

#### **ASX Announcement**

25 May 2022

## Baniaka Mineral Resource grows by 168% to 700 million tonnes

# Oxide & Primary Mineral Resource at Bandjougoy adds 436 million tonnes to Baniaka resource inventory

## **Highlights**

- Maiden, Inferred Oxide and Primary Mineral Resource Estimate completed by independent, global mining consultant, Golder Associates Pty Ltd for the Bandjougoy prospect at Baniaka
- Total Mineral Resource inventory at Baniaka now stands at 700 million tonnes significant growth upside remaining, given Mineral Resource Estimates are prepared for just 15km of interpreted strike, with over 70km still to be drill tested
- Total Inferred Oxide and Primary Mineral Resource for Bandjougoy is 436 million tonnes, with the Oxide component totalling 110 million tonnes – inclusion of infill drilling enabling reclassification to Indicated/Measured to be completed as part of finalising the PFS
- DID and Oxide Mineral Resource inventory increased by 71% to 265 million tonnes
- Primary (magnetite) resource inventory increased by 309% to 432 million tonnes
- Bandjougoy DID Mineral Resource update to be released in the coming weeks

African iron ore explorer and developer, Genmin Limited (**Genmin** or **Company**) (ASX: GEN), is pleased to report a significant increase to the Mineral Resource Estimate (**MRE**) for its 100% owned Baniaka iron ore project (**Baniaka**), located in the Republic of Gabon, Central West Africa (Figure 1). The 168% increase of the Baniaka MRE to 700 million tonnes (**Mt**) results from the inclusion of a Maiden, Inferred Oxide and Primary MRE for the Bandjougoy prospect (Figure 2).

Managing Director and Chief Executive Officer, Joe Ariti commented: "At 700 million tonnes, Baniaka is now by a large margin the biggest JORC mineral resource in Gabon for any commodity. We are starting to build a substantial magnetite inventory, which has significant intrinsic value with our locked-in, renewable, low-cost hydropower supply and increasing market demand for high grade pellets to support decarbonisation of the iron making process. As we saw a few weeks ago, immediately north of Gabon in Cameroon, and within 200km of our Minvoul/Bitam project, Sinosteel committed more than US\$700 million to develop its Lobé (Mamelles) magnetite project to produce 4 million tonnes per annum of concentrate. This speaks to two narratives in terms of the increasing importance of magnetite products in the market, and China's stated policy of developing/procuring African sources of supply".

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He further added: "The Baniaka PFS is assessing the first 10 years of processing DID and Soft Oxide material at an initial rate of 5 million tonnes per annum of iron ore products, with subsequent expansion to 10Mtpa. With the Bandjougoy maiden mineral resource, we now have sufficient DID and Soft Oxide material to underpin this initial mine life."

The MRE was completed by independent consultants Golder Associates Pty Ltd (**Golder**) and is reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 Edition) (**JORC Code**). The MRE is based on Oxide and Primary banded iron formation (**BIF**) assay results from an additional 43 holes for 4,280m of diamond drilling completed in the Bandjougoy prospect area.

Baniaka is divided into 12 major prospects at different levels of maturity (Figure 2). The Baniaka Preliminary Feasibility (**PFS**) includes Soft Oxide mineral resources from the Bandjougoy and Tsengué prospects and detrital iron deposits (**DID**) mineral resources from Bingamba North, Tsengué, Bandjougoy and Flouflou prospects (collectively **PFS Prospects**).

## **Baniaka Mineral Resource Estimate Update**

The updated Baniaka MRE incorporates the results obtained from two (2) campaigns of diamond drilling at the Bandjougoy prospect including the recently completed 43 hole program. The global Baniaka MRE incorporating this Maiden Bandjougoy MRE is shown in Table 1.

**Baniaka Mineral Resource Statement - May 2022** (%) **Tonnes** Material **Resource Category** (Mt) SiO<sub>2</sub> Ρ Fe AI<sub>2</sub>O<sub>3</sub>S LOI<sub>1.000</sub> Indicated 24.0 46.4 17.2 8.4 0.069 0.061 7.4 DID Inferred 39.1 46.7 16.5 8.2 0.073 0.080 7.5 Indicated & Inferred 16.8 7.5 **Total DID** 63.1 46.6 8.3 0.071 0.073 Oxide Inferred 201.4 41.4 32.8 3.4 0.057 0.038 3.8 **Total DID & Oxide** Indicated & Inferred 264.5 43.5 26.3 5.4 0.063 0.052 5.3 Primary Inferred 432.2 33.1 45.1 2.2 0.0.56 0.068 1.1 Total DID, Oxide & Indicated & Inferred 696.7 39.3 33.9 4.1 0.060 0.059 3.6 Primary

Table 1: Baniaka Mineral Resources at 25 May 2022

#### Notes:

The addition of the Maiden Bandjougoy MRE materially increases the Company's global Indicated and Inferred Mineral Resources for Baniaka from 260.4Mt grading at 40% Fe<sup>1</sup> to 696.7Mt grading 39.3% Fe.

Oxide Resources have subsequently increased 120% by tonnage, marking a significant milestone in the advancement of Baniaka. Primary BIF Resources have also increased by 309%, and overall, global Resources have increased by a substantial 168%.

<sup>&</sup>lt;sup>1.</sup> Reported at a cut-off grade of 20% Fe.

<sup>&</sup>lt;sup>2.</sup> Reported tonnes are rounded.

<sup>&</sup>lt;sup>1</sup> Refer to the Company's 2021 Annual Report released on the ASX platform on 29 April 2022 for details of the previous Mineral Resource Estimate for Baniaka



## Maiden Bandjougoy Oxide and Primary Mineral Resource

Figure 3 shows an oblique section through Bandjougoy and Table 2 presents the Maiden MRE.

**Table 2: Bandjougoy Mineral Resource Estimate** 

Resource	Material	erial Cut-off (%Fe)	Tonnes	(%)						
Category	Materiai		(Mt)	Fe	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	P	S	LOI <sub>1,000</sub>	
	Soft Oxide	20.0	66.8	43.7	28.1	4.1	0.055	0.060	4.7	
	Intact Oxide	20.0	43.0	38.0	38.1	3.2	0.056	0.043	3.5	
Inferred	C	Oxide Total	109.8	41.5	32.0	3.7	0.055	0.053	4.2	
	Primary BIF	20.0	326.4	32.6	45.4	2.4	0.055	0.080	1.3	
		BIF Total	436.2	34.8	42.0	2.7	0.055	0.073	2.0	

Achieving this important milestone validates the Bandjougoy in-situ Oxide Exploration Target of 67-124Mt at 35-49% Fe as reported in the Company's prospectus dated 9 February 2021.

Material that was estimated but at this time does not satisfy the reasonable prospects for eventual economic extraction test (**RPEEE Test**) remains classified as an Exploration Target and is summarised in Table 3. This material is predominantly Primary mineralisation that was estimated with values interpolated over distances greater than the down-dip variogram range.

**Table 3: Bandjougoy Exploration Target** 

Class	Material	Tonnes				(%)		
Class	Iviateriai	(Mt)	Fe	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Р	S	LOI <sub>1,000</sub>
Exploration Target	BIF	25 - 47	28 - 37	38 - 52	2 - 3	0.05 - 0.06	0.07 - 0.09	1 - 2

Note: The potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient additional exploration to estimate a Mineral Resource as at the date of this announcement and whilst additional exploration is planned it is uncertain if this will result in the estimation of a Mineral Resource.

## **Further Upside**

At Baniaka, the Chaillu Massif hosts a series of Mesoarchean to Neoarchean greenstone belts comprised of BIF, schist, gneiss and minor amphibolite. BIF-derived DID comprise an unconsolidated blanket of weathered enriched gravels and duricrusts, which overlie weathered in-situ BIF. The in-situ BIF has a dominant upper, friable to sandy, hematite-dominant Soft Oxide component and a lower, more competent banded hematite-quartz Intact Oxide component (Figure 3).

Of the Company's 85km of interpreted iron mineralised strike, only 16% of this cumulative strike potential has been drill tested. Mineral Resource Estimates have been prepared for 15km of the strike length, leaving over 70km as upside. The 12 major prospects at Baniaka comprise the PFS Prospects and a further eight (8) exploration stage prospects, which are yet to undergo significant technical assessment.

## **Reporting of Exploration Results**

The MRE reported in this announcement includes results for the final 12 diamond holes at Bandjougoy from the 2021 drilling program, totalling 1,376m of drilling. Significant intersections and collar locations for these holes are provided in Table 4 and Table 5.

Significant Oxide intersections were:

- 50.4m at 46.8% Fe from 12.5m in BWDD027B;
- 68.0m at 45.7% Fe from 9.0m in BWDD028A;
- 56.1m at 48.2% Fe from 6.9m in BWDD029;



- 59.3m at 45.4% Fe from 13.7m in BWDD032;
- 65.7m at 50.0% Fe from 4.0m in BWDD033; and
- 48.6m at 46.2% Fe from 7.8m in BWDD037.

#### Significant DID intersections were:

- 12.5m at 51.3% Fe from 0.0m in BWDD027B;
- 9.0m at 54.0% Fe from 0.0m in BWDD028A;
- 6.9m at 53.9% Fe from 0.0m in BWDD029;
- 13.0m at 52.2% Fe from 0.0m in BWDD031;
- 11.7m at 51.9% Fe from 2.0m in BWDD032;
- 13.5m at 54.0% Fe from 0.7m in BWDD0034;
- 11.0m at 56.8% Fe from 0.0m in BWDD035A; and
- 6.8m at 55.1% Fe from 1.3m in BWDD036.

#### Significant Primary intersections were:

- 50.5m at 33.5% Fe from 77.0m in BWDD028A;
- 105.3m at 32.8% Fe from 63.0m in BWDD029;
- 45.5m at 35.9% Fe from 56.0m in BWDD030; and
- 87.2m at 32.6% Fe from 77.3m in BWDD038.

Table 4: Significant Intersections – Bandjougoy diamond drillholes BWDD027B to BWDD038

				(m)					(%)			
Section	Hole ID	Mineralisation Zone	Depth from	Depth to	Interval <sup>1</sup>	Core Loss	Fe¹	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Р	s	LOI <sub>1,000</sub>
BJ320 600E	BWDD027B	DID	0.0	12.5	12.5	1.5	51.3	7.2	7.6	0.082	0.118	10.7
BJ320 600E	BWDD027B	Oxide	12.5	62.9	50.4	6.0	46.8	24.8	3.0	0.065	0.071	4.6
BJ320 600E	BWDD028A	DID	0.0	9.0	9.0	0.0	54.0	5.2	8.5	0.067	0.069	8.5
BJ320 600E	BWDD028A	Oxide	9.0	77.0	68.0	0.0	45.7	24.5	3.5	0.079	0.081	5.8
BJ320 600E	BWDD028A	Primary	77.0	127.5	50.5	0.0	33.5	44.6	2.0	0.059	0.088	0.9
BJ320 600E	BWDD029	DID	0.0	6.9	6.9	0.0	53.9	7.3	6.4	0.087	0.102	8.6
BJ320 600E	BWDD029	Oxide	6.9	63.0	56.1	0.0	48.2	23.0	2.7	0.059	0.069	4.9
BJ320 600E	BWDD029	Primary	63.0	168.3	105.3	0.0	32.8	42.9	2.3	0.058	0.080	2.4
BJ320 600E	BWDD030	Oxide	38.1	56.0	17.9	0.0	42.6	27.5	4.0	0.060	0.090	6.7
BJ320 600E	BWDD030	Primary	56.0	101.5	45.5	0.0	35.9	42.3	1.3	0.054	0.136	2.1
BJ320 200E	BWDD031	DID	0.0	13.0	13.0	0.0	52.2	9.3	6.1	0.084	0.094	9.0
BJ320 200E	BWDD031	Oxide	13.0	49.5	36.5	0.0	49.9	16.9	2.4	0.097	0.111	7.6
BJ320 200E	BWDD031	Primary	49.5	79.5	30.0	0.0	31.4	44.9	3.2	0.068	0.135	2.5
BJ320 200E	BWDD031	Primary	126.5	146.9	20.4	0.0	30.9	43.0	1.8	0.055	0.174	3.1
BJ320 600E	BWDD032	DID	2.0	13.7	11.7	1.5	51.9	8.4	7.6	0.095	0.113	9.1
BJ320 600E	BWDD032	Oxide	13.7	73.0	59.3	1.0	45.4	24.8	3.5	0.065	0.129	6.3
BJ320 600E	BWDD032	Primary	73.0	102.5	29.5	0.0	34.4	43.9	1.9	0.060	0.080	1.9
BJ320 600E	BWDD033	Oxide	4.0	69.7	65.7	1.0	50.0	18.3	3.3	0.064	0.093	6.3
BJ320 600E	BWDD033	Primary	69.7	100.0	30.3	0.0	32.1	45.4	2.2	0.060	0.076	2.2
BJ321 400E	BWDD034	DID	0.7	14.2	13.5	2.5	54.0	8.9	6.0	0.110	0.076	7.6
BJ321 400E	BWDD034	Oxide	14.2	55.5	41.3	1.5	43.8	31.4	2.0	0.080	0.039	3.3
BJ321 400E	BWDD034	Primary	61.0	69.4	8.4	0.0	36.9	41.3	1.2	0.049	0.085	2.9
BJ321 000E	BWDD035A	DID	0.0	11.0	11.0	0.5	56.8	8.4	4.1	0.094	0.062	6.3
BJ321 000E	BWDD035A	Oxide	11.0	48.0	37.0	2.5	47.8	26.9	1.2	0.061	0.026	2.7



		Minaualiaatian		(m)					(%)			
Section	Hole ID	Mineralisation Zone	Depth from	Depth to	Interval <sup>1</sup>	Core Loss	Fe <sup>1</sup>	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Р	S	LOI <sub>1,000</sub>
BJ321 000E	BWDD035A	Oxide	55.0	63.1	8.1	0.0	45.4	25.1	2.4	0.055	0.176	7.1
BJ321 000E	BWDD035A	Primary	63.1	80.5	17.4	0.0	33.7	45.5	1.9	0.057	0.095	2.0
BJ323 000E	BWDD036	DID	1.3	8.0	6.8	0.0	55.1	11.0	5.4	0.056	0.034	4.7
BJ321 000E	BWDD037	DID	1.8	7.8	6.1	0.0	46.0	17.7	9.2	0.069	0.057	6.9
BJ321 000E	BWDD037	Oxide	7.8	56.4	48.6	1.5	46.2	28.6	2.3	0.063	0.014	2.9
BJ321 800E	BWDD038	Oxide	46.3	64.5	18.2	0.0	30.9	45.8	6.2	0.026	0.019	3.4
BJ321 800E	BWDD038	Oxide	67.5	76.0	8.5	0.0	29.0	51.7	3.6	0.016	0.012	2.4
BJ321 800E	BWDD038	Primary	77.3	164.5	87.2	0.0	32.6	45.5	1.8	0.062	0.069	0.0
BJ321 800E	BWDD038	Primary	167.3	195.4	28.1	0.0	31.8	43.7	2.2	0.066	0.085	1.1

Notes: <sup>1</sup>Aggregation criteria provided in JORC Table 1 (Appendix 1)

The reporting of the results from these 12 drillholes concludes the PFS diamond drilling program at Bandjougoy. The collar locations are shown in Figure 4.

Table 5: Drill Collar Information for currently reported Bandjougoy diamond drill holes BWDD027B to BWDD038

Drill section	Hole ID		(m	1)		(de	egrees)
Drill Section	Hole ID	Hole Length	Easting	Northing	Elevation	Dip	Azimuth
BJ320,600E	BWDD027B	84.5	320,602.6	9,771,731.1	582.6	-58.7	184.0
BJ320,600E	BWDD028A	140.0	320,600.9	9,771,824.5	586.5	-59.9	188.2
BJ320,600E	BWDD029	179.0	320,597.0	9,771,926.3	556.9	-59.8	185.6
BJ320,600E	BWDD030	101.5	320,603.8	9,772,024.7	531.1	-60.7	186.4
BJ320,200E	BWDD031	168.5	320,198.8	9,771,895.1	529.4	-62.0	188.6
BJ320,600E	BWDD032	113.0	320,601.6	9,771,773.9	589.0	-60.6	183.5
BJ320,600E	BWDD033	100.0	320,599.4	9,771,862.5	577.8	-59.4	183.5
BJ321,400E	BWDD034	75.0	321,399.4	9,771,851.9	553.1	-60.0	175.0
BJ321,000E	BWDD035A	80.5	320,997.6	9,771,844.6	553.7	-59.6	184.1
BJ323,000E	BWDD036	45.0	323,008.8	9,772,520.9	553.3	-59.8	170.1
BJ321,000E	BWDD037	83.0	323,403.0	9,772,987.0	530.5	-60.9	179.5
BJ321,800E	BWDD038	206.0	321,800.0	9,772,153.0	519.6	-60.8	181.9

Note: Coordinates are referenced to UTM Zone 33S (WGS84 Datum)

## **Ongoing Mineral Resource Estimation work**

A MRE update for Bandjougoy is in progress for the DID zone following completion of 57 infill auger holes for 815m drilling. The intent of this infill drilling was to achieve geological information and assay densities likely to achieve a minimum Indicated classification, and subsequently convert the remaining 40% of mineralisation classified as Inferred to Indicated. The DID MRE update is well advanced and will be reported in the coming weeks.

Infill Reverse Circulation (**RC**) and diamond drilling at Bandjougoy continued through Q1 2022 and has recently been completed. Infill drilling has also now been completed at the adjacent Tsengué prospect (Figure 2). Sample preparation and chemical analyses are currently underway with the intent to achieve geological information and assay densities considered likely to support a MRE that achieves a minimum Indicated classification for both prospects for Oxide mineralisation.



Additional infill auger drilling has also been completed at both Flouflou and Bingamba North, the results of which will inform DID MRE updates for both prospects considered likely to support a minimum Indicated classification.

## **Summary of Material Information to support the MRE**

#### **Drilling Techniques**

Drilling at Bandjougoy to inform the updated MRE consisted of PQ3, HQ3 and NQ diameter inclined diamond core drilling targeting the Oxide and Primary mineralisation for a total 4,280m.

#### Sampling and sub-sampling techniques

Diamond drill core is sampled as quarter or half core based on core diameter to a nominal 2m length in the unconsolidated DID gravels and BIF, honouring lithological boundaries. A nominal 4m length is used in non-BIF lithology. Competent core is cut using a core saw with unconsolidated material split using a core splitter or pallet knife.

#### Sample analysis method and quality of assay data

Historical (2018) samples were prepared at an onsite preparation laboratory operated by Setpoint Laboratories. For the 2021-2022 campaign, samples are prepared by Intertek Genalysis at Owendo near Libreville. The samples were oven dried, crushed to 80% passing 2.0mm, riffle split and pulverised to 85% passing 75µm.

Samples were analysed at Australian Laboratories Services Pty Ltd (**ALS**) in Loughrea, Ireland, Johannesburg, South Africa or Perth, Western Australia and at Intertek Genalysis in Perth, by lithium borate fusion and XRF finish on fused disks and loss of ignition (**LOI**) at 1,000°C by thermogravimetric analysis (**TGA**) or muffle furnace. The methods are industry standard for the assay of iron ore. Certified Reference Material and blank samples are inserted at a rate of one per 50 samples and field duplicates at a rate of one per 20 samples.

### **Estimation methodology**

The geological model was created in Leapfrog software by Golder from interpreted geological sections provided by Genmin.

The Mineral Resource grade model was interpolated using Ordinary Kriging (**Kriging**). All geological and grade domains, including waste domains, are estimated where an adequate number of samples are present.

Summary estimation methodology is as follows:

- The block model block sizes are as follows: Parent Block Size: 25m × 25m × 4m and Sub-block Size: 12.5m × 12.5m × 2m;
- Statistical and geostatistical analyses were carried out on data composited to 2m downhole and constrained to stratigraphic units;
- Variography was modelled within the combined BIF domains;
- Grade estimation was carried out for Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, S, LOI<sub>1,000</sub>, CaO, MgO, Mn, Na<sub>2</sub>O, K<sub>2</sub>O and TiO<sub>2</sub>, LOI<sub>650</sub> and LOI<sub>371</sub>. A two-pass estimation was used to inform the grade model by domain. Any blocks that did not receive an estimated grade were assigned the average grade of the estimated portion of that domain;
- Spatial grade continuity was quantified by semi-variogram (variogram) models. The calculations were applied to the unfolded dataset;
- Search ellipsoids had a minimum of eight (8) samples for BIF with lateral search radius of 1.5 times the drill spacing (Pass 1). Pass 2 required a minimum of four (4) or eight (8) samples with a lateral search radius of ≥ 2 times drill spacing;
- The Kriging interpolation method was used for the estimation based on variogram parameters defined from geostatistical analyses. The variogram parameters from the mineralised units were used to estimate the nonmineralised units; and



• Bulk densities were assigned based on density measurements made on samples considered representative of Oxide and Primary lithologies.

#### **Reasonable Prospects of Eventual Economic Extraction**

A mining open pit optimisation study was completed by Golder using GEOVIA Whittle™ software to assess the RPEEE Test for the MRE pursuant to the JORC Code. For the purposes of the optimisation, the DID MRE that directly overlies the Oxide and Primary mineralisation was included (See ASX announcement dated on 21 July 2021). A pit shell with a Revenue Factor of 1.4 was selected.

PFS studies relating to mine optimisation and design are ongoing by Golder. These studies have informed a cut-off grade of 20% Fe for all material types of the MRE.

Open pit mining using a conventional load and haul method is assumed. Most material is expected to be free-dig, with the exception of a thin indurated duricrust that may require drill and blast or ripping. Mining dilution of 6% was assumed.

Consideration was given to mining and processing costs, mass yields by material type and rail transport from site to port, and port loadout to Ocean Going Vessel.

A provision for mine rehabilitation, administration costs and State royalties was also included.

A capital cost allowance was included for the provision of processing plant and mine site infrastructure. Third party capital costs including rail, port and power are excluded as they are covered under operating charges. An additional allowance was made for sustaining capital and for the future upgrade of processing infrastructure to treat Intact Oxide and Primary material types.

Base case product pricing was drawn from the AME group market outlook dated 1 May 2022 and was adjusted for the market lump premium. The CFR North China price applied for 62% Fe fines product was US\$125 per tonne, and NPV was estimated at 15% discount rate.

Further details are set out in Appendix 1, JORC Table 1.

#### Classification criteria

Indicated Resources have a maximum drill spacing of 200m between drill lines and 50m between drill holes while Inferred Resources have a maximum drill spacing of 400m between drill lines and 50m between drill holes. Based on the current sample spacing, the bulk of the estimated domains were classified at an Inferred level of confidence. The zone below 340 mRL elevation was classified as an Exploration Target (refer Table 3) since blocks in this area are mainly estimated with values extrapolated over distances greater than the down-dip variogram range.

This announcement has been authorised by the Board of Directors of Genmin Limited.

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#### **About GENMIN**

**Genmin Limited (ASX: GEN),** is an ASX-listed African iron ore exploration and development company with a pipeline of projects in the Republic of Gabon, central West Africa. The Company has a 100% interest in three (3) projects comprising six (6) exploration licences covering approximately 5,270km<sup>2</sup>.

Genmin's Baniaka and Bakoumba projects are located in south-east Gabon near the provincial city of Franceville, where the Company has an extensive footprint and controls all acreage prospective for iron ore. The Baniaka and Bakoumba projects represent a potential iron ore hub with 2,445km<sup>2</sup> of landholding and 121km of iron mineralised strike with only 13% drill tested with diamond drilling.

Genmin's flagship project, Baniaka, is at feasibility stage with defined JORC Code compliant Mineral Resources and is favourably situated adjacent to existing and operating bulk commodity transport and renewable energy infrastructure.

## **Competent Persons Statement**

The information in this announcement, which relates to the digital geological modelling, MRE and classification, and Exploration Targets is based on information compiled by Mr Richard Gaze who is a full-time employee of Golder, and Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy. Mr Gaze has sufficient relevant experience to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the JORC Code.

Mr Gaze consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement, which relates to reported exploration results, exploration data and geological interpretation has been compiled by Mr Mathieu Lacorde and Mr Marcus Reston.

Mr Lacorde is a full-time employee and minor shareholder of Genmin. Mr Lacorde also holds performance rights over shares that have vesting conditions unrelated to Baniaka. Mr Lacorde is a Member of the Australian Institute of Geoscientists and has sufficient relevant experience to the style of mineralisation and type of deposit under consideration, and to the activity for which he is undertaking to qualify as a Competent Person as defined in the JORC Code.

Mr Reston is a full-time employee of Genmin. Mr Reston holds performance rights over shares that have vesting conditions that are related to Baniaka. