

12 December 2022**Tietto confirms potential to develop a second gold mine at Abujar:
APG heap leach Scoping Study delivers 10 year 850,000oz operation**

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

Cautionary Statement

The Scoping Study referred to in this ASX release has been undertaken for the purpose of evaluating the potential development of a heap leach operation at the APG deposit which is part of the Abujar Gold Project in Côte d'Ivoire. It is a preliminary technical and economic study of the potential viability of developing the APG deposit as a heap leach operation instead of the current mine plan where ore mined at APG will be trucked over 7km to the 4.5Mtpa CIL Abujar gold plant for processing and gold recovery.

The Scoping Study outcomes, Production Targets and forecast financial information referred to in the release are based on low level technical and economic assessments that are insufficient to support estimation of Ore Reserves. The Scoping Study is presented to an accuracy level of +/- 35%. While each of the modifying factors were considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the Production Target itself will be realised. Further exploration, evaluation and appropriate studies are required before Tietto will be able to estimate Ore Reserves or to provide any assurance of any economic development case for a heap leach operation at APG.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study. Mineral Resources used in the heap leach Scoping Study include Inferred Mineral Resources (81%) with the remaining 19% coming from Indicated Mineral Resources. Tietto has designed a 21,000m diamond drilling program to target conversion of these Inferred Mineral Resources to Indicated Mineral Resources.

The Mineral Resources underpinning the production target in the Scoping Study were prepared by a competent person in accordance with the requirements of the JORC Code (2012). The Abujar Mineral Resource totals 98.7Mt @ 1.1 g/t Au for 3.45Moz and includes Measured and Indicated gold resources from two deposits (AG and APG) totalling 46.6Mt @ 1.21 for 1.82Moz. For full details on the Mineral Resource estimate, please refer to the ASX announcement of 11 April 2022. Tietto confirms that it is not aware of any new information or data that materially affects the information included in that release and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not been changed.

This Scoping Study is based on the material assumptions outlined in the announcement. These include assumptions about the availability of funding. While Tietto considers that all the material assumptions are based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved. To achieve the range of outcomes indicated in the Scoping Study, funding in the order of US\$98 million will likely be required. Investors should note that there is no certainty that Tietto will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Tietto's existing shares. Alternatively, it may decide to remain with the current mine development plan for the Abujar Gold Project which involves processing all mined ore from AG and APG at the 4.5Mtpa CIL Abujar gold plant (funded and nearing completion) and which includes Ore Reserves of 34.4Mt @ 1.3 g/t Au for 1.45Moz siting inside the Life of Mine (LOM) mining inventory of 44.9Mt @ 1.2g/t Au for 1.7Moz (ASX announcement 5 October 2021).

This announcement contains forward-looking statements. Tietto has concluded that it has a reasonable basis for providing these forward-looking statements and believes it has a "reasonable basis" to expect it will be able to fund development of a heap leach at APG which is part of the Abujar Gold Project in Côte d'Ivoire. However, a number of factors could cause actual results or expectations to differ materially from the results expressed or implied in the forward-looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely of the results of this study.

Highlights:

- Scoping Study¹ confirms potential for Tietto to develop a second standalone mine at Abujar's APG deposit via a heap leach gold processing operation
- APG gold production forecast to average more than 100koz per year for the first three years, with 85koz annual gold production forecast over 10 years for 850koz gold recovered from 68Mt at 0.48 g/t Au
- APG operation to deliver strong financial returns over a 10-year mine life at an average production rate of 7.5Mtpa
- Gold recovered from an APG heap leach could potentially lift Abujar's annual production profile to **between 260koz to 300koz per year** based on the DFS forecast², adding to gold ores produced via Abujar's 4.5Mtpa carbon-in-leach (CIL) plant
- APG study based on conventional open pit mining with a low strip ratio of 2.4:1 waste to ore
- APG heap leach project has an estimated pre-production CAPEX of US\$98M (accuracy level of ±35%) with a payback period of 1.3 years at the study gold price of US\$1750/oz
- Project³ post-tax NPV_{5%} of US\$247M and post-tax IRR of 63% at the study gold price
- Life of mine (LOM) revenue of US\$1,491M and EBITDA of US\$620M with average annual free operating cashflow of US\$52M pa for the first 5 years of mining operations
- Tietto plans further metallurgical studies and associated engineering design activities to support preparation for a detailed feasibility evaluation along with baseline studies to support permitting and the environmental approval pathway
- Tietto is advancing its dual "Drill and Build" strategy in 2022, driving rapid resource growth at Abujar with 120,000m of diamond drilling due for completion including:
 - Extensional drilling at **AG and APG**, targeting Inferred Resources beyond LOM plan
 - Aggressive regional exploration drilling – 20 exploration prospects within 10km of the Abujar Gold Plant
- Abujar Gold Project construction is **fully funded**; Tietto has **no debt** and **no gold hedging** – on target for **first gold in December 2022**

¹ April 2022 Resource model

² ASX Announcement 5 October 2021

³ Gold price of US\$1750/oz as a base case in scoping study

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 heap leach Scoping Study at its APG deposit, part of its 3.45Moz 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 APG Scoping Study has demonstrated the potential for Tietto to develop a second mine at Abujar; a standalone heap leach operation at the APG deposit that would allow us to bring forward gold production from that deposit and increase overall gold production early in the life of the Abujar Gold Project.*

"We now have an option to essentially add up to a 50% increase in annual gold production at Abujar from building a heap leach at APG running in parallel to our 4.5Mpta CIL Abujar gold plant. Subject to the required testwork, feasibility studies and permitting, we believe we could be producing gold at APG by the end of Q4 2024.

"Although gold recovery from heap leaching fresh ore at APG is lower than conventional CIL, the lower operating costs of a heap leach allow the use of lower cut-off grades. This increases the amount of material presented to the optimiser at the gold price used for the Scoping Study, compared to conventional CIL processing.

"Our construction and operations team have first-hand experience in building and running heap leach operations in West Africa, and we will now move onto additional studies assessing the potential of this opportunity.

"We are working on another Abujar resource update for delivery in the first half of 2023. At current drilling rates, we expect it will include more than 100,000m of diamond drilling from March 2022 to the end of December 2022 to build on our April 2022 MRE. This new resource model will be used for mine update study to be delivered in the first half of 2023.

"Tietto is fully funded to production at Abujar with zero debt and zero gold hedging and we're excited to be West Africa's next gold producer within weeks. Our strategy points towards a strong balance sheet in 2023 to drive our growth ambitions.

"In the meantime, we continue to explore and drill across our project portfolio to build a larger gold inventory for gold production."

1. Scoping Study – APG Heap Leach

Tietto completed a DFS for its Abujar Gold Project in Côte d'Ivoire on 5th October 2021, which outlined an optimised mine and CIL processing plan to exploit both the AG and APG deposits

over 11 years. Tietto was able to use the DFS to equity fund the construction of the Abujar Gold Project as a 4.5Mtpa CIL gold plant and is on track to deliver first gold before the end of CY2022.

The AG deposit and in particular the higher-grade AG Core contributes most of the gold production both during the early years and over the life of the Project. The APG deposit, 7km south of the Abujar gold plant, is lower grade and despite the lower strip ratio accounts for about 12% of gold ounces recovered under the LOM plan.

Mine study engineers noted APG was very sensitive to the gold price used for the optimisation with a considerable increase in the amount of low-strip and relatively low-grade material becoming available during mine optimisation at higher gold prices.

Seeking ways to improve the margin from ore at APG, Tietto conducted some sighter column tests on APG mineralisation in 2021 to assess its suitability for heap leach gold recovery. On the strength of these results, Tietto commissioned additional column tests and in May 2022 (see ASX Announcement 5 May 2022), Tietto reported that column testwork had demonstrated the potential for heap leach processing to recover the gold from the lower grade ores at the APG deposit given very encouraging column test results for oxide, transitional and fresh ore.

Given these positive results, Tietto asked RPM to examine a Heap Leach option for accelerating the development and exploitation of the APG deposit.

The current development plans for APG involve exploitation by conventional open pit mining and haulage of ore by off-highway trucks to the Abujar gold plant for gold recovery via conventional gravity and CIL processing.

The Scoping Study⁴ aimed to demonstrate the potential to develop APG as a standalone open pit mining operation with gold recovery via a conventional Heap Leach (HL) gold processing plant.

The HL plant is assumed to be capable of treating 7.5 Mtpa of ore mined from APG and once developed would run in parallel with the existing AG mining and CIL processing operation that is expected to deliver first gold by the end of 2022. A summary showing the difference between the DFS and the Scoping Study is presented in Table 1.

⁴ This is primarily a technical exercise to establish the project concept and to provide an order-of-magnitude cost. This conceptual study can be used for comparison purposes or to indicate the value in proceeding with further study work.

Table 1: Difference between DFS and the Scoping Study

	DFS	Scoping Study – APG HL
Accuracy	DFS Level +/-15%	Scoping study +/-35%
Use	Ore Reserve and LOM Scenario	Scoping study assessment
Pit	AG detailed design APG detailed design	APG Whittle shell
Mining Schedule	OPMS AG and APG (optimised)	APG Whittle schedule
Processing	Abujar 4.5Mtpa CIL (fresh) Fed from AG and APG ore	HL 7.5Mtpa fed from APG Ore

This summary report is an amalgamation of technical work completed by the following companies:

- Geological and Mining Consultant – RPMGlobal
- Metallurgical Testwork Consultant – Kappes Cassidy Australia
- Financial modelling – Infinity Corporate Finance
- Capital and operating cost - Tietto

The HL Project will consist of open pit mines, HL gold processing plant, HL pads and ponds, waste rock dumps, water storage dam, stores, and associated infrastructure. A conceptual layout of the APG HL showing pits and HL infrastructure and its location relative the AG CIL gold plant is shown in Figure 2.

Estimates of capital and operating costs have been assumed from comparison with similar sized operations in West Africa.

Tietto’s construction and operations team have recent experience both in the construction and operation of HL gold projects in West Africa.

The Scoping Study for a 7.5Mtpa HL plant for APG ore has been prepared to an intended accuracy level of $\pm 35\%$.

The Scoping Study assumes that for the development of a standalone HL operation at APG and that all the necessary confirmatory testwork, approvals, design, and construction could be completed concurrently to allow the establishment of a HL processing plant at APG with a target of delivering first ore by the end of 2024.

Key highlights of APG HL Scoping Study include:

- 10-year mine life,
- 68Mt at 0.48 g/t Au for 1.06Moz is processed for 0.85Moz recovered at 80.4% recovery
- Oxide and transitional material account for 21% of feed with remaining 79% fresh
- Total material movement of up to 30 Mtpa using dedicated contract mining fleet;
- low strip ratio 2.4:1 (w:o);
- Schedule preferentially targets high grade areas, resulting in 120,000 ounces recovered in first year, reducing to 80,000 ounces per year by Year 4.

The APG Heap Leach Scoping Study processing schedule showing gold recovered by year and cumulatively is shown in Figure 1.

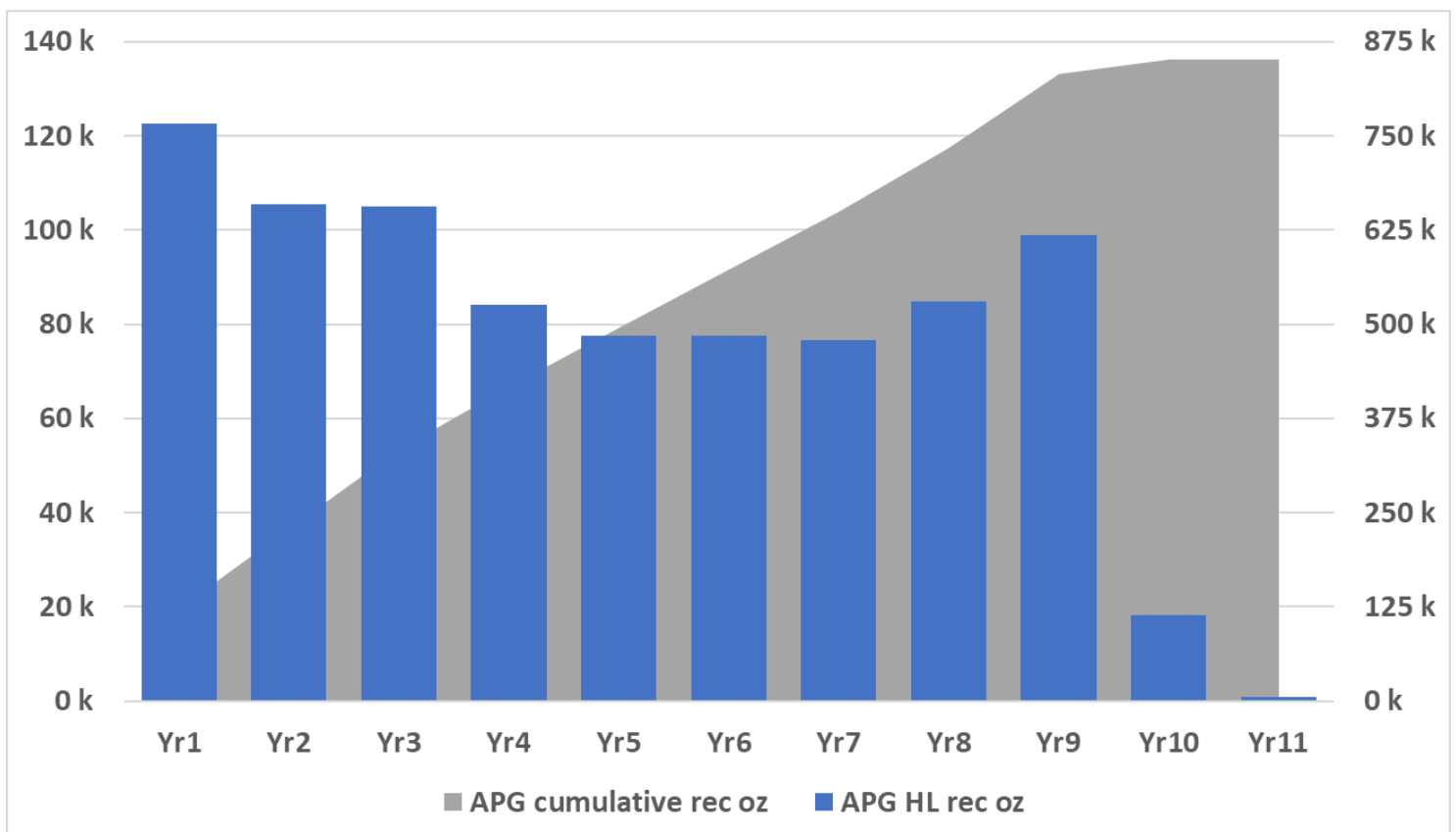


Figure 1: APG HL Scoping Study gold recovered shown by year and cumulatively

The HL Scoping Study demonstrates strong economics with early payback at the study gold price of US\$1,750 and across a range of gold prices as shown in Table 2.

