

4 May 2022

## Tietto receives heap leach gold recoveries up to 95% from lower grade APG ore

### Highlights:

- Scoping study work to assess addition of heap leach to the 4.5Mpta carbon-in-leach (CIL) processing for lower grade ore returns excellent gold recoveries on lower grade ore from the APG deposit, part of Tietto's 3.45Moz Abujar Gold Project in Côte d'Ivoire, West Africa
- Testing completed on 140kg of diamond core samples drilled at APG representing low-grade 'halo' material, with head grades ranging from 0.16 g/t Au to 0.54 g/t Au. Test work results show:
  - Moderate crush size of 12.5 millimetres – crush size not optimised and coarser crushing is likely for field operations with lower operating costs
  - Moderate cement additions (12kg/t) for oxide and transitional material. Cement dosage for the more competent fresh material (2kg/t) was more for pH control than permeability
  - Low cyanide consumption (0.24-0.67kg/t) for oxide & transitional to fresh respectively
  - Rapid gold leaching for oxide columns with more than 80% achieved by Day 10 and up to 95% final extractions. Fresh column reported 50% extraction by Day 7 and 82% final extraction
  - Good permeability and low slump levels

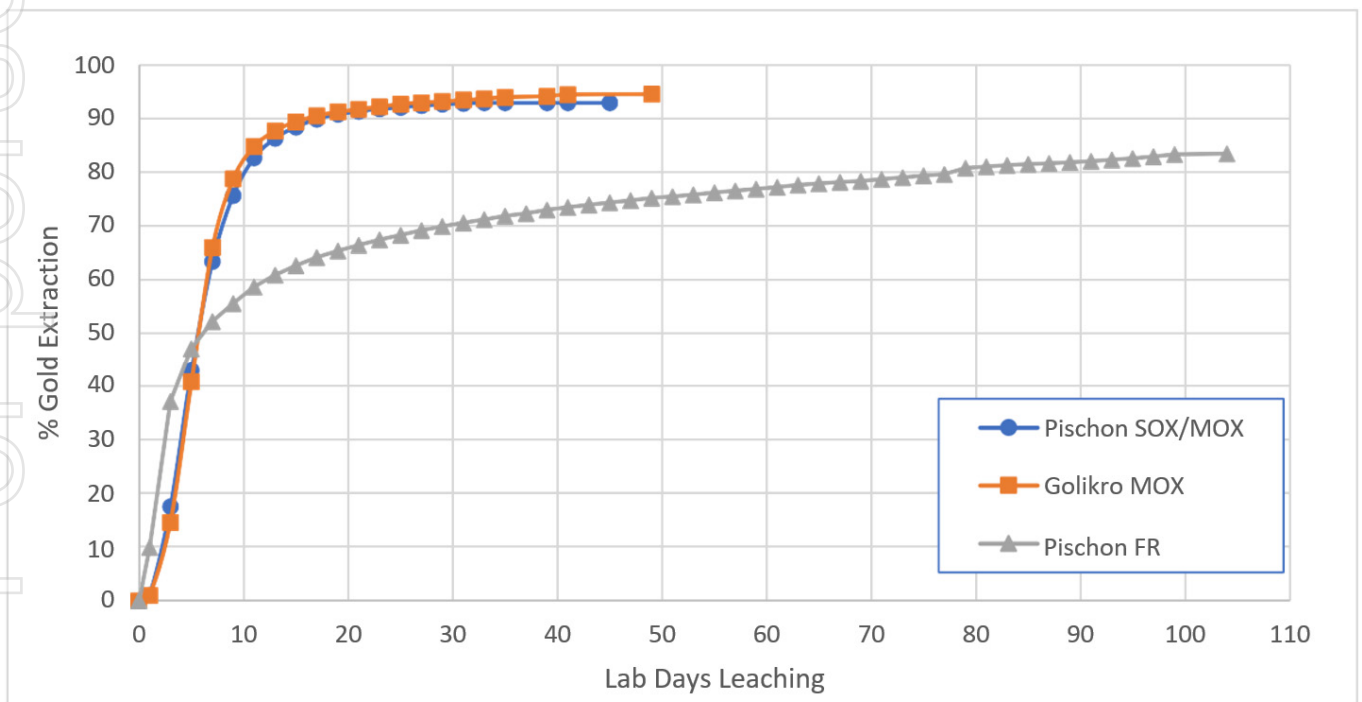


Figure 1: Column Test Recovery Curves

- Results demonstrate heap leaching can be used on APG's lower grade material which is not able to be economically processed at the Abujar mill, with potential to unlock further value from the project
- Test work performed at ALS Metallurgical Laboratory in Balcatta (Perth) and overseen by heap leaching consultant Kappes Cassiday & Associates Australia (KCAA)
- Abujar Gold Resource estimate includes material at the APG deposit of 39.7Mt for 0.77Moz gold within 100m from surface<sup>1</sup> that could be potentially amenable to heap leach processing
- Tietto will incorporate a scoping study to determine the economic benefits of a heap leach operation into the update of Abujar's LOM production plan – results expected by the end of Q2 2022
- Abujar DFS demonstrated robust financial results and estimated **first-year gold production of 260,000oz** and 1.2Moz over the first six years of Abujar's 11-year mine life for an NPV<sub>5%</sub> of A\$1.3B (pre-tax) and A\$0.97B (post-tax) using US\$1,700/oz Au and A\$/US\$=0.74<sup>2</sup>
