**ASX Announcement** 



# **ASX:** MYG

# **Mutiny Simplifies Deflector Plan**

#### 4 August 2014

# **Highlights:**

- New management complete "Mine Operators Review" of the Deflector 2013
   Definitive Feasibility Study, simplifying and optimising the Deflector Project
- Mutiny Board has resolved to pursue financing and development of the Deflector project based on the new mine plan
- New mine plan reduces open pit volume by 80% based on both rock properties and ore thickness, and establishes early access to the underground mine
- Processing capital and throughput revised to align with optimal underground production rate of 380,000 tonnes per annum
- Payable metal of 365,000 gold ounces, 325,000 silver ounces, and 15,000 copper tonnes
- Pre-production capital of \$67.6M
- C1 cash cost of \$549 per gold ounce
- All in sustaining cost of \$723 per gold ounce
- Exploration review completed with primary focus to be placed on the 7km long, under explored, "Deflector Corridor"

Note: Payable metal and costs presented in the highlights are taken from the Life of Mine Inventory model (LOM Inventory). All currency in AUS\$ unless marked.

Mutiny Gold Ltd (ASX:MYG) ("Mutiny" or "The Company") is pleased to announce that the new company management, under the leadership of Managing Director Tony James, has completed an internal "Mine Operators Review" of the Deflector gold, copper and silver project, located within the Murchison Region of Western Australia.

The review was undertaken on detail associated with the 2013 Definitive Feasibility Study (DFS) (ASX announcement 2 September, 2013).

Tony James, Managing Director of Mutiny Gold, said: "The Company now has a simplified plan that is a true reflection of the ore body and 2014 conditions and we are very keen and excited to progress to the next stage of the project."

"Over the last couple of months the new management team has completely reviewed this project, beginning with the geology and the rock type and conditions and then shaped a plan around what we could physically see and understand."

"Fundamentally the mine is a shallow, narrow vein, high grade underground mine in excellent rock conditions, which is straight forward for experienced Western Australian underground miners."





"The purpose built processing facility that will be constructed for the Deflector mine will be based on the optimal underground production rate achieved of 380ktpa. The underground mine equates to 80% of the value. The size of the open pit has been dramatically reduced in line with a natural change-over point at 80m depth on the Western Lode based on rock type, rock conditions and expected thickness."

"This work has generated a new reserve of 1.8Mt at 5.6g/t gold (322,000 ounces), 6.3g/t silver (360,000 ounces) and 0.9% copper (16,000 tonnes)." (Refer to Table 2 below).

"The Company has also completed a detailed technical review of the exploration strategy associated with the Gullewa Gold Project and has identified a logical order to the exploration targets. The immediate focus for the Company will be on the seven kilometre long Deflector Corridor which is effectively untested and under explored outside of the upper parts of the Deflector ore body."

#### **Project and Financial Metrics**

The project physicals and economics resulting from the Mine Operator's Review are now updated based on the new plan. The following Table 1 summarises the key metrics for the project based on the Life of Mine Inventory (LOM Inventory) and Reserve (Tables 4 and 5 below). The LOM inventory includes Inferred Resources that have had the same parameters applied to those used in the Reserve estimation.

Table 1 - Key Financial Metrics

Key Project Metrics	LOM Inventory	Reserve
Mining		
Total Ore Mined	2,248Kt	1,781Kt
Mined Head Grade – Au	5.7g/t	5.6g/t
Mined Head Grade – Cu	0.8%	0.9%
Mined Head Grade - Ag	5.7g/t	6.3g/t
Processing		
Average Mill Throughput	380Ktpa	380Ktpa
Average Metallurgical Recovery – Au	90.6%	90.2%
Average Metallurgical Recovery – Cu	85.8%	84.7%
Average Metallurgical Recovery – Ag	75.3%	75.6%
Production		
Average Annual Production – Au	63Koz	62Koz
Average Annual Production – Cu	2,662t	2,853t
Average Annual Production - Ag	60Koz	63Koz



