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5 October 2021

Tietto to deliver 260,000oz gold in Abujar's first year of production; 200,000ozpa gold over first six years

All amounts in US Dollars unless stated otherwise. Financials reported on 100% equity basis

Highlights:

Definitive Feasibility Study (DFS) for Abujar Gold Project 4Mtpa open pit demonstrates:

- Increased gold production compared to the PFS:
  - ✓ **260,000oz gold** forecast in first year of production (30% increase over the PFS) at an **AISC** of **US$651/oz**
  - ✓ **1.2Moz** of gold production forecast over first six years for **200,000oz per annum** (20% increase over the PFS) at an average AISC of US$804/oz
  - ✓ Updated Open Pit Probable Ore Reserves have grown to 34.4Mt at 1.3 g/t Au for **1.45Moz** using US$1,407/oz (68% increase over the PFS and 78% of Indicated Mineral Resources)
  - ✓ Life of Mine (LOM) mining inventory inclusive of Ore Reserves of 44.9Mt at 1.2 g/t Au **for 1.7Moz** gold recovered (54% increase over the PFS) for a strip ratio of 6:1 w:o

The LOM plan is based on a Probable Ore Reserve of 34.4Mt at 1.3 g/t Au for 1.45Moz (82% gold production of the LOM Plan). The remaining 18% of gold production in the LOM plan are from Inferred Mineral Resources. 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.

- Strong LOM financial results (in US Dollars) demonstrated across a full suite of gold prices[1]:
  - ✓ Life of mine (LOM) revenue US$**2.87B**
  - ✓ LOM pre-tax free cashflow of US$**1.28B** (post-tax US$**0.97B**) and EBITDA of US$**1.52B**
  - ✓ 11-year project life and payback period post-tax of **less than 1 year** from first production
  - ✓ NPV5% (pre-tax) US$**959M** and NPV5% (post-tax) US$**722M (A$1.3B and A$0.97B respectively)**[2]
  - ✓ IRR (pre-tax) **115%** and IRR (post-tax) **95**%
  - ✓ Average AISC of US$832/oz LOM
  - ✓ Pre-production capital requirement of US$200M including contingencies (down 13% on PFS)

1 LOM Financials reported here using US$1,700/oz which is below current spot gold price. Project LOM valuations are presented in this report at a range of gold prices from US$1,200/oz to US$1,800.

2 A$=US$0.74

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- Robust DFS economics (demonstrated for a range of gold prices starting at US1,200/oz) support substantial debt funding opportunity for Abujar
- All mining and environmental approvals for Abujar in place; Mining Convention expected to be ratified this Quarter
- Opportunities for Tietto to improve on DFS gold production by increasing project output via:
  - ✓ **30,000m of Infill diamond drilling** – targeting delineation of Measured Resources for the first two years production
  - ✓ **5,000m deep drilling** targeting underground potential below the ore reserve pit design at AG core to be completed before the end of 2021. Drilling data will be incorporated into the next mineral resource update
  - ✓ **Aggressive regional exploration drilling** - 20 exploration prospects within 10km of the proposed Abujar Plant
  - ✓ **APG heap leach potential** – first results from program expected by the end of 2021
- Early Works/FEED – multiple work streams in place to fast-track plant construction
- Tietto on track to deliver first gold at Abujar in Q4 2022
- Tietto is well-funded, with ~A$31M cash at bank at end of September 2021

West African gold explorer and developer Tietto Minerals Limited (ASX: TIE) (**Tietto** or the **Company**) is pleased to report positive results from an open pit Definitive Feasibility Study (DFS) for its 3.35Moz Abujar Gold Project in Côte d'Ivoire, West Africa, which is on track to be West Africa's next gold mine.

Tietto Managing Director, Dr Caigen Wang, said:

"Our recent update to the Abujar Resource Model has allowed Tietto to deliver a DFS that confirms Abujar's potential to be one of the largest gold producing mines in Côte d'Ivoire.

"The DFS metrics are clearly compelling – all PFS measures have materially improved, from production to finance. Gold production in particular is positioning Abujar as a Tier 1 gold mine.

"We are confident the Abujar Gold Project will continue to enjoy growth in both Resources and Reserve and hence LOM production increases into next year through our continued large-scale drilling program. We are focused on advancing the Abujar Gold Project towards becoming West Africa's next gold mine."

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Underpinned by Ore Reserves of 1.45Moz, the DFS demonstrates Abujar can deliver annual average gold production of more than 200,000 ounces of gold per annum over the first six years of production. With its fleet of drill rigs, Tietto has grown the Abujar Mineral Resource to 3.35Moz gold and expects to further build on this as it drill tests underground targets and 20 regional prospects within 10km trucking distance to the planned Abujar mill.

Tietto believes it can add materially to the Abujar DFS gold production profile and it has engaged consultancy Entech to review an AG underground scoping study using pit limits defined in the DFS. A program of metallurgical testwork is underway on samples from APG to assess its suitability to provide feed for a heap leach. These two programs have potential to deliver further value from Abujar.

Tietto will examine potential for the Abujar mill throughput to increase above DFS levels once the plant is operational, as demonstrated by other West African gold projects.

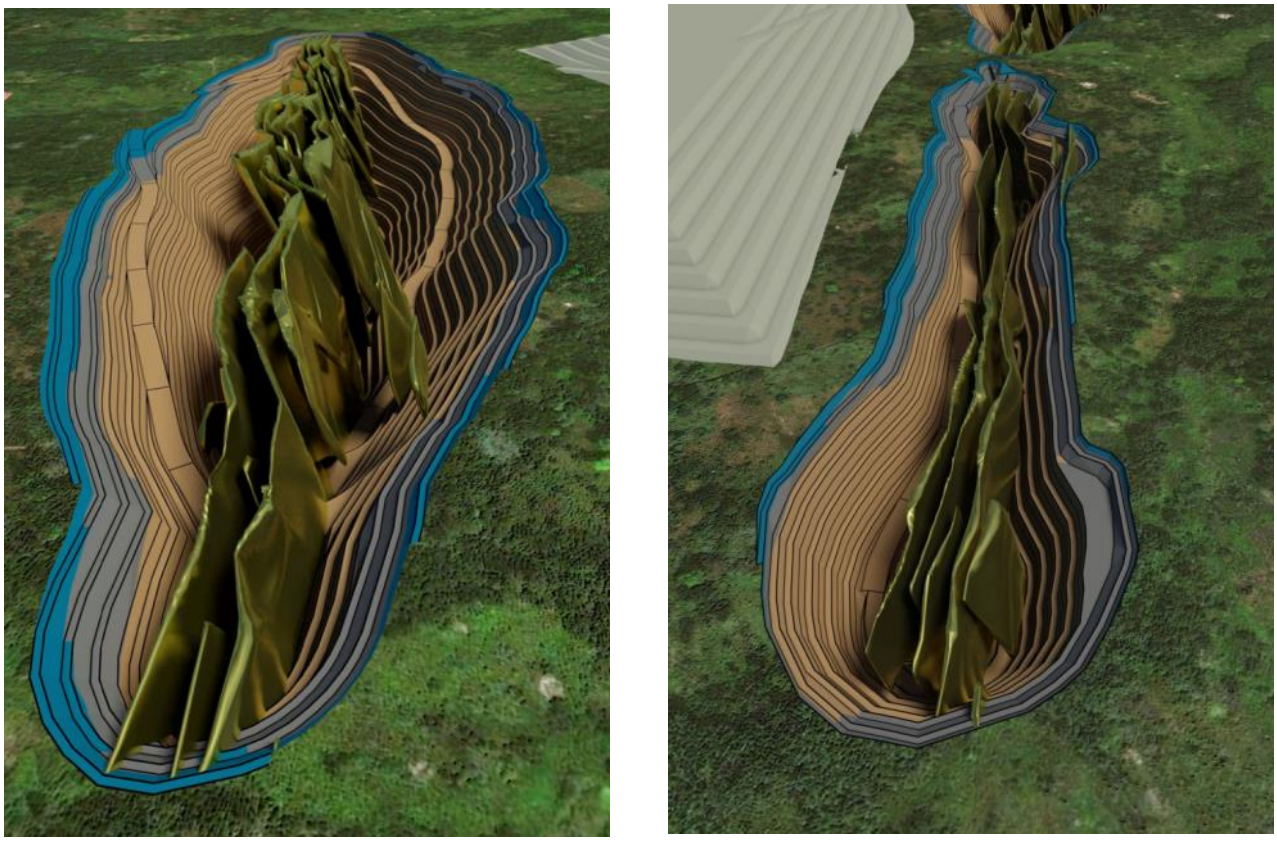

Figure 1: 3D view showing AG Main pit (1.7km long) on left and AG South pit (1.3km long) on right

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Table 1: Abujar Open Pit Definitive Feasibility Study - Highlights

Production Metrics[1]	
Mine and processing life	***11 years***
Ore tonnes mined	***44.9Mt for a strip ratio 6:1 w:o***
Ore processing rate	***4.0Mtpa fresh ore blend***
Average gold produced (Y1-6)	***200,000oz (recovered)***
Average gold produced (LOM)	***155,000oz (recovered)***
Gold Production (LOM)	***1.7Moz (recovered)***
Financial Metrics (US Dollars)	
Gold Price	***US$1,700/oz***
Revenue	***US$2,871M***
All In Sustaining Costs – (Y1)	***US$651/oz***
All In Sustaining Costs – (Y1-6)	***US$804/oz***
All In Sustaining Costs – LOM	***US$832/oz***
Free cashflow (pre-tax)	***US$1,285M***
Free cashflow (post-tax)	***US$968M***
Average free cashflow (pre-tax) – LOM	***US$118M***
EBITDA – LOM	***US$1,522M***
Payback period (post-tax) from first production	***0.9 years***
NPV5% (pre-tax)	***US$959M***
NPV5% (post-tax)	***US$722M***
IRR (pre-tax)	***115%***
IRR (post-tax)	***95%***
Pre-Production Capital Costs (US Dollars)	
Pre-Production Capital Costs	***US$176M***
Pre-Production Contingencies	***US$24M***
Total Capital Costs	***US$200M***

[1] The LOM plan contains approximately 18% of gold ounces produced from Inferred Mineral Resources. 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.

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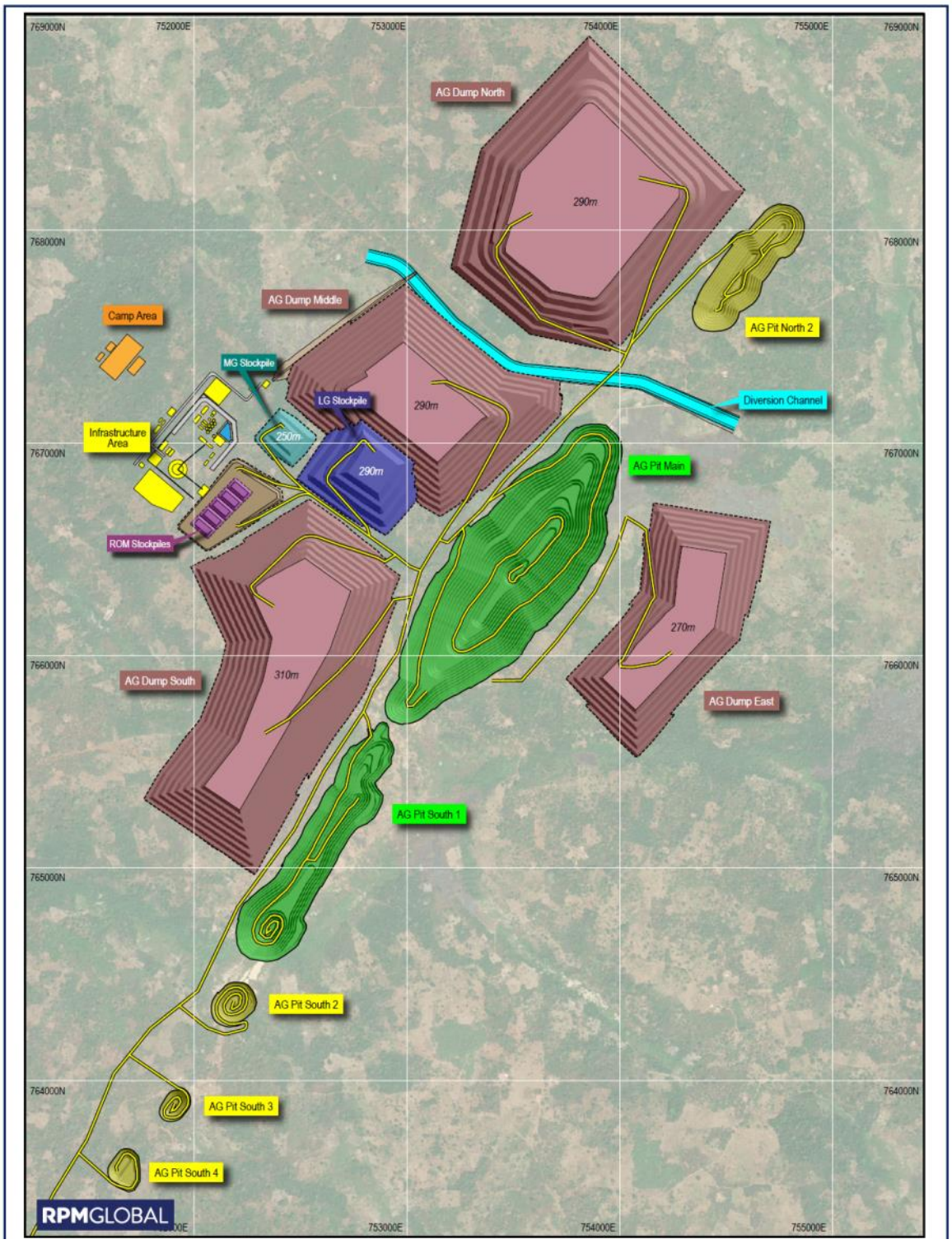

Figure 2: Proposed layout of Abujar Gold Project in Côte d'Ivoire

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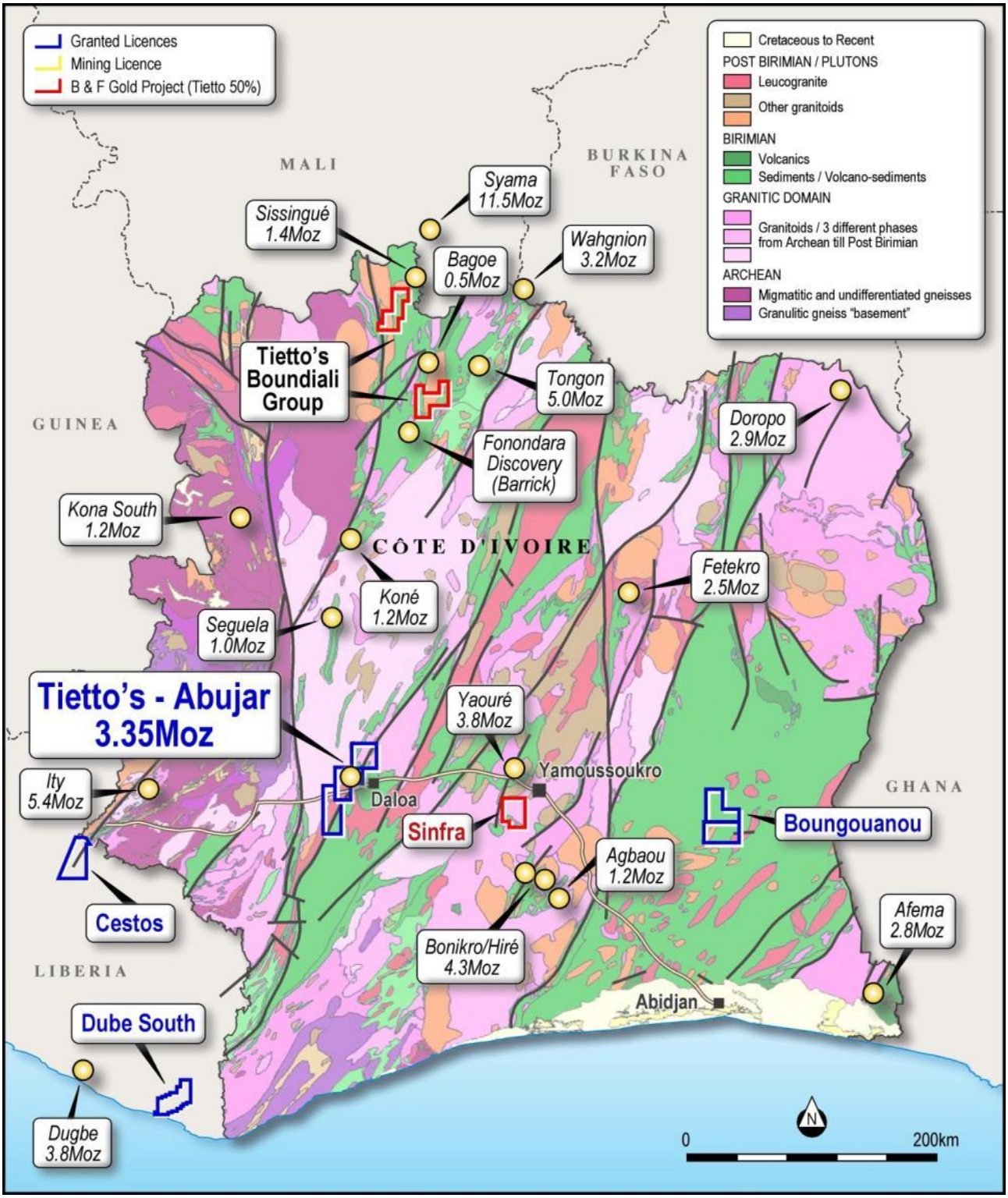

Figure 3: Abujar Gold Project Location in Côte d'Ivoire, West Africa

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1. Introduction and Executive Summary

Tietto (TIE) listed on the Australian Securities Exchange (ASX) in January 2018, focussed on development of the Abujar Gold Project in Côte d'Ivoire, West Africa.

Abujar is located approximately 30km from Daloa, a major regional city in central western Côte d'Ivoire. It is close to regional and local infrastructure, only 15km from the nearest tarred road and grid power, which has facilitated its exploration and development.

Abujar Gold Project is comprised of three contiguous exploration tenements, Middle, South and North, with a total land area of 1,114km^2, of which less than 10% has been explored. It features an NNE-orientated gold corridor over 70km striking across three tenements.

In October 2020, Tietto received environmental approval, and it was granted a gold exploitation (mining) licence within the Abujar Middle tenement in December 2020. The mining tenement covers an area of 120.36km^2. TIE has an 88% interest in the Abujar Gold Project with its local partners having a two percent interest. The Government of Côte d'Ivoire is entitled to a free-carried 10% interest in the Project on commencement of mining.

The Abujar Gold Project Mineral Resource estimates[1] as presented in Table 1 were updated by independent resource consultant RPM Advisory Services Pty Limited (RPM) in July 2021 and were reported in accordance with JORC (2012) guidelines. The Abujar Gold Project Mineral Resource is summarised below with an effective date of 12 July 2021. Mineral resources are inclusive of Ore Reserves.

Table 2: Updated Abujar Statement of Mineral Resources by Deposit as at 12 July, 2021. Reported at 0.25 g/t Au cut off within pit shells; and 1.0 g/t Au cut off below the pit shells for AG, and reported at 0.3 g/t Au cut off within pit shells; and 1.0 g/t Au cut off below the pit shells for APG, and 0.3 g/t Au to a depth of 120m for SG.

Area	Class	Oxide			Transition			Fresh			Total		
		Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)
AG	Indicated	0.5	1.2	0.02	2.1	1.3	0.09	32.4	1.5	1.54	35.0	1.5	1.65
	Inferred	0.4	1.0	0.01	1.7	0.9	0.05	13.3	1.7	0.74	15.3	1.6	0.80
	Total	**0.9**	**1.1**	**0.03**	**3.8**	**1.1**	**0.14**	**45.6**	**1.5**	**2.28**	**50.3**	**1.5**	**2.45**
APG	Indicated	0.5	0.7	0.01	1.9	0.7	0.05	6.0	0.7	0.14	8.4	0.7	0.20
	Inferred	1.2	0.7	0.03	5.2	0.7	0.11	22.0	0.7	0.52	28.4	0.7	0.67
	Total	**1.7**	**0.8**	**0.04**	**7.1**	**0.7**	**0.16**	**28.0**	**0.7**	**0.67**	**36.7**	**0.7**	**0.87**
SG	Inferred	0.0	0.7	0.001	0.10	0.8	0.001	0.4	1.6	0.02	0.5	1.4	0.02
Grand Total		**2.6**	**0.9**	**0.07**	**11.0**	**0.9**	**0.30**	**74.0**	**1.2**	**2.97**	**87.5**	**1.2**	**3.35**

[1] ASX Announcement 12 July 2021

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Ore Reserves

A total of 34.4 Mt of Open Cut **Ore Reserves** at 1.3 g/t Au grade for 1.45Moz were estimated as at 30 September 2021 by RPM, refer Table 3. As no mining has taken place at the site, the reporting date reflects the completion of the technical work supporting the estimate.

Table 3: Open Cut Ore Reserve Estimate as at 30 September 2021

	Proved			Probable			Total		
Deposit	**Quantity**	**Au**	**Au**	**Quantity**	**Au**	**Au**	**Quantity**	**Au**	**Au**
	Mt	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
AG	0	0	0	31.3	1.4	1.38	31.3	1.4	1.38
APG	0	0	0	3.2	0.7	0.07	3.2	0.7	0.07
Total	**0**	**0**	**0**	**34.4**	**1.3**	**1.45**	**34.4**	**1.3**	**1.45**

Notes:

1. *The Ore Reserves has been compiled under the supervision of Mr. Igor Bojanic who is a full time employee of RPM and a Fellow of the Australian Institute of Mining and Metallurgy. Mr. Bojanic has sufficient experience that is relevant to the style of mineralisation, type of deposit and mining method under consideration and to the activity, which he has undertaken, to qualify as a Competent Person as defined in the JORC Code.*
2. *The following marginal cut-off grades determined based on a US$ 1,407 per troy ounce gold price, and costs and mining and metallurgical modifying factors estimated as part of the DFS.*
3. *Marginal cut-off grades for AG: Oxide 0.29 g/t Au, Transition 0.29 g/t Au and Fresh 0.30 g/t Au.*
4. *Marginal cut-off grades for APG: Oxide 0.32 g/t Au, Transition 0.32 g/t Au and Fresh 0.33 g/t Au (as greater haulage distance to AG ROM pad)*
5. *Ore Reserve estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The quantities contained in the above table have been rounded to three significant figures to reflect the relative uncertainty of the estimate. Rounding may cause values in the table to appear to have computational errors.*
6. *All Ore Reserve estimates are on a dry basis.*
7. *The Ore Reserves have been reported at a 100% equity stake and not factored for ownership proportions.*

Audits and Reviews

The Ore Reserve estimate set out in preceding table was computed using Surpac mine planning software. RPM completed an independent audit of the Reserve estimate by generating quantity estimates for the total pit and also of the individual pits. RPM did an additional check by estimating quantities based on grade tonnage curves. All checks demonstrated that the Reserve estimate is reasonable.

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Key Changes from Previous Ore Reserves Statement

A previous maiden Ore Reserve was estimated at a total of 16 Mt of Open Cut Ore Reserves at 1.71 g/t Au grade at a reporting date of 31 December 2020, refer Table 4. As no mining has taken place at the site, the reporting date reflects the completion of the technical work supporting the estimate.

The increase in the Ore Reserve estimate from the previous is largely due to further exploration drilling and a decrease in ore processing costs reducing the cut-off grade.

Table 4: Ore Reserve Estimate as at 31 December 2020 (Superseded)

Deposit	Proved			Probable			Total		
	Quantity Mt	Au g/t	Au Moz	Quantity Mt	Au g/t	Au Moz	Quantity Mt	Au g/t	Au Moz
AG Deposit	**0.0**	**0.00**	**0.00**	**15.7**	**1.71**	**0.86**	**15.7**	**1.71**	**0.86**
Total	**0.0**	**0.00**	**0.00**	**15.7**	**1.71**	**0.86**	**15.7**	**1.71**	**0.86**

Notes for 30 December 2020 Ore Reserve:

1. *The following marginal cut-off grades determined based on a US$ 1,459 per troy ounce gold price, and costs and mining and metallurgical modifying factors estimated as part a PFS.*
2. *Marginal cut-off grades: Oxide 0.35 g/t Au, Transition 0.35 g/t Au and Fresh 0.35 g/t Au.*
3. *Ore Reserve estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The quantities contained in the above table have been rounded to three significant figures to reflect the relative uncertainty of the estimate. Rounding may cause values in the table to appear to have computational errors.*
4. *All Ore Reserve estimates are on a dry basis.*
5. *The Ore Reserves have been reported at a 100% equity stake and not factored for ownership proportions*

Other Relevant Factors

The estimate of Ore Reserves for the Project is not, to RPM's knowledge, materially affected by any other known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors other than that described in the preceding text. It is believed that the classification of Ore Reserves as set out in this section is reasonable.

The Mineral Resource Statement notes that the resources are open at depth. The ultimate pit shell that supports the current Ore Reserve estimate is limited in depth by the Mineral Resources and hence the potential exists to extract some additional material using underground mining methods.

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Inferred material within the Ore Reserve pits that is potentially economically viable is estimated to be 6.2 Mt at 0.98 g/t ROM and so total Indicated and Inferred Material within the Ore Reserve pits could be 40.5 Mt at 1.26 g/t ROM. An Life of Mine was also completed on additional pits within AG and APG deposits that contain a majority of Inferred Mineral Resources, and hence are not part of the Ore Reserve. This material is potentially economically viable (if upgraded with further exploration drilling) and could contribute an additional 4 Mt of additional plant feed at a grade of 0.90 g/t, and so total Indicated and Inferred within the pits could be 45 Mt at 1.22 g/t ROM.

Inferred Resources have a lower confidence of being realised and a cautionary approach should be considered in evaluating the above results.

Further exploration has commenced with aims to upgrade the confidence and increase the size of the Mineral Resource to increase confidence in technical and economic outcomes.

LOM Mine Schedule

The Project will source feed for the mill from two deposits, AG and APG. The AG deposit provides the majority of value to the operation and the AG Open Pit comprises several open pits, all within 1 to 2km of the proposed plant site and a number of satellite pits located along strike to the north and south. Open pit mining will be via a contractor using conventional open pit mining techniques common in West Africa.

The proposed plant comprises a conventional SAG milling circuit, gravity and carbon in leach processing with a throughput capacity of 4.0Mtpa on fresh ore. Construction of the plant is expected to take 12 months. Mining and processing will take around 11 years of mining (11 yrs.) and processing (10.9 yrs.) respectively.

Tietto's mining and processing strategy aims to prioritise the higher grade mineralisation, thereby generating significant early cashflow (Figure 4).

Two scenarios were examined as part of the mining study. A "Reserve" scenario to support the estimation of the Ore Reserve and an "Life of Mine" scenario that included pits in which the economics are largely supported by Inferred Resources. The intent of the Life of Mine it to support strategic planning for location of infrastructure, development and exploration (LOM). The Ore Reserves comprise 77% of the Life of Mine quantities and represent 82% of the contained gold ounces.

Mineable quantities reported in Table 5 and Table 6 include Inferred Resources and do not constitute an "Ore Reserve" as estimated in accordance with the JORC Code. An Inferred Mineral Resource has a lower level of confidence than an Indicated Mineral Resource and there is no

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certainty that further exploration work will result in the conversion of the material into an Indicated Mineral Resource from which Ore Reserves can be derived. An Ore Reserve Statement is presented in the Ore Reserves section of this report.

Table 5: Abujar Open Pit Mineable Quantities for Scheduling – LOM

Source	Total (Mt)	ROM Mineable Quantity (Mt)	Waste (Mt)	Strip Ratio (t:t)	ROM Gold Grade (g/t)	Contained ROM Gold (k oz)
AG Deposit	284.3	36.4	247.8	6.8	1.33	1,556
APG Deposit	30.8	8.4	22.4	2.7	0.77	208
Total	**315.0**	**44.8**	**270.2**	**6.0**	**1.22**	**1,763**

The initial project construction phase involves site preparation, infrastructure construction and waste pre-striping and stockpiling of ore. Major infrastructure to be constructed on site includes a process plant (capacity of 4.0 Mtpa ROM fresh feed), ore stockpiles and handling equipment, mine offices, equipment workshops and access road.

The key aspects of the site layout for the AG deposit and main complex, include the north pit, the larger main pit, and a number of smaller south pits as well as the four waste dumps – one adjacent to the north pit, two adjacent to the main pit, and one adjacent to the south pit, a ROM pad and low-grade stockpile. The APG satellite deposit is located 9 km to the south along strike and consists of a cluster of satellite pits, and three small waste dumps.

The Project involves the development of a truck-and-shovel, open-pit mine using conventional metalliferous mining techniques. The mining component consists of contractor mobilisation and establishment, then approximately 4 months pre-strip, and 10 years of mining operations and then rehabilitation and site reclamation in the following year (Table 6).

A life-of-mine ("LOM") schedule has been developed using RPM's Open Pit Metal Solution scheduling software. The schedule targets 4.0 Mtpa crusher feed for fresh and up to 4.8 Mtpa for oxide and transition blend. The actual crusher feed quantity depends on the proportion of each material type. The production strategy involved accelerated mining to selectively feed high grade ore to the plant, with lower grade ore directed to a long term stockpile. The following assumptions and constraints were made/applied when developing the schedule:

- Pre-strip mining in the first 4 months to build high grade gold stockpile;
- Plant starts producing gold from Month 5 (with commissioning prior);

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- Ore target feed rate to the processing plant of 4.0 Mtpa for fresh and up to 4.8 Mtpa for oxide and transition blend once ramp-up completed;
- Plant ramp up of 64% in the first month of gold production and fully operational in the second month at nameplate capacity.
- The vertical advance rate set to approximately 12 benches (of 5 m bench height) per year. The vertical advance rate is generally 60 m and up to 75 m in selected early years/stages where the benches consist almost entirely waste material; and
- Stockpiling to three different grade bin :
  - ✓ High Grade: 1.0 g/t or above ;
  - ✓ Medium Grade: 0.5 to 1.0 g/t, and
  - ✓ Low Grade: cog to 0.5 g/t.
- Target high value pits (with high contained ounces) prior to processing as per development strategy - prioritise mining of the Main pit Cutback 1 North and AG South 1 due to their high margin and high proportion of Indicated material;
- Defer lower margin pits, such as AG North 2 and South 2, South 3 and South 4 to near the end of the schedule

Mining and gold production schedules for the Life of Mine are presented in Table 6, Table 7 and Figure 4.

Table 6: Abujar Open Pit Mining Schedule – Annual Mine Production

AG and APG	Year	Pre-strip (4mths)	1	2	3	4	5	6	7	8	9	10	11	Total
Total Material	**Mt**	7.1	35.9	46.1	48.4	46.4	36.0	33.7	25.8	18.2	13.5	4.1	0.0	**315.0**
Waste	**Mt**	6.2	30.5	41.5	42.6	37.1	30.3	30.2	23.6	16.0	10.0	2.3	0.0	**270.2**
Ore	**Mt**	0.9	5.4	4.6	5.8	9.3	5.8	3.6	2.1	2.1	3.6	1.8	0.0	**44.8**
Strip Ratio	**t:t**	6.90	5.64	9.11	7.36	4.00	5.26	8.45	11.02	7.54	2.80	1.31	1.09	**6.03**
Gold Grade	**g/t**	1.18	1.56	1.31	0.99	1.01	1.25	1.48	1.04	0.93	1.38	1.52	2.32	**1.22**
Contained. Au	**k oz**	34	271	193	185	301	232	169	72	64	158	86	0	**1,763**

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Table 7: Abujar Mill Processing Schedule – Annual Gold Production

Material Processed	Year	1	2	3	4	5	6	7	8	9	10	11	Total
AG	**Mt**	3.4	3.4	3.1	2.6	3.3	2.0	0.7	1.9	3.5	1.8	0.0	25.7
APG	**Mt**	0.0	0.0	1.1	1.6	0.5	1.0	1.4	0.2	0.0	0.0	0.0	5.7
High-Grade Stockpile	**Mt**	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Medium-Grade Stockpile	**Mt**	0.2	0.8	0.0	0.0	0.2	1.2	0.7	0.0	0.0	0.0	0.0	3.1
Low-Grade Stockpile	**Mt**	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.9	0.5	2.2	3.4	9.7
Total	**Mt**	**4.2**	**4.2**	**4.2**	**4.2**	**4.0**	**4.2**	**4.4**	**4.0**	**4.0**	**4.0**	**3.4**	**44.8**
Grade	**g/t**	2.0	1.5	1.2	1.6	1.6	1.4	0.8	0.7	1.3	0.9	0.4	1.22
Cont. Au	**k oz**	269	197	165	217	214	188	106	88	163	114	44	1,763
Recovered Au	**k oz**	**260**	**190**	**157**	**208**	**205**	**180**	**100**	**83**	**157**	**108**	**41**	**1,689**
Gold Recovery	**%**	96.8	96.2	95.5	95.9	96.2	96.0	94.5	94.3	95.9	95.1	93.0	95.8
Feed by Resource Category													
Indicated	**Mt**	3.6	3.7	3.3	3.1	3.6	3.2	1.9	2.7	3.5	3.2	3.4	35.1
Indicated – Cont. Au	**k oz**	**232**	**184**	**143**	**186**	**194**	**150**	**47**	**68**	**144**	**77**	**43**	**1,469**
Inferred	**Mt**	0.6	0.5	0.9	1.1	0.5	1.0	2.5	1.3	0.5	0.8	0.0	9.7
Inferred – Cont. Au	**k oz**	36	13	21	31	19	38	59	19	19	37	1	294
Total	**Mt**	4.2	4.2	4.2	4.2	4.0	4.2	4.4	4.0	4.0	4.0	3.4	44.8
Total – Cont. Au	**k oz**	269	197	165	217	214	188	106	88	163	114	44	1,763

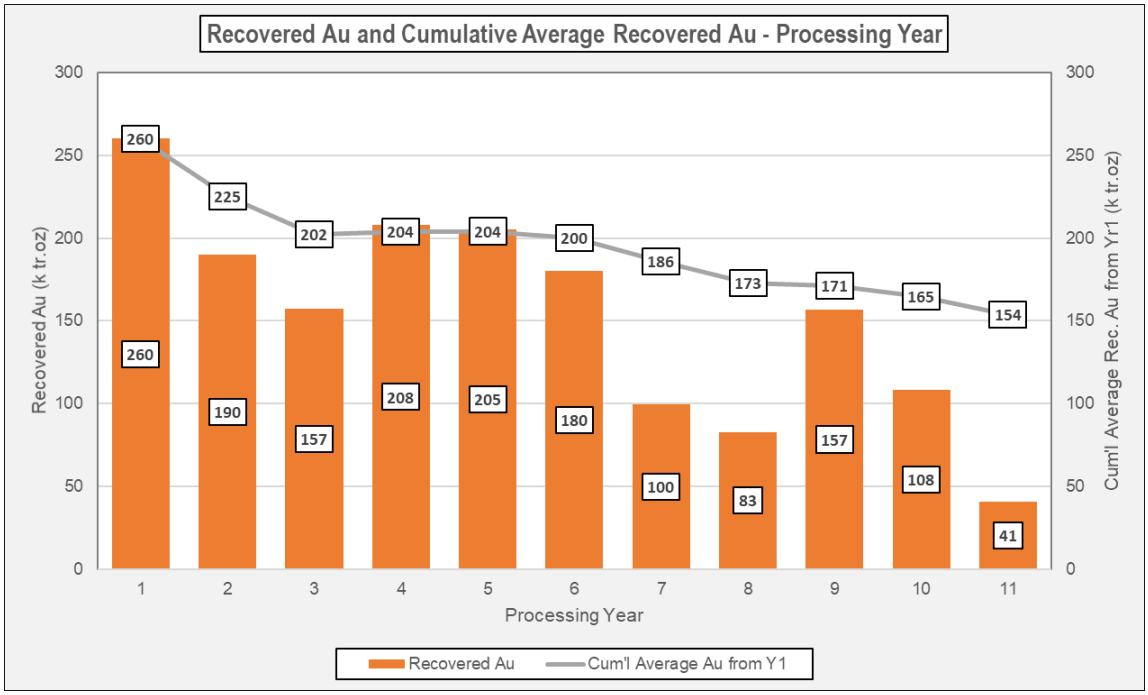

Figure 4: Production Schedule: Annual Gold Production

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Estimated operating costs for the project highlight it will be a conventional, low cost and high margin operation, with average LOM gold recovery of just under 96%, coarse grind size and low energy grinding requirements of all material types (oxide, transition and fresh) in the mine schedule, low reagent consumption and a high component of gravity recoverable gold.

The capital cost estimate provides current costs to assess the economics of the project and to provide the initial control of capital expenditure. All amounts in this report are in US$ unless otherwise stated. The estimated project capital cost is US$200 million, inclusive of contingencies.

The Abujar Gold Project demonstrates strong economics with early payback and is robust across a full range of gold prices for both pre and post-tax as shown in Table 8.

Table 8: Abujar Open Pit DFS at Various Gold Prices (US Dollars)

Metric	$1,200/oz	$1,300/oz	$1,407/oz	$1,700/oz	1,800/oz
Revenue	$2,027M	$2,1967M	$2,377M	$2,871M	$3,040M
EBITDA	$754M	$916M	$1,078M	$1,522M	$1,681M
Net present value (NPV (5%)) pre-tax	$370M	$494M	$618M	$959M	$1,081M
Net present value (NPV (5%)) post-tax	$278M	$372M	$465M	$722M	$814M
Internal rate of return (IRR) pre-tax	51%	64%	78%	115%	128%
Internal rate of return (IRR) post-tax	42%	53%	64%	95%	106%
Payback in years from first production	1.8	1.5	1.3	0.9	0.8
All In Sustaining Costs (AISC)	$787/oz	$791/oz	$802/oz	$832/oz	$838/oz
Average free cashflow pre-tax	$47M	$62M	$77M	$118M	$132M
Average free cashflow post-tax	$36M	$47M	$58M	$89M	$100M
Project free cashflow pre-tax	$517M	$679M	$841M	$1,285M	$1,444M
Project free cashflow post-tax	$317M	$514M	$636M	$968M	$1,088M

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Sensitivity analysis of the Project post tax NPV(5%) in Figure 5 demonstrates the robust nature of the project against +/-20% changes in revenue, operating cost and capital cost at the Ore Reserve gold price of US$1,407/oz.

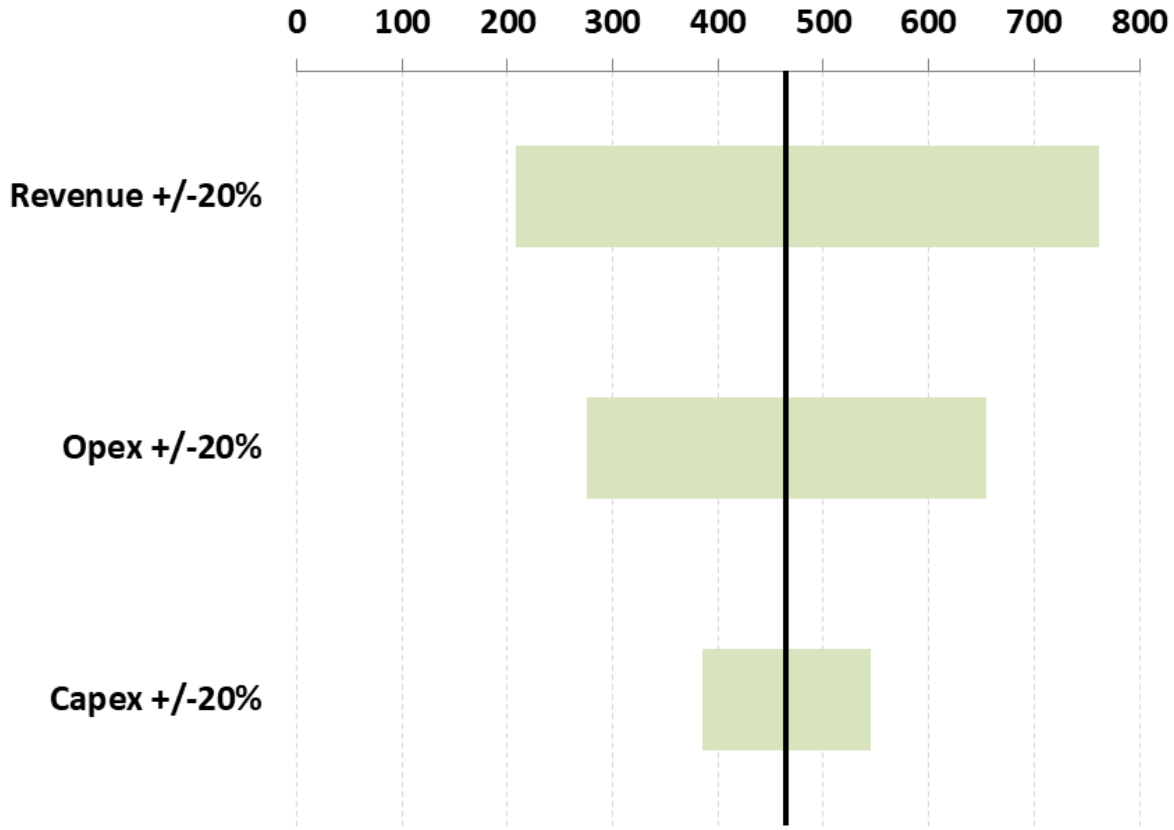

Figure 5: Sensitivity of Post-tax NPV (5%) to +/-20% Change in Revenue, Capex and Opex

Tietto has secured all mining and environmental approvals for Abujar; negotiations are underway with the Ivoirian Government on concluding the Abujar Mining Convention which is expected in Q4 2021.

Early site works have commenced focussing on access road upgrades, site infrastructure and camp construction. Work on the Project is expected to commence in late 2021 with a 12 month construction schedule leading to targeted gold production in the last quarter of 2022[1].

[1] *This timetable is indicative only and may change. Please refer to key risks that may cause changes to the timetable.

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	2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Mining and environmental permits approved	√											
Update Mineral Resource			√									
Ongoing exploration drilling												
Update Ore Reserves			√									
Publish DFS results			√									
Order Mill Package (Mill secured)		√										
Detailed design and commencement of early works												
Formal Investment Decision (FID)												
Project financing												
Debt drawdown												
Tender Mining and contractor Mobilisation												
Commencement of construction major works												
Pre stripping and ore stockpiling												
First gold and commercial production												

***Figure 6: Forecast Timetable*[1]**

Next Steps

Numerous opportunities exist to improve on the findings of the DFS that may have a material positive impact on the project throughput, mine life, and production and financial metrics:

- 30,000m of Infill diamond drilling – Measured Resources cover the first two years production
- 5,000m drilling targeting underground potential below the ore reserve pit design at AG core. The drill program will be completed before the end of 2021. Drilling data will be incorporated into the next mineral resource update.
- Regional Exploration - 20 exploration prospects within 10km of the proposed Abujar Plant.
- APG heap Leach Potential – first results from program expected end of 2021
- Early Works/FEED:
  - ✓ 4Mtpa Mill secured and being refurbished ahead of delivery to site in Q2 2022
  - ✓ Abujar Process Plant engineering and drafting progress approximately 35% complete
  - ✓ Initial site layouts have been completed, PDC, Mechanical equipment list and Flowsheets have been issued
  - ✓ Ten major mechanical packages have been tendered

[1] *This timetable is indicative only and may change. Please refer to key risks that may cause changes to the timetable.

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- ✓ Owner's Team in position
- ✓ Steel frame and blockwork buildings tendered
- ✓ Transport and logistics packages have been tendered
- ✓ Access road – over 75% of the access road upgrade completed
- ✓ Contract Mining tender bids received
- ✓ Fuel supply and bulk explosive supply tenders have been received
- ✓ Powerline - detailed engineering design for the powerline and switchyards completed

ENDS

This market announcement was authorised for release by the Board.

For further information please contact:

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Competent Persons' Statements

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Mark Strizek, a Competent Person who is a Member or The Australasian Institute of Mining and Metallurgy. Mr Strizek is a non-executive director of the Company. Mr Strizek has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaking 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 Strizek consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears. Additionally, Mr Strizek confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

The information in this report that relates to Mineral Resources is based on information evaluated by Mr Jeremy Clark who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Clark is an associate of RPM and he consents to the inclusion of the estimates in the report of the Mineral Resource in the form and context in which they appear.

Compliance Statement

This report contains information extracted from ASX market announcements reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("2012 JORC Code") and available for viewing at www.tietto.com. Includes results reported previously and published on ASX platform, 16 January 2018, 27 March 2018, 23 April 2018, 8 May 2018, 7 June 2018, 4 October 2018, 1 November 2018, 28 November 2018, 31 January 2019, 26 February 2019, 12 March 2019, 19 March 2019, 9 April 2019, 9 May 2019, 30 May 2019, 9 July 2019, 26 July 2019, 2 October 2019, 24 October 2019, 12 December 2019, 23 January 2020, 20 February 2020, 10 March 2020, 24 March 2020, 2 April 2020, 9 April 2020, 23 April 2020, 3 June 2020, 9 June 2020, 25 June 2020, 2 July 2020, 21 July 2020 20 July 2020, 29 July 2020, 19 August 2020, 9 September 2020, 24

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September 2020, 26 October 2020, 11 December 2020, 18 January 2021, 12 February 2021, 23 February 2021, 23 March 2021, 6 April 2021, 8 April 2021, 20 April 2021, 3 May 2021, 6 May 2021, 11 May 2021, 21 May 2021, 27 May 2021, 11 June 2021, 16 June 2021, 12 July 2021 and 10 September 2021. The Company confirms that all material assumptions and technical parameters underpinning the Mineral Resources and Ore Reserves continue to apply and have not materially changed. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous announcements.

Forward Looking Statements

Some statements in this document may be forward-looking statements. Such statements include, but are not limited to, statements with regard to capacity, future production and grades, projections for sales growth, estimated revenues and reserves, targets for cost savings, the construction cost of new projects, projected capital expenditures, the timing of new projects, future cash flow and debt levels, the outlook for minerals and metals prices, the outlook for economic recovery and trends in the trading environment and may be (but are not necessarily) identified by the use of phrases such as "will", "expect", "anticipate", "believe" and "envisage".

By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future and may be outside Tietto Minerals' control. Actual results and developments may differ materially from those expressed or implied in such statements because of a number of factors, including levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on market prices and operating costs, operational problems, political uncertainty and economic conditions in relevant areas of the world, the actions of competitors, activities by governmental authorities such as changes in taxation or regulation.

Financial Amounts and Figures

All financial amounts contained in this announcement are expressed as United States currency unless otherwise indicated and all references to "$" or " US$" are references to United States dollars. All costs are either current or escalated to Q3 CY21 Australian dollars and not inflated. Cashflow discounting begins in the period of first expenditure. Figures in this announcement may not add up due to rounding.

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Contents

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2. Study Team

Preparation of the Abujar Gold Project Open Pit CIL Definitive Feasibility Study has included the following key consultants:

- ALS - Metallurgical Test Work
- Daniel and Morrell Comminution Consulting Pty Ltd - Comminution Modelling
- Dempers & Seymour - Geotechnical Assessment of Open Pit and Underground
- ECG Engineering – Powerline and electrical
- Envitech – Flora and Fauna Surveys and Environmental Permitting
- Knight Piésold - Tailings Storage Facility and Site Water Management
- Mintrex - Study Management, Process Plant & Infrastructure Design, Metallurgical Overview
- RPM - Resource Estimation, Mine Planning and Ore Reserve Statement
- Sahara Geoservices – Surface Surveys

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3. Project Location and Tenure

Côte d'Ivoire

The Abujar Project in Côte d'Ivoire can be accessed by typical regional roads which vary in quality from good quality tarred and regional gravel roads to lesser quality dirt roads from local villages. The local roads, which would require upgrading to support mining operations, are accessible year-round and suitable to support ongoing exploration teams and associated equipment including drill rigs during the drilling season.

Regionally, the Project is connected to the political capital of Yamoussoukro by tarred road and to major regional towns by tarred and good quality gravel roads. The major regional city near Abujar, Daloa, has an airport; however it is not serviced by commercial airlines. International flights are available at Abidjan, which is 400km from Abujar.

Regional Environment

Geography

Project geography is typical of West Africa, with a reasonable flat-lying topography and a tropical climate with a pronounced dry season between November and March and a wet season occurring between April and October. This seasonal rainfall also varies on a year-by-year basis and has an impact on both mining activities and water supply and storage on a day-to-day basis. The average annual temperature is 22°C and the region has an average annual rainfall of 1,500mm.

The major regional town of Daloa is at the intersection of major north-south and east-west travel routes which connect neighbouring Liberia, Sierra Leone and Ghana. It is the primary collecting point for a forest region that produces coffee, cocoa, cashew nuts, and timber to the coast and major port at Abidjan for export. Daloa is also a local trade centre for rice, cassava, yams, bananas, and cotton and has a regional office of the Department of Agriculture.

Mining History

Artisanal surface mining has occurred within several areas of the Project, typically to a depth of 8m to 15m within the currently defined resource areas. Mining has targeted the higher grade, near-surface gold mineralisation. These activities occur in numerous places through the Project and vary significantly from minor surface disturbances to small-scale handheld pit and underground workings within the oxide material above the water table. These mining activities are not considered material to the currently defined gold resources, nor are they restricted to the reported resource areas which highlights the untested mineralisation potential within the region.

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Mineral Rights and Land Tenure

Tietto holds interests in a series of exploration licences and the combination of the Zoukougbeu, Zahibo and Issia licences are named the Abujar Project. These enable the current exploration activities and associated surface disturbances. Below is a summary of the key permit which hosts the mineral resources.

Zoukougbeu licence:

- Tietto Minerals Limited (**TMA**) entered a Joint Venture Agreement for the Development of an Exploration Licence for Gold in Zoukougbeu in Côte d'Ivoire dated 29 April 2014 (the **TMA-B&F Agreement**) with B & F Minerals SARL, a company incorporated under the laws of Côte d'Ivoire (**B&F**) and its shareholders.
- B&F is the registered holder of an exploration licence in the region of Zoukougbeu in Côte d'Ivoire registered with the Mines Directorate under number 469 (the Zoukougbeu Licence) which was granted on 15 September 2014 with Decree No. 2014-520.
- Under the terms of the TMA-B&F Agreement, TMA may earn an interest in the share capital of B&F of up to 50% subject to meeting certain expenditure and payment obligations; and 75% in any exploitation company formed if an exploitation (mining) permit is granted over all or part of the area covered by the Licence.
- TMA's current registered interest in the share capital of B&F is 50%. TMA continues to incur expenditure in accordance with the existing agreement.
- TMA and B&F reached an agreement on 28 March 2017 to allow TMA to have 90% interest in the Abujar Middle Tenement by transferring the exploration licence to a newly incorporate JV company called Tiebaya Gold Sarl, of which Tietto has 90% share capital, B&F has 10% share capital. Tiebaya was incorporated in late April 2017. The Côte D'Ivoire Mining Ministry officially transferred the Zoukougbeu licence to Tiebaya Gold Sarl on 28th February 2018.

The initial tenure of the three exploration licences is four years under the new Côte D'Ivoire mining regulations. Subject to satisfaction to the terms and conditions of the initial exploration licences, the exploration licences are entitled for renewal for second and third terms of three years respectively, followed by one exceptional renewal of two years.

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Mining Licence

In July 2020, Tietto Minerals, through its 90%-owned subsidiary Tiebaya Gold Sarl, applied for a gold mineral mining licence within the Abujar Middle Tenement, part of the Abujar Project. The mining tenement application covers an area of 120.36km^2. The licence was granted in December 2020. On 22 January 2021, Tietto Minerals increased its interest in the Abujar Gold Project's Mining Licence to 88% with 10% for Côte D'Ivoire government and 2% for local partners.

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4. Geology and Mineralisation

Geological Setting and Mineralisation[1]

The West African Craton formed by progressive accretion of younger orogenic belts onto a cratonic core of early Archean age. Locally, younger orogenic belts developed inside the existing cratons, but more commonly they were accreted along the margins. The West African Craton has been subdivided into the Archaean Leo-Man Shield and Palaeoproterozoic Birimian rocks.

The Leo-Man Shield is comprised of an Archean core of extensive granitic gneiss/granitoid complexes containing narrow, elongate metamorphosed volcano-sedimentary and sedimentary greenstones belts. Metamorphic and granitic rocks of the Liberian Province (~3200-2500Ma) underlie the north western two-thirds of Liberia whereas the south eastern portion of the country belongs to the Eburnean Province (~2100-1700Ma). These units are primarily re-activated Archaean basement rocks with some local Proterozoic lithologies. The Eburnean orogenic cycle (2100-1700Ma) re-metamorphosed Archaean cratonic rocks of the earlier Liberian metamorphic age province. In the central and eastern regions of the West African Craton these units have been broadly classified as mafic and ultramafic volcano-sedimentary rocks and iron formations, and are known to host many important precious metals, base metals and bulk mineral (principally iron ore) deposits in West Africa. The metamorphic grade of these greenstone belts ranges from lower greenschist to amphibolite facies.