- Abujar gold plant construction is on target for **first gold in Q4 CY2022**
- Tietto has completed the first tranche of a two-tranche A\$130 million placement to fully fund Abujar Gold Project construction with no debt.

West African gold explorer and developer Tietto Minerals Limited (ASX: TIE) (**Tietto** or the **Company**) is pleased to report excellent metallurgical recoveries confirmed from heap leach test work of lower-grade halo mineralisation at the APG deposit, part of its **3.45Moz** Abujar Gold Project in Côte d'Ivoire, West Africa.

Tietto Managing Director, Dr Caigen Wang, said: *"Results of this latest test work program confirm the amenability of APG oxide, transitional and fresh material to heap leach processing. This has the potential to extract additional value for shareholders from the considerable amount of low-grade halo material at APG which is currently uneconomic to process using the 4.5Mtpa Abujar Mill being built 7km to the north of APG.*

*"We asked the engineers to run a scoping study work to quantify the economic benefits of an additional heap leach operation that could run in parallel with the 4.5Mtpa CIL processing path. This scoping study will be incorporated into an update of Abujar's LOM production plan using the latest Mineral Resource, higher spot gold prices and increased Abujar CIL mill throughput (4.5Mtpa - fresh ore).*

*"We are fully funded to production at Abujar, which has potential to be **one of the largest gold producing mines in Côte d'Ivoire**, with an expected production of **more than 260,000 ounces of gold** in the first year and **1.2M ounces of gold** in the first six years.*

*"Tietto has an experienced team on board to deliver Abujar on time and on budget. We are on track to deliver another mineral resource update and first gold at Abujar later this year. Shareholders can expect further updates from our aggressive diamond drilling program as we advance our dual strategy of 'Drill*

<sup>1</sup> Refer to Table 3 for further details of resource and reserve estimates

<sup>2</sup> Refer ASX Announcement dated 5<sup>th</sup> October 2021

and Build' and develop the Abujar Gold Project into **West Africa's next gold mine with first gold by the end of Q4 CY22.**"

