	\$6	\$6	\$6	\$47.69	\$53.62	5.70	9.33	1,005.55	1,072.67	0.0
12	0.540	121	5,467	4,744	1.41	686	806	-\$2	-\$2	-\$1	\$11	\$6	\$6	\$6	\$6	\$47.62	\$25.36	5.69	1.28	1,005.78	1,135.81	0.0
13	0.580	126	5,628	4,883	1.39	697	823	-\$2	-\$3	-\$1	\$11	\$6	\$6	\$6	\$6	\$46.61	\$25.26	5.51	1.94	1,010.64	1,175.97	0.0
14	0.600	128	5,658	4,910	1.38	698	826	-\$2	-\$3	-\$1	\$12	\$6	\$6	\$6	\$6	\$46.35	\$20.59	5.47	1.21	1,011.92	1,245.49	0.0
15	0.620	128	5,667	4,918	1.38	699	827	-\$2	-\$3	-\$1	\$12	\$6	\$6	\$6	\$6	\$46.27	\$19.71	5.46	1.41	1,012.33	1,280.50	0.0
16	0.640	131	5,754	4,994	1.37	711	842	-\$2	-\$3	-\$1	\$12	\$6	\$6	\$6	\$6	\$45.76	\$22.93	5.44	4.31	1,017.43	1,347.90	0.0
17	0.660	144	6,130	5,320	1.33	770	914	-\$3	-\$3	-\$1	\$13	\$6	\$6	\$6	\$6	\$43.45	\$19.93	5.36	4.59	1,042.84	1,431.72	0.0
18	0.680	181	7,418	6,437	1.27	1,041	1,223	-\$4	-\$4	-\$1	\$15	\$7	\$7	\$7	\$7	\$38.91	\$21.59	5.74	7.18	1,120.04	1,487.55	0.0
19	0.700	185	7,507	6,514	1.26	1,051	1,237	-\$4	-\$4	-\$1	\$15	\$7	\$7	\$7	\$7	\$38.41	\$14.55	5.68	2.63	1,124.54	1,502.19	0.0
20	0.720	191	7,655	6,643	1.25	1,077	1,267	-\$4	-\$4	-\$1	\$16	\$7	\$7	\$7	\$7	\$37.78	\$16.27	5.65	4.68	1,132.54	1,536.63	0.0
21	0.740	200	8,006	6,947	1.25	1,170	1,370	-\$4	-\$4	-\$1	\$16	\$7	\$7	\$7	\$7	\$37.05	\$21.47	5.86	10.44	1,152.24	1,582.54	0.0
22	0.760	207	8,210	7,125	1.23	1,209	1,416	-\$4	-\$4	-\$1	\$17	\$8	\$7	\$7	\$7	\$36.21	\$14.06	5.84	5.16	1,163.86	1,618.90	0.0
23	0.780	209	8,247	7,156	1.23	1,216	1,425	-\$4	-\$4	-\$1	\$17	\$8	\$7	\$7	\$7	\$36.04	\$11.48	5.83	5.07	1,166.24	1,699.29	0.0
24	0.800	213	8,370	7,263	1.22	1,242	1,456	-\$4	-\$4	-\$1	\$17	\$8	\$8	\$8	\$8	\$35.50	\$11.44	5.83	5.55	1,174.36	1,717.27	0.0
25	0.820	226	8,701	7,551	1.20	1,317	1,543	-\$5	-\$5	-\$1	\$18	\$8	\$8	\$8	\$8	\$34.03	\$9.51	5.82	5.78	1,197.80	1,790.94	0.0
26	0.840	228	8,766	7,607	1.19	1,333	1,561	-\$5	-\$5	-\$1	\$18	\$8	\$8	\$8	\$8	\$33.78	\$10.04	5.83	6.92	1,202.27	1,800.35	0.0
27	0.860	238	9,047	7,851	1.18	1,416	1,654	-\$5	-\$5	-\$1	\$18	\$8	\$8	\$8	\$8	\$32.84	\$9.46	5.96	9.09	1,222.76	1,861.57	0.0
28	0.880	245	9,222	8,003	1.17	1,455	1,700	-\$5	-\$5	-\$1	\$19	\$8	\$8	\$8	\$8	\$32.03	\$6.37	5.94	5.17	1,235.61	1,899.89	0.0
29	0.900	249	9,326	8,093	1.16	1,483	1,733	-\$5	-\$5	-\$1	\$19	\$8	\$8	\$8	\$8	\$31.59	\$5.34	5.95	6.86	1,243.84	1,972.69	0.0
30	0.920	259	9,538	8,277	1.15	1,533	1,792	-\$5	-\$5	-\$1	\$19	\$8	\$8	\$8	\$8	\$30.55	\$4.05	5.92	5.08	1,260.69	2,002.92	0.1
31	0.940	266	9,682	8,402	1.13	1,568	1,834	-\$5	-\$5	-\$1	\$20	\$8	\$8	\$8	\$8	\$29.84	\$2.59	5.90	5.14	1,272.85	2,075.69	0.1
32	0.960	697	22,491	19,517	1.00	6,009	6,706	-\$20	-\$14	-\$3	\$46	\$9	\$9	\$9	\$9	\$13.16	\$2.88	8.62	10.30	1,746.67	2,104.86	0.1
33	1.000	703	22,680	19,682	1.00	6,080	6,783	-\$20	-\$14	-\$3	\$46	\$9	\$9	\$9	\$9	\$13.07	\$2.56	8.65	12.18	1,749.85	2,126.15	0.1
34	1.040	728	23,605	20,484	1.01	6,468	7,196	-\$22	-\$15	-\$3	\$48	\$9	\$9	\$9	\$9	\$12.57	-\$1.27	8.88	15.26	1,769.71	2,256.91	0.1
35	1.060	729	23,618	20,495	1.01	6,471	7,200	-\$22	-\$15	-\$3	\$48	\$9	\$9	\$9	\$9	\$12.56	-\$1.96	8.88	4.88	1,770.02	2,340.70	0.1
36	1.100	736	23,886	20,727	1.01	6,597	7,333	-\$22	-\$15	-\$3	\$49	\$9	\$9	\$9	\$9	\$12.38	-\$5.82	8.96	17.78	1,777.01	2,393.45	0.1
37	1.120	751	24,384	21,160	1.01	6,835	7,586	-\$23	-\$15	-\$3	\$50	\$9	\$9	\$9	\$9	\$11.99	-\$7.52	9.10	16.28	1,791.21	2,471.23	0.1
38	1.140	791	25,722	22,321	1.01	7,454	8,246	-\$25	-\$16	-\$3	\$52	\$9	\$9	\$9	\$9	\$10.96	-\$8.16	9.42	15.22	1,828.22	2,502.83	0.2
39	1.160	806	26,190	22,728	1.01	7,690	8,496	-\$26	-\$16	-\$3	\$53	\$9	\$8	\$8	\$8	\$10.56	-\$10.70	9.54	15.85	1,842.16	2,608.12	0.2
40	1.180	817	26,497	22,993	1.01	7,834	8,651	-\$26	-\$16	-\$3	\$54	\$8	\$8	\$8	\$8	\$10.29	-\$10.31	9.59	13.83	1,851.18	2,622.17	0.2

Figure 5-8 Annie Okaley MIF Optimisation Results

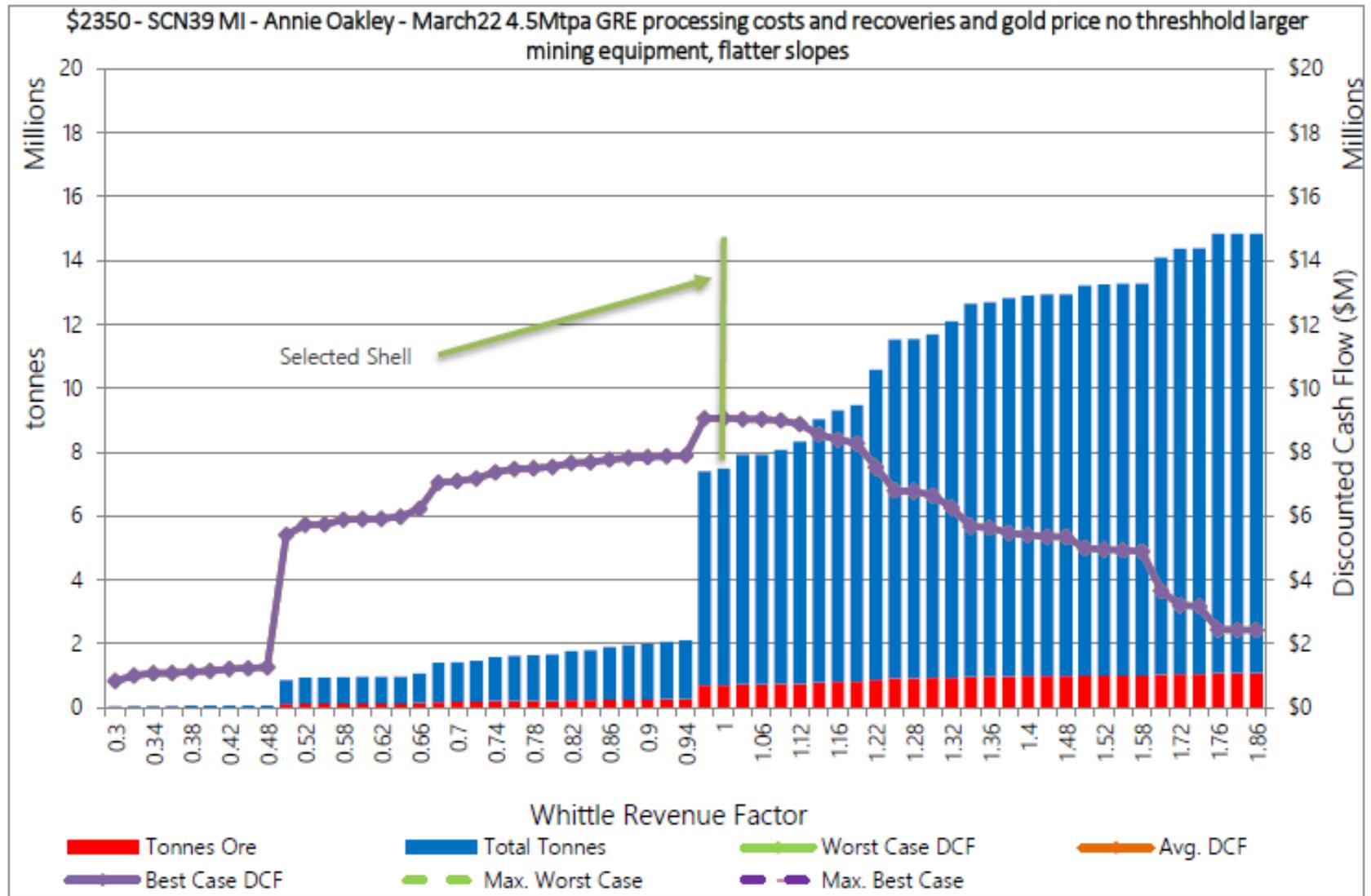


Table 5-7 Quest 29 MIF Optimisation Results

Shell	Revenue Factor					Financials (Undiscounted)							Discounted Cashflows			Selection Criteria				Mine Life		
		Total Ore				Waste	Total	Mining Cost	Ore Process Cost	Selling	Revenue	Cashflow	Best Case	Worst Case	Average Case	Undiscounted Profit / Tonne Ore		Strip Ratio			Cost/oz	
		kt	Au oz	Rec Au oz	g/t	kt	kt	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M	Overall	Incr.	Overall	Incr.		Overall	Incr.
1	0.500	849	35,565	31,333	1.30	1,467	2,315	-\$8	-\$19	-\$4	\$74	\$43	\$41	\$41	\$41	\$50.44		1.73		850.35		0.4
2	0.520	912	37,549	33,080	1.28	1,584	2,496	-\$8	-\$20	-\$4	\$78	\$45	\$43	\$43	\$43	\$49.01		1.74		866.10		0.4
3	0.540	985	39,887	35,141	1.26	1,746	2,731	-\$9	-\$22	-\$5	\$83	\$47	\$45	\$45	\$45	\$47.53		1.77		883.99		0.5
4	0.560	1,119	43,978	38,745	1.22	2,057	3,176	-\$11	-\$25	-\$5	\$91	\$50	\$48	\$48	\$48	\$45.01		1.84		916.48		0.5
5	0.580	1,369	51,181	45,091	1.16	2,611	3,980	-\$13	-\$30	-\$6	\$106	\$56	\$53	\$53	\$53	\$41.07		1.91		969.83		0.7
6	0.600	1,507	55,220	48,648	1.14	2,947	4,454	-\$15	-\$34	-\$6	\$114	\$59	\$55	\$55	\$55	\$39.47		1.96		994.18		0.7
7	0.620	1,579	57,130	50,331	1.13	3,081	4,660	-\$16	-\$35	-\$7	\$118	\$61	\$57	\$57	\$57	\$38.61		1.95		1,005.85		0.8
8	0.640	2,032	73,593	64,835	1.13	5,500	7,532	-\$26	-\$45	-\$9	\$152	\$73	\$66	\$65	\$66	\$35.86		2.71		1,092.87		1.3
9	0.660	2,253	79,896	70,389	1.10	6,168	8,421	-\$29	-\$50	-\$9	\$165	\$77	\$70	\$69	\$69	\$34.28		2.74		1,119.78		1.4
10	0.680	2,397	83,405	73,479	1.08	6,444	8,841	-\$30	-\$53	-\$10	\$173	\$79	\$71	\$70	\$71	\$33.15		2.69		1,135.29		1.5
11	0.700	2,536	86,833	76,500	1.07	6,756	9,292	-\$32	-\$56	-\$10	\$180	\$82	\$73	\$72	\$72	\$32.16		2.66		1,150.74		1.5
12	0.720	2,668	90,044	79,329	1.05	7,068	9,736	-\$33	-\$59	-\$11	\$186	\$83	\$75	\$73	\$74	\$31.27		2.65		1,165.36		1.6
13	0.740	2,812	93,597	82,459	1.04	7,491	10,303	-\$35	-\$63	-\$11	\$194	\$85	\$76	\$74	\$75	\$30.32		2.66		1,182.63		1.7
14	0.760	3,134	101,542	89,459	1.01	8,533	11,667	-\$39	-\$70	-\$12	\$210	\$89	\$79	\$76	\$77	\$28.44		2.72		1,220.32		1.9
15	0.780	3,267	104,641	92,188	1.00	8,892	12,159	-\$41	-\$73	-\$12	\$217	\$91	\$80	\$77	\$78	\$27.72		2.72		1,234.38		2.0
16	0.800	3,470	109,318	96,309	0.98	9,502	12,971	-\$44	-\$77	-\$13	\$226	\$93	\$81	\$78	\$80	\$26.66		2.74		1,256.20		2.2
17	0.820	3,734	115,797	102,017	0.96	10,510	14,244	-\$48	-\$83	-\$14	\$240	\$95	\$83	\$79	\$81	\$25.45		2.82		1,285.39		2.4
18	0.840	3,882	119,101	104,928	0.95	10,977	14,859	-\$50	-\$86	-\$14	\$247	\$96	\$84	\$79	\$82	\$24.76		2.83		1,300.64		2.5
19	0.860	4,070	123,192	108,532	0.94	11,559	15,629	-\$53	-\$91	-\$14	\$255	\$97	\$85	\$79	\$82	\$23.92		2.84		1,319.72		2.6
20	0.880	4,797	140,167	123,487	0.91	14,532	19,329	-\$65	-\$107	-\$16	\$290	\$102	\$88	\$79	\$83	\$21.18		3.03		1,393.82		3.2
21	0.900	5,009	144,990	127,737	0.90	15,379	20,387	-\$69	-\$111	-\$17	\$300	\$103	\$89	\$79	\$84	\$20.50		3.07		1,412.90		3.4
22	0.920	5,203	149,573	131,774	0.89	16,321	21,524	-\$73	-\$116	-\$18	\$310	\$103	\$89	\$78	\$84	\$19.89		3.14		1,431.39		3.6
23	0.940	5,775	162,156	142,859	0.87	18,596	24,371	-\$83	-\$128	-\$19	\$336	\$105	\$90	\$76	\$83	\$18.26		3.22		1,478.52		4.1
24	0.960	6,116	170,490	150,202	0.87	20,451	26,567	-\$91	-\$136	-\$20	\$353	\$106	\$91	\$75	\$83	\$17.39		3.34		1,508.42		4.4
25	0.980	6,353	176,015	155,070	0.86	21,687	28,041	-\$96	-\$141	-\$21	\$364	\$107	\$91	\$74	\$82	\$16.80		3.41		1,528.42		4.7
26	1.000	6,459	178,186	156,981	0.86	22,136	28,595	-\$98	-\$144	-\$21	\$369	\$107	\$91	\$73	\$82	\$16.53		3.43		1,536.57		4.8
27	1.020	6,769	185,178	163,142	0.85	23,815	30,584	-\$105	-\$150	-\$22	\$383	\$107	\$90	\$70	\$80	\$15.74		3.52		1,563.63		5.1
28	1.040	6,853	186,887	164,647	0.85	24,190	31,044	-\$106	-\$152	-\$22	\$387	\$106	\$90	\$70	\$80	\$15.53		3.53		1,570.30		5.2
29	1.060	6,935	188,571	166,131	0.85	24,604	31,539	-\$108	-\$154	-\$22	\$390	\$106	\$90	\$69	\$80	\$15.32		3.55		1,577.20		5.3
30	1.080	7,348	197,803	174,264	0.84	27,163	34,511	-\$118	-\$163	-\$23	\$409	\$105	\$89	\$65	\$77	\$14.26		3.70		1,615.63		5.8
31	1.100	7,554	202,425	178,337	0.83	28,496	36,050	-\$124	-\$168	-\$24	\$419	\$104	\$89	\$62	\$76	\$13.75		3.77		1,634.30		6.0
32	1.120	7,724	206,023	181,506	0.83	29,455	37,179	-\$128	-\$172	-\$24	\$427	\$103	\$88	\$61	\$75	\$13.34		3.81		1,649.20		6.2
33	1.140	7,906	209,858	184,885	0.83	30,548	38,454	-\$132	-\$176	-\$25	\$434	\$102	\$88	\$59	\$73	\$12.90		3.86		1,665.18		6.4
34	1.160	7,986	211,223	186,087	0.82	30,872	38,859	-\$134	-\$177	-\$25	\$437	\$102	\$87	\$58	\$73	\$12.71		3.87		1,671.17		6.5
35	1.180	8,077	213,000	187,653	0.82	31,390	39,467	-\$136	-\$179	-\$25	\$441	\$101	\$87	\$57	\$72	\$12.49		3.89		1,679.30		6.6
36	1.200	8,243	216,852	191,046	0.82	32,728	40,972	-\$141	-\$183	-\$25	\$449	\$99	\$86	\$55	\$71	\$12.04		3.97		1,697.08		6.8