Table 2: APG HL Scoping Study Schedule at Various Gold Prices (US Dollars)

Description	Unit	US\$1400	US\$1500	US\$1750	US\$2000	US\$2100
Physicals						
Waste Mined	kt	162,231	162,231	162,231	162,231	162,231
Ore mined	kt	68,065	68,065	68,065	68,065	68,065
Strip Ratio	x	2.38	2.38	2.38	2.38	2.38
Mine Life	years	10	10	10	10	10
LOM Contained Au	koz Au	1,060	1,060	1,060	1,060	1,060
Au recovered	koz Au	852	852	852	852	852
LOM % Recovery	%	80.4%	80.4%	80.4%	80.4%	80.4%
Au recovered Yr1	koz Au	123	123	123	123	123
Au recovered Yr5 cum	koz Au	495	495	495	495	495
Project Metrics						
Pre-Production CAPEX	USD M	98	98	98	98	98
Sustaining Capital	USD M	61	61	61	61	61
Gold Sales LOM	USD M	1,192	1,278	1,491	1,703	1,789
Gold Sales ave	USD M	112	120	140	160	168
Gold Sales Yr1	USD M	168	180	210	240	252
Gold Sales Yr5 cum	USD M	686	735	858	980	1,029
EBITDA LOM	USD M	271	353	541	742	805
Pre Tax NPV @ FID (5.0%)	USD M	131	193	338	493	541
Post Tax NPV @ FID (5.0%)	USD M	91	138	247	364	400
Pre-Tax IRR (at FID)	%	38%	51%	79%	107%	115%
Post Tax IRR (at FID)	%	29%	40%	63%	86%	93%
Post Tax payback - from production	Years	2.2	1.8	1.3	1.0	0.9
AISC LOM	USD/Oz	1,060	1,065	1,093	1,107	1,134
AISC Yr1 Prod	USD/Oz Au	853	857	885	899	925
AISC Yr5 Prod cum	USD/Oz Au	1,019	1,023	1,052	1,065	1,092
FCFF (Pre-tax) LOM	USD M	191	273	461	663	725
FCFF (Post-tax) LOM	USD M	139	200	342	493	540

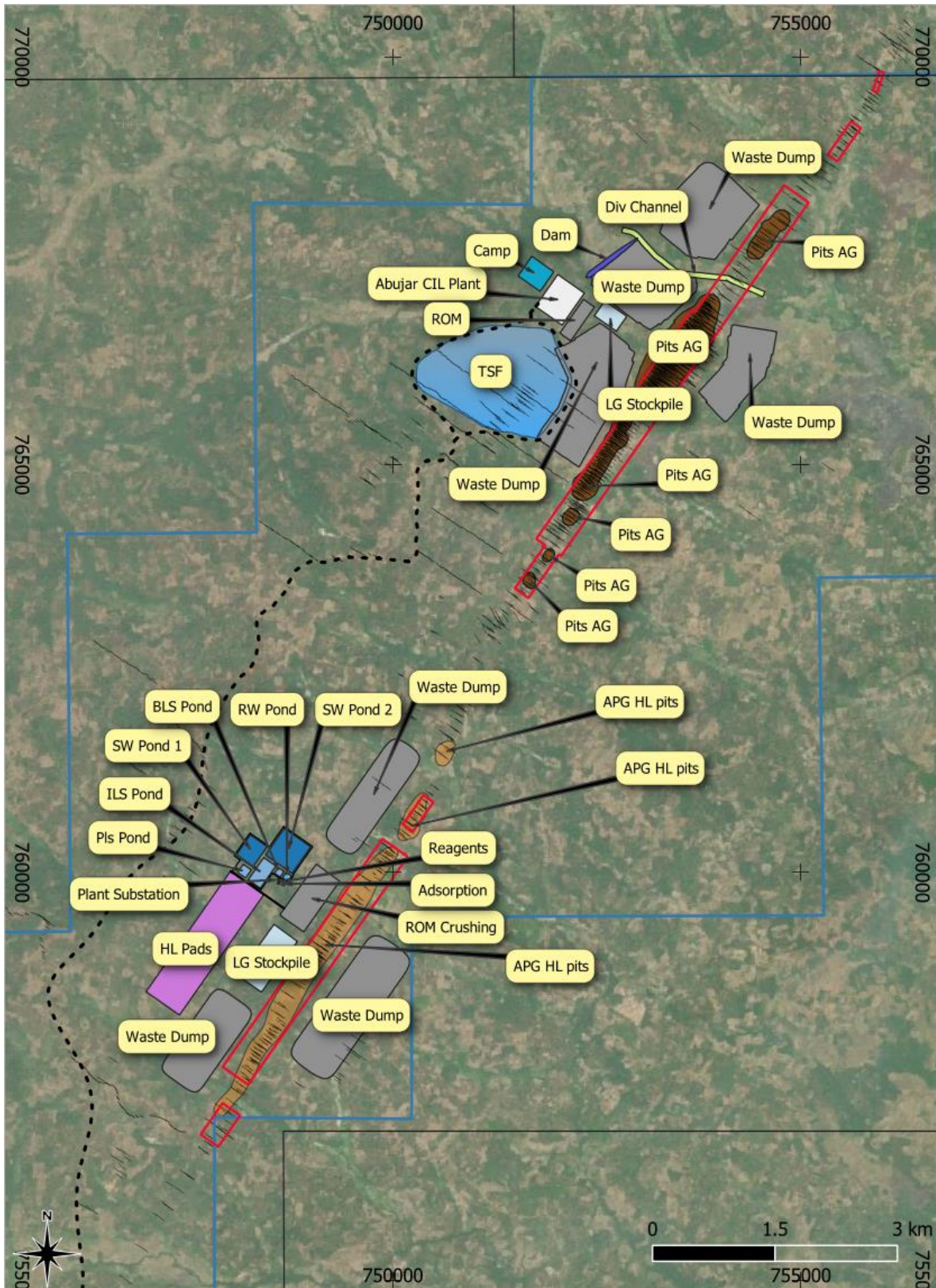


Figure 2: APG HL Scoping Study conceptual layout

1.1. 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.

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 120.36km². 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.

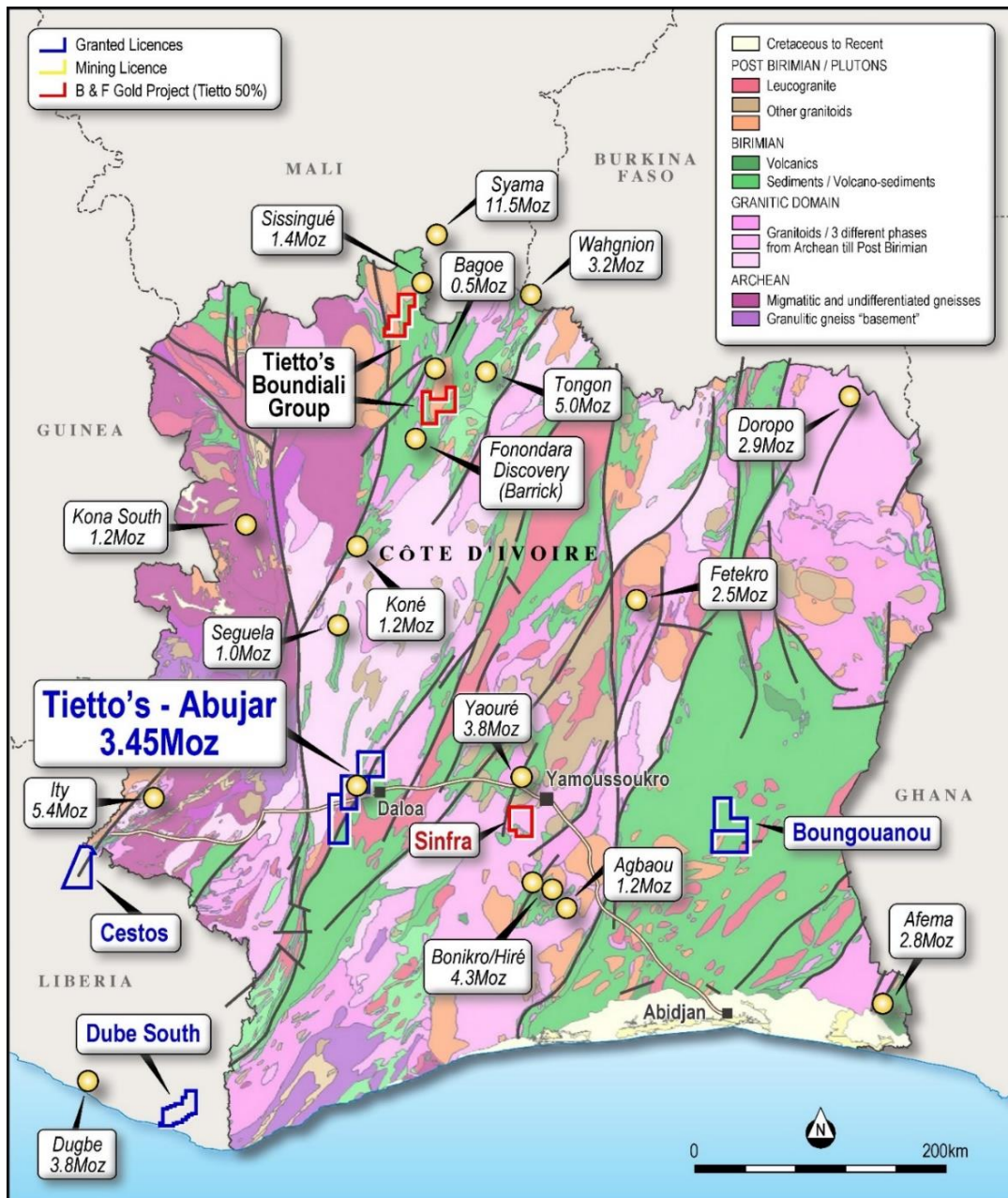


Figure 3: Abujar Gold Project Location in Côte d'Ivoire, West Africa

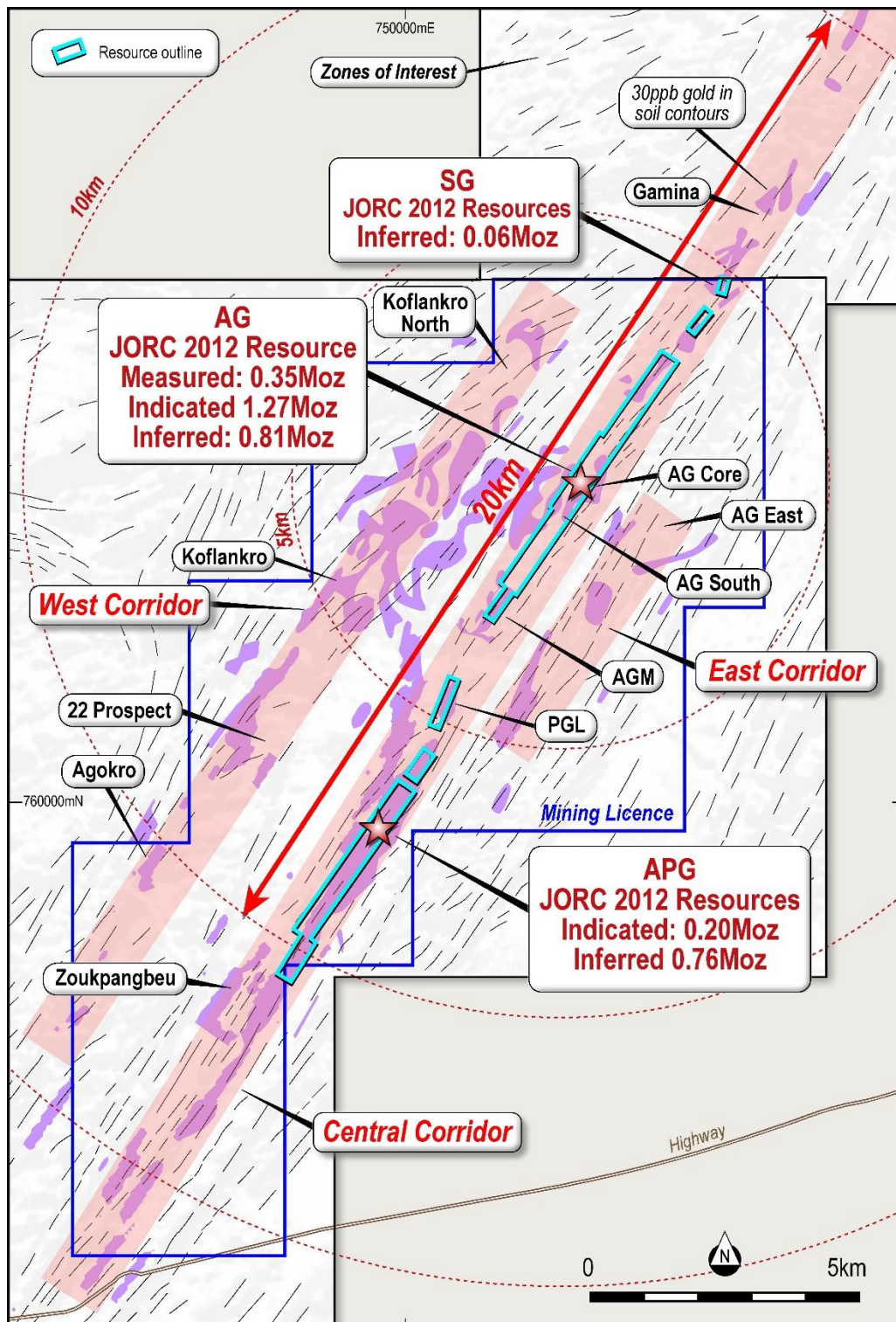


Figure 4: Abujar Gold Project

1.2. Geology and Mineral Resources

The Scoping Study used the 11 April 2022 geological resource model and subsequent mining dilution model prepared by RPM. Results of the independent Mineral Resources estimate for the Project are tabulated in the estimate of Mineral Resources in Table 3, 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. Mineral Resources are reported as at 28th February 2022 which was the drilling cut-off date.