Key Project Metrics	LOM Inventory	Reserve
Production		
LOM Payable Au Ounces (4)	365Koz	284Koz
LOM Payable Cu Tonnes <sup>(4)</sup>	15,000t	12,490t
LOM Payable Ag Ounces <sup>(4)</sup>	325Koz	264Koz
Mine Life	5.9 Years	4.6 Years
Financial		
Capex – Preproduction	\$67.6M	\$67.6M
Gold Price Assumed (\$USD/oz)	\$1,300	\$1,300
Copper Price Assumed (USD\$/t)	\$6,660	\$6,660
Silver Price Assumed (USD\$/oz)	\$20	\$20
USD:AUD Exchange Rate	0.93	0.93
C1 Cash Cost (\$/Au oz) (2)	\$549	\$524
All in Sustaining Cash (AISC) Cost (\$/Au oz) (3)	\$723	\$701
LOM Revenue	\$611M	\$481M
LOM Cash Flow after Capital Expenditure	\$178M	\$130M
IRR Before Tax	50%	48%
NPV (8%) Before Tax	\$111M	\$84M

Notes: (1) All currencies in AUS\$ unless marked. (2) C1 costs are onsite costs less by-product credits. (3) AISC are C1 + Corporate Overheads and royalties + sustaining capital expenditure. (4) Payable metal is based on company revenue after all Bullion and concentrate terms and conditions.

The preproduction capital shown of \$67.6Min the above table is made up of:

- processing facility \$51.2M;
- accommodation village \$5.5M;
- open pit pre strip \$4.8M;
- project implementation \$4.1M; and
- underground infrastructure \$2.0M.

The economic modelling associated with the Deflector LOM Inventory presented above in Table 1 are stand-alone financials which do not include hedging, gold streaming, gearing or tax.

Provided on page 11 are charts showing Gold Price and Operating Expense Sensitivities (Figure 4) and Revenue by Metal by Year (Figure 5).

The sections below look specifically at the open pit, underground, processing facility and financial charts associated with the plan. In each case, the values and detail shown relate to the LOM Inventory Model.



#### **Open Pit**

The Deflector ore body sits under a thin transported cover. Mining commences with an open pit designed to mine oxide and transitional ore in the first ten months whilst the underground mine is established from an access point adjacent to the Central lode. Figure 1 below shows the new design layout for the open pit and underground in direct comparison to the 2013 DFS. Key design and logic parameters associated with the open pit are as follows:

- The overall size of the open pit has been reduced from 23.2Mt (stripping ratio 23.5 : 1) to 4.8Mt (stripping ratio 13.5 : 1).
- Open pit ore production is 348kt @ 5.5g/t Au (62,000 ounces), 11.8g/t Ag (132,000 ounces) & 1.6% Cu (6,000 tonnes).
- The open pit is mined to 85m on the Western lode and 35m on the Central lode.
  The Central lode allows for underground access to commence three months after
  the open pit commences. The best rock properties within the ore body are seen
  below 80m depth.
- The average ore body thickness changes from 5.5m above 80m to 3.1m at 80m depth making the transition to underground mining logical at this depth.
- Ore located in the revised open pit is in the 100% "Measured" Resource category.
- Open pit mining commences nine months after project approval.
- Average open pit operating cost is \$45/t.