Figure 5-9 Quest 29 MIF Optimisation Results

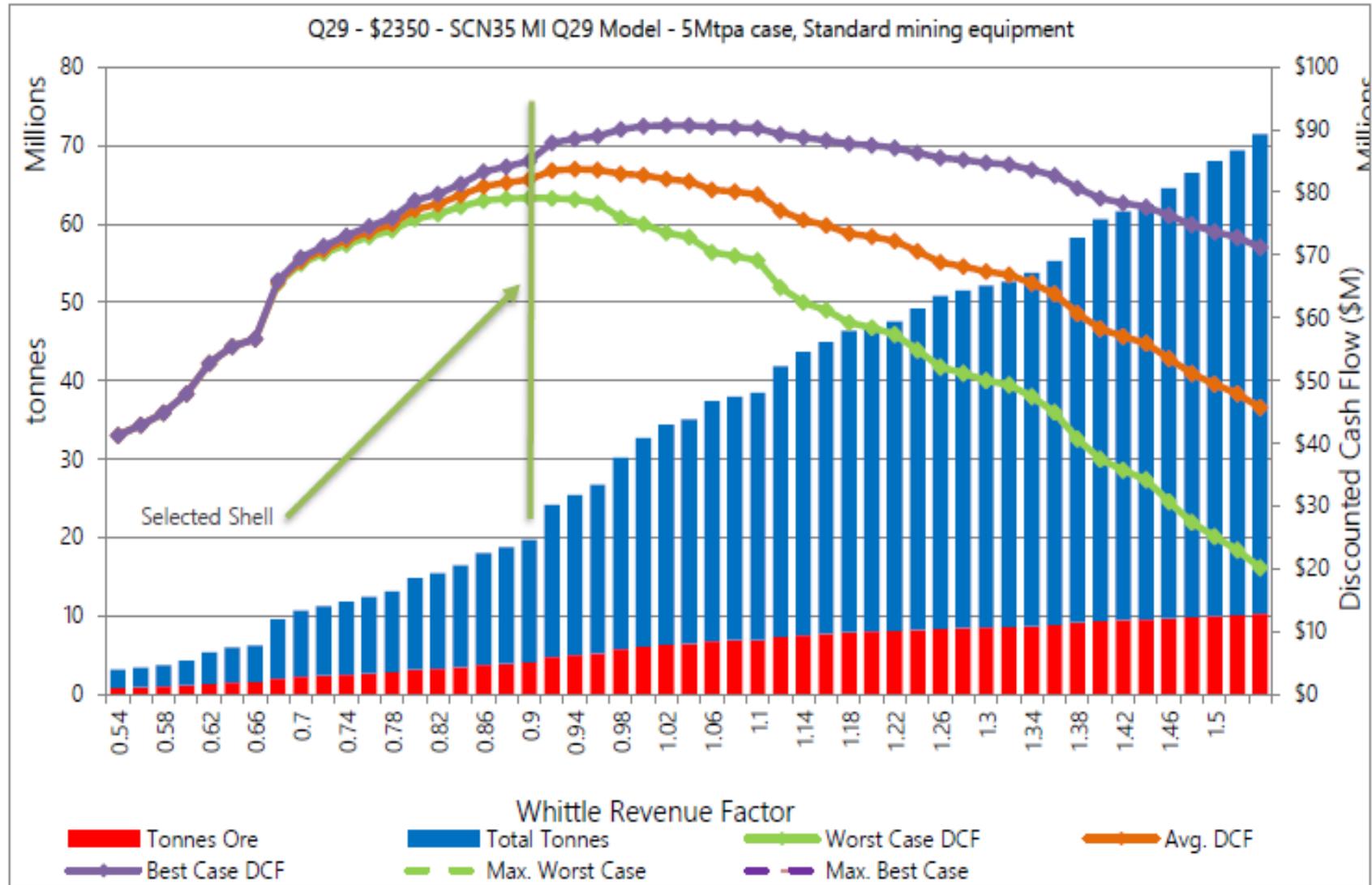


Figure 5-10 Rustlers Roost

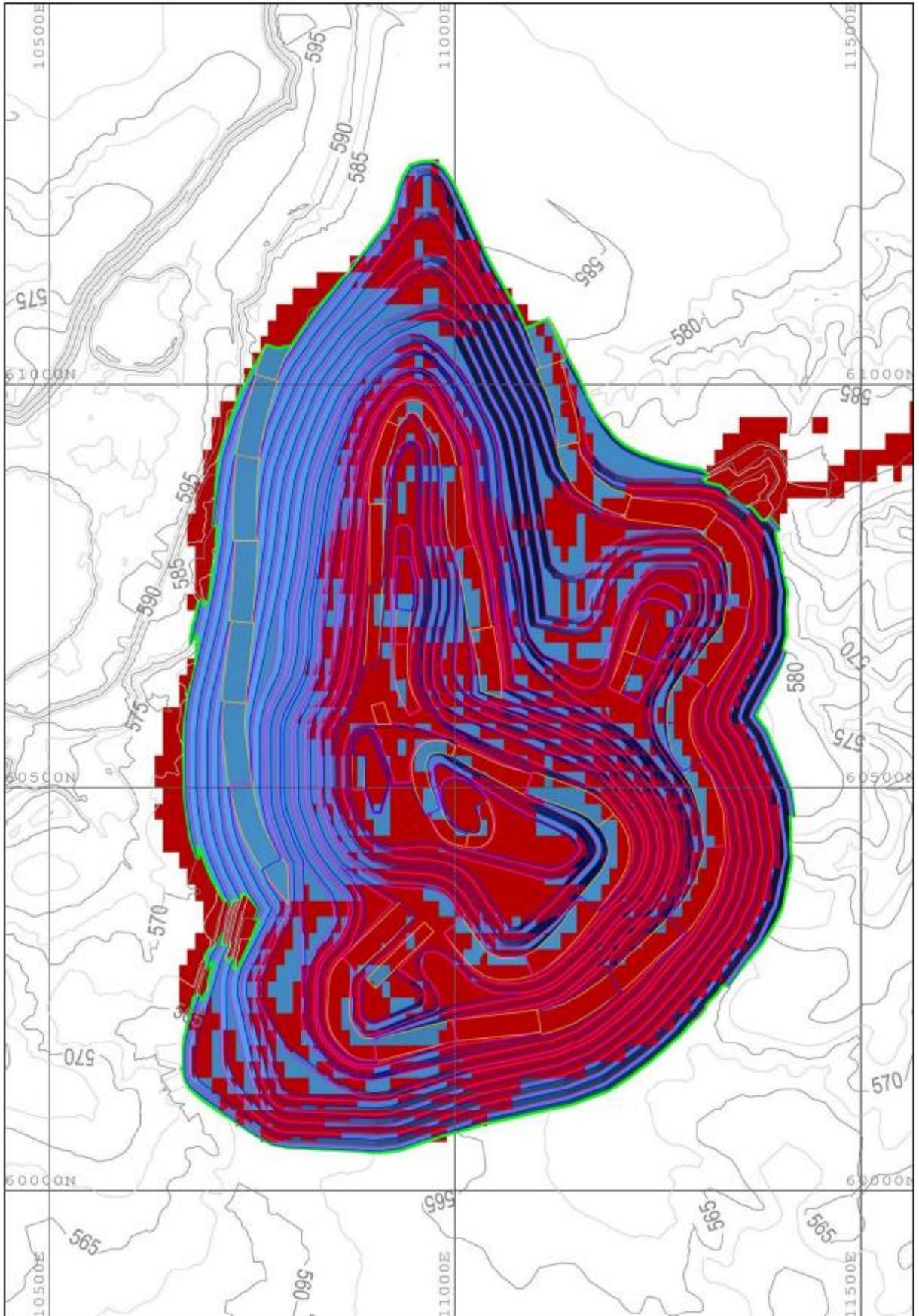


Figure 5-11 Annie Okaley

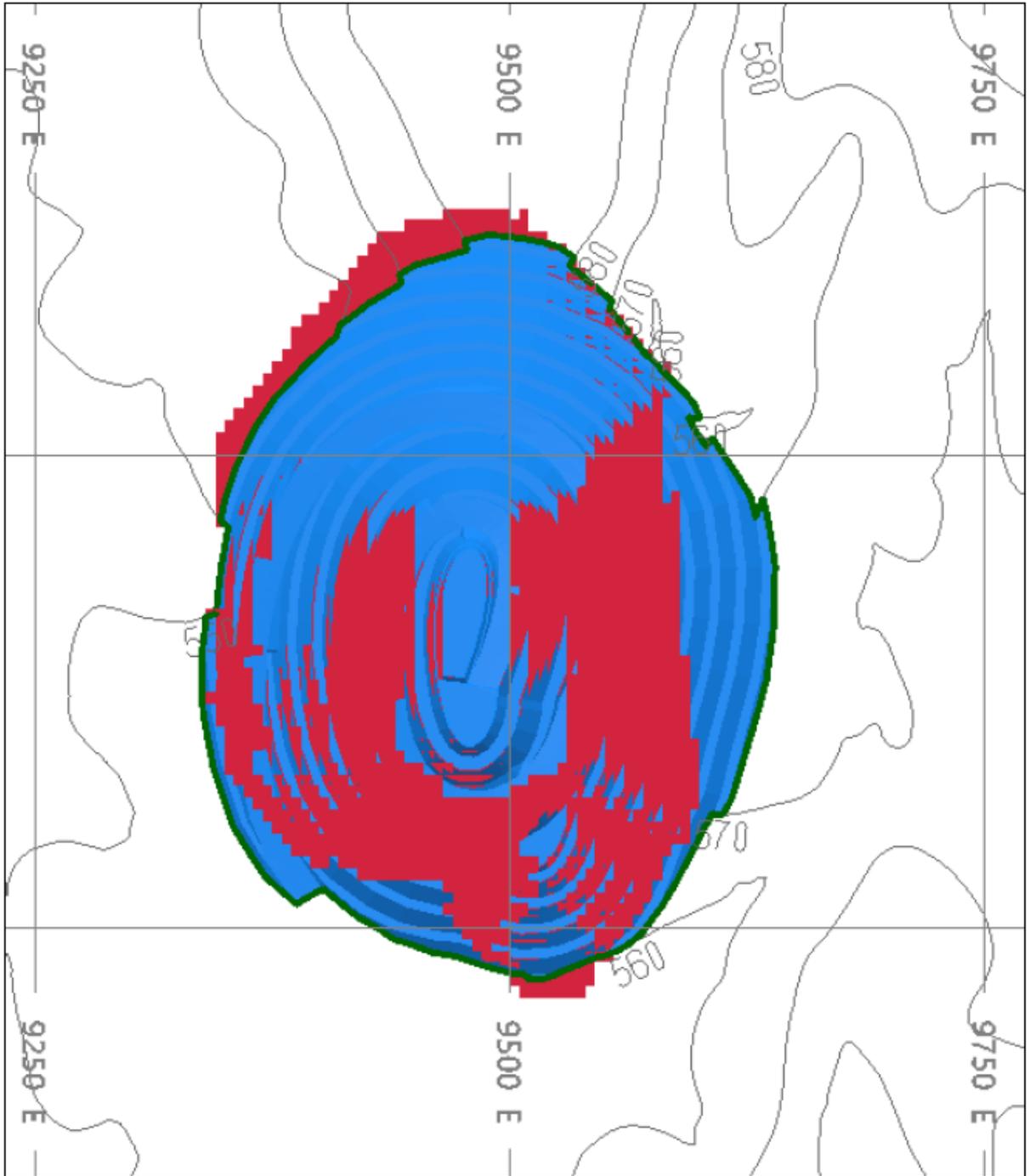


Figure 5-12 Quest 29 – North Koolpin

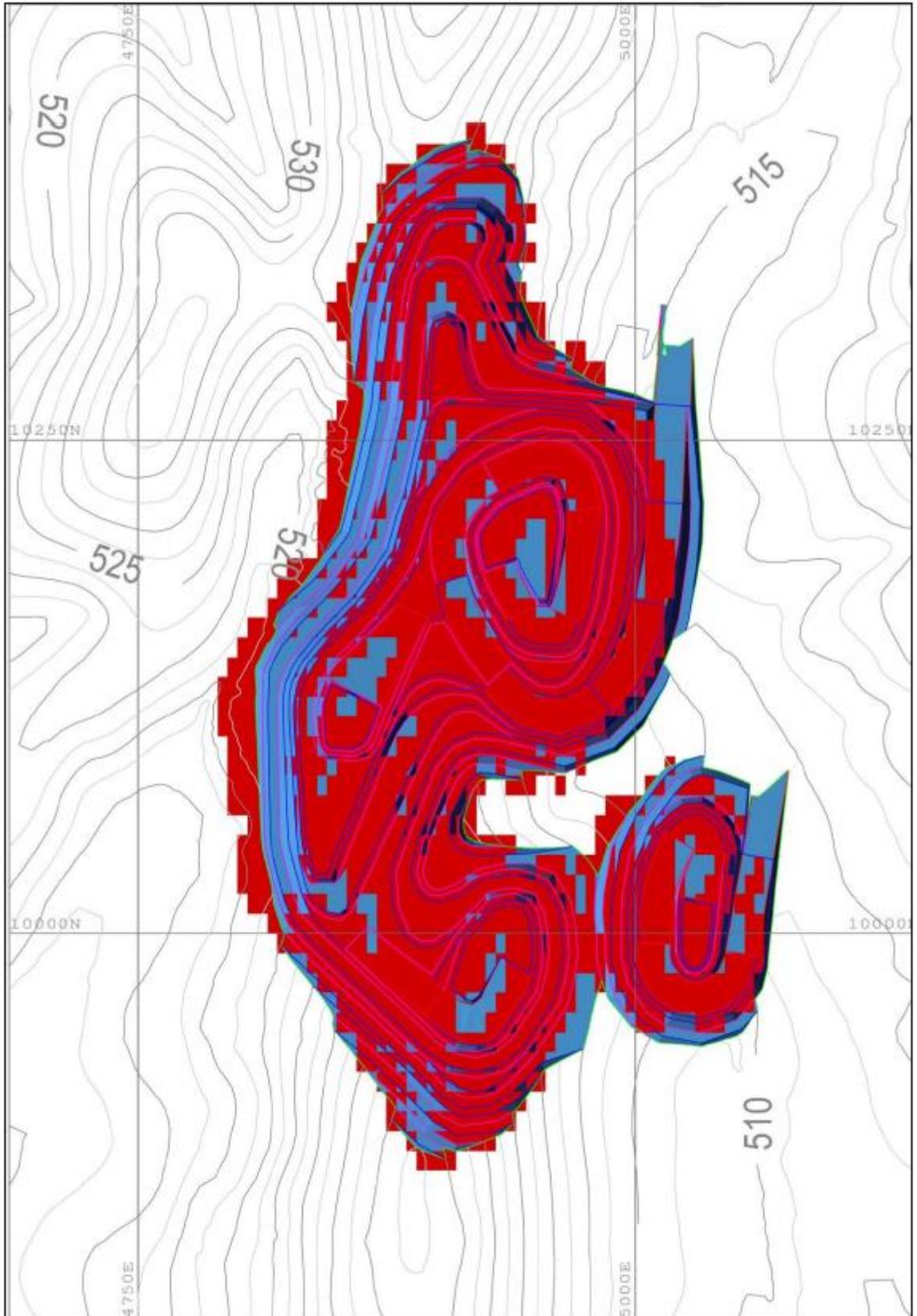


Figure 5-13 Quest 29 – Mobile Hill

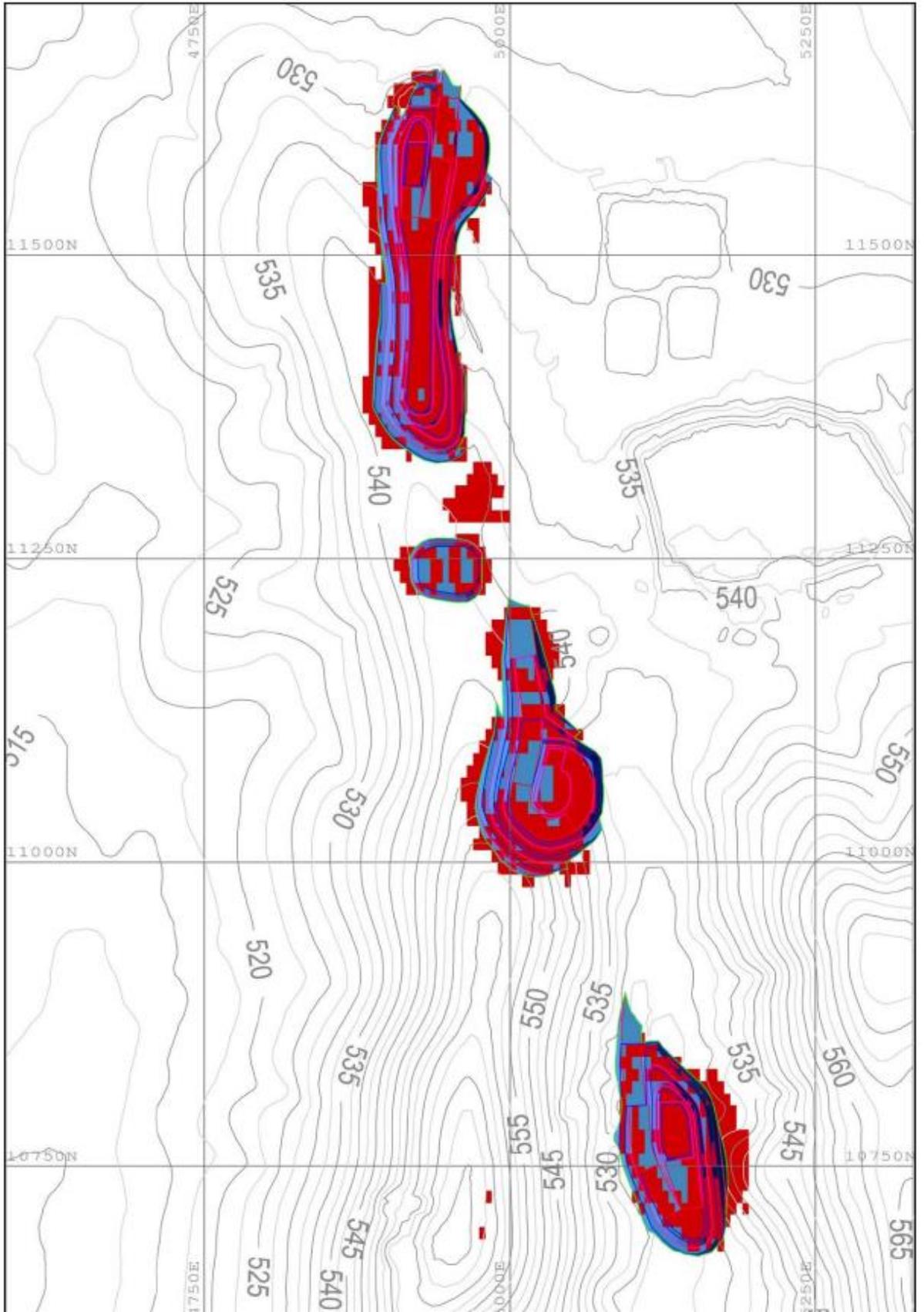
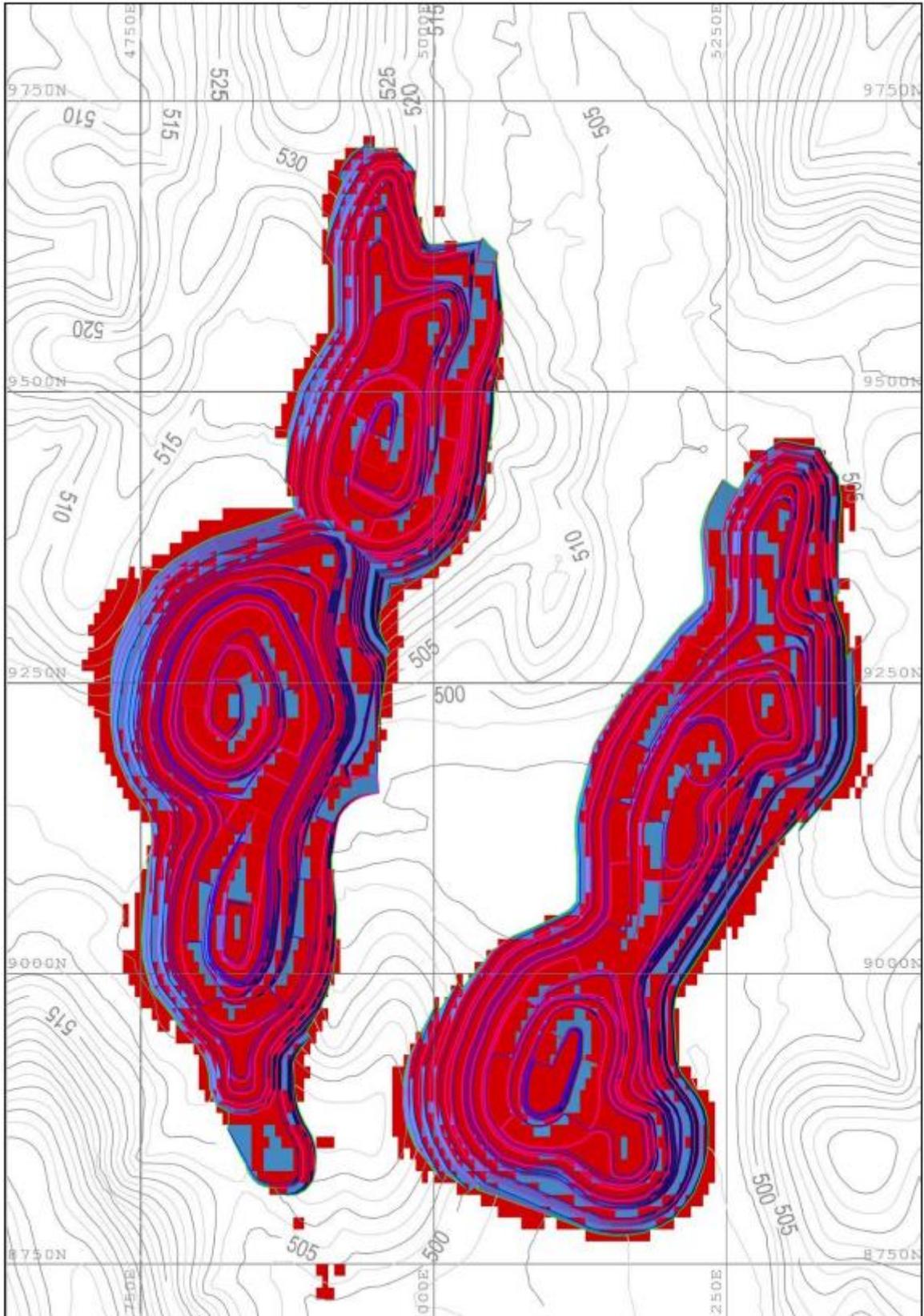