AG is reported at 0.25 g/t Au cut off within a 2,000 USD pit shell; and 1.1 g/t Au cut off below the pit shells, APG is reported at 0.3 g/t Au cut off within a 2,000 USD pit shell; and 1.1 g/t Au cut off below the pit shell, and 0.25 g/t Au to a depth of 120m for the SG deposit. The cut off grades were based on estimated mining and processing costs and recovery factors of similar projects in Côte d'Ivoire as detailed in JORC Table 1. It is highlighted that while a 2,000 USD per ounces pit shell was utilised 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 February 2022.

Table 3: Statement of Mineral Resources by Deposit as at 28th February 2022

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	Measured	0.1	1.4	0.01	0.5	1.3	0.02	7.1	1.4	0.32	7.7	1.4	0.35
	Indicated	0.5	1.0	0.02	1.8	1.1	0.06	28.1	1.3	1.19	30.4	1.3	1.27
	Inferred	0.3	0.9	0.01	1.4	0.8	0.04	15.4	1.5	0.76	17.1	1.5	0.81
	Total	0.9	1.0	0.03	3.7	1.0	0.12	50.6	1.4	2.27	55.2	1.4	2.43
APG	Indicated	0.5	0.7	0.01	1.9	0.7	0.04	6.1	0.8	0.15	8.5	0.7	0.20
	Inferred	1.3	0.7	0.03	5.1	0.7	0.11	27.0	0.7	0.62	33.3	0.7	0.76
	Total	1.8	0.7	0.04	7.0	0.7	0.15	33.1	0.7	0.77	41.9	0.7	0.96
SG	Inferred	0.08	0.74	0.002	0.15	1.09	0.01	1.3	1.3	0.05	1.6	1.2	0.06
Grand Total		2.8	0.8	0.07	10.8	0.8	0.28	85.1	1.1	3.10	98.7	1.1	3.45

Notes:

1. The Mineral Resources have been compiled under the supervision of Mr. Jeremy Clark who is an associate of 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 28th February 2022. 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.

Tietto Exploration Drilling

Tietto has maintained a very aggressive diamond drilling schedule in 2022 and expects to complete around 120,000m of diamond drilling by the end of December 2022. At this stage, Tietto expects to complete ~100,000m of diamond drilling over the period from the start of March 2022 to end of December 2022 (**Figure 5**).

This drilling is in addition to the drill data used to construct and inform the April 2022 MRE (drilling data as at 28 February 2022). Tietto is planning another resource update to be delivered in early in CY23 which will be based on this new drilling (March CY22 to December CY22).

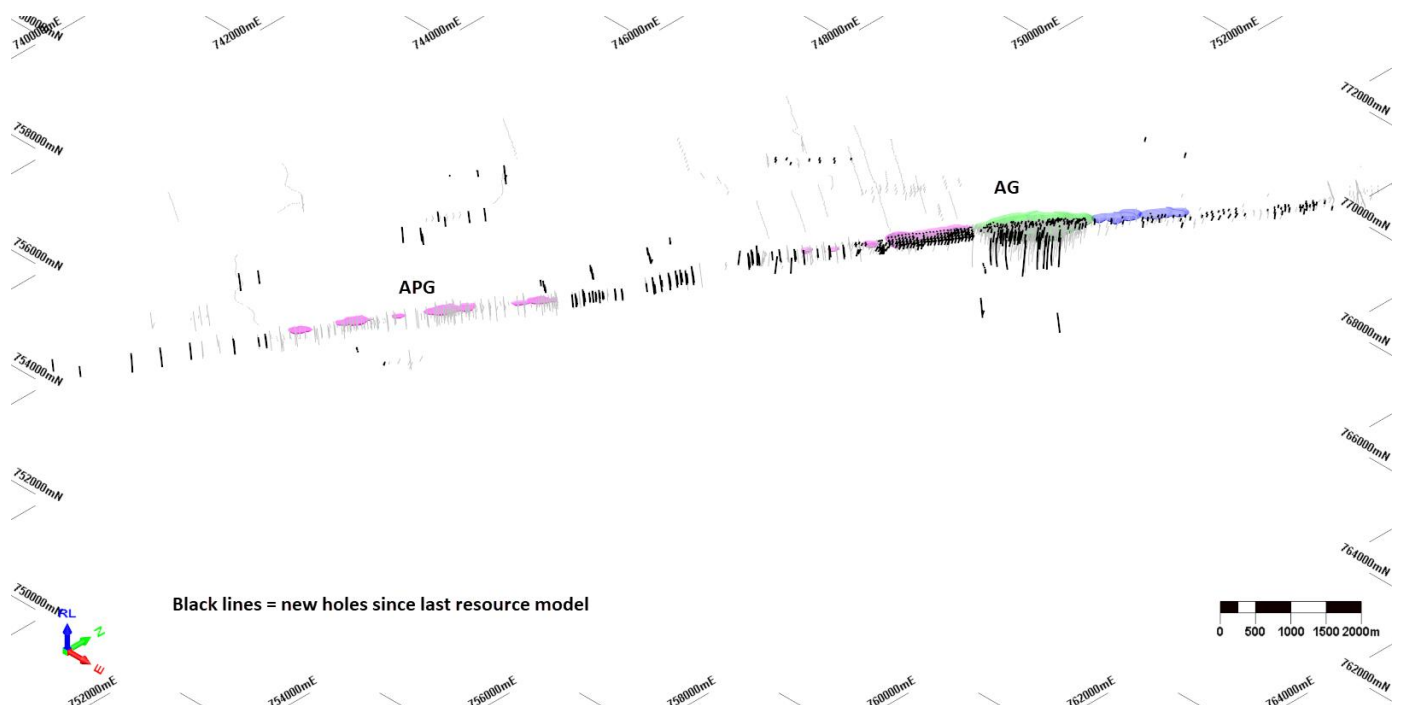


Figure 5: Oblique view showing drilling used for April 2022 MRE (grey) and drilling completed since March 2022 (black)

Following the strong results from this study, Tietto has designed 140 diamond holes for approximately 21,000m. These holes are planned to be drilled early in CY2023 with the main goal of increasing the confidence of Mineral Resource estimates at APG for further mine studies. The drilling results from this program will be used in a subsequent MRE update which will likely be in H2 CY 23. An isometric view showing the planned drilling is presented in **Figure 6**.

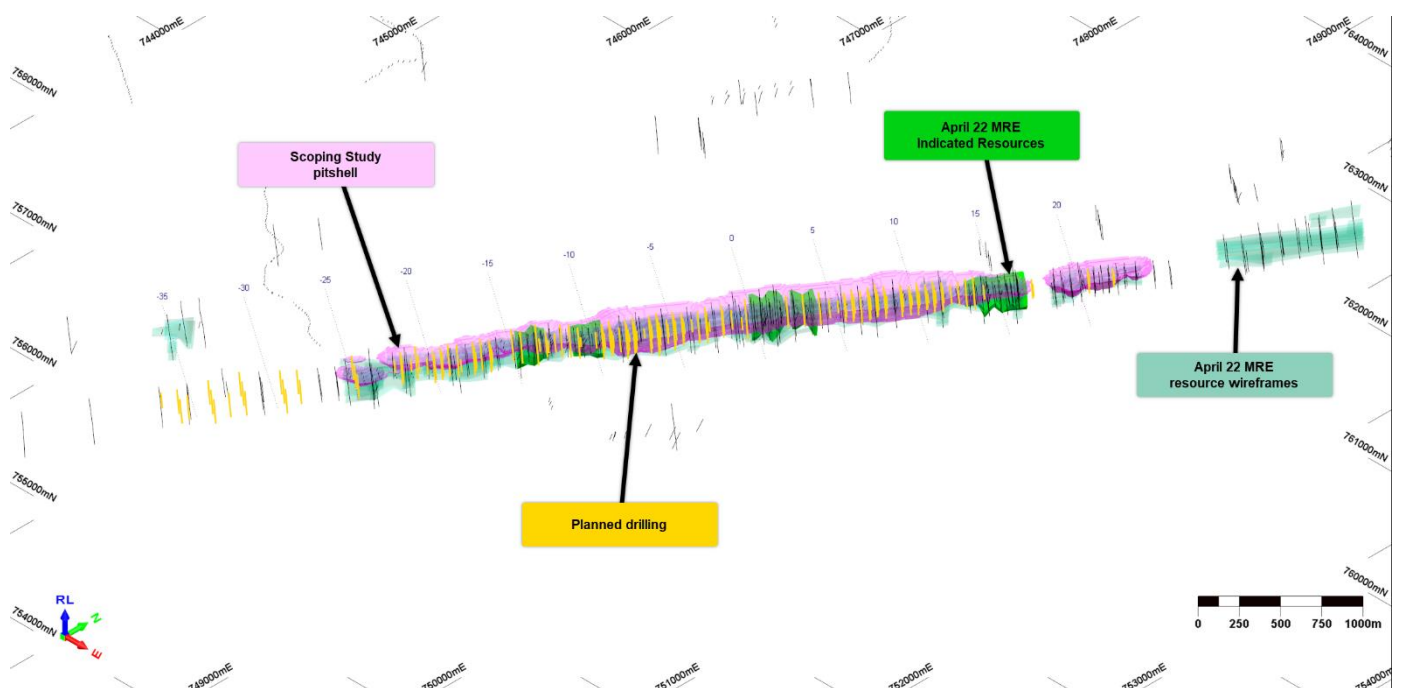


Figure 6: Isometric view showing diamond drilling planned for 2023 at APG

Project Geology

The deposits making up the Abujar Gold Project are 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. 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:
 - I. Argillic schist: are always weathered with mottled texture and crosscut by quartz veins; and
 - II. 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 consist 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 a regional metamorphism of greenschist facies, with a paragenesis 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, being marked by 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 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 paragenetic 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 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 (AG) is associated with a major regional shear zone and is developed in granodiorite hosts similar to that which hosts the Pischon & Golikro deposits (APG) 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 and over 1.5km within Pischon and 2.5km within Golikro, however analysis of the drill holes within these deposits 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 is the intersection of near vertical extremely high-grade plunging shoots (>5g/t) which can be interpreted within both the Abujar and Pischon Golikro Deposit. These can be seen in the long sections of the grade estimates.

All APG lodes have similar southwest-dipping orientations striking 030° and dipping at varying angles of inclination typically between 50 and 75°. 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 40m, with the thicker zones general occurring where the higher grades occur, which is as expected for the structurally controlled style of mineralisation. A typical cross section is shown in **Figure 7**.

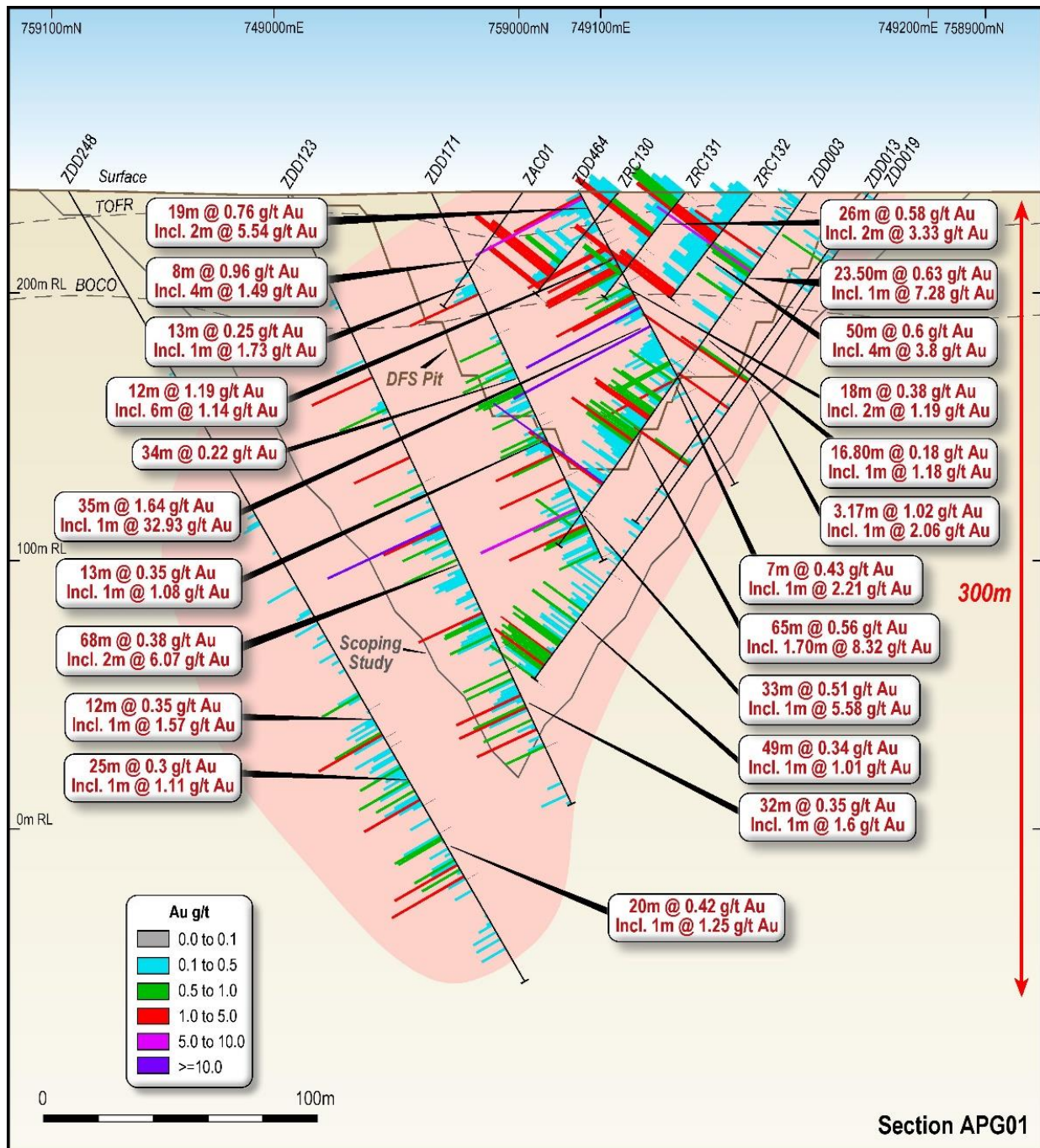


Figure 7: Oblique cross section showing resource drilling, DFS and scoping study pitshell at APG Section 01

1.3. Mineral Processing and Metallurgical Testing - APG Samples

Following on from the excellent results received from initial heap leach testwork (Intertek Laboratories in Accra, Ghana) on samples of drill core reported in April 2021, Tietto engaged Kappes Cassiday & Associates Australia (KCAA) to supervise a more detailed test work programme.