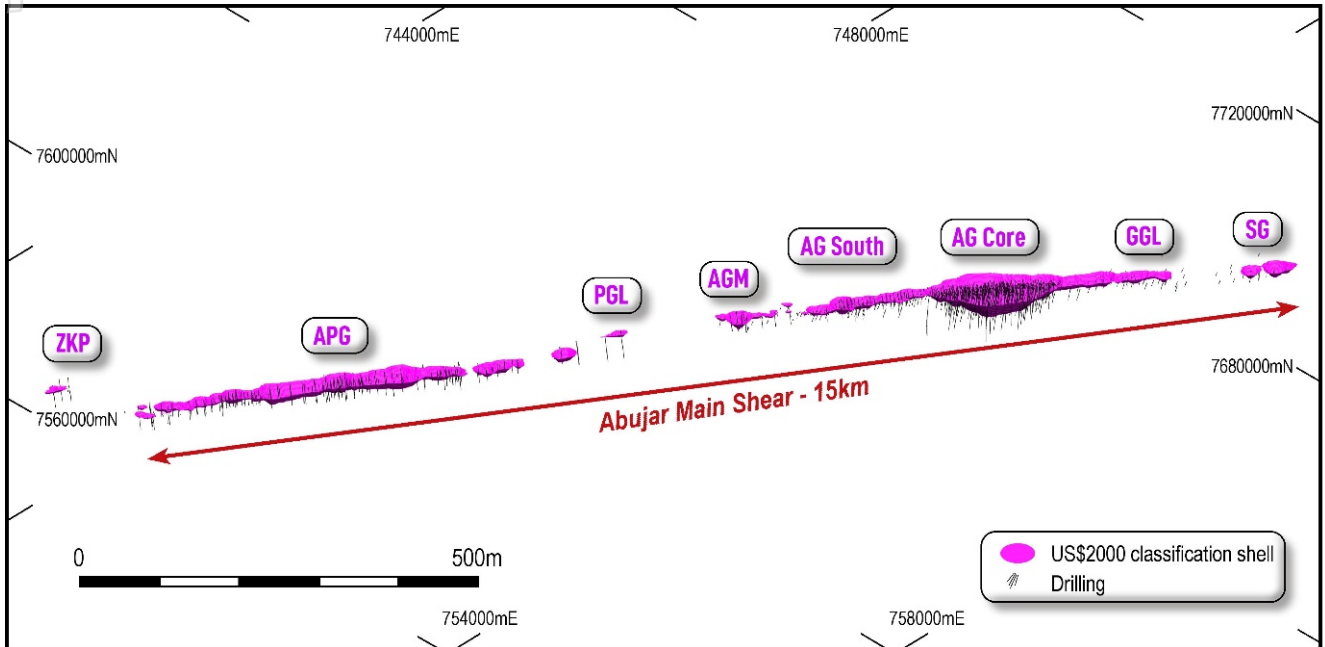


Figure 2: Abujar Oblique view showing location of deposits and prospects making up the Abujar Resource

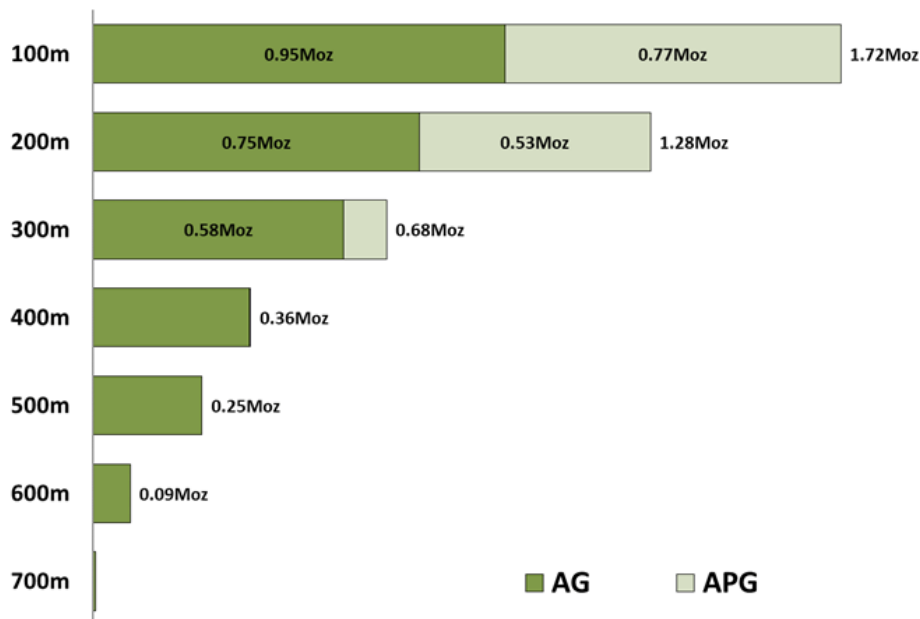


Figure 3: AG and APG Mineral Resources by 100m level at a 0.25 g/t Au cut-off<sup>3</sup>

<sup>3</sup>The figure above is not a Statement of Mineral Resources and does not include the use of pit shells to report the quantities rather the application of a 0.25 g/t Au cut-off grade. As such variations will occur and a direct comparison is not able to be completed.

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## Heap Leach Studies - 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.

As a follow on from the Intertek test program, 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 1 and their locations are shown in Figure 4.