Figure 5-14 Quest 29 – Zamu & Taipan (Koolpin West)



5.4.2 Sensitivity

Since the 2021 PFS for Rustlers Roost & Quest 29, the resource drilling has improved the confidence significantly. The Table 5-9 outlines the selected scenarios for Rustlers Roost, Quest 29 and Annie Okaley which is the PFS MI Option at a \$2,350/oz gold price. Limited sensitivity analysis shows:

- Using mining costs and a \$2,350/oz gold price, the combined project contained ounces have increased by ~36%, total pit size by ~13% and overall cashflow by ~20% which isolates the impact of the model change only.
- The inclusion of inferred material has a minor impact on ounces, total pit size and overall cashflow.
- A reduction in the oxide processing cost outlines a reasonable change in all key parameters.
- The latest updated where process costs decreased, process recovery increased and the gold price increased to \$2,350/oz has a significant effect on cashflow. Including Inferred ore adds to this significant effect on ore tonnes, total tonnes and cashflow.
- The higher gold price has a significant effect on project size, ore tonnage and cashflow.

Table 5-9 Sensitivity Scenario Detail

Scenario	Description	Selection Basis	Optimal Shell #	Revenue Factor	Material		Cont. Au	Rec. Au	Waste	Total	Financials (Undiscounted)				Discounted Cashflows			Mine Life	Strip Ratio	Cost per Oz.	
					Total Ore						Mining Cost	Ore Process Cost	Selling	Revenue	Cashflow	Best Case	Worst Case				Average Case
					Kt	g/t															
SCN21	\$2350 MI Base Case - 2021 PFS - Updated GRE processing costs and recoveries - no threshold	Best Case	36	1.00	45,215	0.83	1,201,532	1,021,302	66,729	111,944	-\$401.1	-\$948.3	-\$136.0	\$2,399.9	\$914.6	\$693.2	\$585.9	\$639.6	11.30	1.48	1,321
SCN29	\$2350 - SCN29 MI - Feb22 GRE 5Mtpa processing costs and recoveries and gold price no threshold larger mining equipment, increased fuel price	Selected	32	0.92	47,949	0.80	1,231,590	1,085,031	64,486	112,436	-\$377.2	-\$954.8	-\$144.4	\$2,549.7	\$1,073.2	\$836.7	\$731.7	\$784.2	9.59	1.34	1,228
SCN38	\$2350 - SCN38 MI - November 2021 4.5Mtpa GRE processing costs and recoveries and gold price no threshold larger mining equipment, increased fuel price	Best Case	36	1.00	49,226	0.80	1,259,294	1,109,438	70,739	119,965	-\$395.6	-\$1,001.3	-\$147.7	\$2,607.0	\$1,062.4	\$831.6	\$717.2	\$774.4	9.85	1.44	1,259
Scenario 28 2021 PFS	\$2350 SC28 - Q29 MIF - 2021 PFS - Updated GRE costs & Recoveries, gold price with 0.5 g/t threshold	Best Case	35	0.98	3,796	1.15	140,481	119,408	14,955	18,751	-\$63.9	-\$88.2	-\$15.9	\$280.6	\$112.6	\$106.5	\$106.5	\$106.5	0.90	3.94	1,274
SCN35	Q29 - \$2350 - SCN35 MI Q29 Model - 5Mtpa case, Standard mining equipment	Selected	20	0.90	5,009	0.90	144,990	127,737	15,379	20,387	-\$69.1	-\$111.4	-\$17.0	\$300.2	\$102.7	\$88.5	\$78.9	\$83.7	3.40	3.07	1,413
SCN40	Q29 - \$2350 - SCN40 MI Q29 Model - 4.5Mtpa case, Standard mining equipment	Best Case	26	1.00	6,164	0.87	172,490	151,964	21,155	27,319	-\$93.3	-\$139.6	-\$20.2	\$357.1	\$103.9	\$88.5	\$72.3	\$80.4	4.55	3.43	1,533
SCN39	\$2350 - SCN39 MI - Annie Okaley - November 2021 4.5Mtpa GRE processing costs and recoveries and gold price no threshold larger mining equipment	Best Case	33	1.00	909	1.03	30,006	26,039	6,760	7,668	-\$23.3	-\$18.2	-\$3.5	\$61.2	\$16.2	\$16.0	\$16.0	\$16.0	0.18	7.44	1,593
SCN41	\$2350 - SCN41 MI - Annie Okaley - November 2021 4.5Mtpa GRE processing costs and recoveries and gold price no threshold larger mining equipment, flatter slopes	Selected	33	1.00	703	1.00	22,680	19,682	6,080	6,783	-\$20.3	-\$14.1	-\$2.6	\$46.2	\$9.2	\$9.1	\$9.1	\$9.1	0.14	8.65	1,750

6 MINE DESIGN

6.1 Mine Design Criteria

The pit designs are in accordance with the optimisation shell selection process outlined in Section 5.4.1.

6.1.1 Slope Design Criteria

The pit slope design parameters (also utilised in the optimisation process) are based on the guidelines provided by Peter O'Bryan and Associates and are highlighted in Figure 5-3.

6.1.2 Ramps, Switchbacks and Road Design Widths

All ramps for use by mine equipment in the Rustlers Roost Pit were designed to accommodate Caterpillar 777G dump trucks with a 90 t payload. It is industry practice to design main ramps with pavement width of 3.0-3.5 times the width of the largest truck utilised and as such a design width of 26 m has been used. The design allows for safe passing of trucks, wall side drainage and pit side bunding.

Pit ramps and haul roads have a maximum gradient of 10%.

For the benches at the pit bottom, a single lane ramp width of 16 m was adopted to reflect the lower traffic intensity on this section of ramp and to minimize waste development. The maximum length of a single lane ramp is 150 m (i.e. 15 m vertical).

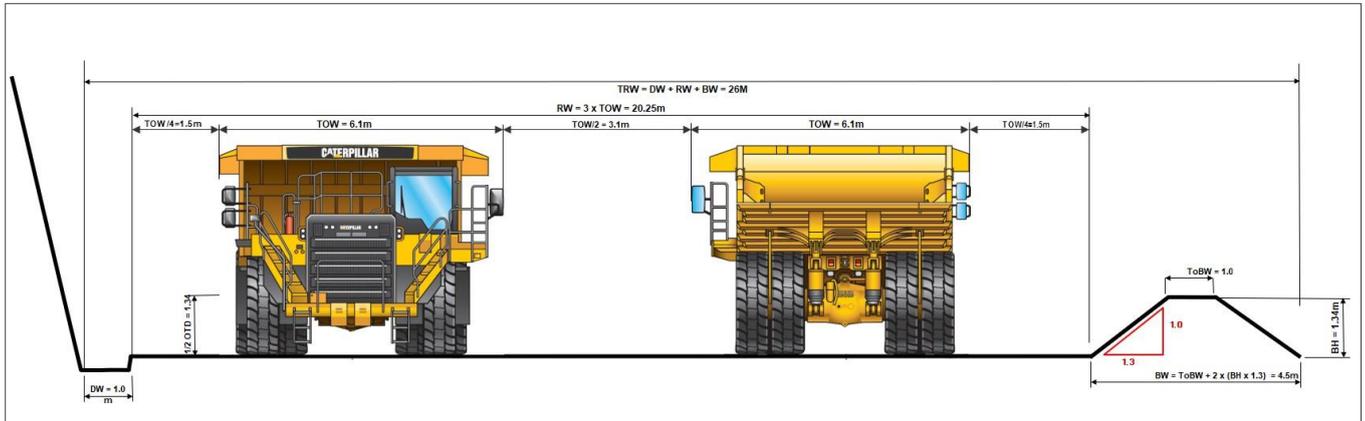
As a provision for wet conditions, a 1.0 m allowance for a drain on the high-wall side to capture run-off water from the pit wall surface was included. To facilitate surface drainage of the roadway, a 2% cross-slope is planned.

A shoulder barrier, or safety berm, on the outside edge should be constructed to a height equal to the radius of the largest tyre using the ramp. A 27.00R49 tyre of a Caterpillar 777G has a diameter of 2.7 m. Using design bund slopes of 1.3H: 1V with a 1.0 m flat top, the required bund width is 4.5 m. The ramp design specifications are summarized in Table 6-1 and highlighted in Figure 6-1. A similar approach is developed for single lane ramps as well as ex-pit ramps.

Table 6-1 Ramp Design Criteria

Road Type	Truck Width m	Tyre		Height (BH) m	Bund		Drain Width (DW) m	Running Width		Total Ramp Width (TRW) m
		Type	Outside Tire Diameter (OTD) m		Top of Bund Width (ToBW) m	Width (BW) m		Multiplier Value	Width (RW) m	
2-way	6.55	27.00R49	2.7	1.3	1	4.5	1	3.3	20.3	26
1-Way	6.55	27.00R49	2.7	1.3	1	4.5	1	1.7	10.5	16

Figure 6-1 Dual Lane Ramp Configuration



6.1.3 Minimum Mining Width

Pit designs were undertaken with safe, efficient and practical extraction of ore and waste as the aim. This meant that a minimum mining width was applied at all stages to ensure that adequate space is available for equipment to access mining areas and congestion can be avoided. Based on a 150 t excavator and a Caterpillar 777G truck, a safe mining width of 20 m was used to allow space for machine clearance and excavator slew. ‘Goodbye’ cuts were designed to be easily diggable with the excavator.

Table 6-2 shows the minimum widths used for the pit designs.

Table 6-2 Minimum Mining Widths

Parameter	Unit	Value
Minimum mining width	m	20
Goodbye cuts	m	15

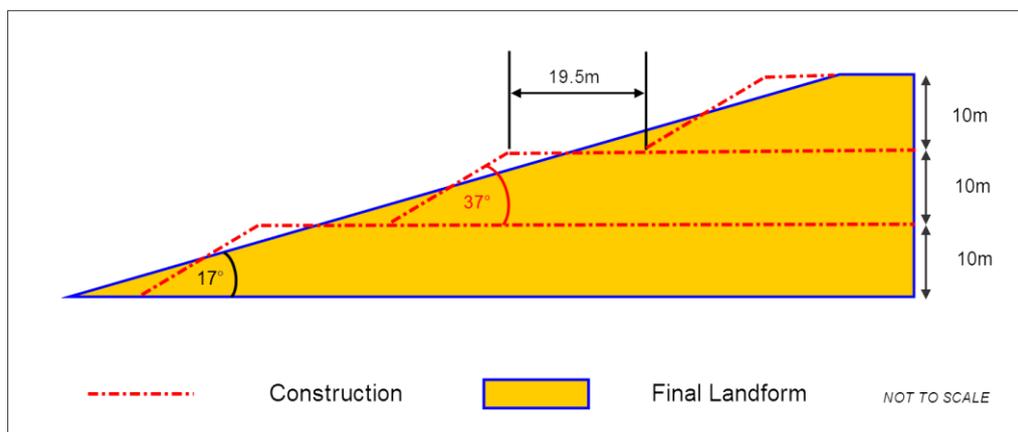
6.1.4 Waste Rock Dump Design Criteria

Waste material will be disposed in Waste Rock Dumps (WRD’s) adjacent to the pit. The area to the West of the pit was selected as the primary dump locations to minimize haulage distances and to keep the haulage cost low (i.e. close to pit exit).

The waste dump construction and final landform as highlighted in Figure 6-2 are based on the following criteria:

- Waste dumps must be within the mining lease boundary.
- The Eastern waste dump to be integrated with the TSF.
- The swell factor utilised to calculate the placed material in the dump is 30%.
- Dump face angle is 37° during construction in 10m lifts with a continuous 17° slope on the final landform.
- Berm width of 19.5 m during construction.

Figure 6-2 Waste Dump Schematic



Additional considerations relating to the construction of WRD's are:

- All topsoil and soft, organic or saturated cohesive soils within the pit footprints should be stripped.
- Poorer quality waste materials (for example weathered material or materials with sulphides) should be disposed of within the central areas of the waste dump, and should not be placed near the outer slopes or toe areas. Temporary containment of such materials with bunds of better quality waste rock may be required as part of dump operations.
- Catchment of waste dump runoff may be required for sediment control.
- The fresh rock will also be encapsulated in the waste dump and will eventually be covered by oxide and transitional material.

Daily inspection and survey monitoring of dump crest deformation should also be part of normal dump operations.

6.1.5 Pit Design

Compared to the previous PFS design, the ultimate pit design has increased substantially and pushed to the east and south. The Ultimate pit is shown in Figure 6-4, which indicates that:

- The haul ramps exit to the north on both the eastern and western walls to allow access to both the ROM pad and eastern WRD.
- The pit exit is at approximately 585 mRL and the base of the pit is at 375 mRL.
- A single lane ramp provides access to the benches below 420 mRL.
- There is a single goodbye cut at the bottom of the pit.

The pit design has been split into 4 main stages as illustrated in Figure 6-5 to Figure 6-7 with the following objectives:

- Stage 1 – accessing ore directly on the central and southern end of the pit in the floor.
- Stage 2 –accessing central ore at depth with a single ramp system accessing the material.

- Stage 3 – accessing deeper ore in the centre of pit by pushing to ultimate limits on the western wall.
- Final Stage 4 – developing the pit to ultimate limits on the eastern and southern walls to the 375 mRL.

The ultimate pit designs for the Quest 29 pits are very similar to the 2021 PFS study and are shown in Figure 6-8, which indicate that:

- Owing to their relatively shallow nature, the majority of pits with the exception of Zamu, have oxide and transitional material forming the largest portion of material type.
- The haul ramps exit to the east to allow access to both the central ROM access road and WRD.
- Due to the depth of the pits only single access ramps have been used. With the depth of the Zamu pit a passing bay has been added on the 465 mRL.
- All pits have a single goodbye cut at the base of the pit.

The Quest 29 pit designs have been split into 5 main stages which are defined by their areas, with the following objectives:

- Stage 1 – Zamu Pit in the Southern extent of the project to access the highest grade ore and value and also provide area for backfilling.
- Stage 2 – Open up Taipan Pit to the west to gain access to shallow ore and provide additional backfilling area.
- Stage 3 – Progress to the north and to develop the West Koolpin Pit which has the second highest average grade ore within the project whilst backfilling into Zamu and Taipan pits.
- Stage 4 – Continue to progress north to the North Koolpin pit with waste continued to be backfilled into the Zamu and Taipan pits.
- Stage 5 – Finally developing the Mobile Hill pit which is the smallest pit within the project.

The ultimate pit design for the Annie Oakley pit is shown in 9, the pit will be completed in one stage.