KCAA recommended that additional testwork was deemed necessary to further verify heap response at a logical crush size and agglomeration requirements as well as to provide predictive tools for potential operations and later reclamation. The testing program was based on 7 x drill core sub-composites, representing 218m of half NTW drill core. Details of the composites are presented in Table 4 and their locations are shown in Figure 8.

Table 4: APG core sub-composites

Sub- composite	Orebody	Oxidation Code	Depth Range, m	Weight, kg	Expected Grade, g/t Au
SC-1	APG (Pischon)	SOX	23.0 – 36.0	15.9	0.22
SC-2	APG (Pischon)	MOX	36.0 – 45.0	10.3	0.36
SC-3	APG (Pischon)	SOX	3.0 – 10.0	10.5	0.18
SC-4	APG (Golikro)	MOX	21.0 – 39.0	19.2	0.24
SC-5	APG (Golikro)	MOX	29.0 – 50.0	41.5	0.27
SC-6	APG (Golikro)	WOX	50.0 – 55.0	10.4	0.97
SC-7	APG(Pischon)	fresh	57.0 – 70.0	34.7	0.49

Oxidation level designations are as follows:
 SOX = Strongly oxidised
 MOX = Moderately oxidised
 WOX = Weakly oxidised
 fresh = Fresh

In all, some 140 kg of half NTW core were received. Due to the small core diameter, testing at a coarse crush size was not possible so the samples were crushed to 100% passing 12.5mm for heap leach and related testwork. Coarser crush sizes should also be tested to determine if similar extractions can be obtained but with lower operating costs.

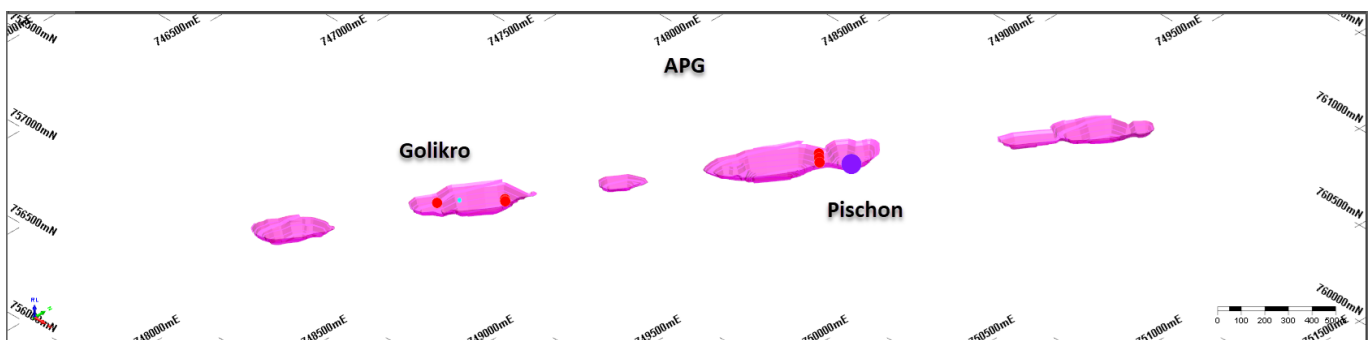


Figure 8: Abujar Oblique view showing location of samples used for heap leach testwork at APG

Test Program

The test program consisted of head assays, sizing analyses with fraction assays, ground ore bottle roll tests (BRTs), 10-day two-stage intermittent bottle roll tests (IBRTs) at 12.5mm, agglomeration / percolation testing and column leach testing.

The BRTs were conducted in closed bottles at 40% solids on 1.0kg portions of SC06 and SC07, each composite over a 24-hour period. Rolling was continuous. Solution samples were collected at 2, 4, 10 and 24 hours. Oxygen sparging was employed.

The intermittent 2-stage bottle roll tests (IBRTs) were conducted on portions of all but the SC-07 fresh material at 12.5mm. Tests were run in open bottles at 33% solids on a 3 to 4kg portion of each composite over a 10-day period with changeout of leach solution after five days of leaching. Rolling was intermittent. Cyanide levels were initially set at 500ppm while being maintained at a minimum of 250ppm. Solution samples were collected at 2, 4, 8, 24, 48, 72, 96, 120, 122, 144, 168, 192, 216 and 240 hours. No oxygen sparging was employed.

The agglomeration / percolation testing was conducted on the Golikro MOX MC-1 composite only due to sample availability. The results were considered when selecting cement requirements for MC-2. The tests involved a 48-hour cure of the agglomerated ore prior to placing in percolation columns and flooding the column. Measurements of ore settlement (slump), maximum flow through the ore beds, and out-flow solution pH were made and evaluated prior to selection of the appropriate cement dose for the column feed. Water addition as well as cement dose was evaluated.

The column tests were conducted in 100mm diameter columns on charges of 19 to 24kg. The 12.5mm topsize was selected as the coarsest size that could be generated from the available core size combined with limited sample. Bed depths were targeted at 2.0 metres.

Agglomeration of oxide and transition material required 12kg/t Portland Type GP cement for the MC-1 and this dose was also employed for MC-2. Fresh material was agglomerated with 2kg/t, more for pH control than for permeability.

Leaching was conducted with 3-litre batches of leach solution containing 500 ppm NaCN at a minimum pH of 10.0. Pregnant leach solution (PLS) collected after Day 1 leaching was passed through activated carbon on Day 2 for recovery of gold from solution. The resulting barren solution was made up in volume and target chemical composition and re- applied on Day 3. Leaching continued on alternate days. Leach times ranged from 39 days for the MC-1 and MC-2 composites to 97 days for the SC07 fresh material. The leach cycle was followed by 5 days of fresh water washing.

Solution samples were taken of PLS and barren solution after contact with carbon. The carbon batches were changed out 3 to 4 times over the course of the leach cycle and analysed for gold, silver and copper content. Washed / drained residue was removed from the column and sampled by quarters down the length of the column. Portions of each quarter were

recombined to provide for a particle size distribution (PSD) analysis with fraction assays. The remaining material from each quarter was then assayed. Thus each column test generated two recovered gold values (to solution and to carbon) and two tailings values (PSD and an average of the bulk splits).

Program Results

Leach Baseline Tests

Gold extractions in the ground ore tests indicate that both the samples are free milling with a relatively small amount of gold in the SC07 fresh sample being refractory. NaCN consumptions were low to moderate while lime requirements were low. The oxygen sparging would likely have increased NaCN consumption to some degree.

Intermittent Bottle Roll Tests

The IBRT results yielded excellent results for all the oxide samples, with extractions ranging from 90 to 95%. Leaching was essentially completed at Day 7 for most samples. Only the weakly oxidised SC06 sample showed continuing leaching at the end of the test. Cyanide consumptions were moderate, averaging 0.4kg/t. Lime requirements averaged 1.0kg/t, ranging from 0.4kg/t for the WOX SC06 to 2.0kg/t for the AGP SOX SC03.

Agglomeration / Percolation Tests

The agglomeration / percolation test results on the MC-2 MOX composite indicated that a cement dose of 12kg/t would be suitable for column leaching. Additional testing to optimise cement and water addition will be critical in any future test programs, with slightly lower doses expected at the lower oxidation levels.

Column Leach Tests

After review of the BRT and IBRT results, column tests were set up on MC-1 and MC-2 as well as the fresh SC07. In spite of the low grade of SC03, it was included in the MC-1 composite. The agglomeration / percolation trials indicated a cement dosage of 12kg/t for MC-2 and this dose was also employed for MC-1. The cement dose for the more competent SC07 fresh material was selected at 2kg/t more for pH control than permeability. Other details of the column tests are included in **Table 5**.

Table 5: Column Test details

Item	Unit	MC-1	MC-2	SC07
Leach Time	Day	39	39	97
Calc'd Head	g/t Au	0.34	0.45	0.52
Bulk Tail	g/t Au	0.01	0.02	0.10
PSD Tail	g/t Au	0.07	0.04	0.08
Au Extraction	% Au	93.5	94.7	81.6

Item	Unit	MC-1	MC-2	SC07
Ag Extraction	% Ag	13	18	38
NaCN	kg/t	0.24	0.25	0.67
Cement	kg/t	12	12	2
Lime	kg/t	0.01	0.01	0.11
Slump	%	0.1	0.1	0.5
Final Percolation	L/h/m ²	14,700	5,800	22,700
Final Residue Moisture	%	25.0	26.8	5.9
Final Dry Bulk Density	t/m ³	1.15	1.12	1.63
Void Volume	%	18.8	13.2	29.9

Leaching was extremely rapid for the two oxide columns with over 80% extraction achieved by Day 10 and 90+% final extractions.

The fresh SC07 composite leached quickly up to ~50% extraction at Day 7, then exhibited a slow continuing leach rate even to the final day of leaching (Day 99). As there was no evidence of coarse or spotty gold in head or residue screen fraction assays, the slow leach rate is likely related to diffusion of leach solution into / out of the coarser rock sizes where a significant fraction of contained gold is not located on grain boundaries.

There was no indication of excessive slumping or permeability issues during the tests. Final moisture of the residues for the two oxide column tests were very high at 25 to 27%. This is reflective of the high clay / fines content of the material. The fresh column had a final residue moisture of 5.9% which is as expected for fresh material.

NaCN consumptions were very low at 0.24kg/t average for the oxide columns with minimal lime added to leach solutions to maintain leach pH. However, the longer leach time requirement for the fresh column resulted in a moderately high value of 0.67kg/t NaCN with 0.11kg/t lime required for pH control during the tests.

The residue analysis for the fresh column shows a general pattern of higher extractions at finer sizes; however, there is really no indication that finer crushing would significantly improve extraction. It is noted that the ground ore test on this material achieved 86% extraction compared to 82% at 12.5mm.

Observations and Conclusions

Key observations from the testwork are presented below. It is noted that the heap leach database available for review is quite small and comments/conclusions should be so considered:

- The size distributions of the oxide columns indicate a very high clay / fines content that contributes to good gold extractions but may present permeability issues in field leaching.
- Extractions were excellent for all samples at a 12.5mm crush size, including the fresh material.
- Leach kinetics were exceptionally fast for the oxide column tests but the fresh material required a significantly longer leach time.
- While finer crushing may improve extraction and leach kinetics for the fresh material, coarser crush sizes should also be tested to determine if similar extractions can be obtained but with lower operating costs.
- Coarser crush sizes are likely to give similar leach behaviour for the oxide materials, with a 40mm topsize recommended for future testing.
- There may be a very slight function of head grade for these samples - although the lower extractions are more related to oxidation level.
- The residue vs head grade trend indicates an extraction trend of >90% based on the IBRTs, again with oxidation level implications.
- Depth is considered a proxy for oxidation level where extraction falls off slightly from depths of >60 metres.
- Based on the very low column test NaCN consumptions in the oxide columns, field consumption for a short leach cycle would likely be in the 0.1 to 0.2kg/t range – very low by industry standards. Field consumption for fresh material as represented by this column test would be in the range of 0.2 to 0.3kg/t, also considered low.
- It is further expected that the cement in agglomeration would obviate the need for much (if any) additional lime for pH control of leach solutions for the oxide ores.
- Agglomeration testwork was limited due to sample availability, but it is considered likely that a minimum dosage of 12 kg/t would be expected for the high clay oxide materials.
- Agglomeration of fresh material would likely not be required, although lime dosing for pH control would be necessary.
- None of the samples are considered acidic, with “natural” pH values ranging from 6.0 to 8.0 in the BRTs.
- Silver values were less than 0.5 g/t Ag for all samples.
- Contained copper in the samples was low to very low and copper would not be expected to impact on heap leach operations for these ores through increased cyanide consumption or contamination of doré bullion.
- Mercury values were very low for all samples and should not be an issue in design or production.

- As PSDs with fraction assays were only conducted on two of the sub-composites, there is minimal data to support potential screen upgrading.

The program concluded low-grade oxide samples from these ore zones are highly amenable to heap leach processing while low grade fresh material also showed suitable leach behaviour. Relatively low reagent consumptions would be expected although cement for agglomeration would be a major cost for the oxide ores.

Based on a rough scale-up of the column test results, potential field leach curves have been prepared in Figure 9 based on an 8m lift height. The final extraction for the fresh material has been discounted by 4% while the two oxide column extractions were limited to 90%. A leach cycle of 80 to 90 days is indicated for the oxide materials while the fresh material would require a much longer 240-day cycle.

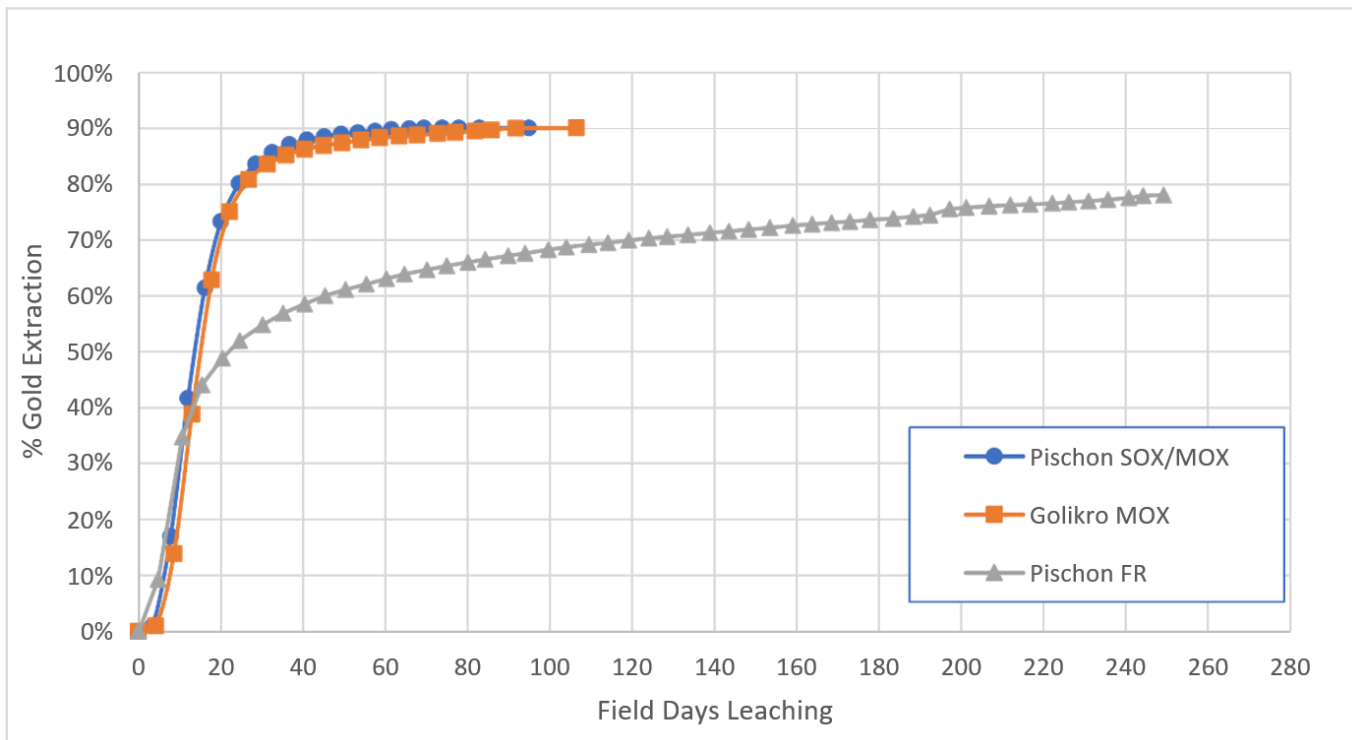


Figure 9: Projected Field Recovery Curves for APG Low Grade Ores

1.4. Leach Pad Design

Site Characteristics

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.