2014 PIT

Figure 1: Deflector open pit and underground isometric



#### **Underground**

The majority of the Deflector ore body is narrow high grade veins in excellent host rock conditions (pillow basalt). The ore is located in three separate lodes being the West, Central and Contact lodes. With good stand-off distances between the lodes, the vertical nature and strike continuity is perfect for standard Western Australian narrow vein mechanised underground mining techniques. Key design and logic parameters associated with the underground include:

- Underground access commences from the Central lode within the open pit three months after the open pit commences.
- Underground production is synchronised with the open pit production to ensure continuity in metal production.
- Underground ore production, based on LOM Inventory, is 1.9Mt @ 5.7g/t Au (349,000 ounces), 4.6g/t Ag (282,000 ounces) & 0.6% Cu (12,000 tonnes).
- Capital development associated with the underground mine is 4,800m. Total lateral development in the mine is 22,400m.
- Mechanised bench stoping on 20m sub levels produces 1.34Mt @ 6.5g/t Au (278,000 ounces), 5.2 g/t Ag (225,000 ounces) and 0.7% Cu (9,700 tonnes) and ore drive development produces 0.56Mt @ 3.9g/t Au (71,000 ounces), 3.1 g/t Ag (57,000 ounces) and 0.4% Cu (2,450 tonnes).
- Key underground metrics include 6,300 tonnes per vertical meter and 1,160 gold ounces and 40 copper tonnes per vertical meter.
- Underground access commences 12 months after project approval.
- Average underground operating cost is \$96/t.

#### **Processing**

A fit for purpose processing facility will be constructed to enable adequate recovery of gold bullion from a gravity circuit prior to production of a copper/gold/silver concentrate which will be sold on commercial terms. The processing flow sheet is the same as presented in the 2013 Deflector DFS. The process flow sheet used is considered standard technology and the components are those typical in Western Australia and readily available. Other key design and logic parameters coming out of the review associated with the processing facility include:

 The design of the processing facility throughput rate is based solely on the optimal underground production rate for fresh sulphide ore which is 380ktpa. The underground fresh sulphide ore accounts for 80% of the value of the LOM inventory.



- The throughput rate of the oxide and transitional ore in the first 15 months is 480ktpa. The higher throughput associated with oxide and transitional ore is related to lower material work indexes.
- 80% of the ore processed is primary, 11% of the ore is transitional, and 9% is oxide material.
- The processing facility location has been relocated from the historical Gullewa plant location to the Deflector mine site to minimise ore haulage and infrastructure costs.
- The capital associated with the processing facility including three stage crushing is \$51.2M.
- The engineering and construction time frame is 12 months from project approval.
- Table 2 below shows the different recovery parameters and gravity/concentrate splits for the different ore types.
- Average processing operating cost is \$37/t.

#### **Table 2 - Metal Recovery**

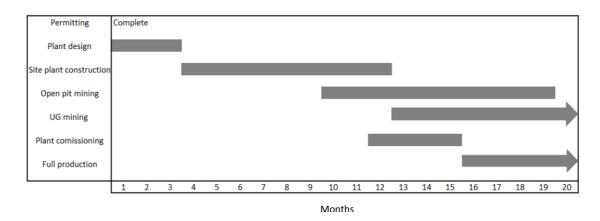
Metal Recovery (Concentrate Grade)	Oxide	Transition	Primary
Gravity Au	39%	45%	56%
Flotation Au	39% (97g/t)	47% (34g/t)	35% (39g/t)
Flotation Cu	65% (35%)	81% (20%)	93% (21%)
Total Au	78%	92%	91%
Total Cu	65%	81%	93%



#### **Project Development**

Figure 2 below outlines the timing associated with preproduction mining, engineering, and construction.

Figure 2 - Project Development



# **Project Funding**

Recently a number of banks and financial institutions have expressed interest in the Deflector project. With the release of this new project plan and confirmation of robust project economics, Mutiny is committed to financing the project.

During the next period management will turn its focus to achieving full project funding with a view to commencing project development as soon as possible.