Figure 6-4 Rustlers Roost Ultimate Pit Design

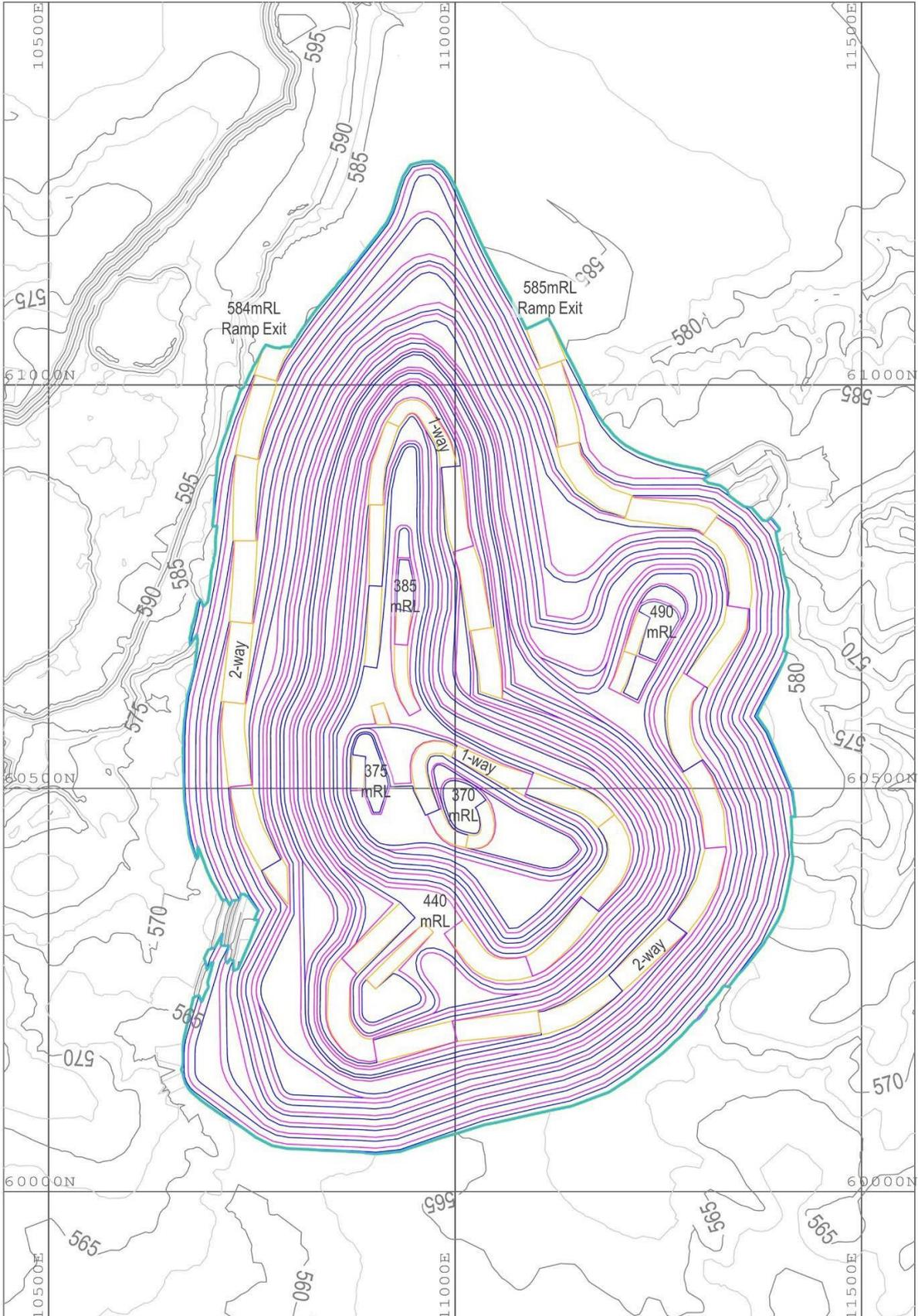


Figure 6-5 Rustlers Roost Stage 1

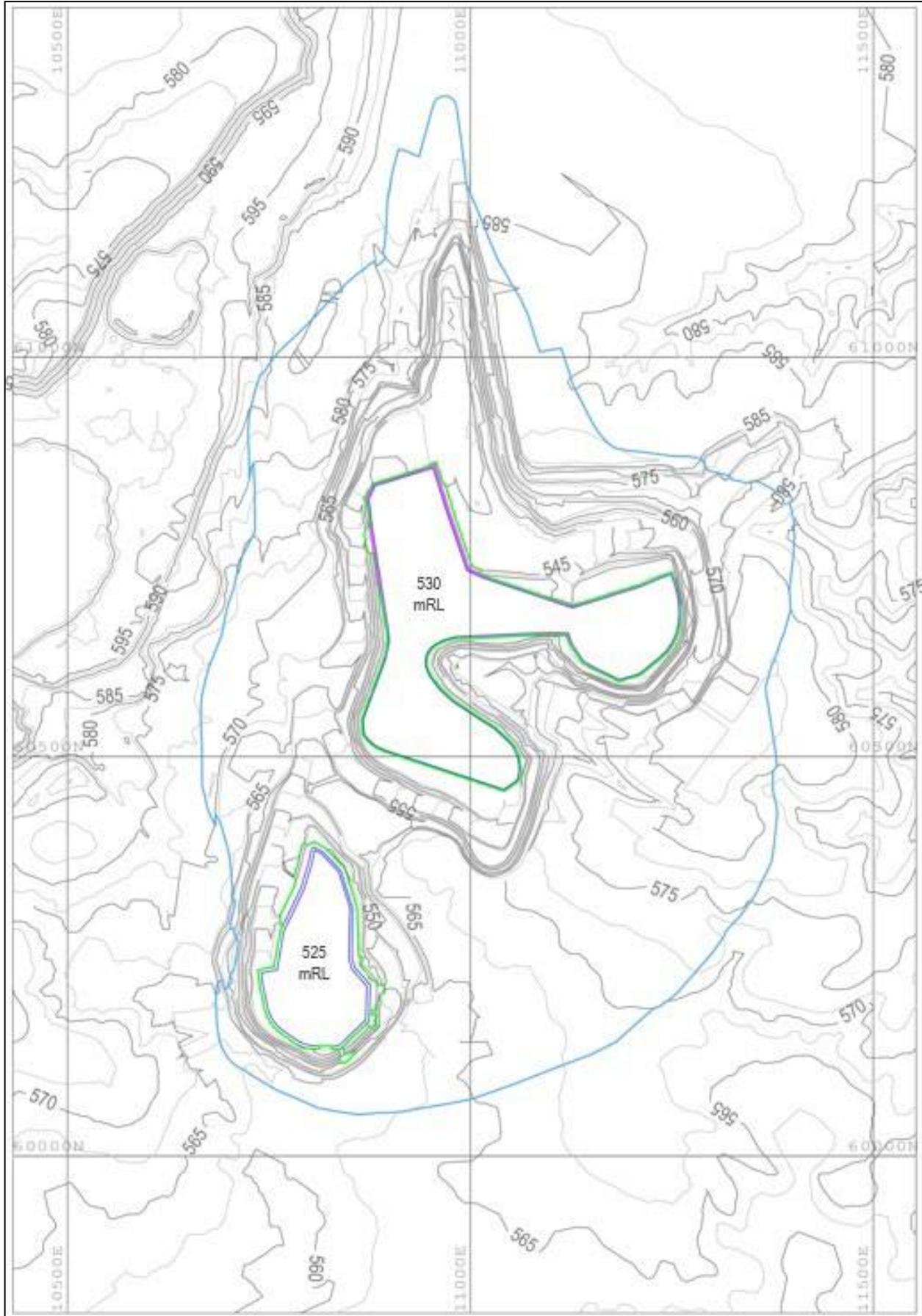


Figure 6-6 Rustlers Roost Stage 2

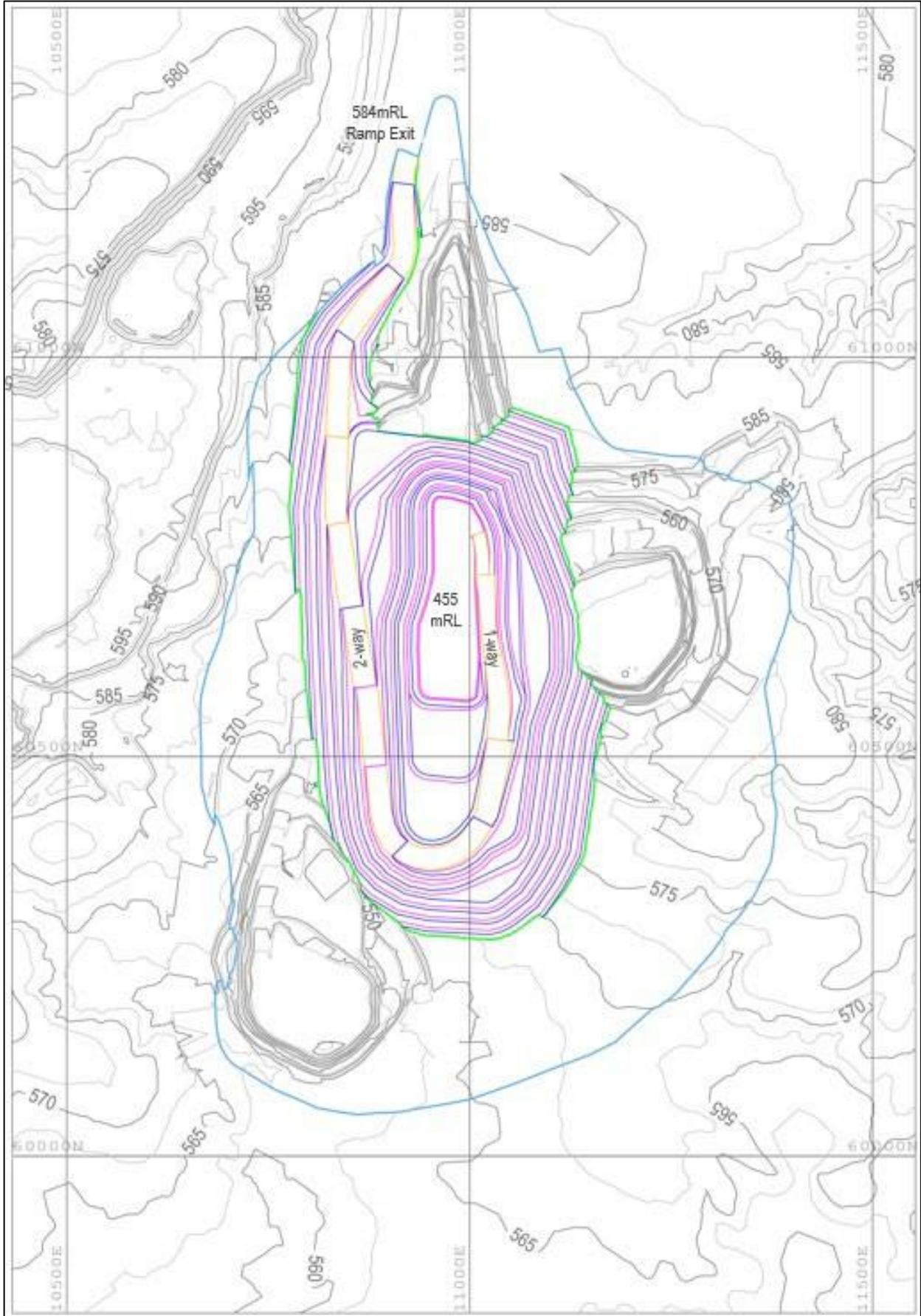


Figure 6-7 Rustlers Roost Stage 3

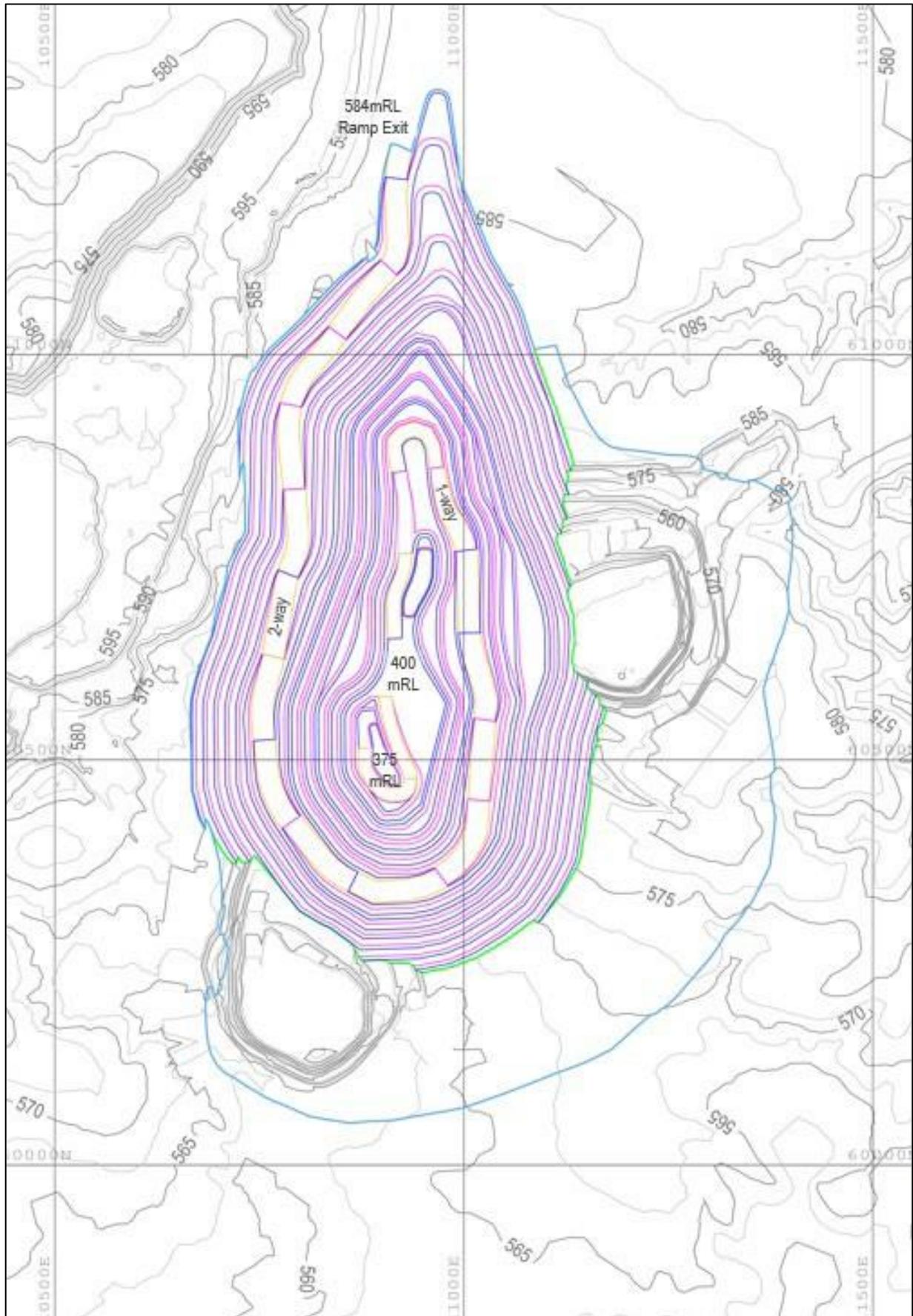


Figure 6-8 Quest 29 All Designs

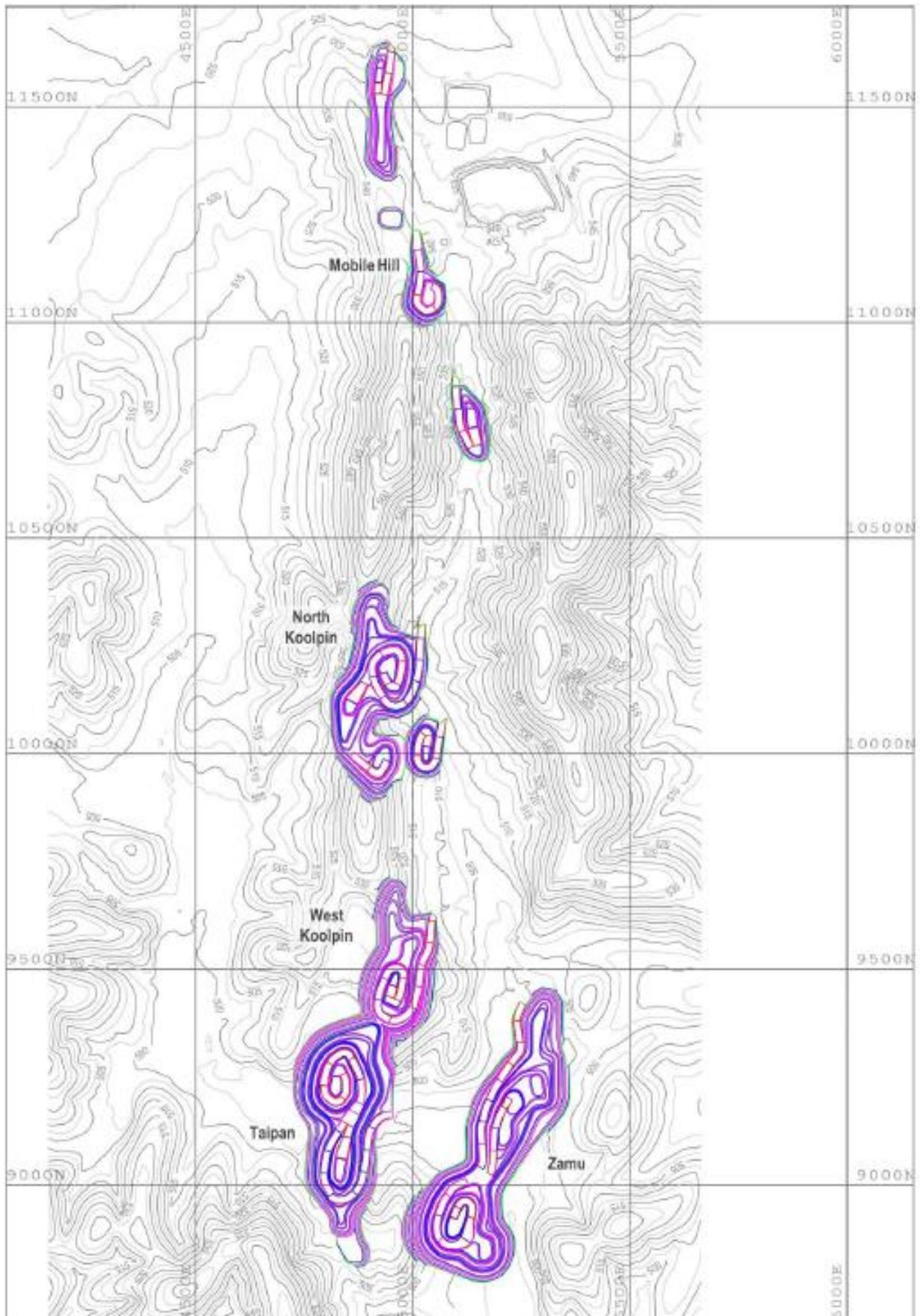
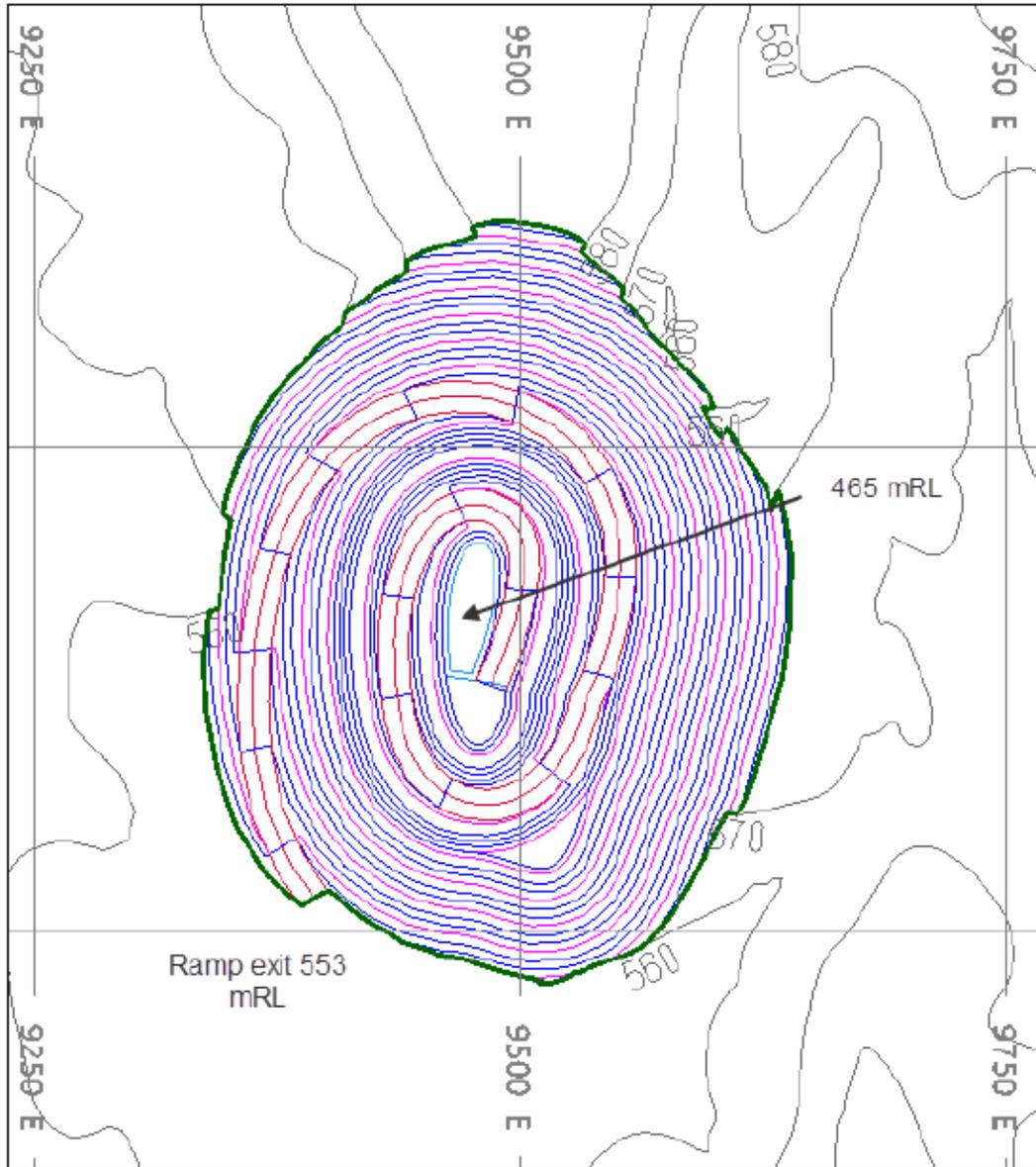


Figure 6-9 Annie Okaley Ultimate Pit Design



6.1.6 Pit Tonnes for Scheduling

The ore and waste tonnes in the Rustlers Roost pit are broken down by stage in Table 6-3 and Table 6-4. These materials and their quantities are used for scheduling.