Geotechnical Investigation

No geotechnical investigation of the heap leach pad (HL) area has been undertaken for the Scoping Study and it has been assumed that no significant geotechnical issues are expected within the HL process pond areas based on the loading conditions envisaged.

It is planned to complete a full geotechnical site investigation comprising the following to provide the required level of information:

- Test pitting and core drilling within the footprint of the proposed heap leach pad
- Laboratory testing on representative samples

Site Water Model

No detailed work has been completed to assess the flow of water around the site and account for varied climatic conditions. For the purposes of this study, it has been assumed that there is sufficient site water to develop and run the HL process plant process/raw water use, meet potable water requirements and dust suppression in the plant and mining areas.

Typically, process ponds will comprise Pregnant Leach Solution (PLS), Intermediate Leach Solution (ILS) and Barren Leach Solution (BLS) ponds. A Raw Water Pond (RW) is also assumed adjacent to the proposed plant site area. All ponds are expected to be constructed in cut below existing ground level. The RW and BLS ponds will be lined with a 300 mm thick compacted soil liner overlain by a geomembrane liner. The PLS and ILS ponds, which will contain cyanide and gold in solution, will be lined with a compacted soil liner and two geomembrane liners separated by a Leachate Collection and Return System (LCRS) to reduce the risk of seepage losses through the base of the ponds.

Stormwater ponds will be constructed downstream of the HL designed to store run-off from the heap area up to, and including, a 100-year ARI event. As with the process ponds, the stormwater ponds will be excavated below existing ground level. They will be lined with a 300 mm thick compacted soil liner overlain by a geomembrane liner. The process plant will source water from the stormwater ponds to maintain adequate stormwater capacity and to reduce the demand on raw water supplies.

Operational spillways will be in place in all ponds to manage flows around the process ponds and to provide controlled release from the stormwater ponds in the unlikely event that rainfall exceeds the design 100-year ARI levels.

Heap Leach Pad Design

Based on experience from other operations in West Africa it is envisaged that the Heap Leach Pad will comprise individual cells which discharge into a common solution collection channel. The pads will be constructed in stages with Stage 1 cells constructed prior to commissioning of the processing plant to provide some 15 months of stacking capacity.

The overall stacking plan is based on 4 off x 10 m lifts over the life of the facility. A flexible pad development plan will allow an increase in the number of lifts and reduce overall footprint if it is considered more operationally efficient.

It is assumed that the pads will be constructed with a double liner system comprising a reworked soil liner overlain with a 1.0 mm HDPE geomembrane. The overliner will comprise of a 300 mm low permeability soil cushion layer to protect the geomembrane and a 300 mm drainage layer.

A series of slotted HDPE pipes will be incorporated into the drainage layer to transfer solution from the pad into the solution collection system at the toe of the heap. Pregnant and intermediate solution will flow by gravity back to the process ponds within a geomembrane lined channel. The geomembrane lined collection channel will also return excess rainfall runoff from the pads to the geomembrane lined stormwater pond(s).

Interlift drainage has been assumed for every lift to ensure effective percolation can be maintained to drain the upper lifts of the pad.

The stability of the proposed heap leach configuration is assumed to meet the minimum factor of safety requirements under both static and seismic loading conditions. Further detailed work is planned to confirm these assumptions.

Surface Water Management

Surface water management of the site will be required to control and separate clean and dirty water runoff to reduce environmental impacts on the downstream drainage system. Detailed planning will be required to ensure the minimum disturbance on water catchments. If required these will be diverted by diversion channels or bunds downstream of infrastructure to be returned to the environment. Water which has been impacted by developments will be routed by diversion channels to sediment control structures before release downstream. It

has been assumed that no major watercourse diversion will be required around the planned open pits. Further work will be required to confirm these assumptions.

Monitoring

It has been assumed that a monitoring programme for the HL and associated ponds will be developed to monitor for any potential problems which may arise during operations.

Groundwater monitoring stations are typically installed around and downstream of the HL and process ponds to facilitate early detection of changes in groundwater level and/or quality, both during operation and following decommissioning.

Typically, each monitoring bore station consists of one shallow bore, extending to a depth of approximately 5 to 10 m, and one deep bore to approximately 15 m to 25 m.

Piezometers will be installed within the HL to monitor pore water pressures within the heap to ensure that stability is not compromised. The piezometers will be monitored at regular intervals and any rises in water level compared against defined trigger levels.

Closure and Rehabilitation

As per standard operating practice at HL operations in West Africa, at the end of the HL operation, the downstream faces of the pad will be reshaped, together with 5 m wide benches located at 10 m height intervals, for an overall slope profile of 3.0H:1V. The adopted downstream profile will be stable under both normal and seismic loading conditions, will provide a stable drainage system and will allow for revegetation.

The process and stormwater ponds will be backfilled to prevent standing water. There is often an option of converting one or more of the ponds into landfill sites for the secure containment of wastes generated during the decommissioning process.

Rehabilitation of the HL surface will commence upon termination of rinsing with reshaping undertaken to achieve the closure profile. A capping layer of mine waste will be placed to provide long term erosion protection and a topsoil growth medium layer nominally 100 mm thick will be spread across the final surface. Drainage chute structures will be provided to control discharge off the heaps. The finished surface will be shallow ripped and seeded with appropriate local shrubs and grasses.

1.5. Process Plant

For the purposes of this scoping study, it has been assumed that APG ore will be processed using a 7.5 Mtpa heap leach plant that will be fed using a contract open pit mining fleet. Further work is planned to optimise the mining schedule and profitability of the project. This may involve an increase in the HL pad capacity and the use of grade streaming and stockpiling via accelerated mining. The key project and ore specific criteria assumed for the plant design are:

- Operation and equipment designed for 7.5 dry Mt/y of oxide ore.
- Mechanical utilisation of 70% for the crushing, agglomeration and heap stacking circuits.
- Mechanical availabilities of 97% for the heap leaching and adsorption circuits.
- Sufficient automated plant control to minimise the need for continuous operator interface and allow manual override and control when required.

A treatment plant of this scale is expected to incorporate the following unit process operations:

- Primary crushing with a jaw crusher
- Open circuit screening and secondary crushing
- Agglomeration
- Stacking and heap leaching
- Adsorption in carbon columns
- Acid wash, cold cyanide wash, AARL elution circuit with electrowinning (at existing Tietto facilities)
- Gold smelting (at existing Tietto facilities)
- Carbon regeneration, sizing and storage (in new Tietto facilities)

1.6. Infrastructure

Power Supply and Reticulation

It has been assumed that no upgrade will be required for the 90kv grid connection from Daloa to the Abujar Gold Plant the Daloa grid connection. An additional back-up generator may be required at the HL site. Based on experience at other operations in West Africa an installed load has been assumed to be 8.5MW with an operating load expected to be around 5MW. An 11kV overhead line from the Abujar Gold Plant substation to the HL will be required and has been assumed in the capex for the study. Design and construction of the overhead line and any upstream works that may be required at the Abujar Gold plant main 11kV switchboard and substation will be addressed in the next phase of work.

Buildings

Only a small number of additional buildings are expected to be required by the HL. These may include a workshop (containerised structure with a roof), administration office, amenities and change block, warehouse and reagent laydown area and security control room. It is expected that HL will require the addition of 30 rooms to the existing Abujar Gold Camp. The supply and installation of all the aforementioned infrastructure will be undertaken by Tietto.

Roads

Construction of additional roads to develop and support the HL will be undertaken by Tietto.

1.7. Pit Limits APG HL

While carbon-in-leach (CIL) is currently the technically more advanced processing method for recovering gold, there is potential for heap leaching (HL) to also be employed, particularly for lower grades. This section presents the results of a high-level analysis (+/-35%) of the heap-leach potential for the APG Deposit using the Whittle 4X software.

The APG deposit was selected due to the lower grade of the deposit. The analysis included Measured, Indicated and Inferred Resources.

To determine the sensitivity of the heap leach option to gold price, Whittle 4X generated pit shells at a series of gold prices ranging from 150 USD/oz to 2500 USD/oz. The resulting feed tonnage and grades at these prices is shown in Figure 10 and Figure 11 shows the feed and waste tonnages plus strip ratio for the resulting pits.

Both graphs demonstrate an abrupt increase in pit size at a gold price of USD1250/oz. This is due to a larger area of lower grade mineralisation becoming economic at that price point. The steepness of the graphs demonstrate that the APG heap leach pits are highly sensitive to gold price / economic factors. That is, a high increase in costs or a large decrease in metallurgical recovery could greatly impact the mineable quantities. At the base case gold price, the total potential heap leach feed from APG is 60 Mt at an average grade of 0.5 g/t using cut-off-grades of 0.14 g/t Au for Oxide and Transition and 0.11 g/t Au for fresh.

Figure 12 shows the pit shell feed tonnage and grades evaluated at a single base-case price of USD1,750/oz. Pit 33 is considered the “optimum”, or highest cash-value pit shell, with any pits larger than this not considered as they reduce the cash-flow. As presented earlier, as the pits increase in size, the amount of waste stripping increases causing the incremental margin to decrease. At the boundary of the “optimum” pit the margin is at its lowest, causing that pit limit to be more at risk to price and cost fluctuations. This risk can be reduced by selecting a small pit shell with a higher incremental margin.

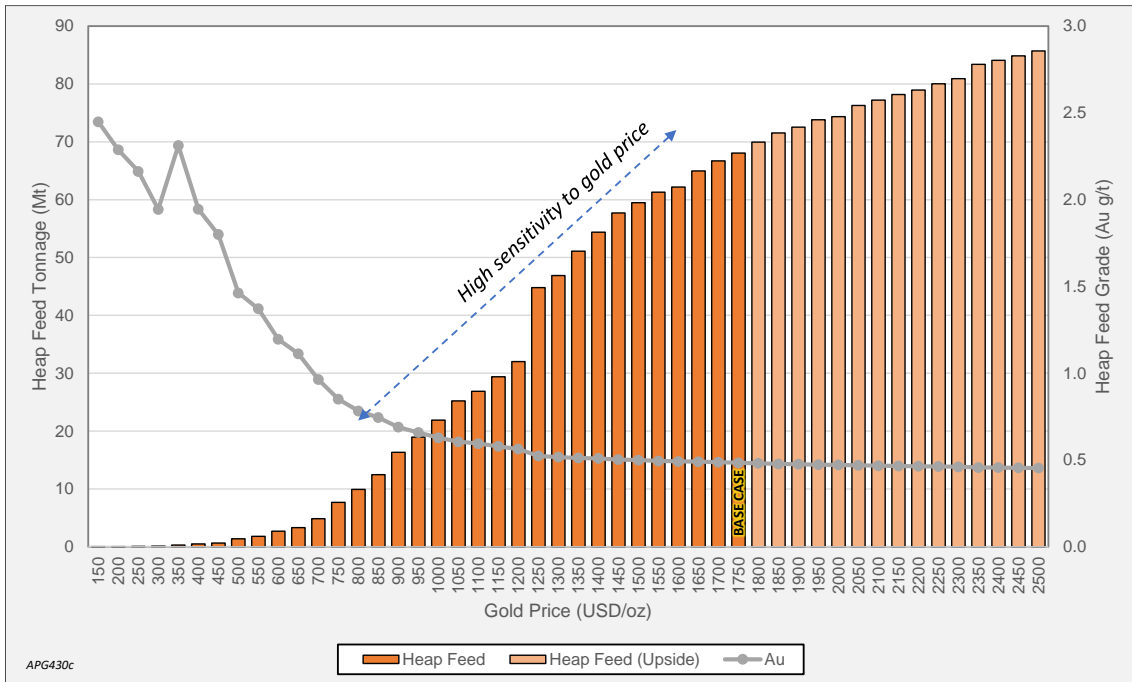


Figure 10: Price Sensitivity - APG Heap Leach Ore Tonnage and Grade (MII)

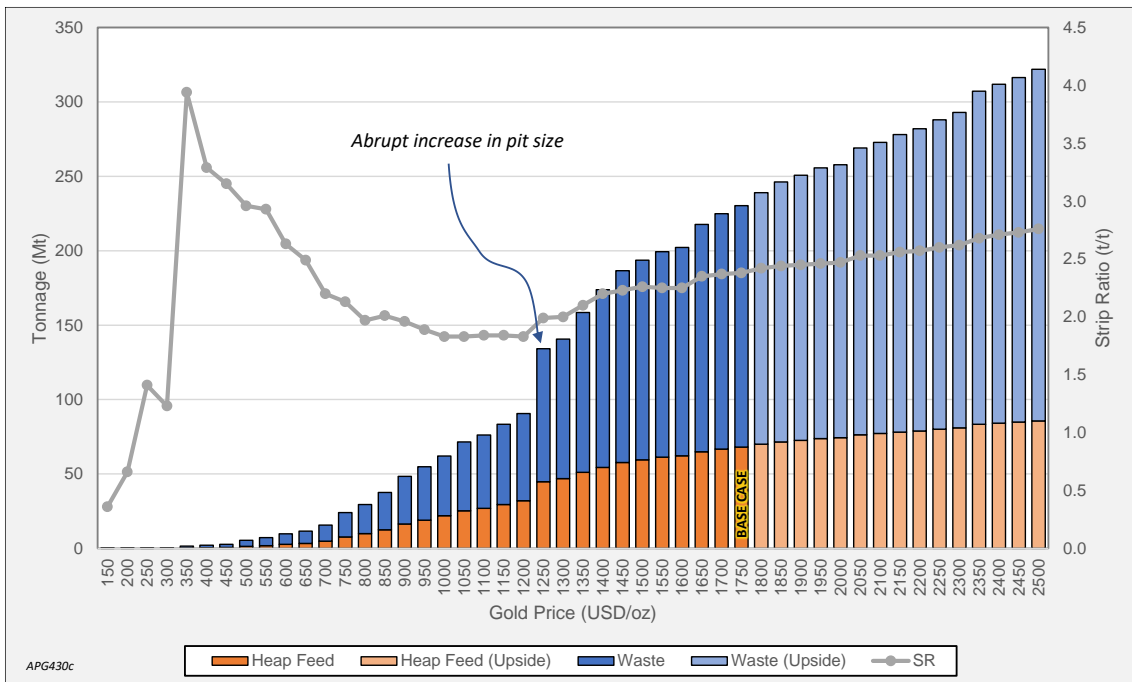


Figure 11: Price Sensitivity - APG Heap Leach Tonnage and Strip Ratio (MII)