The Birimian rocks comprise volcanic arc and sedimentary basinal successions that mantle the Leo-Man Shield to the north and east. These were deformed by the most active period of the Eburnean orogeny, which took place in three major tectono-metamorphic phases between 2150 and 2190Ma. After the Eburnean orogeny, most of West Africa formed a stable craton (around 1700Ma) and was bounded on the east and west by the Pan-African mobile zones. Birimian successions host most of the major gold deposits in West Africa.

The last major tectonic event in West Africa was the Pan-African Orogeny of Upper- Proterozoic to Lower Palaeozoic age (600-500Ma). This event also added new crustal material to the older cratons and re-metamorphosed older sequences of Archean to Late Proterozoic age. Pan- African mobile belts rim the western margins of West Africa and occur along Liberia's coastline. At the end of the Pan-African orogeny, the various cratons were joined together to form the approximate current shape of the continent of western Africa.

Geology of the Region

[1] Independent Geologist's Reports, Coffey Mining September 2012 and RPMGlobal December 2016

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Côte d'Ivoire lies in the southern portion of the West African Craton and the southern portion of the Leo-Man Shield. The country consists of four geological domains defined on geochronology; Archean, transition, Paleoproterozoic sedimentary basin and coastal sedimentary basin.

Archean Domain

The Project area is located to the central-western part of Côte d'Ivoire which is enclosed to the west of the major curved Sassandra Fault. This fault continues WNW, towards Guinea in the north. The lithology of the Archean area consists of grey gneiss and tonalite, trondhjemitic to charnokites; greenstone metamorphosed to granulite facies, banded quartzite, with magnetite and biotite migmatites. These formations are intruded by pink granites and basic-ultrabasic complex. This area was metamorphosed during orogenic cycles; Sierra Leone (3.5 to 2.9 Ga) and Liberia (2.9 - 2.6 Ga).

Modern dating on mono-zircon and monazite show that the oldest granulite formations are the tonalite gneisses in the northern part of the Archean area (north of the fault Danane-Man). These gneisses are dated to 3050 ± 10 Ma and intruded by charnokite formations that are dated at 2800 ± 8 Ma. The manifestation of the Eburnean orogeny in this area of Archean is dated to 2100 ± 40 Ma, and exhibits retrogressive reactions in basic rocks in formations of Mount Tia (Toulepleu-Ity) and in basic gneiss northern area.

Transition Area Archean-Proterozoic

The work of Kouamelan (1996) indicates the existence of a transition zone within the Paleoproterozoic area between the fault of Sassandra and longitude 6° W. He determined the presence of inherited zircons whose isotopic ages Pb / Pb of respectively 3132 ± 9 Ma and 3141 ± 2 Ma. These ages prove the existence of Archean segments within a transition zone. This area is characterized in particular by the existence of Archean relics within the Paleoproterozoic domain.

Paleoproterozoic Domain

The Proterozoic Domain is separated from Paleoproterozoic-Archean area by the Sassandra Fault. The characteristic lithology consists of volcano-sedimentary belts which are generally oriented 020 to 050 and sandwiched between granitoid batholiths. The age of this domain is attributed to Birimian with the formations consisting predominately of tholeiitic and calc-alkaline rocks.

The structure of this area is interpreted to be the result of two major Paleoproterozoic strains: the first was the result of tangential tectonics on structures oriented NS to NNE; the second corresponds to a transcurrent deformation, which is marked by the establishment of large sets of granitoids, around 2.1 Ga. Studies from geochronology show that the Birimian rocks were formed (quickly) between 2.25 and 2.05 Ga. This area is covered in the south by the coastal sedimentary basins up to the present Cretaceous basin.

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Coastal Sedimentary Basin

The Ivory Coast Sedimentary Basin extends along the Atlantic coast. Its history is linked to the rifting of Gondwana and opening of the South Atlantic in the Lower Cretaceous. This opening led to the separation of Africa and South America.

It is an "open" type of basin; part of a string of sedimentary basins along the Atlantic coast from southern Morocco to South Africa. The Ivory Coast crescent is 400 km long and 40 km wide. It represents only 2.5% of Ivory Coast's surface. The formations of the Ivory Coast sedimentary basin are of Cretaceous-Quaternary age.

The history of the basin is summarised by three episodes of transgressions:

- The Albo- Aptien is characterised by deposits of clay and sandstone;
- Lower Maastrichtian-Eocene is marked by glauconitic clays, clays and sands; and
- Lower Miocene is composed of marl, of variegated clays and lignite.

Tectonic Development of the Birimian

The Birimian litho-stratigraphic succession is separated into two large groups:

- A Lower Birimian (B1) is essentially flyschoid basin fill. The whole basin is affected by three cycles of deformation:
  - ✓ D1 (2090-2100Ma) phase of major collision: duplication of the lower Proterozoic on the gneissic Archaean basement, a break in all B1 sedimentation and intrusion of syn- kinematic granites;
  - ✓ D2 and D3 (2090-1970Ma) responsible for the intrusion of granites;
  - ✓ 2080 and 1945my (D2 large sinistral offsets, related overlaps and folding; D3 dextral offsets and associated folds); and
- The upper Birimian (B2), volcanic-dominated, where fluvio-deltaic formations are intercalated in volcano-sedimentary facies.

Metallogenesis of the Birimian

The Eburnean metallogenic cycle, which is rich in gold and base metals lasted 150Ma with:

- A first period at the time of the filling of the B1; stratiform deposits of Mn, Fe, Au, Zn-Ag were put in place at about 2150Ma at the top of the stratigraphic pile. This period ends with the deposition of gold mineralisation in conglomerates; and

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- The second, late-orogenic metallogenic period appears with the latter brittle deformation phases of D1 and D2. It is marked by mesothermal mineralisation, followed by quartz veins and paragenetic Pb-Zn-Ag-Bi deposits dated at approximately 201Ma.

The deposits encountered in West Africa in the Birimian are diverse. Examples of deposit types are:

- Gold mineralisation associated with major shear zones for example, Obuasi (AngloGold) along Ashanti Fault Zone in Ghana
- Gold mineralisation associated with conglomerates at the base of paleo-channels (placers) as in the deposit at Tarkwa in Ghana (Iamgold/Gold Fields)
- Volcanic Massive Sulphides in the lower Birimian for example the zinc deposit at Perkoa in Burkina Faso (Blackthorn Resources and Glencore International)
- Sedex deposits of the Nsuta Manganese Mine in Ghana operated by the Ghana Manganese Company Limited since 1916. Mineralisation is associated with turbidites within a volcano-clastic terrane
- Gold skarn at Ity Gold Mine. Ity is the only known Au skarn in the Birimian however iron skarns are known in the Kéniéba-Kedougou Inlier of the Faleme District in Mali and Senegal

Project Geology

Abujar

The Project is located within the Proterozoic Birimian rocks of the Leo-Man Shield, as situated on the Daloa 1:200,000 geologic sheet, 30km west of Daloa. It is located in the Hana-Lobo belt, east of the Sassandra Fault that marks the boundary between the Leo-Man Shield (Archean) and Eburnean domains.

Lithologies

Within the Project area outcrops are very uncommon. Lateritic cover mainly consists of hardpans and duricrust occurrences. Owing to vegetation cover, weathering and laterite development, the 1:200,000 geological map lacks detail however; general features of the local geology can be interpreted from the recently completed airborne geophysics magnetic survey.

The Abujar Deposit is located within a NNE-SSW orientated body of granitoid migmatite and is hosted within in an interpreted regional shear structure. This is then enclosed within two mica granite bodies of similar interpreted orientation which are regionally referred to as granodiorites.

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Greenstones are rare in the immediate vicinity but have been mapped as isolated bodies to the south and east.

Due to the lack of outcrop and limited drilling, the regional lithologies are relatively poorly understood, however they can be separated into either Proterozoic or post Proterozoic. The lithologies of Proterozoic age which are present inside the Project include:

- Migmatitic granitoids (Eburnean) associated with syntectonic granites; they can belong to either the metamorphic or the magmatic domain depending on the intensity of melting. They occur in the central portion of the property;
- Metamorphosed rhyolite (Eburnean) of pyroclastic origin. They occur as relics within two mica granites and consist mainly of quartz phenocrysts inside glass. They are found as light coloured banks showing mainly muscovite corresponding most probably to pyroclastic rhyolitic flows;
- Schists are divided into two groups:
  - ✓ Argillic schist: are always weathered with mottled texture and crosscut by quartz veins; and
  - ✓ Two-mica (+ staurolite and andalusite) schist: - consist of biotite and muscovite with minor andalusite, which is a common mineral of contact metamorphism. This rock occurs at the contact with two-mica granite bodies in the central area of the property.

Only artisanal pits and diamond drill holes exhibit the different lithologies associated with the Proterozoic aged rocks which typically host mineralisation and are outlined below:

- Granodiorite is post Eburnean in age and consists of calc-alkaline intrusions. They are generally coarse to medium grained in texture depending on the intensity of deformation. Mineral compositions consist of quartz, biotite, amphibole, plagioclase, chlorite, epidote/calcite and pyrite. Visible gold can be present. The granodiorite has undergone regional metamorphism to greenschist facies, with a mineral assemblage made of chlorite-quartz-biotite-epidote.
- The Schist group (or highly deformed granodiorite) consists of rocks with schistose texture of indeterminate origin. Minerals are fine-grain, mainly biotite, chlorite, quartz and pyrite. The biotite-chlorite-quartz assemblage shows that the rock belongs to the greenschist facies, due to regional metamorphism.
- Later Intrusions crosscut the granodiorite and schists. These later intrusions consist of either diorite or pegmatites. Diorite is massive and fine grained. The minerals don't show any

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general orientation and are typically green biotite, quartz and plagioclase. The pegmatite has thicknesses ranging from centimetres to metres. They are high temperature rocks in terms of the mineral assemblage. Main minerals are K-feldspar, biotite, muscovite, quartz and garnet.

Deformation and Mineralisation

Two styles of deformation are interpreted to be present within the drill cores at Abujar; these include both ductile deformation and brittle deformation. The gold mineralisation is interpreted to be related to the deformed granodiorite, in shear zones, with sulphides (mainly pyrite and minor chalcopyrite) associated with visible gold. The mineralisation seems to be located within the granodiorite at the boundary between two different intensities of deformation i.e. weakly deformed and highly strained.

Alteration is characterised by chlorite, sericite, calcite, secondary quartz and disseminated pyrite. This assemblage is well developed in schistose, foliated rocks with the presence of quartz veins or veinlets.

Mineralisation Style and Geometry

Deposits within the Abujar Project resemble typical shear zone deposits of the West African granite-greenstone terrane. The Abujar deposit is associated with a major regional shear zone and is developed in granodiorite hosts similar to that which hosts the Pischon & Golikro deposits and the interpreted extension areas in the Gamina deposits to the north (Gamina South and Centre). Mineralisation is potentially spatially related to the emplacement of intrusives and interpreted to be mesothermal in origin. Free gold in quartz vein stockworks and zones of silicification, associated with pyrite and chalcopyrite.

The gold mineralisation is typically found in linear domains with the contacts showing evidence of shearing with free gold frequently observed. Alteration is weak to severe depending on the development of the system. As noted, gold mineralisation is hosted within a continuous shear zone which is traced over 4.5km within Abujar, 1.5km within Pischon and 2.5km within Golikro, however analysis of the drill holes within these deposit indicates that within this low grade shear hosted halo, higher grade lodes occur which are slightly oblique to the strike of the shear. This is interpreted to be typical Riedel ductile shear mineralisation, which is structurally controlled both at a local and regional scale.

Several occurrences of boudin structures are observed within the drill core, and it is hypothesized these structures control mineralisation both regionally and locally. Of particular note are the intersection of near vertical extremely high grade plunging shoots (>5g/t) which can be interpreted

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within both the Abujar and Pischon Deposit. These can be seen in the long sections of the grade estimates.

All lodes have similar southeast-dipping orientations striking 030^{o} and dipping at varying angles of inclination typically between 50 and 75^{o}. These lodes appear to coincide with strong linear geological structures which are offset by several faults and have strike length from 200 metre to up to 1.2km. The lodes range in thickness from 2m to up to 15m, with the thicker zones general occurring where the higher grades occur, which is as expected for the structurally controlled style of mineralisation.

Exploration Works

Tietto's exploration has focused on the Zoukougbeu Licence, which has included geochemical sampling, surface pits and trenches as well as surface diamond, RC and AC drilling since 2015. Recent work has focused on surface drilling over the AG and APG deposits located in the north-eastern part of the Zoukougbeu permit.

Drilling

Drilling to date has targeted areas directly beneath artisanal workings and anomalous areas identified during the geochemical sampling programs. Tietto has used both Reverse Circulation (**RC**) and Surface Diamond Drilling (**DD**) for the Project to date in seven phases during 2015 - 2017, 2018, 2019 – 2020 and 2020 - 2021.

All drilling during 2015 and 2017 was via surface RC. In 2016 most holes were RC but some holes had RC pre-collars with DD-tails at depth, with the majority of mineralised intersections within the DD drilling. Drilling in 2019-2020 was predominately DD.

The diamond rigs used a conventional wire-line diamond drilling technique to produce HQ- or NQ-size diamond core. HQ-size rods and casing were used at the top of the holes to stabilise the collars, however the majority were drilled with NQ-NTW-size equipment to the end of the hole. On rare occasion BQ drilling was used at depth. In July 2018 Tietto started utilising its own man portable DD rig and now has six rigs working 24/7.

Drilling to date has targeted seven areas within the Project, these include: Abujar-Gludehi (AG), Pischon (APG) and South Gamina (SG) deposits within the Zoukougbeu licence and the Gamina set of deposits within the Zahibo Licence.

Drilling at the deposits now extends to a vertical depth of approximately 700m within AG and 200m at APG and SG.

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Drill hole collars were generally spaced on an approximate 100m by 50m grid in all deposits with recent drilling including infill drilling on 50m by 50m spacing within AG with some closer spacing in the central core of AG.

Mineral Resource Data Verification

RPM Advisory Services Pty. Ltd ("RPM") conducted a review of the geological and digital data supplied by Tietto to ensure that no material issues could be identified and that there was no cause to consider the data inaccurate and not representative of the underlying samples.

RPM personnel visited the Abujar Project in July 2016, August 2017, July 2018 and October 2019 and reviewed the outcrops, drill-hole locations and core sheds as well as holding various discussions with site personnel. RPM sighted mineralised drill-hole intersections for all the deposits, down hole surveys and assay data, laboratory facilities, and reviewed survey data acquisition protocols, assay procedures, bulk density determination, logging and sample preparation procedures and quality control (QC) results. RPM concluded that the data was adequately acquired and validated following industry best practices.

Exploration Data

Tietto used reverse circulation (RC) and surface diamond drilling (DD) for the Project to date. All drilling during 2015 at Abujar was RC with the 2016 drilling most completed with RC and some commencing with RC pre-collars and changing to DD at depth, subsequently all drilling during 2017 was RC. In 2018, drilling included DD, RC, and RC with DD tail and AC. Early 2019, DD and RC drilling was conducted and since late 2019 to present all drilling has been DD.

The diamond rigs used a conventional wire-line diamond drilling technique to produce HQ- or NQ-size diamond core. HQ-size rods and casing were used at the top of the holes to stabilise the collars, however the majority were drilled with NQ-NTW-size equipment to the end of the hole. In rare occasion BQ drilling was used at depth. In July 2018, Tietto started utilising its own man portable DD rig. Each drill run was 6m in length, or 1.5m in length for the man portable.

All RC samples were placed in plastic bags directly sourced from the rig mounted cyclone. The core was placed in approximately 1 m long wooden/metal/plastic core trays (each holding around 4 to 6m of drill core depending of the core diameter) subsequent to extraction from the core barrel. The 1m intervals were then marked and labelled for future reference.

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Drilling Sample Recovery

Within the diamond drilling typical core recoveries ranged between 90% and 100% for all holes which RPM considers suitable with no notable outliers within the mineralised zones. Some low recovery are associated with intensely fractured or faulted intervals and the more intensely weathered upper zone however these low recoveries are not considered material to the total Mineral Resource currently estimated.

Drill Hole Collar Locations

All drill hole collar and trench locations were surveyed utilising the differential GPS methods by third party surveyors (Sahara Mining Services) and more recently Tietto's own licenced surveyor. The DGPS system utilised is typically within 10cm accuracy range which is suitable for the classification applied.

Down Hole Survey

Contract drilling teams utilised the Reflex EZ-shot instrument to measure deviations in azimuth and inclination angles for all RC and RCD holes; however, vertical holes were not surveyed. The first measurement is taken at 12 m depth, and then approximately every 30m depth and again at the end of the hole. Tietto has utilised its own survey tool with its man portable DD rig. RPM considers the drilling and the drilling information provided for the reported resources to be of high standard when compared to mining industry practices. RPM agrees with the surveys procedures, their controls and, as a result, all drilling for the Abujar Project can be used as a base for the Mineral Resource estimate.

Drill Hole Logging

The Company has developed logging and sampling procedures based on the experience of the local technical team. These were subsequently reviewed by RPM during the site visit and it is their opinion that the processes and protocols implemented will provide results with a high level of confidence. Tietto company geologists log the core and RC samples according to the existing lithological, alteration and mineralogical nomenclature of the deposit as well as sulphide content. Photography and recovery measurements were carried out by assistants under a geologist's supervision.

Logging records were mostly registered in physical format and were inputted into a digital format (excel). However, as the project develops RPM would recommend capturing the geological logs in digital format, to avoid any potential for input errors. The core photographs, collar coordinates and down hole surveys were received in digital format.

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Sample Methodology

Diamond core was logged both for geological, alteration and mineralised structures as noted above. The core was then cut in half using a diamond brick cutting saw on 1m intervals. Typically the core was sampled to geological intervals as defined by the geologist within two metre sample intervals. The right hand side of the core was always submitted for analysis with the left side being stored in trays on site, as confirmed by RPM during the site visit.

RC samples were collected as 1m samples directly from the cyclone which were split using a riffle splitter with ¼ of the sample retained in the plastic bags, the remainder was re-split with ¼ retained in calico bag and the remainder placed in large green plastic bags. These samples were spear sampled to form 2 m composite samples which were subsequently sent to the laboratory.

Sample Preparation and Assaying

All resource sample preparation and assay has been completed by independent international accredited laboratories. Prior to September 2018 ALS Minerals undertook the work and since then the work has been undertaken by Intertek. Subsequent to cutting or splitting, the samples were bagged by Tietto's employees and then sent to ALS Minerals laboratory in Yamoussoukro for preparation. These samples were subsequently sent to Ghana for analysis by fire assay. Since September 2018, samples have been analysed by Intertek. Samples were picked up from site and then send to Ghana for preparation and analysis. Both labs used the exact same preparation and analytical method path.

Tietto employees insert quality control (QAQC) samples on site prior to delivering the samples to ALS Minerals in Yamoussoukro / to Intertek picking up the samples from site. Tietto employees have no further involvement in the preparation or analysis of the samples.

All samples followed a standard path as outlined below:

- Samples as received are initially sorted and verified against the client Sample Submission Form
- Samples are air dried at 90°C
- All samples are crushed to 2mm using a jaw crusher and Boyd crusher in a two-stage process
- Sample split by rotary sample divider to 600-700 g, with reject retained
- Whole sample is pulverised to 90% <75 µm

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- The pulverised sample is mixed and divided manually, with approximately 200g retained for the client and 300g retained for laboratory analysis
- Gold by fire assay with atomic adsorption finish 30g

Quality Assurance and Quality Control

A definitive QAQC program has been implemented to provide verification of the sample procedure, the sample preparation and the analytical precision and accuracy of the primary laboratory, which includes the following:

- Standard Reference Material (SRM) samples: Two types of standards sourced from Geostats Ltd. were inserted 1 in every 20 samples.
- Primary RC duplicates: Generated from the first splitter off the rig and inserted 5% (1 in 20 samples). This sample is collected from a spear sample from the reject material of the primary split.
- Primary DD duplicate: Generated by cutting the remaining half core into a ¼ and sampled.
- Coarse blank samples: Inserted 1 in every 20 samples.
- Laboratory Internal Duplicates and Standards.

Sample Security

Measures undertaken to ensure sample security included the following:

- Samples for the Mineral Resource estimates have been derived from surface drilling. The drilling crews are responsible for delivering the samples and core to the storage facilities, the Company's personnel are responsible for cutting the core and placing the cut core in bags for delivery to the preparation laboratory facilities which is also managed by the Company's Geology Department. Together with the cores and RC samples, the geology staff provides the laboratory with a report detailing the amount and numbers of samples and sample tickets to each core are provided. Prior to submission, duplicate and SRM's were included in the batches and documented within the sample runs. Batches are sent to the analytical laboratories with a report detailing the analysis method required for each element. Chain of custody is kept all the time by the Company personnel.
- Following submission, samples are managed and prepared by independent international accredited laboratory personnel.
- All personnel handling samples are supervised by senior site geologists and geotechnicians. In addition, photos are taken of all core trays prior to sampling. Core is clearly labelled for

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sampling, a suitable paper trail of sampling can be produced and duplicate samples are taken to ensure no sample handling issues arise. Half core rejects, core rejects and pulps are appropriately stored inside the core shed and are available for further checks.

5. Mineral Resource

Mineral Resources have been independently reported by RPM in compliance with the recommended guidelines of the JORC Code (2012) and are dated 12 July 2021.

Mineral Resource Classification System under the JORC Code

A "Mineral Resource" is defined in the JORC Code as 'a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results.

For a Mineral Resource to be reported, it must be considered by the Competent Person to meet the following criteria under the recommended guidelines of the JORC Code:

- There are reasonable prospects for eventual economic extraction.
- Data collection methodology and record keeping for geology, assay, bulk density and other sampling information is relevant to the style of mineralisation and quality checks have been carried out to ensure confidence in the data.
- Geological interpretation of the resource and its continuity has been well defined.
- Estimation methodology that is appropriate to the deposit and reflects internal grade variability, sample spacing and selective mining units.
- Classification of the Mineral Resource has taken into account varying confidence levels and assessment and whether appropriate account has been taken for all relevant factors i.e. relative confidence in tonnage/grade, computations, confidence in continuity of geology and grade, quantity and distribution of the data and the results reflect the view of the Competent Person.

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Area of the Resource Estimation

The deposits, which form part of the Mineral Resource estimates, are located approximately 27km west of Daloa in Côte d'Ivoire all within the Abujar Project. The Project consists of three exploration rights under the Ivory Coast mining code currently held by the Companies of which Tietto have Joint Venture agreements or partial owners through subsidiaries. RPM notes that the reported Mineral Resources include the following areas (***Figure 7***):

- AG Deposit – Located within the northern portion of the Zoukougbeu licence this deposit consists of multiple vein structures defined up to 700m in depth with a strike length of 5.5 km.
- APG Deposit – Located to the south of the AG Deposit within the central portion of the Zoukougbeu licence this deposit consists of multiple vein structures defined up to 200m in depth with a strike length of 5.5 km.
- South Gamina – Located to the north of the AG Deposit within the northern portion of the Zoukougbeu licence this deposit consists of multiple vein structures defined up to 150m in depth with a strike length of 1.5 km (No change).

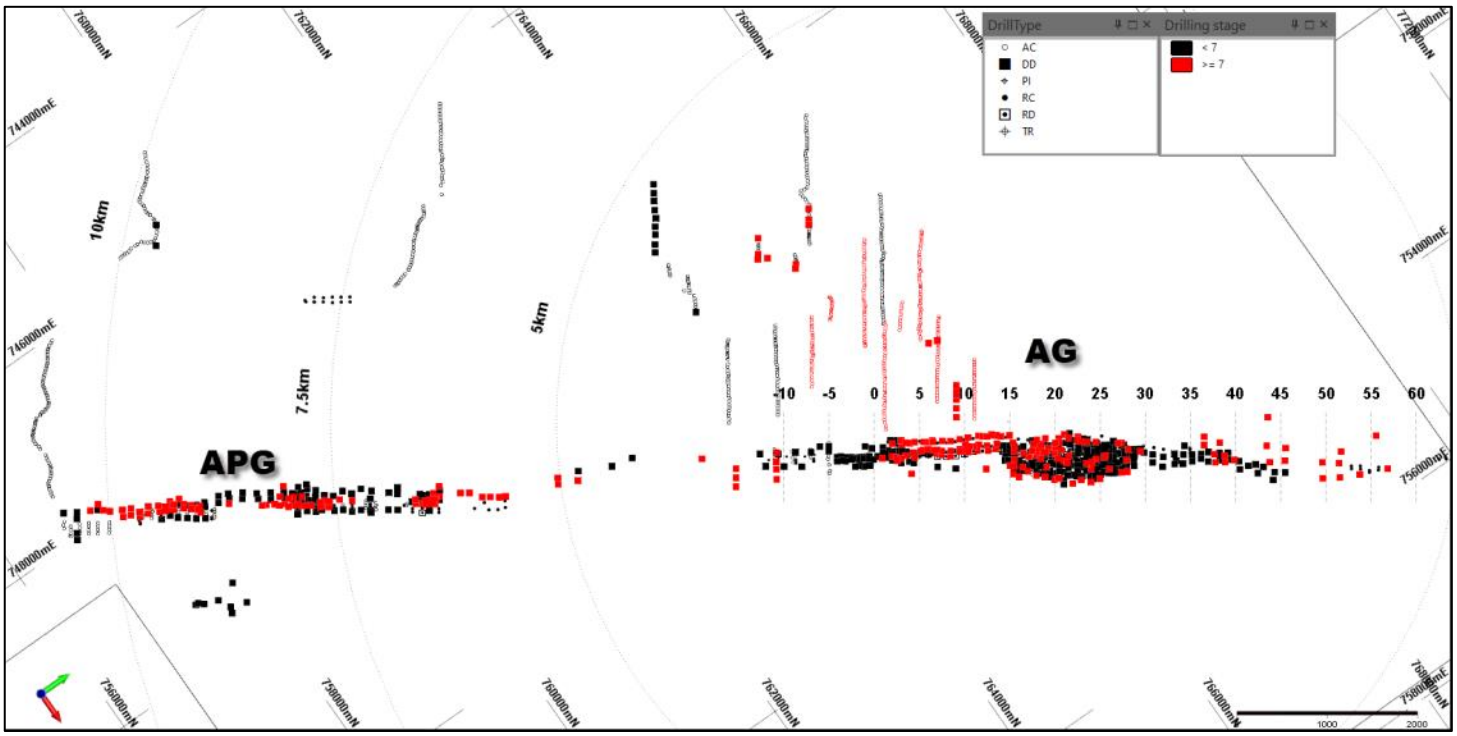

Figure 7: Area of the Abujar Resource Estimate

Estimation Parameters and Methodology

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Sample Data

A comprehensive dataset was provided to RPM which were utilised within the estimate and resultant classification of the resources. The dataset included RC, RD, AC, DD holes and surface trenches. All drill hole and channel sample collar, survey, assay and geology records were supplied to RPM in digital format by the site geologists. All Mineral Resource estimation work reported by RPM was based on data received as at 16 June 2021 (***Table 9***).

Table 9: Summary of Drill Hole Data Supplied to RPM

Deposit	No holes	Type	Metres
AG	22	2015RC	2,063
	2	2016DD	477
	39	2016RC	6,833
	12	2016RD	2,800
	6	2017TRENCH	110
	43	2018AC	1,497
	56	2018RC	9,287
	6	2018RD	1,610
	97	2019DD	26,572
	7	2019RC	1,299
	159	2020DD	44,102
	128	2021DD	31,136
APG	7	2016RC	800.32
	70	2018AC	3,025
	17	2018DD	2,746
	33	2018RC	2,219
	1	2018RD	179.74
	18	2019DD	4,180
	69	2020DD	15,852
	60	2021DD	8,514
SG	15	2017RC	1,926
	2	2020DD	536
	6	2021DD	1,130
Other	13	2016RC	1,520
	24	2016TRENCH	1,500
	34	2017RC	4,506
	37	2018AC	1,430
	12	2019DD	1,710
	581	2019PITTING	2,983
	492	2020AC	22,557

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Deposit	No holes	Type	Metres
	26	2020DD	6,554
	241	2021AC	11,063
	8	2021DD	1,491
Total	**2,343**		**224,206**

Bulk Density Data

Bulk density determinations were carried out on the diamond core from holes within the Abujar Project:

- No relation can be interpreted between grade and density, this is as expected for the style of mineralisation;
- Rock types of granodiorite (Fgd) and Mafics (Msc) appear to have relationship with density, as would be expected; and
- Experimental density values were assigned for oxidised and transition areas with 2.0 g/cu.cm and 2.4 g/cu.cm respectively applied, and an average density value 2.82 g/cu.cm from provided density data used for fresh rock.

Depletion Areas

Small scale mining has been undertaken on several areas within the project. This mining is restricted typically to the upper 10m of the oxide material, however is variable in depth and extent. A detailed topographic survey was used to deplete known mining areas.

Geological Interpretation

Geological units and shear hosted veins for the deposits, defined by lithological logging and sample assays consisted of generally discrete, mineralised lenses. These were interpreted and wireframed as solids for each area.

RPM constructed one set of mineralised wireframes for each deposit using a cut-off grade of 0.3 g/t Au based on interrogation of log histograms and probability plots of the raw assay data. Geological interpretations of the lithological units, the geological structure, alteration and the different lodes of mineralisation were used to guide and interpret the shape of the mineralised wireframes.

All deposits have similar styles of mineralisation which was interpreted as being comprised of southeast-dipping lodes striking 035^{o} dipping at varying angles of inclination typically between 50 and 75^{o}. These lodes appear to coincide with strong linear geological structures which are offset by several offsetting faults.

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RPM defined 112 discrete bodies for the AG Deposit and 93 for APG based on the orientation and shape of the mineralisation.

Oxidation logging data was used to create a base of oxidation surface and the top of fresh rock to further constrain the mineralised domains and allow separation of material types into oxide, transition and fresh.

Drill hole collars were generally spaced on an approximate 100m by 50m grid in all deposits however closer spacing occurs within AG.

Preparation of Wireframes

Wireframed solids were constructed based on sectional interpretations of drill hole geological and sample data using SURPAC version 6.7 geological software. The sectional resource outlines were generally extrapolated to a distance half-way between mineralised and un-mineralised holes/sections with a maximum distance of 50m along strike where the drill spacing was greater than 100m and on the edges of the mineralisation. In the up-dip and down-dip directions where no un-mineralised holes were available to constrain the mineralisation, extrapolation was also around 50m where geological continuity could be observed along strike.

The interpreted outlines were manually triangulated to form the wireframes. To form the ends of the wireframes, the end section strings were copied to a position mid-way to the next section (to a maximum of 50m) and adjusted to match the overall interpretation and trend of the mineralisation. The wireframed objects were validated using SURPAC software and set as solids.

The resultant mineralised wireframes were used as hard boundaries to constrain the grade interpolation within the deposit. All un-sampled intervals were assumed to have no mineralisation and they were therefore set to zero grade, however these were minimal.

Sample and Generational Support

RPM completed a sample support analysis of the two sample types RC and DD. As these are different sampling methods and importantly have different sampling volumes, there is the potential to introduce inherent sample bias. A statistical review of the assay results from the two sampling methods indicates that there is no potential bias when comparing close pairs of each dataset, as such no changes to the data was required.

Composites

The sets of mineralised wireframes (“objects”) were used to code the assay database to allow identification of the resource intersections. A review of the sample lengths was subsequently completed to determine the optimal composite length. The most prevalent sample length inside the mineralised wireframes was 2m, and as a result, was chosen as the composite length. The

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samples inside the mineralised wireframes were then composited to 2m lengths and SURPAC software was used to extract the composites. Separate composite files were generated for each resource object. The composites were checked visually in SURPAC software for spatial correlation with the wireframed mineralised objects.

Statistical Analysis

The composites were imported into statistical software to analyse the statistics of the assays within the mineralised wireframes. The summary statistics for major lodes are shown in ***Table 10***. Log histograms and log probability plots for the drilling composites within AG and APG are shown in ***Figure 8*** and ***Figure 9***.

The composite samples show a moderate positively skewed log-normal distribution which is typical for the style of mineralisation observed within the deposits. RPM notes that it is apparent that multiple distributions occur within the populations at the AG and APG deposit.

Table 10: Basic Statistics and Major Lodes

Deposit	AG						APG	
Statistic	**All**	**32**	**34**	**40**	**43**	**51**	**All**	**4**
Number	14,176	1,197	1,023	2,477	1,463	944	4,704	1,366
Minimum	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum	532.1	174.7	532.1	160.1	137.6	53.5	26.5	23.1
Mean	1.26	1.4	1.66	1.11	1.79	0.93	0.58	0.61
Std Dev	8.38	7.48	18.47	5.53	6.89	2.66	1.23	1.28
Coeff Var	6.65	5.33	11.13	4.97	3.85	2.86	2.13	2.11
Variance	70.24	55.93	341.27	30.63	47.5	7.09	1.51	1.65
Skewness	33.61	15.45	24.71	19.23	10.68	10.9	9.86	9.26
Percentiles								
10%	0.05	0.04	0.05	0.06	0.05	0.06	0.09	0.09
20%	0.1	0.08	0.08	0.11	0.1	0.1	0.15	0.15
30%	0.15	0.13	0.12	0.18	0.17	0.17	0.21	0.21
40%	0.23	0.19	0.18	0.26	0.3	0.26	0.27	0.26
50%	0.33	0.3	0.27	0.34	0.37	0.34	0.32	0.32
60%	0.42	0.37	0.36	0.45	0.51	0.44	0.39	0.39
70%	0.57	0.53	0.47	0.63	0.75	0.6	0.49	0.51
80%	0.89	0.79	0.69	0.94	1.22	0.91	0.65	0.7
90%	1.72	1.73	1.28	1.78	2.91	1.73	1.08	1.17
95%	3.53	3.72	2.38	3.24	6.35	3.43	1.72	1.74
97.50%	6.62	10.65	4.48	5.63	13.86	5.63	2.71	3.14
99%	17.21	24.07	16.12	11.59	29.12	13.3	4.65	4.45

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High-Grade Cuts

The statistical analysis of the composited samples for Au inside the mineralised wireframes was used to determine the high-grade cuts that were applied to the grades in the mineralised objects before they were used for grade interpolation. All assays above the cut value were assigned the cut value. This was done to eliminate any high grade outliers in the assay populations which would result in conditional bias within the resource estimate. The high grade cuts applied to the composites were determined from the log histograms and log probability plots for each deposit resulting in the following conclusions:

- Top-cuts of 60g/t and 35g/t were appropriate for different lodes in the AG area respectively and a top-cut of 20g/t was appropriate for all lodes in the APG area. These high grade cuts were applied to the composites and were determined from the log histograms and log probability plots. RPM notes there were some extreme high grade samples identified during the latest exploration stage however the high grade domains were not extended.
- A grade dependent search was applied to all samples above 35 g/t. This was limited to a 35m radius influence of 10 samples due to the extreme grades of these holes.

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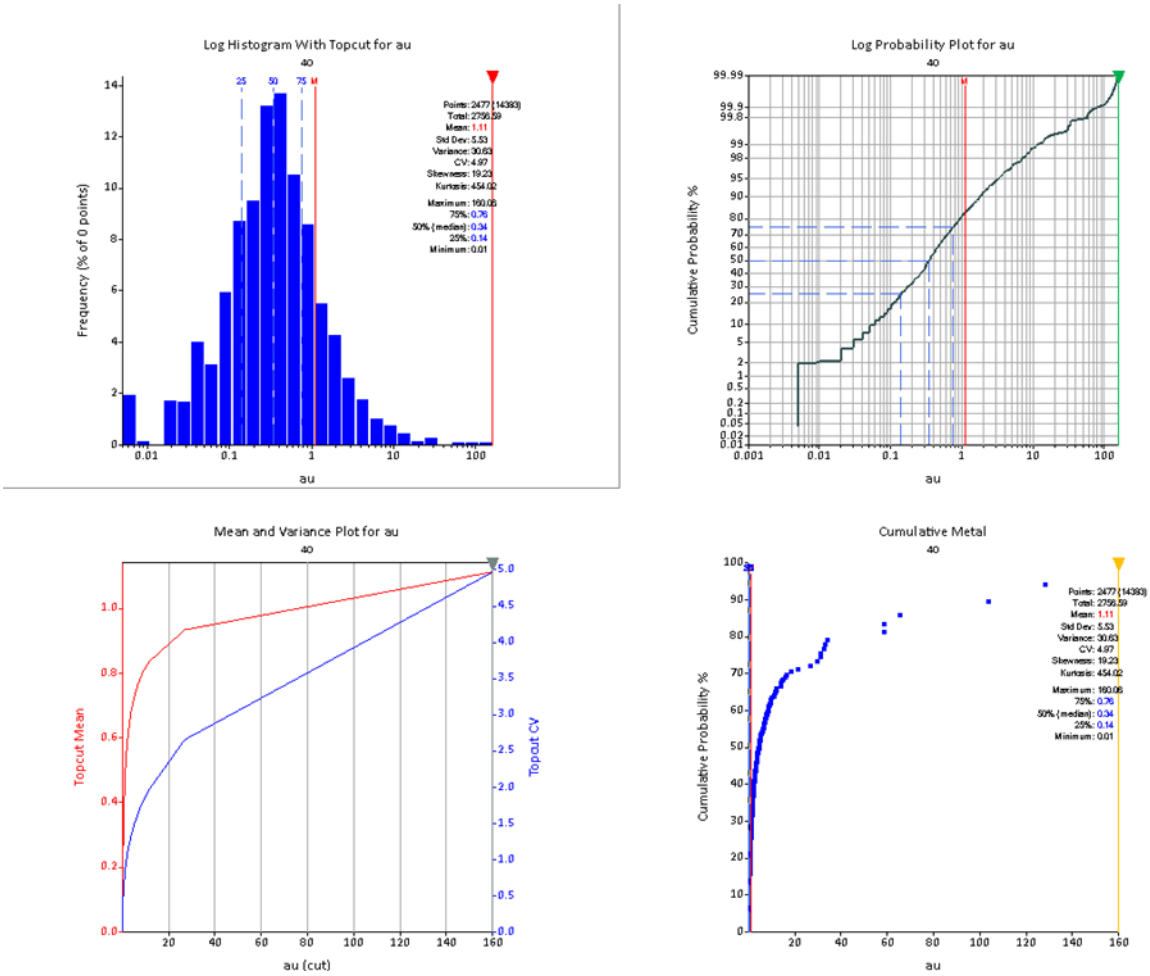

Figure 8: Example top-cut analysis for AG pod 40

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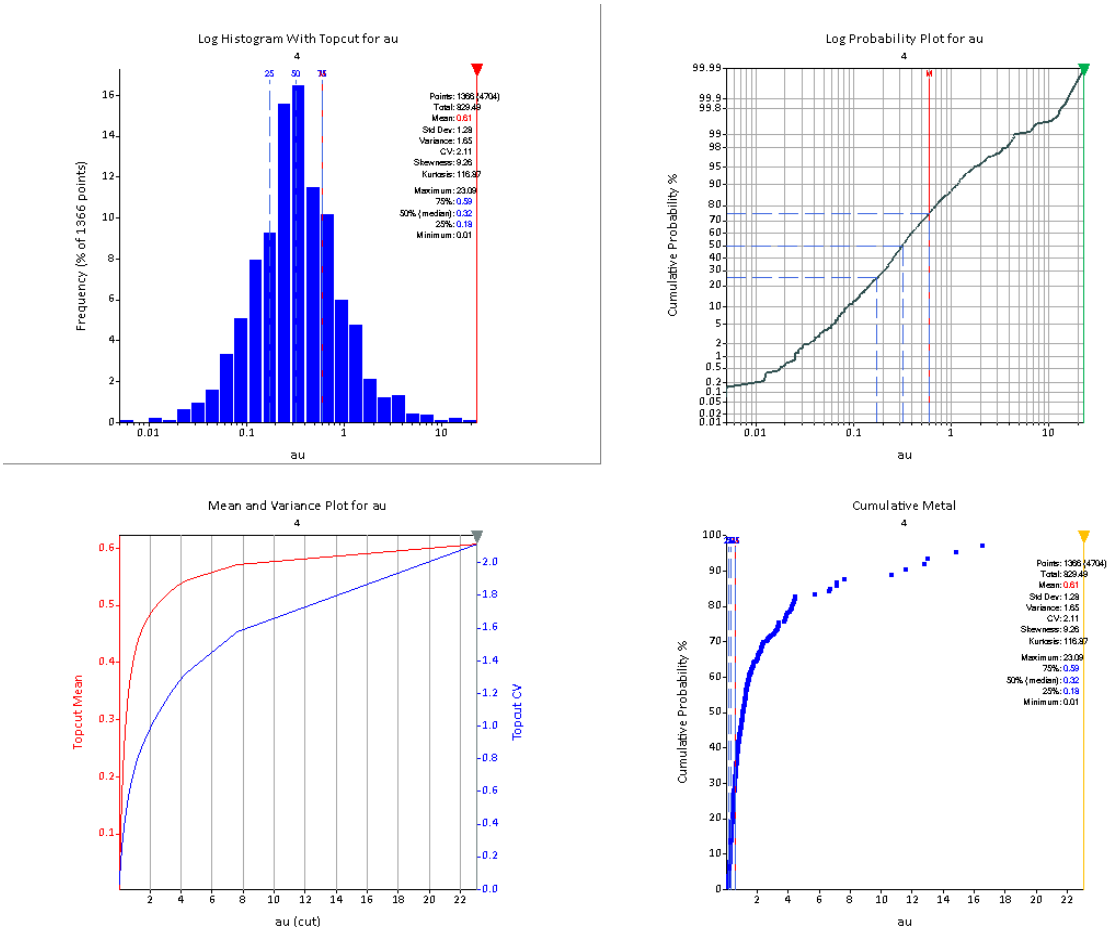

Figure 9: Example top-cut analysis for APG pod 4

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Geospatial Analysis

RPM completed normal scores variogram analysis for the modelled areas at AG. These analyses indicated that within the continuous along strike shear (035°) which dips consistently at 60° - 80° to the southeast, southerly plunging shoots can be interpreted (Figure 10). This orientation is consistent with the high grade plunges which can be interpreted within the drill holes.

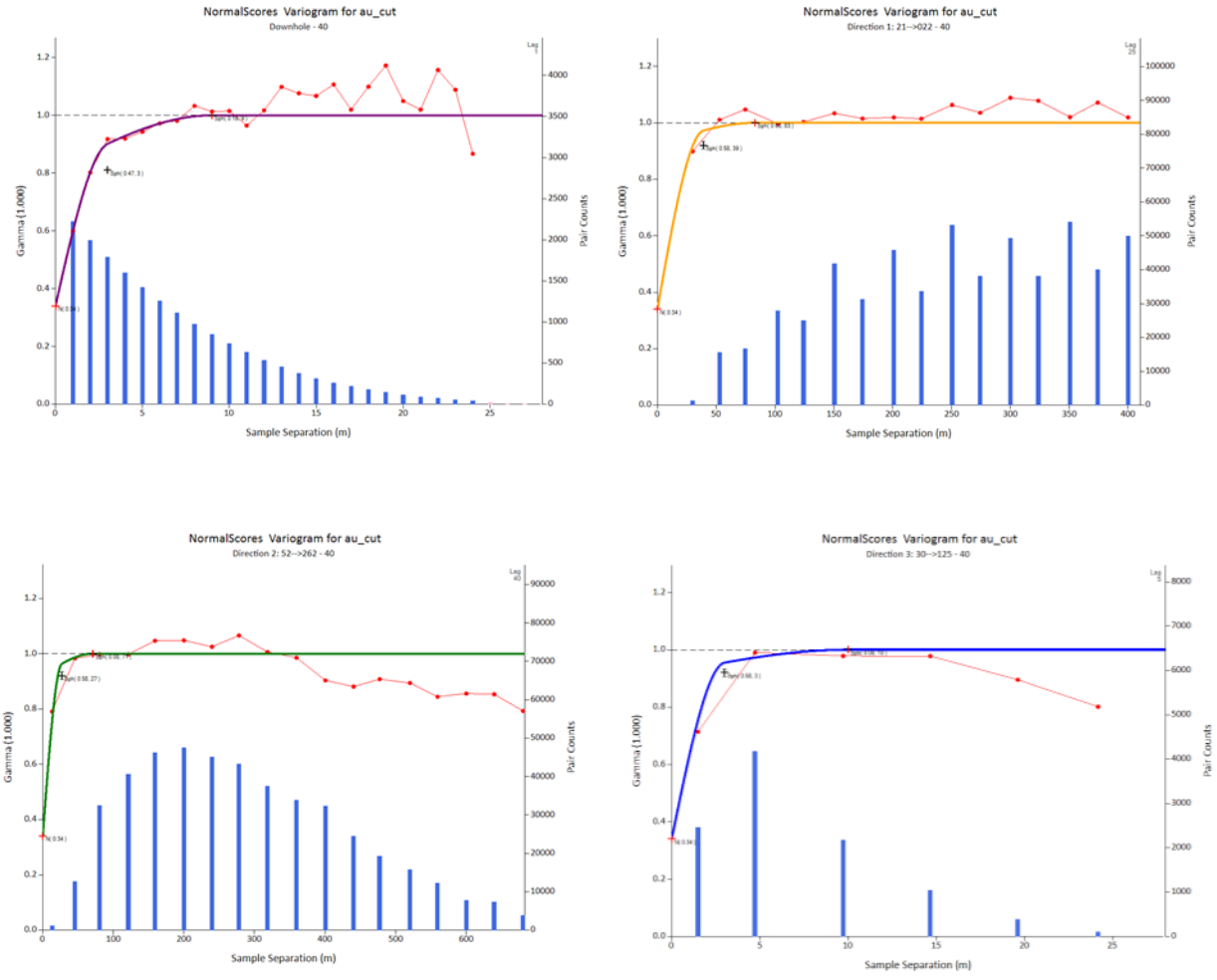

Figure 10: Example normal scores variograms and fitted model AG pod 40

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RPM also undertook normal scores variogram analysis for the modelled areas at APG. These analyses indicated that within the continuous along strike shear (035°) gold mineralisation dips consistently at around 60° - 70° to the southwest (Figure 11). This orientation is consistent with the mineralisation intersected by drill holes.

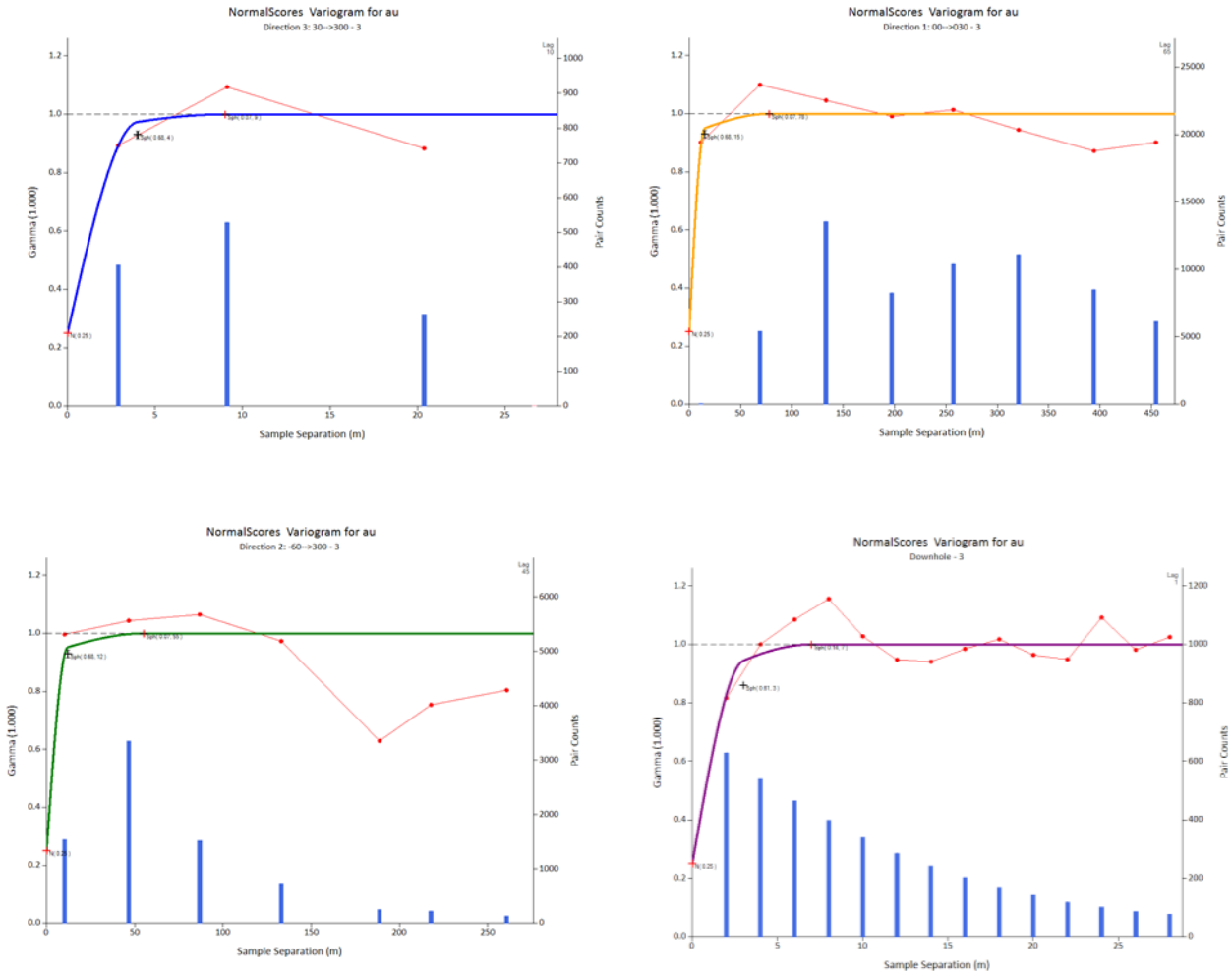

Figure 11: Example normal scores variograms and fitted model APG pod 3

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Mineral Resource estimation

Block Model

SURPAC block models were created to encompass the full extent of each resource area as currently defined within the licence boundary for the AG and APG deposits. The block model was rotated to a bearing of 035 degrees to align with the general strike of the majority of the mineralised lenses, to improve the fit of the blocks to the wireframe and to reduce the size of the block model. The block dimensions used in the model were 25m NS (along strike) by 10m EW (across strike) by 5m vertical with sub-cells of 3.125m by 3.125m by 0.625m based on the drill spacing. The block model origin, extent and attributes are shown in ***Table 11***.

Table 11: Block Model parameters

Estimate	Origin			Extent			Rotation
Area	**Easting**	**Northing**	**Elevation**	**Easting**	**Northing**	**Elevation**	**Degrees**
AG	750,400	763,500	-400	1,600	7,000	700	35
APG	746,000	756,000	-175	1,600	6,000	470	35

Grade Interpolation and Estimation Parameters

Each mineralised wireframed object was used as a hard boundary for the interpolation of Au. That is, only composites inside each object were used to interpolate the blocks inside the same object. The Ordinary Kriging (**OK**) algorithm was selected for grade interpolation of Au. The OK algorithm was selected to minimise smoothing within the estimate and to give a more reliable weighting of clustered samples.

An isotropic search ellipsoid in the major and semi-major directions was used for the interpolation process based on the number of samples to be used to estimate a block and the relative orientations of the mineralisation, however an anisotropic parameter was used in the minor direction (across strike). The search ellipsoid orientations used for interpolation matched the general orientation of the mineralised lodes in each domain, with separate parameters used for the north, middle and south. Three passes were used for the estimation including a final pass with a large search ellipsoid and a minimum sample of one to ensure that all blocks were estimated within the block model, as shown in ***Table 12*** and ***Table 13***.

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Table 12: AG Search Ellipsoid Parameters

Parameter	Estimation Pass 1	Estimation Pass 2	Estimation Pass 3	Estimation Pass 4
Search Type	Ellipsoid			
Bearing	35	35	35	35
Dip	-65	-65	-65	-65
Plunge	0	0	0	0
Major-Semi Major Ratio	1.3	1.3	1.3	1.3
Major-Minor Ratio	3	3	3	3
Search Radius	30	50	80	160
Minimum Samples	5	5	1	1
Maximum Samples	12	12	12	12
Max. Samples per Hole	4	4	4	4

Table 13: APG Search Ellipsoid Parameters

Parameter	Estimation Pass 1	Estimation Pass 2	Estimation Pass 3
Search Type	Ellipsoid		
Bearing	35	35	35
Dip	65	65	65
Plunge	0	0	0
Major-Semi Major Ratio	1	1	1
Major-Minor Ratio	2	2	2
Search Radius	40	80	300
Minimum Samples	8	4	1
Maximum Samples	15	15	15
Max. Samples per Hole	4	4	4
Block Discretisation	5 X by 4 Y by 2 Z		

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Model Validation

A rigorous process was used to validate the estimation for the Project as outlined below:

- Mathematical Comparison by Domain;
- Visual Inspection of the Blocks; and
- Overall Validation.

Visual Inspection of the Blocks

Following the mathematical comparison and the validation notes, a visual comparison of the block estimates to the composites was completed. The visual inspection indicates a good correlation exists at a local scale down dip and when closer spaced drilling occurred between the block estimate and the surrounding composites with the block estimate grade smoothed due to a combination of the block dimensions and the OK algorithm.