Table 6-3 Summary by Stage - Pit reserve tonnes by Stage

Description	PIT NAME	RR				AO	Q29								TOTAL
	STAGE	1	2	3	4	13	5	6	7	8	9	10	11	12	
PROBABLE	Ore (Mt)	0.98	10.04	14.80	21.94	0.66	0.19	0.05	0.01	0.10	0.53	1.54	1.61	1.09	53.6
	Mgrams (Au)	0.73	8.85	12.35	16.26	0.69	0.12	0.05	0.01	0.07	0.45	1.20	1.78	0.80	43.4
	Grade (g/t)	0.74	0.88	0.83	0.74	1.04	0.64	0.87	0.52	0.67	0.85	0.78	1.11	0.73	0.81
	Mozs	0.02	0.28	0.40	0.52	0.02	0.00	0.00	0.00	0.00	0.01	0.04	0.06	0.03	1.39
TOTAL	Waste (Mt)	0.34	9.41	14.94	40.59	6.93	0.30	0.35	0.02	0.18	1.99	5.32	6.27	2.93	89
	Total (Mt)	1.3	19.5	29.7	62.5	7.6	0.5	0.4	0.0	0.3	2.5	6.9	7.9	4.0	143
	Strip Ratio (w:o)	0.35	0.94	1.01	1.85	10.44	1.55	6.70	1.99	1.78	3.73	3.45	3.91	2.68	1.67

Table 6-4 Summary by Resource - Pit reserve tonnes by Stage

Description	Units	Rustlers Roost	Annie Oakley	Quest 29	Total
Probable	Mt	47.8	0.664	5.134	53.6
	g/t	0.80	1.04	0.87	0.81
	Mozs	1.228	0.022	0.144	1.39
Waste	Mt	64.1	6.9	17.3	89
Total	Mt	113.0	7.6	22.5	143
Strip Ratio	w:o	1.4	10.4	3.4	1.7

6.1.7 Pit Ultimate Pit Design and Whittle Shell Comparison

The previous figures 5-10 to 5-14 illustrate the ultimate pit designs overlaid with selected optimisation Shells, for Rustlers Roost, Annie Okaley and Quest 29 to provide a comparison between designs and the selected optimal shell.

6.2 Waste Dump Design

The waste rock dump is located to the west of the open pit is the shown in Figure 6-13. Due to the tight constraints, the waste dump extends to the north and west of the plant layout as well.

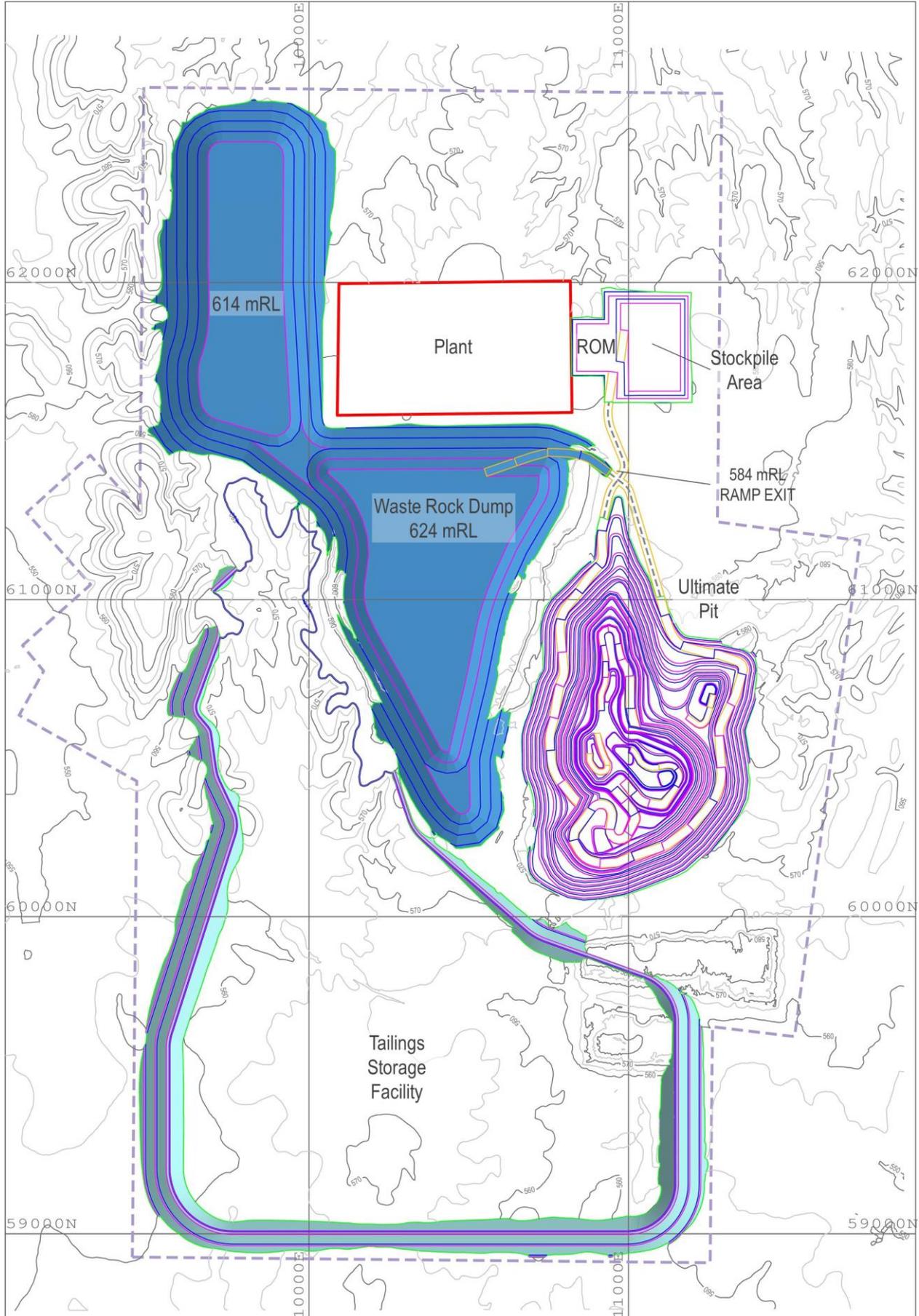
The first lift of the TSF perimeter embankment to the 563 mRL requires 930 kbcm of waste which will also be sourced during the stripping of Stage 2 and 3. The remainder of the TSF embankment will be formed/sourced from suitable material either from the open pit or from borrowed material. The final associated volumes are summarised in Table 6-5.

Table 6-5 Waste Dump Capacity

Western Waste Dump		Unit	Value
Pit Waste Ex-Pit Storage	Total Insitu Waste	Mbcm	25.10
	Swell Factor	%	30%
	Storage Volume Required	Mlcm	32.63
	Western Capacity	Mlcm	32.83
Q29 Waste Dump		Unit	Value
Pit Waste Ex-Pit Storage	Total Insitu Waste	Mbcm	5.96
	Swell Factor	%	30%
	Storage Volume Required	Mlcm	7.74
	Q29 Dump Capacity	Mlcm	4.47
	Backfill Capacity	Mlcm	4.40
	Total Waste Capacity	Mlcm	8.87

Sufficient space has been maintained for storage of topsoil material generated by clearing of the pits, dumps and stockpiles (refer to Figure 6-13).

Figure 6-13 Rustlers Roost Site Layout



7 MINE PRODUCTION SCHEDULE

A quarterly schedule for the first two years followed by an annual schedule with a Total Material Movement (TMM) objective was generated within Maptek Evolution™ software, a state of the art open pit scheduling tool with an underlying optimisation engine driven by “evolutionary” algorithms (EA’s). Evolution™ develops high resolution, 3D block by block schedules targeting multiple criteria and constraints to provide a robust and accurate indication of the presentation of ore and waste.

Material movement is based on controlling parameters such as:

- Mining capacity.
- Minimum mining width.
- Stage availability (Stage lag /precedence).
- Mining lag.
- Bench sink rate.
- Ore target and definition.
- Minimum digging area.

The Evolution™ scheduling process consists of an iterative series of schedules from which the mine planner selects and locks in successive periods until a final schedule is produced that represents the best trade off option between the competing objectives and constraints. The determination of the “best” trade-off may not necessarily involve economics alone but include practical mining and processing considerations also.

Scheduling takes place after the completion of pit designs. High quality pit stage designs are imperative as it allow for better scheduling control and, in accordance with the schedule’s objectives and constraints, to:

1. assist in targeting higher-value areas of the pit first and;
2. delay the mining of less favourable areas.

Only materials within the stage designs were scheduled. Ultimate pit and the stage design inventory have been provided in Section 6.1.6. The inventories of the ultimate pit used for scheduling are detailed in Table 6-3.

7.1 Scheduling Method

The Mt Bundy Gold project was scheduled using Maptek Evolution™, scheduling software that utilises multi-objective evolutionary algorithms to find best-fit scheduling solutions. Evolution also has a Strategy component which is used to optimise the cut-off grade profile in order to maximise value. The results from this can then be used to inform Evolution Origin at a tactical level which highlights that an optimised cut-off grade policy as highlighted in Table 7-2 can be used to enhance value with ore between the break- even cut-off grades at the higher gold grade as outlined in Table 7-1.

Table 7-1 Breakeven COG

Parameter	Units	Rustlers Roost	Q29
Gold Price	Au\$/oz	\$2,350	\$2,350
	Au\$/gm	\$75.55	\$75.55
Royalty	%	5.67%	5.67%
	Au\$/oz	\$133	\$133
	Au\$/gm	\$4.28	\$4.28
Net	Au\$/oz	\$2,217	\$2,217
	Au\$/gm	\$71.27	\$71.27
Recovery	%	88%	88%
Process Cost	\$/t ore	\$20.2	\$22.6
Ore Mining Premium	\$/t ore	\$0.70	\$0.70
Total Processing Cost	\$/t ore	\$20.9	\$23.6
Breakeven COG	g/t	0.32	0.35

Material which has a grade between the breakeven grade as defined in Table 7-1 and the cut-off grade as defined by year (lower to upper depending on period length) in Table 7-2 will be stockpiled and reclaimed where necessary or at the end of the mine life.

Table 7-2 Cut-off Grade Policy

Year	1	2	3	4	5	6	7	8	9	10	11	12
Resource	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	Q29	Q29
Cut-off Grade lower	BE ¹	0.40	0.57	0.58	0.45	0.45	0.40	0.45	0.45	0.51	BE	BE
Cut-off Grade upper	-	0.70	0.58	0.58	0.45	0.45	0.40	0.45	0.45	0.51	-	-

1 - BE = Breakeven Even COG

The EVO-Origin module offers two styles of block-by-block scheduling: Total Material Movement (TMM) and Truck-Based (TB). TMM schedules work on the principle of excavator or shovel utilisation while TB schedules are predicated on haul-profile-based truck fleet management and utilisation. The TMM based method was used here as the additional level of detail from a TB schedule is warranted for more advanced projects (DFS or Implementation phases) that require modelling the truck fleet size and optimise waste dump development by always selecting the shortest haul route available.

The mining model was limited to all blocks that were fully or partially within the ultimate pit designs and assigned with corresponding proportions and a "Stage Identifier". It was then exported from the Vulcan™ general mining package into Evolution™.

7.2 Scheduling Objectives and Constraints

7.2.1 Scheduling Periods

The Life of Mine (LOM) schedule was developed in quarterly increments for the first two years followed by annual periods thereafter to allow for a detailed assessment of the ore presentation and bench turnover requirements. It has been accumulated annually for presentation purposes in some of the tables and figures of this report.

7.2.2 Stage Release

The pit and stage design process together with design outcomes can be found in Section 6.1.5. In order to facilitate scheduling, the Rustlers Roost, Annie Okaley and Q29 pits were designed with 13 stages in total. After the designs were completed the mining model was coded by stages and then exported, in CSV format, for loading into Evolution™ for scheduling.

The mine schedule requires minimal pre-strip period due to ore being present in the mine floor.

7.2.3 Workdays per Year

Orelogy estimated that an allowance for 17 days per annum (2 days for shutdowns and 15 days for weather related events) of production interruptions was necessary. Hence mining activities are restricted to 348 days per year.

7.2.4 Shifts and Shift Duration

The mining roster was based on two 12 hour shifts per day operating 7 days per week.

7.3 Production Schedule Assumptions

TMM schedules (utilised in this study) require assumptions about fleet productivity to determine the amount of material that can be mined in a period. Based on Oreology's productivity estimate, the mining fleet will consist of:

- two Caterpillar 6015 excavators with a productivity estimated at approximately 9.1 Mtpa per machine with an associated fleet of Cat 777G haul trucks supported by a standard ancillary fleet.
- Both machines were fully utilised for the first 5 years to maximise the utilisation of the fleets and provide extra ore to allow for higher grade blending earlier in the mining schedule.

The productivity assumptions on which this schedule was based are summarised in Section 8.2. Mill throughput rates were also increased to 5.0 Mtpa to reflect softer oxide and transitional ore earlier in the schedule and a new plant with higher throughput.

The purpose of the scheduling activity was to generate a practical, realistically achievable schedule that maximises project value within the given targets. For the purposes of the Mt Bundy Gold project, that schedule should satisfy process plant production requirements which were to:

- Avoid vertical advance rates over 80 m per year (16 x 5 m high benches).
- Support a stable fleet size.
- Minimise the pre-strip period and generally delay waste mining where possible.
- Process ramp-up based on the ramp-up-schedule as outlined in Table 7-3.

Table 7-3 Process ramp-up Schedule.

Ramp up	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
%	40%	60%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%
t/week	34,615	51,923	69,230	77,885	86,538	86,538	86,538	86,538	86,538	86,538	86,538	86,538
t/month				233,654				346,154				346,154
				M1				M2				M3
									Full quarter			925,961

7.4 Scheduling Results

The physicals and grades for the final PFS schedule have been summarised by period in Table 7-4. The project has been scheduled with a single quarter for pre-stripping, followed by quarters for the first 2 years and annual increments thereafter.

The Base Case schedule shows:

- Material movement continues over a ~10 year period and can be achieved with the same fleet for the mine life.
- Higher grade ore is mined and processed earlier in the mine schedule resulting in ~ 146 kozs/yr recovered during the first two years of processing. Ounce production averages ~117 kozs/yr recovered for the next 7 years after which the mining is finished and production lowers to ~68koz/yr for the remainder of the operation, focused on stockpile rehandle mode.
- Bench turnovers are acceptable.
- Q29 commences mining in Year 3 and is completed by Year 7 and provides an alternate mining area as part of the accelerated mine plan.

Process schedules are outlined in Table 7-5 and Table 7-6 for both options.

Table 7-4 Mt Bundy Gold Project Mining Schedule – Base Case Summary

Description		Period	Prestrip	Y1				Y2				Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4										
Basis	Stage	Units	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Rustlers Roost	1	Mt	1.3	1.3																	
	2	Mt	19.5	3.1	2.8	4.5	5.3	3.7													
	3	Mt	29.7			1.4	0.9	2.4	5.5	2.4	2.9	2.1	6.3	5.4	0.4						
	4	Mt	62.5						0.6	2.2	1.7	2.5	5.7	8.1	4.7	8.5	12.3	8.8	7.7		
Annie Okaley	13	Mt	7.6	4.2	3.2	0.2															
Quest 29	5	Mt	0.5											0.5							
	6	Mt	0.4												0.4						
	7	Mt	0.0												0.0						
	8	Mt	0.3										0.3								
	9	Mt	2.5												2.3	0.2					
	10	Mt	6.9												3.3	3.6					
	11	Mt	7.9										6.2	1.7							
12	Mt	4.0											2.8	1.2							
Total		Mt	143	8.6	6.0	6.1	6.2	6.2	6.0	4.6	4.6	4.6	18.4	18.5	12.3	12.3	12.3	8.8	7.7	0	0
Probable	Ore	Mt	53.6	1.5	0.8	2.8	3.7	3.3	2.0	1.0	1.5	1.3	5.8	7.2	3.0	4.2	4.7	5.0	5.7		
	Au Grade	g/t	0.81	0.72	0.78	0.77	0.91	0.99	0.68	0.62	0.73	0.75	0.91	0.86	0.77	0.75	0.80	0.83	0.70		
	% Ore Mined	%	98%	99%	98%	100%	100%	100%	100%	100%	100%	100%	100%	99%	97%	97%	90%	95%	99%		
Inferred	Ore	Mt	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.3	0.1		
	Au Grade	g/t	0.70	0.54	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.47	0.49	0.40	0.75	0.85	0.76		
	% Ore Mined	%	2%	1%	2%								0%	1%	3%	3%	10%	5%	1%		
Total	Ore	Mt	54.8	1.5	0.8	2.8	3.7	3.3	2.0	1.0	1.5	1.3	5.8	7.2	3.1	4.4	5.3	5.3	5.8		
	Au Grade	g/t	0.81	0.72	0.78	0.77	0.91	0.99	0.68	0.62	0.73	0.75	0.91	0.86	0.77	0.75	0.80	0.83	0.70		
Total Waste Mined		Mt	88	7.1	5.2	3.3	2.5	2.9	4.1	3.6	3.1	3.3	12.6	11.2	9.1	7.9	7.0	3.5	1.8	0.0	0.0
Total Probable Ore		Mt	53.6	1.5	0.8	2.8	3.7	3.3	2.0	1.0	1.5	1.3	5.8	7.2	3.0	4.2	4.7	5.0	5.7	0.0	0.0
Total Inferred Ore		Mt	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.3	0.1	0.0	0.0
Strip Ratio		W:O	1.61	4.72	6.46	1.17	0.66	0.90	2.07	3.49	2.05	2.50	2.18	1.55	2.92	1.81	1.33	0.66	0.32	0.00	0.00

Table 7-5 Mt Bundy Gold Project Processing Schedule – Base Case Summary

Description	Units	Period	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	
		Total	0	1	2	3	4	5	6	7	8	9	10	11	
Processing HG	Tonnes	Mt	17.7	0.0	3.8	2.3	2.6	2.7	0.8	1.0	1.6	1.8	0.9	0.0	0.0
	Cont. Metal Au	Mg	21.4	0.0	4.7	2.7	3.2	3.4	1.0	1.3	1.9	2.1	0.9	0.0	0.0
	Grade Au	g/t	1.21	0	1.23	1.18	1.23	1.24	1.23	1.26	1.18	1.18	1.07	0	0
	Cont. Ounce	Moz	0.69	0.00	0.15	0.09	0.10	0.11	0.03	0.04	0.06	0.07	0.03	0.00	0.00
	Recovered Ounce	Moz	0.60	0.00	0.13	0.08	0.09	0.10	0.03	0.04	0.06	0.06	0.03	0.00	0.00
Processing MG	Tonnes	t	12.0	0.0	0.9	2.7	1.6	1.5	0.7	0.8	1.4	1.4	1.1	0.0	0.0
	Cont. Metal Au	g	9.5	0.0	0.7	2.2	1.2	1.2	0.5	0.6	1.1	1.1	0.9	0.0	0.0
	Grade Au	g/t	0.8	0	0.79	0.8	0.8	0.8	0.8	0.79	0.8	0.79	0.8	0	0
	Cont. Ounce	Oz	0.31	0.00	0.02	0.07	0.04	0.04	0.02	0.02	0.04	0.04	0.03	0.00	0.00
	Recovered Ounce	Oz	0.27	0.00	0.02	0.06	0.04	0.03	0.01	0.02	0.03	0.03	0.02	0.00	0.00
Processing LG	Tonnes	t	21.0	0.0	0.1	0.0	0.8	0.8	3.6	3.1	2.0	1.8	3.0	5.0	0.8
	Cont. Metal Au	g	11.8	0.0	0.0	0.0	0.5	0.4	2.0	1.7	1.1	1.0	1.9	2.8	0.4
	Grade Au	g/t	0.56	0	0.54	0	0.56	0.56	0.55	0.54	0.55	0.57	0.62	0.56	0.56
	Cont. Ounce	Oz	0.38	0.00	0.00	0.00	0.02	0.01	0.06	0.05	0.03	0.03	0.06	0.09	0.01
	Recovered Ounce	Oz	0.33	0.00	0.00	0.00	0.01	0.01	0.06	0.05	0.03	0.03	0.05	0.08	0.01
Processing MW	Tonnes	t	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
	Cont. Metal Au	g	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
	Grade Au	g/t	0.37	0	0	0	0	0	0	0	0	0	0	0	0.37
	Cont. Ounce	Oz	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	Recovered Ounce	Oz	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
TOTAL	Tonnes	t	54.8	0.0	4.8	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Cont. Metal Au	g	44.2	0.0	5.5	4.9	4.9	5.0	3.4	3.7	4.1	4.3	3.7	2.8	2.0
	Grade Au	g/t	0.81	0	1.14	0.97	0.98	1	0.69	0.73	0.83	0.85	0.73	0.56	0.4
	Cont. Ounce	Oz	1.42	0.00	0.18	0.16	0.16	0.16	0.11	0.12	0.13	0.14	0.12	0.09	0.06
	Recovered Ounce	Oz	1.25	0.00	0.16	0.14	0.14	0.14	0.10	0.10	0.12	0.12	0.10	0.08	0.06

The Base Case schedule is illustrated graphically in Figure 7-1 to 3 showing ore mined, total material mined, ore processed and stockpile balance for each period.