*Table 1: 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:

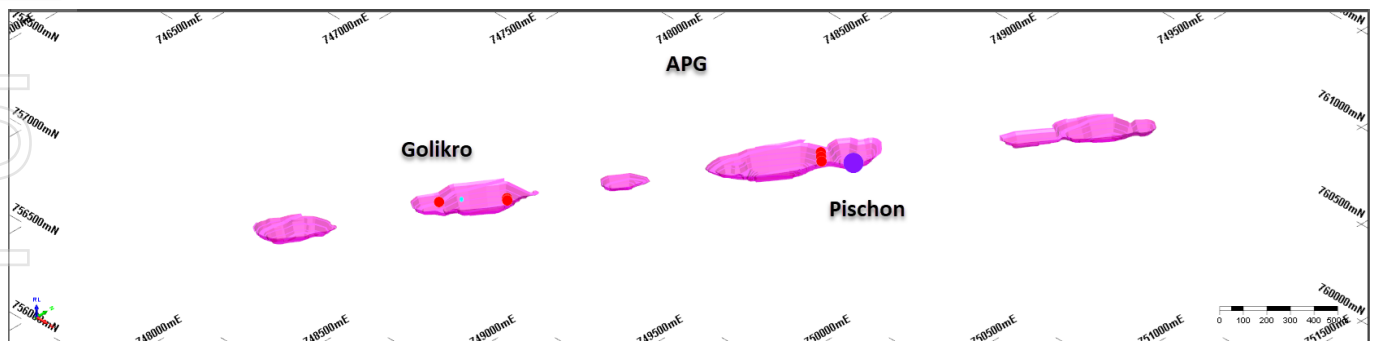
SOX = Strongly oxidised

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 4: 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 of 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 2**.

*Table 2: 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
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 <sup>2</sup>	14,700	5,800	22,700
Final Residue Moisture	%	25.0	26.8	5.9
Final Dry Bulk Density	t/m <sup>3</sup>	1.15	1.12	1.63
Void Volume	%	18.8	13.2	29.9

The recovery curves for the tests based on the ALS calculation of solution-based extraction are shown in Figure 5. 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:

- a. 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.
- b. Extractions were excellent for all samples at a 12.5mm crush size, including the fresh material.
- c. Leach kinetics were exceptionally fast for the oxide column tests but the fresh material required a significantly longer leach time.
- d. 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.
- e. Coarser crush sizes are likely to give similar leach behaviour for the oxide materials, with a 40mm topsize recommended for future testing.
- f. There may be a very slight function of head grade for these samples - although the lower extractions are more related to oxidation level.
- g. The residue vs head grade trend indicates an extraction trend of >90% based on the IBRTs, again with oxidation level implications.

- h. Depth is considered a proxy for oxidation level where extraction falls off slightly from depths of >60 metres.
- i. 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.
- j. 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.
- k. 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.
- l. Agglomeration of fresh material would likely not be required, although lime dosing for pH control would be necessary.
- m. None of the samples are considered acidic, with “natural” pH values ranging from 6.0 to 8.0 in the BRTs.
- n. Silver values were less than 0.5 g/t Ag for all samples.
- o. 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.
- p. Mercury values were very low for all samples and should not be an issue in design or production.
- q. 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 5 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.



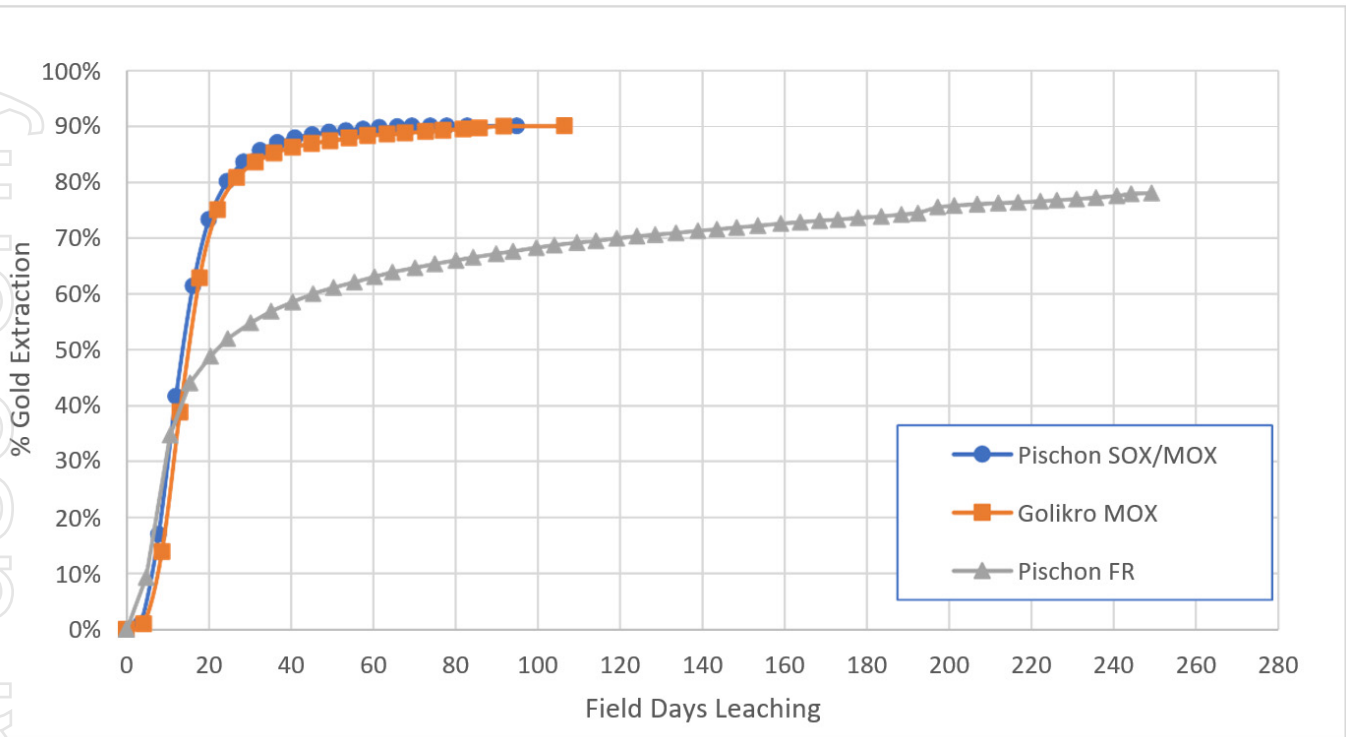


Figure 5: Projected Field Recovery Curves for APG Low Grade Ores

### Next Steps

Tietto announced a A\$130 million two-tranche placement on 29 March 2022 to accelerate development of Abujar, with no debt. The placement allowed the participation of like-minded investors, keen for the Company to realise first gold production by Q4 CY22 and produce 260,000oz gold in 2023.

Tietto remains very well positioned to advance its dual strategy of ‘Drill and Build’ into 2022:

1. **Continue to drive rapid resource growth at the 3.45Moz Abujar Gold Project; and**
2. **Fast-track development of Abujar Gold Project to achieve first gold in Q4 CY22.**

Tietto continues to deliver project milestones; with Abujar’s maiden Measured gold resources of 7.7Mt @ 1.4 g/t Au for 350,000oz reported on 11 April 2022. Tietto will deliver an update on Abujar’s LOM production plan by the end of Q2 CY22 using the updated Mineral Resource Estimate, increased mill throughput and higher gold prices (spot price is +35% greater than US\$1407/oz used in the DFS<sup>4</sup>), targeting a material increase to existing LOM production.

Tietto’s own team is advancing construction of the process plant and associated infrastructure which remains on schedule. Abujar Gold Project is progressing towards first gold pour by the end of Q4 CY22 and is on track to become West Africa’s next producing gold mine.