#### **Exploration**

During the "Mine Operator's Review" all exploration work to date was technically reviewed resulting in a ranking of the exploration targets associated with Gullewa Gold Project outside of the Deflector resource. The review has highlighted four separate areas ranked by priority that justify further systematic exploration. Figure 3 below shows the location of these areas within the Gullewa tenure. The targets are:

- 1. Deflector Corridor Host to the Deflector gold (591,000oz) copper (27,000t), silver (631,000oz) deposit. The Deflector Corridor extends over seven kilometres in length and like most of the Gullewa Gold Project area is predominately under shallow cover. The discovery RAB hole drilled by Sons of Gwalia (SOG) in 1991 detected the adjacent Deflector deposit with a best assay of 1m at 1.9g/t gold from 6m. Along the Deflector Corridor, Mutiny has identified four similar high priority targets which include 4m at 2.3g/t gold from 22m at Jack Sparrow, 2m at 1.1g/t from 39m at Mary Celeste (recent Mutiny discovery announced on the ASX 5<sup>th</sup> of June 2014), 1m at 8.9g/t gold from 43m at Davy Jones and 3m at 1.0g/t gold from 51m at Flying Dutchman. All four shallow drill intercepts were obtained from the cover/rock interface and are yet to be followed up. The recent discovery of Mary Celeste has also demonstrated to the Company that Sub Audio Magnetics (SAM) can be used as an effective exploration tool to identify potentially mineralised structures under the shallow cover within the Gullewa Gold Project area.
- 2. Quartermaster This area is relatively un-explored with some minor historical surface workings. Also under extensive cover, the Quartermaster Corridor shows some similar geological features to the Deflector Corridor. Quartermaster has a small intrusive rock body (not dissimilar to the Gearless Well intrusive adjacent to Deflector). It sits directly along strike of the Deflector Corridor. Essentially no previous exploration has been completed at Quartermaster and Mutiny is currently completing a SAM survey over this target area.
- Brandy Hill The Brandy Hill area sits at the southern end of the Salt Creek
  Fault and was subject to gold exploration in the late 1990's and early 2000.
  Follow up work is required to test known geophysical and geochemical anomalies
  at Boatswain, Gunner, Brandy Hill and Navigator.
- 4. Gullewa This area hosts the historical high grade gold mines of King Solomon, Monarch, Shenandoah and Rocksteady. These previously mined deposits are all open at depth with the potential to host a second underground mining complex at Gullewa.



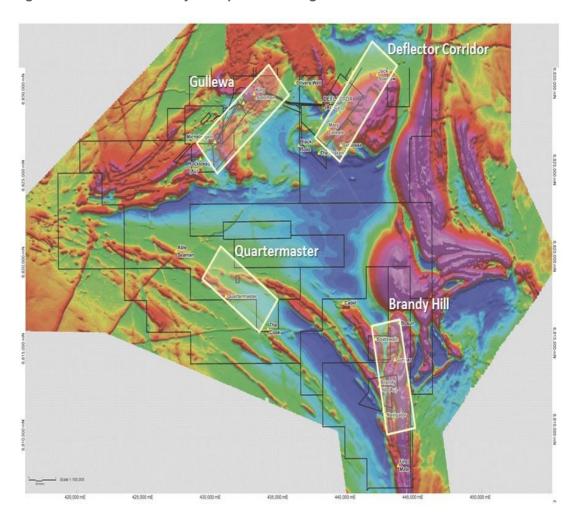


Figure 3: Gullewa Gold Project Exploration Targets



# **Financial Sensitivities and Charts**

The following charts show Gold Price and Operating Expense Sensitivity vs NPV(8%), and Revenue by Metal by Year for LOM Inventory

Figure 4 – Gold Price and Operating Expense Sensitivities vs NPV Project NPV @ 8% (AUD '000) Sensitivities