Figure 7-1 Ore Movement by Stage & overall grade profile – Base Case Schedule

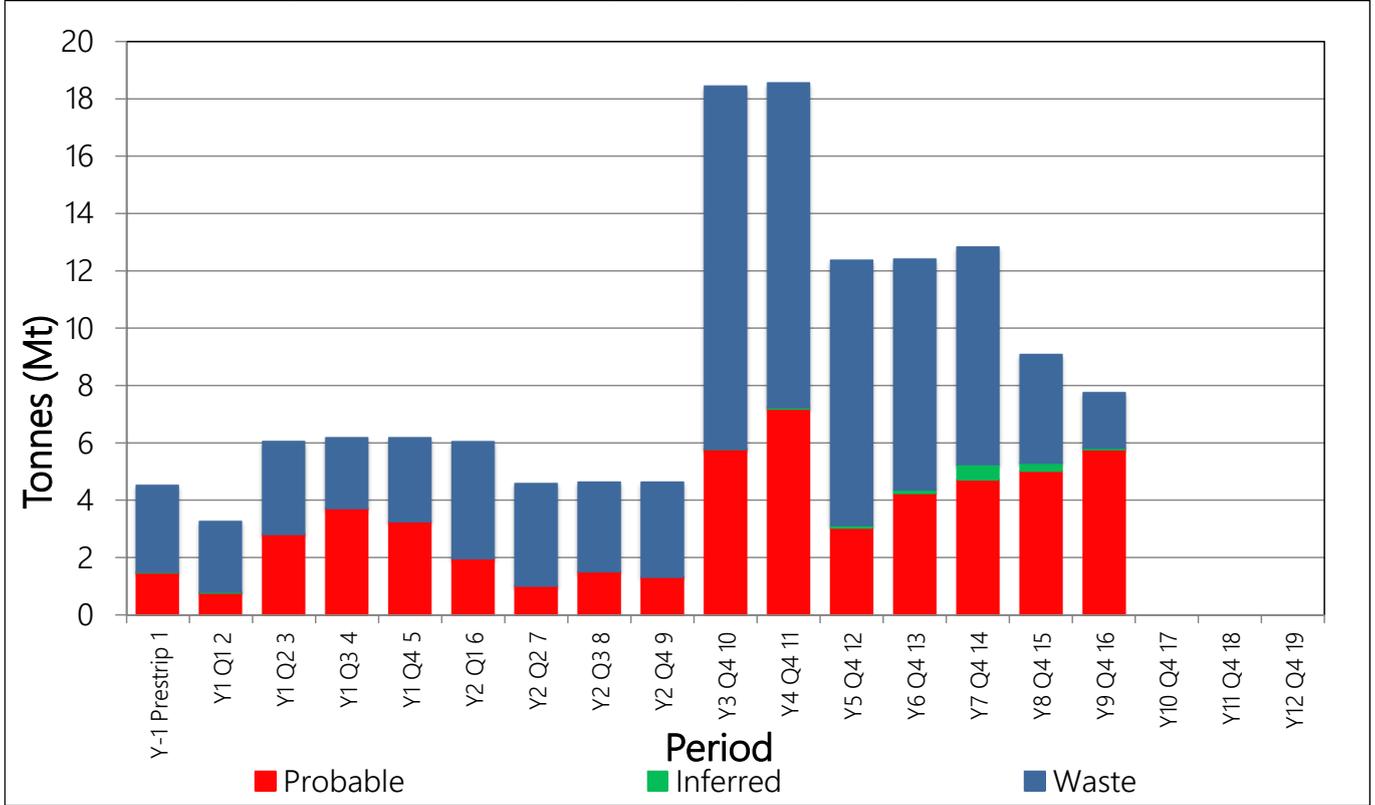


Figure 7-2 Ore Processed & overall grade profile – Base Case Schedule by Year

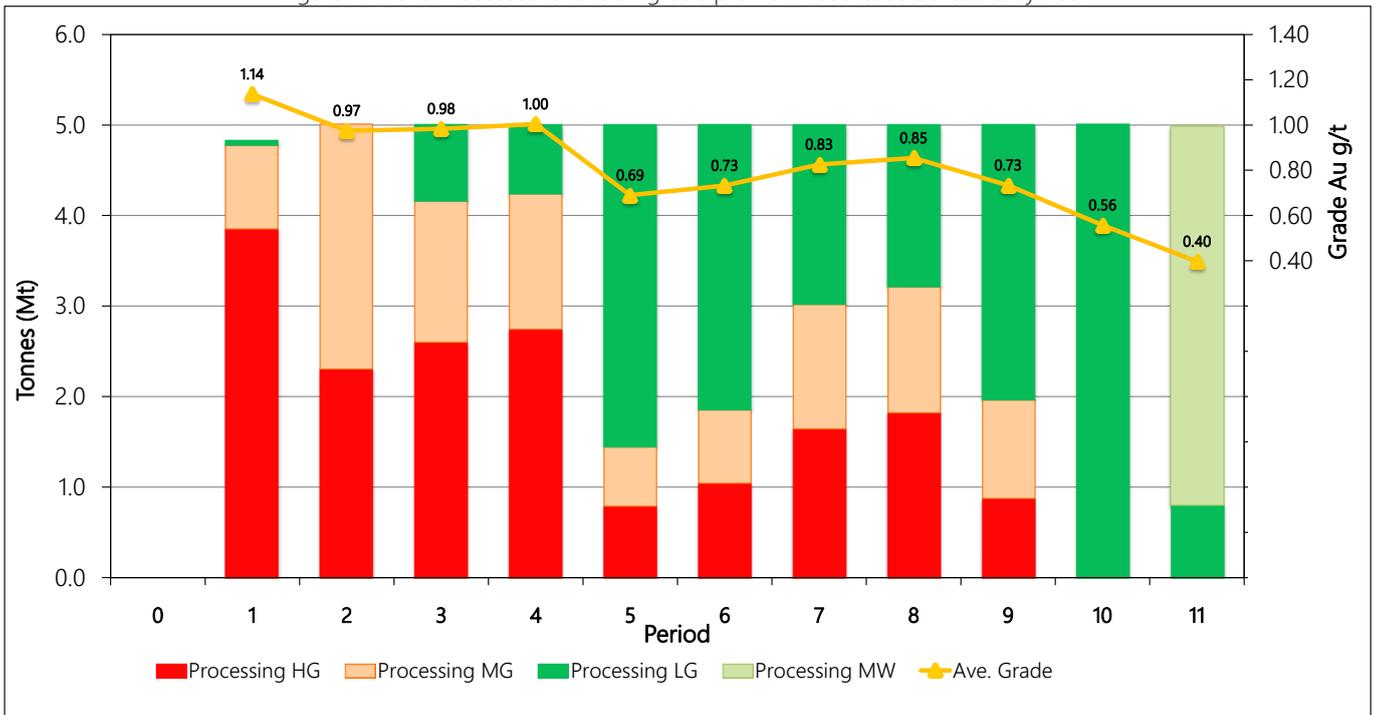
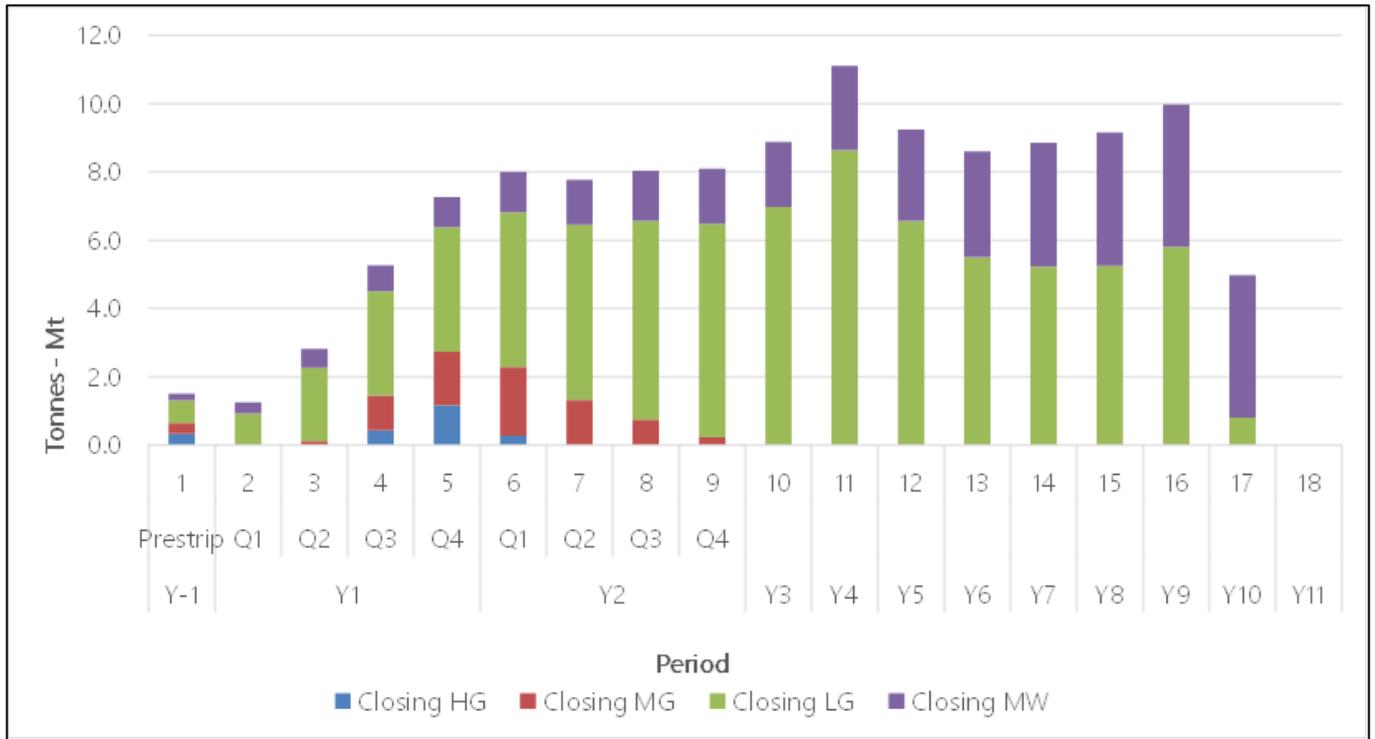


Figure 7-3 Ore Stockpile Balance – Base Case Schedule



7.4.1 Stockpiling and Reclaim

The current mine plan indicates that not all ore mined from the pit is processed immediately. Ore feed to the crusher will be from mining operations and product stockpile (ROM Pad). It is envisaged that ~75% of ore mined will be stockpiled. The hourly excavator production rate exceeds plant feed rate and during the time when the excavator is working purely in an ore zone, only 25% of the ore can be directly tipped. If there is more material mined than is required by the process, the excess is placed onto the stockpiles. If there is less ore material being mined than is required (i.e. the excavator being located in a waste or a mixed zone, mining being curtailed due to bad weather, shift change, maintenance downtime etc.) plant feed will be sourced from stockpiles to meet the shortfall. It will be taken in such a way as to best meet the required feed targets.

To this end there will be a minimum of two ROM stockpiles “open” at any given time. One stockpile will be under construction while the other is available to be reclaimed to the crusher. The operation will not build and reclaim a ROM stockpile simultaneously. This allows for improved safety, control on ore quality and overall reconciliation.

Stockpile reclaim will be based on mining the highest grade ore at any point in time to ensure value is maximised.

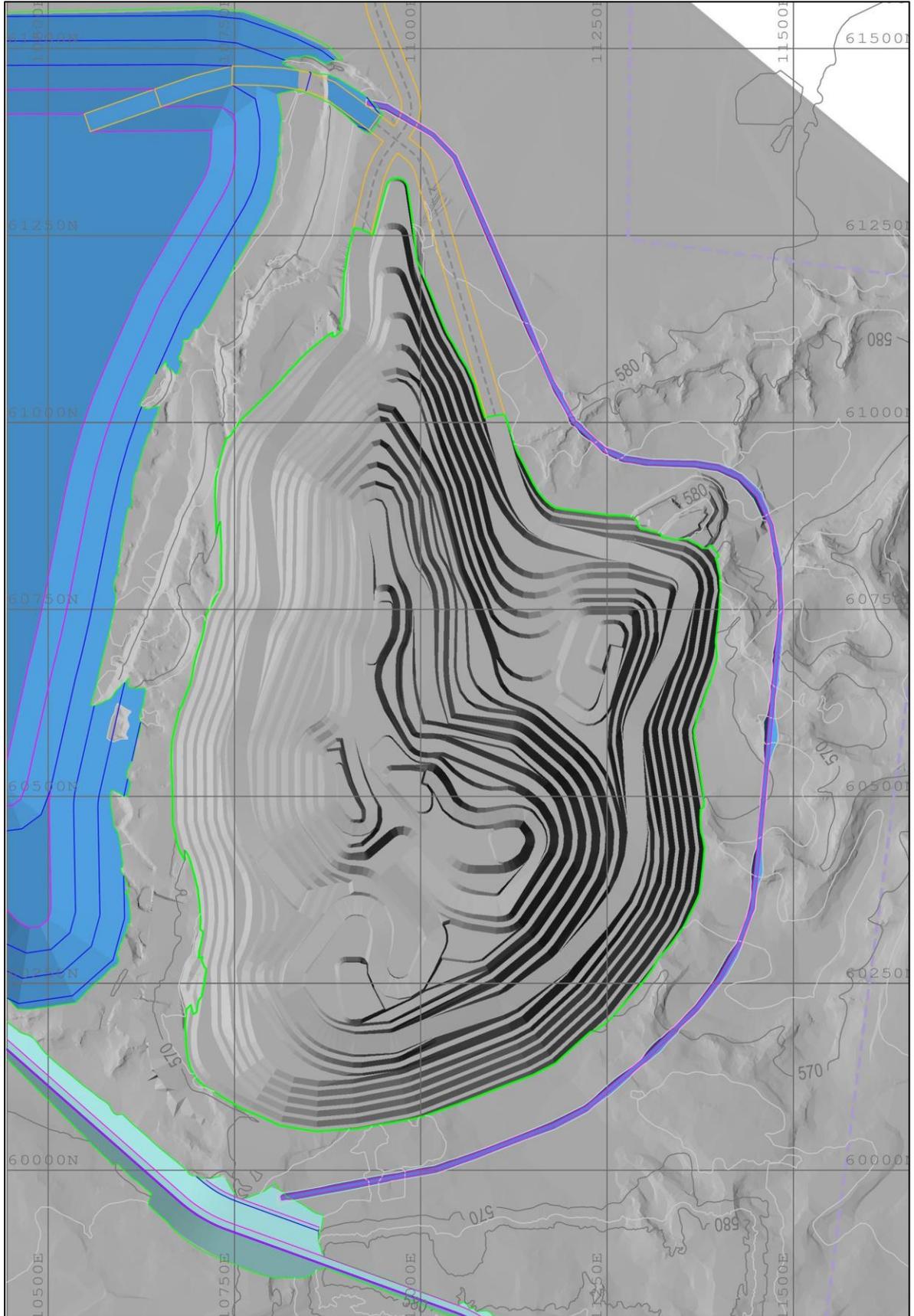
7.5 Closure

On completion of mining, all disturbed areas including waste dumps, haul roads and ROM areas will be battered down to final limits, reprofiled, contour ripped and then seeded. A closure bund, 2 m high and 2 m across the top profile will be built to minimise access to the open pit as shown in Figure 7-6.

The overall length and volume of this bund is 2,400 m long and ~20,000 m³ to place.

The open pit will also be allowed to flood.

Figure 7-4 Closure bund surrounding open pit



8 MINING COST ESTIMATE

8.1 Basis of Estimate

8.1.1 Estimating Method

The costs are estimated in Australian dollars (AUD) and developed from first principles for an owner operator operation to undertake the activities outlined Section 4 which match the activities in the mining schedule detailed in Section 7. A margin of 20% to replicate the use of a mining contractor is then added.

The cost estimating method is based on dollars per mined for both ore and waste by oxide, transitional and fresh breakdown.

The cost is then calculated by multiplying the resource quantities and their associated rates for the appropriate activity.

Table 7-4 displays the various physicals and quantities generated by the LOM schedule which have been used in the calculation of this cost estimate.

8.1.2 Estimation Accuracy

The costs estimate has been developed to an accuracy of $\pm 25\%$, in line with the requirements of a study to pre-feasibility level.

Orelogy have not allowed for any contingency on top of the capital or operating cost estimates. It is assumed an allowance will be made for such in the over-arching project financial model.

8.1.3 Battery Limits

Table 8-1 shows the key items that were included in the mining cost estimate.

Table 8-1 Mining Cost Items Included

Item	Included	Excluded
Capex & Opex Equipment	Excavators	
	Trucks	
	Drills	
	Dozer	
	Grader	
	Loader/s	
	Water carts	
	Pit Dewatering Pumps	
	Service truck	
	Fuel truck	

Item	Included	Excluded
	Crane/s	
	Forklift	
	Integrated Tool Carrier	
	Lighting plant	
	Compactor/s	
	Light Vehicles	
	Offices & Crib rooms	
	Workshops	
	Fuel and Oil Storage	
	Magazines	
	Tailing dam Embankment – 1 st lift	
	Activities	Clearing & Topsoil Stripping
Grade Control		
Drilling & Blasting		
Loading & Hauling		
ROM Rehandle & Crusher Feeding		
Pit Dewatering		
People	Closure activities	
	Mining Operators	
	Mining Supervisors	
	Heavy Mining Fleet Maintenance	
	Technical Services	
	Mine Management	
	Training, Safety & Security	
	Resource Geology	
	Maintenance Supervisors	
	Store / Warehouse people	
Mine Administration		
Remuneration	Salaries & Bonus	
	On costs	
	Accommodation & Messing	
	Airfares	

8.2 Estimating of Equipment Hours, Personnel and Consumables

8.2.1 Scheduled Hours and Availabilities

The assumptions for and calculations of the overall productivities of each of the various units on an annual basis and shift basis are summarised in Table 8-2 and Table 8-3.