RPM notes due to the style of mineralisation there is a degree of smoothing within each lode, however RPM considers this level of smoothing suitable to interpretation on a global scale, however variation may occur on a local scale. As such RPM considers that further drilling and closer drilling spacing will be required should a higher level of classification be required.

Overall Validation

The review of the mathematical comparison indicates that a good overall correlation exists between the block estimates and the composite grades within both deposit and each lode. This good correlation of the drill holes and interpolated block model is further supported when a visual inspection is completed, however RPM does note that there is a degree of smoothing.

As a result of the validation completed, RPM considers the estimate is representative of the composites and is indicative of the known controls of mineralisation and the underlying data.

See JORC Table 1 for further details.

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Mineral Resource Classification

Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012). The Mineral Resource was classified as Indicated and Inferred Mineral Resource on the basis of data quality, sample spacing, and lode continuity.

The AG and APG deposits both show good continuity of the main mineralised lodes along strike and down dip which allowed the drill hole intersections to be modelled into coherent, geologically robust wireframes within the drill spacing of 50m-100m by 50m with a number of closer drill spacing within the AG deposit and small portions of the APG deposit. Relative consistency is evident in the thickness of the structures, along with the continuity of structure between sections. While there is good geological continuity along strike and down dip, there is evidence, and it is interpreted, that local variation of grade and thickness will occur between the current drill spacing arising from the boudin type structures and therefore resulting in discontinuous pods of mineralisation.

Given the interpretation of further local grade variation with further drilling, within the good geological continuity, RPM considers the current data suitable to provide a good estimate of tonnage and metal content within the current drilling spacing on a global scale. For the AG area, RPM considers the 2020 infill and extension drilling undertaken allows good confidence in the grade and geological continuity with both the 50m and closer spacing allowing interpretation between section and down dip. As such RPM considers 50m by 50m spacing suitable for the Indicated classification in AG and APG which was selected based on variogram ranges (60% of the sill range) and visual confirmation of structure and grade continuity. RPM however considers that further drilling is required to allow a confirmed estimate of local grade and metal distribution; as such no Measured resource is reported. All other areas report the Mineral Resource as Inferred within the 100m by 50m drilling spacing areas and extrapolated to 30 – 50m from the nearest drill hole.

Limited bulk density samples have been determined for the transition and no samples for oxide. While RPM considers the applied densities suitable for the style of mineralisation and rock types, further determinations are recommended to enable Measured resources to be estimated. RPM highlights that the oxide and transition material constitute a very minimal portion of the Indicated estimate and as such does not have a material impact on either the local or global estimates.

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6. JORC Statement of Mineral Resources – 12 July 2021

Results of the Independent Mineral Resources estimate for the Project are tabulated in the Statement of Mineral Resources below, which are reported in line with the requirements of the 2012 JORC Code; as such the Statement of Mineral Resources is suitable for public reporting. The Statement of Mineral Resources shown in ***Table 14***.

Within AG, the Mineral Resource is reported at a cut of grade of 0.25 g/t Au within a pit shell that used a gold price of 2,000 US$ per troy ounce, and 1.0 g/t Au below the pit shell. The cut off grades were based on estimated mining and processing costs and recovery factors and are detailed in Section 3 of the JORC Code, 2012 Edition – Table 1. It is highlighted that while a 2,000 US$ per ounce pit shell was utilised the cut-off grades were estimated based on the gold price of 1,800 US$ per troy ounce which is 1.25 times the consensus forecast as of June, 2021.

Within APG, the Mineral Resource is reported at a cut of grade of 0.30 g/t Au within a pit shell that used a gold price of 2,000 US$ per troy ounce, and 1.0 g/t Au below the pit shell. The cut off grades were based on estimated mining and processing costs and recovery factors and are detailed in Section 3 of the JORC Code, 2012 Edition – Table 1. It is highlighted that while a 2,000 US$ per ounces pit shell was utilised the cut-off grades were estimated based on the gold price of 1,800 US$ per troy ounce which is 1.25 times the consensus forecast as of June, 2021.

There is no change to the South Gamina Resource (October 21, 2020) which is reported to a depth of 120m and not reported at depths below 120m.

Table 14: Statement of Mineral Resources by Deposit as at 12 July, 2021. Reported at 0.25 g/t Au cut off within pit shells; and 1.0 g/t Au cut off below the pit shells for AG, and reported at 0.3 g/t Au cut off within pit shells; and 1.0 g/t Au cut off below the pit shells for APG, and 0.3 g/t Au to a depth of 120m for SG.

Area	Class	Oxide			Transition			Fresh			Total		
		Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)
AG	Indicated	0.5	1.2	0.02	2.1	1.3	0.09	32.4	1.5	1.54	35.0	1.5	1.65
	Inferred	0.4	1.0	0.01	1.7	0.9	0.05	13.3	1.7	0.74	15.3	1.6	0.80
	Total	**0.9**	**1.1**	**0.03**	**3.8**	**1.1**	**0.14**	**45.6**	**1.5**	**2.28**	**50.3**	**1.5**	**2.45**
APG	Indicated	0.5	0.7	0.01	1.9	0.7	0.05	6.0	0.7	0.14	8.4	0.7	0.20
	Inferred	1.2	0.7	0.03	5.2	0.7	0.11	22.0	0.7	0.52	28.4	0.7	0.67
	Total	**1.7**	**0.8**	**0.04**	**7.1**	**0.7**	**0.16**	**28.0**	**0.7**	**0.67**	**36.7**	**0.7**	**0.87**
SG	Inferred	0.0	0.7	0.001	0.10	0.8	0.001	0.4	1.6	0.02	0.5	1.4	0.02
Grand Total		**2.6**	**0.9**	**0.07**	**11.0**	**0.9**	**0.30**	**74.0**	**1.2**	**2.97**	**87.5**	**1.2**	**3.35**

Note:

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1. *The Mineral Resources has been compiled under the supervision of Mr. Jeremy Clark who is a sub-consultant to RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Clark has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
2. *All Mineral Resources figures reported in the table above represent estimates at 12 July, 2021. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.*
3. *Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).*
4. *The Mineral Resources have been reported at a 100% equity stake and not factored for ownership proportions.*

The total resource at AG and APG is reported at varying cut-off grades are provided in ***Table 15*** below. However, RPM recommends that the Mineral Resource be reported using the criteria shown in ***Table 14***. It is highlighted that ***Table 15*** is not a Statement of Mineral Resources and does not include the use of pit shells to report the quantities rather the application of various cut off grades. As such variations with ***Table 14*** will occur and a direct comparison is not able to be completed.

Table 15: AG and APG Mineral Resources at varying cut off grades

COG	AG Indicated			AG Inferred			APG Indicated			APG Inferred			Total		
	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)
0.1	46.1	1.2	1.8	44.5	0.8	1.2	11.9	0.6	0.2	66.3	0.5	1.1	168.7	0.8	4.4
0.2	44.1	1.2	1.8	41.4	0.9	1.2	11.7	0.6	0.2	62.1	0.6	1.1	159.3	0.8	4.3
0.3	39.2	1.4	1.7	35.3	1.0	1.1	10.4	0.7	0.2	52.3	0.6	1.0	137.2	0.9	4.1
0.4	32.8	1.6	1.7	27.7	1.2	1.1	7.8	0.8	0.2	38.9	0.7	0.9	107.2	1.1	3.8
0.5	27.4	1.8	1.6	22.0	1.4	1.0	5.7	0.9	0.2	26.0	0.8	0.7	81.2	1.3	3.4
0.6	23.1	2.0	1.5	17.2	1.6	0.9	4.2	1.0	0.1	16.6	1.0	0.5	61.0	1.6	3.1
0.7	19.4	2.3	1.4	13.7	1.8	0.8	3.1	1.2	0.1	11.8	1.2	0.4	48.1	1.8	2.8
0.8	16.7	2.5	1.4	11.6	2.0	0.8	2.4	1.3	0.1	8.5	1.3	0.4	39.1	2.1	2.6
0.9	14.7	2.8	1.3	9.9	2.3	0.7	1.9	1.4	0.1	6.9	1.4	0.3	33.4	2.3	2.4
1	13.1	3.0	1.3	8.6	2.4	0.7	1.5	1.5	0.1	5.5	1.6	0.3	28.7	2.5	2.3
1.1	11.9	3.2	1.2	7.6	2.6	0.6	1.2	1.7	0.1	3.8	1.8	0.2	24.5	2.7	2.1
1.2	10.8	3.4	1.2	6.8	2.8	0.6	0.9	1.8	0.1	3.0	1.9	0.2	21.5	2.9	2.0
1.3	9.9	3.6	1.1	6.2	3.0	0.6	0.8	1.9	0.0	2.6	2.0	0.2	19.5	3.1	2.0
1.4	9.2	3.8	1.1	5.6	3.1	0.6	0.7	2.0	0.0	2.4	2.1	0.2	17.8	3.3	1.9
1.5	8.5	4.0	1.1	5.2	3.3	0.5	0.6	2.1	0.0	1.9	2.3	0.1	16.2	3.5	1.8
1.6	7.9	4.1	1.0	4.8	3.4	0.5	0.5	2.2	0.0	1.5	2.5	0.1	14.7	3.7	1.7
1.8	7.0	4.4	1.0	4.1	3.7	0.5	0.4	2.4	0.0	1.2	2.7	0.1	12.7	4.0	1.6
1.9	6.6	4.6	1.0	3.8	3.9	0.5	0.3	2.4	0.0	1.1	2.8	0.1	11.8	4.1	1.6
2	6.2	4.8	1.0	3.5	4.0	0.5	0.3	2.5	0.0	1.0	2.9	0.1	11.0	4.3	1.5
2.5	4.8	5.5	0.8	2.5	4.7	0.4	0.1	3.2	0.0	0.6	3.2	0.1	7.9	5.1	1.3
3	3.8	6.3	0.8	2.0	5.3	0.3	0.1	3.5	0.0	0.3	3.9	0.0	6.1	5.8	1.1

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7. Geotechnical

Dempers & Seymour Pty Ltd (D&S) was commissioned by Tietto Minerals Ltd to undertake the Definitive Feasibility Study (DFS) open pit slope design for the Abujar Gold Project in Côte d'Ivoire, West Africa. The scope of work for the pit slope design project included:

- Geotechnical photo logging of targeted geotechnical drillholes and selected exploration drillholes
- Select samples recovered from 11 diamond drillholes (2,265m) for laboratory testing including:
  - ✓ Particle Size Distribution (PSD)
  - ✓ Atterberg Limits
  - ✓ Uniaxial Compressive Strength (UCS)
  - ✓ Direct Shear
  - ✓ Brazilian Tensile Strength
- Structural Analyses from structural data compiled from drillholes located across the proposed Main Pit and South Pit following structural logging of diamond drillholes carried out by site personnel under D&S supervision
- Create a 3D Significant Geotechnical Features Model (SGFM)
- Create a 3D Mining Rock Mass Model (MRMM) of relevant rock mass parameters and ratings
- Rigorous pit slope design analyses

Raw data for the project comprised geotechnical parameters interpreted from photo logging of core from selected exploration drillholes. This data was used to construct a 3D Mining Rock Mass Model for the project. Rock mass characteristics are summarised in the following table.

Table 16: Rock Mass Characteristics

Rock Unit	Rock Strength	Joint Condition	Fracture Freq.	RMR	MRMR
TRANSPORTED	1MPa - 5MPa	Smooth and undulating with gouge infill	>40 frac/m Spacing <0.02m	8 - 22 Average 16	7 - 18 Average 13
RESIDUAL	5MPa -25MPa	Rough and planar with soft sheared fine infill	6.0 frac/m Spacing 0.17m	13 - 31 Average 25	10 - 25 Average 20
GRANODIORITE	100MPa - 130MPa	Rough and planar with non- softening medium infill	0.65 frac/m Spacing 1.52.m	63 - 71 Average 66	56 - 63 Average 58

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Rock Unit	Rock Strength	Joint Condition	Fracture Freq.	RMR	MRMR
GNEISS	100MPa - 130MPa	Rough and planar with non- softening medium infill	0.9 frac/m Spacing 1.11m	60 - 68 Average 63	52 - 59 Average 55
STRUC 1	25MPa - 50MPa	Rough and planar with non- softening medium infill	10 frac/m Spacing 0.1m	27 - 41 Average 34	22 - 33 Average 27
STRUC 2	25MPa - 50MPa	Rough and planar with soft sheared infill	10 frac/m Spacing 0.1m	23 - 40 Average 31	18 - 33 Average 25

The rock mass quality of the main rock units is classified as Good. The Transported unit is classified as Very Poor and the Residual unit and geotechnical features (Struc 1 and Struc 2) are classified as Poor. Recommended pit slope design configurations excluding haul ramps for each geotechnical domain are given in the following table.

Table 17: Recommended pit slope design configurations

MAIN PIT PARAMETERS						
Domain	**From**	**To**	**Bench Height (m)**	**Berm Width (m)**	**Batter Angle (degrees)**	**Inter Ramp Slope Angle (degrees)**
North West	Surface	180	10	5	50	41
	180	80	20	6	65	55
	80	-60	20	6	65	54
South West	Surface	180	10	5	50	39
	180	80	20	6	65	55
	80	-60	20	6	65	54
North East	Surface	180	10	5	50	41
	180	80	20	6	70	59
	80	-60	20	6	70	58
South East	Surface	180	10	5	50	39
	180	80	20	6	70	59
	80	-60	20	6	70	58
SOUTH PIT PARAMETERS						
Domain	**From**	**To**	**Bench Height (m)**	**Berm Width (m)**	**Batter Angle (degrees)**	**Inter Ramp Slope Angle (degrees)**
North West	Surface	180	10	5	50	41
	180	80	20	6	70	59
South West	Surface	200	10	5	50	41
	200	80	20	6	70	58
North East	Surface	180	10	5	50	41
	180	80	20	6	75	63
South East	Surface	200	10	5	50	41
	200	80	20	6	75	63

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The pit slope design configurations are dependent on dry dewatered slopes. A 25m geotechnical berm must be included at ~80mRL for Main Pit due to the final depth of 300m. A geotechnical berm is not required for the South Pit with a final depth of 150m. The slope design for the transported and residual material is determined from the depth of the weathering profiles based on current knowledge. However, the depth of this material varies and can comprise large intersections of saprolite. If these are encountered during mining the following configuration must be applied:

- Depth of transported material <30m - 50° batters, 10m high with 5m wide berms
- Depth of transported material >30m to 60m - 50° batters, 5m high with 5m wide berms

Based on the Mining Rock Mass Model and rigorous analyses, geotechnical domains have been defined for the Main Pit and South Pit as shown in the following figure:

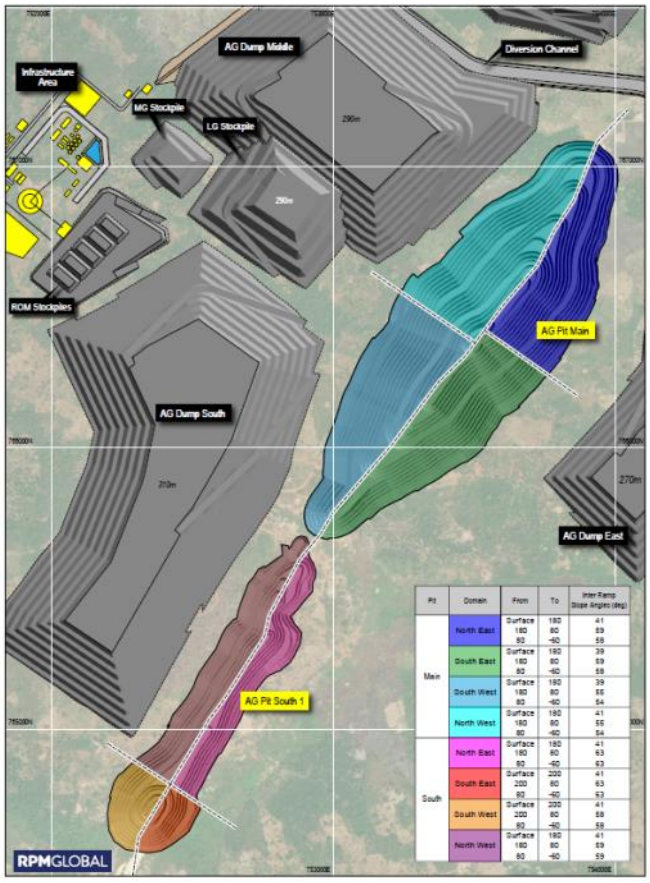

Figure** 12: **Geotechnical pit domains

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8. Mining

Introduction

A DFS Mining Study was completed to define a practical development scenario for the Project. The DFS Ore Reserve consists of analysis of selected "higher confidence" pits (high proportion of Indicated Resources) at the Abujar Gludehi Deposit (AG) and the Abujar-Pischon-Golikro (APG) deposit located 8 km to the south of AG. Both deposits contain Indicated and Inferred Mineral Resources; however the majority of the material contained within the pits is Indicated (34 Mt or 85% is Indicated and 6.2 Mt Inferred). The DFS also includes a strategic analysis examining the upside potential of the pits that include a majority of Inferred Resources – termed the Life of Mine. These smaller majority Inferred pits are sequences after the majority Indicated pits and comprise 4.3 Mt of mineable quantity.

The AG deposit currently comprises three main open cut pit areas, namely: AG Main pit, North pit and a number of Southern pits. The Main pit and South 1 pit generate the majority of the value for the project. The Project is at a greenfields stage and aims to commence development as soon as funding is sourced and approved.

The purpose of the DFS is to confirm the economic potential of the Project to support decision-making by Tietto to proceed to the detailed design stage. Tietto are aiming to fast-track development, subject to financing and long lead items.

The DFS process is being managed by Tietto with specialist consultants assigned to different technical areas. RPM's scope is the preparation of the Mineral Resource Statement, the Mining Study and the Ore Reserve Statement.

Key Outcomes

The key outcomes of the mining study include:

- Ore Reserves of 34 Mt ROM at 1.30 g/t Au for 1,450,000 contained ounces;
- Mineable quantities (Indicated and Inferred) of 44.9 Mt ROM at 1.22 g/t Au for 1,766,000 contained ounces and a strip ratio of 6:1 (wt:ot);
- Mine life based on production target of 4.0 Mt ROM (fresh material) per year;
- Average gold production from Year 1 to Year 6 of 200 k oz. per annum;
- Mining activity of 11 years comprising six months of establishment and pre-strip (including 4 months -pre-strip to build a high-grade gold stockpile), 10 years of primary production with the final year being stockpile reclaim; a

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- Pit limit sensitivity analysis indicated the Project mineable quantities are linearly sensitive to economic factors, both on the upside and downside; however there are no sudden increases or decreases in mineable quantities at particular gold prices.

Project Description

The Project involves the development of a truck-and-shovel, open-pit mine using conventional metalliferous mining techniques. The mining component consists of contractor mobilisation and establishment, then approximately 4 months pre-strip, and 10 years of mining operations and then rehabilitation and site reclamation in the following year.

The initial project construction phase involves site preparation, infrastructure construction and waste pre-striping and stockpiling of ore. Major infrastructure to be constructed on site includes a process plant (capacity of 4.0 Mtpa ROM fresh feed), ore stockpiles and handling equipment, mine offices, equipment workshops and access road.

The key aspects of the site layout for the AG deposit and main complex, include the north pit, the larger main pit, and a number of smaller south pits as well as the four waste dumps – one adjacent to the north pit, two adjacent to the main pit, and one adjacent to the south pit, a ROM pad and low-grade stockpile (13). Additionally the APG satellite deposit is located 9 km to the south along strike and consists of a cluster of satellite pits, and three small waste dumps (***Figure 14***).

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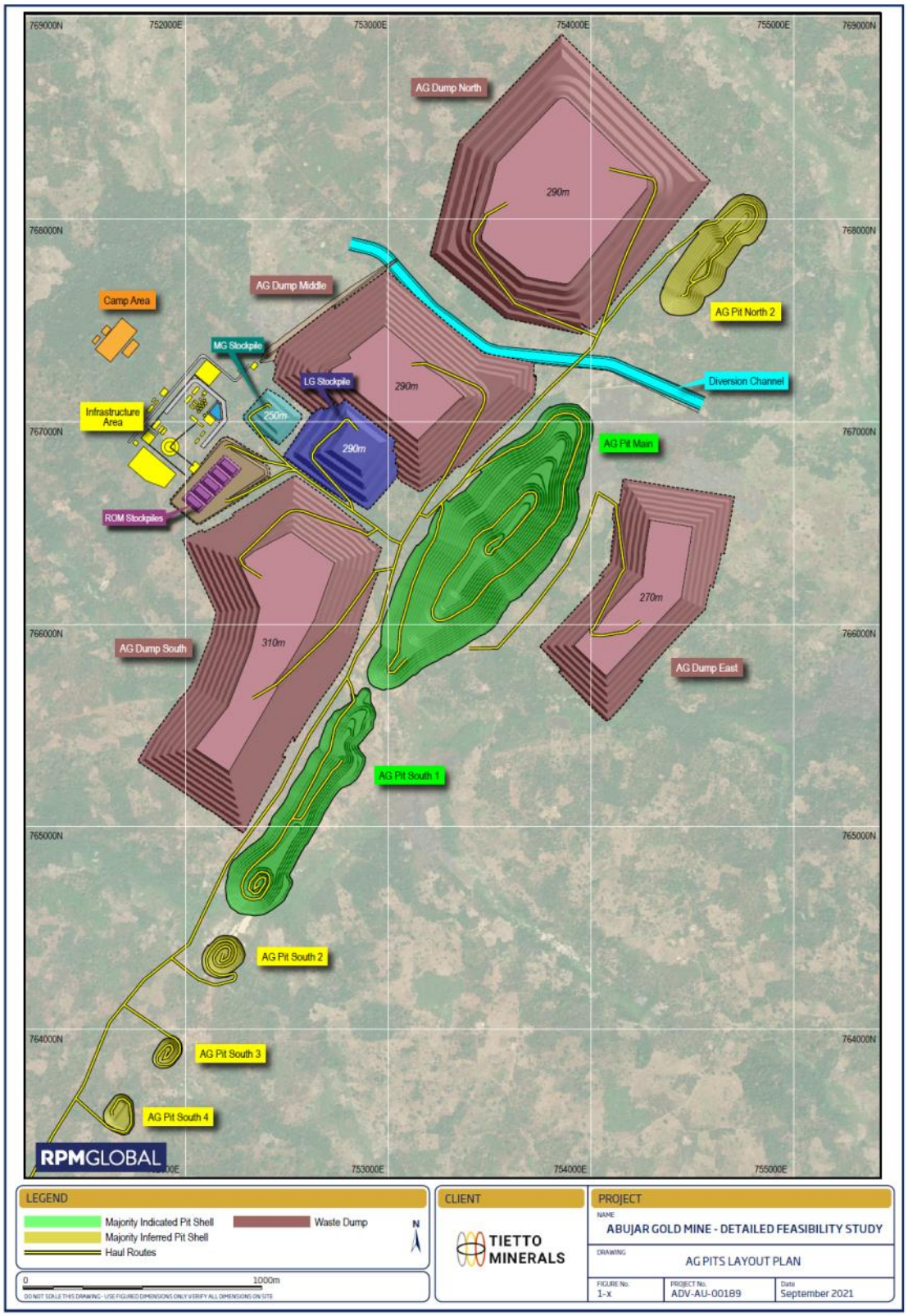

Figure 13: Proposed layout Abujar Gold Project – AG Open Pit

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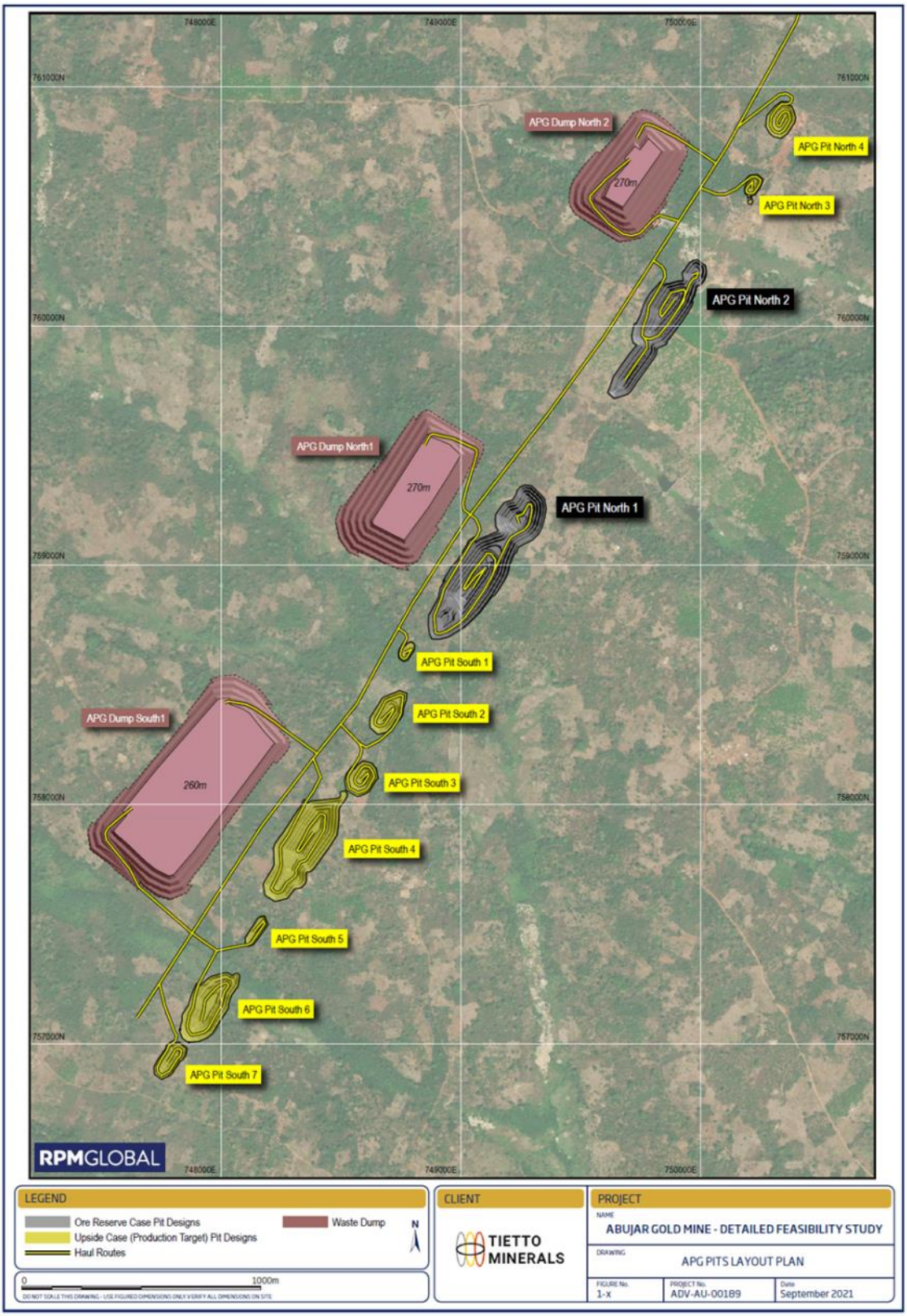

Figure 14: Proposed layout Abujar Gold Project – APG Open Pit

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Production Rate Study

A production rate study was completed as part of the initial project definition phase. Within Geovia Whittle 4X software, RPM examined production rate options ranging from 2 Mtpa to 4 Mtpa, in 0.5 Mtpa increments. In conjunction with Tietto, the 4.0 Mtpa ore production rate was selected as it best met corporate objectives for cash flow and mining life.

SMU Size

The SMU was selected on the basis of an ore loss and dilution study. The Resource model was converted to a mining model by regularising the blocks to a smallest mining unit (SMU) of 2.5 (X), 6.25 (Y), 2.5 (Z) to account for loss and dilution.

The SMU size was selected based on the structure of the mineralisation, proposed mining method and grade control practises, excavator size and proposed mining bench and flitch height. The goal was to select the smallest practical mining unit (SMU) that would produce acceptable ore loss and dilution for each pit while achieving stated production tonnages. This analysis was completed using an RPM in-house software package that rapidly evaluated the impact of different SMU sizes. The estimated cut-off grade was used to categorise ore and waste both before (in situ) and after SMU re-blocking. Ore dilution was provided from adjacent blocks in the model that had grades below the cut-off.

From these results RPM selected the most suitable SMU size for each deposit and estimated the expected global ore loss and dilution, the results of which are presented below in Table 18.

Table 18: Estimated Loss and Dilution

Model	Loss (tonnage) %	Dilution (tonnage) %
AG (SMU 2.5x6.5x2.5)	19	10
APG (SMU 2.5x6.5x2.5)	13	6

The SMU size selected assumes mining two 2.5 m flitches, with a 5 m bench height for blasts containing ore, and 110 t hydraulic excavators being used for a high proportion of ore mining. Given the thin nature of the orebodies considerable attention will be needed to be given to selective mining practises in order to achieve the proposed loss and dilution. RPM notes that the global ore loss and dilution in the table above is based on the full resource model and that the actual ore loss and dilution can differ throughout different domains of the deposit.

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Pit Limits

Geovia Whittle 4X pit limit optimisation software was used to determine the economic open pit mining limits. The SMU mining model was used with blocks regularised to a smallest mining unit (SMU) of 2.5 (X), 6.25 (Y), 2.5 (Z) to account for loss and dilution.

For key inputs to pit optimisation, RPM estimated mining costs based on a contractor estimate, Mintrex processing costs and metal recovery and Dempers & Seymour geotechnical parameters.

The "Ore Reserve" mine gate gold price used for optimisation was the June 2021 Consensus Forecast long term price at US$1,407/oz.

Pit Limit Results – AG deposit – Measured and Indicated Case

A gold price sensitivity analysis was completed on metal prices ranging from 30% to 150% of the reference price, which is equivalent to a US$438/oz. to US$2,188/oz. gold price. The change in ore tonnage and grade for each gold price increment is presented graphically in Figure 15. This shows a relatively linear increase in the available ore as the gold price increases. The AG deposit is moderately sensitive to change in revenue, with a 100 US$/oz rise/fall in gold price results in a 6%/-10% change in ore tonnage respectively. The initial pits have low ore tonnages but higher grades.

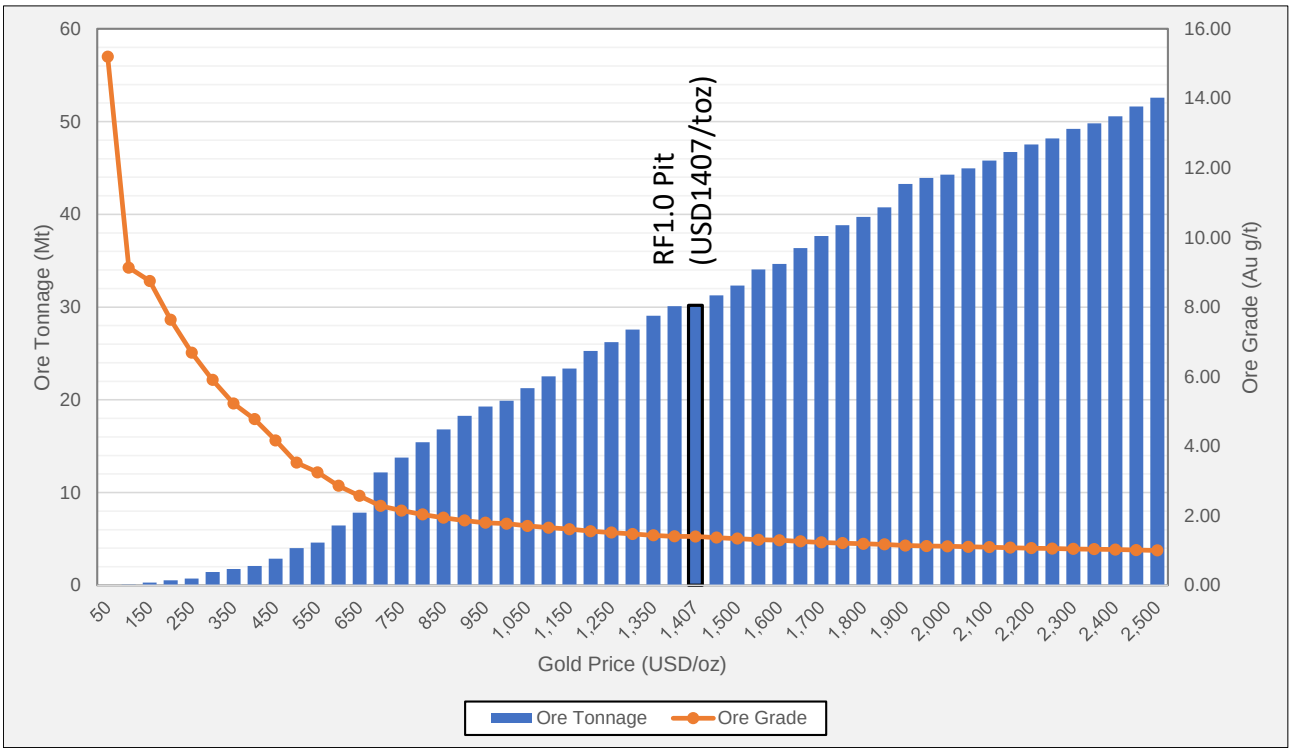

Figure 15: Price Sensitivity – AG - Ore Tonnage and Grade (Meas + Ind only)

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To aid pit selection, Whittle 4X software estimates the discounted value of each pit at the Ore Reserve parameters. A high-level 4 Mtpa ore schedule was prepared. A discount rate of 10% was applied. The results of the cash flow analysis are presented in Figure 16. Based on the practical schedule the discounted cashflow remains relatively constant from pit 17 and above. This suggests that any ultimate pit shell in this range can be selected with the same DCF outcome.

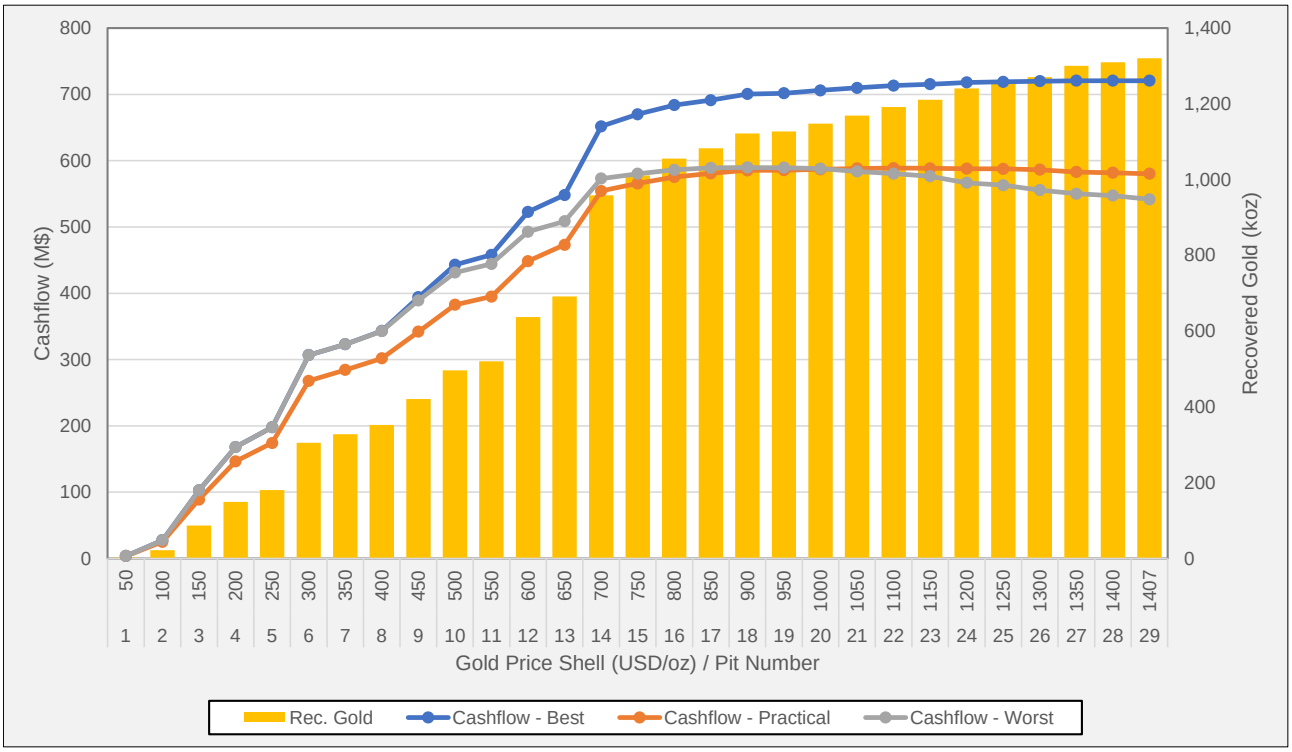

Figure 16: AG Shell Analysis - Discounted Cashflow and Ore Tonnage (Meas + Ind only)

Pit Optimisation Results – AG – Including Inferred

An Life of Mine was also completed, including Inferred material. The results including and excluding Inferred material are provided in Table 19 and Figure 17.

Table 19: Pit Optimisation Results – With/Without Inferred Sensitivity

Pit Shell	Deposit	Material Class	Total Tonnage Mt	Waste Tonnage Mt	Strip Ratio t/t	Ore Tonnage Mt	Ore Grade Au g/t	Contained Gold koz
1407	AG	MEA+IND	222.8	192.6	6.4	30.2	1.40	1,361
1407	AG	MEA+IND+INF	289.0	249.2	6.3	39.9	1.30	1,671

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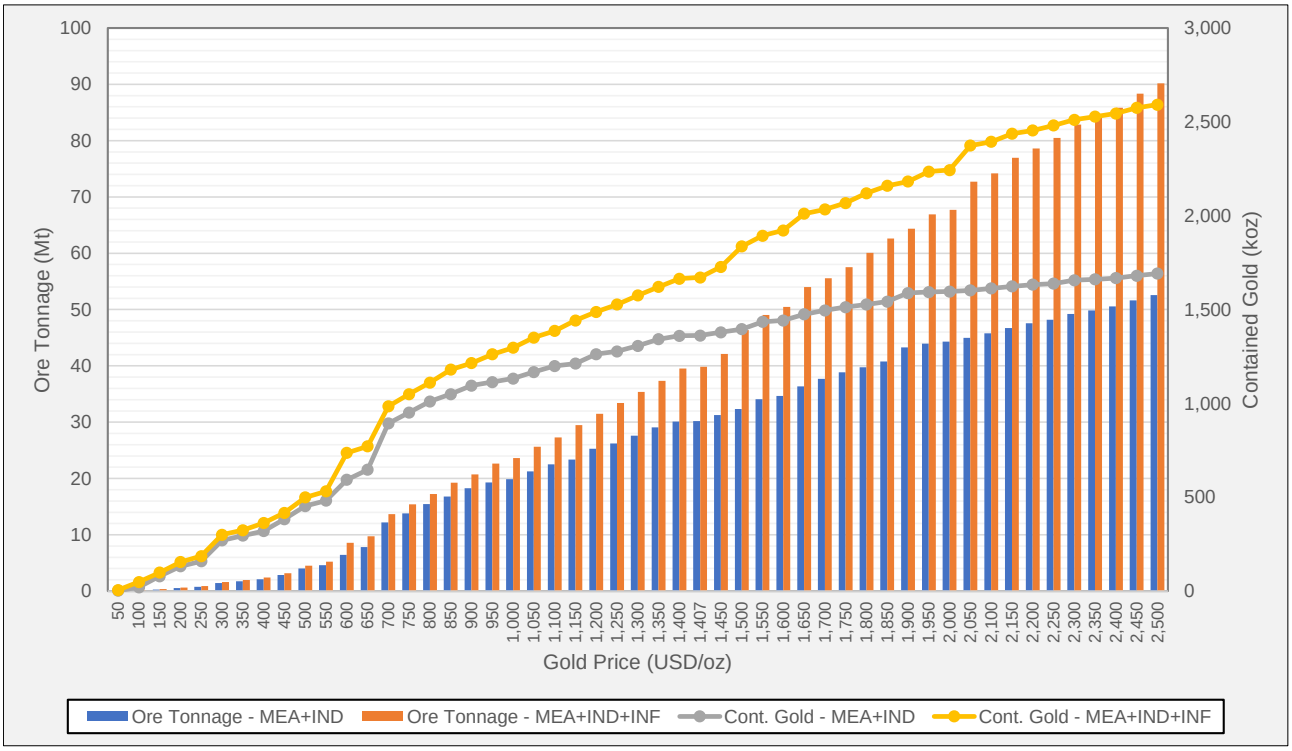

Figure 17: AG Shell Analysis - Discounted Cashflow and Ore Tonnage (Meas+Ind vs Meas+Ind+Inferred)

Given the comparison of results, pit shell 29 (100% RF) for the Meas+Ind+Inf scenario was selected to represent the final pit limit and support subsequent detailed pit design. This pit was considered to best reflect the upside resource potential associated with the deposit and the confidence that the deposit will be developed in the short term and likely exposed to higher gold prices. Interim cutbacks were designed (using a range of shells in various areas) in order to improve early cashflow).

While the inclusion of Inferred material to generate the pit shell is considered an upside potential to the Project, given that the Inferred is only 20% of the total and will be mainly extracted well beyond the payback period, the larger shell enables better strategic understanding for the placement of infrastructure and future development. As well as the Upside Schedule, an Ore Reserve scenario was also considered.

The Ore Reserve scenario excludes pits that that do not have sufficient margin on an Indicated only basis. That is, the assessment of the economic potential of each pit assumed Inferred Resources to be waste rock.

Though the 100%RF shell will have a high incremental stripping ratio, given the current gold price upside and comparing the long-term price (US$1407/oz.) relative to the spot price US$1,800/oz, RPM believes that this is a reasonable selection. Further drilling is planned prior to production to increase the confidence of the Mineral Resources.

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APG Deposit

A similar methodology was also utilised for the pit optimisation for the smaller APG deposit, with a similar selection of the 100%RF Meas+Ind+Inf shell to guide pit design. Pits that do not generate a positive margin from Indicated only are eliminated at the schedule stage, and excluded from the Ore Reserve.

Mine Design and Mineable Ore Quantities

Detailed pit designs were prepared based on the 100% revenue factor Meas+Ind+Inf shell for AG and APG. The mineable quantities contained within the pit designs are set out in Table 20. The cut-off grade applied for the AG deposit was 0.29 g/t for oxide and transition and 0.30 g/t Au for fresh and for APG deposit 0.32 g/t for oxide and transition and 0.33 g/t Au for fresh (given it has an additional 8 km haulage to the AG ROM pad). The Indicated material within the specified Ore Reserve (Ore Reserve case) pit designs was used for the reporting of Ore Reserves. The Life of Mine is the basis of the schedule presented below.

Table 20: Mineable Quantities for Scheduling (Dry) (non-JORC)

Deposit	Pit	Total Tonnage Mt	Waste Tonnage Mt	Mineable Quantity Mt	Ore Grade Au g/t	Contained Gold koz	IND Mt	INF Mt	Status[1]
AG	Main	232.6	202.4	30.2	1.34	1,300	26.9	3.3	Both Base and Life of Mine
AG	North2	12.3	10.7	1.5	0.69	33	0.0	1.5	Life of Mine
AG	South1	36.9	32.4	4.5	1.49	215	4.3	0.2	Both Base and Life of Mine
AG	South2	2.0	1.9	0.2	0.70	4	0.1	0.1	Life of Mine
AG	South3	0.6	0.6	0.0	1.46	2	0.0	0.0	Life of Mine
AG	South4	0.9	0.8	0.1	1.30	3	0.0	0.1	Life of Mine
AG	Sub-total	285.2	248.8	36.5	1.33	1,558	31.3	5.2	
APG	North1	12.3	7.9	4.4	0.67	93	2.2	2.2	Both Base and Life of Mine
APG	North2	5.5	3.9	1.5	0.76	37	1.0	0.5	Both Base and Life of Mine
APG	North3	0.1	0.1	0.0	0.63	0	0.0	0.0	Life of Mine
APG	North4	0.5	0.4	0.1	0.80	2	0.0	0.1	Life of Mine
APG	South1	0.1	0.1	0.0	1.77	1	0.0	0.0	Life of Mine

[1] Pits not viable in their own right on an Indicated basis were excluded from Ore Reserve estimate, but included in Upside Case Production Schedule

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Deposit	Pit	Total Tonnage Mt	Waste Tonnage Mt	Mineable Quantity Mt	Ore Grade Au g/t	Contained Gold koz	IND Mt	INF Mt	Status[1]
APG	South2	0.8	0.5	0.2	0.57	4	0.0	0.2	Life of Mine
APG	South3	0.7	0.5	0.1	0.61	2	0.0	0.1	Life of Mine
APG	South4	7.1	5.4	1.8	0.83	47	0.7	1.1	Life of Mine
APG	South5	0.2	0.1	0.0	1.25	2	0.0	0.0	Life of Mine
APG	South6	3.4	3.1	0.3	2.03	18	0.0	0.3	Life of Mine
APG	South7	0.5	0.5	0.0	1.32	2	0.0	0.0	Life of Mine
APG	Sub-total	31.0	22.6	8.4	0.77	208	3.9	4.6	
Total	**Total**	**316**	**271**	**44.9**	**1.22**	**1,766**	**35.2**	**9.7**	

The mineable quantity of 44.9 Mt of is well supported by a high proportion of Indicated Resources:

- Indicated Resources: 35.2 Mt, or 78% of the total ore feed and 83% of the contained ounces;
- Inferred Resources: 9.7 Mt, or just 22% of the total ore feed and 17% of contained ounces;

Table 21 provides a reconciliation of the quantities from the Ore Reserve to the Life of Mine production schedule. This included additional pits and Inferred material within these pits. It confirms that the selection of the Indicated + Inferred shell does not substantially increase the Indicated quantity, with only an additional 0.8 Mt, and hence does not overly influence the quantity of the estimated Reserves.

Table 21: Reconciliation of Ore Reserve to Mineable Quantities

Scenario	Total Tonnage kt	Waste Tonnage kt	Mineable Quantity Mt (dry)	IND Mt	INF Mt	Ore Grade Au g/t	Cont. Gold koz	SR (t:t)	% IND oz
Ore Reserve Case (exclude Inferred)	287	253	34.4	34.4		1.30	1,450	7.4	
Inferred within Ore Reserve Pits			6.2		6.2	0.98	194		
Ore Reserve Pits including Inferred	287	247	40.5	34.4	6.2	1.26	1,650	6.1	88%
Incremental Additional Pits (majority Inferred)	29	25	4.3	0.8	3.5	0.86	120		
Total Indicated and Inferred	316	271	44.9	35.2	9.7	1.20	1,766	6.0	83%

The quantities reported above include Inferred Resources and do not constitute an "Ore Reserve" as estimated in accordance with the JORC Code. An Ore Reserve Statement is presented in **Section 9**.

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Production Schedule

A life-of-mine ("LOM") schedule has been developed using RPM's Open Pit Metal Solution scheduling software. The schedule targets 4.0 Mtpa crusher feed for fresh and 4.8 Mtpa for oxide and transition. The actual crusher feed quantity depends on the proportion of each material type. The production strategy involved accelerated mining targeting up to 40 Mtpa total material movement (TMM) to selectively feed high grade ore to the plant, with lower grade ore directed to a long term stockpile.

The following assumptions and constraints were made/applied when developing the schedule:

- Pre-strip mining in the first 4 months to build high grade gold stockpile;
- Plant starts producing gold from Month 5 (with commissioning prior);
- Ore target feed rate to the processing plant of 4.0 Mtpa for fresh and 4.8 Mtpa for oxide and transition once ramp-up completed;
- Plant ramp up of 64% in the first month of gold production and fully operational in the second month at nameplate capacity.
- The vertical advance rate set to approximately 12 benches (of 5 m bench height) per year. The vertical advance rate is generally 60 m and up to 75 m in selected early years/stages where the benches consist almost entirely waste material; and
- Stockpiling to three different grade bin :
    - ✓ High Grade: 1.0 g/t Au or above ;
    - ✓ Medium Grade: 0.5 to 1.0 g/t Au, and
    - ✓ Low Grade: cog to 0.5 g/t Au.
- Target high value pits (with high contained ounces) prior to processing as per development strategy ;
- Prioritise mining of the Main pit Cutback 1 North and AG South 1 due to their high margin and high proportion of Indicated material;
- Defer low margin pits, such as AG North 2 and South 2, South 3 and South 4 to near the end of the schedule;
- Exclude North 1 pit from mining schedule due to water management requirements (diversion across the pit),

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- Limit feed of APG from at least Year 3 onwards (from start of processing) (to allow time to negotiate access to the area);
- Where possible defer pits with a higher proportion of Inferred feed to the mill till after Year 5.

Key characteristics of the Life of Mine production schedule are:

- 4 month pre-strip;
- Total material movement (TMM) in Year 1 to 5 averages 45 Mt (maximum 48 Mtpa in Year 3).
- Strip Ratio of average 6:1 (t waste : t ore) in the first 5 years of mining,
- Average 83% of mineable quantity (tonnes) is from Indicated Resources in the first 5 years of mining and 78% LOM, and contained gold (ounces) is 89% Indicated in the first five years of mining (and 83% LOM),
- AG Main CB1 North and AG South pit targeted to provide early high grade material for processing,
- Stockpiling strategy results in a stockpile of up to 11 Mt (9Mt low grade and 2 Mt MG).
- Ramp down TMM from Year 6 as access to lower strip ratio (but lower grade) ore is achieved.

The quarterly total material movement requirements for the Life of Mine schedule is shown graphically in Figure 18. Total material movement (TMM) from quarter 9 to 16 averages 12.2 Mt per quarter. Total material movement (TMM) from quarter 4 to 28 averages 10.4 Mt per quarter.

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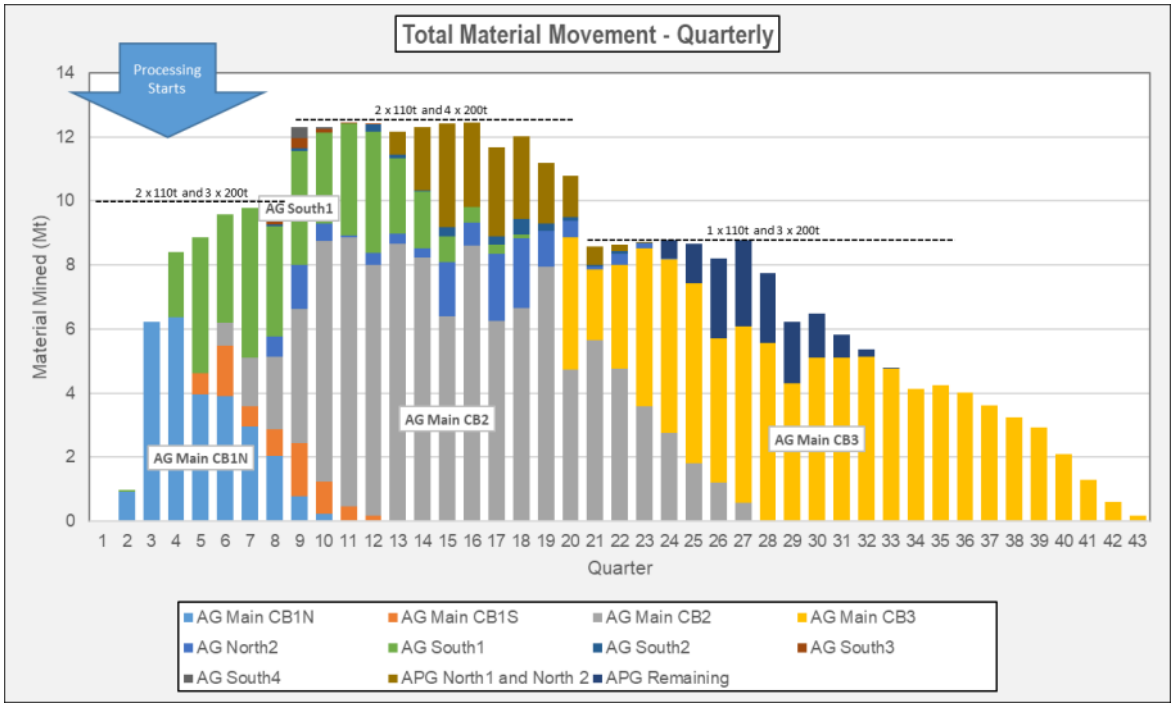

Figure 18: Production Schedule: Quarterly Total Material Mined

The annual plant feed tonnage and grade is shown in Figure 19. High grade material is processed in early years to maximise the early cash-flow for the project, with lower grade material stockpiled;

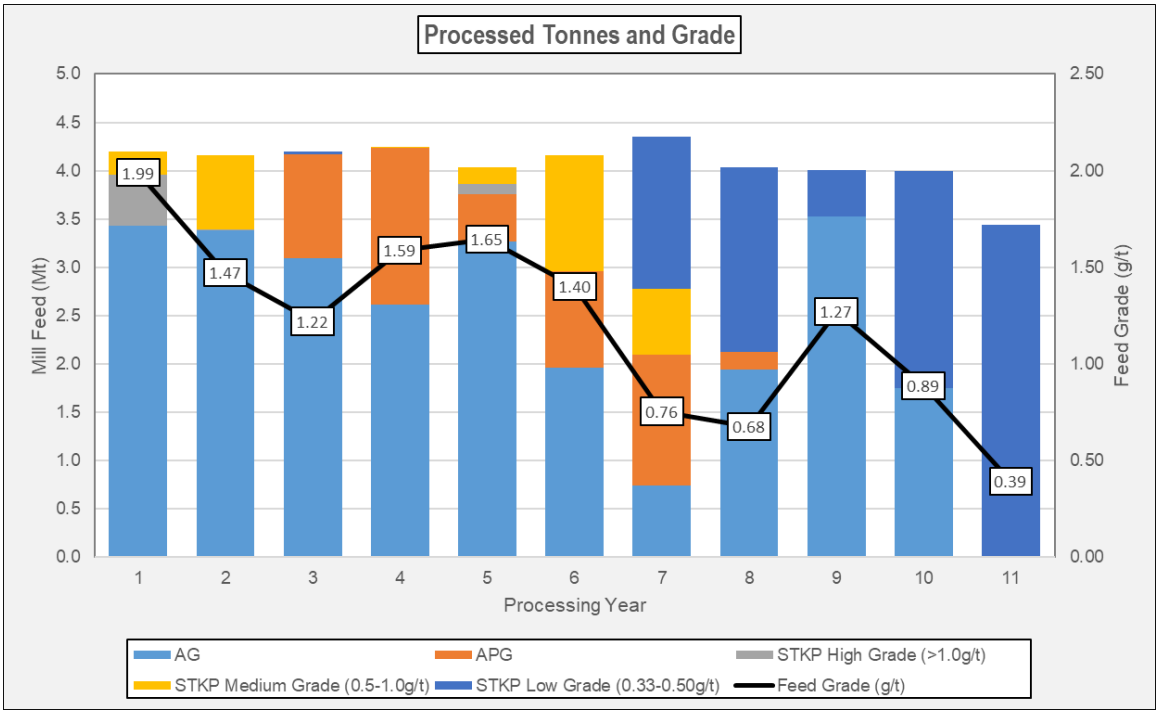

Figure 19: Production Schedule: Annual Crusher Feed Tonnage and Grade

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Annual gold production is shown in Figure 20. Key results from the schedule include:

- Total gold production targets over 200+ koz per year for the first six years of processing, with 260 koz in Year 1;
- Total gold production of nearly 1.7 Moz over the life of mine.