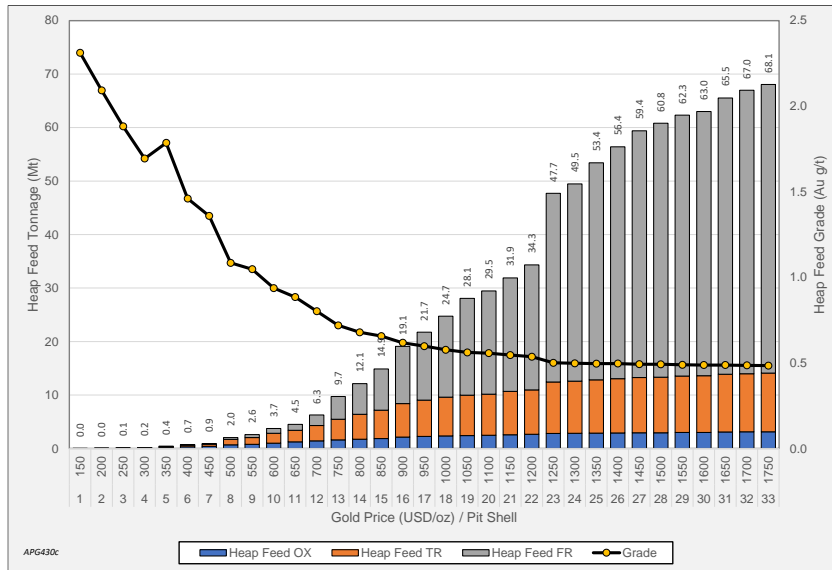


Figure 12: Shell Analysis - APG Heap Leach Ore and Grade by Oxidation (MII)

1.8. Production Schedule APG HL

To understand the practical outcomes of an APG heap leach scenario, a conceptual 7.5 Mtpa ore schedule using a 20m minimum mining width was prepared using Whittle software. The annual mined tonnages and strip ratio is shown graphically in Figure 13, while the annual mill feed tonnage and grade are presented in Figure 14. Finally, the annual contained and recovered gold ounces are shown in Figure 15.

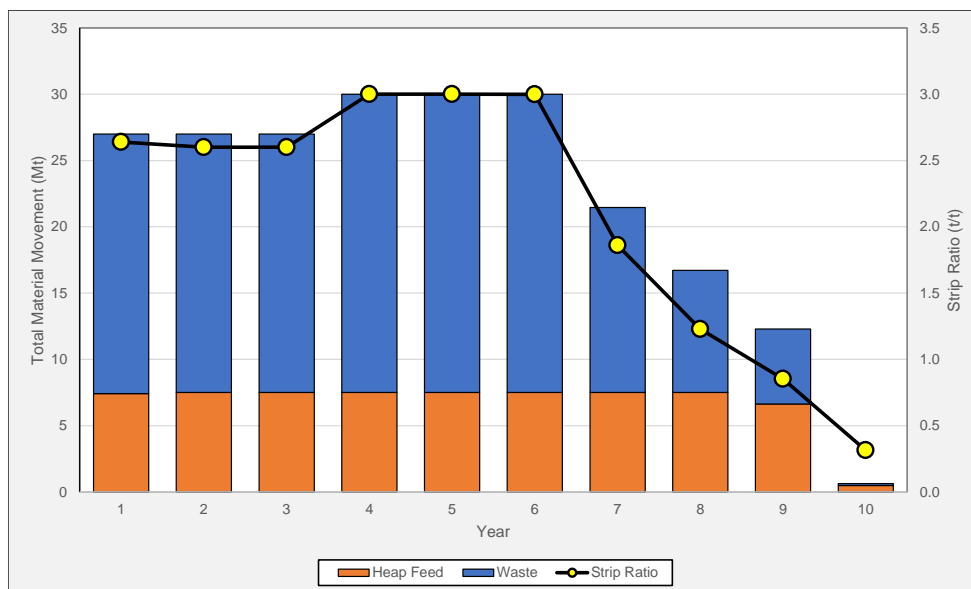


Figure 13: APG Heap Leach Schedule – Annual Tonnage Mined and Strip Ratio (MII)

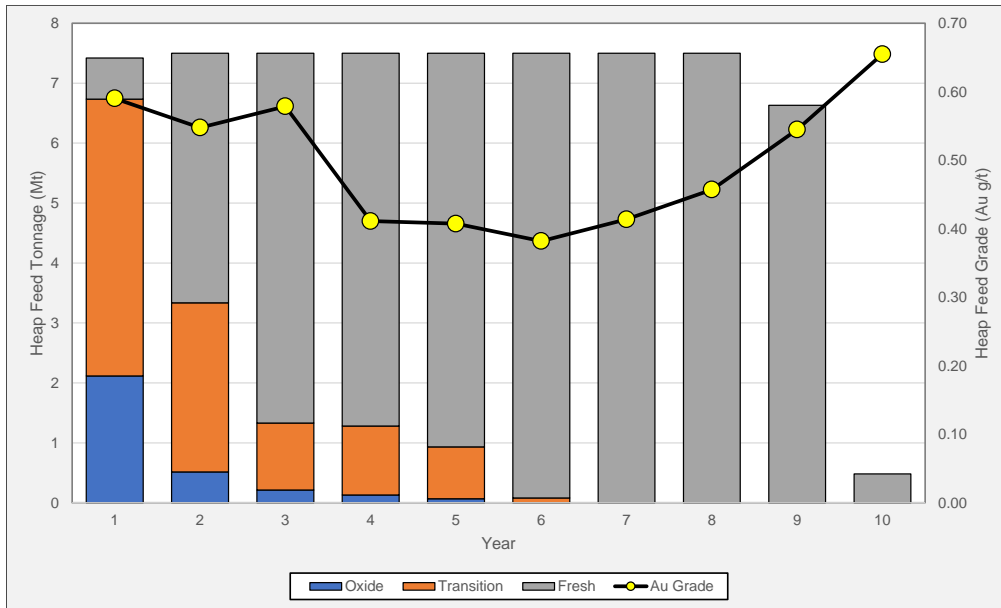


Figure 14: APG Heap Leach Schedule – Annual Mill Feed Tonnage by Oxidation

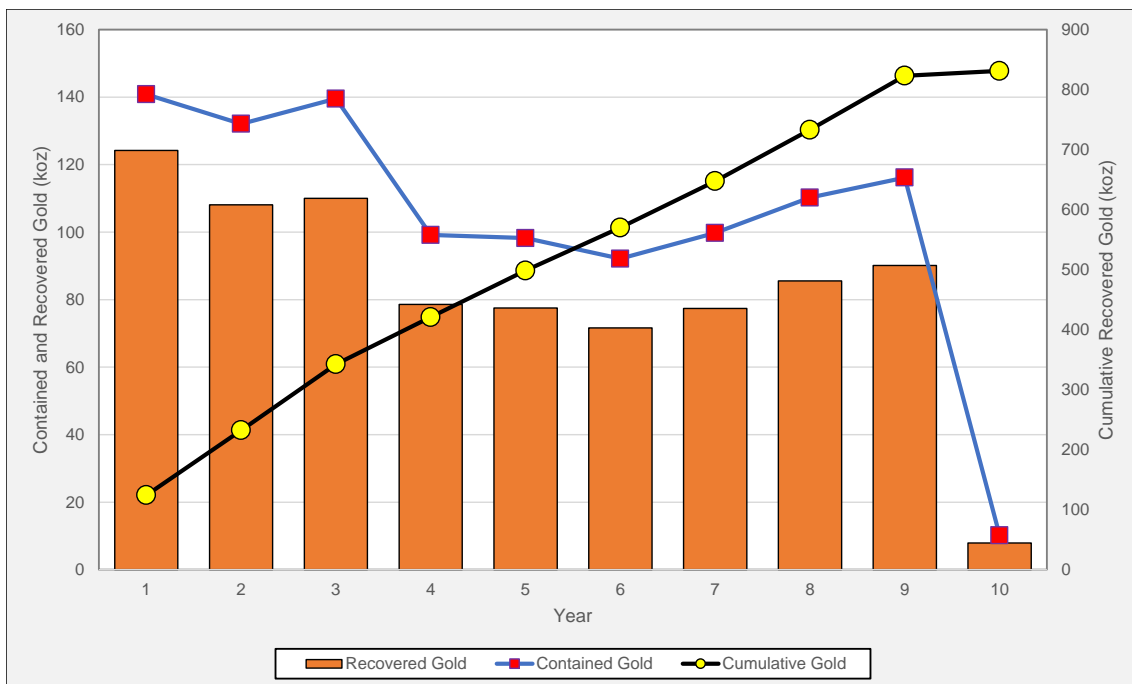


Figure 15: APG Heap Leach Schedule - Annual Contained and Recovered Gold

Key schedule results for APG HL scenario include:

- 10 year mine life,
- 68Mt at 0.48 g/t Au for 1.06Moz is processed for 0.85Moz recovered at 80.4% recovery
- Indicated Resources account for 30% of the first four years feed and 19% over the LOM
- Oxide and transitional material account for 21% of feed with remaining 79% fresh
- Total material movement of up to 30 Mtpa;
- low strip ratio 2.4:1 (w:o); and
- Schedule preferentially targets high grade areas, resulting in 120,000 ounces recovered in first year, reducing to 80,000 ounces per year by Year 4.

While the results of the APG heap leach analysis are positive, this needs further evaluation to understand the sensitivity of the outcomes to project parameters.

1.9. Environment and Social

An Environmental and Social Impact Assessment (ESIA) for the Abujar Gold 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.

Tietto expects that additional studies and fieldwork will be required for a heap leach at APG and will work with local environmental consults to progress this work in 2023.

Tietto takes its social responsibility seriously and strives to respect, protect and promote the human rights of local populations. The ESIA provides a framework for Tietto's social licence to operate.

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 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 an APG HL operation would cover construction, operations and closure phases and 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.

Mine Closure Plan

A mine closure plan 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.

At this stage, Tietto is not aware of any significant negative environmental or social impacts that would prevent the development of an APG heap leach operation at the Abujar Gold Project. The APG HL Project is expected to deliver positive impacts, related to community development and opportunities for local people.

1.10. Capital and Operating Costs APG HL

Estimates of pre-production capital and sustaining capital necessary for the development and operation of a 7.5Mtpa HL at APG have been based on recent operational experience and is presented in Table 6 and reflect an estimate accuracy of +/-35% as of Q4 2022.

Table 6: Estimate of pre-production and sustaining capital for APG 7.5Mtpa HL

Area	Cost
Pre-production Capital Infrastructure Reagent and Plant Services Treatment Plant Costs Owners Costs Contingency	US\$98M
Sustaining Capital inc closure costs	US\$61M

Mining costs from the current mining contract have been assumed and applied to the APG HL operation. Diesel was assumed to be US\$1.0/l which is higher than what Tietto is currently paying. HL processing costs were developed from the column testwork and operational experience from similar operations in West Africa and reflect an estimate accuracy of +/-35% as of Q4 2022 and are presented in Table 7.

Table 7 Heap Leach Operating Cost Estimates

Description	Unit	Estimate
Mining Cost per tonne mined	US\$/t	2.30
Processing Cost Oxide (assume 12 kg/t cement)	US\$/t	5.46
Processing Cost Transition (assume 12 kg/t cement)	US\$/t	5.46
Processing Costs Fresh (assume 2 kg/t cement)	US\$/t	3.46

1.11. Financial Evaluation APG HL

The APG HL production schedule was loaded into the Abujar financial model. The extra development capital and sustaining capital for an APG HL operation were added. HL specific costs and recovery curves were incorporated into the financial model.

The cash flow and economic analysis has been prepared on a 100% of project, constant fourth quarter calendar 2022 US dollar basis. Cost estimations are at a scoping study level of accuracy of +/-35%.

APG HL demonstrates strong economics with early payback at the study gold price and is shown across a full range of gold prices in Table 8.

Table 8: APG HL Schedule at Various Gold Prices (US Dollars)

Description	Unit	US\$1400	US\$1500	US\$1750	US\$2000	US\$2100
Physicals						
Waste Mined	kt	162,231	162,231	162,231	162,231	162,231
Ore mined	kt	68,065	68,065	68,065	68,065	68,065
Strip Ratio	x	2.38	2.38	2.38	2.38	2.38
Mine Life	years	10	10	10	10	10
LOM Contained Au	koz Au	1,060	1,060	1,060	1,060	1,060
Au recovered	koz Au	852	852	852	852	852
LOM % Recovery	%	80.4%	80.4%	80.4%	80.4%	80.4%
Au recovered Yr1	koz Au	123	123	123	123	123
Au recovered Yr5 cum	koz Au	495	495	495	495	495
Project Metrics						
Pre-Production CAPEX	USD M	98	98	98	98	98
Sustaining Capital	USD M	61	61	61	61	61
Gold Sales LOM	USD M	1,192	1,278	1,491	1,703	1,789
Gold Sales ave	USD M	112	120	140	160	168
Gold Sales Yr1	USD M	168	180	210	240	252
Gold Sales Yr5 cum	USD M	686	735	858	980	1,029
EBITDA LOM	USD M	271	353	541	742	805
Pre Tax NPV @ FID (5.0%)	USD M	131	193	338	493	541
Post Tax NPV @ FID (5.0%)	USD M	91	138	247	364	400
Pre-Tax IRR (at FID)	%	38%	51%	79%	107%	115%
Post Tax IRR (at FID)	%	29%	40%	63%	86%	93%
Post Tax payback - from production	Years	2.2	1.8	1.3	1.0	0.9
AISC LOM	USD/Oz	1,060	1,065	1,093	1,107	1,134
AISC Yr1 Prod	USD/Oz Au	853	857	885	899	925
AISC Yr5 Prod cum	USD/Oz Au	1,019	1,023	1,052	1,065	1,092
FCFF (Pre-tax) LOM	USD M	191	273	461	663	725
FCFF (Post-tax) LOM	USD M	139	200	342	493	540

Sensitivity analysis of the Project post tax NPV(5%) is shown in Figure 16 and demonstrates the impact of +/-35% changes in revenue, operating cost and capital cost.