Table 8-2 Scheduled Hours per Annum

Item	Unit	Value
Days per annum	days/year	365
Public Holidays	days/year	2
Downtime Weather	days/year	15
Scheduled Days	days/year	348
Scheduled Shifts per Day	shifts/day	2
Scheduled Shifts	shifts/year	696
Scheduled Hours per Shift	hours/shift	12
Scheduled Hours	hours/year	8,352

Table 8-3 Equipment Availability

Item	Unit	Value
Excavator / FEL Availability	%	88
Truck Availability	%	90
Drill Availability	%	83

8.2.2 Equipment Effective Operating Hours

Estimations of the effective operating hours for excavators, trucks, loaders and drills are summarised in Table 8-4.

Table 8-4 Effective Operating Hours

Item	Unit	Excavator	Truck	Loader	Drill
Shift	hours/shift	12	12	12	12
Lunch	mins/shift	60	60	60	60
Inspection	mins/shift	15	15	15	15
Fuel & service	mins/shift	-	20	10	10
Safety meetings etc	mins/shift	2.1	2.1	2.1	2.1
Operating Standby	mins/shift	15	15	15	15
Engine hours	hours/shift	10.5	10.1	10.3	10.3
Operating delays	min/shift	67	67	40	52.3
Operating hours per shift	hours/shift	9.3	9	9.6	9.4
Efficiency	min/hour	52	52	52	52
Effective operating hours per	hours/year	5,657	5,455	5,698	5,248

8.2.3 Equipment Productivities

Estimations of the excavators, trucks, loaders and drills productivities are summarised in Table 8-5 to Table 8-8.

Table 8-5 Excavator Productivity

Item	Unit	Cat 6015
		Cat 777G
Bucket capacity	m ³ /bucket	8.1
Rated load	t/bucket	14.6
Bucket fill factor	%	95
Truck load	t/truck	91
Hang Time	min	0.08
Spotting @ excavator	min	0.67
Buckets per truck	#	7.0
First bucket	sec	5
Bucket cycle	sec	24
Loading time	min	3.2
Loads	#/hr	16
Operating hours per annum	hrs/year ¹	5,798
Tonnage per annum	Mt/year	9.1
Average Tonnage per hour	t/hr	1,400

¹Inclusive of 56 min/hr

Table 8-6 Truck Productivity Parameters

Item	Unit	Cat 777G
Tray capacity	m ³	57.2
Rated load	t	90.6
Spotting at excavator	min	0.67
Loading time	min	3.2
Spotting on dump	min	0.77
Dumping	min	2.2
Average speed up	km/hr	10
Average speed flat	km/hr	25
Average speed down	km/hr	20

Table 8-7 Front End Loader Productivity Parameters

Item	Unit	Cat 992K
Bucket capacity	m ³ /bucket	8.8
Rated load	t/bucket	15.8
Bucket fill factor	%	90
Bucket cycle	min	0.52
Tram speed	km/hr	15
Raise bucket, dump, turn	min	0.52

Table 8-8 Drill Productivity

Item	Unit	Oxide	Fresh
Penetration rate	m/hr	35.0	25.0
Hole depth	m	11.1	11.1
Drill time per hole	min	18.19	29.26
Relocate & setup next hole	min	3.5	3.5
Drill cycle per hole	min	21.69	25.76
Number of holes per hour	#	2.4	2.0
Dry tonnes per engine hour	#	2,846	1,260
Tonnes per annum	Mdmt	16.6	7.3

8.2.4 Ancillary Equipment - Allocated Hours

Ancillary equipment requirements are calculated as indicated in Table 8-9.

Table 8-9 Ancillary Equipment

Item	Unit	Value	
Ancillary Equipment	Wheel dozer	hrs per truck hour	0.13
	Dozer hours	% of Excavator + Loader Hrs	1
	Grader hours	hrs per truck hour	0.13
	Water cart hours	hrs per truck hour	0.13

8.2.5 Variable Personnel - Operators, Maintainers and Supervisors

Operators and maintenance personnel numbers vary with the number of equipment hours required during any period. They, and the mining supervisors, are employed on a 2 weeks on / 1 week off roster which, with appropriate scheduling, can be satisfied with a 3 crew panel. Applying 3 crew panel across all variable personnel provides some allowance for personnel shortfalls (i.e. absenteeism, annual leave etc.). Orelogy assumed that operators would also be multi-skilled in order to provide additional cover.

Maintenance activities are supervised by the fixed plant workshop supervisors. Shift duration is 12 hours with a day shift and a night shift providing a 24 hour service all year round.

All personnel will stay in site accommodation while on roster.

8.2.6 Fixed Personnel

Fixed personnel details are summarised in Table 8-10. There are different work groups but in most cases all personnel will work a 12 hour shift are worked in all positions.

Table 8-10 Mining Fixed Personnel

Work Group	Position	Roster	Number
Mine Management	Mining Manager	9&5 d	1
	Clerk/Admin	2&1	1
	OHSE Supervisor	2&1	1
	Environmental officer	2&1	1
Technical Services	Mine Super	9&5 d	1
	Senior Mining Engineer	2&1	1
	Mine Planning Engineer	2&1	1
	D&B engineer	2&1	1
	Senior Geologist	2&1	1
	Mine Geologist	2&1	2
	Geology technicians	2&1	2
	Senior Surveyor	9&5 d	1
	Surveyor	2&1	1
	Survey Technicians	2&1	1
	Operations	Ops Manager	9&5 d
OHS Officer		2&1	1
Clerk		2&1	1
Shift Super		2&1	1
Leading hand		2&1	1
Blast leading hand		2&1	1
Blast crew		2&1	2
Mine Maintenance	Mine Maintenance Super	2&1	1
	Workshop foreman	2&1	1
	Workshop Leading hand	2&1	1
	Service men	2&1	1
	Maintenance planner	2&1	1
	Clerk	2&1	1

8.2.7 Equipment Scheduled Maintenance

Equipment parts and consumables, such as lubrication, coolant and filters, required for scheduled maintenance activities are based on Caterpillar estimates. A flat rate (\$/hr) was applied throughout the life of the equipment.

8.2.8 Fuel

Fuel consumption is calculated from the equipment hours and their fuel burn estimates summarised in Table 8-11.

The truck fuel burn rate for ore and waste haulage from the pits was estimated in Talpac based on haul profiles, cycle times, engine loads, together with the productivities. Spotting, loading and dumping, as outlined in Table 8-6, were assumed at 15% engine loading.

Table 8-11 Equipment Fuel Consumption Rates

Item	l/hr
6015B	85
777G	var.
992K	90
D10T	60
16M	20
775G	32
EpiROC SmartROC DML	66

8.2.9 Explosives

Bulk explosive consumption is based on a powder factor of 0.4 kg/bcm in oxide material, 0.6 kg/bcm in trans material and 0.8 kg/bcm in fresh rock as outlined in Table 8-12. The consumption is expressed in ANFO equivalents meaning that less (kg) explosives are required if the explosive has a higher SG or weight strength, which is typically the case for emulsions.

Because it is anticipated that mining will take place in a wet environment, use of emulsion has been assumed.

Explosive accessories (boosters, detonators, surface delays and detonator cord) are allocated to each blasthole.

Table 8-12 Explosive Consumption

Item		Oxide	Fresh	
Explosives Details	Explosive Type	Fortis	Fortis	
	Product Name	Adv H	Adv H	
	SG	t/m ³	1.10	1.10
	Rel Weight Strength	%	100	100
	Water Resistance	-	Excellent	Excellent
Drilling Details	Bench Height	m	10.0	10.0
	Blasthole Size	mm	191	191
	Burden	m	7.1	5.0
	Spacing	m	8.15	5.75
	Subdrill	m	1.0	1.0
	Blasthole Length	m	11.0	11.0
Charge Column	m	8	8	

Item			Oxide	Fresh
Charge Details	Stemming	m	3.1	3.1
	Explosives Amount	kg	229.2	229.2
Powder Factors	BCM per blasthole	m ³	573	286.5
	P.F.	kg/m ³	0.4	0.8
	ANFO equiv P.F.	kg ANFO/m ³	0.4	0.8

8.2.10 Tyres and GET

Engineering tyre life estimates for the various equipment items are summarised in Table 8-13 and an allowance (\$/hr) was made for equipment GET and wear items such as ripper boots, cutting edges, bucket teeth, adaptor plates, tracks, tray wear etc. Tyre prices were estimated from a recent quote for a similar project.

Table 8-13 Tyre Costs

Item		Tyre Life	No Tyres	Cost
Type	Model	(Eng. Hrs)	(#)	\$/tyre
Truck	777G	5,000	6	\$16,000
Front End Loader	990K	5,500	4	\$36,600
Grader	16M	3,000	6	\$5,370
Water carts	775G	5,500	6	\$11,300

8.2.11 Equipment and Personnel

Standard 150 t class excavators and 91 t class trucks will be supported by a suitably sized ancillary fleet. Initially, the first fleet will be purchased for pre-stripping with the second fleet purchased ready for production in year 1. Both fleets will be fully utilised for the first 5 years after which only a single fleet will be required to meet the overall tonnage profile.

The mining operation will be completed within a 10 year period with stockpile rehandle operations continuing for an additional year. Equipment and manning levels are outlined in tables 8-14 and 8-15 respectively.

Table 8-14 Equipment Deployed

Equipment Item	Units	Y1				Y2				Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8											
Main Excavator	#	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1		
Trucks	#	4	9	9	9	9	9	9	9	9	9	5	5	5	5	5	5	4		
Front End Loader	#	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Dozer	#	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1		
Grader	#	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Water carts	#	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Drills	#	1	1	2	2	2	2	2	2	1	2	2	2	2	2	2	1	1		

The personnel headcount is summarised in Table 8-15.

Table 8-15 Personnel Headcount

AREA	Y1				Y2				Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8											
TOTAL - Mine Management	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
TOTAL - Technical Services	11	11	11	11	12	12	12	12	12	12	12	12	12	12	12	10			
TOTAL - Mine Operations	12	12	12	12	13	13	13	13	14	14	14	14	14	14	14	10	1		
TOTAL - Mine Maintenance	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	1		
Operators	34	52	55	55	55	55	55	55	55	52	52	37	40	43	46	40	15		
Maintenance	8	15	17	18	18	17	17	16	16	16	16	10	11	12	13	11			
TOTAL PERSONNEL	79	104	109	110	112	111	111	110	111	108	108	87	91	95	99	85	21		

The variable component of the headcount (mining operators and maintainers) is based on equipment hours and the shift/crew arrangements. The main factors to determine the fixed component were the need to keep the numbers at a reasonable level given the relatively size of the operation while still

providing adequate support for mining and maintenance activities and acceptable site coverage at all times.

8.3 Prices and Unit Costs

Equipment purchase prices are summarised in Table 8-16. As highlighted in the table, PGL plans to acquire new equipment. The prices were sourced by Oreology for PGL from Oreology's database which was recently updated.

Table 8-16 Equipment Purchase Prices (Including Freight)

Item	Model	Unit	Value M\$
Main Excavator	6015B	\$/unit	2.05
Truck	777G	\$/unit	2.32
Loader	992K	\$/unit	3.25
Dozer	D10T	\$/unit	2.71
Grader	16M	\$/unit	1.46
Water truck	775G	\$/unit	1.41
Drill	SmartROC	\$/unit	2.13
Pump	TF 50/30	\$/unit	0.1

Table 8-17 summarises the operating cost per hour for the main mining fleet. These costs were estimated from manufacturer provided maintenance information together with engineering estimates for consumables such as tyres and GET. Labour and capital are excluded from these hourly costs and fuel for the main haul fleet is variable and is also excluded.

Table 8-18 shows which components are included and excluded. The costs of those components that are excluded from the equipment operating cost per hour are incorporated in the total cost estimate separately (i.e. fuel cost for trucks is determined from Talpac fuel burns for haulage profiles and the fuel price, while labour costs are determined from the headcounts and salary levels).

Table 8-17 Equipment - Operating Cost per Hour

Item	Model	Unit	Value
Main Excavator	6015B	\$/hr	150
Truck	777G	\$/hr	73
Loader	992K	\$/hr	168
Dozer	D10T	\$/hr	125
Grader	16M	\$/hr	65
Water truck	775G	\$/hr	78
Drill	SmartROC	\$/hr	235

Table 8-18 Equipment Operating Cost - Components

Equipment Item	Included	Excluded
All Equipment	Maintenance parts Lubrication & Coolant Tyres, GET	Operating Labour Maintenance Labour Capital
All Equipment except Trucks	Fuel	
Trucks		Fuel

Table 8-19 summarises the operator salary levels (including all on-costs). The salary basis information was estimated by Orelogy for the appropriate base salaries. Allowances for payroll tax, superannuation, workers compensation, training, absenteeism and production bonus are additional to the base salaries.

Table 8-19 Salary by Position

Area	Position	Base Annual Salary \$/year
Management	Mining Manager	\$262,340
	Admin	\$75,675
	OHSE Supervisor	\$141,260
	Environmental Officer	\$121,080
Tech Services	Tech Services Manager	\$227,025
	Senior Mining Engineer	\$171,530
	Mining Planning Engineer	\$131,170
	D&B Engineer	\$131,170
	Senior Geologist	\$151,350
	Mine Geologist	\$126,125
	Resource Geologist	\$151,350
	Geological Tech.	\$80,720
	Senior Mine Surveyor	\$151,350
	Mine Surveyor	\$136,215
	Survey Technician	\$85,765
Operations	Operations Manager	\$227,025
	OHS Officer	\$121,080
	Clerk/Admin. Asst.	\$80,720
	Shift Supervisor	\$141,260
	Leading Hand	\$121,080
	Blasting Leading Hand	\$141,260
	Blast Crew	\$80,720
Maintenance	Mine Maint. Supt.	\$221,980
	Workshop Foreman	\$166,485
	Workshop Leading Hand	\$146,305
	Serviceman	\$121,080

Area	Position	Base Annual Salary \$/year
	Serviceman Offsider	\$105,945
	Maintenance Planner	\$146,305
	Maintenance Clerk/Stores	\$80,720
Operators	Grade 1	\$101,909
	Grade 2	\$92,828
	Grade 3	\$82,738
Maintenance	Trades Assistant	\$105,945
	Fitter	\$136,215
	Welder	\$131,170
	Electrician	\$131,170

Table 8-20 summarises the costs for travel and accommodation & messing, which was provided by PGL.

Table 8-20 Unit Costs – Flights, Accommodation and Messing

Item	Unit	Value
Accommodation & messing	\$/day	66
Travel - Return	\$/return ticket	656

The fuel price for the project was set at \$1.40 with a \$0.416 fuel rebate for a final price of \$0.98/l applied while the explosives prices summarised in Table 8-21 were from Orelogy's internal database.

Table 8-21 Explosives Prices

Item	Unit	Value
Emulsion	\$/t	1,120
Booster	each	8.95
Down Hole Detonator	each	3.60
Surface Delay	each	4.50
Surface Detonator Cord	\$/m	0.47

8.4 Mining Cost - Capex and Opex

8.4.1 Capex

The bulk of the main operating fleet has the capital cost of the equipment purchased at the beginning of mine operations.

The current open pit is filled with water and will need pumping prior to operations commencing. At the moment, the water level is at the 562 mRL which means the depth of water is almost 30 m deep. It is estimated that approximately 4.5 M³ of water will need to be pumped out which could take up to

6-7 months prior to operations commencing at the base of the pit. Upper areas could be mined earlier if required. The cost associated with this is ~\$0.9M which allows for purchasing a number of high flow pumps, piping, fuel and labour prior to operations. Hence, this cost has been included as capital.

The total capital expenditure associated with mining is summarised in Table 8-22 and is based on the miscellaneous items including pit dewatering, computing software, haul road building, clearing, topsoil management and mobilisation and site establishment.

Demobilisation is estimated at \$0.6M.

Table 8-22 Mining Capital Expenditure

AREA	Capital Cost A\$M	
	Initial Capital	Sustaining Capital
MINING FLEET	8.4	49.3
REPLACEMENT	0.0	2.1
ANCILLARY & MINOR	0.2	0.0
INITIAL DEWATERING	0.9	0.1
CLEARING	0.5	1.5
ROAD BUILDING	0.3	0.1
REHAB		0.5
DEMOBILISATION		0.6
TOTAL	10.2	54.2

8.4.2 Opex

Operational expenditure is based on a fixed and variable rate which is rolled up to a \$/t mined by oxide, transition and fresh basis for both ore and waste and are summarised in Figure 8-1 and Figure 8-2.

Overall mining operating costs are \$3.79/t mined (including margin) as a LOM cost for the project.

Table 8-23 breaks down the unit operating costs by cost centre and Table 8-24 breaks down the operating and capital cost by year in detail. Overall total cost per tonne mined is \$4.58/Ore t mined and \$3.23/Waste t mined which includes capital.

Table 8-23 Unit Mining Costs by Cost Centre

COST ITEM	Ore \$/t	Waste \$/t
LOAD & HAUL	\$0.64	\$0.51
DRILL & BLAST	\$0.46	\$0.39
SUPPORT	\$0.17	\$0.15
PERSONNEL COST	\$1.45	\$1.22
DEWATERING (Inc. in Fixed costs)		
GRADE CONTROL	\$0.19	
ORE REHANDLE	\$0.19	
FIXED OVERHEADS (Inc. Ancillary)	\$0.50	
MARGIN (20%)	\$0.55	\$0.55
CAPITAL	\$0.45	\$0.45
TOTAL	\$4.58	\$3.23

Figure 8-1 Breakdown of Total Mine Operating Cost per Ore Tonne

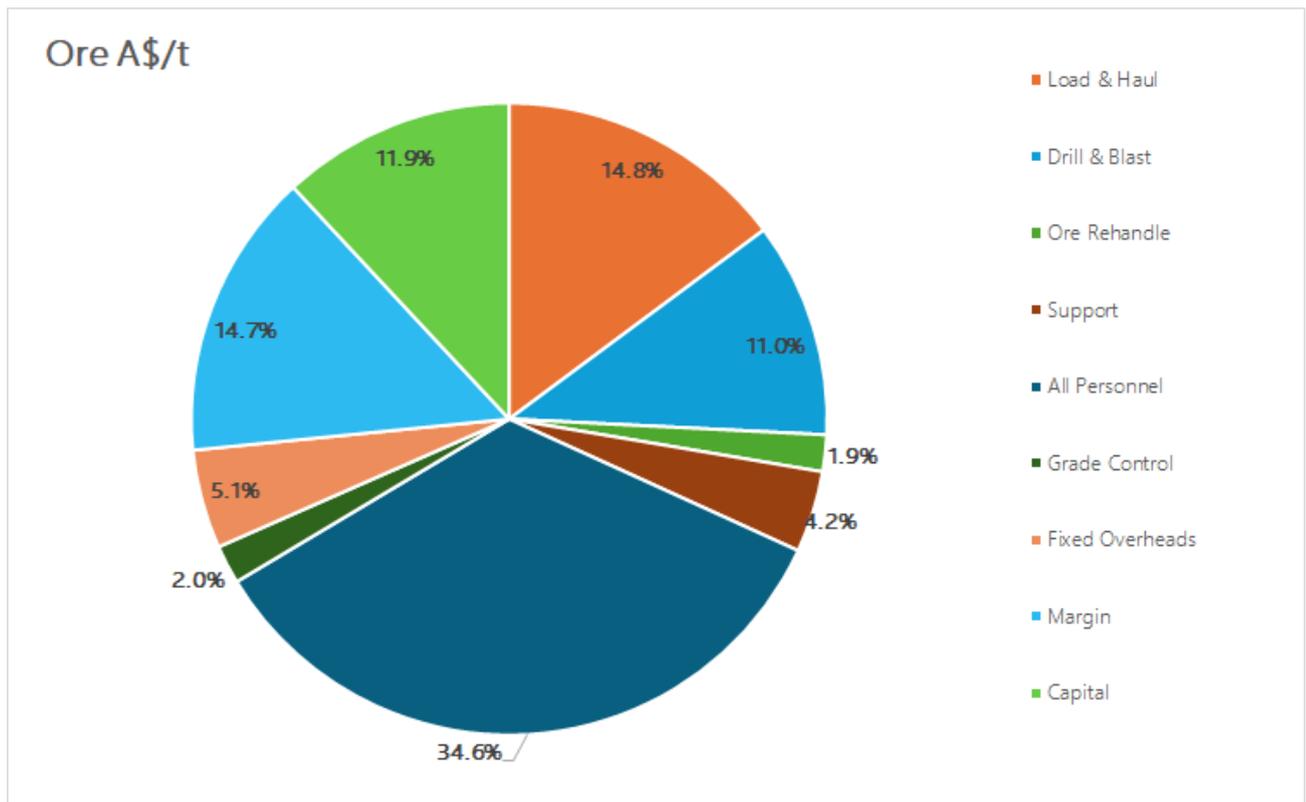


Table 8-24 Total Operating and Capital cost by Year Base Case – M\$

PERIOD	COST CENTRE	TOTAL	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
ORE	LOADING	\$9.9	\$0.3	\$1.9	\$1.1	\$1.0	\$1.3	\$0.6	\$0.8	\$0.9	\$0.9	\$1.0	\$0.0	\$0.0	\$0.0
	HAULING	\$25.2	\$0.3	\$3.6	\$3.0	\$2.2	\$2.7	\$1.7	\$1.8	\$2.0	\$2.1	\$1.8	\$2.0	\$2.0	\$0.0
	SUPPORT	\$9.3	\$0.3	\$0.8	\$0.6	\$0.6	\$0.8	\$0.5	\$0.7	\$0.8	\$1.2	\$1.0	\$1.0	\$1.0	\$0.0
	DRILLING	\$7.7	\$0.1	\$1.3	\$0.7	\$0.8	\$1.0	\$0.3	\$0.5	\$0.9	\$1.0	\$1.1	\$0.0	\$0.0	\$0.0
	BLASTING	\$17.5	\$0.3	\$3.2	\$1.7	\$1.9	\$2.3	\$0.9	\$1.3	\$1.8	\$1.9	\$2.1	\$0.0	\$0.0	\$0.0
	PERSONNEL COST	\$79.5	\$2.4	\$8.9	\$5.9	\$6.4	\$7.9	\$4.6	\$6.6	\$8.2	\$9.2	\$8.9	\$5.6	\$4.4	\$0.5
	GRADE CONTROL	\$10.7	\$0.3	\$2.1	\$1.2	\$1.1	\$1.4	\$0.6	\$0.9	\$1.0	\$1.0	\$1.1	\$0.0	\$0.0	\$0.0
	ORE REHANDLE	\$10.1	\$0.0	\$0.9	\$0.8	\$1.0	\$1.0	\$0.9	\$0.9	\$1.0	\$1.0	\$1.0	\$0.7	\$0.7	\$0.1
	FIXED OVERHEADS (Inc. Ancillary)	\$27.4	\$0.3	\$3.2	\$3.2	\$3.2	\$3.2	\$2.4	\$2.4	\$2.4	\$2.4	\$2.4	\$1.6	\$1.6	\$1.6
TOTAL	\$197.3	\$4.4	\$25.9	\$18.1	\$18.3	\$21.6	\$12.4	\$15.9	\$19.0	\$20.7	\$19.6	\$11.0	\$9.8	\$0.6	
WASTE	LOADING	\$15.9	\$1.3	\$2.5	\$2.5	\$2.3	\$2.0	\$1.6	\$1.4	\$1.3	\$0.6	\$0.3	\$0.0	\$0.0	\$0.0
	HAULING	\$29.1	\$1.1	\$4.0	\$4.6	\$4.0	\$3.7	\$2.6	\$3.0	\$3.2	\$1.8	\$1.1	\$0.0	\$0.0	\$0.0
	SUPPORT	\$13.2	\$1.8	\$1.3	\$1.6	\$1.5	\$1.4	\$1.7	\$1.4	\$1.3	\$0.9	\$0.4	\$0.0	\$0.0	\$0.0
	DRILLING	\$9.7	\$0.5	\$1.3	\$1.4	\$1.4	\$1.1	\$0.9	\$1.0	\$1.2	\$0.7	\$0.4	\$0.0	\$0.0	\$0.0
	BLASTING	\$24.7	\$1.6	\$3.5	\$3.7	\$3.4	\$3.0	\$2.5	\$2.5	\$2.5	\$1.3	\$0.7	\$0.0	\$0.0	\$0.0
	PERSONNEL COST	\$107.8	\$11.3	\$11.5	\$14.2	\$13.8	\$12.2	\$13.3	\$11.8	\$10.8	\$6.0	\$2.8	\$0.0	\$0.0	\$0.0
	TOTAL	\$200.5	\$17.5	\$24.1	\$28.0	\$26.4	\$23.4	\$22.5	\$21.2	\$20.3	\$11.4	\$5.7	\$0.0	\$0.0	\$0.0
TOTAL	LOADING	\$25.8	\$1.6	\$4.4	\$3.6	\$3.3	\$3.3	\$2.2	\$2.2	\$2.2	\$1.6	\$1.4	\$0.0	\$0.0	\$0.0
	HAULING	\$54.4	\$1.3	\$7.6	\$7.5	\$6.0	\$6.3	\$4.2	\$4.7	\$5.0	\$4.1	\$3.1	\$2.4	\$2.4	\$0.0
	SUPPORT	\$22.6	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$1.5	\$1.1	\$1.1	\$0.0
	DRILLING	\$17.4	\$0.6	\$2.6	\$2.0	\$2.2	\$2.1	\$1.2	\$1.5	\$2.1	\$1.6	\$1.4	\$0.0	\$0.0	\$0.0
	BLASTING	\$42.3	\$1.9	\$6.8	\$5.4	\$5.4	\$5.3	\$3.4	\$3.8	\$4.4	\$3.2	\$2.8	\$0.0	\$0.0	\$0.0
	PERSONNEL COST	\$187.2	\$13.7	\$20.4	\$20.1	\$20.1	\$20.1	\$17.9	\$18.4	\$19.0	\$15.2	\$11.7	\$5.6	\$4.4	\$0.5
	DEWATERING (Inc. in Fixed costs)														
	GRADE CONTROL	\$10.7	\$0.3	\$2.1	\$1.2	\$1.1	\$1.4	\$0.6	\$0.9	\$1.0	\$1.0	\$1.1	\$0.0	\$0.0	\$0.0
	ORE REHANDLE	\$10.1	\$0.0	\$0.9	\$0.8	\$1.0	\$1.0	\$0.9	\$0.9	\$1.0	\$1.0	\$1.0	\$0.7	\$0.7	\$0.1
	FIXED OVERHEADS (Inc. Ancillary)	\$27.4	\$0.3	\$3.2	\$3.2	\$3.2	\$3.2	\$2.4	\$2.4	\$2.4	\$2.4	\$2.4	\$1.6	\$1.6	\$1.6
TOTAL	\$397.8	\$21.7	\$50.0	\$45.9	\$44.4	\$44.8	\$34.8	\$36.9	\$39.1	\$32.3	\$25.6	\$11.4	\$10.2	\$0.6	
MARGIN	TOTAL	\$79.6	\$4.3	\$10.0	\$9.2	\$8.9	\$9.0	\$7.0	\$7.4	\$7.8	\$6.5	\$5.1	\$2.3	\$2.0	\$0.1
CAPITAL	MINING FLEET	\$57.7	\$10.2	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$2.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	REPLACEMENT	\$2.1	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.0
	ANCILLARY & MINOR	\$0.2	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	INITIAL DEWATERING	\$1.0	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	CLEARING	\$2.0	\$0.6	\$0.4	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.3	\$0.0	\$0.2	\$0.0	\$0.0
	ROAD BUILDING	\$0.3	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	REHAB	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	\$0.2	\$0.1	\$0.1	\$0.0	\$0.0
	DEMOBILISATION	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	\$0.0	\$0.0
TOTAL	\$64.4	\$12.5	\$9.6	\$9.7	\$9.2	\$9.2	\$9.2	\$9.2	\$2.7	\$0.6	\$0.3	\$0.5	\$0.7	\$0.2	\$0.0
GRAND TOTAL	TOTAL	\$541.8	\$38.6	\$69.6	\$64.8	\$62.5	\$63.0	\$51.0	\$47.0	\$47.6	\$39.0	\$31.2	\$14.4	\$12.5	\$0.7

9 FINANCIALS

The overall project makes a positive cashflow with the following characteristics:

The Base Case summarised in Table 9-1 show:

- 5.0 Mtpa process throughput for a ~11 year mine life.
- Includes processing all mining ore inventory within the design pit.
- \$290 M initial capital which includes \$10 M for mining. There is an additional \$54 M for sustaining and replacement mining capital which is spent during the course of the operation.
- Average mining cost is \$3.79/t mined and average processing cost is \$20.9/t processed.
- Overall insitu ounces are 1.42 Mozs which produces 1.25 Mozs recovered.
- Total cashflow is \$742 M when evaluated at a gold price of \$2,350/oz.
- NPV at 6% is \$392 M.

Note, these values do not account for all of the costs associated with financing, depreciation and tax.

The project is sensitive to gold price with NPV varying by $\pm 30\%$ when gold price is varied by $\pm 6\%$ as shown in Figure 9-1.

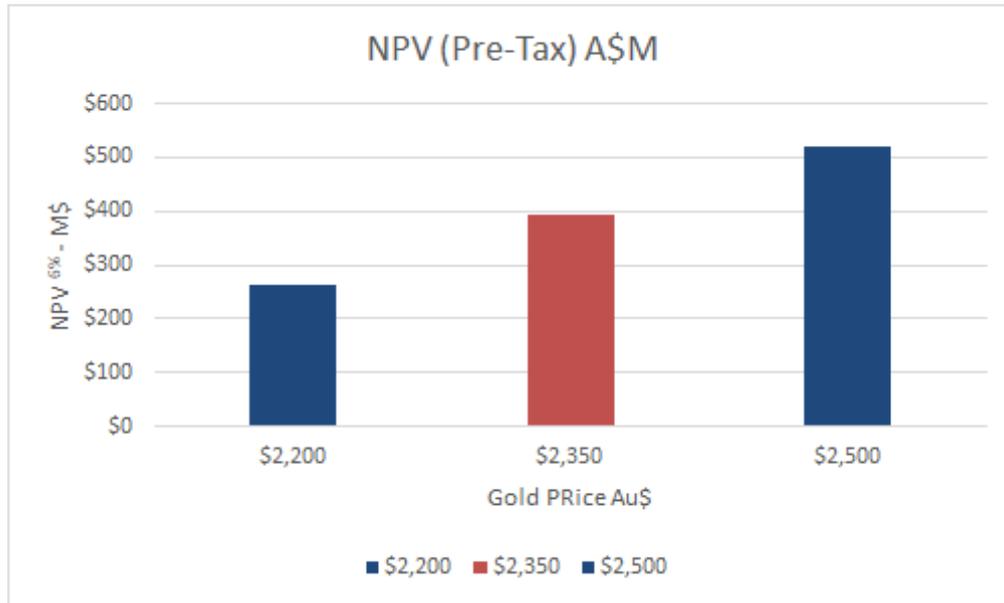
The selling costs are also based on the net value approach to royalty calculation as this was in most cases the maximum of both the net value versus percentage of metal approach to royalty calculation.

There is an element of risk associated with the LOM Base Case option, however, the risk is minimal as the majority of the inferred ore is mined towards the end of the mine life which provides ample time to drill and increase the confidence of this ore. Finally, the amount of inferred ore represents approximately 2% of the total ore within the pit, hence the risk is minimal.

Table 9-1 Base Case – EBITA Financials

PROJECT PHYSICALS	UNITS	Rustlers Roost, AO & Q29
Project Life	Yr	11.0
Total Ore Mined (Mining Inventory)	Mt	54.8
Strip Ratio	waste/ore	1.61
Ore Grade	g/t	0.81
Ounces Contained	oz	1,422,361
Recovery	%	88%
Ounces Recovered	oz	1,251,678
Plant Throughput	Mtpa	5
Annual Ounce Production	ozpa	113,789
PROJECT FINANCIALS		
Development Capital	A\$M	\$280
Pre-Production	A\$M	\$10
Total Pre-Production Costs	A\$M	\$290
Gold Price	A\$/oz	\$2,350
Gold Sales Revenue	A\$M	\$2,941
Mining Costs	A\$M	\$592
Processing Costs	A\$M	\$1,146
Site G&A Costs	A\$M	inc
Royalty (2.5%)	A\$M	\$74
Royalty (NT Govt. MRA Levy)	A\$M	\$93
Mining Sustaining Costs	A\$M	\$5
Project Costs (Pre-Tax)	A\$M	\$2,200
Project Cashflow (Pre-Tax)	A\$M	\$742
NPV ₆ (Pre-Tax)	A\$M	\$392
IRR (Pre-Tax)	%	34%
NPI	index	1.4
COSTS OF PRODUCTION		
Total Cash Cost (C1) Per Rec Ounce	A\$/oz	1,389
Royalties	A\$/oz	\$133.25
Sustaining Costs	A\$/oz	\$3.86
All In Sustaining Cost (ASIC) Per Rec Ounce	A\$/oz	1,526

Figure 9-1 NPV^{6%} variation to Gold Price



10 Ore Reserve Statement

The Pre-Feasibility Study was undertaken on the Mt Bundy Gold Project during Feb to June 2022. The initial 2021 PFS was based on the design of 4.5Mtpa carbon-in-leach gold processing plant. This study includes an updated design to 5.0Mtpa process rate and 88% metallurgical recovery rate.

The mine planning process has relied on inputs from other disciplines. The key inputs are:

- The resource model provided by Cube Consulting.
- Slope design criteria, provided by Peter O’Bryan & Associates.
- Orelogy Consulting completed the modifying factors associated with dilution and mining recovery estimates.
- Processing costs, processing recoveries and concentrate grade provided by GR Engineering.
- The gold price used in the study was originally defined at Au\$2,200/oz and was subsequently increased to Au\$2,350/oz. These prices are highlighted in Figure 10-1 which illustrate that both of these prices are below the average FY21 price of ~Au\$2,500/oz.
- Royalties and concentrate pay-ability provided by Primary Gold Limited.

Figure 10-1 – Historical Gold Price (Source Gold.org/goldhub/data – 2nd July 2021)



The mine planning component of this study involved mine cost estimation, pit optimisation, mine design and scheduling. The total mineable reserve for the deposit is 53.6 Mt at 0.8 g/t for 1.39 Moz contained gold at an average strip ratio of 1.7 as summarised and broken down by resource in Table 10-1. Included within the pit design inventory but not the ore reserve is ~1.3 Mt of inferred material at 0.7 g/t as highlighted in Table 10-2.

Table 10-1 Ore Reserve Summary – COG = 0.32 g/t Au Rustlers Roost, AO and 0.35 g/t Au Q29.

Description	Units	Rustlers Roost	Annie Oakley	Quest 29	Total
Probable	Mt	47.8	0.664	5.134	53.6
	g/t	0.80	1.04	0.87	0.8
	Mozs	1.228	0.022	0.144	1.39
Waste	Mt	64.1	6.9	17.3	89
Total	Mt	113.0	7.6	22.5	143
Strip Ratio	w:o	1.37	10.4	3.4	1.7

Table 10-2 Ore Inventory Summary – COG = 0.32 g/t Au Rustlers Roost, AO and 0.35 g/t Au Q29.

Description	Units	Rustlers Roost	Annie Oakley	Quest 29	Total
Probable	Mt	47.8	0.664	5.134	53.6
	g/t	0.80	1.04	0.87	0.81
	Mozs	1.228	0.022	0.144	1.39
Inferred	Mt	1.2	0.0	0.1	1.3
	g/t	0.70	0.72	0.75	0.70
	Mozs	0.026	0.001	0.001	0.03
Waste	Mt	64.1	6.9	17.3	88
Total	Mt	113.0	7.6	22.5	143
Strip Ratio	w:o	1.37	10.4	3.4	1.7

Proved Ore Reserves are based on Measured resource materials and Probable Ore Reserves are based on Indicated resource materials, reported within the pit design.

The competent person for the reserve estimate is Mr Stephen Craig, Managing Director with Orelogy. Mr Craig is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Craig has sufficient experience relevant to the style of mineralisation, the type of deposit and the activities planned at Rustlers Roost to qualify as a Competent Person as defined in the 2012 JORC Code.

11 RISKS

11.1 Execution Risk

The key risks identified with the open pit operations are summarised as follows:

- There will always be a risk in any mining operation that ore delivered to the process plant will not be of the grade or tonnage as planned. This will usually be a result of:
- Resource model not in-line with orebody;
- Incorrect estimation of ore loss and / or dilution; or
- Planned mining productivities not achieved.

These risks have been and / or will be mitigated respectively by the following activities.

- Strict grade control in advance of mining;
- The PFS approach to ore loss and dilution is considered realistic;
- The mining schedule is considered achievable;
- Geotechnical risk associated with open pit workings was identified as this is always a risk associated with open pit workings.

The key risks identified are associated with:

- Uncertainty in the location of unfavorable geotechnical structures and / or the oxide / fresh boundary ;
- Elevated wall pore pressures reducing slope stability.

These risks will be mitigated through extensive geotechnical investigation carried out as part of the future FS, plus the staged pit development approach and the planned implementation of a de-watering borefield during site establishment.

- There is risk associated with project start-up, and the potential of not meeting mining ramp-up requirements. The effective establishment of site access will be crucial.
- Health and safety risks associated with on-going mining operations will be mitigated though the implementation of industry standard procedures and protocols to minimise both the potential for incidents to occur and limit the severity of any incidents.

11.2 Cost Risk

Risk in the mining cost estimation is generally a result of:

- Under-estimating costs; and / or
- Over-estimating productivity.

Oreology have developed costs on the basis of costs supplied by in-country suppliers and their owner experience and cost database. They consider the underlying assumptions reasonable and the resulting costs to be with PFS levels of confidence. Key cost drivers such as fuel price, personnel costs etc. will be subject to the usual market fluctuations that cannot be predicted.

12 RECOMMENDATIONS FOR FURTHER WORK

Given the increase in processing throughput to 5.0 Mtpa, more work is required in matching/improving the mining fleet. At present, two 150 t class excavators are working for a 5 year period, with one of them being retired. This does provide operational flexibility, but costs may be able to be further optimised by purchasing a secondhand machine closer to implementation.

Other areas will include:

- Updating equipment pricing.
- Engaging with mining contractors on an RFQ/tendering basis.
- Update manning schedule and associated costs.
- Update the overall mine design to deal with the larger shells.
- Ensure processing throughputs and cost structures are valid.
- Revise waste dump design in conjunction with TSF design. At present, the capacity of the waste dump is very close to the amount of waste being produced.