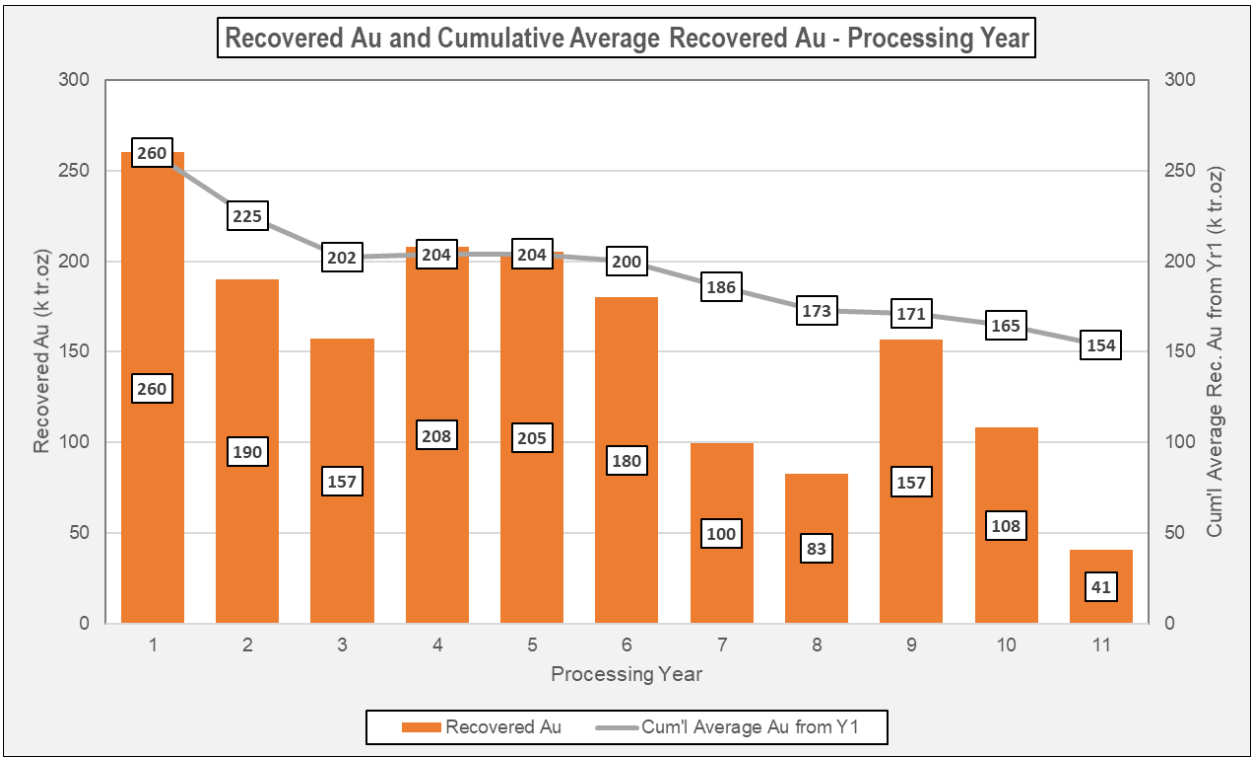

Figure 20: Production Schedule: Annual Gold Production

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The production and processing schedules for the Life of Mine are shown in Table 22 and Table 23 respectively, and stockpile balance per year in Table 24.

Table 22: Production Schedule– Life of Mine

AG and APG	Year	Pre-strip	1	2	3	4	5	6	7	8	9	10	11	Total
Total Material	**Mt**	7.1	35.9	46.1	48.4	46.4	36.0	33.7	25.8	18.2	13.5	4.1	0.0	**315.0**
Waste	**Mt**	6.2	30.5	41.5	42.6	37.1	30.3	30.2	23.6	16.0	10.0	2.3	0.0	**270.2**
Ore	**Mt**	0.9	5.4	4.6	5.8	9.3	5.8	3.6	2.1	2.1	3.6	1.8	0.0	**44.8**
Strip Ratio	**t:t**	6.90	5.64	9.11	7.36	4.00	5.26	8.45	11.02	7.54	2.80	1.31	1.09	**6.03**
Gold Grade	**g/t**	1.18	1.56	1.31	0.99	1.01	1.25	1.48	1.04	0.93	1.38	1.52	2.32	**1.22**
Contained. Au	**k oz**	34	271	193	185	301	232	169	72	64	158	86	0	**1,763**

Table 23: Processing Schedule– Life of Mine

Material Processed	Year	1	2	3	4	5	6	7	8	9	10	11	Total
AG	**Mt**	3.4	3.4	3.1	2.6	3.3	2.0	0.7	1.9	3.5	1.8	0.0	**25.7**
APG	**Mt**	0.0	0.0	1.1	1.6	0.5	1.0	1.4	0.2	0.0	0.0	0.0	**5.7**
High-Grade Stockpile	**Mt**	0.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	**0.6**
Medium-Grade Stockpile	**Mt**	0.2	0.8	0.0	0.0	0.2	1.2	0.7	0.0	0.0	0.0	0.0	**3.1**
Low-Grade Stockpile	**Mt**	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.9	0.5	2.2	3.4	**9.7**
Total	**Mt**	4.2	4.2	4.2	4.2	4.0	4.2	4.4	4.0	4.0	4.0	3.4	**44.8**
Grade	**g/t**	2.0	1.5	1.2	1.6	1.6	1.4	0.8	0.7	1.3	0.9	0.4	**1.2**
Cont. Au	**k oz**	269	197	165	217	214	188	106	88	163	114	44	**1,763**
Recovered Au	**k oz**	260	190	157	208	205	180	100	83	157	108	41	**1,689**
Recovery	**%**	96.8	96.2	95.5	95.9	96.2	96.0	94.5	94.3	95.9	95.1	93.0	**95.8**
Indicated	**Mt**	3.6	3.7	3.3	3.1	3.6	3.2	1.9	2.7	3.5	3.2	3.4	**35.1**
Indicated – Cont. Au	**k oz**	232	184	143	186	194	150	47	68	144	77	43	**1,469**
Inferred	**Mt**	0.6	0.5	0.9	1.1	0.5	1.0	2.5	1.3	0.5	0.8	0.0	**9.7**
Inferred – Cont. Au	**k oz**	36	13	21	31	19	38	59	19	19	37	1	**294**
Total	**Mt**	4.2	4.2	4.2	4.2	4.0	4.2	4.4	4.0	4.0	4.0	3.4	**44.8**
Total – Cont. Au	**k oz**	269	197	165	217	214	188	106	88	163	114	44	**1,763**

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Table 24: Stockpile Balance – Life of Mine Schedule

Stockpile Balance	Year	Pre-strip	1	2	3	4	5	6	7	8	9	10	11
High-Grade Stockpile Inventory	Mt	0.24	0.01	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High-Grade Stockpile Grade	g/t	2.90	7.81	0.00	0.00	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium-Grade Stockpile Inventory	Mt	0.34	0.77	0.00	0.06	1.79	1.89	0.68	0.00	0.00	0.00	0.00	0.00
Medium-Grade Stockpile Grade	g/t	0.71	0.69	0.00	0.60	0.67	0.66	0.64	0.00	0.00	0.00	0.00	0.00
Low-Grade Stockpile Inventory	Mt	0.32	1.32	2.49	4.02	7.23	8.95	9.56	8.03	6.12	5.68	3.43	0.00
Low-Grade Stockpile Grade	g/t	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.00
Total Stockpile Inventory	Mt	0.89	2.10	2.49	4.08	9.12	10.84	10.24	8.03	6.12	5.68	3.43	0.00
Stockpile Grade	g/t	1.18	0.53	0.39	0.39	0.46	0.44	0.41	0.39	0.39	0.39	0.39	0.00

Note:
High Grade Stockpile - >= 1.00 g/t
Medium Grade Stockpile - >= 0.50 g/t and < 1.00 g/t
Low Grade Stockpile >= cut-off Grade and <0.50 g/t

Mining Equipment

The geometry of the deposit and shallow ore zones make open pit mining preferred both practically and economically. The requirement for selective ore mining, cutback staging to maintain ounce production profile, supports a mining method utilising a conventional truck and excavator approach. Contractor mining will most likely be utilised, with multiple contractors providing responses to a RFP after the PFS was completed.

Open pit mining is envisaged utilising hydraulic excavators in backhoe configuration, and standard off-highway rear-dump trucks. Ore and waste material will be nominally drilled and blasted on 5 m bench heights and excavated on 2.5 m flitches Bulk waste areas may be drilled in 10 m benches. With appropriate grade control and ore management practices, the selected flitch height will assist in minimising ore loss and waste rock dilution. Definitive split drilling and wall control will be completed on 10 m benches in fresh rock.

Key outcomes from the mining equipment assessment include:

- Conventional truck and loader mining system was selected using 90 tonne trucks and a combination of 110t and 250 tonne excavators. 110t excavators will be priorities for ore mining to reduce loss and dilution;

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- Fleet selections were made assuming contractor operation;
- Up to 6 excavators (4 x 250t and 2 x 110t) are required for prime material movement, with commensurate levels of trucks and associated support equipment depending on pit depth and haul distance;
- A long term stockpile is utilised, with a FEL and truck fleet transporting material to the ROM as required;
- Truck travel times increase over the life of the mine as pit depth and dump height increases and distance from the ROM pad increases; and
- A top hammer drill rig capable of drilling up to 140 mm blast holes for production and top hammer or DTH for pre-split drilling are proposed.

The excavator requirements are shown as part of the TMM chart in Figure 18. Initially 2 x 110t excavators and 3 x 200t excavators are utilised, increasing to 2 x 110t excavators and 4 x 200t excavators from quarter 9 to 20. After this point TMM requirements decrease and 1 x 110t excavators and 3 x 200t excavators are utilised, reducing towards the end of the mine life due to working room and vertical advance rate constraints in the final AG main cutback 3 stage.

The RPM estimate of fleet requirements is primarily to confirm the practicality and achievability of the mining plan. The ultimate responsibility for fleet selection and numbers of equipment will be with the preferred mining contractor.

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9. Ore Reserves

Overview

RPM has prepared an independent estimate of the Open Cut Ore Reserves (the "Statement") for the Abujar Gold Project (the "Project") focussing on its Abujar Gludehi ("AG") Deposit. The Statement estimates the Ore Reserves as at 30 September 2021 and has been undertaken in compliance with the requirements of the reporting guidelines of the 2012 Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("JORC Code").

Terminology for this Statement

RPM has adopted the following JORC terms for the reporting of Mineral Resources and Ore Reserves:

- **Mineral Resources** as used in this Statement are the same as "Mineral Resource" as defined in the JORC Code. "Geological Resources" and "In Situ Resources" are also common terms used in the industry to refer to Mineral Resources;
- **Measured, Indicated and Inferred Resources** are categories of Mineral Resources and are defined in the JORC Code to reflect the level of confidence in the quantities and grade estimated in the Resource Statement;
- **Ore Reserves** as used in this Statement are the same as "Ore Reserves" in the JORC Code and "Mining Reserves", a common term used in the industry;
- Ore Reserves in the JORC Code are subdivided into **Proved and Probable** to reflect the confidence in the underlying resource data and modifying factors applied during mine planning;
- **Mineral Resources** are reported inclusive of Ore Reserves, (that is, Ore Reserves are not additional to Resources); and
- Ounces are Troy ounces of gold.

Additional terminology applied within this Statement includes the following:

- **Geological Model** (or "In Situ" Model) is the computerised three-dimensional estimate of the deposit based on topographic survey data, samples derived from outcrop, drill hole or other methods. No loss or dilution parameters have been applied to this model;
- **Mineable In Situ Ore** (not JORC terminology) is used in this Statement to refer to in situ ore within the mine designs which has not had loss and dilution applied; and
- **Run of Mine (ROM)** Ore (not JORC terminology) is used in this Statement to refer to the mineable in situ ore after application of ore loss and waste rock dilution.

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Approach

The Ore Reserve estimate is based on the outcomes of a Detailed Feasibility Study (DFS) prepared for the Project. The DFS relied on the following outcomes that supported the estimation of Ore Reserves.

The DFS relied on the following outcomes that supported the estimation of Ore Reserves:

- Geotechnical design criteria as outlined in this study
- Mining modifying factors as outlined in this study
- Identification of the economic mining area as outlined in this study
- Ultimate pit design which formed the basis of the Reserves estimated outlined in this study
- Life of mine schedule as outlined in this study
- Metallurgical modifying factors provided by Mintrex and summarised as outlined in this study
- Additional technical considerations for infrastructure, environment and water management as outlined in this study
- Economic viability of the Project confirmed as part of the financial evaluation outlined in this study.

In the estimation of Ore Reserves, a number of spot checks were completed to validate the accuracy of the estimate and the results. An additional check was to do a separate Independent pit limit optimisation on Measured and Indicated Resources only. The results of the analysis are discussed in this study.

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Mineral Resource Estimate

The Abujar Gold Project Mineral Resource estimates were updated by Independent resource consultants RPM in July 2021 and were reported in accordance with JORC (2012) guidelines. The Abujar Gold Project Mineral Resource is summarised below with an effective date of 12 July 2021. Mineral Resources in this Statement are inclusive of Ore Reserves.

Table 25: Statement of Mineral Resources by Deposit as at 12 July, 2021. Reported at 0.25 g/t Au cut off within pit shells; and 1.0 g/t Au cut off below the pit shells for AG, and reported at 0.3 g/t Au cut off within pit shells; and 1.0 g/t Au cut off below the pit shells for APG, and 0.3 g/t Au to a depth of 120m for SG.

Area	Class	Oxide			Transition			Fresh			Total		
		Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)	Quantity (Mt)	Au (g/t)	Au (Moz)
AG	Indicated	0.5	1.2	0.02	2.1	1.3	0.09	32.4	1.5	1.54	35.0	1.5	1.65
	Inferred	0.4	1.0	0.01	1.7	0.9	0.05	13.3	1.7	0.74	15.3	1.6	0.80
	Total	**0.9**	**1.1**	**0.03**	**3.8**	**1.1**	**0.14**	**45.6**	**1.5**	**2.28**	**50.3**	**1.5**	**2.45**
APG	Indicated	0.5	0.7	0.01	1.9	0.7	0.05	6.0	0.7	0.14	8.4	0.7	0.20
	Inferred	1.2	0.7	0.03	5.2	0.7	0.11	22.0	0.7	0.52	28.4	0.7	0.67
	Total	**1.7**	**0.8**	**0.04**	**7.1**	**0.7**	**0.16**	**28.0**	**0.7**	**0.67**	**36.7**	**0.7**	**0.87**
SG	Inferred	0.0	0.7	0.001	0.10	0.8	0.001	0.4	1.6	0.02	0.5	1.4	0.02
Grand Total		**2.6**	**0.9**	**0.07**	**11.0**	**0.9**	**0.30**	**74.0**	**1.2**	**2.97**	**87.5**	**1.2**	**3.35**

Note:

1. *The Mineral Resources has been compiled under the supervision of Mr. Jeremy Clark who is a sub-consultant to RPM and a Registered Member of the Australian Institute of Mining and Metallurgy. Mr. Clark has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.*
2. *All Mineral Resources figures reported in the table above represent estimates at 12 July, 2021. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.*
3. *Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).*
4. *The Mineral Resources have been reported at a 100% equity stake and not factored for ownership proportions.*

The Statement of Mineral Resources have been constrained by the topography, which was constructed from the latest topography contour strings.

Within AG, the Mineral Resource is reported at a cut of grade of 0.25 g/t Au within a 2,000 US$ pit shell and 1 g/t Au below. The cut off grades were based on estimated mining and processing costs and recoveries factors on the previous PFS study and updated processing recovery costs as detailed

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in JORC Table 1 along with a gold price of 1,800 US$. It is highlighted that while a 2,000 US$ per ounces pit shell was utilised, a 1,800 US$ gold price, which is 1.25 the consensus forecast as at June 2021, was used to calculate the cut of grade with the pit shells.

Within APG, the Mineral Resource is reported at a cut of grade of 0.3 g/t Au within a 2,000 US$ pit shell and 1 g/t Au below. The increase in COG was due to the increased costs of potential mining and likely requirement to haul material to the plant at AG.

The geologic interpretation models consist of a set of 3D solids, generated using sectional interpretation modelling, one for each interpreted lode such that the metal content was estimated considering the whole volume of the blocks. As such this method does not incorporate ore loss or dilution into the block estimates.

Mineral Resources quoted in this Statement are inclusive of Ore Reserves.

Site Visit

A site visit has not been undertaken to the Project area by the Competent Person, Mr. Igor Bojanic due to COVID-19 international travel restrictions. This is not considered to be a risk as site information has been provided to Mr Bojanic by Tietto, and by Mr Jeremy Clark, RPM's competent person for Resource estimation, who has completed three site visits.

Cut-off Grade Parameters

Using the ore related costs estimated for the pit limit optimisation, RPM calculated the break-even cut-off grades for oxide, transition and fresh ore types. These inputs are presented in **Table 26** and the results in **Table 27**. The cut-off for APG is higher due to increased haulage distance from the deposit to the AG mill.

Table 26: Cut-off Parameters

Processing Method			CIL		
Deposit			AG		
Area	Item	Units	Oxide	Transition	Fresh
Physicals	Processing Recovery	%	92.4%	92%	92%
Unit Rates	Incremental Ore Mining Cost	US$/t.ore	0.63	0.63	0.65
	Mill Processing Costs	US$/t.ore	7.60	9.3	9.3
	General & Admin Costs	US$/t.ore	2.08	3	3
	Capex Sustaining + Tailings	US$/t.ore	2.0	2	2

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	Total Ore Related Incremental Costs	US$/t.ore	12.31	14.93	14.95
Price	US$ Metal Price	US$/oz	1,407	1,407	1,407
	Refining	$/Oz	2.39	2.39	2.39
	Royalties	%	4.5%	4.5%	4.5%
Cut-off	ROM Cut-off Grade	g/t ROM	0.29	0.29	0.30
Deposit			APG		
Area	Item	Units	Oxide	Transition	Fresh
Physicals	Processing Recovery	%	92.5%	92%	93%
Unit Rates	Incremental Ore Mining Cost	US$/t.ore	0.53	0.63	0.65
	Mill Processing Costs	US$/t.ore	7.60	9.3	9.3
	General & Admin Costs	US$/t.ore	2.08	3	3
	Capex Sustaining + Tailings	US$/t.ore	2.0	2	2
	Total Ore Related Incremental Costs	US$/t.ore	12.21	14.93	14.95
Price	US$ Metal Price	US$/oz	1,407	1,407	1,407
	Refining	$/Oz	2.39	2.39	2.39
	Royalties	%	4.5%	4.5%	4.5%
Cut-off	ROM Cut-off Grade	g/t ROM	0.32	0.32	0.33

Table 27: Cut-off Grade

Description	Units	Oxide	Transition	Fresh
Au Grade – AG deposit	g/t ROM	0.29	0.29	0.30
Au Grade – APG deposit	g/t ROM	0.32	0.32	0.33

Pit Optimisation Results and Pit Selection

The detailed discussion of pit limit optimisation and pit selection is presented in the Mining Section. The parameters used for pit limit optimisation are as set out in Table 26 including a long term gold price of US$1,407/oz. A sensitivity analysis of pit tonnage was completed for both the AG and the APG deposits. The AG and APG deposits were considered to be moderately sensitive up to price to

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the base price, as illustrated in Figure 21 and Figure 22. Beyond the base price, the APG is quite sensitive to the gold price.

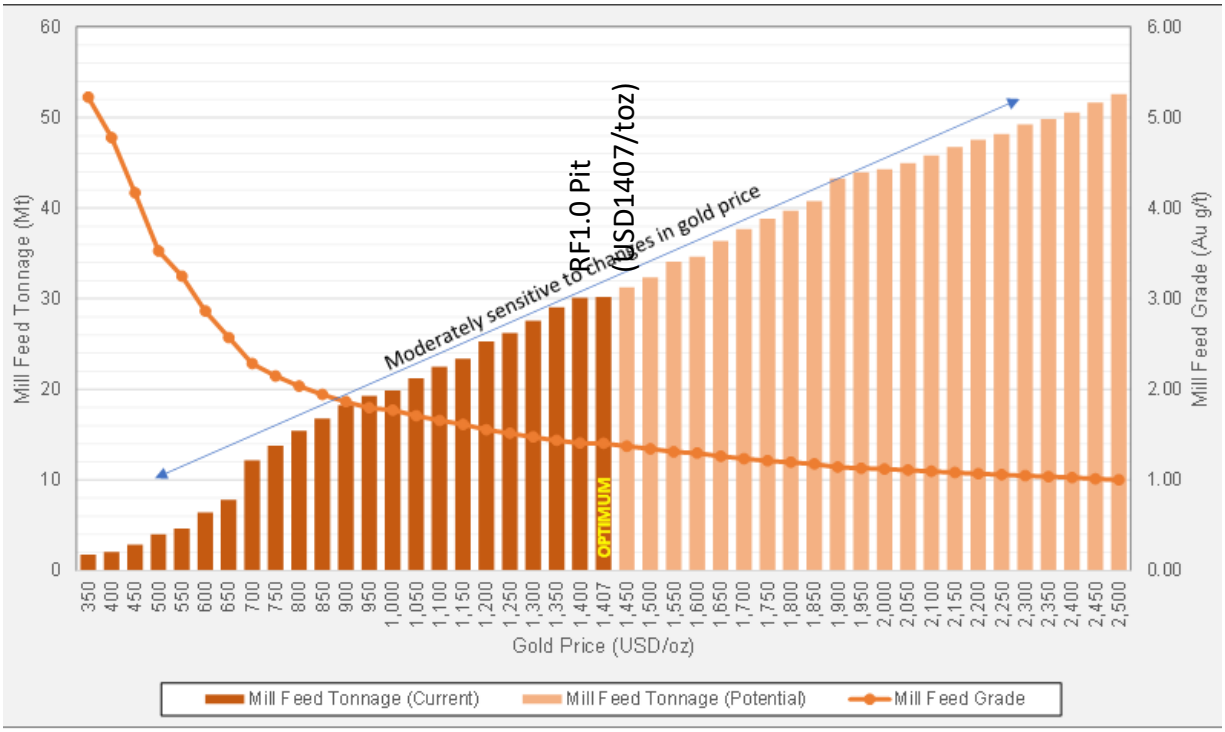

Figure 21: Gold Price Sensitivity Analysis – AG Pit (Measured and Indicated Only)

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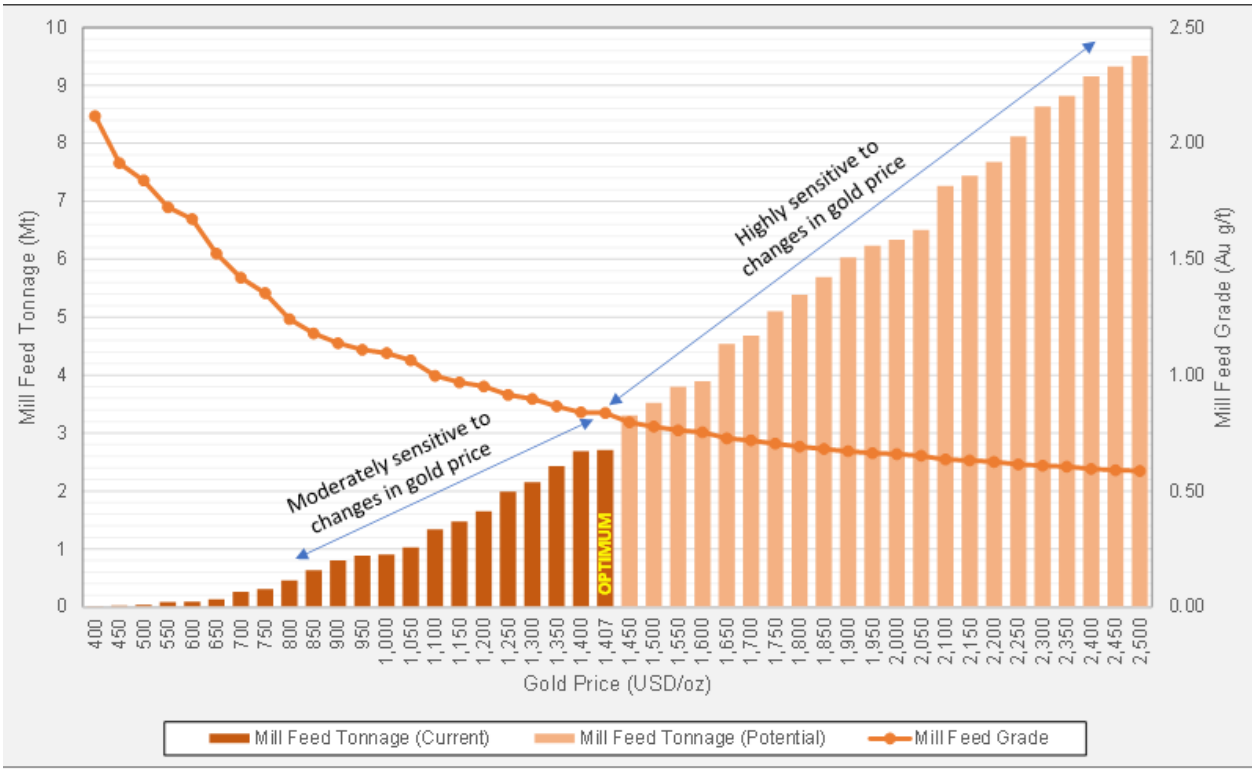

Figure 22: Gold Price Sensitivity Analysis – APG Pit (Measured and Indicated Only)

According to JORC guidelines, only Measured and Indicated categories can be converted to an Ore Reserve (there is no Measured material in the AG or APG deposit). To understand the sensitivity of the deposit to Resource class, and to validate the Ore Reserve estimate, two scenarios were completed, one pit limit optimisation with Indicated only and a second inclusive of Inferred material.

A comparison of the Indicated only and Indicated plus Inferred results are shown in Table 28. The results indicate that including Inferred material in the pit limit optimisation does not overly influence the quantity of Indicated material and hence the Reserve estimate. Therefore, the Indicated and Inferred pit shell was used for mine design as it supported important strategic analysis and was used as the basis of an Upside scenario.

An additional scenario was also completed referred to as the "Reserve" scenario. Following detailed open cut design, each pit was examined to confirm the pit was profitable on an Indicated only basis, that is, assuming Inferred Resources were waste rock. The pits that were not profitable were excluded from the Ore Reserve scenario and estimate.

The outcomes from the economic analysis of individual pits for AG and APG are illustrated in Figure 23 and ***Figure 24*****,** respectively**.** It shows that the "Reserve" shells are wholly contained within the strategic or "Upside" shells.

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Table 28: Pit Shell Analysis - Options Summary for the Ore Reserve Price Shell

Deposit	Option	Mill Feed IND+INF Mt	Mill Feed IND Mt	Mill Feed INF Mt	Cont. Gold IND+INF koz	Cont. Gold IND koz	Cont. Gold INF koz
AG	IND Pit	30.2	30.2	-	1,362	1,362	-
	IND+INF Pit	39.5	31.7	7.8	1,665	1,408	256
APG	IND Pit	2.7	2.7	-	73	73	-
	IND+INF Pit	8.4	3.8	4.6	220	94	126
AG+APG	IND Pit	32.9	32.9	-	1,434	1,434	-
	IND+INF Pit	47.9	35.5	12.4	1,885	1,503	382
Change	IND+INF Pit	15.1	2.6	12.4	450	68	382
		+46%	+8%	-	+31%	+5%	-

From the detailed ultimate pit designs for AG and APG, mineable quantities were estimated and a life of mine production schedule completed.

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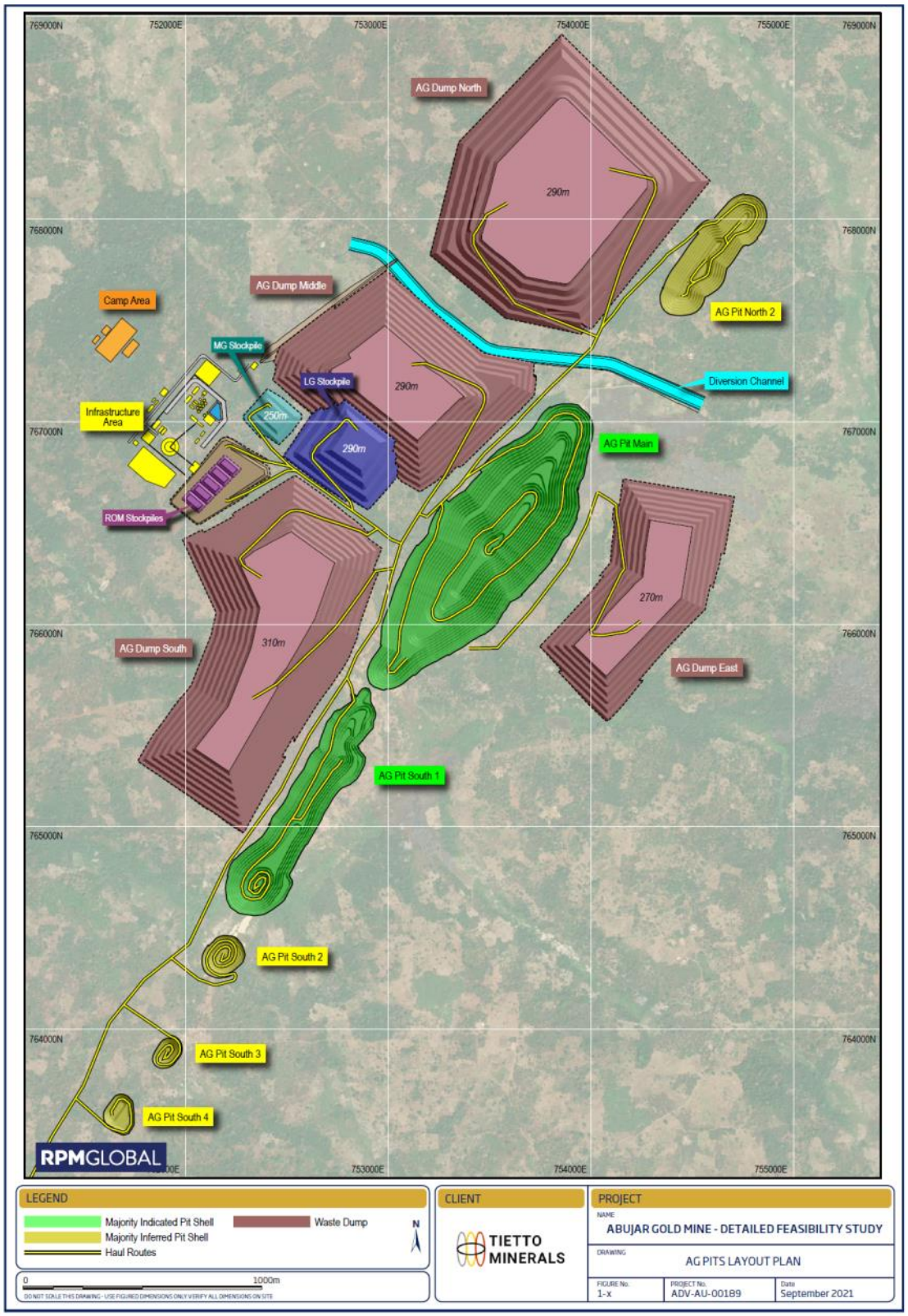

Figure 23: AG Deposit Ore Reserve and Life of Mine Pit Designs

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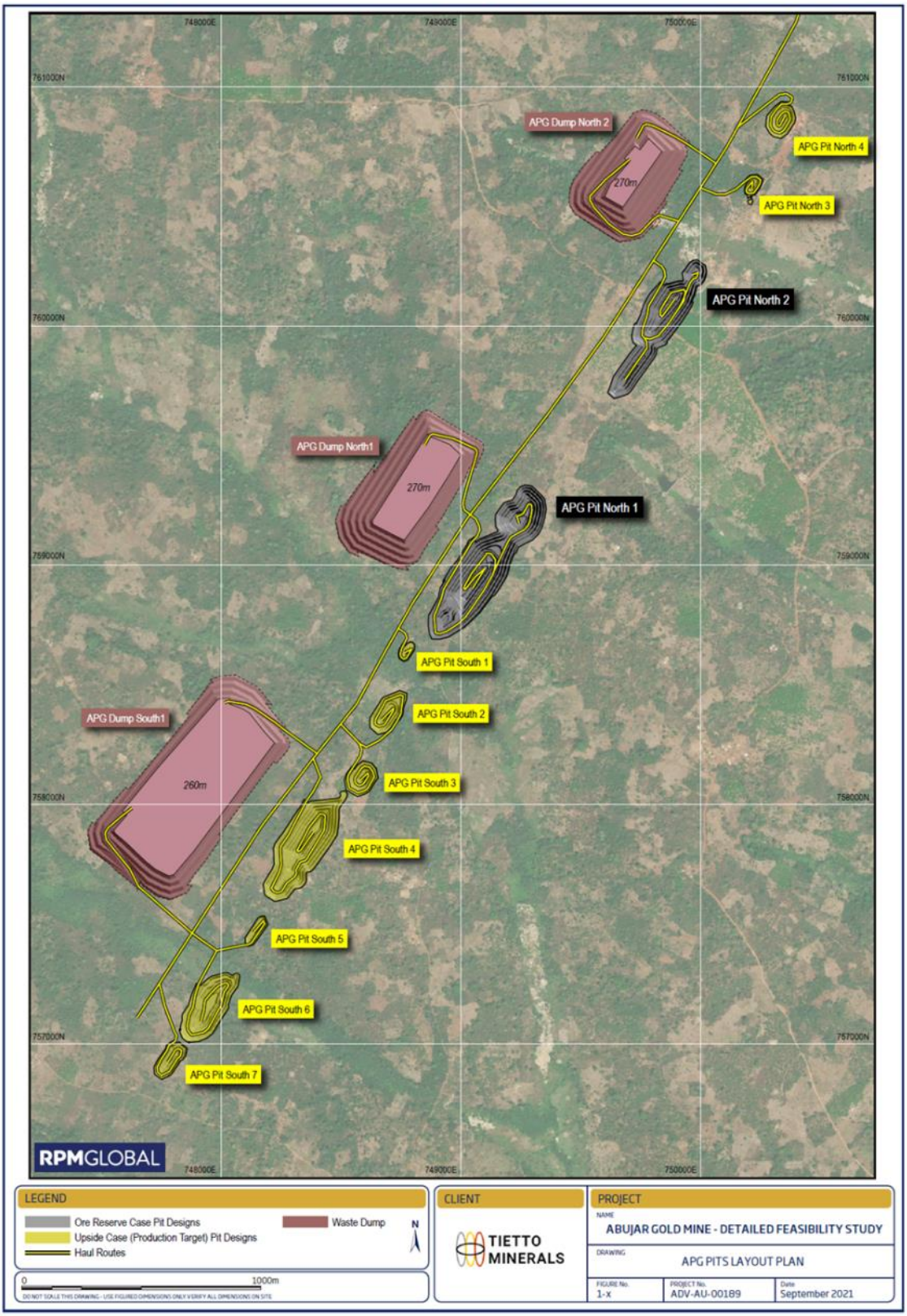

Figure 24: APG Deposit Ore Reserve and Life of Mine Pit Designs

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Ore Reserves Schedule

A specific life of mine schedule for the Ore Reserve pits was completed to confirm practical and achievable extraction. The basis of the mineable quantities in the schedule were the ultimate pit designs with positive economics based on Indicated Resources as described above. Though the schedule is inclusive of Inferred Resources, where practical these were deferred until the latter half of the schedule. Over 88% of the contained ounces in the schedule are of an Indicated Resource classification demonstrating a reasonable level of confidence (Figure 25).

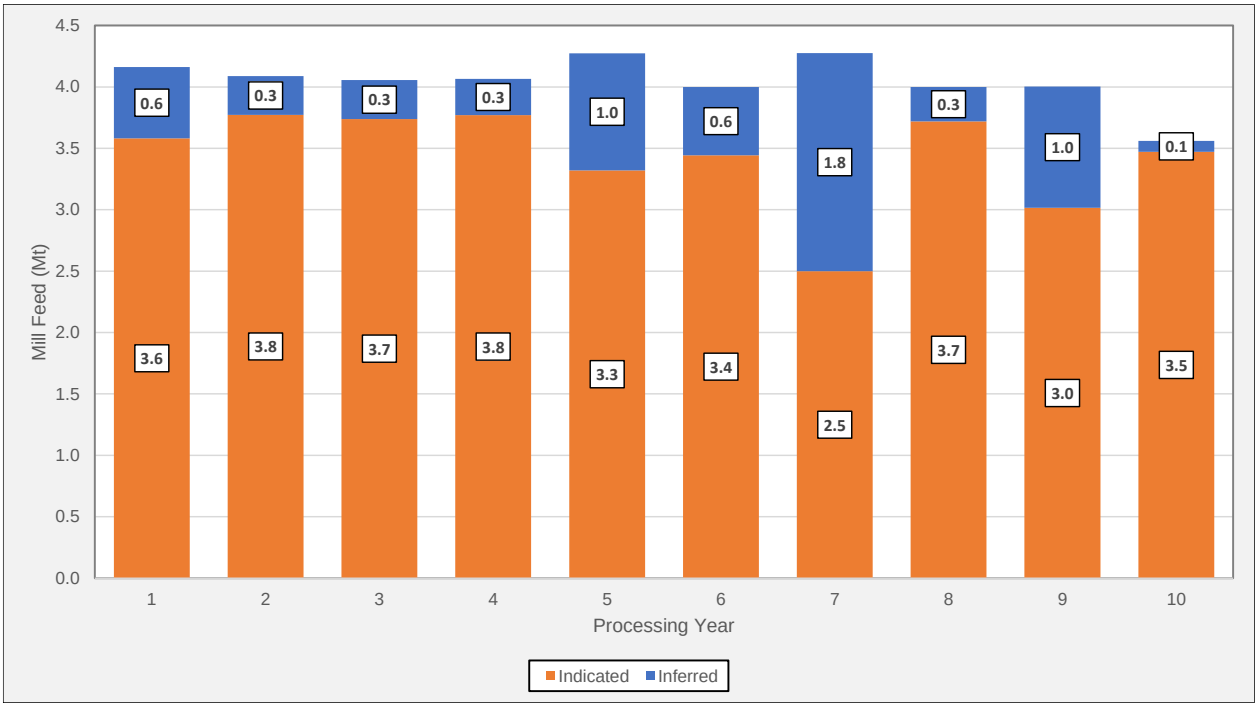

Figure 25: Production Schedule: Plant Feed by Resource Classification

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Economic Modelling

Tietto prepared a corporate financial model (developed by Infinity Corporate Finance Pty Ltd) and modelled the Reserve production schedule physicals. The model was provided to RPM and the results confirm that the Project is economically viable with a post-tax payback period of ~2 years. The breakeven gold price is US$941/oz (NPV@10%=0). This demonstrates a good economic resilience should there be a fall in the gold price and improves confidence in the reporting of the Ore Reserves.

Classification

Ore Reserves are classified based on the underlying Mineral Resources classifications and the level of detail in the mine planning. Mineral Resources are classified as Measured, Indicated and Inferred. Ore Reserves are based only on the Measured and Indicated Resources and are classified as Proved and Probable Ore Reserves, respectively and taking into account other factors where relevant.

The deposit's geological model is well-constrained and well-understood. The Ore Reserve classification is considered appropriate given the nature of the deposit, the moderate grade variability, drilling density, structural complexity and mining history. Therefore, it was deemed appropriate to use Measured and Indicated Mineral Resources as a basis for Proven and Probable Reserves.

No Inferred Mineral Resources are reported in the estimation of the Ore Reserve estimate.

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Statement of Ore Reserves

A total of 34.4 Mt of Open Cut Ore Reserves at 1.3 g/t Au grade were estimated as at 30 September 2021, refer **Table 29**. As no mining has taken place at the site, the reporting date reflects the completion of the technical work supporting the estimate.

Table 29: Open Cut Ore Reserve Estimate as at 30 September 2021

	Proved			Probable			Total		
Deposit	**Quantity**	**Au**	**Au**	**Quantity**	**Au**	**Au**	**Quantity**	**Au**	**Au**
	Mt	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
AG	0	0	0	31.3	1.4	1.38	31.3	1.4	1.38
APG	0	0	0	3.2	0.7	0.07	3.2	0.7	0.07
Total	**0**	**0**	**0**	**34.4**	**1.3**	**1.45**	**34.4**	**1.3**	**1.45**

Notes:

1. *The Ore Reserves has been compiled under the supervision of Mr. Igor Bojanic who is a full time employee of RPM and a Fellow of the Australian Institute of Mining and Metallurgy. Mr. Bojanic has sufficient experience that is relevant to the style of mineralisation, type of deposit and mining method under consideration and to the activity, which he has undertaken, to qualify as a Competent Person as defined in the JORC Code.*
2. *The following marginal cut-off grades determined based on a US$ 1,407 per troy ounce gold price, and costs and mining and metallurgical modifying factors estimated as part of the DFS.*
3. *Marginal cut-off grades for AG: Oxide 0.29 g/t Au, Transition 0.29 g/t Au and Fresh 0.30 g/t Au.*
4. *Marginal cut-off grades for APG: Oxide 0.32 g/t Au, Transition 0.32 g/t Au and Fresh 0.33 g/t Au (as greater haulage distance to AG ROM pad)*
5. *Ore Reserve estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The quantities contained in the above table have been rounded to three significant figures to reflect the relative uncertainty of the estimate. Rounding may cause values in the table to appear to have computational errors.*
6. *All Ore Reserve estimates are on a dry basis.*
7. *The Ore Reserves have been reported at a 100% equity stake and not factored for ownership proportions.*

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Audits and Reviews

The Ore Reserve estimate set out in preceding table was computed using Surpac mine planning software. RPM completed an independent audit of the Reserve estimate by generating quantity estimates for the total pit and also of the individual pits. RPM did an additional check by estimating quantities based on grade tonnage curves. All checks demonstrated that the Reserve estimate is reasonable.

Key Changes from Previous Ore Reserves Statement

A previous maiden Ore Reserve was estimated at a total of 16 Mt of Open Cut Ore Reserves at 1.71 g/t Au grade at a reporting date of 31 December 2020, refer Table 30. As no mining has taken place at the site, the reporting date reflects the completion of the technical work supporting the estimate.

The increase in the Ore Reserve estimate from the previous is largely due to further exploration drilling and a decrease in ore processing costs reducing the cut-off grade.

Table 30: Ore Reserve Estimate as at 31 December 2020 (Superseded)

Deposit	Proved			Probable			Total		
	Quantity Mt	Au g/t	Au Moz	Quantity Mt	Au g/t	Au Moz	Quantity Mt	Au g/t	Au Moz
AG Deposit	**0.0**	**0.00**	**0.00**	**15.7**	**1.71**	**0.86**	**15.7**	**1.71**	**0.86**
Total	**0.0**	**0.00**	**0.00**	**15.7**	**1.71**	**0.86**	**15.7**	**1.71**	**0.86**

Notes for 30 December 2020 Ore Reserve:

6. *The following marginal cut-off grades determined based on a US$ 1,459 per troy ounce gold price, and costs and mining and metallurgical modifying factors estimated as part a PFS.*
7. *Marginal cut-off grades: Oxide 0.35 g/t Au, Transition 0.35 g/t Au and Fresh 0.35 g/t Au.*
8. *Ore Reserve estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The quantities contained in the above table have been rounded to three significant figures to reflect the relative uncertainty of the estimate. Rounding may cause values in the table to appear to have computational errors.*
9. *All Ore Reserve estimates are on a dry basis.*
10. *The Ore Reserves have been reported at a 100% equity stake and not factored for ownership proportions*

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Other Relevant Factors

The estimate of Ore Reserves for the Project is not, to RPM's knowledge, materially affected by any other known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors other than that described in the preceding text. It is believed that the classification of Ore Reserves as set out in this section is reasonable.

The Mineral Resource Statement notes that the resources are open at depth. The ultimate pit shell that supports the current Ore Reserve estimate is limited in depth by the Mineral Resources and hence the potential exists to extract some additional material using underground mining methods.

Inferred material within the Ore Reserve pits that is potentially economically viable is estimated to be 6.2 Mt at 0.98 g/t ROM and so total Indicated and Inferred Material within the Ore Reserve pits could be 40.5 Mt at 1.26 g/t ROM. An Life of Mine was also completed on additional pits within AG and APG deposits that contain a majority of Inferred Mineral Resources, and hence are not part of the Ore Reserve. This material is potentially economically viable (if upgraded with further exploration drilling) and could contribute an additional 4 Mt of additional plant feed at a grade of 0.90 g/t, and so total Indicated and Inferred within the pits could be 45 Mt at 1.22 g/t ROM.

Inferred Resources have a lower confidence of being realised and a cautionary approach should be considered in evaluating the above results.

Further exploration has commenced with aims to upgrade the confidence and increase the size of the Mineral Resource to increase confidence in technical and economic outcomes.

Competent Persons Statement

The information in the report to which this Competent Persons Statement is attached, relates to the Ore Reserves for the Abujar Gold Project focussing on the Abujar Gludehi ("AG") deposit and the Abujar-Pischon-Golikro ("APG") deposit, and is based on information compiled and reviewed by Mr. Igor Bojanic, who is a Fellow of the Australasian Institute of Mining and Metallurgy, and is an employee of RPM. Mr. Igor Bojanic has sufficient experience, which is relevant to the style of mineralisation, type of deposit under consideration and mining method and to the activity, which he has undertaken, to qualify as a Competent Person, as defined in the 2012 Edition of the Australasian Code for the Reporting of Mineral Resources and Ore Reserves.

Mr. Igor Bojanic is not aware of any potential for a conflict of interest in relation to this work for the Client

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10. Metallurgy and Process Flowsheet Development

Summary

Tietto Minerals (Tietto) engaged ALS Ltd. (ALS) via the management of Mintrex (Pty Ltd (Mintrex) in January 2020 to undertake a Preliminary Feasibility Study (PFS) and a Definitive Feasibility Study (DFS) program of metallurgical testwork on a total of 30 samples from its Abujar gold deposit. The PFS testwork was conducted on an initial 9 composites and the DFS testwork continued with an additional 21 composites. The Abujar resource is located in central western Côte d'Ivoire.

The purpose of the PFS and DFS testwork programs were to provide inputs for the PFS and DFS design of a gold processing plant, respectively. Mintrex were also engaged by Tietto to assist in sample selection for the intended testwork programs and thereafter to manage the programs and report on the results to Tietto. Sample selection was conducted with Tietto and comminution modelling experts.

A gold grain analysis indicated spotty grains of gold dispersed in the ore body. Head assay results of PFS and DFS composites indicated no deleterious components. Semi-quantitative X-Ray Diffraction (XRD) tests concurred with head assay results.

The DFS testwork results correlate strongly with PFS testwork results. The testwork programs indicated very favourable grinding and leaching characteristics for the ore:

- PFS comminution tests were undertaken on the composites to produce Bond abrasion (Ai), ball mill (BWi) and rod mill (RWi) indices and SMC tests. This provided adequate input for a PFS level comminution modelling report to be developed by DMCC. Initial modelling by DMCC suggested single stage crushing followed by SAG milling (SSAG) with optional pebble crushing will most probably be the best comminution flowsheet for this material. Further DFS comminution testwork was issued to DMCC in December 2020 for a DFS level comminution modelling report. DMCC confirmed with DFS level modelling that SSAG remains the recommended flowsheet and further recommended incorporating a pebble circuit as the DFS testwork indicated a similar hardness but increased toughness

- Comminution testing results indicated the following:

  - ✓ Ai (average ~0.3 for fresh domain) indicates that the ore is not abrasive;

  - ✓ BWi, RWi and SMC results indicate that the fresh ore is of medium to moderate hardness and the transitional composites was quite soft. Oxide ore was very friable and therefore had to be filtered until there was sufficiently competent material to be tested. As a result, the oxide BWi value of 23.6 kW/t is indicative of the most

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competent portion of oxide as the majority of oxide is very soft, evident by its friability;

- ✓ The average PFS RWi (13.2 kWh/t) for fresh and variability fresh ore is generally slightly higher than the PFS BWi (12.0 kWh/t), which indicates that the ore is slightly more competent at larger sizes. This supports the pebble crushing circuit being included;
- ✓ The difference between DFS BWi (9.6 kWh/t) and PFS BWi (12.0 kWh/t) is largely attributed to the larger closing screen size setting of 150µm for DFS comminution samples and 106µm for PFS comminution samples
- ✓ The SMC testwork indicates that the ore is likely to be amenable to single-stage crushing followed by SAG milling (SSAG) (average A*b of 40.1 for DFS and PFS fresh and variability fresh ore) in closed circuit with a pebble crusher (as stated in Mintrex flowsheet).

- ➢ Gravity testwork has indicated that the ore contains a large proportion of free/gravity recoverable gold. The proportion of gravity recoverable gold varied from 44-88% and averaged 64.5% across all PFS and DFS composites. Broadly, the higher gold grade fresh ores had higher fractions of gravity gold (average ~70% for PFS and 65% for DFS), but even the lower-grade transitional and oxide composites (0.05 g/t to 1.15 g/t) showed substantial gravity gold recovery (average ~60%) – in general, the higher-grade fresh ore had a higher gravity recovery, while the lower grade sample had lower gravity recoveries (but still very good). Intensive leach results indicate gold recoveries from the gravity concentrate >99%
- ➢ Leaching optimisation tests on two fresh PFS samples found that the leaching process was relatively simple and robust:
  - ✓ Use of air instead of oxygen for sparging did not impact gold recovery significantly;
  - ✓ The addition of 100 g/t of lead nitrate did not improve gold recovery significantly;
  - ✓ Decreasing cyanide concentration to 500 ppm (maintained at 250 ppm) did not impact overall gold recovery significantly;
  - ✓ Varying the solids concentration between 40-55% did not significantly impact gold recovery;
  - ✓ The oxygen uptake rate of the samples was low;
  - ✓ Longer leach times in excess of 24 hrs will not be necessary at a grind size of 115 µm;

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- ✓ Gold leaching kinetics are mostly fast;
- ✓ The samples **did not** display any preg-robbing characteristics

- Applying the optimised leach conditions to all composites found that the leach recovery of gold (that is, of leach feed gold) was between 77-95% at 125 µm. Overall, the composites tested demonstrated very high total gold recoveries (including gravity) of 90-99% after 24 hrs, with gravity gold making up 42-87% of the total gold recovered. Average total gold recovery across DFS composites was 94.3% (at 125 µm) with a residue gold grade of 0.08 g/t. Equilibrium carbon loading and sequential CIP tests indicated no carbon fouling from slurry and reasonable carbon loading capacity. CIP tests indicated decent Fleming 'k' and 'n' constants for oxide but a lower 'k' value for fresh as low leach feed gold grade is suboptimal for this test.