<sup>4</sup> ASX 5 October 2021

**ENDS**

This update has been authorised on behalf of Tietto Minerals Limited by:

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**Competent Persons' Statements**

*The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Mark Strizek, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Strizek is a non-executive director of the Company. Mr Strizek has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Strizek consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears. Additionally, Mr Strizek confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.*

*The information in this report that relates to Mineral Resources 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).*

*The information in the report that relates to other scientific and technical information is based on information compiled by or under the direction of Randall Pyper, General Manager for Kappes, Cassidy & Associates Australia Pty Ltd, who is a Fellow of The Australasian Institute of Mining and Metallurgy and a consultant to Tietto Minerals Ltd. Mr Pyper has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration, and to the activity which he is undertaking, to qualify as a Competent Person as defined in the JORC Code. Mr Pyper consents to and has approved the inclusion in this release of the matters based on this information in the form and context in which it appears, including sampling, analytical and test data underlying the results.*

**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 and 29 April 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.*

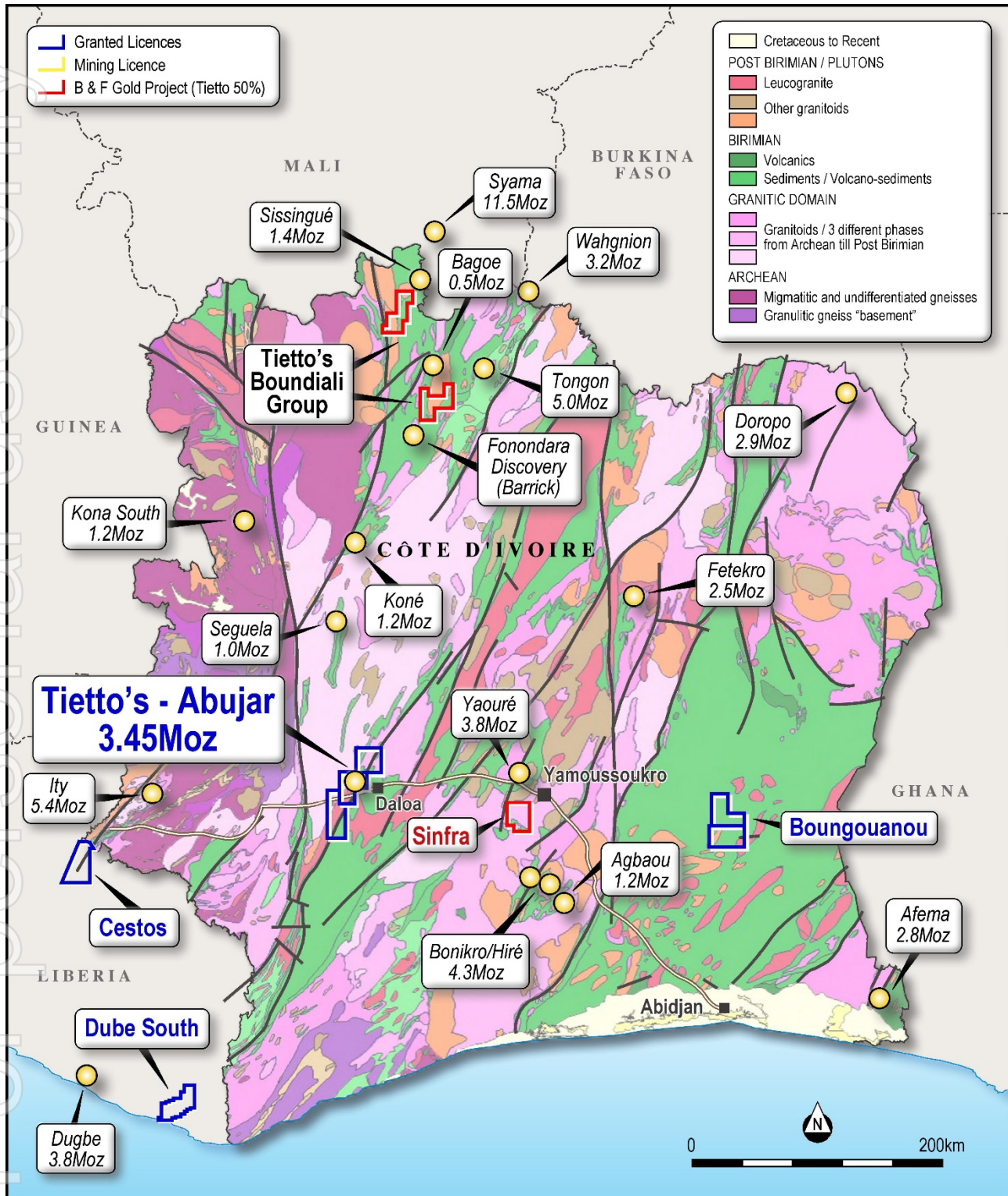


Figure 6: Plan view showing location of Tietto's Projects

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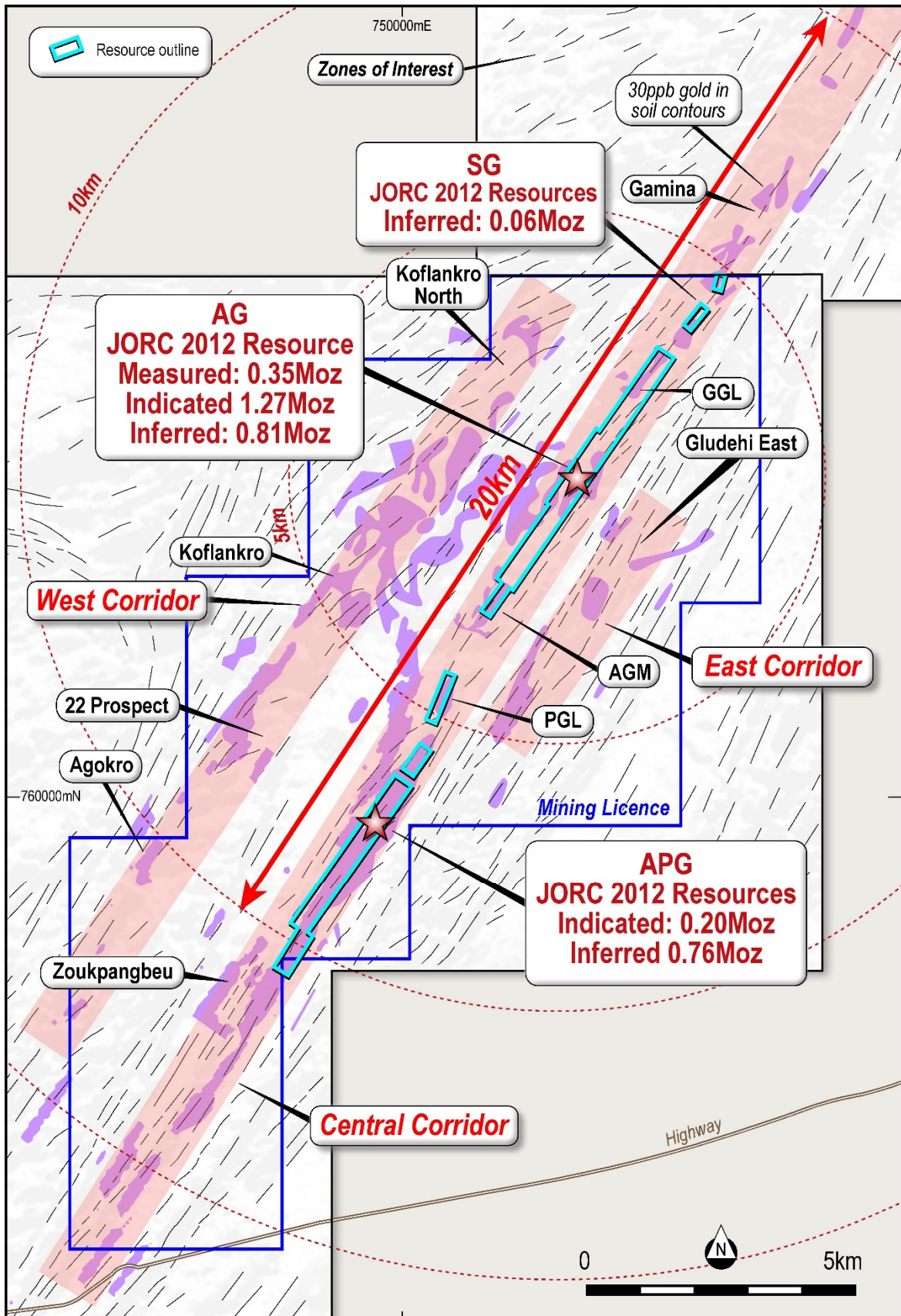