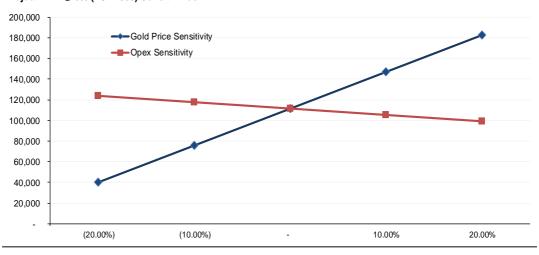
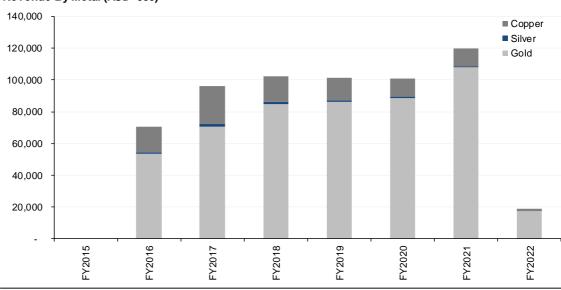


Figure 5 – Revenue by Metal by Year for LOM Revenue By Metal (AUD '000)







#### **Mineral Resources**

The Mineral Resources estimate used for the Deflector DFS Review was reported on the 26<sup>th</sup> November 2012.

Table 3 - Deflector Mineral Resource

DEFLECTOR MINERAL RESOURCE STATEMENT – ASX RELEASE 26 NOVEMBER 2012							
		Au	Au	Cu	Cu	Ag	Ag
Classification	Tonnes	(g/t)	(oz)	(%)	(t)	(g/t)	(oz)
Measured	1,164,000	6	223,000	1.5	17,000	10.9	407,000
Indicated	1,043,000	7.3	246,000	0.6	7,000	4.2	140,000
Measured & Indicated	2,207,000	6.6	468,000	1.1	24,000	7.7	547,000
Inferred	658,000	5.8	122,000	0.5	3,000	3.9	82,000
Totals	2,865,000	6.4	591,000	0.9	27,000	6.8	628,000

Note: Figures are rounded to nearest 10,000 tonnes, 0.1 g/t, and 1,000 ounces. Rounding errors may occur

#### Competent Persons Statement:

The Geological aspects in this report which relates to Deflector Mineral Resource is based upon information compiled by Mr. Lynn Widenbar, of Widenbar and Associates. Mr Widenbar is a member of the Australasian Institute of Mining and Metallurgy and has sufficient expertise and experience which is relevant to the style of mineralisation and to the type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Widenbar consents to the inclusion in the report of matters based on his information in the form and context in which they appear.

#### Competent Persons Statement:

The Metallurgical aspects in this report which relates to Mining Reserve is based upon information compiled by Mr. Allan Brown, Non- Executive Director, Mutiny Gold Ltd. Mr Brown is a member of the Australian Institute of Mining and Metallurgy and has sufficient expertise and experience which is relevant to the style of mineralisation and to the type of deposit under consideration to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Brown consents to the inclusion in the report of matters based on his information in the form and context in which they appear.





# **Ore Reserves and Mining Inventory**

The Deflector Reserve and LOM Production Inventory were generated as part of the "Mine Operators Review" utilising the 26<sup>th</sup> November 2012 Mineral Resource estimate. A detailed mine design and economic evaluation was used to generate the current ore reserve and mining inventory.

Table 4 - Deflector Total Ore Reserve

DEFLECTOR TOTAL ORE RESERVE- ASX RELEASE 4 AUGUST 2014							
		Au	Au	Cu	Cu	Ag	Ag
Classification	Tonnes	(g/t)	(oz)	(%)	(t)	(g/t)	(oz)
Proven	908,000	5.3	153,000	1.3	11,000	9.4	274,000
Probable	873,000	6.0	168,000	0.5	4,000	3.1	86,000
<b>Total Reserve</b>	1,781,000	5.6	322,000	0.9	16,000	6.3	360,000

Note: Figures are rounded to nearest 10,000 tonnes, 0.1 g/t, and 1,000 ounces. Rounding errors may occur