- 8 DFS samples were analysed for acid producing/neutralising capacity. The Acid Neutralising Capacity (ANC) exceeds the Theoretical Acid Production Potential (TAPP). This indicates that the ore stockpile has a very low potential to produce acidic drainage.

- Free and Weak Acid Dissociable (WAD) cyanide analysis was determined through $AgNO_3$ titration and the Picric acid method. 4 cyanide detox tests with various reagent dosages were conducted on fresh leach tailings and a further 4 tests conducted on oxide leach tailings. Fresh and oxide leach tailings are readily detoxed with near stoichiometric quantities of SMBS

Sample Identification

PFS samples supplied to ALS Perth were divided into nine composites on the basis of their domain (oxide, transitional and fresh ores) and the proximity of their drill holes. A further 21 samples were obtained for Bankable Feasibility Study (DFS) testwork. The 21 samples comprised of 19 fresh and 2 oxide composites broadly categorised based on domain and drill hole proximity. DFS Comminution testwork was performed on samples from single drill holes and are identified with a suffix of C. This is to differentiate from gravity and leaching testwork samples which are identified with a suffix of L as these were composites from groups of metallurgical drill holes. A summary of sample identification can be found in Table 31 and a plan view showing sample location in Figure 26.

Table 31: Metallurgical Sample Identification

Sample ID	Metallurgical Drill Hole ID	Study Level
Fresh 1	ZDD028, ZDD080, ZDD082	PFS
Fresh 2	ZDD028	PFS
Fresh 3	ZDD043	PFS

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Sample ID	Metallurgical Drill Hole ID	Study Level
Variability Fresh 1	ZDD029, ZDD035	PFS
Variability Fresh 2	ZDD081, ZDD090	PFS
Variability Fresh 3	ZDD038, ZDD085	PFS
Trans	ZDD090	PFS
Variability Trans	ZDD075, ZDD084, ZDD088, ZDD091, ZDD093	PFS
Oxide	ZDD087, ZDD088, ZDD090, ZDD093	PFS
2-FRESH-1-C	ZDD056	DFS
2-FRESH-2-C	ZDD058	DFS
2-FRESH-3-C	ZDD086	DFS
2-FRESH-4-C	ZDD062	DFS
2-FRESH-5-C	ZDD077	DFS
2-FRESH-6-C	ZDD078	DFS
2-FRESH-7-C	ZDD064	DFS
2-FRESH-8-C	ZDD092	DFS
2-FRESH-9-C	ZDD091	DFS
2-FRESH-10-C	ZDD061	DFS
2-FRESH-11-C	ZDD097	DFS
2-FRESH-12-C	ZDD180	DFS
2-FRESH-13-C	ZDD102	DFS
2-FRESH-14-C	ZRD104	DFS
2-FRESH-15-C	ZDD100	DFS
2-FRESH-16-C	ZDD121	DFS
2-FRESH-17-C	ZDD116	DFS
2-FRESH-18-C	ZDD094	DFS
2-FRESH-19-C	ZDD133	DFS
2-OXIDE-1-C	ZDD146	DFS
2-OXIDE-2-C	ZDD172	DFS
2-FRESH-1-L	ZDD056, ZDD035	DFS
2-FRESH-2-L	ZDD058	DFS
2-FRESH-3-L	ZDD086, ZDD187	DFS
2-FRESH-4-L	ZDD062, ZDD192	DFS
2-FRESH-5-L	ZDD077. ZDD060	DFS
2-FRESH-6-L	ZDD078, ZDD075	DFS
2-FRESH-7-L	ZDD064, ZDD093	DFS
2-FRESH-8-L	ZDD092, ZDD087	DFS
2-FRESH-9-L	ZDD091, ZDD059	DFS
2-FRESH-10-L	ZDD061, ZRD114	DFS
2-FRESH-11-L	ZDD097, ZDD063	DFS
2-FRESH-12-L	ZDD180, ZDD101	DFS
2-FRESH-13-L	ZDD102	DFS
2-FRESH-14-L	ZRD104, ZRD053	DFS
2-FRESH-15-L	ZDD100, ZDD205	DFS
2-FRESH-16-L	ZDD121, ZRD116	DFS
2-FRESH-17-L	ZDD116, ZDD117, ZDD119	DFS
2-FRESH-18-L	ZDD094, ZRD103	DFS
2-FRESH-19-L	ZDD133, ZDD142, ZDD145	DFS
2-OXIDE-1-L	ZDD116, ZDD117, ZDD145, ZDD146	DFS
2-OXIDE-2-L	ZDD172, ZDD133, ZDD148	DFS

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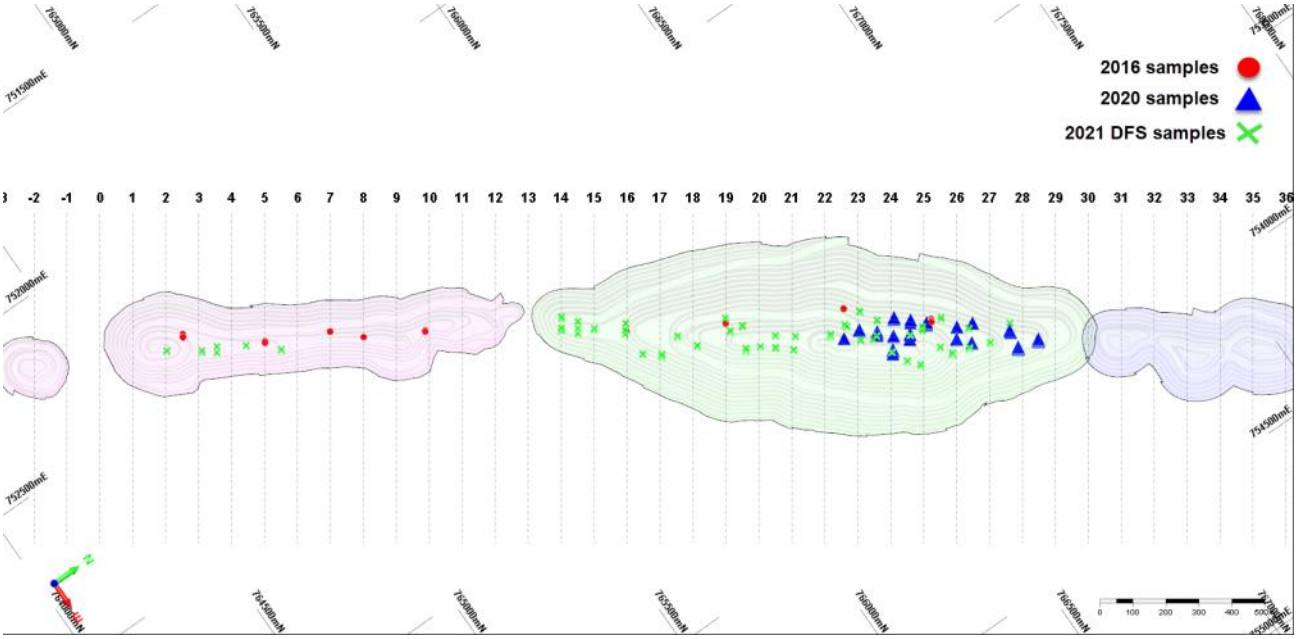

Figure 26: Metallurgical Sample Locations

Figure 27: DFS Samples from left, 2-Fresh-1-L, 2-Fresh-2-L , 2-Oxide-2-L and 2-Oxide-1-L

Bond Work Index – Abrasion (Ai)

The Bond Abrasion Index (Ai) is a measure of the abrasiveness of an ore – the composite is tumbled in a mill fitted with a paddle of known weight. After the process is finished, the mass of the paddle

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is weighed again, and the percentage wear of the paddle is the Ai. Ai is used to determine the wear rates of liners and grinding media consumption. Table 32 depicts the Ai for each composite. These Ai values are normal for a non-abrasive gold-bearing ore, being slightly less abrasive than average for such ores. The ore (irrespective of domain) is unlikely to pose any significant problems with abrasiveness.

Table 32: Bond Abrasion Index

SAMPLE ID	AI
Fresh 1	0.30
Fresh 2	0.31
Fresh 3	0.35
Variability Fresh 1	0.26
Variability Fresh 2	0.24
Variability Fresh 3	0.23
Trans	0.066
Variability Trans	0.050
Oxide	0.019

Bond Work Index – Ball Mill (BWi)

The Bond Ball Mill Work Index (BWi) is used to calculate the power requirements to grind ore to a typical ball mill product. Table 33 shows the BWi for each composite.

Table 33: Bond Ball Mill Work Index

Sample ID	Closing Screen	F80 (µm)	P80 (µm)	BWi (kWh/t)
Fresh 1	106	2794	83	11.4
Fresh 2	106	2757	83	13.6
Fresh 3	106	2860	83	12.9
Variability Fresh 1	106	2750	81	11.3
Variability Fresh 2	106	2784	76	10.9
Variability Fresh 3	106	2751	82	12.0
Trans	106	2080	97	6.9
Variability Trans	106	1890	89	11.0
Oxide	106	627	81	19.6
2-FRESH-1-C	150	2742	124	10.3
2-FRESH-2-C	150	2759	119	9.9
2-FRESH-3-C	150	2659	119	9.7

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Sample ID	Closing Screen	F80 (µm)	P80 (µm)	BWi (kWh/t)
2-FRESH-4-C	150	2589	132	11.5
2-FRESH-5-C	150	2593	108	8.8
2-FRESH-6-C	150	2673	114	10.1
2-FRESH-7-C	150	2707	120	8.7
2-FRESH-8-C	150	2712	120	10.8
2-FRESH-9-C	150	2593	120	10.8
2-FRESH-10-C	150	2612	114	9.3
2-FRESH-11-C	150	2678	101	7.3
2-FRESH-12-C	150	2613	114	9.8
2-FRESH-13-C	150	2624	131	10.1
2-FRESH-14-C	150	2596	125	8.9
2-FRESH-15-C	150	2560	122	9.9
2-FRESH-16-C	150	2790	118	10.5
2-FRESH-17-C	150	2834	116	8.0
2-FRESH-18-C	150	2834	116	11.2
2-FRESH-19-C	150	2739	115	7.3
2-OXIDE-1-C	150		Sample Too Fine to Complete Test	
2-OXIDE-2-C	150	332	122	23.6

BWi values between 9 and 14 kWh/t indicate an ore which is of medium hardness. BWi values between 14 and 20 kWh/t indicate ore which is moderate to hard. The results of the PFS testwork show that the ore is primarily of medium hardness, with the transition composite being quite soft. Further DFS testwork confirms medium hardness with a mean of 10.1 kWh/t across all samples excluding oxides. DFS samples appear, on average, to have a slightly lower BWi compared to PFS samples, 11.2kWh/t and 9.6kWh/t, respectively. This is largely attributed to the larger closing screen size setting of 150µm for DFS comminution samples and 106µm for PFS comminution samples.

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SMC Testwork

The SMC suite of testwork is intended to provide parameters for use in comminution modelling. The oxide ore sample was too friable for SMC testwork, and was thus excluded – this is not considered material due to the low proportion. Table 34 shows the results of the SMC testwork for both PFS and DFS.

Table 34: PFS and DFS SMC Results

Sample ID	SMC										
	A	b	A x	Dwi	Dw	ta	Mia	Mic	Mih	SCS	SG
FRESH-1	67.	0.6	45.8	6.1	42	0.4	17.4	6.5	12.6	9.44	2.7
FRESH-2	66.	0.8	57.3	4.8	27	0.5	14.6	5.2	10.1	8.55	2.7
FRESH-3	69.	0.6	45.8	6.1	43	0.4	17.5	6.6	12.7	9.45	2.7
VARIABILITY	65.	0.7	49.9	5.6	36	0.4	16.3	6	11.6	9.09	2.7
VARIABILITY	68.	0.7	48.6	5.7	37	0.4	16.8	6.2	12	9.14	2.7
VARIABILITY	67.	0.6	43.8	6.4	47	0.4	18.2	6.9	13.3	9.64	2.7
TRANS	69.	1.9	136	1.9	5	1.3	7.4	2.2	4.3	6.21	2.6
VARIABILITY	72.	0.7	53.2	4.9	28	0.5	15.8	5.7	11	8.6	2.6
2-FRESH-1-C	75.	0.4	36.2	7.71	64	0.3	21.1	16.1	8.3	10.6	2.7
2-FRESH-2-C	73.	0.5	37.4	7.41	60	0.3	20.5	15.5	8	10.3	2.7
2-FRESH-3-C	67.	0.5	38.6	7.24	58	0.3	20.1	15.1	7.8	10.2	2.7
2-FRESH-4-C	70.	0.5	41.8	6.62	50	0.3	18.8	13.9	7.2	9.79	2.7
2-FRESH-5-C	62.	0.5	34.9	7.97	67	0.3	21.8	16.7	8.6	10.7	2.7
2-FRESH-6-C	74.	0.4	34.2	8	67	0.3	22	16.8	8.7	10.8	2.7
2-FRESH-7-C	66.	0.6	41.1	6.72	51	0.3	18.9	14	7.2	9.91	2.7
2-FRESH-8-C	81.	0.4	37.3	7.36	59	0.3	20.6	15.5	8	10.3	2.7
2-FRESH-9-C	77.	0.4	31.1	8.96	78	0.2	23.8	18.7	9.6	11.4	2.7
2-FRESH-10-C	69.	0.5	35.5	7.78	65	0.3	21.4	16.3	8.4	10.6	2.7
2-FRESH-11-C	78.	0.4	36.8	7.66	63	0.3	21	16	8.3	10.5	2.7
2-FRESH-12-C	68.	0.5	35.6	7.84	66	0.3	21.4	16.4	8.5	10.6	2.7
2-FRESH-13-C	74.	0.5	38.9	7.12	56	0.3	20.1	15.0	7.8	10.1	2.7
2-FRESH-14-C	64.	0.7	48.9	5.66	37	0.4	16.6	11.9	6.1	9.12	2.7
2-FRESH-15-C	74	0.4	34.0	8.14	69	0.3	22.1	17	8.8	10.9	2.7
2-FRESH-16-C	75.	0.4	34.0	8.22	70	0.3	22.1	17.1	8.8	10.9	2.8
2-FRESH-17-C	72.	0.5	39.2	7.07	56	0.3	19.7	14.8	7.6	10.1	2.7
2-FRESH-18-C	91.	0.3	32.1	8.66	75	0.3	23.4	18.2	9.4	11.1	2.7
2-FRESH-19-C	65.	0.6	42.8	6.48	48	0.4	18.6	13.6	7.1	9.68	2.7
2-OXIDE-2-C	67	0.8	58.3	4.28	21	0.6	14.7	9.9	5.1	8.26	2.5

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A is the resistance of breaking larger particles.

- b is breakage of smaller particles
- A*b allows comparison of different ore – the smaller value the greater resistance to comminution
- ta is a measure of resistance to abrasion grinding

The A x b values from PFS and DFS testwork indicate medium to medium-soft hardness for most of the composites (32 to 57), with the trans composite once again being much softer. The SAG Circuit Specific Energy (SCSE) is derived from simulations of a "standard" circuit of a single stage SAG mill in closed circuit with or without a pebble crusher. The SCSE results for these composites indicate that the ore is well-suited for such a circuit. The results for ta compared very well with the Ai values indicating that the material will be medium to medium soft with regards to abrasion (0.29 to 0.65).

As described in the JKTech SMC report for these composites, Mia is the work index for the grinding of coarser particles (> 750 µm) in tumbling mills such as autogenous (AG), semi-autogenous (SAG), rod and ball mills. Mih is the work index for the grinding in High Pressure Grinding Rolls (HPGR) and Mic for size reduction in conventional crushers. Along with the DWi values, these are required for comminution circuit modelling during the feasibility study.

Figure 28 illustrates the relationship between sample average depth and BWi and A*b. BWi remains relatively flat across the depths which indicates a consistent hardness across depth. A*b decreases slightly with depth which indicates increasing resistance to breakage with depth. It should be noted that the R2 is low which indicates a weak effect size.

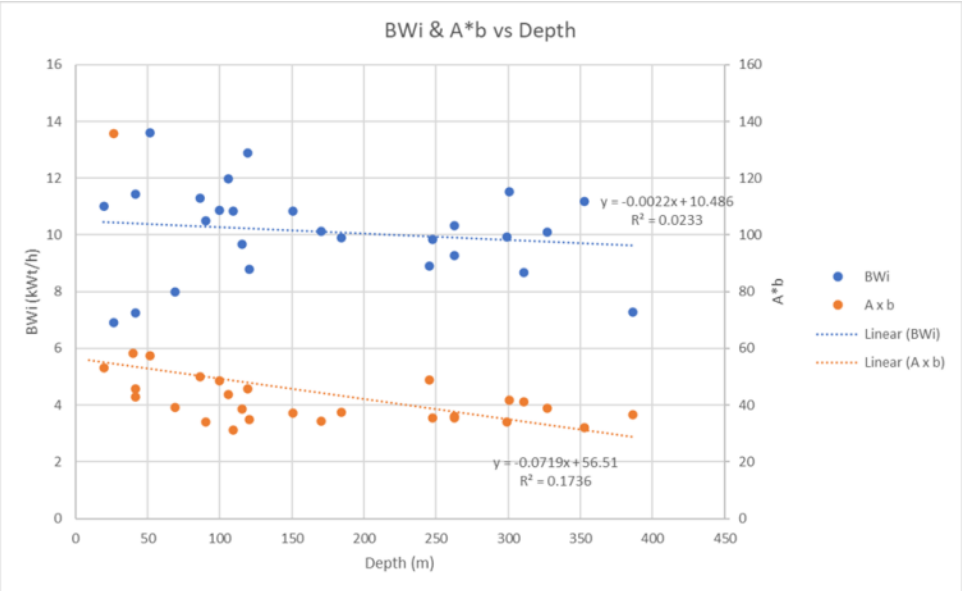

Figure 28: BWi & A*b vs Sample Depth

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Gold Grain Size Investigation

Four Knelson Gravity Pan Concentrate samples underwent optical mineralogical analysis for free grain gold. The sample ID, number of gold grains and grain sizes is summarised in Table 35. It should be noted that the number of gold grains detected does not reflect the gold grade. The presence of gold grains of this size indicates that a gravity circuit is highly recommended.

Table 35: Gold Grain Size Investigation Results

Sample ID	No. of Gold Grains Detected	Grain Size
2-Fresh-3-L-Gravity Concentrate	7	~75µm – 1.75mm
2-Fresh-4-L-Gravity Concentrate	11	~75µm – 600µm
2-Fresh-10-L-Gravity Concentrate	18	~150µm – 900µm
2-Fresh-15-L-Gravity Concentrate	6	~250µm – 700µm

Optical images of free gold grains from the Knelson Gravity Concentrate are shown below.

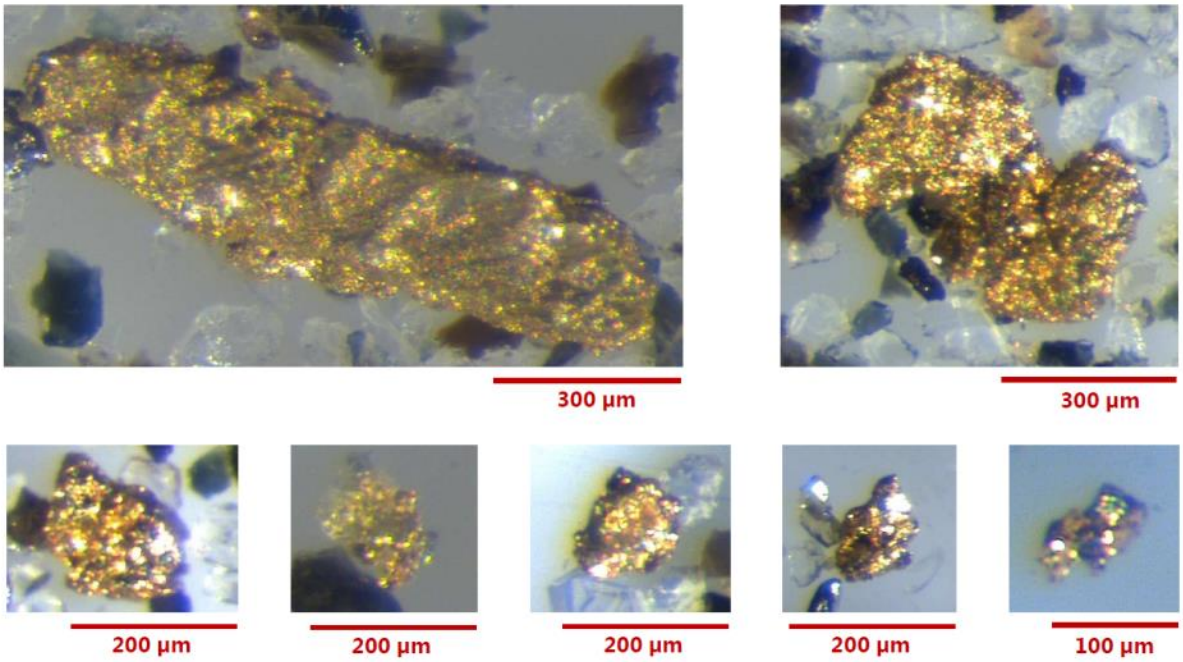

Figure 29: Optical Images of Free Gold Grains Observed in 2-Fresh-3-L Gravity Concentrate

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Mineralogy - Quantification of Minerals

Eight DFS samples were provided to ALS Metallurgy for semi-quantitative X-Ray Diffraction (XRD). XRD is used to analyse the samples and a combination of matrix flushing and reference intensity ration (RIR) derived constants were used to identify and quantify sample mineralogy. The XRD test results are shown in Table 36. Minerals identified were common among gold ores and no major cyanide consumers or deleterious minerals were identified.

Table 36: Summary of XRD Analysis

Mineral or Mineral Group	**2-**	**2-**	**2-FRESH-**	**2-FRESH-**	**2-FRESH-**	**2-FRESH-**	**2-FRESH-**	**2-**
	Mass %							
Clay mineral	0	1	0	2	0	2	1	10
Kaolinite	0	< 1	0	0	0	0	< 1	27
Chlorite	<1	1	1	< 1	<1	< 1	1	2
Serpentine	0	NA	0	NA	0	NA	NA	1
Annite - biotite -	19	25	20	33	19	19	20	4
Muscovite	1	2	0	1	0	1	1	0
Calcic amphibole	12	19	16	11	15	11	18	2
Pyroxene	1	NA	2	NA	<1	NA	NA	<1
Epidote	2	1	1	1	1	2	1	1
Plagioclase	24	29	23	29	48	25	37	16
K-feldspar	6	5	1	2	5	4	3	7
Quartz	36	17	35	20	11	36	19	30

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Head Assays

PFS and DFS composites were subjected to head assay analysis through fire assays and Inductive Coupled Plasma (ICP) analysis. A summary of results is presented in Table 37. Two fire assays were conducted per composite sample. Gold grades varied more significantly between composites than between samples of the same composite. Difference between samples of the same composite can be indicative of spotty grains of gold dispersed in the ore body. Some of the difference can also be attributed to variations between samples as fire assay as tested on small samples of a small mass. Assay results also correlate with XRD conclusions where no deleterious components were detected. Trace amounts of Sulphur, Ag, Cu, Zn and Fe indicated a CIL process is suitable for this type ore.

Table 37: Summary of Head Assay Results

Analyte	Au_1	Au_2	Au_Av	Ag	Cu	Fe	Sulphide	Zn
Method	Fire	Fire	Fire	D3/ICP	D3/ICP	D4Z/ICP	Sherritt /	D3/ICP
Units	g/t	g/t	g/t	g/t	ppm	%	%	ppm
FRESH_1	10.3	5.60	7.95	0.60	52.0	3.88	0.28	58.0
FRESH_2	1.12	0.62	0.87	0.90	42.0	3.30	0.26	56.0
FRESH_3	12.1	20.2	16.2	0.90	40.0	3.30	0.52	54.0
TRANS	0.05	0.04	0.05	0.60	30.0	4.22	<0.02	68.0
OXIDE	0.66	0.59	0.63	0.30	58.0	8.60	<0.02	56.0
VAR FRESH_1	22.0	18.2	20.1	0.90	40.0	3.64	0.24	62.0
VAR FRESH_2	3.73	2.60	3.17	0.60	44.0	3.50	0.20	76.0
VAR FRESH_3	0.96	2.59	1.78	0.90	40.0	3.62	0.26	58.0
VAR TRANS	0.39	0.24	0.32	0.60	40.0	3.82	0.10	68.0
2-FRESH-1	0.40	0.38	0.39	<2	38.0	3.64	0.18	68.0
2-FRESH-2	4.34	4.84	4.59	<2	45.0	3.60	0.32	64.0
2-FRESH-3	10.1	8.49	9.30	<2	33.0	3.78	0.16	62.0
2-FRESH-4	1.13	0.78	0.96	<2	34.0	3.56	0.30	60.0
2-FRESH-5	1.35	2.23	1.79	<2	26.0	3.70	0.26	64.0
2-FRESH-6	0.39	0.50	0.45	<2	50.0	3.88	0.14	58.0
2-FRESH-7	0.84	0.62	0.73	<2	37.0	3.74	0.18	64.0
2-FRESH-8	2.07	1.35	1.71	<2	86.0	3.76	0.26	58.0
2-FRESH-9	0.39	0.51	0.45	<2	30.0	3.50	0.14	64.0
2-FRESH-10	6.94	10.7	8.82	<2	38.0	3.58	0.14	58.0
2-FRESH-11	4.18	6.00	5.09	<2	44.0	4.38	0.14	72.0
2-FRESH-12	1.76	1.86	1.81	<2	42.0	4.22	0.26	66.0
2-FRESH-13	0.60	1.66	1.13	<2	42.0	3.80	0.16	62.0
2-FRESH-14	0.55	0.51	0.53	<2	46.0	3.72	0.14	62.0
2-FRESH-15	0.83	1.41	1.12	<2	52.0	3.80	0.30	56.0

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Analyte	Au_1	Au_2	Au_Av	Ag	Cu	Fe	Sulphide	Zn
Method	Fire	Fire	Fire	D3/ICP	D3/ICP	D4Z/ICP	Sherritt /	D3/ICP
Units	g/t	g/t	g/t	g/t	ppm	%	%	ppm
2-FRESH-16	0.30	0.21	0.26	<2	44.0	4.14	0.16	66.0
2-FRESH-17	0.25	0.39	0.32	<2	36.0	3.98	0.12	58.0
2-FRESH-18	0.44	0.44	0.44	<2	46.0	3.90	0.18	58.0
2-FRESH-19	0.80	0.47	0.64	<2	40.0	4.56	0.36	62.0
2-OXIDE-1	0.57	0.28	0.43	<2	44.0	4.92	<0.02	96.0
2-OXIDE-2	1.11	1.69	1.40	<2	52.0	4.54	<0.02	96.0

Gravity Concentration

The composite samples were initially subjected to gravity concentration testwork to determine the gravity gold component that can be expected from the various domains. Gravity concentration was tested using a laboratory-scale Knelson concentrator. PFS samples were followed by amalgamation using mercury.

Table 38 shows the results of the PFS and DFS gravity recovery tests. The composites showed very high proportions of gravity gold, with 42-88% of the gold in the samples being recoverable by gravity with an average of 64% across the DFS samples. Some composites have a very high gold grades while others had low gold grades, which varied significantly between assays. This correlates well with the gold grain investigation which indicated spotty gold, having small areas of high concentration. However, even the low-grade composites and transitional composites had significant gravity recoverable gold of 42% and higher.

Table 38: Gravity Recovery

Sample ID	Gold Grade (g/t)	Gravity Recovery (%)
Fresh 1	7.95	83.1
Fresh 2	0.87	45.0
Fresh 3	16.2	81.9
Variability Fresh 1	20.1	88.3
Variability Fresh 2	3.17	59.1
Variability Fresh 3	1.78	73.2
Trans	0.05	45.7
Variability Trans	0.32	NOT TESTED
Oxide	0.63	72.3
2-FRESH-1-L	0.50	44.4
2-FRESH-2-L	2.98	62.1
2-FRESH-3-L	2.16	73.9

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Sample ID	Gold Grade (g/t)	Gravity Recovery (%)
2-FRESH-4-L	1.91	56.5
2-FRESH-5-L	1.76	77.1
2-FRESH-6-L	0.65	42.2
2-FRESH-7-L	1.64	68.8
2-FRESH-8-L	2.56	70.5
2-FRESH-9-L	1.29	65.4
2-FRESH-10-L	4.87	87.5
2-FRESH-11-L	2.82	71.8
2-FRESH-12-L	1.96	61.6
2-FRESH-13-L	2.69	82.5
2-FRESH-14-L	1.04	64.0
2-FRESH-15-L	0.98	43.3
2-FRESH-16-L	0.63	57.1
2-FRESH-17-L	0.49	56.0
2-FRESH-18-L	1.00	58.8
2-FRESH-19-L	1.01	76.4
2-OX-1-L	0.50	52.4
2-OX-2-L	1.75	65.8
DFS Average	1.68	63.7

Bulk Leaching Tests

After the optimum leaching conditions were determined in stage 2 of the PFS, the third stage of testing applied these optimal conditions to a larger number of samples, including those from the oxide and transitional domains. Additionally, the equilibrium carbon loading was tested, and sequential CIP/CIL tests were conducted. Intensive leaching tests of the gravity concentrate were also conducted.

Similarly, the additional fresh and oxide DFS composites were tested in at the conditions established during leach optimisation. The 21 DFS composites of gravity tails combined with their respective gravity leach tails underwent leach testing. Intensive leaching tests of the 21 DFS gravity concentrate was conducted again to confirm the PFS results. Carbon loading and sequential CIP tests were conducted for 2 composites: a fresh composite comprising of the DFS fresh composites and an oxide composite comprising of the DFS oxide composites.

DFS Leaching Tests of Gravity Tails

The DFS composites were ground to 125 µm, then separated by gravity concentration into a concentrate and tails. The tails were subjected to cyanidation at 500 ppm NaCN with oxygen

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sparging, no lead nitrate addition and a solids concentration of 45%. Table 39 shows the recovery by gravity and the total gold recovery of the gravity tails after 12 and 24 hrs.

Table 39: DFS Bulk Cyanidation Tests

Sample	Assay Head (g/t)	Gravity Recovery (%)	Leach Extraction (%)		Total Recovery (%)
			12 hr	24 hr	
2-FRESH-1-L	0.39	44.4	75.3	81.9	89.9
2-FRESH-2-L	4.59	62.1	73.5	82.7	93.5
2-FRESH-3-L	9.30	73.9	72.8	85.8	96.3
2-FRESH-4-L	0.96	56.5	61.0	77.2	90.1
2-FRESH-5-L	1.79	77.1	80.1	87.6	97.2
2-FRESH-6-L	0.45	42.2	74.9	81.4	89.2
2-FRESH-7-L	0.73	68.8	75.6	80.4	93.9
2-FRESH-8-L	1.71	70.5	77.9	82.7	94.9
2-FRESH-9-L	0.45	65.4	82.4	86.5	95.3
2-FRESH-10-L	8.82	87.5	89.3	89.3	98.7
2-FRESH-11-L	5.09	71.8	83.6	87.4	96.5
2-FRESH-12-L	1.81	61.6	80.3	86.7	94.9
2-FRESH-13-L	1.13	82.5	89.4	89.4	98.1
2-FRESH-14-L	0.53	64.0	83.4	86.6	95.2
2-FRESH-15-L	1.12	43.3	76.6	82.1	89.8
2-FRESH-16-L	0.26	57.1	77.0	81.5	92.1
2-FRESH-17-L	0.32	56.0	83.1	85.9	93.8
2-FRESH-18-L	0.44	58.8	75.6	83.0	93.0
2-FRESH-19-L	0.64	76.4	76.6	79.1	95.1
2-OX-1-L	0.43	52.4	84.4	89.5	95.0
2-OX-2-L	1.40	65.8	91.2	93.3	97.7

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The DFS test results correlate well with the PFS results. Gravity recovery varied significantly between the composites (42-88%) with higher head grade ore tending towards high gravity recovery and low head grade ore with lower gravity recovery. The cyanidation stage recovered between 77-93% of the remaining gold with an average of 85%, for a total gold recovery of between 89.2-98.7% and an average of 94.3% and an average residue grade of 0.08 g/t. The consumption of cyanide varied between 0.06 to 0.37 kg/t with an average of 0.18 kg/t. Lime consumption varied between 0.19 and 1.41 kg/t with fresh samples consuming an average of 0.22 kg/t and oxide samples an average of 1.32 kg/t.

The leach residue for two samples with recoveries of ~90% were re-leached to investigate whether there is any additional leachable gold. Sub-samples of 2-FRESH-4-L and 2-FRESH-15-L were leached for an additional 24 hours after re-setting leach conditions to pH 10.5 and 500 ppm NaCN. The residue grade reduced from 0.19 to 0.14 g/t and 0.10 to 0.06 g/t for 2-FRESH-4-L and 2-FRESH-15-L, respectively. This indicates that there is some leachable gold available and this should be recovered with a smaller grind size of 115 µm.

Intensive Leaching Tests of Gravity Concentrate

Further tests were undertaken on the gravity concentrates. These tests were undertaken in order to determine the performance and reagent consumption of intensive cyanidation of the concentrate, as this is the likely method of gravity recovery for the process. The PFS composites, Fresh-1 and VAR Fresh-2, demonstrated very high extraction of gold (>99%), and high (expected for intensive cyanidation) consumption of cyanide (18 kg/t). The DFS gravity and intensive cyanide testwork for the additional 21 composites confirmed a very high extraction of gold (~99.3%) and similar consumption of cyanide (17 kg/t).

Carbon Loading

Equilibrium loading and sequential CIP tests were undertaken on the leach slurry produced as part of the bulk tests in order to determine what carbon loading (grams of gold per tonne of carbon) can be expected in the plant. In the equilibrium tests, different masses of carbon were added to samples of the slurry to determine the equilibrium carbon loading at various masses. 7 composites were tested during the PFS and 2 composite were tested during DFS. These results are used to inform the number of CIL/CIP stages that will be required for the plant. Table 40 shows the equilibrium loadings for each composite at three different concentrations of gold.

Table 40: Equilibrium gold loading at various concentrations

Sample	Gold loading on carbon (g/t)		
	1.0 mg/L solution	**0.5 mg/L solution**	**0.1 mg/L solution**
PFS Fresh-1	5,833	4,173	1,917

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Sample	Gold loading on carbon (g/t)		
	1.0 mg/L solution	0.5 mg/L solution	0.1 mg/L solution
PFS Fresh-3	6,820	4,928	2,317
PFS VAR Fresh-1	12,452	8,457	3,444
PFS VAR Fresh-2	2,126	1,748	1,109
PFS VAR Fresh-3	606	539	409
PFS VAR Trans	250	293	427
PFS Oxide	486	409	274
DFS Fresh	3189	2320	1523
DFS Oxide	2184	1691	1206

Sequential CIP tests were also undertaken on the leach slurry – these are meant to simulate the action of a carbon circuit. The carbon is contacted with a sample of slurry for two hours, then extracted and transferred to a fresh batch of slurry for two hours, then transferred to a final batch for an additional 20 hours for 24 total hours. The cumulative gold loading on the carbon is calculated and checked by assay of the carbon. Both total loadings for each composite are shown in Table 41.

Table 41: Sequential CIP Tests

Sample	Feed Gold Concentration (mg/L)	Calculated Carbon Loading (g/t)	Carbon Assay (g/t)	Fleming Constants	
				k (hr^{-1})	n
PFS Fresh-1	1.24	2,008	1,710	239.2	0.66
PFS Fresh-3	2.82	2,525	2,259	175.7	0.63
PFS VAR Fresh-1	3.29	2,767	2,571	203.0	0.62
PFS VAR Fresh-2	0.78	1,584	1,665	180.7	0.76
PFS VAR Fresh-3	0.31	704	N/A	98.1	0.75
PFS VAR Trans	0.19	755	N/A	225.2	0.94
PFS Oxide	0.18	710	N/A	260.7	0.84

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Sample	Feed Gold Concentration (mg/L)	Calculated Carbon Loading (g/t)	Carbon Assay (g/t)	Fleming Constants	
				k (hr^{-1})	n
DFS Fresh	0.33	864	981	126.6	0.82
DFS Oxide	0.38	922	927	193.7	0.65

The main measures for the CIP tests are the Fleming 'k' and 'n' constants. The 'k' constant indicates the empirical rate constant for carbon adsorption – when applied to virgin carbon in a laboratory situation, it can be used as a measure of whether the ore is fouling the carbon. Values of >240 hr^{-1} are considered excellent – the results broadly show that there is not significant fouling of the carbon by the slurry. The 'n' constant indicates the carbon loading capacity, with values between 0.5-1.0 considered reasonable.

DFS equilibrium shows gold loading increasing with carbon loading for both fresh and oxide composites. The DFS fresh correlates well with the PFS fresh results. The DFS oxide composite highlights the importance of blending as the gold loading increases with carbon loading. DFS results for the sequential CIP tests indicate reasonable Fleming 'k' and 'n' constants given the low feed gold concentration.

Acid Mine Drainage

Eight DFS samples were analysed for acid producing/neutralising capacity. The Acid Neutralising Capacity (ANC) exceeds the Theoretical Acid Production Potential (TAPP). This indicates that the ore stockpile has a very low potential to produce acidic drainage.

Cyanide Detoxification

Cyanide detoxification testwork was conducted at ALS through comparing cyanide destruction to reagent consumption. Free cyanide and weak acid dissociated cyanide was determined through $AgNO_3$ titration and the Picric acid method. 4 fresh samples and 4 oxide samples were tested with various reagent dosages. A Sodium Metabisulphite (SMBS) dosage of 0.70 kg/m^3 of solution without copper sulphate or lime was able to reduce WAD cyanide concentration from 175 mg/L feed solution to below 11 mg/L final solution for fresh leach tailings. A SMBS dosage of 0.56 kg/m^3 of solution and 0.16 kg/m^3 of solution lime was able to reduce WAD cyanide concentration from 154 mg/L to below 7 mg/L for oxide leach tailings.

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Process Design Recommendations

The key process design criteria for the plant from the current testwork are depicted in **Table 42**. The proposed Process Design Criteria is further discussed in Process Plant Section 11. Table 43 presents a summary of comminution inputs used to produce the comminution model and mill sizing. The recovery curve and corresponding ranges are summarised in Table 44.

Table 42: Proposed PDC Values based on Testwork

Proposed PDC inputs	Value
P80	106-125 µm
Gravity Recoverable Gold	65%
Leaching Time	~24 hours
Au Recovery by Gravity	64%
Au Recovery by Leaching	85%
Au Recovery Total	94%
CN Consumption	0.2-0.3 kg/t
Lime Consumption	0.3-0.6 kg/t
O2 Consumption	0.00148 kg/t

Table 43: DMCC Comminution Model Inputs

Model Parameter	Value
DWi	6.93 kWh/m3
BWi	10.2 kWh/t
SG	2.78
A*b	40.1
Throughput	437.5 t/h
SAG Circulating Load	450 %
P80	115 µm

Table 44: Summarised Recovery Curves

Recovery Curve	Range
Recovery (%) = 98.5	3.2 g/t < Head Grade
Recovery (%) = 92.44 + 1.39 x Head Grade	0.5 g/t ≤ Head Grade ≤ 3.2 g/t
Recovery (%) = 91.89 + 1.89 x Head Grade	0.2 g/t ≤ Head Grade < 0.5 g/t

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11. Process Plant

Introduction

The Abujar Process Plant flowsheet is broadly based on similar free-milling gold plant designs utilised in Western Australia and Africa. The process flow diagrams (PFDs) have been developed from the process design criteria (PDC) prepared by Mintrex. The plant design proposed is simple but robust and broadly comprises the following:

- Primary Crushing;
- Single Stage Semi-Autogenous Grinding;
- Gravity Concentration & Intensive Leaching;
- Leaching and Adsorption;
- Cyanide Destruction;
- Carbon Elution and Electrowinning; and,
- Smelting.

The following sections outline the key design criteria and considerations adopted and provide overview of the process plant design and operation.

Process Design Philosophy

The Abujar flowsheet was designed for an annual fresh ore throughput of 4.0 Mtpa. It incorporates a carbon in leach (CIL) design typical of Australian and West African gold plants fed via a primary jaw crusher and single stage SAG mill comminution circuit.

Comminution Circuit Design

The preliminary design of the comminution equipment for the Abujar process plant was undertaken by Mintrex at a definitive feasibility level (DFS) based on inputs from Mintrex, Tietto Minerals, RPM Global and DMCC. The equipment design and selection is based on testwork using fresh ore samples from exploration work.

The process design has an 80% passing (F_{80}) size of 150 mm transferred from primary crushing to milling, and P_{80} of 115 µm transferred from the comminution circuit to leaching.

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Comminution Circuit Design Basis

Process Criteria

The process criteria adopted for the preliminary design of the comminution circuit are summarised in **Table 45**.

Table 45: Comminution Circuit Process Design Criteria

Criteria	Units	Value
Annual Throughput	Mtpa	4.0
Crushing Availability	%	71
Crushing Circuit Operating Hours	h/yr	6,220
Crushing Circuit Throughput	tph	563
Grinding Circuit Availability	%	91.3
Grinding Circuit Operating Hours	h/yr	8,000
Grinding Circuit Transfer P80	µm	115

Grind Size Selection

Grind size selection is important as it is the determining factor when deciding between which comminution circuit is applicable for the ore characteristics to achieve a certain throughput. A smaller grind size generally increases gold recovery through improved leaching while a larger grind size will reduce power consumption but adds capital costs for larger leach tanks to achieve longer residence times.

A high-level economic analysis by Mintrex compared grade recovery against main cost drivers for various grind sizes. Based on the economic model, a grind size of 115 µm was selected.

Ore Specific Criteria

Ore specific criteria were based on comminution testwork undertaken by Tietto Minerals through Mintrex and ALS in 2020, with further detailed modelling and interpretation by DMMC. The key data for DMCC comminution circuit modelling is presented in **Table46**.

Table46: Updated Consolidated Ore Properties used for Circuit Design

Parameter	Units	Value
A x b		40.1
ta	%	1.45

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DWi	kWh/m^3	6.9
Bond Impact CWI	kWh/t	15.4*
RWi	kWh/t	13.5
BWi	kWh/t	10.2
Ai		0.35
SG	t/m^3	2.78
Circuit P80	µm	115

Oxide and Transitional Feed

The process plant has been designed for an annual throughput of 4.0 Mtpa of fresh ore. Less than 14 % of the resource estimate is oxide and transition ore as shown in **Table 2**.

Bond test results show (as typical) that oxide and transitional ores are softer than fresh ore. The wide variation in ore grade encourages the use of blending.

The oxide and transitional ore feed do not define the plant configuration, other than ensuring leach tanks are sized for required leaching time and reagent dosing systems can deliver the required consumption rates for lime and cyanide. While stockpile buffering of mined ore ahead of the plant can smooth the fraction of soft (oxide + transition) presented for processing.

Comminution Circuit Selection

The comminution circuit selected (as recommended by DMCC) is a single stage SAG mill, fed with primary crushed ore. For fresh ore above ~90% of total feed a pebble crushing circuit is considered necessary and is included in the plant design. The SAG Mill specifications proposed by DMCC are presented in ***Table 47***.

Table 47: Comminution Design Parameters

Parameter	Units	SAG Mill
Number of Mills		1
Mill Diameter (Inside Shell)	m	9.75
Effective Grinding Length (EGL)	m	4.88
L:D Ratio		0.50
SAG circulating load	%	450
Specific Energy	kWh/t	15.8
Power at Pinion	kWh	6,840
Motor rating (operating)	kWh	7,315
Installed Mill Motor Power	MW	9.0 (2 x 4.5)

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Tietto has committed to purchase a mill of the above proportions with 2 x 5.75 MW drives. Comminution layout design has considered future addition of a ball mill for design changes or potential expansion.

Process and Plant Description

The processing schematic for the Abujar plant is presented in ***Figure 30***.

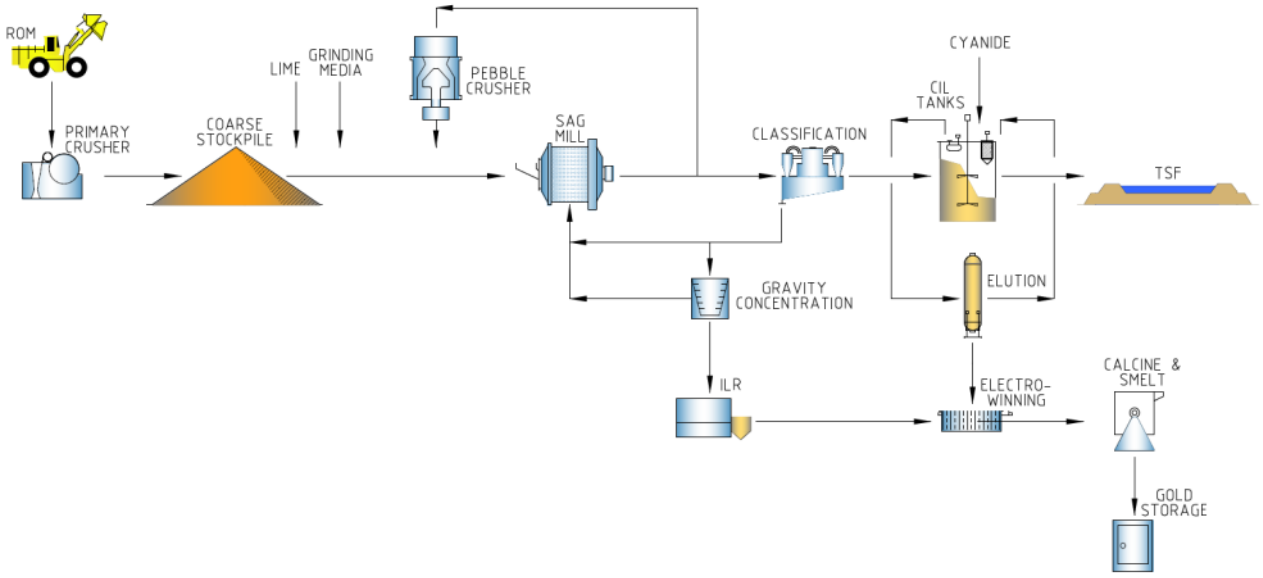

Figure 30: Abujar Schematic Flow Sheet

Preliminary equipment selections have been completed for all process plant mechanical units.

An isometric view from a 3D model is presented in **Figure 31**.

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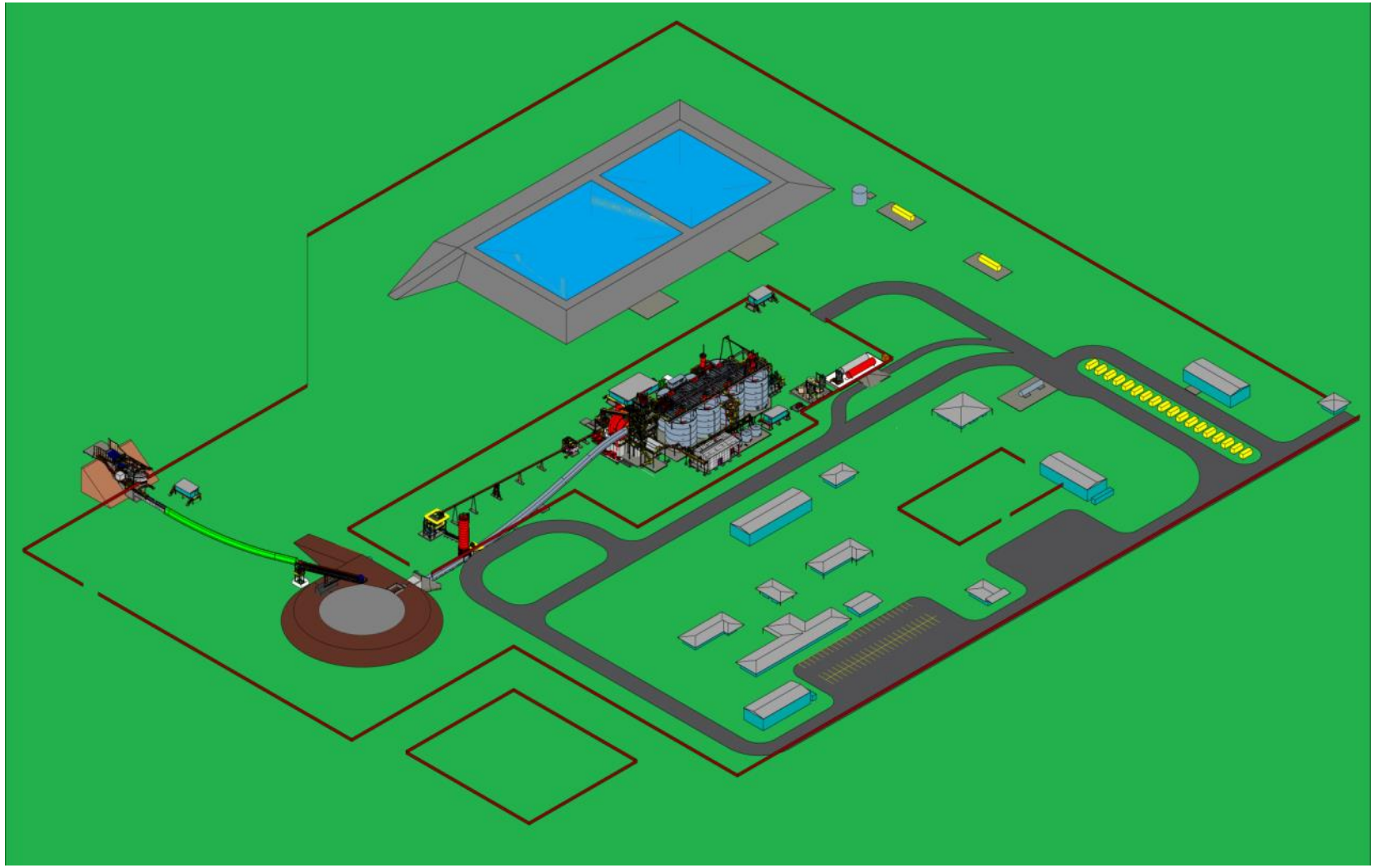

Figure 31: Process plant indicative arrangement

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Crushing Plant

Ore will be fed to the process plant via the ROM pad, with possible blending of ore types/grades as feed to the primary crusher. The estimated maximum lump size of ore on the ROM pad will be 900 mm in any dimension. Oversize rock will be placed to one side and broken below 900 mm in the mine or on the ROM pad.

The crushing plant provides single stage crushing to feed the SAG mill. The crushing plant design has been based on a bespoke fixed crushing plant with a Metso C150 jaw crusher (or equivalent). The crushing plant consists of ROM bin, apron feeder, grizzly feeder, jaw crusher, stockpile feed conveyor and rock breaker, including all associated chutes, mechanical and electrical equipment, steelwork and platework.

The ROM bin will be fed ore from the ROM pad stockpiles using either a 10 m^3 front end loader (FEL) or via direct dump from a haul truck (~90 t payload). The ROM bin will have a live capacity of 150 tonnes, with replaceable liners. Feeding of the ROM bin will be controlled by signal lights controlled by a radar level sensor. Dust control will be achieved using high pressure water sprays installed within the ROM bin, to form a dense mist to contain the fugitive dust particles.

The ROM bin and steel wing walls are set in a reinforced concrete vault. The ROM bin discharge will be handled on a 1,500 mm wide apron feeder. The primary crusher is located outside the vault in a steel structure on concrete foundations. Walkways and stairs will provide full operational and maintenance access throughout the primary crushing station.

The primary crusher has a feed opening of 1,200 mm x 1,400 mm, allowing for crushing of the 900 mm ROM top size. A rock breaker mounted adjacent to the crusher will break any oversized rocks that lodge in the crusher and would otherwise not be passed. The crusher jaws will be set to 150 mm closed side setting and will reduce the rock to a nominal P80 of 150 mm. Downstream material flow paths will be sized to accommodate rocks to up to 300 mm.

The primary crusher discharge is directed onto the stockpile feed conveyor (1,500 mm belt), which feeds the crushed ore directly to the crushed ore stockpile. The stockpile feed conveyor is fitted with access walkways on both sides, and a weightometer to record crushing plant throughput.

During periods of high primary crusher utilisation, ore will be crushed and accumulated on the conical stockpile as a buffer for crusher shutdowns. A central feeder in the reclaim tunnel provides live recovery of around 20% of gross capacity. The balance is available via FEL reclaim into a dedicated hopper/feeder outside the edge of the stockpile.

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Grinding and Classification Circuit

Primary crushed ore will be fed to the SAG mill from the crushed ore stockpile. The stockpile will have a live capacity around 2,300 t, equivalent to 5.5 hours of mill feed at the design grinding rate. The dead stockpile capacity will be approximately 9,500 t, giving a total stockpile capacity (live and dead) of around 27 hrs of mill feed.

The stockpile apron feeder provides a controlled discharge from the stockpile onto the mill feed conveyor. A separate reclaim bin and apron feeder allows mill feed to be sourced via FEL recovery of dead stock, and a backup if the stockpile apron feeder is not operational.