Figure 7: Plan view showing Abujar Project

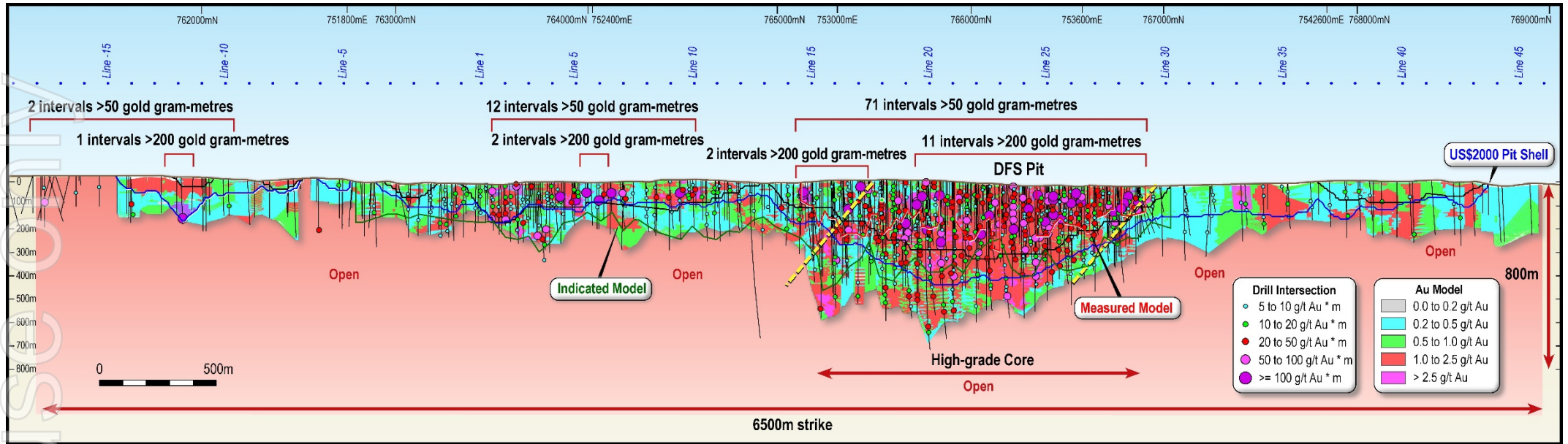


Figure 8: Oblique long section showing latest drill results at AG

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## **Abujar Gold Project, Côte d'Ivoire**

The Abujar Gold Project is located approximately 30km from the major regional city of Daloa in central western Côte D'Ivoire. It is close to good regional and local infrastructure to facilitate exploration and development being only 15km from nearest tarred road and grid power.

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

In December 2020, a gold exploitation (mining) licence within the Abujar Middle exploration tenement was granted. The mining tenement covers an area of 120.36km<sup>2</sup>.

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 in Q4 CY2022.

## **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 3.

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 3: 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
	<b>Total</b>	<b>0.9</b>	<b>1.0</b>	<b>0.03</b>	<b>3.7</b>	<b>1.0</b>	<b>0.12</b>	<b>50.6</b>	<b>1.4</b>	<b>2.27</b>	<b>55.2</b>	<b>1.4</b>	<b>2.43</b>
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
	<b>Total</b>	<b>1.8</b>	<b>0.7</b>	<b>0.04</b>	<b>7.0</b>	<b>0.7</b>	<b>0.15</b>	<b>33.1</b>	<b>0.7</b>	<b>0.77</b>	<b>41.9</b>	<b>0.7</b>	<b>0.96</b>
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
<b>Grand Total</b>		<b>2.8</b>	<b>0.8</b>	<b>0.07</b>	<b>10.8</b>	<b>0.8</b>	<b>0.28</b>	<b>85.1</b>	<b>1.1</b>	<b>3.10</b>	<b>98.7</b>	<b>1.1</b>	<b>3.45</b>

*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 4 below. However, RPM recommends that the Mineral Resource be reported using the criteria shown in Table 3. It is highlighted that Table 4 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 3 will occur and a direct comparison is not able to be completed.

**Table 4: 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 5 (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 5: 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
<b>AG</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31.3</b>	<b>1.4</b>	<b>1.38</b>	<b>31.3</b>	<b>1.4</b>	<b>1.38</b>
<b>APG</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3.2</b>	<b>0.7</b>	<b>0.07</b>	<b>3.2</b>	<b>0.7</b>	<b>0.07</b>
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34.4</b>	<b>1.3</b>	<b>1.45</b>	<b>34.4</b>	<b>1.3</b>	<b>1.45</b>

**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.*

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