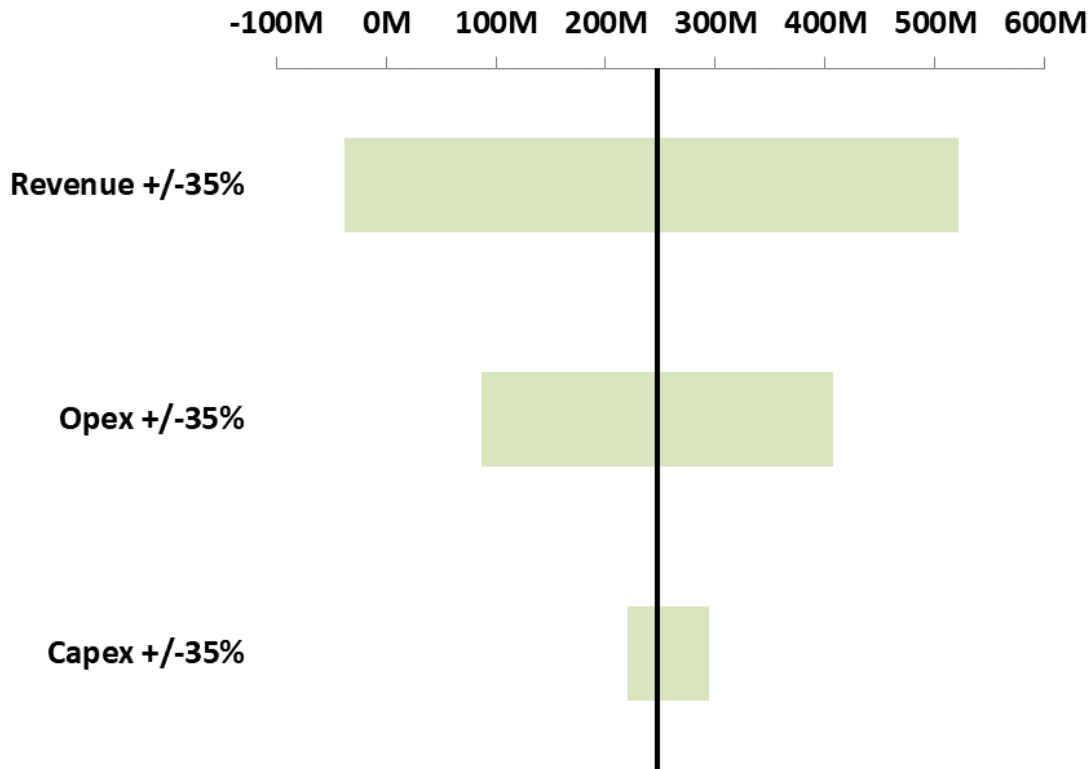


Figure 16: Sensitivity of Post-tax NPV (5%) to +/-35% change in Revenue, Capex and Opex

Project NPV(5%) and payback is shown against changes in the estimated CAPEX (Figure 17).

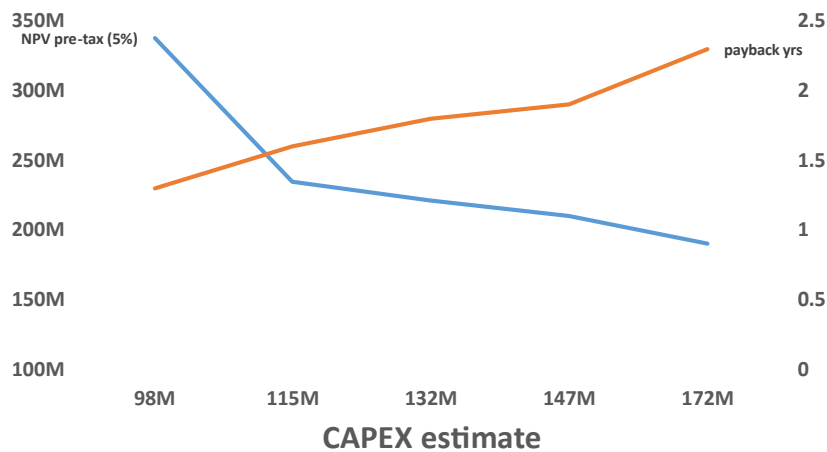


Figure 17: Sensitivity of project NPV(5%) and payback against a change in Capex

1.12. Issue for Further Development

While preparing this Scoping Study numerous aspects where information is limited, and risks/opportunities were identified but could not be resolved. These are noted below to provide some prompts for more detailed studies on this project in the future.

- Extractions were excellent for all samples at a 12.5mm crush size, including the fresh material. Coarser crush sizes are likely to give similar leach behaviour for the oxide materials, with a 40mm top size recommended for future testing to determine if similar extractions can be obtained but with lower operating costs.
- Agglomeration testwork was limited due to sample availability, but it is considered likely that a minimum dosage of 12 kg/t would be expected for the high clay oxide materials. Agglomeration of fresh material was assumed in this study and testwork will be required to confirm that it will not be required, although lime dosing for pH control would be necessary.
- Plant throughput is based on total mineral resources which includes Indicated as well as Inferred resource. Continued exploration and drilling is required to confirm the plant throughput is suitable for the resource before the next phase of this project.
- There is the potential to schedule higher grade ore through the plant and delaying the lower grade material using cut-over strategy especially given the limited mining constraints and continuity of high-grade mineralisation. Further analysis is required.

1.13. Development Schedule

An indicative development schedule for the APG HL project is shown in Figure 18. Please note this timetable is indicative only and may change. Please refer to key risks identified at the front of this report that may cause changes to the timetable.

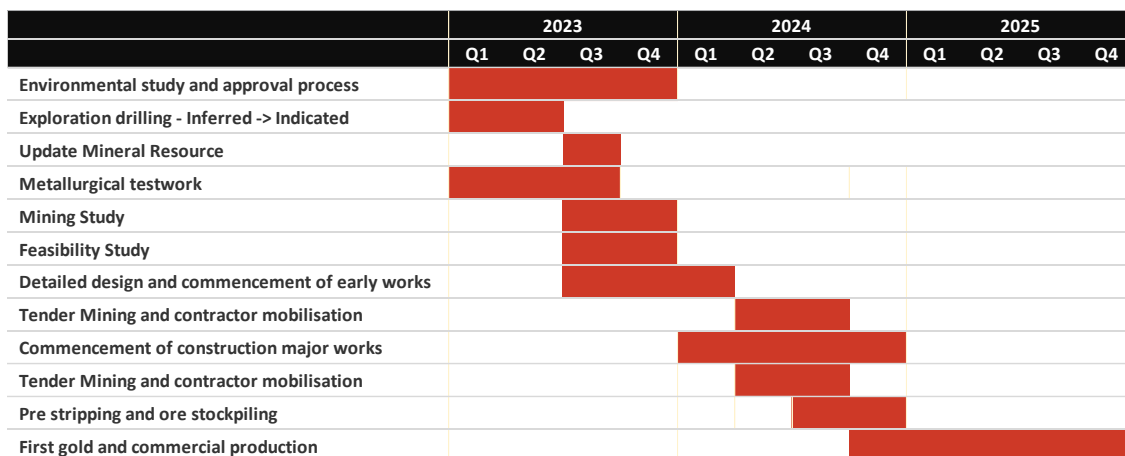


Figure 18: Forecast Timetable

1.14. Conclusion and Next Steps

The Scoping Study provides justification that the APG heap leach is technically simple and economically robust project with significant potential to grow. The Board of Tietto has approved progression of the Project directly to a Feasibility Study (“FS”). The FS work will commence in parallel with ongoing exploration and resource drilling. The FS completion is targeted for the end of CY 2023.

1.15. Reasonable Basis for Funding Assumption

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.

- To achieve the range of outcomes indicated in the Scoping Study, pre-production funding of approximately US\$98M may be required. Typically project development financing would involve a combination of debt and equity.
- Tietto expects its equity funded Abujar Gold Project to deliver strong post-tax cashflows in 2023 and notes that global debt and equity finance availability for high-quality gold projects remains robust.
- The APG heap leach is low risk, technically simple and has a rapid payback of 2.3 years from commercial production at the study gold price.
- The APG deposit has significant exploration potential to both grow and increase the confidence of the Mineral Resource base that forms this Scoping Study which will likely further strengthen the potential Project economics.
- The Tietto Board and Management has extensive experience in mine development, financing and production in the resources industry and West Africa and specifically in Côte d’Ivoire
- Côte d’Ivoire is a stable, mining and investor friendly jurisdiction with a history of successful gold mine developments

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 presentation that relates to Mineral Resources was prepared by RPM Global and released on the ASX platform on 11 April 2022. The Company confirms that it is not aware of any new information or data that materially affects the Minerals Resources in this publication. The Company confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the RPM Global's findings are presented have not been materially modified.

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.

The information in this report that relates to Ore Reserves was prepared by RPM and released on the ASX platform on 5 October 2021. The Company confirms that it is not aware of any new information or data that materially affects the Ore Reserves in this publication. The Company confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the RPM findings are presented have not been materially modified

The information in the report that relates to Ore Reserves for the Abujar Gold Project 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 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. Mr. Igor Bojanic is not aware of any potential for a conflict of interest in relation to this work for the Client. 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" (30 September 2021).

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 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, 10 September 2021, 22 September 2021, 5 October 2021, 13 October 2021, 21 October 2021, 8 November 2021, 12 November 2021, 16 November 2021, 22 November 2021, 30 November 2021, 10 December 2021, 22 December 2021, 18 January 2022, 20 January 2022, 24 January 2022, 7 February 2022, 14 February 2022, 18 February 2022, 25 February 2022, 15 March 2022, 29 March 2022, 11 April 2022, 29 April 2022, 4 May 2022, 16 May 2022, 24 May 2022, 8 June 2022, 10 June 2022, 14 June 2022, 29 June 2022, 4 July 2022, 12 July 2022, 14 July 2022, 21 July 2022, 28 July 2022, 1 August 2022, 17 August 2022, 1 September 2022, 12 September 2022, 14 September 2022, 20 September 2022, 29 September 2022, 4 October 2022, 11 October 2022, 26 October 2022, 10 November 2022, 11 November 2022, 22 November 2022, 24 November 2022 and 7 December 2022. 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 Q4 CY22 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.

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 1,114km², 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 120.36km².

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 3.45 million ounces Measured, Indicated, and Inferred JORC 2012 Mineral Resources and has completed metallurgical test work and a DFS. Tietto is currently constructing the Abujar Gold Plant and expects to produce first gold by the end of Q4 CY2022.

The Company first reported the production targets and forecast financial information derived from its production targets in accordance with Listing Rules 5.16 and 5.17 in its ASX announcement on 5 October 2021 titled "Tietto to Deliver 260,000 oz Gold in Abujar First Year". The Company confirms that all material assumptions underpinning the production targets and the forecast financial information derived from the production targets continue to apply and have not materially changed.

Abujar Mineral Resources

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 9.

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 USD per troy ounce, and 1.1 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 JORC Table 1. It is highlighted that while a 2,000 USD per ounce pit shell was

utilised the cut-off grades were estimated based on the gold price of 1,800 USD per troy ounce which is 1.25 times the consensus forecast as of February 2022.

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 USD per troy ounce, and 1.1 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 JORC Table 1. It is highlighted that while a 2,000 USD per ounces pit shell was utilised the cut-off grades were estimated based on the gold price of 1,800 USD per troy ounce which is 1.25 times the consensus forecast as of February 2021.

South Gamina Resource is reported to a depth of 120m and not reported at depths below 120m.

Table 9: Statement of Mineral Resources by Deposit as at 28th February 2022 Reported at 0.25 g/t Au cut off within pit shells; and 1.1 g/t Au cut off below the pit shells for AG; and 0.3 g/t Au cut off within pit shells, and 1.1 g/t Au cut off below the pit shells for APG, and 0.25 g/t to a depth of 120m for SG (2000 USD Pit).

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	Measured	0.1	1.4	0.01	0.5	1.3	0.02	7.1	1.4	0.32	7.7	1.4	0.35
	Indicated	0.5	1.0	0.02	1.8	1.1	0.06	28.1	1.3	1.19	30.4	1.3	1.27
	Inferred	0.3	0.9	0.01	1.4	0.8	0.04	15.4	1.5	0.76	17.1	1.5	0.81
	Total	0.9	1.0	0.03	3.7	1.0	0.12	50.6	1.4	2.27	55.2	1.4	2.43
APG	Indicated	0.5	0.7	0.01	1.9	0.7	0.04	6.1	0.8	0.15	8.5	0.7	0.20
	Inferred	1.3	0.7	0.03	5.1	0.7	0.11	27.0	0.7	0.62	33.3	0.7	0.76
	Total	1.8	0.7	0.04	7.0	0.7	0.15	33.1	0.7	0.77	41.9	0.7	0.96
SG	Inferred	0.08	0.74	0.002	0.15	1.09	0.01	1.3	1.3	0.05	1.6	1.2	0.06
Grand Total		2.8	0.8	0.07	10.8	0.8	0.28	85.1	1.1	3.10	98.7	1.1	3.45

Note: The Mineral Resources have 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.

- All Mineral Resources figures reported in the table above represent estimates at 28 February 2022. 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.*
- 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).*
- 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 10 below. However, RPM recommends that the Mineral Resource be reported using the criteria shown in Table 9. It is highlighted that Table 10 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 9 will occur and a direct comparison is not able to be completed.