Table 5 – Deflector Life of Mine Production Inventory

DEFLECTOR LOM PRODUCTION INVENTORY – ASX RELEASE 4 AUGUST 2014							
		Au	Au	Cu	Cu	Ag	Ag
Classification	Tonnes	(g/t)	(oz)	(%)	(t)	(g/t)	(oz)
Measured	903,000	5.4	157,000	1.3	12,000	9.6	279,000
Indicated	875,000	6.3	178,000	0.5	4,000	3.2	91,000
Inferred*	470,000	5.0	76,000	0.4	2,000	3.0	45,000
Totals	2,248,000	5.7	411,000	8.0	18,000	5.7	415,000

Note: Figures are rounded to nearest 10,000 tonnes, 0.1 g/t, and 1,000 ounces. Rounding errors may occur

\*Cautionary statement: there is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised

#### Competent Persons Statement:

The Underground and Open Pit mining aspects in the report which relates to Mining Reserve is based upon information compiled by Mr Shane McLeay – B.Eng(Hons), Principal – Mining of Entech Pty Ltd. Mr McLeay is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient expertise and experience which is relevant to the style of mineralisation and to the type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr McLeay consents to the inclusion in the report of the matters based on his information in the form and context in which they appear.



For further queries please contact:

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# **Reserve Estimation Parameters**

Criteria	JORC Code Explanation	Commentary
Mineral resource Estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	<ul> <li>The Ore Reserve estimate is based on the Mineral Resource estimate carried out in November 2012 Mutiny Gold Ltd.</li> <li>The Mineral Resources are reported inclusive of Ore Reserves.</li> </ul>
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.  If no site visits have been undertaken indicate why this is the case.	<ul> <li>No site visit has been conducted by the Competent Person.</li> <li>Site visits have been conducted by multiple personnel involved in the project including Entech employees.</li> <li>The Competent Person is satisfied that the descriptions of the planned infrastructure and locality provided by MYG along with the surveyed 3D topography are sufficient information to carry out the mine design and classify the Ore Reserves.</li> </ul>
Study Status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine	•Feasibility level.





	plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	
Cut-off Parameters	The basis of the cut-off grade(s) or quality parameters applied.	<ul> <li>Cut-off grades were determined based on unit costs from the "feasibility level" mining cost model.</li> <li>In order to determine the economically mineable part of the resource, the total value of the mineralised material was calculated, including recognition of the value of gold, copper and silver in the ore. This value, commonly referred to as a Net Smelter Return (NSR) is calculated in Australian dollars per ore tonne and represents the value of the products produced from one tonne of ore if sold at the mill gate. It is calculated from the revenue received from the payable metal (mill recovered) contained in the products less all costs and charges downstream of the site including transportation, smelting, refining and metal loss throughout these stages.</li> <li>NSR cut-off grade calculations were conducted by Entech prior to designing the open pit and underground mines, and again following completion of the design, scheduling and cost modelling. The initial estimation that was used for the updated mine design purposes was based on processing, treatment, refining, mining, administration and operating cost estimates from the 2012 Feasibility Study.</li> <li>2014 Commodity prices were provided by Mutiny based on average pricing data from concensus estimates.</li> </ul>





# Mining Factors or Assumptions

The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access. etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors

- Ore Reserves have been calculated by generating detailed mining shapes for the proposed open pit, and underground mines. All open pit mining shapes include planned and unplanned dilution, being waste material that is located within the minable shape. Additional unplanned dilution is also generally incurred from the walls of the pit and stopes sue to blast damage, redistribution of stress, poor mining practise (such as poor blasting/drilling and over digging)
- Open pit unplanned diluition has been modelled witihin the mining shapes as a skin of material likely to be taken additional to material considered to be the smallest mining unit (SMU). A 10% unplanned dilution for all underground stoping shapes has been calculated by Entech. This value is considered to be appropriate given the expected ground conditions, orebody width and proposed mining style.
- Mining recovery factor of 98% and 95% has been applied to the open pit and
  underground Ore Reserves respectively post geological interrogation to generate the final
  diluted and recovered Ore Reserve estimate. This mining recovery is applied to allow for
  any ore loss due to mining related issues such as; underbreak due to poor drilling and
  blasting techniques, stope bridging or freezing or material being left in stopes due
  inaccessibility.
- The selected mining methods for the Deflector deposit are open pit and underground to exploit the majority of the ore body. The proposed pit is to be completed using conventional open pit mining methods (drill, blast, load and haul) by a mining contractor utilising 100 t class excavators and 90 t trucks. The selected mining method for the underground is long hole retreat open stoping with pillars. Both methods are used widely in mines across Western Australia and is deemed appropriate given the mature of the ore body, and the desire to extract the maximum value from the deposit.
- Stopes sizes are generally 35 mL x 25 mH by ore width. The average stoping width is 2.5 mW and the minimum mining width used in stoping generation is 1.5 m. Rib pillars have been designed in a chequer board arrangement to ensure wall stability is maintained the average pillar:stope width is 2:1 which is considered appropriate given the nature of the host rock.

15

used.





Any minimum mining widths used.

The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.

The infrastructure requirements of the selected mining methods.

- A minimum mining width down to 15 m for final pit extraction from the base of pit has been used.
- Pit wall slopes are based on recommendations provided by Snowden Mining Industry Consultants (Snowden) and based upon expected rock type, weathering profile and depth below surface.
- Inferred material has not been included within this Reserve estimate (treated as waste) but has been considered in LOM planning. It is assumed that Inferred material will be converted to Reserve via grade control drilling which has been provided for and will be carried out ahead of mining.
- 10% dilution (zero grade) & 95% mining recovery has assumed.
- Standard haul roads, mine drainage and workshop and processing facilities have been accounted for in the generation of the Deflector Ore Reserve.
- Infrastructure required for the proposed Deflector Project have been accounted for and included in all work leading to the generation of the Ore Reserve estimate. The Deflector Project infrastructure includes:
  - · All site surface infrastructure, including:
    - Processing facilities, including crushing, grinding, flotation and dewatering
    - Tailings pumping lines
    - Offices, workshops, warehouses and associated facilities
    - Borefield and pipeline
    - Camp
    - Access Road
    - Power Station
- All power and pumping reticulation for underground operations will be fed through decline development, ventilation rises and service holes drilled in close proximity to the decline to minimise cable and pipe runs along the decline path.
- Ventilation fans will be installed underground at the base of a raisebored shaft to supply fresh air to underground workings.





# Metallurgical Factors or Assumptions

The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work

and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy

- The Deflector processing facility design is based on an industry standard copper flotation process utilising Controlled Potential Sulphurisation (CPS), a technique utilised in several commercial plants to float copper oxides using short chain xanthates. The processing facility will produce a copper/gold concentrate, and gold bullion derived from gravity concentrate. When processing primary material, bullion derived from the leaching of an intermediate flotation product will be added to the product streams.
- An ore processing facility capable of processing up to 480,000 t/yr of oxide and transitional material and 380,000 t/yr of fresh material is be to established on the Deflector mine site.
- Mutiny's processing flowsheet includes the major process steps described below.
  - Three stage crushing circuit
  - Single stage ball mill
  - Gravity circuit
  - Flotation
  - Pre-leach thickening
  - · Six stage CIP plant on rougher tails
  - Elution
  - Tails pumping

The processing facility design for the Deflector is based on a robust metallurgical flowsheet designed for optimum recovery with minimum operating costs. Design of the facility has been completed by GR Engineering Services as part of the metallurgical definitive feasibility study.