The mill feed conveyor will have a weightometer to measure and control mill fresh feed, with a nominal rate of 438 tph.

A 200 tonne lime silo will be installed above the mill feed conveyor, allowing for a controlled lime addition to the mill feed via a rotary valve installed on the silo discharge.

New feed from the mill feed conveyor is added to the recirculating load in the mill feed chute. Controllers provide density control of the circuit by water addition to the mill feed chute and discharge hopper in proportion to the mill feed rate.

A 9.75m ø x 4.88m EGL SAG mill is proposed for the primary grinding duty. The SAG mill will operate with a ball charge of <5% for first 24 months on soft ore and then 5-10% thereafter (70 to 105 mm for first 24 months and then 105 and 125 mm balls thereafter). Total charge will be 22- 30%, with an expected pinion power draw of 6.8 MW. The SAG mill will be driven by dual pinions (4.5 MW motors) with variable speed drives. Mill discharge will be onto a vibrating screen installed to control the particle size of the slurry reporting to the mill discharge pumps. The screened slurry from the mill reports to the mill discharge hopper.

Screen oversize will report to the pebble crushing circuit with optional diversion to a local scats bunker for disposal. A cross-belt magnet rejects mill ball remnants from the conveyor prior to crushing. A metal detector and diverter gate provides protection to the tertiary cone crusher. Crushed pebble material is conveyed back onto the mill feed conveyor.

Duty/standby mill discharge pumps have separate suction lines from the mill discharge hopper. Pneumatically controlled knife gate valves on the suction and discharge pipework allow pump changeover and maintenance while the system is operating.

The slurry in the mill discharge hopper is pumped to a 14-outlet cyclone cluster. The cluster will have 12 x 400 mm cyclones installed (10 operating and 2 standby). The cyclone underflow recirculation is designed as a nominal 350% of new mill feed with an overflow P_{80} of 115 µm to the CIL circuit.

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Cyclone underflow is split with a fraction to the gravity circuit and balance returning to the SAG mill feed chute.

Gravity Recovery Circuit

The gravity feed stream is directed over the two scalping screens operated in parallel to enable continuous operation of the gravity concentration. Undersize from the scalping screens is directed to respective 40" centrifugal gravity concentrators. The concentrators will continually operate on a 45 minute cycle, with the cycles staggered 15 minutes apart. Each unit will remove approximately 40 kg of concentrate per cycle which is transferred as gravity flow to the intensive leach reactor in the goldroom. Concentrator tails slurry is routed to the mill feed boil box with an optional split to the mill discharge hopper for mill density control.

The intensive leach reactor is a batch process, leaching the gravity concentrate to dissolve the contained gold into solution. The pregnant liquor from the reactor is pumped to the dedicated electrowinning module in the goldroom. The barren leach slurry is returned to the mill circuit.

The gold collected from the gravity circuit cell will be smelted separately using the calcine oven and smelting furnace to allow for separate metallurgical accounting of the gravity circuit. The final doré gold bars will be stored in the goldroom safe. Around 2/3 of the available gold is recovered via the gravity processing.

Carbon in Leach Circuit

Fine slurry from the cyclone overflow is directed to a pair of trash screens which normally operate as Duty/Duty. Oversize material from the trash screens will normally be returned to the SAG mill feed chute. The chutework will have dual outlets to allow dumping of trash to a bin at ground level if required.

Trash screen underflow will be directed to the first carbon in leach (CIL) tank, or the second tank if the first tank is offline for maintenance. An HCN monitor is installed in this area to provide warning of toxic emissions should these arise from trash screens or cyanide addition to lead CIL tanks.

The carbon in leach train will comprise 7 tanks, 14.3 m in diameter and 16.3 m high (2,538 m^3 working volume), providing a total slurry residence time in the leach circuit of 24 hours with a slurry density of 43% solids by weight.

Each CIL tank will be fitted with a pumped inter-tank screen. Carbon will be held in all tanks except the first (leaching) tank where the inter-tank screen will act as a safety screen to

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prevent oversize material entering the carbon tanks in the event of cyclone roping or a trash screen failure.

All tanks will be equipped with hollow shaft agitators to facilitate oxygen injection through the shafts. Only the first three operating tanks will normally be sparged with oxygen.

CIL tanks will be equipped with recessed impeller carbon transfer and recovery pumps. These will be used to advance the carbon, except for tank 2. The pump in tank 2 will pump slurry over the carbon recovery screen to recover loaded carbon from the circuit.

A carbon safety screen below the outlets of tanks 6 and 7 will be located adjacent to tank 6. This screen will collect any carbon that escapes from tank 7 (or tank 6 if tank 7 is off-line) into a drum for manual reintroduction to the circuit.

A 5-tonne travelling gantry crane mounted above the tanks will facilitate removal of the intertank screens, cyclone clusters and agitator gearboxes for maintenance.

The tanks will be constructed on concrete ring beams within a concrete bunded containment structure equipped with a sump pump. The bunded structure around the tanks is not designed for full tank containment because CIL slurry is below the PG III toxicity range, so is not classified as Dangerous Goods (DG). Minor spillages are fully contained, and in the unlikely event of a large spill, it will be contained by the confined surface drainage system around the plant and collected in an Event Pond nearby. Solids will be recovered by mechanical means e.g. FEL.

Elution Circuit and Goldroom Operations

The elution batch size is 6t of carbon. The carbon removed at the recovery screen is transferred to a wash hopper. The acid wash and rinse cycles are performed as required in the 15 m^3 rubber lined wash hopper located beneath the recovery screen.

Carbon stripping is implemented in a Split AARL system. Following the rinse cycle the carbon in the storage hopper is dumped into the elution column with a volumetric capacity of approximately 14 m^3.

The strip solution is dosed with sodium hydroxide and sodium cyanide, then preheated by the heater system to a temperature of 130°C. The hot strip solution will then be introduced to the bottom of the elution column.

After approximately one “bed-volume” of caustic cyanide solution has been passed through the elution column to definitive soak the carbon a further five bed volumes of hot rinse water will be passed through the column. A further one bed volume of cold rinse water will be passed through the column after the hot rinse water to cool down the carbon. The

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definitive soak and rinse water will be delivered via the eluate filters to either of the two pregnant solution tanks via a recovery heat exchanger to recover heat to the strip solution from the eluate.

Elution of the gold from the carbon is expected to take about 7 hours. Pregnant solution will be collected into either one of two pregnant solution tanks. The solution tanks have a pregnant solution pump which will feed the dedicated electrowinning cells 1 or 2. The return barren solution from the electrowinning cells will be returned to pregnant solution tank 1 or 2.

Steel wool cathodes from electrowinning cells will be oxidised in a calcine oven. The product from the calcine oven will be direct smelted using fluxes in a diesel-fuelled barring furnace to produce doré bars which are weighed and then stored in the gold safe. Doré produced from gravity gold is smelted separately for metallurgical accounting purposes.

On completion of the elution cycle barren carbon will be pumped from the elution column to the regen kiln storage hopper above CIL tank 7. From this hopper the carbon is either regenerated in a kiln or dropped directly into CIL tank 7 by gravity. The barren carbon will be de-watered over a small sieve bend screen above the storage hopper. The kiln feed chute drains free water from the carbon prior before it the kiln. Kiln off-gases are used to dry the carbon before it enters the kiln. The regenerated carbon feeds directly by gravity into CIL tank 7, with the option to feed CIL tank 6.

Tailings Disposal

Underflow slurry from the carbon safety screen flows to the tails hopper. Two tailings discharge pumps in a duty/standby arrangement transfer slurry from the tails hopper via HDPE pipelines to the tailings storage facility (TSF). Pumps are equipped with actuated inlet and discharge valves to allow changeover and maintenance with the plant in operation. The proximity and elevation of the TSF are such that only a single stage of pumping is required with PN16 delivery lines. Process and raw water can be supplied to the tails hopper to control tailings slurry density or for tails flushing.

A cyanide gas monitor will be installed above the tails hopper. If excess HCN is detected the monitor will energise a local siren and beacon to warn operators in the vicinity and alarm in the PCS. The alarm and beacon will also be energised whenever spent acid is being transferred from the elution area as this stream increases cyanide gas risks.

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Reagents

Lime

Quicklime will be delivered to site by road tankers and transferred to the silo. Current testwork indicates that a 200t lime silo will provides storage of ~24 days demand. Delivery trucks are self-unloading using on-board compressors to deliver lime through a pneumatic transfer line. A dust collector on the silo will contain dust emissions during the inload process. Maintenance access will be provided to the bin top dust collectors.

A bin activator will mobilise the quicklime to discharge from the silo via a rotary valve. The silo will deliver lime directly onto the mill feed conveyor with feed rate proportioned to the mill feed conveyor tonnage.

Cyanide

Cyanide will be delivered to site as solid briquettes in bulky-box packaging. The boxes are discharged within a closed cabinet, and briquettes are dissolved in an agitated tank below. The solution is transferred to horizontal storage tanks. All cyanide handling is fully contained within a Dangerous Goods bund, sized to contain the total volume of all cyanide tanks.

Duty/standby cyanide circulating pumps will circulate cyanide solution through the plant ring main with a constant pressure return to the storage tank. A cyanide dosing pump will transfer cyanide from the ring main to the stripping plant as required.

Fixed HCN gas monitors will alarm if high gas levels are detected in the cyanide mixing and storage area.

The cyanide bund has a collection sump to recover spillage. The cyanide sump pump will recover minor spillage and collected rainfall and deliver it to the trash screen underflow stream.

Caustic Soda (Sodium Hydroxide)

Caustic soda pearl (sodium hydroxide) will be delivered to site in bulk bags. The bags are lifted by the caustic bag hoist and broken over a bag splitter into the agitated caustic mixing tank. The mixing tank is sized at 15m^3. Raw water is added to achieve a solution strength of 50% w/w. A separate 20 m^3 storage tank is provided.

A dosing pump draws from the storage tank and delivers caustic to the stripping plant. The dosing pump is protected with a pressure relief valve and a return line back to the mixing tank.

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The caustic mixing and storage tanks will be contained within the same concrete bund as the cyanide facilities.

Hydrochloric Acid

Concentrated (32% w/w) HCl will be delivered in liquid form in 1 m^3 bulk boxes which will be stored in a dedicated acid-resistant bund in the reagents area. An acid dosing pump will be used to combine the HCL with dilution water to make a 3% w/w HCl stream for the carbon wash hopper.

The concrete containment bunds surrounding cyanide, caustic and acid tanks will comply with the DG statutory requirements, including separations as required.

Activated Carbon

Activated carbon will be delivered in 500 kg bulk boxes transported to the site in shipping containers. It will be stored in original shipping containers or the reagent store for protection from the weather. When make-up is required, a 500 kg package will be hoisted up to the top of CIL tank 7 with the OHT crane and broken directly into the tank.

Oxygen

Oxygen gas will be manufactured on site using a small pressure swing adsorption (PSA) plant. The plant will have a nominal capacity of ~0.05 t/d. Plant compressed air would provide a backup if required.

Grinding Media

Grinding media will be a 100 mm and 125 mm steel balls delivered in 200 litre drums each holding a tonne. The supply chain will utilise the normal site freight delivery system and schedule. The annual consumption of grinding media is expected to be 3,250 t. It is envisaged that the site stock capacity for grinding media will be 270 t or 30 days plant consumption.

Plant Process Control Systems

The automation and control of the plant will be generally a low-level of complexity with the option of local or remote control and remote monitoring from a central control room. The Plant Control System (PCS) will be programmed in accordance with the project P&IDs and Control Philosophy. The system will be configured such that modifications, troubleshooting and fault finding will be able to be carried out by maintenance personnel without extensive training.

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The PCS will consist of a programmable logic controller (PLC) network and supervisory control and data acquisition (SCADA) system.

Electrical Systems

Plant Power Distribution

Five 11kV and 415V Switchrooms will be provided in the Plant as follows:

- Plant 11kV switchroom
- Crushing Switchroom
- Milling Switchroom
- Metal Recovery and Reagents Switchroom
- Services Switchroom

The plant 11kV switchroom will be fed by an underground cable from an 11kV switchboard at the 90kV substation. The plant 11kV switchroom will also house the VSD for the SAG Mill and an 11kV switchboard which will feed 11/0.415 transformers located to each switchroom.

Services

Compressed Air

Plant air and instrument air will be supplied from two air compressors operating in duty/standby mode located near the CIL area. The plant air compressors feed the plant air receiver. Air for instrument services will be dried and filtered before reporting to the instrument air receiver. A separate compressor will be located near primary crushing providing plant air to that area.

Raw Water / Fire Water

Raw water will be supplied from the river water pump station located adjacent to the water diversion dam. Transfer pumps will deliver river water to the raw water pond with a required rate up to 460m^3/hr. Raw water will be stored in a lined pond holding ~12,000 m^3 in addition to a 4 hour reserve for fire-fighting service.

Raw water will be drawn from the pond via two Raw Water pumps installed in a duty/standby arrangement for use in gland water, fire water and other clear-water applications. A dedicated diesel engine driven fire water pump set provides backup for the

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fire service duty in case of electrical failure. The Raw Water pond will have an overflow into the Process Water pond.

Process Water

Water will be delivered to the Process Water pond (18,000 m^3 capacity) from:

- Raw Water pond overflow;
- TSF decant return water; and
- Fill line from the Raw Water pond via the raw water pumps. This pumped transfer will only be used if other sources fail to maintain a suitable pond level.

Process water will be discharged from the pond to plant demands via two process water pumps in a duty/standby arrangement. Process water demand is designed at 557 m^3/hr.

Potable Water

Potable water for the plant area will be sourced through a pipeline from the accommodation village.

General plant usage is estimated at 10m^3/d. A 50m^3 lined and enclosed storage tank will be used for plant potable water. Water will be treated with minor sterilisation and distributed via plant potable water pumps to safety showers and in ablutions, offices and workshops, with a branch to the mining contractor's area.

To prevent contamination of the potable water supply, there will be no potable water service points in the plant areas or any direct connection of the potable water system to process equipment.

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12. Project Infrastructure

Site Access

Road access to the site from Daloa is currently via the sealed A6 highway followed by unsealed roads. Tietto will be responsible for building and maintaining the access road into the site.

The project will upgrade the unsealed road access to plant site with improved geometry, width, drainage and laterite surfacing. The improved Site Access Road (19 km long) will run from the A6 motorway West of Daloa to the Abujar project area. It comprises two 3.5 m width running lanes with a 1 m shoulder each side, for a total formation width of 9 m.

At one location along the Site Access Road, a combined culvert and floodway structure will be required. The floodway will comprise low flow culverts and a trafficable floodway structure to convey all runoff resulting from a 1 in 100-year average recurrence interval storm event, over and above the flow through the culvert.

The road will be constructed with in-situ material where possible. Borrow locations will be identified along the road route to provide suitable road-base as required. This route will be used for material delivery during construction, workforce commuting, and supply of fuel and other consumables during operation.

A route survey has been commissioned to identify any transport constraints on project deliveries from Abidjan port right through to the site.

Site Roads

A network of roads will provide access to and around the Abujar Process Plant and the accommodation village. Separate Heavy Vehicle roads will provide access between the mine pits, the Mining Contractor's hub, ROM pad and waste dumps. Haul roads will consist of two 12m width running lanes, with a 1.5m high safety bund on each side for a total formation width of 30m. These will be started as part of the mine development and extended/modified as the mining operation progresses.

Accommodation Camp

Tietto will construct a fully supported 270 person accommodation camp, located adjacent to the process plant. The camp will be operated by a catering and accommodation service provider on a long term operating contract. The camp contractor will be responsible for all operations at the accommodation camp including catering, cleaning and maintenance activities.

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The accommodation camp will be constructed prior to the commencement of process plant construction in order to utilise the camp to accommodate construction personnel.

The camp will be composed of the single ensuite rooms in blocks of 20. These will be constructed in-situ using site-manufactured concrete blocks. Central facilities will cover food storage and preparation, security, messing, laundry and recreation facilities. A section will be allocated to site services with water treatment, sewage treatment and a back-up generator.

The camp will be supported by the following facilities/buildings:

- Kitchen/diner building;
- Laundry building;
- Recreation building;
- Swimming pool;
- Dry storage building; and
- Security office.

Power and water services are provided from the process plant to the village services compound. Power will be provided from an 11 kV overhead powerline. Potable water will be pumped from the treatment unit at the process plant. It is stored in local tanks and distributed via underground piping after further sterilisation.

Administration and Plant Buildings

Administration Office

The main administration building will be located adjacent to the entrance to the plant area. It will be a pre-fabricated flat panel construction of approximately 800 m2 set on a concrete slab, providing offices for:

- General Manager;
- Owners Mining Team (Mining Superintendent, Surveyors, Mining Engineers, Geologists);
- Process Plant Management (Processing Manager and superintendents, metallurgists, engineering, maintenance, projects);
- Occupational Health, Safety & Environmental personnel;

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- Commercial & Administration personnel.

The administration building will have a spare office for visiting managers, a meeting room, male and female ablutions and kitchen facilities. The administration offices will be fitted with split system air conditioners throughout. The building will also provide an area for the cleaning office/supply area. A breezeway will connect this office to the maintenance crib room and toilets.

A carpark (approximately 30 bays) will be located adjacent to the main entrance of the administration building.

First Aid/Medical Room

Adjacent to the administration office will be housed, the safety and first aid officer, who will also perform security functions. Vehicles will enter the plant site immediately adjacent to the administration building next to the first aid office. The First Aid area will have a parking ramp and veranda for the ambulance.

Maintenance / Plant Workshop

The plant workshop building is a clad structural steel building divided into four sections with a total floor area of about 500 m2. It will include a secure small storage area, with four bays dedicated welding, mechanical/fitting, vehicle maintenance and electrical/instruments respectively. Environment conditioning will include fixed mechanical ventilation and portable fans as appropriate. When necessary, objects will be moved in/out by mobile crane or forklift through large roller doors.

Plant Store

The plant store will be located adjacent to the internal access road for easy access by trucks to facilitate the unloading and receipt of goods. The building will be divided into receiving and “holding” areas. The receiving area will have an annexed office space for warehouse and supply staff. The “holding” area will comprise of both high-rack shelving and open areas. The building will have eave height in excess of 6m to allow for forklift operation within the building. Fixed and portable fans will provide ventilation. An adjacent hardstand area will be included for forklift and crane operation. There is an adjoining open yard for secure storage of larger items.

Delivery vehicles will report to the security gatehouse for inspection before and after deliveries have been made.

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Reagent Storage

The reagent storage building will be located close to the plant-site entry. The building will be fully enclosed to provide weather protection for reagent bulk bags (e.g. caustic and cyanide). The building will have an eave height in excess of 6m to allow for forklift operation within the building. Areas will be designated and marked for storage of specific reagents to comply with Dangerous Goods (DG) requirements. A loading dock will be provided to allow unloading of containers on road trucks as an alternative to removing the entire container by 60t crane.

Plant Area Ablutions

The plant area ablutions will be a site-assembled building containing male and female toilets and hand washing facilities. The building will have a floor area of about 130 m2. Additional hand washing facilities will be arranged outside the toilets adjacent to the crib room. It is planned to complex together the crib room and the ablutions, with a shaded decking linking them.

Laboratory and Core Shed

The laboratory building is for the metallurgical and environmental laboratory functions and the metallurgical sample preparation area. The laboratory will be a pre-fabricated construction set on a concrete slab.

The building will house the office, atomic absorbtion machine room, weighing room and fume cupboard, a general laboratory room and sample preparation area with working benches and fume cupboards. A separate area will be constructed for dry sample preparation to avoid transfer of vibration to the wet lab precision equipment.

A separate core shed is provided to receive and store exploration drill cores and grade control samples.

Control Rooms

The crushing control room is a single room modular building, supported on the steelwork of the primary crushing station, to provide visual surveillance of the primary crusher. The control room will be insulated and air conditioned with lighting, power and windows. A communications link will be established between the Crushing control room and the CIL control room. CCTV coverage in the crushing area will also allow monitoring from the CIL control room.

The main plant control room will be situated in CIL on the top-of-tank steelwork, overlooking the SAG mill on one side and the CIL circuit on the other. It will be an 8.4 m x 3.3

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m module, air conditioned and fitted with windows along both long sides. The building will be divided into two rooms. The larger area of 5.8 m x 3.3 m will be the main plant control room. A 2.4 m x 3.3 m section will be fitted with laboratory sinks and cupboards for use as a titration room.

MCC (Switchroom) Buildings

Electrical switchrooms will be located near the crushing facility and the SAG mill. The layout of these switchrooms will be finalised during detailed engineering. Switchrooms will all be flat-pack modular structures assembled and fitted with electrical panels on-site.

Plant Wash-down Area

The plant washdown area next to the plant workshop consists of a 32 m2 washdown slab and waste oil management facility. The washdown system will be made up with raw water. The washdown slab will incorporate a silt trap and oil trap separator. Cleaned water will be recycled for washdown use or disposed into the tailings dam via the tails hopper.

Kitchens and Dining

Two kitchen/dining rooms will be constructed near the plant and administration building areas to provide shift meals to working personnel. The meals will be delivered and prepared by the camp operator. The two facilities will each in total seat around 120 personnel. Large fly-screened windows will provide ventilation and ceiling fans will provide circulation.

Plant Water Demand

The plant water demand, based upon a tails slurry density of 42% w/w and mill throughput of 438 tph of fresh ore will be approximately 635 m^3/hr. It is estimated that around 30% of this water will be returned to the process water dam via the decant return water pump installed at the TSF. This return rate will be affected by seasonal variations. The corresponding raw water demand from the river will be ~460 m3/hr. Decant water return from rainfall catchment is expected to increase annually as the TSF expands and by 2025, the plant water balance is expected to be positive. Plant operation will be adapted as the water balance shifts to minimise the amount of TSF supernatant to be discharged to the environment.

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Raw and Fire Water System

Raw water is supplied from the water storage dam and pumped to a 12,000 m3 Raw Water (RW) pond. The RW pond is designed to provide 24 hours of usage at 460 m3/h, plus a dedicated reserve supply for fire-fighting service.

The RW will primarily be used for screen spray water, reagent mixing and wash down. The RW pond also overflows providing a make-up stream to the Process Water pond. RW will be distributed via a piping network which also supplies fire hydrants and hose reels. The duty/standby Raw Water pumps will service normal process operations. Refer to Section 10.15 for description of the fire response facilities.

Process Water System

Process water (PW) is supplied from the 18,000 m3 process water pond. The PW pond is designed to for approximately 28 hours of supply capacity based on the estimated total demand of 635 m3/h. A duty/standby pump arrangement will distribute the process water via distribution routed primarily to the milling and gravity areas.

Tailings Return Water System

Water accumulated in the tailings dam from the drainage of plant tailings slurry, toe drain and seepage pump returns is recovered via the decant return water system. Decant return water is pumped to the process water pond via the decant return water pump housed in a decant caisson set inside the TSF.

Potable Water System

Treated potable water is supplied from a water treatment plant at the village fed by a local borefield. The village treatment facility delivers potable water to a storage tank at the plant. A local treatment plant provides re-sterilisation and distribution. At the plant site, potable water is distributed to the safety shower system and to infrastructure buildings including the MCA. For the plant safety shower system, the distribution pumps will be supplemented with power-fail pneumatic accumulators.

Plant Sewerage

A sewage treatment system located at the process plant site will be installed to service the plant buildings and mining services area. Sewage from the MCA will also be transferred to the treatment facility at the plant via a pump station. Clarified treated effluent will be discharged to the TSF tails stream.

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Power Supply

Power for the mine will be supplied from the 90kV Daloa substation located approximately 30km away from the site. A new 90kV bay will be installed at the Daloa substation and a new 90kV transmission line run to a new 90/11 kV switchyard installed adjacent to the process plant. The supply voltage will be stepped down via a transformer within this substation. An 11kV switchroom will be installed adjacent to the 90kV switchyard and will house an 11kV switchboard that will provide feeders to the Plant 11kV switchroom and the 11kV overhead transmission lines. Estimate of annual power consumption is shown in Table 48.

Table 48: Process Plant and Infrastructure Electrical Energy Demand

Plant Area	Estimated Annual Consumption (GWh)
Primary Crushing	2.3
Milling & Classification	69
Leaching, Adsorption, Detox	7.0
Tailings Storage	0.4
Metal Recovery & Refining	0.8
Reagents	0.1
Services	2.6
Infrastructure	0.7
Remote Services (Village & Mining)	4.6
Total	87

Plant Electrical System

The electrical system for the Project is based on 11kV distribution and 415V working voltage. System frequency is designed at 50 Hz. From the 90/11kV switchyard, the 11kV supply is reticulated from the plant feeder to the process plant 11kV switchboard. Remote loads such as the mine services area, camp, and tailings dam loads will be fed via overhead transmission lines. The main process plant distribution will include five switchrooms. Outdoor switchboards will be installed at the tailings dam facilities. An emergency power generator will be supplied at the Switchyard switchboard (2000kVA).

Medium Voltage Switchgear

The indoor 11kV switchboards will be a withdrawable design. All 11kV switchboards are supplied with protection, metering and earthing facilities. The design fault level and circuit breaker ratings adopted are:

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- 11kV switchboard busbar 2000 A, 25 kA at 1 seconds
- 11kV incomer circuit breakers 2000 A.
- 11kV feeder circuit breakers 630 A.

Protection will be provided by microprocessor-based protection relays.

Low Voltage Switchgear

The low voltage motor control centres (MCC's) will be housed in the low voltage switchrooms. Construction of all low voltage MCC's will be form 4b segregation, Type 2 coordination. Starters in MCCs will be of demountable design and main incoming circuit breakers will be of withdraw-able design complete with protection. Motor starters up to 90 kW will be equipped thermal overload protection and electronic protection will be used for all larger drives. The LV MCCs will supply power to the low voltage motors, low voltage variable speed drives and low voltage distribution boards.

Substation Buildings

All site electrical switchrooms are designed to house the LV MCC's, MV switchboards, Variable Speed Drives (VSD) and Process Control System (PCS) hardware. The switchrooms will be sealed for dust ingress and be complete with air conditioning, Uninterruptible Power Supplies (UPS) and fire detection systems.

The switchrooms will be mounted on 2m high steel pedestals to facilitate cable installation below the switchroom and bottom entry connection to the internal equipment through gland plates. Entry to the rooms will be via stairs and access platforms constructed at each end.

Power Transformers

All 11kV / 415V distribution transformers will be of ONAN (non-fan forced) cooling configuration and vector group Dyn11. Fire rated concrete walls will be constructed around the pad mounted transformers. Distribution transformers will be rationalised in the electrical design to minimise spares holding requirements.

Variable Speed Drives

Low voltage variable speed drive (VSD) units will be supplied from the LV MCC's. These units will be installed along the internal wall of the relevant LV electrical switchrooms. LV VSD's will be hardwired to the local PLC's for control and monitoring.

Electrical Field Installation

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Cables up to 25 mm^2 will be PVC insulated and larger cables will be XLPE insulated. VSD cables will be three phase and three earth cables symmetrically laid out within an overall shielded cable. In general, cables within the plant area will be installed above ground on cable ladders and follow the pipe racks wherever possible. Cables to equipment in open areas such as process water pumps will be partially installed underground in conduits for ease of access and to minimise clashes with pipework.

Cable ladders will generally be laid horizontally, with vertical ladders only used in areas where regular spillage may occur. Hot dip galvanised cable ladder will be used. Ladder routes will in general follow the mechanical pipe racks. Cables of different voltage groups will generally be installed on separate ladders. Where they need to be installed together, segregation in the form of barrier strips will be provided.

Sun cover will be provided over the top level of all cable ladder to provide protection against UV damage and plant spillage.

Plant lighting will be designed in a fit for purpose manner to suit the operational requirements of the plant. LED luminaires will be used to maximise light spread and energy efficiency. Enclosed areas and staircases will be fitted with traditional swivel lighting poles. Vibration resistant fittings and auxiliaries will be used where required. Flood lights and high-bay luminaires will be provided for perimeter, general area and workshops lighting.

UPS maintained emergency light fittings will be installed as required throughout the plant to ensure that personnel can safely negotiate obstacles in substations, control rooms, stairways, access ways and safety shower locations.

Earthing System and Lightning Protection

The earthing system will be designed in accordance with relevant Australian Standards. The following method of system earthing will be implemented at various voltage levels:

- 11kV Earthed via earthing transformer or NER at 90 / 11kV Substation
- 415V Solidly earthed system / Multiple Earthed Neutral (MEN) / T-N-C-S

Earth stakes and grading rings will be provided around the transformer compounds to mitigate against step and touch potential risks.

Lightning protection will be provided for buildings and structural steel as appropriate. Lightning protection systems will have their own independent earthing electrodes and will be interconnected with the power earthing system.

Power Factor Correction

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Power factor correction will be provided to keep the power factor within the limits set by the supply authority. Power factor correction will be done at 11kV and connected to the switchyard 11kV switchboard.

Diesel

A self-bunded diesel fuel storage tank of 75,000 litres will provide fuelling for the ROM pad FEL, light vehicles and plant vehicles. Mining fuel storage is within the Contractor's area. A fuel supplier will be engaged to deliver diesel via road haulage from Daloa to cater for the operational needs.

Communications

Conventional VHF radio system will service site communications with hand-held radios providing separate channels for mining, process plant and an emergency channel.

The plant data network will use optic-fibre connections. A dedicated link to the new mobile network tower will provide a portal to the internet for corporate data and VOIP services.

Plant Security

The overall project arrangement has been designed to contain the overall project area and to minimise the secure area to be covered by security personnel and systems. Design and installation of project security systems will be provided by a specialist group and will consist of:

- Mining lease access control;
- Swipe in / swipe out access control;
- Fencing (double and single layer) and electronic security gates;
- Electronic surveillance including CCTV;
- Physical and visual barriers;
- Lighting;
- Patrols

Listed below are additional security allowed for the gold room:

- Cameras within the Gold Room;
- Security rack mount panel including encoder and UPS;

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- LED Monitor;
- Alarm Panel and keypad;
- Infrared beams & motion detectors;
- Siren/Strobe;
- Card Readers and Cards;
- Magnetic Lock for Gold Room door

The gold room will be fitted with an access control system and intruder protection system CCTV. High resolution colour cameras in protective housings will be installed to provide surveillance and recorded images from the following gold room locations:

- Entrance door;
- Bullion safe;
- Electrowinning area;
- Furnace;
- Intensive leach reactor.

A CCTV camera will also be installed for surveillance above the gravity circuit screen. All surveillance cameras will report to a monitoring and recording station in a secure area of the administration building. If required, information can be transmitted from the security system to other areas of plant or externally, via the fibre backbone installed for the voice and data communications network.

Fire Emergency Response Facilities

Fire hydrants and hose reels in accordance with AS 2419 and AS 2441 will be installed in the process area. The firewater system will be a dual-purpose raw water/fire water ring main with water supply sourced from the raw water pond. The ring main is maintained at a constant pressure by the raw water pumps. A diesel fire water pump is installed to maintain pressure within the fire water ring main in the event of a power interruption.

A fire truck, complete with a water supply tank, pump and hose reel will be available onsite for use during fire emergencies, including locations away from fixed infrastructure.

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A diesel fire pump skid drawing from the raw water storage is provided at the village. There is an underground distribution piping system to supply hydrants and hose reels through the area.

Mining Contractors Area

A mining contractor's area will be established adjacent to the plant infrastructure area and connected into the mine HV access routes. The area is approximately 220,000m^2 within a general security perimeter fence. The mining contractor's area will be serviced with power, raw and potable water from the process plant area at a designated battery limit at the boundary of the area. Washdown water will be clarified for re-use within the area.

The mining contractor will establish facilities within this area which will include, workshops, warehouse, ablution blocks, offices, washdown area, fuel and waste oil management facilities. The washdown slab will incorporate a silt and oil trap. An oil separator will remove any contaminant oil from the waste water before it is recycled into the washbay facility, with excess water used for dust suppression. The mining contractor will manage the safe removal of waste oil by approved parties.

The treatment and disposal of sewage from the contractor's area will be through the process plant sewage treatment facility. A pump station will be installed in the mining contractor's area to transfer the sewage via an underground line.

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13. Project Implementation

The implementation plan sets out the phases, contracting / procurement strategies and assigns functional accountability and authorities. An Engineering, Procurement and Construction Management (EPCM) execution strategy has been selected for project delivery. The EP will be contracted to an EP Engineer and Construction Management will be performed by Tietto Minerals (Tietto).

As a minimum the design, construction and operation of the Abujar Gold Project will conform to the requirements of the various regulations in Côte d'Ivoire, requirements within Australian Standards, ISO Standards and Tietto internal standards. These minimum standards will be applicable only if they are above the minimum standards of any local regulations or no local standards or regulations apply.

A goal for the execution phase of the project is the attainment of the best safety record possible. To accomplish this, all contractors and involved personnel will be required to adhere to defined safety objectives and standards developed by Tietto and advised by their consultants. These will include all appropriate safety requirements in Côte d'Ivoire and will adopt as a minimum the safety standards required of any similar project in West Africa or Australia.

Project Phases

The future key project phases considered sequentially in the implementation schedule include the following:

- Key project approvals being progressed concurrently;
- Final Investment Decision;
- Financing;
- Tendering and Appointment of EP Engineer; and,
- Project Delivery:
  - ✓ Engineering Design;
  - ✓ Procurement (including award of key contracts);
  - ✓ Construction through mechanical completion;
  - ✓ Commissioning;
  - ✓ Ramp up and handover to Operations.

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Project Delivery

EPCM project execution will commence after successful formal approvals to proceed. Engineering and Procurement of plant and infrastructure will be outsourced to an Engineer (EP Engineer) to provide comprehensive EP services, supported by those subject matter specialists generally drawn from participants in the BFS. Construction Management will be performed by Tietto. A work breakdown structure is provided in Section 11.7 to delineate the works to be completed by the EP Engineer and which works will be contracted separately by Tietto.

Project Organisation Structure

Figure 32 shows the project organisation chart. The EP Engineer's Project Director will oversee project implementation and provide oversight for the project, supported by an EP Project Manager and responsible to the Tietto Chief Operating Officer (COO). The EP Project Manager will be supported by Engineering Design teams. The Tietto Construction Manager will be supported by Construction Supervisors and will report directly to the Tietto Chief Operating Officer. For the project development phase the Abujar General Manager will report to the Tietto Minerals Managing Director and be supported by site senior management in the Mining, Geology, Processing, Admin/Commercial and OHS&E departments.

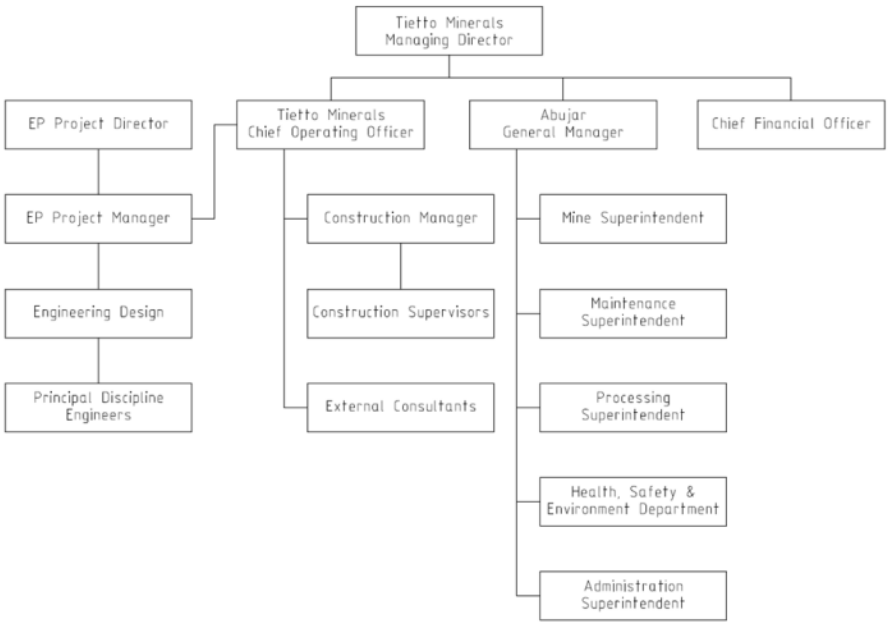

Figure 32: Project Organisation Chart

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Administration

Tietto will implement overall project administrative controls internally within their corporate office located in Perth, Australia. To support the Perth corporate office, Tietto will utilise their established administrative office in Abidjan, Côte d'Ivoire. The project administration functions – accounting, finance, personnel, supply, logistics and government relations functions – will be handled by Tietto in either the Perth corporate office or Abidjan administrative office.

Tietto will establish work authorisation reporting structures within the project to remain informed of project progress and enable corrective and preventative actions to be undertaken to achieve the project charter should situations arise where such action is necessary. Tietto will also establish administration, safety, occupational health and personnel policies for the project implementation and the same policies and procedures will be further modified and used for the operational phase of the project.

Tietto will raise company orders for work to be undertaken. The value of those orders will be recorded into the project accounting system to be established at their office together with the value budgeted for the order and the variance.

Each month Tietto will produce a project cost report which will identify the expenditure to date, the anticipated expenditure to complete the project, the budget variance to complete the project and the cash flow forecast for the entire project.

In addition, the EP Project Manager will collate weekly short-form reports of the project's engineering and drafting performance against schedule and budget for Tietto.

These monthly reports will provide the company directors and the project financiers with adequate information about the cost and time performance of the project to ensure that funding is available as it is required. The Construction Manager will likewise produce weekly construction reports for the construction scope.

The EP Engineer will undertake the basic project administrative and implementation tasks for the plant and infrastructure development. However, the overall project administration and control will be managed by Tietto.

Payment of employees and contractors will be arranged by Tietto through either the Perth or Abidjan offices. Based upon the reports prepared by the Project Manager as approved by the Tietto Managing Director and following approval by the company's directors and project financiers, each month the company will draw down sufficient funds to pay the projected expenditure for that month.

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Engineering

The EP design engineers will provide design drawings, specifications and procurement documents for the new plant and services.

The plant design and documentation process will commence before the site works. The EP Project Manager will ensure the design engineers provide ongoing support to the construction team throughout the construction period and mechanical and electrical assistance during commissioning.

The major infrastructure components of the project will be awarded to other specialist groups by Tietto Minerals for the detailed design and documentation and QA/QC during construction including;

- Design and construction of HV power supply to Abujar processing plant;
- Design and QA/QC of the Tailings Storage Facility, water storage/diversion dam and access roads.

Procurement

Procurement of major mechanical items will be based upon recommendations received from the EP Engineer. The EP Engineer will prepare the documentation, call for prices and tenders, carry out tender evaluations, negotiate prices with contractors and make recommendations for Tietto's approval.

Limited contracts are proposed (horizontal packages of site-wide scale) as this will allow specialist contractors to work in their area of expertise and reduce cost through higher efficiencies. Wherever possible, lump sum contracts will be sought. It is anticipated that the three major site contracts will be Civil Construction, Structural Mechanical Piping Installation, and HV power supply. Bulk earthworks, and electrical and instrumentation installation will be self-performed by Tietto.

Minor procurement at the construction site will be performed by a clerk based upon requisitions approved by the Construction Manager or delegate in his absence. Tietto will establish authorisation limits to ensure that expenditure is controlled.

All orders raised for the project will be part of a special sequence of orders to distinguish them from other company orders and will be typed directly into the project accounting system. Tietto will establish a procedure to ensure that a separate register of orders is kept, referenced by order number, supplier and order description. These steps will ensure that the orders can be easily referenced in the future for plant maintenance and other purposes.

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Items of major expenditure will incorporate contract terms and conditions appropriate to the level of expenditure. Minor expenditure will rely upon the standard conditions of purchase for company orders. Expenditure greater than US$500,000 will generally be documented as a standard form contract. Australian Standard contracts will be used for contracts awarded in Australia and FIDIC, DIN or ISO standards will be used for contracts awarded in Côte d'Ivoire. Tietto will develop annexures to those as required and as appropriate to the circumstances.

Construction

The Tietto Construction Manager will appoint a team to assist with management of the construction sites at the Abujar Gold Project. Those personnel may be employees, contractors or subcontractors.

Work Breakdown Structure

The works will be divided into broad disciplines for the purpose of delineating the scopes of work as presented below:

- Bulk Earthworks;
- Civil Construction;
- Transport and Logistics;
- Structural Steel and Platework Supply;
- Structural, Mechanical and Piping Installation (SMP);
- Mechanical Equipment Purchases;
- Electrical and Instrumentation Purchases;
- Electrical and Instrumentation Installation;
- Major Pipelines;
- Design and Documentation;
- Security;
- Construction Management;
- Commissioning;
- Accommodation Camp;

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- HV powerlines and HV switchyard;
- Tailings Storage Facility / water diversion design;
- Access Roads;
- Mine Development and Operations;
- Communications;
- Owner's Costs.

Clarifications for the commissioning, camp and plant infrastructure and owners cost are provided below.

Camp and Plant Infrastructure

The fire protection and safety equipment, light vehicles, mobile equipment and workshop equipment will be purchased by Tietto using purchase orders. The camp and plant buildings will be contracted by Tietto to local construction contractors. The security will be tendered by Tietto to local security companies who will provide security personel, Tietto will provide suitably qualified personnel for supervision of the contractor.

Owner's Costs

The Abujar General Manager will manage the owner's management team and will report the owner's costs. As operations management personnel are appointed, they will be allocated responsibilities for particular areas of the owner's cost budget and will report expenditure to the Abujar General Manager.

Scope Change Control

The Work Breakdown Structure defines the baseline scope of the project. Changes to that scope will be managed by an agreed set of procedures that the Abujar General Manager in consultation with the EP Project Manager and Tietto Construction Manager will establish. This will ensure that appropriate authorisations are obtained for proposed scope changes.

The Abujar General Manager will supervise the preparation of Tietto purchase orders. The Tietto administration group will maintain a register of all orders raised, the value of each order, and its current progress and invoice status. All orders will be raised prior to commitments being made and where the order value is unknown, an estimate will be provided.

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Minor scope changes will be addressed informally and authorised as part of the normal contract variation procedure. Significant scope changes, which are likely to have a material effect on the budget or schedule, will be the subject of a brief exception report from the Abujar General Manager to the Tietto Managing Director, outlining the reason for the proposed change, the effect of the change on the budget and schedule and any other information that is relevant.

Commissioning

This work will be performed by a combination of EP personnel, equipment vendors, construction and operations personnel under the management of the Abujar Construction Manager. As sections of plant are commissioned, they will be handed over to the operations group who will become responsible for operating and maintaining that section of the plant. The Tietto Construction Manager will oversee outstanding work lists (punch lists) for sections of plant that are handed over and will require contractors to complete those tasks before final payment is made.

Project Schedule

The project is expected to take 75 weeks to complete from award of the process plant EP contract for an intended practical completion date of October 2022. The following design, procurement and construction activities have progressed to improve project delivery compared to the Pre-feasibility estimated schedule:

- Site Access Road;
- Establish initial water supply;
- Power supply line construction;
- Accommodation Camp Design and Construction;
- Pit diversion dam construction;
- Site Layout and Process Plant Site Earthworks Design;
- SAG Mill Specification, Tendering and Evaluation;

The access road, water supply, power supply and accommodation camp has commenced in order to expand the site workforce to permit mobilisation of the SMP and mine development teams.

Water diversion development has commenced in order to divert river water and prevent surface water interference to development of the mine pit.

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A SAG mill has been ordered and will undergo refurbishment with expected EXW delivery date in Q2 2022.

These works were necessary to reduce duration and this has been reflected in the updated schedule.

Operational Readiness

The Operations team will have an early presence on the site with the mobilisation of operations personnel to site occurring progressively over a 6 month period prior to production. Operations readiness will commence early in the project to initially accommodate the needs of open pit mining and will incorporate infrastructure and the processing plant as the construction program progresses.

The Operations team will manage:

- Open pit mining contract;
- Recruitment of operations and maintenance staff;
- Pre-production training for operators and maintenance personnel;
- Process consumables and reagents contracts;
- Operational support contracts; and,
- Operating and equipment care strategies.

Management of the site will transition to the Operations team as commissioning commences. Construction will contract into an activity within an operating mine site. This will require close monitoring and detailed definition of roles and responsibilities. The objective is to have the Operations team managing the Site before the commencement of ore feed to the process plant.

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14. Operations Strategy

Tietto's operations strategy is to exploit the Abujar project reserves by using bulk tonnage mining methods to feed the purpose built processing plant. The plant will utilize conventional comminution, gravity recovery and cyanide leaching technology (Carbon in Leach – CIL) in order to recover and produce gold doré. The mining and processing activities will be supported by facilities, systems, services and infrastructure that are suitable to the location, broadly based upon equipment and methods used at modern free-milling gold operations within Australia and Africa.

Employment Plan

For this study the following categories of employment are considered:

- Expatriate (salaried) employees (South Africa, Canada, Australia) – housed in the site accommodation village.
- Other salaried African expatriates e.g. Mali, Ghana, Tanzania which have a substantial pool of experienced mine operations personnel. Also housed in the village.
- Côte d'Ivoire salaried employees (non-local) – housed in the project village.
- Côte d'Ivoire waged employees (locals) – bussed by Tietto to/from local centres. The skills and experience of the local communities are limited, but potentially suitable for positions up to ticketed trades employment.

Expatriates will work continuous swings on site followed by an extended break for R&R leave to their place of origin. The swings will be shorter for personnel recruited elsewhere in Africa, and longer for those from Canada, Australia and South Africa. Côte d'Ivoire salaried personnel will work a nominal 3-week cycle, 2 weeks onsite and a week off.

There will be substantial engagement of local CDI employees from adjacent towns with a scheduled bus service covering both 10-hour/day employment (5-day week) and 12 hour/day employment (4 day week). The 12 hr/day personnel will work rotating shifts to provide the requisite cover for continuous cover of positions, whether dayshift only or 24/7. The local employees effectively work either 48 or 50 hours/week.

Expatriate rosters include the implied annual leave provisions within the rotation. For CDI employees, their annual leave is additional to their rostered weeks off. Additional personnel are employed to ensure that critical positions are fully covered for leave absences.

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Site Operations Roster

The mining, processing and maintenance operations will run 24 hours per day, seven days per week. These functions will operate on two 12-hour shifts per day. All planned maintenance will be completed on dayshift except for major shutdowns.

Administrative position covered by village residents will be typically 5 x 10 hour days/week, or 6 x 8 hr days/week.

Functions such as security will be covered by a blend of 12 hr/day village residents and 12 hr/day local wages personnel.

Site Operations Structure and Personnel

The approach adopted in the BFS for all operational areas, other than mining, is the use of directly employed personnel in full time positions. Mining operations will be undertaken by a contracted organisation. Support functions such as bullion transport and access road maintenance etc. will also be provided by external service contractors. Laboratory operation may be contracted but is presently costed as an internal service group. The camp costing covers all residents, whether Tietto employees or contractors.

It is anticipated that five departments will be required to support the mining, operations and maintenance aspects of the operation. Below the General Manager level, personnel can be grouped into Geology, Mining, Processing, Administration/Commercial, and OHS/Environment departments. HR and security for the site and production sits under Administration.

Management

Figure 33 details the organizational chart for senior management. The total workforce in the senior management area is forecast at five persons. These positions represent the functional department heads of the operation.

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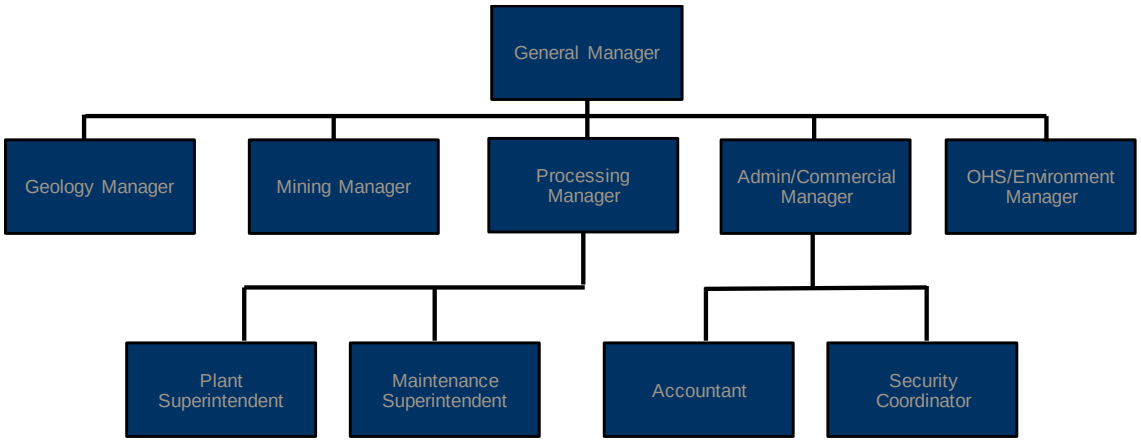

Figure 33: Senior Management Organisation Chart

Processing

The Processing Department is under the control of the Processing Manager. The processing department will be responsible for all process operations from the primary crusher to the gold room as well as the laboratory. Figure 34 details the organizational chart for processing. The total workforce in the plant operations group is forecast at 63 personnel.

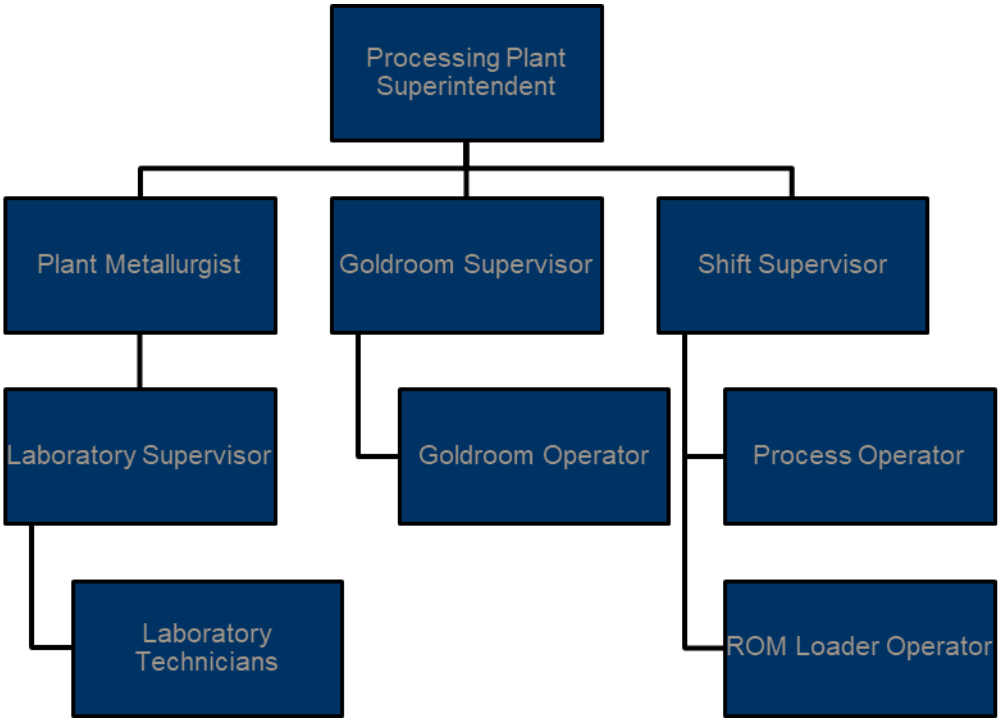

Figure 34: Processing Organisation Chart

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Maintenance

The Maintenance department will come under the control of the Maintenance Superintendent (reports to Processing Manager). The maintenance department will be responsible (in conjunction with the processing department) for all maintenance planning, scheduling and implementation of mechanical and electrical maintenance work. The maintenance organization chart is shown in Figure 12.3.

The maintenance department will nominally work 12 hour shifts on dayshift only with a rostered call out system for night-time breakdown maintenance. The forecast of required workforce in the maintenance area is 48 persons.

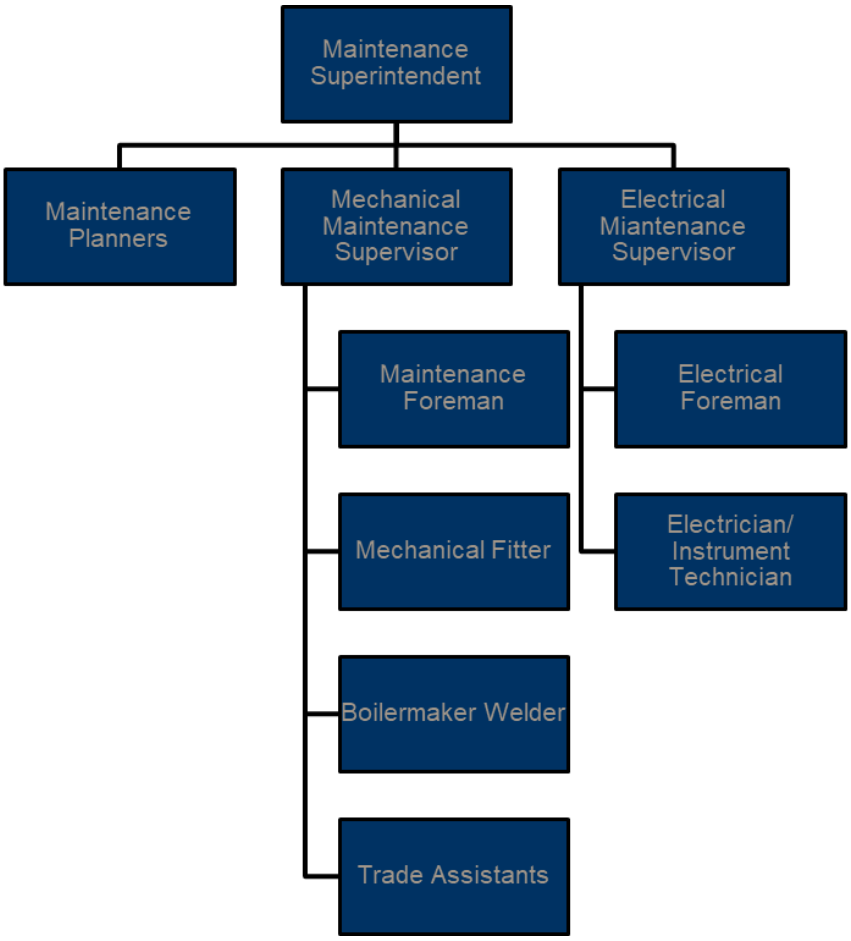

Figure 35: Maintenance Organisation Chart

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Administration and Commercial

The administration and commercial department will be controlled by an Administration Manager. The administration and commercial department will be responsible for the following functions:

- Financial and management reports;
- Accounts payable and receivable;
- Human resources (in conjunction with Department Heads);
- Payroll and accounting;
- Procurement and logistics;
- Warehouse and inventory;
- Security.

The total workforce of the administration and commercial department on site is forecast at 44 persons, plus another 50 in the Security group.

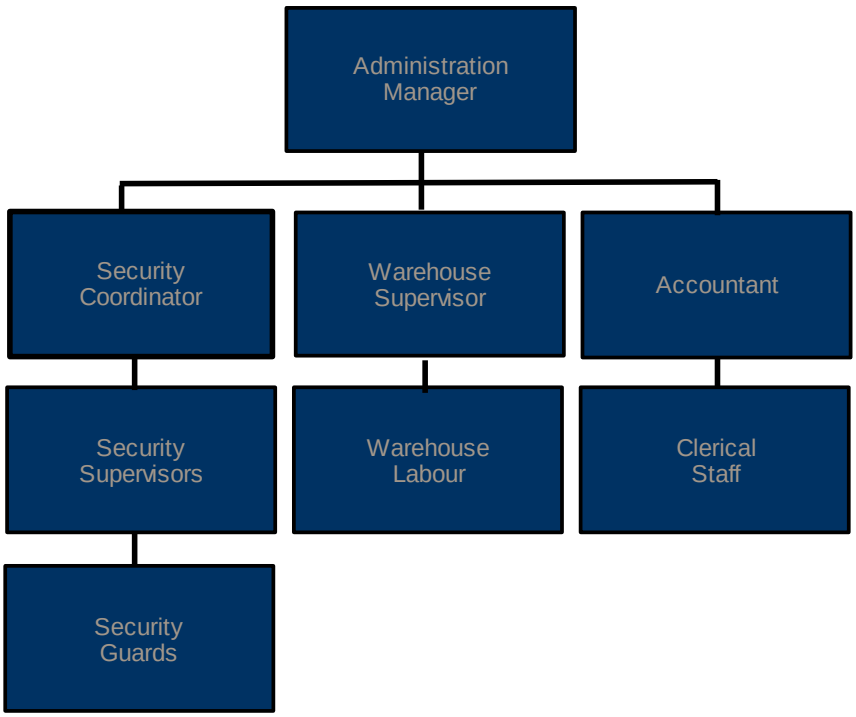

Figure 36: Administration and Commercial Organisation Chart

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Figure 36 details the organisational chart of this department. Tietto will utilise the administration and commercial personnel located in their offices in Perth (Australia) and Abidjan (CDI) to assist with and/or complete some of the above functions.

OHS and Environmental

The OHS and Environment (OHSE) group (forecast at 12 persons total) will be directed by a Manager. Figure 37 details the organisational chart of this department.

The Supervisors will be responsible for the following:

- Community liaison
- Environmental monitoring for compliance to the Environmental Management Plan;
- Rehabilitation and Statutory environmental reporting.
- Occupational health and safety (including training);
- Emergency Response capability
- Nursing post and first aid;
- Management and implementation of the Site Safety Management Plan.

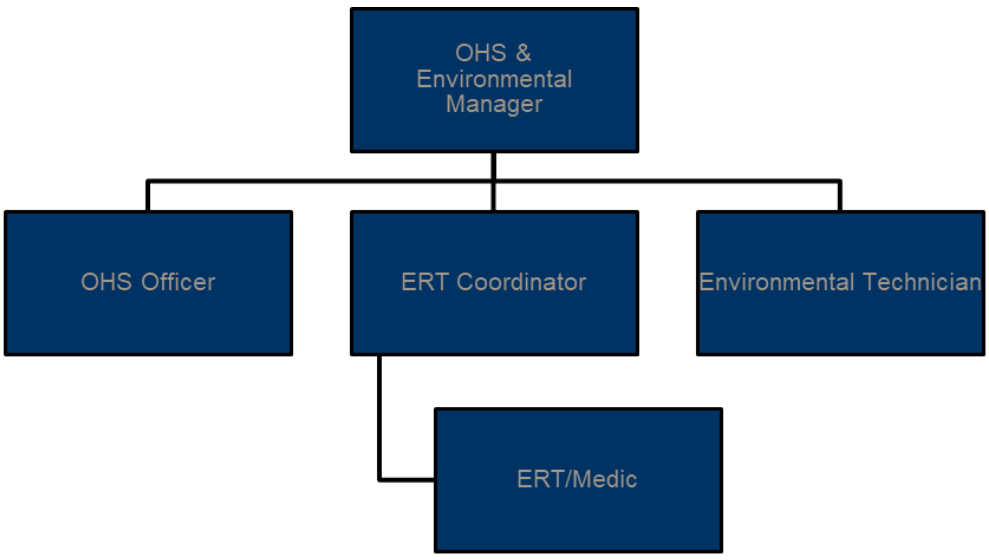

Figure 37: Occupational, Health, Safety, and Environmental Organisation Chart

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Mining Contractor

All mining operations will be carried out by a suitably experienced open pit mining contractor. This contractor will also be responsible for the mining-related construction activities, including Run of Mine (ROM) pad and haul road construction and maintenance during operations. An area to the North West of the plant is allocated for the contractor's park-up and operations support area including the office, crib facilities, heavy vehicle workshop and wash-bay.

The contractor is expected to supply all of its own maintenance equipment and facilities. Scheduled maintenance and repair of all equipment will occur in the mine contractor's workshops. Power and water will be supplied to the contractor's workshop area. In all other respects it is expected that the contractor will cover its own requirements.

Advantages of contract mining include:

- A reduction in initial capital;
- Increased operational flexibility and the ability to change (ramp up and ramp down);
- Access, if required, to specialised services and equipment; and
- Focus of the owner's attention on core business activities - ore resource management and gold recoveries.

Operations Management

The first division of Operations Management is between Mining i.e. ore delivery to the ROM area, and Processing which extracts a marketable gold product from the ore. Processing also looks after the project Infrastructure via the Maintenance group.

ROM Stockpile Management

ROM stockpile management will be shared by the Tietto Mining and Process departments. Processing will operate the FEL to feed the crushing plant and stockpile ore for ROM rehandle. Ore will arrive in 100 t haul trucks directly from the mining area. The preference is to direct dump to the ROM bin but significant amounts will be dumped onto the ROM pad in graded stockpiles for rehandle into the plant by the FEL.

Power Management

Power for the project will be provided by overhead line from the national grid. The capacity will be such that the plant is never routinely constrained. There will be a designated point of contact at the site if the grid needs to reduce total demand, and an action plan for Abujar to reduce the plant load. This will typically include reducing plant feed rate and SAG mill

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speed (VSD) and dropping loads which are non-critical in the short-term (ROM crushing, river water and TSF decant pumps etc).

Laboratory

The laboratory facilities for process control analyses are included in the capital cost budget as a Tietto-owned facility. Tietto will be responsible for the supply of all equipment, consumables and personnel to operate a laboratory performing wet analysis on a production basis. Grade control drilling samples will also be processed in the onsite laboratory.

Communications

Central communications will be located at the plant administration office. General mine and plant communications will be delivered by UHF mobile radio. The mine (contractor) system will be independent of the plant, with shared channels as appropriate. Allowance has been included for mobile radios in vehicles and portable radios for ore processing, maintenance and security staff.

The existing mobile phone network coverage of the site already provides personal connectivity for all workers at the site and village. The network provider will add a local tower to improve capacity. This will also serve as the portal for site network data connection to the internet.

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Mobile Equipment

The project will own a fleet of mobile equipment as listed in Table 49.

Table 49: Tietto Mobile Equipment Units

Vehicles and Mobile Equipment	
Road Vehicles (LV)	
Toyota Hilux(or equ.) dual cab mine spec trim	17
Toyota Prado (or equ.) 4WD mine spec trim	5
Ambulance	1
Fire Truck	1
40-seater bus	4
Ops and Maintenance Units	
CAT 990 (or equ.) ROM pad / reclaim FEL (81t dry)	1
CAT 930H Integrated Tool Carrier (14t)	1
60t AT crane Grove GMK3060-1	1
3t Telehandler Manitou MT-X 1030ST	1
Skid-steer loader (CAT 226 or equ 2.6t dry)	1
5t Twincab 4WD Hiab Truck	1
3t Tip Truck	1
60ft EWP	1
3t Stores Forklift	1
Maintenance Plant	
Trailer mounted generator / lighting set (10 kVA)	1
Trailer Mounted compressor	1
Trailer mounted diesel welder (400A)	1
Fusion poly welder Damos 90/315	1
Fusion poly welder Damos 200/500	1
Covered trailer	1
Diesel trailer 2000 L	1

The Light Vehicles (LV's) are allocated across Mining, Processing/Maintenance and Admin/Security.

The front end loader (CAT 990 or equivalent) is used both for tramming material from ROM pad to the ROM bin, and reclaiming coarse-ore stockpile (COS) for plant feed when crushing is not operating and the stockpile has drawn down.

A smaller CAT 930 is used for clean-up around ROM and COS. It is a tool-carrier unit allowing further use as a fork lift and light crane.

The 60t all-terrain crane is used for unloading containers from road trucks. A number of reagents and consumables arrive in containers which will be handled in a laydown area at

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gross weights up to 30 tonnes. The crane also provides general maintenance support with a boom length of ~40 metres.

A 3t telehandler will be provided for unpacking boxes, bulk-bags and IBC's from containers and transporting to their points of usage. This unit can also load empty containers onto transport.

A 3t forklift is provided for the stores area. This will be used at the store for unloading pallets from transport, stowing and retrieving material, and unpacking containers as required.

The site will have an ambulance and a fire truck. Four full-size buses will be operated to transport local employees from nearby towns to/from work at shift-change times.

Other minor units are used in support of maintenance and operations clean-up.

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15. Tailings Storage Facility and Site Water Management

Introduction

Knight Piésold Pty Ltd (KP) was commissioned by Tietto to undertake the Definitive Feasibility Study (DFS) design of the following site infrastructure for the Abujar Gold Project:

- Tailings Storage Facility (TSF)
- Water Diversion Dam (WDD)
- Sediment management system
- Surface water management system
- Site Access Road
- Geotechnical assessment
- Groundwater assessment

Site Characteristics

Côte d'Ivoire is characterised by a tropical climate with two distinct, wet and dry seasons. The average annual rainfall for the project area is 1,361 mm. The average annual lake evaporation for the project area is 1,212 mm.

Geotechnical Investigation

A geotechnical investigation of the proposed sites of the TSF, Process Plant, Water Diversion Dam (WDD), accommodation village, and potential borrow sources was carried out as part of the feasibility study in order to investigate the sub-surface conditions at these locations and to provide geotechnical parameters for design. Due to coronavirus restrictions, it was not practicable for a KP Geotechnical Engineer to be present during the site investigation and Tietto Minerals undertook the fieldwork with KP providing 'remote' supervision from the Perth office. It is noted that the site investigation was only partially complete at the time of reporting. Key findings from the geotechnical investigation are summarised as follows:

Plant Site:

- Typically the ground conditions comprise surface clay and gravel material with some duricrust which is underlain by residual clay / extremely weathered material (soil like) that extends to approximately 46.5 m depth.
- Preliminary settlement estimates indicate that settlement of small or lightly loaded foundations will be reasonable but that it will be difficult to maintain settlements

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within specified settlement requirements for the more highly loaded and/or low settlement tolerance structures

- Based on Knight Piésold's experience of other plant sites, the ground conditions identified by the investigation are considered suitable to adequately support ground bearing foundations when appropriate measures are undertaken. These measures include: the reassessment of settlement tolerances, settlement calculations partially discount the proportion of settlement that occurs during construction, construction is undertaken during the dry season, preloading is undertaken where practicable (e.g. CIL tanks are preloaded by extended water tests) and key structures are monitored during construction.

TSF and WDD

- Typically the ground conditions comprise gravel material to approximately 2 m depth underlain by residual clay/ extremely weathered material (soil like) that extends to depth. Some duricrust is present at surface.
- The founding conditions are considered suitable for the construction of TSF and WDD embankments.
- The gravel layer that is commonly present near surface may possess high permeability and seepage control measures will need to be implemented. It is expected that material that possesses too high permeability will be removed and used for Zone C construction material or the material capped with lower permeability material.
- The site investigation was undertaken during the wet season. Groundwater was measured to be present at or close to the surface at the TSF and WDD sites. Therefore significant dewatering equipment and temporary works may be required during construction.

Groundwater Assessment

A high-level estimate of pit inflow for the project was conducted based on the available information and the results of a site investigation. Hydrogeological data were derived from experience on projects in the region with comparable geological settings, as well as drilling and slug test information gathered during the incomplete site investigation.

These data and information were extrapolated across the site and certain assumptions made to establish hydraulic aquifer parameters. Using these data, pit inflow estimations were calculated using analytical modelling. As such, the assessment is limited to a high level and indicative evaluation. The desktop evaluation of available groundwater, geological and environmental information and information collected during the site investigation indicate

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that potential groundwater pit inflows may be significant. The potential pit inflows should be re-assessed once all site investigation data are available, to allow more accurate estimates of pit inflow volumes relative to the mining schedule and the broader implications on dewatering and developing a dewatering cone of depression.

Tailings Testing

Physical and geochemical testing of the Oxide and Fresh tailings samples was conducted during the study.

The rate of supernatant release for the Oxide Leach sample was quick and reached moderate dry densities at a very quick rate from settling, with a good increase due to drying and consolidation. It is estimated that the average settled density for the sample will be approximately 1.25 t/m^3.

The rate of supernatant release for the Fresh Leach sample was quick and reached moderate dry densities at a very quick rate from settling, with a little increase due to drying and consolidation. It is estimated that the average settled density for the sample will be approximately 1.42 t/m^3.

The geochemical testing indicates that the tailings are non-acid generating and, therefore, conventional sub-aerial deposition will be appropriate for the disposal of the tailings. The proposed TSF seepage control measures (HDPE basin lining and underdrainage collection system) are considered appropriate for the expected geochemistry of the tailings solids and supernatant liquor, notably the very high cyanide concentrations in the supernatant water.

A basic closure cover system which is resistant to erosion and incorporates a growth medium is recommended based on the geochemistry of the tailings solids. Infiltration and salt migration control may be achieved using a composite store and release cover, incorporating a basal capillary break, overlain by a low permeability layer followed by a growth medium layer. This cover configuration has been incorporated into the TSF design.

Waste Rock Geochemistry

Based on the data available for this review, the samples are not expected to generate acid. However, additional testing is required to verify that these samples are representative of the overall waste rock to be mined and to determine the metal(loid) concentrations in the waste rock and the leaching potential.

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Water Balance Modelling

The TSF is designed to hold the tailings plus expected rainfall, and thus has sufficient storm water storage capacity for all design storm events and rainfall sequences. The supernatant pond should be removed (and treated if necessary) as soon as practicable after decommissioning.

Process water shortfall is expected to occur under average and design dry climatic conditions. Peak shortfalls under average conditions occur in 2023, primarily due to lower runoff generated by the smaller tailings beach in the initial stages of operation. All make-up water requirements can be provided by the WDD reservoir designed for dry conditions. The WDD construction should be completed a minimum of 3 months prior to process plant commissioning, in order to fill prior to commissioning.

Tailings Storage Facility Siting Study

A TSF siting options assessment was conducted to evaluate three potential sites for the Abujar TSF. The recommended TSF site (Option 2) from the siting assessment was adopted as the basis of the design. This option was recommended primarily due to lower construction costs and closer proximity to the Plant Site and Open Pit.

Tailings Storage Facility Design

The design objectives for the TSF (Table 50) are as follows:

- Permanent and secure containment of all solid waste materials (tailings) generated by the process plant.
- Maximisation of tailings densities using subaerial deposition.
- Removal and reuse of free water as much as practicable.
- Reduction of seepage.
- Excess storage capacity to retain ANCOLD-prescribed design storms and annual rainfall sequence, including containment of runoff from upstream catchments.
- Rapid and effective rehabilitation.
- Ease of operation.
- Monitoring network comprising embankment (standpipe) piezometers, survey pins and groundwater bores.

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The TSF will comprise a valley storage formed by multi-zoned earth fill embankments, comprising a total footprint area (including the basin area) of approximately 72 ha for the Stage 1 TSF increasing to 189 ha for the final TSF. The TSF is designed to accommodate a total of 30 Mt of tailings.

The Stage 1 TSF will be designed for 10 months storage capacity. The TSF will need to be constructed before the WDD is constructed because of the WDD reservoir flood extent. Subsequently, the TSF will be constructed in annual raises to suit storage requirements. Downstream raise construction methods will be utilised for all TSF embankment raises.

A downstream seepage collection system will be installed within and downstream of the TSF embankment, to direct seepage from the TSF into the downstream WDD reservoir.

The TSF basin area will be cleared, grubbed and topsoil stripped, and a 200 mm thick compacted soil liner will be constructed in the TSF basin area and overlain with 1.5 mm smooth HDPE geomembrane over the entire basin area. The embankment upstream face and decant tower areas will be lined with 1.5 mm textured HDPE geomembrane liner.

The TSF design incorporates an underdrainage system to reduce pressure head acting on the compacted soil and HDPE geomembrane liners, reduce seepage, increase tailings densities, and improve the geotechnical stability of the embankments. The underdrainage system comprises a network of collector and finger drains. The underdrainage system drains by gravity to a collection sump located at the lowest point in the TSF basin. A leakage collection and recovery system (LCRS) will be installed beneath the basin composite liner. Solution recovered from the underdrainage system and LCRS will be released to the top of the tailings mass via submersible pump, reporting to the supernatant pond.

Supernatant water will be removed from the TSF via submersible pumps (designed by others) located within a series of decant towers, constructed at start-up and raised during operation. The supernatant pond will be maintained in the eastern valley of the TSF basin. Solution recovered from the decant system will be pumped back to the plant for re-use in the process circuit.

An emergency spillway will be available at all times during TSF operation in order to protect the integrity of the constructed embankments in the unlikely event of emergency overflow.

Prior to decommissioning, the deposition plan will be managed to move the supernatant pond adjacent to the northern TSF embankment. The closure spillway will be located on the northern side of the TSF, at the low point of the final tailings beach. The closure spillway will discharge into the WDD reservoir (via a channel excavated into the natural ground). Upon closure, the TSF will be a fully water-shedding structure.

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Tailings will be discharged into the TSF by sub-aerial deposition methods, using a combination of spigots at regularly spaced intervals from the TSF embankment.

In the unlikely event of failure of the Abujar TSF a Population at Risk (PAR) of'≥100 to <1,000'was determined. The severity level in the unlikely event of failure of the Abujar TSF would be 'Catastrophic'on the basis of significant damage to infrastructure, business and public health. Therefore, the Abujar TSF has an ANCOLD consequence category of 'Extreme'. This ANCOLD consequence category is typical of similar scale projects in the region.

Table 50: TSF design parameters

DESIGN STANDARDS	
TSF Consequence Category	Extreme
Dam Spill Consequence Category	Significant
TSF Stormwater Storage Capacity	Average supernatant pond superimposed with both of: - 1 in 100 year ARI, 72 hr flood; and - 1 in 10 year ARI wet season runoff (assuming 100% runoff and no evaporation).
TSF Emergency Spillway: - Spillway capacity - Erosion protection	PMF/critical duration 1:100 AEP/critical duration
TSF Closure Spillway: - Spillway capacity - Erosion protection	PMF/critical duration PMF/critical duration
Contingency Freeboard - Wave Run-up - Additional Freeboard	 1 in 10 year ARI Wind 0.3 m
Earthquake Loading*2 - Operating - Final	 Operating Basis Earthquake (OBE): 1,000 year ARI Maximum Credible Earthquake (MCE): 10,000 year ARI
EMBANKMENT STABILITY CRITERIA	
Stability Factors of Safety	
- Long-term undrained	1.5
- Short-term undrained:	
- potential loss of containment	1.5
- no potential loss of containment	1.3
- Post-seismic	1.0 – 1.2
OPERATIONS	
Capacity - Final - Starter	30 Mt of dry tails. 4.2 Mt of dry tails – 10 months initial capacity.
Production Rate	5.0 Mtpa.
Slurry Characteristics	
-Beach Slope*1	150H:1V
-Density -Stage 1	1.14 t/m3
- Final	1.31 t/m3
Fluid Management	Full basin underdrainage, gravity system into collection sumps. Return to supernatant pond via submersible pumps. Leakage collection and recovery system (LCRS) installed beneath composite basin liner in main drainage course within the TSF

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	basin, discharging to a collection sump, pumped to supernatant pond. Decant tower system for removal of supernatant solution. Return to the plant via submersible pump. Seepage collection system within TSF embankment to divert seepage to downstream toe into WDD reservoir.
EMBANKMENT	
Embankment design: - Crest Width - Upstream Slope - Downstream Slope (interim) Downstream Slope (final, overall)	 8 m 3H:1V 3H:1V 3.5H:1V
General	Supernatant pond is adjacent to the western TSF embankment during initial stages of operation only, before sitting adjacent to the eastern embankment in later stages. Deposition will occur from the western TSF embankment to push pond into the existing natural valley (eastern basin area). Minimum total freeboard of 1.0 m plus design pond elevation below spillway level. Minimum tailings freeboard of 0.5 m to embankment crest.
Construction Description - Cut-off Trench - Embankment - Embankment Raises - Decant System	Upstream toe cut-off through residual/transported material Multi-zoned earthfill embankment, with upstream low permeability zone. Embankment contains internal chimney and embankment finger drains. Upstream face lined with textured HDPE geomembrane liner. Downstream raise construction methods for all raises. Series of vertical decant towers to allow for supernatant pond migration throughout operation. Towers comprise slotted concrete sections, surrounded by coarse, clean rockfill with structural fill access causeway
BASIN	
Basin Liner	Compacted soil liner comprising primarily of in situ soils, scarified and re-compacted throughout basin area to form a 200 mm liner. Where in-situ materials are unsuitable for soil liner, low permeability material (Zone A) will be imported. 1.5 mm smooth HDPE geomembrane liner above compacted soil liner in the TSF basin.
Leakage Collection and Recovery Systems (LCRS)	Leakage collection and recovery system (LCRS) installed beneath composite basin liner. Drains excavated in alluvial sands with slotted pipe, backfilled with sand (Zone F1) and capped with low permeability material (Zone A) below basin soil liner.
Tailings Underdrainage System	Collector drains and finger drains throughout TSF basin area, water collected from the tailings mass and discharged to a collection sump, pumped to the supernatant pond. Collector Drains - Corrugated, perforated tubing (with filter sock), surrounded by sand (Zone F1), wrapped in geotextile. Finger Drains - Corrugated, perforated tubing (with filter sock), surrounded by sand (Zone F1) and wrapped in geotextile.
MATERIALS	
Material Supply	Low permeability fill (Zone A) sourced by civil contractor from local borrow or selected mine waste.

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	Structural fill (Zone C) sourced by civil contractor from local borrow or selected mine waste. Structural fill (Zone C1) sourced from mining operation, either pre-strip (Stage 1) or run of mine waste (Stage 2+). Random fill (Zone D) sourced by civil contractor from local excavations, borrow or selected mine waste. Rip rap for erosion protection (Zone E) sourced from mining operation or off-site quarry. Drainage material (Zone F1 and Zone F2) sourced from local river beds or off-site quarry. Coarse rockfill for decant surround (Zone G) sourced from mining operation or off-site quarry. Wearing course material sourced by civil contractor from local borrow or selected mine waste.
REHABILITATION	
Final Embankment Slopes	3.5H:1V (overall), with 5 m horizontal benches at 10 m height increments
Cover Profile	Generally shaped to achieve dry closure with no ponding (water shedding)
Capping*[3]	Mine waste capillary break (0.5 m), Low permeability mine waste (nominal 0.3 m thickness), covered with topsoil (0.20 m), re-vegetation.
*[3] – Low permeability mine waste layer has been incorporated into FS TSF design, however it may be removed subject to the outcomes of operational geochemical testing.	

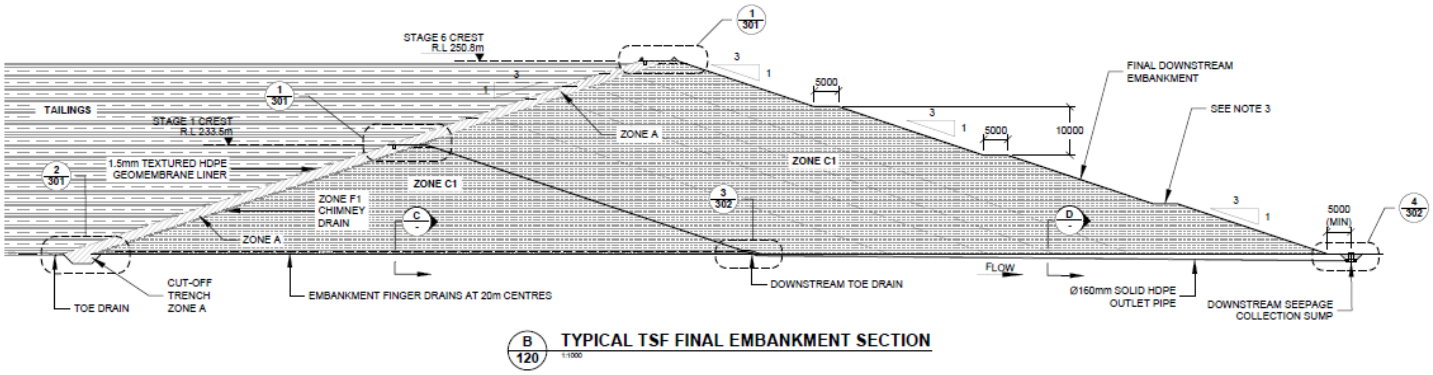

Figure** 38**: TYPICAL TSF FINAL EMBANKMENT SECTION

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Water Diversion Dam

The design objectives for the Water Diversion Dam (WDD) (Table 51) are as follows:

- Attenuate and divert surface water runoff around the pit via the Pit Diversion Channel, which will act as an engineered spillway for the WDD reservoir and run around the northern extent of the Open Pit.
- Secure clean water supply for the process plant, and make-up process water during dry conditions.
- Containment of runoff from upstream catchments.
- Safe discharge of the required design storm events around the Open Pit, reducing risk of overtopping the embankment.

The WDD is the main collection and storage pond for raw water for the project, and is designed to store up to 1.32 Mm^3 of water at the maximum operating level. The WDD will attenuate and divert surface water runoff around the Open Pit via the Pit Diversion Channel, which will act as an engineered spillway for the WDD and run around the northern extent of the Open Pit.

The WDD will collect rainfall runoff from upstream catchments (512 km^2). Water stored in the WDD will be pumped back to the plant (by others) to supply raw water requirements, including process make-up water requirements.

Discharge from the WDD will occur in a controlled manner via an engineered spillway, in order to protect the integrity of the embankments from overtopping failure. As the WDD is expected to fill during each year of operation, it is anticipated that the spillway will flow in a channel around the Open Pit and discharge water will report to the existing stream bed downstream of the Open Pit, each wet season. A backwater dam will be constructed to prevent discharge from the Pit Diversion Channel flowing back into the Open Pit.

Table 51: WDD design parameters

WDD DESIGN	
Storage Capacity Freeboard	1.32 Mm^3 11 m above maximum storage level (surge flood level plus 0.5 m)
Embankment design: - Crest Width - Upstream Slope - Downstream Slope	 8 m 3H:1V 3H:1V

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Water Abstraction	Vertical abstraction tower(s) to allow for supernatant pond migration throughout operation. Towers comprised slotted concrete sections, surrounded by coarse, clean rockfill with structural fill access causeway
WDD overflow spillway (Water Diversion Dam) - Spillway capacity - Erosion protection	 PMF/critical duration PMF/critical duration
Earthquake Loading Operating Final	 Operating Basis Earthquake (OBE): 1,000 year ARI Safety Evaluation Earthquake (SEE): 10,000 year ARI
Factors of Safety - Static (Operation) - Seismic (OBE)	 1.5 1.1
Embankment - General	Central cut-off trench. Multi-zoned earth fill embankment, with central low permeability core. Embankment contains internal chimney and embankment finger drains. Upstream face textured HDPE geomembrane liner for erosion protection. Downstream toe collection ditch.
WDD REHABILITATION	
Rehabilitation	WDD may be breached or remain in place for local communities (to be confirmed).

Sediment Management

The design objectives for the site sediment management system (Table 52) are as follows:

- Containment of sediment-laden runoff from the process plant, Open Pit development, waste dump and stockpile areas, within sediment basins for controlled discharge from site. It is noted that the WDD will also act as a sediment basin downstream of some site infrastructure.

Sediment control structures (SCSs) are sediment dams that will be constructed in the downstream reaches of catchments impacted by site infrastructure. The SCSs were designed to limit the maximum water depth to 2.0 m for safety reasons, and will be able to capture particles larger than a coarse silt.

Table 52: SCS design parameters

SCS DESIGN	
Particle Retention Size	0.05 mm (coarse silt).
Design Maximum Water Depth	2.0 m

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Construction Description	Homogeneous low permeability (Zone A) material earth fill embankment.
Spillway Configuration Capacity	 Overflow via gravity discharge system (open channel). 1 in 100-year ARI storm event, occurring when pond is at spillway inlet level.
SCS REHABILITATION	
Rehabilitation	Breach or remove SCS, replace topsoil, rip along contour and re-vegetate.

Site Access Road

The Site Access Road (19 km long) runs from the A6 highway to the Abujar project area, and comprises two 3.5 m width running lanes with a 1 m shoulder each side, for a total formation width of 9 m.

At three locations along the Site Access Road, a combined culvert and floodway structure will be required. The floodway will comprise low flow culverts and a trafficable floodway structure to convey all runoff resulting from a 1 in 100-year average recurrence interval storm event, over and above the flow through the culvert.

Monitoring

A total of three groundwater monitoring stations will be installed downstream of the TSF to facilitate early detection of changes in groundwater level and/or quality, both during the operating life and following decommissioning.

Standpipe piezometers will be installed in both the TSF and WDD embankments to monitor pore water pressures at several locations within the embankments to ensure that stability is not compromised.

Survey pins will be installed at regular intervals along the TSF and WDD embankment crests in order to monitor embankment movements and assess effects of any such movement on the embankment.

Rehabilitation

At the end of the TSF operation the downstream faces of the embankments will have an overall slope profile of approximately 3.5H:1V. The profile will be inherently stable under both normal and seismic loading conditions. The embankment downstream face will be re-vegetated once the final downstream profile is achieved.

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Upon closure the final tailings surface will be capped with a soil cover. The following cover system was assumed:

- Mine waste capillary break (500mm).
- Low permeability fill layer (300 mm).
- Topsoil growth medium layer (200 mm).
- The finished surface will be shallow ripped and seeded with shrubs and grasses.

The lower permeability fill layer may be removed subject to the outcomes of operational geochemical testing, however for the purposes of the FS design it was incorporated into the cover system.

If required, the WDD may be decommissioned by breaching the WDD embankment to achieve full drainage of the WDD reservoir into the decommissioned Open Pit. Alternatively, it could remain in place for use by local communities.

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16. Environment and Social

During the past 5 years of exploration, Tietto has been privileged to develop a relationship with the communities living in the villages of the Abujar project area. Tietto has always strived to live in harmony with the immediate environment and these local communities. The multidimensional social actions undertaken have involved communities in the promotion of sustainable development and social well-being.

Tietto's exploration operations have increased over time since 2014 and our financial contributions now total more than 0.25 billion FCFA (approximately US$0.5 million) to help the local communities of the villages located within the perimeters of exploration permits to develop road infrastructure, support training, trade, transport and communication.

Environmental and Social Impact Assessment (ESIA)

An Environmental and Social Impact Assessment (ESIA) for the Project was prepared during 2020 by Ivoirian based consultants Envitech with assistance from RPM. Tietto's goal is to adhere to both Côte d'Ivoire's standards and IFC guidelines for social and environmental measures and reporting associated with the Abujar project.

Envitech collected and supplied data in regards to the project and its impacts to the National Environment Agency (ANDE). This included information and observations on:

- Weather;
- Air quality;
- Noise and sound levels;
- Hydrology;
- Hydrobiology;
- Hydrogeology;
- Chemical and biological balance of surface and groundwater;
- Fauna and flora;
- Classification of soils;
- Archaeology and sacred sites;
- Economic and social situation; and
- Community Health.

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The studies were carried out according to appropriate scientific methods, the data being systematically collected. Reference samples were collected to represent both the dry season and the rainy season in order to account for seasonal changes in climate.

Tietto takes its social responsibility seriously and strives to respect, protect and promote the human rights of local populations. The ESIA provides a social licence to operate and requires that Tietto:

- Develop a community development plan, in consultation with local communities and administrative authorities, with clearly defined objectives and well-developed investment plans. This fund is intended to carry out socio-economic development projects for local communities as agreed to in the community development plan
- Tietto will work with community leaders to set up a Local Mining Development Committee responsible for the implementation of economic and social development projects for local communities
- The community development plan must include projects for:
    - ✓ the development of basic infrastructure and equipment;
    - ✓ the development of basic social services and the living environment;
    - ✓ promotion of employment;
    - ✓ development of the local economy; and
    - ✓ development of human capital.

Tietto is required to set up a "local development fund" for the villages directly impacted by mining activities, as identified during the ESIA studies. The local development fund will be used to finance and develop projects identified exclusively for local communities affected or impacted by the project. These projects must be approved by the Local Development Committee. Funding for the local development fund is currently stipulated as 0.5% of turnover, after deduction of transport costs, FOB prices and refining costs.

Permits and Bonds

The two main government departments responsible for the approval of mining activities in Côte d'Ivoire are the Ministry of Mines and Industry and the Ministry of Environment.

Mining activities fall under the jurisdiction of the Ministry of Mines and Industry. Applications for exploitation and exploration permits have to be approved by the Ministry of Mines and Industry. However, an exploitation permit can only be issued once the ESIA for a mining project has been approved by the Ministry of Environment in collaboration with an

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inter-ministerial committee consisting of representatives of the main Ministries and the National Agency of Environment (ANDE).

In addition, the Ministry of Mines and Industry together with the Ministry of Agriculture oversee land compensation as well as approval for the transportation and storage of cyanide and explosives.

In accordance with the provisions of Article 144 of the Mining Code, a reclamation bond equal to an agreed percentage of the estimated total cost of the rehabilitation and closure work for the site will be paid into an environmental rehabilitation escrow account upon first commercial production. The amount can be reviewed every three years to capture any changes to the mine plan or completed rehabilitation. The actual percentage to be paid will be determined during the Mining Convention negotiations and will be captured in the Convention. An annual Rehabilitation Plan and associated budget will also be communicated to the government.

Monitoring Programme

The environment and social monitoring programme for Abujar construction, operations and closure phases will include:

- Climate – temperature, rainfall, evapotranspiration, humidity and wind;
- Water - groundwater levels, stream flows, surface and groundwater quality, and water use;
- Noise;
- Vibration (i.e. blasting during operations);
- Air quality – dust deposition and particulate matter;
- Waste rock – acid base accounting;
- Biodiversity - visual fauna sightings, rehabilitation monitoring, aquatic monitoring; and
- Social – community grievances, community health studies and socio-economic studies.

The National Anti-Pollution Centre (CIAPOL) will also issue an ordinance in which air, noise, soil and water quality limits will be stipulated for the Project. This will be followed by annual audits to ensure that the Project meets these requirements.

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Mine Closure Plan

A mine closure plan that will be developed during the mine life, and a set of completion criteria for rehabilitation, which are consistent with overall site closure objectives, will be determined and agreed with the regulator and relevant stakeholders. Through long-term monitoring of the site, the development of rehabilitated areas will be consistent with the completion criteria. Consultation with stakeholders will continue throughout the life of the Project.

Conclusions

Tietto will develop environmental and social management systems to effectively and transparently manage these functions and to encourage continual improvement in performance. Regular consultation and communication with key stakeholders, including government and community representatives, will be a key objective of the Company to ensure they remain informed and appropriately involved.

There are currently no significant negative environmental or social impacts identified for the development of the Abujar Gold Project. The Project is expected to deliver positive impacts, related to community development and opportunities for local people.

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17. Permitting and Approvals

Environmental and Social Impact Assessment

In October 2020 the Côte d'Ivoire Ministry of Environment and Sustainable Development approved the Environmental and Social Impact Assessment ("ESIA") for the Abujar Gold Project. The ESIA is associated with our Exploitation (Mining) Permit which covers an area of 120.36km^2.

The ESIA allows Tietto to operation the Abujar Gold Project in accordance with the conditions listed in the application file and subject to the Environmental and Social Management Plan ("PGES").

The National Environment Agency ("ANDE") has responsible for ensuring the project operations in compliance with environmental regulations.

Mining Licence

In December 2020 Côte d'Ivoire's Le Ministère des Mines, du Pétrole et de l'Energieh (Ministry of Mines, Petroleum and Energy) granted the Mining Licence for Tietto's Abujar Gold Project. The Mining Licence covers an area of 120.36km^2.

Mining Convention

Tietto is negotiating the Mining Convention with the Ivoirian Government and expects to reach agreement in Q4 2021.

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18. Operating Cost Estimate

An operating cost estimate has been prepared for the Abujar Process Plant with an operating throughput of 4.0 Mtpa on fresh ore.

Mining costs have been sourced from a tender process. They include fixed and variable costs with escalation for mining depth. Diesel has been priced at US$1.07/litre

Plant operating costs have been estimated from a variety of sources including:

- Consumable consumption rates based on the metallurgical test work results summaries and historical operating consumptions;
- Power and grinding media consumptions as determined by DMCC;
- Quotations for the supply of consumables, equipment and services;
- A proposed manning schedule and corresponding labour costs; and
- Mintrex database of costs from similar sized and located operations.
- Grid power costs has been estimated 0.12/kwh as provided by ECG

All costs are in US dollars (US$ and US$) and reflect an estimate accuracy of ± 15% as at Q3 2021. A summary of the operating cost estimate is provided in **Table 53**.

Table 53: Operating Cost Estimate (AISC) using Ore Reserve gold price of US$1,407/oz

Item	LOM Cost (US$)	LOM Cost (US$) / Ore Tonne	LOM Cost (US$) / Ounce
Mining	$755M	$16.9	$447
Processing	$292M	$6.5	$173
Maintenance	$59M	$1.3	$35
General & Administration	$101M	$2.3	$60
Transport, Insurance and Refining	$4M	$0.1	$2
Royalty & Statutory Cost	$107M	$2.4	$63
Sustaining Capital	$37M	$0.8	$22
Total	**$1,355M**	**$30.2**	**$802**

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19. Capital Cost Estimate

The purpose of the capital cost estimate is to provide current costs suitable for use in assessing the economics of the Abujar Gold Project and to provide the initial control of capital expenditure.

The estimated pre-production capital cost is US$180.2M for plant, infrastructure and owners costs, including a contingency of US$23.6M. Mining contractor establishment and pre-production mining is estimated at US$19M and is based on tendered prices.

The capital cost estimate is based upon an EPCM approach whereby the project owner assumes the budget and schedule risk and therefore includes no builder's margin.

The capital cost estimate has been prepared as a definitive feasibility level study and is presented in United States Dollars (US$) to an accuracy level of +/-15%, as at Quarter 1 2021). **Table 54** below summarises the capital cost estimate for the Project, including contingency.

Table 54: Pre-Production Capital Cost Summary

Plant and Infrastructure	Total (US$)	Contingency (US$)	Total including contingency (US$)
4.0Mtpa Process Plant	$69.7M	$10.4M	$80.0M
Infrastructure (TSF, Plant Vehicles, Mobile Equipment, Process Plant Infrastructure, Powerline and Camp)	$52.3M	$8.0M	$60.3M
Owners Costs (Insurance, Construction Facilities, Land Purchase , First Fills and Capital Spares)	$34.6M	$5.2M	$39.8M
Total Plant and Infrastructure	**$156.6M**	**$23.6M**	**$180.2M**
Pre-production mining including mine contractor establishment	$19M		$19M
Total	**$175.6M**	**$23.6M**	**$200M**

Estimate Basis

Mintrex prepared the capital cost estimate for the process plant, associated infrastructure and accommodation camp. Cost estimates for the tailings storage facility, water storage facility, and the sedimentation and surface water controls have been prepared by Knight Piésold (KP). Electrical and instrumentation capital costs for the process plant and infrastructure and power supply capital costs have been prepared by ECG Engineering (ECG).

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Mining development capital costs were prepared by RPM. Construction Labour is based on budget prices provided by a number of Contractors operating in the region.

Estimate Assumptions and Clarifications

The following assumptions and clarifications apply to the cost estimates:

- The capital estimate is based on an EPCM implementation strategy and the overall contracting strategy described in this report;
- The cost of mining-related bulk earthworks, such as the construction of the run of mine (ROM) ore stockpile area, primary crushed ore stockpile and the mining haulage roads are the responsibility of the mining contractor and hence form part of the mining development costs;
- The mining contractor facilities will be provided by the Owner, with corresponding capex included in the estimate;
- Sufficient material is available nearby for local borrow stockpiles for use as subgrade material and structural fill for bulk earthworks construction;
- Power will be available through HV overhead line route from Daloa to the processing plant switch yard in time to progress the plant commissioning;
- The estimate is based on contractor-quoted wage rates and the expected site safety regulations and work practices;
- Scheduled international air services are operating and sufficient seats are available as required to meet the program schedule;
- Sufficient manpower resources are available in Côte d'Ivoire to undertake the project in the timescale envisaged. The project requires locals as well as expatriate personnel from other African countries and international personnel;
- Vehicles and mobile equipment for project operations will be purchased outright (excluding the contract mining fleet); and
- Expatriate work permits for the construction management workforce are available from the Côte d'Ivoire government.

Exclusions

The following exclusions apply to this capital cost estimate:

- Escalation of prices;

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- Financing costs or interest;
- Import duty for capital items and services;
- Government approvals and special permits;
- Currency exchange rate variations;
- VAT (if applicable);
- The provision of process guarantees or performance warranties beyond the normal vendor obligations;
- Owner's sunk costs prior to formal approval of project implementation;
- Expatriate construction personnel taxation and employment law compliance costs;
- Inclement weather delays; and
- Working capital.

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20. Financial Evaluations

Financial evaluation on a 100% equity basis using a US$1,700/oz gold price has been completed and reported in US$ (Table 55). Project start date is assumed to be 1 November 2021. The Project generates strong cashflows and returns.

Table 55: Abujar Open Pit Definitive Feasibility Study –Financial Evaluation

Financial Metrics (US Dollars)	
Gold Price	***US$1,700/oz***
Revenue	***US$2,871M***
All In Sustaining Costs – (Y1)	***US$651/oz***
All In Sustaining Costs – (Y1-6)	***US$804/oz***
All In Sustaining Costs – LOM	***US$832/oz***
Free cashflow (pre-tax)	***US$1,285M***
Free cashflow (post-tax)	***US$968M***
Average free cashflow (pre-tax) – LOM	***US$118M***
EBITDA – LOM	***US$1,522M***
Payback period (post-tax) from first production	***0.9 years***
NPV5% (pre-tax)	***US$959M***
NPV5% (post-tax)	***US$722M***
IRR (pre-tax)	***115%***
IRR (post-tax)	***95%***
Pre-Production Capital Costs (US Dollars)	
Pre-Production Capital Costs	***US$176M***
Pre-Production Contingencies	***US$24M***
Total Capital Costs	***US$200M***

Because of the relatively low AISC, the project is robust at a range of gold prices. Sensitivity analysis demonstrating the robust economics under a range of gold price scenarios for both pre and post-tax in presented in Table 56.

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Table 56: Abujar Open Pit DFS Financial Metrics (US Dollars) at Various Gold Prices

Metric	$1,200/oz	$1,300/oz	$1,407/oz	$1,700/oz	1,800/oz
Revenue	$2,027M	$2,1967M	$2,377M	$2,871M	$3,040M
EBITDA	$754M	$916M	$1,078M	$1,522M	$1,681M
Net present value (NPV (5%)) pre-tax	$370M	$494M	$618M	$959M	$1,081M
Net present value (NPV (5%)) post-tax	$278M	$372M	$465M	$722M	$814M
Internal rate of return (IRR) pre-tax	51%	64%	78%	115%	128%
Internal rate of return (IRR) post-tax	42%	53%	64%	95%	106%
Payback in years from first production	1.8	1.5	1.3	0.9	0.8
All In Sustaining Costs (AISC)	$787/oz	$791/oz	$802/oz	$832/oz	$838/oz
Average free cashflow pre-tax	$47M	$62M	$77M	$118M	$132M
Average free cashflow post-tax	$36M	$47M	$58M	$89M	$100M
Project free cashflow pre-tax	$517M	$679M	$841M	$1,285M	$1,444M
Project free cashflow post-tax	$317M	$514M	$636M	$968M	$1,088M

Sensitivity analysis of the Project post tax NPV(5%) demonstrates the robust nature of the project against +/-20% changes in revenue, operating cost and capital cost at the Ore Reserve gold price of US$1,407/oz (Figure 39).

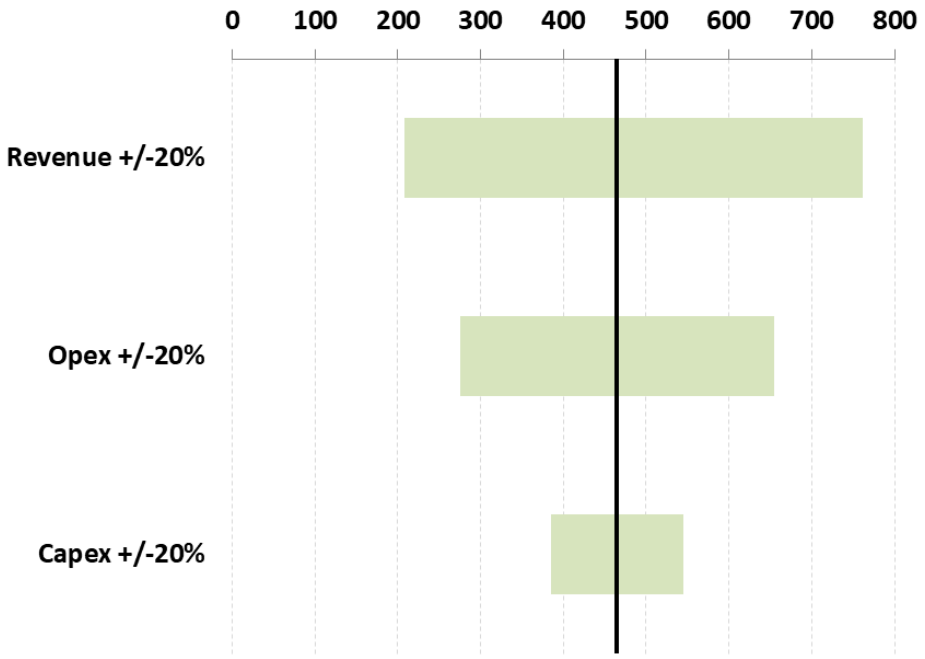

Figure 39: Sensitivity of Post-tax NPV (5%) to +/-20% Change in Revenue, Capex and Opex

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Funding Requirements

Tietto's Board believes that there are reasonable grounds to assume that future funding will be available for the ongoing development of the Project, as envisaged in this announcement, on the following basis:

- Project economics are well defined following completion of the DFS which was underpinned by an updated Mineral Resource and Ore Reserves.
- The production and economic outcomes delivered in the Definitive Feasibility Study are sufficiently robust to provide confidence in the Company's ability to fund development of the project through conventional debt and equity financing. Early stage discussions with a number of potential financiers are already underway however no material or binding Agreements for funding have been signed to date.
- The Company currently has significant cash reserves (A$31 million) in addition to the potential conversion of up to 77 million options, which are exercisable at various prices between now and January 2023. If fully exercised, the options would provide up to A$17m cash. These funds in addition to cash reserves could be applied directly to Project funding or to future debt reduction payments.
- There are recent examples of similar projects in West Africa attracting debt and equity funding.

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21. Risks

Risk Workshop

A risk assessment workshop was conducted in Perth on 8th June 2021 to identify, assess and implement control measures to eliminate or reduce risks (associated with the Abujar Gold Project) to an acceptable level. The risk workshop was carried out by a risk assessment team and team members were selected to cover all aspects of the study being analysed. The project has continued to be de-risked by the following events being achieved since the April 2021 Pre-Feasibility Study release; ongoing drilling of the Mineral Resources with the successful update and increase of the global Mineral Resource in July 2021 which forms the basis of the DFS and the completion of the DFS .

Gold price volatility and exchange rate risk

The project is financially robust with a short payback period and strong free cashflows. Of all variables, the financial outcome is most impacted by changes to revenue factors. Negative changes to the recovered gold or gold price, either by US dollar gold price variation or AUD:USD exchange rate fluctuations would have a direct effect on revenue and derived cashflow. Other revenue factors such as mining and processing recovery have less of an effect as their range of plausible downside has been limited by testwork and previous experience.

Resource and Reserve estimates

Mineral Resources and Ore Reserves are estimates only and no assurance can be given that any particular level of recovery of gold or other minerals will in fact be realised or that an identified mineral deposit will ever qualify as a commercially mineable (or viable) ore body which can be economically exploited. Mineral Resources which are not Ore Reserves may not have demonstrated economic viability. These estimates are prepared in accordance with the JORC Code 2012 and are expressions of judgement based on knowledge, experience and industry practice, and may require revision based on actual production experience which could in turn affect the Company's mining plans and ultimately its financial performance and value. Estimates that are valid when made may change significantly when new information becomes available. In addition, gold price fluctuations, as well as increased production costs or reduced throughput and/or recovery rates, may render Reserves and Resources uneconomic and so may materially affect the estimates.

Risks as to forecasts

The Company has prepared operating cash costs, future production targets and revenue profiles for its future operations at the project.

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These forecasts, although considered to have reasonable grounds, may be adversely affected by a range of factors including: mining, processing and loading equipment failures and unexpected maintenance problems; limited availability or increased costs of mining, processing and loading equipment and parts and other materials from suppliers; mine safety accidents; adverse weather and natural disasters; and a shortage of skilled labour.

If any of these or other conditions or events occur in the future, they may increase the cost of mining or delay or halt planned commissioning, ramp up and production, which could adversely affect our results of operations or decrease the value of our assets.

The Company has in place a framework for the management of operational risks and an insurance program which provides coverage for a number of these operating risks. However, any unforeseen increases in capital or operating costs of the project could have an adverse impact on the Company's future cash flows, profitability, results of operations and financial condition. No assurance can be given that the Company's estimates will be achieved or that the Company will have access to sufficient capital to develop the project due to an increase in capital and operating costs estimates.

COVID-19

Supply chain disruptions resulting from the transmission of COVID-19 in the community and measures implemented by governments around the world to limit the transmission of the virus may adversely impact the Company's operations, financial position, prospects and ability to raise capital.

To date, the COVID-19 pandemic has not had any material impact on the Company's operations however, any infections on site at the project could result in operations being suspended or otherwise disrupted for an unknown period of time, which would have an adverse impact on the Company's operations and development schedule. The Company considers that unless required to shut-down operations as a result of a government intervention, any isolated incidents of COVID-19 on site may be managed and operated around to minimise any potential disruption to operations.

Operational and development risks

The ultimate and continued success of the project is dependent on a number of factors, including the construction of efficient development and production infrastructure within capital expenditure budgets and on schedule.

The Company's operations may be delayed or prevented as a result of various factors, including weather conditions, mechanical difficulties or a shortage of technical expertise or equipment. There may be difficulties with obtaining government and/or third-party

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approvals; operational difficulties encountered with construction, extraction and production activities; unexpected shortages or increase in the price of consumables, plant and equipment; or cost overruns. The Company's operations may be curtailed or disrupted by risks beyond its control, such as environmental hazards, industrial accidents and disputes, technical failures, unusual or unexpected geological conditions, adverse weather conditions, fires, explosions and other accidents, and government restrictions applied in response to COVID-19 or other pandemics.

The occurrence of any of these circumstances could result in the Company not realising its operational or development plans or in such plans costing more than expected or taking longer to realise than expected. Any of these outcomes could have an adverse effect the Company's financial and operational performance.

Budget risks

The current capital expenditure estimates are at feasibility study level and are subject to change. The exploration and development costs of the Company are based on certain assumptions with respect to the method and timing of exploration and development. By their nature, these estimates and assumptions are subject to uncertainties and, accordingly, the actual costs may materially differ from these estimates and assumptions.

Additional requirements for capital

The Company may require further financing to continue to operate in the future if, for example, it fails to meet its construction timeline or there is otherwise a material departure from the Company’s production or cost guidance for the project.

Although the Directors believe that additional capital can be obtained if it becomes required, no assurances can be made that appropriate capital or funding, if and when needed, will be available on terms favourable to the Company or at all. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and this could have a material adverse effect on the Company's activities and could affect the Company's ability to continue as a going concern.

Tenure risk

Interests in tenements in Côte d’Ivoire are governed by national legislation and are evidenced by the granting of licences or leases. Each licence or lease is for a specific term and has annual expenditure and reporting commitments, together with other conditions requiring compliance. The Company could lose its title to or its interest in one or more of the tenements in which it has an interest, or the size of any tenement holding could be reduced if licence conditions are not met or if insufficient funds are available to meet the

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minimum expenditure commitments. The Company's tenements, and other tenements in which the Company may acquire an interest, will be subject to renewal, which is usually at the discretion of the relevant authority. If a tenement is not renewed the Company may lose the opportunity to discover mineralisation and develop that tenement. The Company cannot guarantee that tenements in which it presently has an interest will be renewed beyond their current expiry date.

Changes in law, government policy and accounting standards

Adverse changes in government policies or legislation may affect ownership of mineral interests, taxation, royalties, land access, labour relations, and mining and exploration activities of the Company. It is possible that the current system of exploration and mine permitting in Côte d'Ivoire may change, adversely affecting the Company' operations and financial performance.

Mining development and operations can be subject to public and political opposition. Opposition may include legal challenges to exploration and development permits, political and public advocacy, electoral strategies, ballot initiatives, media and public outreach campaigns and protest activity, all which may delay or halt development or expansion..

In the ordinary course of business, mining companies are required to seek governmental permits for exploration, expansion of existing operations or for the commencement of new operations. The duration and success for permitting efforts are contingent upon many variables not within the control of the Company. There can be no assurance that all necessary permits will be obtained, and, if obtained, that the costs involved will not exceed those estimated by the Company. Amendments to current laws, regulations and permits governing operations and activities of mining companies in the jurisdictions within which the Company operates or may in the future operate, or a more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in the cost of production, capital expenditure or exploration costs and reduction in levels of production for the Company's operations.

Environmental risk

Mineral extraction and processing is an industry that has become subject to increasing environmental responsibility and liability. Future legislation and regulations or environmental regulations applying to mining operations may impose significant environmental obligations on the Company. The Company intends to conduct its activities in a responsible manner which minimises its impact on the environment, and in accordance with applicable laws.

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Insurance risk

The Company insures its operations in accordance with industry practice. However, in certain circumstances, the Company's insurance may not be available or of a nature or level to provide adequate insurance cover. The occurrence of an event that is not covered or fully covered by insurance could have a material adverse effect on the business, financial condition and results of the Company. In addition, there is a risk that an insurer defaults in the payment of a legitimate claim by the Company.

Occupational, health and safety

Mining and exploration activities have inherent risks and hazards. The Company is committed to providing a safe and healthy workplace and environment for its personnel, contractors and visitors. The Company provides appropriate instructions, equipment, preventative measures, first aid information, medical facilities and training to all stakeholders through its occupational health and safety management systems.

A serious site safety incident may expose the Company to significant penalties and the Company may be liable for compensation to the injured personnel. These liabilities may not be covered by the Company's insurance policies or, if they are covered, may exceed the Company's policy limits or be subject to significant deductibles. Also, any claim under the Company's insurance policies could increase the Company's future costs of insurance. Accordingly, any liabilities for workplace accidents could have a material adverse impact on the Company's liquidity and financial results. It is not possible to anticipate the effect on the Company's business from any changes to workplace occupational health and safety legislation or directions or necessitated by concern for the health of the workforce. Such changes may have an adverse impact on the financial performance and/or financial position of the Company.

Securities investments and share market conditions

There are risks associated with any securities investment. The prices at which the securities trade may fluctuate in response to a number of factors. Furthermore, the stock market, and in particular the market for exploration and mining companies may experience extreme price and volume fluctuations that may be unrelated or disproportionate to the operating performance of such companies. These factors may materially adversely affect the market price of the securities of the Company regardless of the Company's operational performance. Neither the Company nor the Directors warrant the future performance of the Company, or any return of an investment in the Company.

Force majeure

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The Company's projects now or in the future may be adversely affected by risks outside the control of the Company, including fires, labour unrest, civil disorder, war, subversive activities or sabotage, floods, pandemics, explosions or other catastrophes, epidemics or quarantine restrictions.

Economic risk

Changes in both Côte d'Ivoire, Australian and world economic conditions may adversely affect the financial performance of the Company. Factors such as inflation, currency fluctuations, interest rates, industrial disruption and economic growth may impact on future operations and earnings.

Litigation risk

The Company may be exposed to possible litigation risks including tenure disputes, environmental claims, royalty disputes, other contractual disputes, occupational health and safety claims and employee claims. Further, the Company may be involved in disputes with other parties in the future which may result in litigation. Any such claim or dispute if proven, may impact adversely on the Company's operations, financial performance and financial position. The Company is not currently engaged in any material litigation.

Speculative investment

The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Company and the value of its shares. Shares issued in the Company carry no guarantee with respect to the payment of dividends, returns of capital or the market value of those shares. Potential investors should consider that the investment in the Company is highly speculative and should consult their professional advisers before deciding whether to apply for shares in the Company.

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22. Opportunities and Next Steps

Numerous opportunities exist to improve on the findings of the DFS that may have a material positive impact on the project throughput, mine life, and production and financial metrics.

Infill drilling

Tietto is well advanced with over 20,000m of a 30,000m infill drilling completed. The drilling program is designed to deliver Measured Resources covering the first two years of production within the current ore reserve pit design at AG. Tietto expects to complete this infill program toward the end of October 2021. This drilling will be incorporated into an updated Mineral Resource Estimate which is due at the end of 2021.

Underground Exploration

Tietto is planning to complete 5,000m of diamond drilling targeting potential underground resources below the ore reserve pit design at AG core. The drill program will be completed before the end of 2021. Drilling data will be incorporated into the next mineral resource update.

Regional Exploration

Tietto's six diamond drill rigs that are operating at Abujar are now delivering approximately 11,000m of diamond core per month at industry low costs of US$35/m. Tietto's geologist have identified over 20 exploration prospects within 10km of the proposed Abujar Plant. Diamond drilling to define mineral resources at these prospects will continue throughout 2021 and into 2022.

APG heap Leach Potential

Early stage metallurgical test work has demonstrated the amenability of transitional and fresh material from the APG deposit to heap leaching. KCAA (Kappes Cassidy Australia) have been retained to further this metallurgical test work program to scoping or PFS level. Preliminary results from the test work program are expected to become available before the end of 2021 with a preliminary economic assessment of the feasibility of heap leaching the lower grade material to follow.

Early Works/FEED

Program has been structured to deliver maximum progress across multiple disciplines whilst minimising cash expenditure prior to project finance.

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Mill Procurement

Tietto purchased an unused mill that was originally manufactured by Metso, shipped to a site in Mt Isa and never installed. NCP will fully refurbish the mill and will deliver it to site with a full warranty at a significantly cheaper price and shorter lead time compared to a new mill purchase.

The mill has the same diameter of the originally specified mill however has a longer effective grinding length and increased motor power. Comminution consultants have confirmed the mill to be suitable for the Abujar Project in terms of throughput (4Mpta on 100% fresh ore) and grind size.

NCP has transported the mill components to Johannesburg for a full inspection and refurbish and are on track to refurbish this unused 11.5MW single stage SAG mill for shipping to site in Q2 2022.

Engineering and Drafting

Tietto selected Perth-based Primero Group as the successful engineering tenderer to provide all process and engineering design, procurement oversight, field engineering, and commissioning services required for the delivery of a fully designed, safety compliant, functional, fully operating, reliable and efficient process treatment plant for the life of the Abujar Gold Mine.

Engineering has progressed quickly on the Abujar Process Plant and the engineering and drafting progress is currently at approximately 35% completion.

Initial site layouts have been completed. Revision A Process Design Criteria, Mechanical equipment list and Flowsheets have been issued.

Procurement and Contracting

Ten major mechanical packages have been tendered. These include; CIL agitators, Intertank Screens, Apron feeders, Jaw Crusher, Cone Crusher, Cyclones, and vibrating wet screens.

The remainder of the mechanical equipment required for the process plant is being procured with technical assistance from Primero. To minimise capital expenditure the long lead equipment has been tendered using a two stage approach that splits the purchase order into two separate portions. These portions are described as:

- Separable Portion A – Long lead Items with Vendor Data
- Separable Portion B – Fabrication, testing, packaging for delivery

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Owner's Team

Tietto has appointed key personnel to drive Abujar's development, including Chief Operating Officer Matt Wilcox, who joined Tietto after delivering West African Resources' Sanbrado Gold Mine on time and under budget in March 2020. Other key appointments included Guillaume Hubert as Earthworks Manager, Daniel Kotzee as Construction Manager, Hesbon Okwayo as Commercial Manager and Beatrice Godde as HSE Superintendent and all these team members have significant experience on similar projects.

Buildings

Tenders for steel frame and blockwork buildings required for the project have been tendered and quoted pricing has been received. Blockwork buildings were tendered to a variety of local contractors in the Daloa region.

Transport and Logistics

Transport and logistics packages have been tendered. Tender bids received are in line with expectation given that contingencies were applied to DFS estimates given the backdrop of rising global freight prices.

Access road

Over 20km of the access road upgrade has been completed. The final 25% of the road requiring upgrade is expected to be finalised in the December 2021 quarter.

Contract Mining

Tender bids were received and were used for DFS costing. A short list of tenders will be asked to update their bids with the DFS mine schedule

Fuel Supply

Tenders for fuel supply have been received and are being reviewed. Fuel and lubricant prices are in line with DFS expectations

Explosive Supply

Tenders for bulk explosive supply have been received and are being reviewed. Prices are in line with DFS expectations.

Powerline

Perth based electrical engineering company ECG has been managing the 90kv grid power connection study since late 2020. Angle point and environmental surveys have been

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completed. Detailed engineering design for the powerline and switchyards were completed and used to conduct a tender process. Bids have been received and are being evaluated. The Ivorian Government has declared the powerline to be a project of National Importance.

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23. Competent Persons and Qualified Persons Statement

Ore Reserves

The information in the report to which this Competent Persons Statement is attached, relates to the Open Cut Ore Reserves for the Abujar Gold Project focussing on its Abujar Gludehi Deposit. It is based on information compiled and reviewed by Mr. Igor Bojanic, who is a Fellow of the Australasian Institute of Mining and Metallurgy, and is an employee of RPM. Mr. Igor Bojanic has sufficient experience, which is relevant to the style of mineralisation, type of deposit and mining method under consideration and to the activity, which he has undertaken, to qualify as a Competent Person, as defined in the 2012 Edition of the Australasian Code for the Reporting of Mineral Resources and Ore Reserves.

Mr. Igor Bojanic consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears. Additionally, Mr. Igor Bojanic confirms that the he is not aware of any new information or data that materially affects the information contained in the ASX release referred to in this report

…….

Igor Bojanic (B.Eng. (Mining), FAusIMM)

The estimates of Ore Reserves presented in this Statement have been carried out in accordance with the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (December, 2012).

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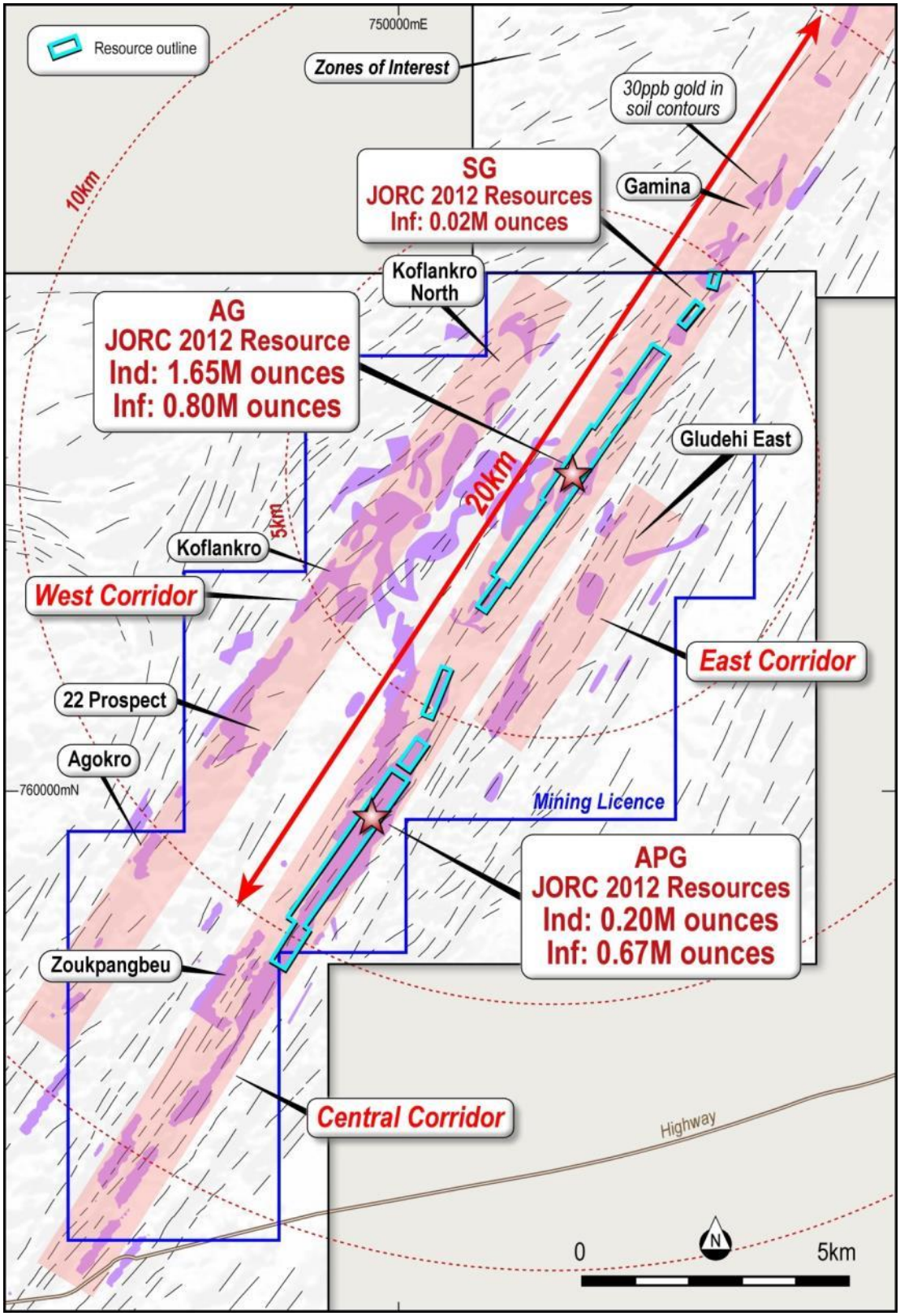

Figure** 40**: Plan view showing Abujar Project

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Abujar Gold Project, Côte d'Ivoire

The Abujar Gold Project is located approximately 30km from the major regional city of Daloa in central western Côte D'Ivoire. It is close to good regional and local infrastructure to facilitate exploration and development being only 15km from nearest tarred road and grid power.

The Abujar Gold Project is comprised of three contiguous exploration tenements, Middle, South and North tenement, with a total land area of 1,114km^2, of which less than 10% has been explored. It features an NNE-orientated gold corridor over 70km striking across three tenements.

In December 2020, a gold exploitation (mining) licence within the Abujar Middle exploration tenement was granted. The mining tenement covers an area of 120.36km^2.

Tietto is well placed to grow its resource inventory. It has substantially advanced the project since starting exploration in mid-2015 with the identification of 3.35 million ounces Indicated and Inferred JORC 2012 Mineral Resources and has completed metallurgical test work and a DFS. Tietto is currently in discussion with project finance providers and is targeting first gold in Q4 2022.

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24. **Section 1 of the JORC Code, 2012 Edition – Table 1**

Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• *Samples at AG, APG and SG project areas were collected using drilling techniques including Air Core Drilling (AC), Reverse Circulation (RC), however Diamond Drilling (DD) is the predominate drilling method. Holes were generally angled at 60° to 90° towards the northwest at AG to optimally intersect the mineralised zones; however some drilling was orientated to the south east to target near surface mineralisation due to drill location restrictions. Within APG the recent holes were drilled to the Northeast due to the reinterpreted westerly dip of the mineralisation.* • *AC samples were collected every 1m from cyclone, and 2m composite samples which is combined with two 1/3 of each one meter sample were sent for assaying. No Aircore samples were used in the estimates reported in the Report.* • *RC samples were collected as 1m samples from the cyclone, which were subsequently spear sampled to form 2 m samples which were subsequently sent to the laboratory. All one meter samples were split using a riffle splitter with 1/4 of the same retained in the plastic bags, the remainder was re-split with 1/4 retained in calico bag and the remainder discarded.* • *Diamond core was logged both for geological and mineralised structures as noted above with all 2021 drilling geotechnically logged. The core was then cut in half using a diamond brick cutting saw on 1m intervals. Typically, the core was sampled to geological intervals as*

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Criteria	JORC Code explanation	Commentary
		defined by the geologist within the even two metre sample intervals utilised. The right hand side of the core was always submitted for analysis with the left side being stored in trays on site. • *No QAQC was completed during the 2015 drilling program; however the vast majority of the data is sourced from the 2016-2021 drilling which implemented industry and best practice QAQC program, to provide verification of the sample procedure, the sample preparation and the analytical precision and accuracy of the primary laboratory.* • *Sampling and QAQC procedures were carried out to industry standards upon the advice of RPM.* • *Sample preparation was completed by independent international accredited laboratories ALS Ghana in 2016 and Intertek Minerals Ltd in 2018 to 2021. Following cutting or splitting, the samples were bagged by the Client employees and then sent to the laboratory for preparation. These samples were subsequently sent to Ghana for analysis via 30g fire assay in 2016-2017 (ALS Ghana) and 150g fire assay in 2018-2021 (Intertek Ghana).*
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• *AC drilling size is 89 mm, RC drilling comprising 105mm diameter face sampling bit. Diamond drilling carried out with mostly NTW and some HQ sized equipment. PQ-size rods and casing were used at the top the holes to stabilise the collars although no samples were taken from the PQ size core.*
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and*	• *Within the Diamond drilling typically core recoveries ranged between 85% and*

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Criteria	JORC Code explanation	Commentary
	results assessed. • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	*100% for all holes with no significant issues noted. All 2019 - 2021 holes have recoveries above 95% in the majority of the mineralised areas.* • *Some low recovery are associated with intensely fractured or faulted intervals and the more intensely weathered upper zone however These low recoveries are not considered material to the total Mineral Resource currently estimated.* • *AC, RC samples were visually checked for recovery, moisture and contamination. RPM notes that it has relied on information for the majority of holes for sample recovery based on drilling plods however considers sample recovery suitable and notes that the majority of the Mineral Resources reported are underpinned by diamond holes.* • *No relationship exists between sample recovery and grade.*
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• *All holes were field logged by company geologists. Lithological, alteration and mineralogical nomenclature of the deposit as well as sulphide content were recorded. Geotechnical and structural data measured commenced in the latter part of the 2019 program and the later 2020-2021 holes.* • *Photography and recovery measurements were carried out by assistants under a geologist's supervision. The logging for all RC holes is also recorded on a logging "chip-board", where the chips for each metre are glued to a board to form a visual log of the entire hole* • *All drill holes were logged in full.* • *Logging was qualitative and quantitative*

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Criteria	JORC Code explanation	Commentary
		in nature.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• *HQ and NQ core was cut in half using a core saw. Typically the core was sampled to major geological intervals as defined by the geologist initially within the even two metre sample intervals for early programs prior to switching to 1m in since 2019. All samples were collected from the same side of the core.* • *AC, RC samples were collected as 1m samples from the cyclone, which were subsequently composited using as spear samples to form 2 m samples.* • *Sampling of diamond core and AC, RC chips used industry standard techniques. Sample preparation for the 2020-2021 drilling is detailed below; previous releases detail the 2016 and 2018 drilling results. After drying the sample is subject to a primary crush to 2mm. Sample is split through a riffle splitter until 250gm is left (this involves 4-5 splits through the riffle splitter).* • *The 250gm sample is milled through an LM5 using a single puck to 90% <75 micron* • *Milled sample is homogenised through a matt roll with a 150gm routine sample collected using a spoon around the quadrants and sent to Ghana for analysis and the remaining 100gm kept at Intertek for checks.* • *Field QC procedures involved the use of 2 types certified reference materials (1 in 20) which is certified by Geostats Ltd,* • *Primary RC duplicates: Generated from the first splitter off the rig and inserted 5% (1 in 20 samples). This sample is collected from a spear sample from the*

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Criteria	JORC Code explanation	Commentary
		reject material of the primary split. • *Primary DD duplicate: Generated by cutting the remaining half core into a ¼ and sampled.* • *Coarse blank samples: Inserted 1 in every 20 samples* • *Laboratory Internal Duplicates and Standards* • *Sample sizes are considered appropriate to correctly represent the moderately nuggetty gold mineralisation based on: the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and assay value ranges for Au.*
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• *The analytical techniques used Fire Assay on 150g pulp samples.* • *No geophysical tools were used to determine any element concentrations used in this Mineral Resource estimate.* • *Sample preparation checks for fineness were carried out by the laboratory as part of internal procedures to ensure the grind size of 2mm was being attained. Laboratory QAQC includes the use of internal standards using certified reference material, and pulp replicates. No anomalous assays were noted in information provided to RPM or from discussions with the Client.* • *The QAQC results confirm that acceptable levels of accuracy and precision have been established for the Classifications applied following an independent review by RPM...*
Verification of sampling	• *The verification of significant intersections by either independent*	• *The Company has developed logging and sampling procedures that is based on the*

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Criteria	JORC Code explanation	Commentary
and assaying	*or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	*African experience of the local teams and subsequently reviewed by RPM during the site visits that confirmed the processes and protocols implemented giving the results a high level of confidence. The Company geologists log the core and RC samples according to the existing lithological, alteration and mineralogical nomenclature of the deposits as well as sulphide, veining and structural content. Photography and recovery measurements were carried out by assistants under a geologist's supervision. The logging for all RC holes is also recorded on a "chip-board", where the chips for each metre are glued to a board to form a visual log of the entire hole.* • *Twinned holes have not been drilled as not considered appropriate as the Company has been responsible for all holes.* • *Logging records were mostly registered in physical format and were input into a digital format. The core photographs, collar coordinates and down the hole surveys were received in digital format.* • *Assay values that were below detection limit were adjusted to equal half of the detection limit value. Un-sampled intervals were assumed to have no mineralisation and they were therefore set to blank in the database; however these are minimal.* • *The selective original data review and site visit observations carried out by RPM did not identify any material issues with the data entry or digital data. In addition, RPM considers that the onsite data management system meets industry standard which minimizes potential*

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Criteria	JORC Code explanation	Commentary
		'human' data-entry errors and no systematic fundamental data entry errors or data transfer errors.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• *All drill hole and trench collar locations were surveyed utilising the differential GPS methods by third party surveyors.* • *RPM notes that the DGPS system utilised is typically within a 10 cm accuracy range which is suitable for the classification applied.* • *The Client's drilling teams utilised the Reflex EZ-shot instrument to measure deviations in azimuth and inclination angles for all holes; however, vertical holes were not surveyed. The first measurement is taken at 5 m depth, and then at approximately every 30 to 50m depth interval and at the end of the hole.* • *Small scale artisanal mining has been undertaken on several areas within the project. This mining is restricted typically to the upper 10m of the oxide material however is variable in depth and extent with recent underground mining occurring in the fresh rock. For AG area, the latest provided topographic survey models based on satellite imagery. While small scale UG mining activity is being undertaken drilling to date has not intersected any workings near surface. Previous resource depleted small areas of the resources, however recent drilling in these areas did not indicate any major workings.* • *For AGP area, no significant UG mining has been undertaken as such the latest topography was utilised as the depletion.*
Data spacing	• *Data spacing for reporting of*	• *Drill hole collars were generally*

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Criteria	JORC Code explanation	Commentary
and distribution	*Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	*spaced on initially 100 m by 50 m grid in both deposits with recent drilling including infill drilling on 50m by 50m spacing within AG and APG areas.* • *The drill hole spacing and distribution is considered sufficient to establish the degree of continuity appropriate for the Inferred and Indicated Mineral Resource estimation procedures. Three largest objects were selected for variogram analysis for AG north, central and south, and the two largest objects for were selected for variogram analysis for APG area.* • *The most prevalent sample lengths inside the mineralised wireframes were 1m and 2 m, and as a result, 1m was chosen as the composite length. The samples inside the mineralised wireframes were then composited to 1 m length.*
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• *No bias was interpreted to be introduced as most drill holes are angled to northwest in AG and SG, which is approximately perpendicular to the orientation of the mineralised trends are interpreted being comprised of southeast-dipping lodes striking 35^{o} dipping at varying angles of inclination typically between 60^{o} and 80^{o}.* • *APG has a westerly dipping orientation; as such recent holes have been drilled to the southeast. All previous holes were drilled to the northwest, however given the large drill spacing this is not considered to be a bias in the sampling and was considered during interpretation.*

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Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• *Chain of custody is managed by the Client's senior site geologists and geotechnicians. Samples are stored in a core shed at site and samples were delivered to the laboratory by client geologists. Client employees have no further involvement in the preparation or analysis of the samples.*
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• *A review of sampling techniques was carried out on each site visit by RPM in July 2016 and July 2018 and again in October 2019.*

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25. **Section 2 of the JORC Code, 2012 Edition – Table 1**

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• *The Project is contained within three adjacent exploration licenses (Zoukougbeu, Zahibo and Issia licenses) which are currently held by third party companies, of which Tietto or its wholly owned subsidiaries are part owners. All resources are contained within the Zahibo tenement.* • *The tenements are in good standing with no known impediment to future grant of a mining lease (which is under application).*
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• *No exploration programs have been conducted by other parties on the Project.* • *The license area was not historically known as a prospective region for gold, but recent artisanal workings revealed the presence of primary gold mineralisation in artisanal pits and small-scale underground mining.*
Geology	• *Deposit type, geological setting and style of mineralisation.*	• *The AG-APG-SG Deposits are located within the Proterozoic Birimian rocks of the Man shield. It is situated on the Daloa 1:200,000 geologic sheet, 30km west of Daloa. It is located in the Hana-Lobo belt, east of the Sassandra fault that marks the boundary between the Man shield (Archean) and Eburnean domain. The regional trend is NNE to NE.* • *The AG-APG-SG deposits resemble typical shear zone deposits of the West African granite-greenstone terrane. The deposits themselves are associated with a major regional shear zone and are developed in a granodiorite host. Mineralisation may be spatially related to the*

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Criteria	JORC Code explanation	Commentary
		emplacement of intrusives. The gold mineralisation is mesothermal in origin and occurs as free gold in quartz vein stockworks and zones of silicification, associated with pyrite and chalcopyrite. The gold mineralisation is found in linear zones with the contacts showing evidence of shearing. Free gold is frequently observed. Alteration is weak to strong depending on the development of the system. • *Two types of deformation are present in the drill cores: ductile deformation and brittle deformation. The gold mineralisation is related to deformed granodiorite, in shear zones, with sulphides (mainly pyrite and minor chalcopyrite) associated with visible gold. Alteration is characterized by chlorite, sericite, calcite, secondary quartz and disseminated pyrite. This assemblage is well developed in schistose, foliated rocks with presence of quartz veins or veinlets.*
Drill hole information	• *A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole*	• *Drill hole locations are shown on the map within the body of this Mineral Resource report and the ASX release.* • *All information has been included in the appendices. No RC or DD drill hole information has been excluded however no AC drilling is utilised.*

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Criteria	JORC Code explanation	Commentary
	• *down hole length and interception depth* • *hole length* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• *Exploration results are not being reported* • *No aggregation of intercepts was carried out. Drilling intervals are predominantly 1m and 2m.* • *AC, RC samples were collected as 1m samples from the cyclone, which were subsequently spear samples to form 2 m samples which were subsequently sent to the laboratory* • *Metal equivalent values are not being reported.*
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this*	• *Most drill holes are angled to northwest at AG, which is approximately perpendicular to the orientation of the mineralised trends as all deposits have similar styles of mineralisation which was interpreted as being comprised of southeast-dipping lodes striking 30o dipping at varying angles of inclination typically between 60o and 80o.*

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Criteria	JORC Code explanation	Commentary
	effect (e.g.'down hole length, true width not known').	• *APG is interpreted to the westerly dip with changes to drilling orientation completed at such.* • *Sections are provided in the main body of the report and the press release however exploration results are not being reported*
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, however not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• *Relevant diagrams have been included within the Mineral Resource report main body of report and ASX release However exploration results are not being reported*
Balanced Reporting	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• *All drill hole and trench collar locations were surveyed utilising the differential GPS methods by third party surveyors. DGPS system utilised it typically within 10 cm accuracy range.* • *Drilling teams utilised the Reflex EZ-shot instrument to measure deviations in azimuth and inclination angles for all holes; however, vertical holes were not surveyed. The first measurement is taken at 12 m depth, and then at approximately every 30m to 50m depth interval and at the end of the hole.*
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (however not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock*	• *All interpretations for each deposit are consistent with observations made and information gained during drilling at the project.*

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Criteria	JORC Code explanation	Commentary
	characteristics; potential deleterious or contaminating substances.	
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• *Further exploration work has been planned which will focus on expanding the resource and infill drilling to increase the confidence in the resource.* • *Subject to several years of systematic exploration the Project contains numerous gold anomalous areas with particular focus on the AG Deposit. While encompassing the entire Project, this Report focused on the estimation of Mineral Resources within three areas (AG, APG and SG); however, several other anomalous areas have been identified within the Project. So further exploration works could be planned.* • *Infill and extensional drilling during 2019-2021 on the AG Mineral Resource account for the classification update.*

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26. **Section 3 of the JORC Code, 2012 Edition – Table 1**

Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	*The data base is systematically audited by Client's senior geologists. All drill logs are validated digitally by the database geologist once assay results are returned from the laboratory.* *The selective original data review and site visit observations carried out by RPM did not identify any material issues with the data entry or digital data. In addition, RPM considers that the onsite data management system meets industry standard which minimizes potential 'human' data-entry errors and no systematic fundamental data entry errors or data transfer errors; accordingly, RPM considers the integrity of the digital database to be sound.* *RPM performed data audits in Surpac and in excel.*
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.*	*Site visits have been conducted by Jeremy Clark (RPM) in July 2016 and subsequently by Philippe Baudry in July 2018 and in October 2019 by Jeremy Clark. During the visits the visitors reviewed the outcrops, drill-hole location and core sheds as well as held various discussions with site personnel. RPM sighted mineralised drill-hole intersections of all the deposits, down hole surveys and assay data, laboratory facilities, sampling and reviewed survey data acquisition protocols, assay procedures, bulk density determination, logging and sample preparation procedures and quality control (QC) results.* *RPM concluded that the data was adequately acquired and validated following industry best practices.*
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological*	*The confidence in the geological interpretation is considered to be assumed and is based on*

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	interpretation of the mineral deposit. *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	*good quality drilling.* *All deposits have similar styles of mineralisation which was interpreted as being comprised of southeast-dipping lodes striking 35o dipping at varying angles of inclination, typically between 60° and 80° and westerly dip at APG These lodes appear to coincide with strong linear geological structures which are offset by several faults which have been interpreted based on logging of samples taken at regular intervals from angled drill holes.* *RPM defined 112 discrete bodies for the AG area, and 93 discrete bodies for the APG area and 9 in South Gamina based on the orientation and shape of the mineralisation. These are still some sub domains that are likely separated by interpreted fault zones identified from geophysical surveys; however, the style of mineralisation appears the same between domains although grade ranges vary.* *No additional high grade domaining was undertaken within the deposit based on statistic reviews however further infill drilling may confirm the presence and will be reviewed at the next update.* *Current interpretation is considered suitable for the classification applied maximum Indicated.* *Outcrops of mineralisation and host rocks within the Project support the geometry of the mineralisation.*
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	*Mineral Resource Estimate is comprised of three areas.* *The AG Mineral Resource area extends over a strike length of 6,000m (from 763,400mN – 763,300mN), has a typical width of 90m (from 751,500mE – 755100mE). It includes the 700m vertical interval from -450mRL to 300mRL.*

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		The APG Mineral Resource area extends over a strike length of 6,300m (from 756,700mN – 762,250mN), has a typical width of 60m (from 747,700mE – 751,000mE). It includes the 350m vertical interval from -100mRL to 250mRL. *The South Gamina Area is located to the north of AG for a further 1.2km.*
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* *In the case of block model interpolation,*	*The Ordinary Kriging ("OK") algorithm was selected for grade interpolation of Au for AG, APG and while ID was used for SG. The Inverse Distance ("ID") and Nearest Neighbour ("NN") algorithms were also assessed as a way of validating the OK estimation results.* *A maximum distance of 30m was generally applied; however in areas of 100m at depth with no infill drilling the distance was increased if depth consistency was observed between the section and the main lodes which were extrapolated to 50m, both areas are classified as inferred. Additionally, due to the limited drilling near surface if mineralisation was observed in the alluvial pits, the lodes were extrapolated to surface.* *With additional drilling which intersected with the main objects, the largest lode of objects 34, 40 and 51 were selected for the variogram analysis for the AG south, central and north areas. The analyses indicated that for AG area within the highly continuous along strike sheets (180° which dip consistently at 60° - 80° to the southeast, a southerly plunging shoots can be interpreted with degrees at 35° - 40°; This orientation is consistent with the high-grade plunges which can be interpreted within the drill holes.* *With additional drilling which intersected with the main objects, the largest lode of objects 3 and 4 were selected for the variogram analysis for the APG area. (And Object 4 was also used as reference for all other small objects) The*

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	the block size in relation to the average sample spacing and the search employed.	*analyses indicated that within the continuous along strike shear (180°) which dip consistently at 60° - 75° to the northwest, no major plunging shoots can be interpreted.* *Surpac software was used for the estimations.* *Top-cuts range from 30g/t to 60g/t were appropriate for different lodes in the AG area respectively and a top-cut of 10g/t was appropriate for two largest lodes in the APG area. These high-grade cuts were applied to the composites and were determined from the log histograms and log probability plots. RPM notes there were some extreme high-grade samples identified during the latest exploration stage however the high-grade domains were not extended.*
	Any assumptions behind modelling of selective mining units. *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.*	*No Top cuts were applied to the South Gamina composites.* *A grade dependent search was applied to all samples above 35g/t. This was limited to a 35m radius influence due to the extreme grades of these holes.* *The parent block dimensions used were 25m NS by 10m EW by 5m vertical with sub-cells of 3.125m by 1.125m by 0.625m for all three areas based on QKNA analysis on both AG and APG. No QKNA was undertaken on South Gamina due to the limited composites and assumed the AG results. The parent block size was selected on the basis of average drill hole spacing in the deposit. Each block model was rotated to a bearing of 35 degrees to align with the general strike of the majority of the mineralised lenses, to improve the fit of the blocks to the wireframe and to reduce the size of the block model.* *Historical production records were not available for small scale artisanal mining operations.*

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	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	*No assumptions have been made regarding recovery of by-products.* *No estimation of deleterious elements was carried out. Only gold (Au) was interpolated into the block model.* *An orientated 'ellipsoid' search was used to select data and was based on parameters taken from the variography or the observed lode geometry. Four passes were used for each domain. The ranges for 4 passes are 30m, 50m, 80m and 160m. The minimum samples for 4 passes are 5, 5, 1 and 1. A maximum of 12 samples and maximum of 4 samples per hole were used for all 4 passes.* *For APG area, 3 passes were used for each domain. The ranges for 3 passes are 40m, 80m and 160m. The minimum samples for 3 passes are 8, 4, and 1. A maximum of 15 samples and maximum of 4 samples per hole were used for all 4 passes.* *Selective mining units were not modelled in the Mineral Resource model. The block size used in the model was based on drill sample spacing and lode orientation.* *Only Au assay data was available, therefore correlation analysis was not possible.* *The deposit mineralisation was constrained by wireframes constructed using a 0.3g/t Au cut-off grade in association with logged lithology codes. The wireframes were applied as hard boundaries in the estimate.* *Statistical analysis was carried out on data from 210 lodes based on the orientation and shape of the mineralisation, which were further domained in the northern AG area and southern APG area. These 2 domains are likely separated by interpreted fault zones identified from geophysical surveys; however, the style of mineralisation appears the same between*

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		domains although grade ranges vary. Similarly, South Gamina is a continuation of the shear from Ag to the north with likely faulting offsetting this shear. *A three-step process was used to validate the model. A qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling. A quantitative assessment of the estimate was completed by comparing the average Au grades of the composite file input against the Au block model output for all the resource objects. Validation of the model included detailed comparison of composite grades and block grades by northing and elevation. Validation plots showed good correlation between the composite grades and the block model grades.* *While some smoothing is noted within the grade estimates, RPM considers this appropriate for the style of mineralisation which displays a relatively high nugget, with good geology continuity displayed. The validation indicated that the NN estimate showed reasonable variation on a global scale however this is considered to be not representative of the local variability with both the ID3 and OK displaying smoothing which is considered appropriate and suitable.* *With additional infill drilling, RPM recommends that further high-grade domains be investigated along with the use of MIK or conditional simulation, which given the current drill spacing is not considered a suitable estimation methodology.*
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	*Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.*

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Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	*AG Mineral Resource is reported at a cut of grade of 0.25 Au g/t within a pit shell within a gold price of 2,000 USD per troy ounce, and 1 Au g/t below. Within APG Mineral Resource is reported at a cut of grade of 0.3 Au g/t within a pit shell within a gold price of 2,000 USD per troy ounce, and 1 Au g/t below. The cut off grades were based on estimated mining and processing costs and recoveries factors on the previous PFS study and updated processing recovery costs. The pit shell was generated with both indicated and inferred resources using the following parameters are:* *Gold Price of USD 2,000 per ounce, RPM notes this is based on the eventual extraction sometime in the future and not the long-term consensus forecast.* *The cut off grades were estimated based on the gold price of 1,800 USD per troy ounce which is approximately 1.25 times the consensus forecast as of June.* *Mining Cost of USD 0.64 /tonnes rock* *Mining Ore Loss and Dilution of 5% and 15%.* *Processing costs of USD 7.5 per tonne milled.* *G and A USD 3.1 per tonnes ore* *USD 2 per tonne ore sustaining capital and;* *Processing recovery of 96%.* *RPM has utilised the operating costs and recoveries along with the price noted above in determining the appropriate cut-off grade. Given the above analysis RPM considers both the open pit and material below the pit demonstrates reasonable prospects for eventual economic extraction, however highlights that additional studies and drilling is*

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		required to confirm economic viability. *South Gamina Resource was reported to a depth of 120m and not reported below.*
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, however the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	*RPM has assumed that the deposit could be mined using mostly open cut techniques with some possibility of underground mining.*
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, however the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	*Metallurgical testing has been conducted on the AG and APG Project. It is likely that processing would entail gravity separation of Au followed by leaching to produce a concentrate with expected recoveries greater than 96% for Au based on these results.* *Further metallurgical studies are planned as part of the feasibility study work.*
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration*	*No assumptions have been made regarding environmental factors. Tietto Minerals Pty Ltd will work to mitigate environmental impacts as a result of any future mining or mineral processing.* *As part of this estimate, RPM has not completed a detailed environmental review however is aware a study is underway. RPM has not been informed nor is aware of any issues with the licence and understands that*

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	of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	*the licence in which Exploration results and Mineral Resources are reported are in good standing.*
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	*RPM is aware a total of 1,271 bulk density samples were carried out on the diamond core from numerous holes with 954 samples from the AG area and 317 samples from AGP area (no samples were undertaken on South Gamina).* *While there is limited data from oxidised, transition, experimental density values were assigned for oxidised and transition areas with 2.0 g/cu.cm and 2.4 g/cu.cm respectively applied, and average density value of 2.82 g/cu.cm and 2.76 g/cu.cm from provided density data were used for fresh rock of AG and APG areas respectively As SG areas is extend areas of AG area, same density values from AG were applied for SG.*
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	*Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012). The Mineral Resource was classified as Indicated and Inferred Mineral Resource on the basis of data quality, sample spacing, and lode continuity.* *The AG, SG and APG deposits both show good continuity of the main mineralised lodes along strike and down dip which allowed the drill hole intersections to be modelled into coherent, geologically robust wireframes within the drill spacing of 50m-100m by 50m with some closer spacing within the core of the AG deposit. Relative consistency is evident in the thickness of the structures, along with the continuity of structure between sections. While there is good geological continuity along strike and down dip, there is evidence, and it is*

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		interpreted, that local variation of grade and thickness will occur between the current drill spacing arising from the boudin type structures resulting in discontinuous pods of mineralisation.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	*Given the interpretation of further local grade variation with further drilling, within the good geological continuity, RPM considers the current data suitable to provide a good estimate of tonnage and metal content within the current drilling spacing on a global scale. For AG area, RPM considers the 2020 infill and extension drilling undertaken allows good confidence in the grade and geological continuity with both the 50m and closer spacing allowing interpretation between section and down dip. As such RPM considers 50m by 50m spacing suitable for the indicated classification in AG and APG which was selected based on variogram ranges (60% of the sill range) and visual confirmation of structure and grade continuity. RPM however considers that further drilling is required to allow a confirmed estimate of local grade and metal distribution; as such no measured resource is report. All other areas are reported the Mineral Resource as Inferred within the 100m by 50m drilling spacing areas and extrapolated to 30 – 50 m from the nearest drill hole.*
	Whether the result appropriately reflects the Competent Person's view of the deposit.	*Limited bulk density samples have been determined for the transition and no samples for oxide. While RPM considers the applied densities suitable for the style of mineralisation and rock types, further determinations are recommended to enable measured resources to be estimates. RPM highlights that the oxide and transition material constitute a very minimal portion of the indicated estimate (4% of tonnes and 3% of metal content) as such does not have a material impact on either the local or global estimates.*

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		All SG were classified as inferred due to the larger drill spacing and contain the bulk of the oxide and transition material. *The Mineral Resource estimate appropriately reflects the view of the Competent Person.*
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	*Internal audits have been completed by RPM which verified the technical inputs, methodology, parameters and results of the estimate.*
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource 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 resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that 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.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	*The Mineral Resource estimate has been reported with a high degree of confidence. The lode geometry and continuity has been interpreted to reflect the Mineral Resource classification. The data quality is good and the drill holes have detailed logs produced by qualified geologists. Recognised laboratories have been used for all analyses.* *The Mineral Resource statement relates to global estimates of tonnes and grade.* *This is an update to the existing Mineral Resource and no recorded mining activities have been undertaken therefore reconciliation could not be conducted.*

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27. Section 4 of the JORC Code, 2012 Edition – Table 1

Estimation and Reporting of Ore Reserves

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.*	• *The Mineral Resources has been compiled under the supervision of Mr. Jeremy Clark who is a sub-consultant to RPM and a Member of the Australasian Institute of Mining and Metallurgy. Mr. Clark has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.* • *The Mineral Resources are inclusive of these Ore Reserves.*
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.*	• *Mr Igor Bojanic, is the nominated Competent Person. He is a Fellow of the Australasian Institute of Mining and Metallurgy, and is an employee of RPM. Mr Igor Bojanic has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which he has undertaken to qualify as a Competent Person, as defined in the 2012 Edition of the Australasian Code for the Reporting of Mineral Resources and Ore Reserves.* • *A site visit has not been undertaken to the Project area by Mr. Igor Bojanic due to COVID-19 international travel restrictions. This is not considered to be a study risk as site information has been provided to Mr Bojanic by Tietto, and Mr Jeremy Clark, RPM's competent person for Resource estimation, who has completed a site visit.*
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 plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• *The Mineral Resources have been converted to Ore Reserves by means of a Detailed Feasibility Study (DFS) completed by Tietto, including economic assessment.* • *The DFS mine plan demonstrates that the Project outcomes are technically achievable and the Project is economically viable.*
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• *The cut-off grade estimates are an outcome of the final detailed engineering and cost modelling from the DFS.* • *The marginal cut-off grades for the estimate of Ore Reserves for the AG deposit were estimated to be:* ○ *Oxide: 0.29 g/t Au.* ○ *Transition: 0.29 g/t Au.* ○ *Fresh: 0.30 g/t Au.*

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Criteria	JORC Code explanation	Commentary
		• *The marginal cut-off grades (inclusive of additional transport for 8 km to AG ROM pad) for the estimate of Ore Reserves for the APG deposit were estimated to be:* ○ *Oxide: 0.32 g/t Au.* ○ *Transition: 0.32 g/t Au.* ○ *Fresh: 0.30 g/t Au.*
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 (egg 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 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.*	• *The mining method for the extraction of ore is to be selective open cut mining utilising hydraulic excavator and off-highway rear dump truck. Contractor operation for mining is the most likely option.* • *To account for loss and dilution the in situ Mineral Resource model was converted to a run-of-mine mining model by regularisation of the sub-blocks to a size of 2.5 m east-west, 6.25 m north-south and 2.5 m vertical.* • *The geotechnical criteria for the design of the AG and APG open cuts were developed by Dempers & Seymour Pty Ltd for the purposes of the DFS. In AG, the mining region was sub-divided into domains and varying parameters assigned based on material characteristics. In general, oxide rock had an overall slope angle of ~40 degrees, while in fresh and transition rock this was ~50 degrees.* • *The ROM (mining) model used to determine quantities and grades was calculated to have a global ore tonnage loss of 19% and dilution of 10% for AG and 13% loss and 6% dilution for the APG deposit. Local ore loss and dilution will vary slightly throughout the deposits.* • *A 12 m wide single-lane ramp and minimum mining width of 25 m has been applied for a "good-bye" cut at the bottom of pits.* • *The economic pit limits was defined using Whittle 4X pit optimisation software ("Whittle 4X") with inputs such as geotechnical parameters, SMU mining model, metallurgical recovery and mining costs.* • *Economic mining limits were tested using two scenarios. The first considered only Measured and Indicated Resources, with Inferred having zero grade. The second was inclusive of Inferred Resources.* • *The results indicated that Inferred Resources did not materially impact the potential viability of the major pits. Including Inferred in the analysis resulted in only a 15% increase in mineable quantity.* • *Detailed pit design was completed on the Measured, Indicated and Inferred shells for revenue factor of 1.* • *An economic analysis was completed on each separate pit design, and pits that did not generate a positive margin from only Measured and Indicated material were excluded from the Ore Reserve mine plan.* • *Conventional open cut mining is a very common mining method used through the mining industry and requires no specialist infrastructure.*

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		• *In terms of infrastructure to support the mining operation it is planned that the bulk of the supporting infrastructure will be provided by the mining contractor, and has been included in the DFS study costs.*
	• *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 to meet the specifications?*	• *Appropriate metallurgical testwork has been undertaken to support the DFS, and a grade-recovery curve generated based on the sampling.* • *The samples tested are considered representative of the different material types throughout the mining area.* • *A pilot plant was not considered necessary as the preferred processing approach of leaching gold using cyanide is used throughout the industry and is a proven technology.* • *The processing plant will be a carbon-in-leach plant designed to process 4.0 Mt/a of fresh (primary) ore, with potential for higher treatments rates of oxide and transitional ore.* • *No major presence of deleterious material has been identified.* • *Metal recoveries are estimated to be between 92% and 98.5% depending on grade. The average recovery is estimate to be 96%*
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.*	• *In October 2020 the Côte d'Ivoire Ministry of Environment and Sustainable Development approved the Environmental and Social Impact Assessment ("ESIA") for the Abujar Gold Project. The ESIA is associated with our Exploitation (Mining) Permit which covers an area of 120.36 sq.km^2.* • *The ESIA allows Tietto to operate the Abujar Gold Project in accordance with the conditions listed in the application file and subject to the Environmental and Social Management Plan ("PGES").* • *The National Environment Agency ("ANDE") has responsiblity for ensuring the project operations are in compliance with environmental regulations.* • *Tietto is negotiating the Mining Convention with the Ivoirian Government and expects to reach agreement in Q4 2021. This is the final statutory approval required for operations to start.*

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		• *Testing of ore and waste samples has determined the lithologies have very low potential to produce acidic drainage. An ongoing monitoring program will be implemented during production.*
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 can be provided, or accessed.*	• *Limited site infrastructure is currently in place. There is an exploration camp for 80 people to support development activities.* • *Site infrastructure requirements have been defined as part of the DFS.* • *Sufficient land is available for the placement of all required infrastructure, including ore processing plant, tailings management facility, waste rock storage, explosives magazine and accommodation village.* • *Water will be provided by constructing a site dam.* • *Power for the mine will be supplied from the 90kV Daloa substation located approximately 30km away from the site.* • *Professional staff will be sourced nationally and accommodated in the accommodation village. Some specialist roles will need to be sourced internationally. Where feasible, employment will focus on local communities.*
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.*	• *The estimating of capital and operating costs was supported by engineering commensurate with a detailed feasibility study.* • *Cost modelling was undertaken in United States Dollars.* • *A large proportion of the costing was supported by direct quotes from manufacturers and suppliers.* • *Mine costs were supported by a contractor RFP process.* • *Where available, some costs were benchmarked against existing operating gold mines in the region.* • *Government royalty increases with the gold price. At the long term price applied, the royalty is 4% of revenue on average.* • *No deleterious materials have been identified in the test work.*
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity*	• *Gold is the only metal considered in the Ore Reserves to generate revenue.* • *A gold price of USD1,407/oz was estimated from a long term forecast using published metal price forecasts.*

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	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 co-products.*	
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 prior to a supply contract.*	• *The demand for gold is considered in the gold price used.* • *It was considered that gold would be marketable beyond the processing life of these Reserves.* • *The commodity is not an industrial metal.*
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.*	• *An economic model has been prepared from the outcomes of the detailed engineering and costing associated with the DFS. The economic modelling demonstrates that the Project is cash flow positive.* • *The Ore Reserve results in a positive economic outcome as assessed by an NPV calculation (@10% DCF). The NPV is most sensitive to the gold price. The project break-even gold price is approximately USD940/oz.*
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• *Tietto advises that it enjoys a good relationship with the local community.* • *A resettlement action plan inclusive of a livelihood restoration plan has been prepared by Tietto in 2021 in line with the recommended guidelines of the world bank, IFC and Africa Development Bank. This plan is in the process of being implemented with 218 households needing to be resettled.*
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.*	• *All property permissions, permitting, legal and marketing arrangements are understood to be in good standing.* • *All Government agreements and approvals are understood to be in good standing or nearing approval.* • *The current overall Project has the potential for improved economics when areas that are currently Inferred are drilled in order to improve the confidence. An Life of Mine has*

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	• *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 tenement status, and 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.*	*been prepared to demonstrate the potential of the project should the Inferred material be upgraded in the future and to support strategic planning.*
Classification	• *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 is classified as Probable in accordance with the JORC Code, corresponding to the resource classifications of Measured and Indicated Resources.* • *No Measured Resources are currently estimated.* • *Indicated Resources have been converted to Probable Reserves.* • *No Inferred Mineral Resources were included in the Ore Reserve estimate.*
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• *The JORC Code provides guidelines which set out minimum standards, recommendations and guidelines for the Public Reporting of exploration results, Mineral Resources and Ore Reserves. Within the JORC Code is a "Checklist of Assessment and Reporting Criteria" (Table 1 – JORC Code). This checklist has been used as a systematic method to undertake a review of the underlying Study used to report in accordance with the JORC Code.* • *RPM has completed an internal review of the Ore Reserve estimate, deriving quantities using separate methods, and believes the estimate is of sufficient accuracy, given the input parameters used.*
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate*	• *The proposed project will be employing conventional mining and ore processing techniques delivering a high confidence that technical outcomes will be achieved.* • *The DFS has been supported by engineering and costing to provide a level of service targeting +/-15% accuracy.* • *Detailed pit design was undertaken based on the preferred*

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	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.* • *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.*	*pit shells.* • *Ore Reserve quantities and grades were derived based on the mining model, Mineral Resource categories, the cut-off grade and constrained by the relevant ultimate pit designs.* • *An internal audit checked the estimation of quantities.* • *Sensitivity analyses were undertaken on the economic model to confirm robustness of the economic outcomes.* • *The total Project breakeven cost is USD940/oz., which is well below the current gold spot price or long term forecast price.* • *These outcomes demonstrate the economic robustness of the Project.* • *The accuracy of the underlying Mineral Resources is defined by the Resource Category that the Mineral Resources are assigned to.* • *Only Measured and Indicated Resources have been used for estimating Ore Reserve quantities.*