Table 10: Abujar Mineral Resources at varying cut off grades

COG	AG Measured			AG Indicated			AG Inferred			APG Indicated			APG Inferred			Total		
	Tonnes (Mt)	Au (g/t)	Au (Moz)	Tonnes (Mt)	Au (g/t)	Au (Moz)	Tonnes (Mt)	Au (g/t)	Au (Moz)	Tonnes (Mt)	Au (g/t)	Au (Moz)	Tonnes (Mt)	Au (g/t)	Au (Moz)	Tonnes (Mt)	Au (g/t)	Au (Moz)
0.1	8.6	1.3	0.4	42.2	1.0	1.4	45.5	0.9	1.3	12.0	0.6	0.2	66.6	0.6	1.2	175.0	0.8	4.5
0.2	8.1	1.3	0.3	39.9	1.1	1.4	43.6	0.9	1.3	11.9	0.6	0.2	64.2	0.6	1.2	167.7	0.8	4.4
0.3	7.2	1.5	0.3	34.5	1.2	1.4	38.3	1.0	1.2	10.2	0.7	0.2	56.2	0.6	1.1	146.5	0.9	4.3
0.4	6.1	1.7	0.3	28.1	1.4	1.3	31.1	1.1	1.1	7.9	0.8	0.2	40.7	0.7	0.9	113.9	1.1	3.9
0.5	5.2	1.9	0.3	23.0	1.6	1.2	24.7	1.3	1.1	5.7	0.9	0.2	27.1	0.9	0.8	85.7	1.3	3.5
0.6	4.4	2.1	0.3	19.2	1.8	1.1	19.4	1.5	1.0	4.3	1.1	0.1	17.7	1.0	0.6	65.0	1.5	3.1
0.7	3.8	2.4	0.3	16.2	2.1	1.1	15.9	1.7	0.9	3.3	1.2	0.1	12.2	1.2	0.5	51.3	1.7	2.9
0.8	3.2	2.6	0.3	13.9	2.3	1.0	13.6	1.9	0.8	2.5	1.3	0.1	9.3	1.3	0.4	42.6	1.9	2.6
0.9	2.8	2.9	0.3	12.2	2.5	1.0	12.0	2.0	0.8	2.0	1.5	0.1	7.2	1.5	0.3	36.1	2.1	2.5
1.0	2.5	3.2	0.3	10.8	2.7	0.9	10.7	2.2	0.8	1.6	1.6	0.1	5.9	1.6	0.3	31.5	2.3	2.3
1.1	2.2	3.5	0.2	9.7	2.9	0.9	9.6	2.3	0.7	1.3	1.7	0.1	4.5	1.8	0.3	27.2	2.5	2.2
1.2	2.0	3.7	0.2	8.8	3.1	0.9	8.5	2.4	0.7	1.1	1.8	0.1	3.9	1.9	0.2	24.2	2.7	2.1
1.3	1.8	4.0	0.2	8.1	3.2	0.8	7.7	2.6	0.6	0.9	1.9	0.1	2.9	2.1	0.2	21.4	2.8	2.0
1.4	1.7	4.2	0.2	7.4	3.4	0.8	6.8	2.7	0.6	0.7	2.1	0.05	2.5	2.2	0.2	19.2	3.0	1.9
1.5	1.5	4.5	0.2	6.9	3.5	0.8	6.1	2.9	0.6	0.6	2.2	0.04	2.0	2.4	0.2	17.0	3.2	1.8
1.6	1.4	4.7	0.2	6.4	3.7	0.8	5.4	3.1	0.5	0.5	2.3	0.04	1.5	2.8	0.1	15.2	3.4	1.7
1.7	1.3	4.9	0.2	5.9	3.8	0.7	4.9	3.2	0.5	0.4	2.4	0.03	1.3	2.9	0.1	13.9	3.6	1.6
1.8	1.2	5.1	0.2	5.5	4.0	0.7	4.4	3.4	0.5	0.4	2.5	0.03	1.2	3.0	0.1	12.8	3.7	1.5
1.9	1.1	5.4	0.2	5.1	4.2	0.7	4.1	3.5	0.5	0.3	2.6	0.03	1.1	3.1	0.1	11.9	3.9	1.5
2.0	1.1	5.6	0.2	4.8	4.3	0.7	3.8	3.6	0.4	0.3	2.6	0.03	1.1	3.1	0.1	11.0	4.0	1.4
2.5	0.8	6.7	0.2	3.6	5.0	0.6	2.4	4.4	0.3	0.1	3.4	0.01	0.7	3.7	0.1	7.6	4.9	1.2
3.0	0.6	7.7	0.2	2.7	5.8	0.5	1.7	5.0	0.3	0.1	3.9	0.01	0.4	4.1	0.1	5.6	5.6	1.0

*SG included with AG

Abujar 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 11 (refer ASX release 5 October 2021). As no mining has taken place at the site, the reporting date reflects the completion of the technical work supporting the estimate.

Table 11: Open Cut Ore Reserve Estimate as at 30 September 2021

Deposit	Proved			Probable			Total		
	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:

- 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.*
- 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.*
- 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.*
- 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)*
- 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.*
- All Ore Reserve estimates are on a dry basis.*
- The Ore Reserves have been reported at a 100% equity stake and not factored for ownership proportions.*
- The Company first reported the production targets and forecast financial information derived from its production targets in accordance with Listing Rules 5.16 and 5.17 in its ASX announcement on 5 October 2021 titled "Tietto to Deliver 260,000 oz Gold in Abujar First Year". The Company confirms that all material assumptions underpinning the production targets and the forecast financial information derived from the production targets continue to apply and have not materially changed.*

1. Section 4 of the JORC Code, 2012 Edition – Table 1

No Ore Reserve has been declared for APG HL operation. This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions on which the Scoping Study production target and projected financial information are based have been included in this release and disclosed in the table below.

Criteria	JORC Code explanation	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<p>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</p> <p>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</p>	<p>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.</p> <p>The Mineral Resources are inclusive of Ore Reserves.</p>
<i>Site visits</i>	<p>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</p> <p>If no site visits have been undertaken indicate why this is the case.</p>	<p>A site visit has not been undertaken to the Project area by the RPM mining team or KCAA. This is not considered to be a study risk as no Ore Reserve has been declared.</p> <p>Tietto has knowledge of the site and Mr Jeremy Clark, RPM's competent person for Resource estimation, has completed multiple site visits.</p>
<i>Study status</i>	<p>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</p> <p>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</p>	<p>The Project is an at Scoping Study level.</p> <p>No Ore Reserve has been declared for APG heap leach Scoping Study.</p>

Criteria	JORC Code explanation	Commentary
	a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	
<i>Cut-off parameters</i>	The basis of the cut-off grade(s) or quality parameters applied.	<p>The marginal cut-off grades for the Scoping Study were informed from mining costs from the current mining contract Diesel was assumed to be US\$1.0/l which is higher than what Tietto is currently paying. HL processing costs were developed from the column testwork and operational experience from similar operations in West Africa and reflect an estimate accuracy of +/- 35%</p> <p>Oxide: 0.14 g/t Au. Transition: 0.14 g/t Au. Fresh: 0.11 g/t Au.</p>
<i>Mining factors or assumptions</i>	<p>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).</p> <p>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.</p> <p>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc.), grade control and pre-production drilling.</p> <p>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</p> <p>The mining dilution factors used.</p> <p>The mining recovery factors used.</p>	<p>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 underway at the AG deposit.</p> <p>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 2.5 m east-west, 6.5m north-south and 2.5 m vertical for APG deposit.</p> <p>The geotechnical criteria for the design of the AG and APG open cuts were developed by Dempers & Seymour Pty Ltd for the purposes of a DFS study. Mining regions were sub-divided into domains and varying parameters assigned based on material characteristics. In general, oxide rock had an overall slope angle of ~40</p>

Criteria	JORC Code explanation	Commentary
	<p>Any minimum mining widths used.</p> <p>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</p> <p>The infrastructure requirements of the selected mining methods.</p>	<p>degrees, while in fresh and transition rock this was ~50 degrees.</p> <p>The ROM (mining) model used to determine quantities and grades was calculated to have a global ore tonnage loss of 15% loss and 13% dilution for the APG deposit. Local ore loss and dilution will vary slightly throughout the deposits.</p> <p>The economic pit limits were defined using Whittle 4X pit optimisation software (“Whittle 4X”) with inputs such as geotechnical parameters, SMU mining model, metallurgical recovery and mining costs.</p> <p>Economic mining limits were tested using Measured, Indicated and Inferred Resources. Tietto estimates that 21,000m of diamond drilling will be required to convert the Inferred Resources at APG to Indicated.</p> <p>Conventional open cut mining is a very common mining method used through the mining industry and requires no specialist infrastructure.</p> <p>In terms of infrastructure to support the mining operation it is planned that the bulk of the mining supporting infrastructure will be provided by the mining contractor, and has been included in the mining costs.</p>
<p><i>Metallurgical Modifying Factors</i></p>	<p>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</p> <p>Whether the metallurgical process is well-tested technology or novel in nature.</p>	<p>Appropriate metallurgical testwork has been undertaken to support the Scoping Study and grade-recovery curves were generated based on the samples collected for testing.</p> <p>The samples tested are considered representative of the different material</p>

Criteria	JORC Code explanation	Commentary
	<p>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</p> <p>Any assumptions or allowances made for deleterious elements.</p> <p>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.</p> <p>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</p>	<p>types throughout the mining area. More samples will be required to confirm the assumptions made in this study.</p> <p>A pilot plant was not considered necessary at this early stage as the approach of heap leaching gold using cyanide is used throughout the industry and is a proven technology.</p> <p>No major presence of deleterious material has been identified.</p>
<i>Environmental</i>	<p>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.</p>	<p>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.km2.</p> <p>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").</p> <p>Further approvals will need to be sought for the development of a heap leach operation at APG and this work is planned for 2023,</p> <p>The National Environment Agency ("ANDE") has responsibility for ensuring the project operations are compliant with environmental regulations.</p>

Criteria	JORC Code explanation	Commentary
		<p>Tietto has received a draft mining Convention with the Ivoirian Government and expects to reach agreement before the end of 2022 following final negotiations.</p> <p>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.</p>
<i>Infrastructure</i>	<p>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.</p>	<p>Appropriate site infrastructure is in place to supporting operating activities. A mining camp for 480 people has been constructed to support development and operating activities at the 4.5Mtpa CIL Abujar gold plant which is located approximately 7km to north east of APG.</p> <p>Further detailed engineering work will be required to confirm the cost of site and offsite infrastructure.</p> <p>Sufficient land is available for the placement of all required infrastructure, including heap leach pads, processing plant, waste rock storage, explosives magazine.</p> <p>It is assumed that water can be provided by a diversion dam or a pipeline from the Abujar CIL process plant.</p> <p>Grid power for the mine will be supplied from the 90kV Daloa substation located approximately 30km away from the site. Energisation of the powerline is expected before the end of 2022. An 11kV powerline would be required for a heap leach operation at APG.</p>

Criteria	JORC Code explanation	Commentary
		<p>Professional staff have been sourced from West Africa and some specialist roles have been sourced internationally. Where feasible, recruitment for employment will focus on local communities.</p>
<p><i>Costs</i></p>	<p>The derivation of, or assumptions made, regarding projected capital costs in the study.</p> <p>The methodology used to estimate operating costs.</p> <p>Allowances made for the content of deleterious elements.</p> <p>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</p> <p>The source of exchange rates used in the study.</p> <p>Derivation of transportation charges.</p> <p>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</p> <p>The allowances made for royalties payable, both Government and private.</p>	<p>Capital and operating costs have been developed inhouse with experience from operations in West Africa to an accuracy level of ±35%</p> <p>Cost modelling was undertaken in United States Dollars.</p> <p>Mine costs were supported by a mining contractor pricing contract.</p> <p>Where available, some costs were benchmarked against existing operating gold mines in the region.</p> <p>Government royalty increases with the gold price. At the long-term price applied, the royalty is 4-5% of revenue on average.</p> <p>A community development fund of 0.5% of revenue.</p> <p>No deleterious materials have been identified in the test work.</p>
<p><i>Revenue factors</i></p>	<p>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</p> <p>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</p>	<p>The derivation of feed grades comes from the April 2022 Mineral Resource estimate.</p> <p>Gold is the only metal considered to generate revenue.</p> <p>A gold price of USD1,750/oz was estimated from historic and recent gold prices. These were compared to long-term forecasts by published metal price forecasters.</p>

Criteria	JORC Code explanation	Commentary
<i>Market assessment</i>	<p>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</p> <p>A customer and competitor analysis along with the identification of likely market windows for the product.</p> <p>Price and volume forecasts and the basis for these forecasts.</p> <p>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</p>	<p>The demand for gold is considered in the gold price used.</p> <p>It was considered that gold would be marketable beyond the processing life of these Reserves.</p> <p>The commodity is not an industrial metal.</p>
<i>Economic</i>	<p>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.</p> <p>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</p>	<p>An economic model has been prepared from using assumed engineering and cost inputs these are considered to be at an accuracy level of $\pm 35\%$.</p> <p>The economic modelling demonstrates that the Project is cash flow positive.</p> <p>The base case results in a positive economic outcome as assessed by an NPV calculation (@5% DCF (FID)). The NPV is most sensitive to the gold price. The project break-even gold price is approximately USD1,400/oz.</p>
<i>Social</i>	<p>The status of agreements with key stakeholders and matters leading to social licence to operate.</p>	<p>Tietto advises that it enjoys a good relationship with the local community and is operation the Abujar gold mine located 7km to the northeast.</p>
<i>Other (incl Legal and Governmental)</i>	<p>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</p> <p>Any identified material naturally occurring risks.</p>	<p>No Ore Reserves have been declared.</p> <p>All Government agreements and approvals are understood to be in good standing or nearing approval.</p> <p>Further land purchase, environmental studies, and environment approvals will</p>

Criteria	JORC Code explanation	Commentary
	<p>The status of material legal agreements and marketing arrangements.</p> <p>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.</p>	<p>be required before Tietto could start building a heap leach operation at APG.</p>
<i>Classification</i>	<p>The basis for the classification of the Ore Reserves into varying confidence categories.</p> <p>Whether the result appropriately reflects the Competent Person's view of the deposit.</p> <p>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</p>	<p>No Ore Reserve has been declared.</p>
<i>Audits or reviews</i>	<p>The results of any audits or reviews of Ore Reserve estimates.</p>	<p>No Ore Reserve has been declared.</p>
<i>Discussion of relative accuracy/ confidence</i>	<p>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which</p>	<p>No Ore Reserve has been declared.</p> <p>This Scoping Study is primarily a technical exercise to establish the project concept and to provide an order-of-magnitude cost. This Scoping study can be used for comparison purposes or to indicate the value in proceeding with further study work.</p>

Criteria	JORC Code explanation	Commentary
	<p>could affect the relative accuracy and confidence of the estimate.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>The Scoping Study for a 7.5Mtpa HL plant for APG ore has been prepared to an intended accuracy level of $\pm 35\%$.</p>