	to meet the specifications?	
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	<ul> <li>Environmental impacts and hazards are being considered as part of the DOIR application process.</li> <li>Waste rock characterisation and hydrogeological investigations indicates the rock mass is considered non-acid forming.</li> <li>Tailings from the open pits and underground operations are proposed to be stored within the existing Tailings Storage Facility (TSF) Guallewa.</li> <li>All permitting is currently in place for Deflector.</li> </ul>
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure	<ul> <li>There is currently no significant infrastructure located at the Deflector site. TSF facilities are located 7.5 km away at the previous process location.</li> <li>It has been assumed that all development of surface infrastructure will be completed to enable to development of the Deflector Resource.</li> <li>It has been assumed that there will be sufficient water available to develop the Deflector Project.</li> </ul>



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	can be provided, or accessed.	
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.  The methodology used to estimate operating costs. Allowances made for the content of deleterious elements.  The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.  The source of exchange rates used in the study.  Derivation of transportation charges.  The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.  The allowances made for royalties payable, both Government and private.	<ul> <li>Capital and operating costs have been sourced from supplier and contractor quotes as well as Entech's cost database through the "feasibility study" process.</li> <li>A capital and operating cost model has been developed in Excel and has been used to complete a life of mine cashflow estimate.</li> <li>The derivation of assumptions made for commodity prices is shown below.</li> <li>Smelter terms have been deteremined from typical contracts and include: <ul> <li>Gold and Silver payability (Cu Concentrate)</li> <li>Copper payability and TC/RC</li> <li>Gold and Silver payability (Bullion)</li> <li>The presence of deleterious elements has been assessed and been determined that no penalties will be applied.</li> <li>Estimates of smelter terms have been determined in-house.</li> </ul> </li> <li>Product inland transport costs have been estimated by budget estimates from local contractors</li> <li>Royalty allowances are in accordance with Division 5 of the WA Mining Act and assessment of royalties payable to other parties.</li> </ul>





Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.  The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and coproducts.	Revenue has been based on the commodity price and exchange data provided by Mutiny, the following commodity prices have been used:  Gold - AU\$1,400/oz Silver - AU\$21/oz Copper - AU\$7,170/t Exchange rate - \$A 1: \$US 0.93  This information has been used in all stages of design and cost modelling.
Market Assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.  A customer and competitor analysis along with the identification of likely market windows for the product.  Price and volume forecasts and the basis for these forecasts.  For industrial minerals the customer specification, testing and acceptance requirements	Several trading houses have supplied quotes and ensure there is a market for the copper gold concentrate and are keen to take the product, direct contact with smelters confirms the same.  Gold doré from the mine is to be sold at the Perth mint.





	prior to a supply contract.	
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	<ul> <li>The Ore Reserve estimate is based on a financial model for that has been prepared at a "feasibility study" level of accuracy economic modelling. All inputs from mining operations, processing, transportation and sustaining capital as well as contingencies have been scheduled and evaluated to generate a full life of mine cost model.</li> <li>Economic inputs have been sourced from suppliers or generated from database information relating to the relevant area of discipline.</li> <li>A discount rate of 8% has been applied.</li> <li>The NPV of the project is strongly positive at the assumed commodity prices.</li> </ul>
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	• To the best of the Competent Persons knowledge there are no issues that may prevent the required approvals from being obtained in order to meet the proect timline.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral	To the best of the Competent Persons knowledge all agreements are in place and are current with all key stakeholders including traditional owner claiments.



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Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The Ore Reserve has been peer reviewed internally and is in line with current industry standards.
Classification	government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.  The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit.  The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	The Ore Reserve has been broken into Proven and Probable categories. Only Measured material has been converted to a Proven Ore Reserve. Indicated material has been converted to a Probable Ore Reserve. The Competent Person believes the classification of the Mineral Resource and hence the conversion to Ore Reserve is appropriate.
	tenement status, and	



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Discussion of relative accuracy/confide nce

Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages. which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.

- The design, schedule and financial model on which the Ore Reserve is based has been completed to a "feasibility study" standard, with a corresponding level of confidence.
- All modifying factors have been applied to design mining shapes on a global scale.

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Accuracy and confidence



discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.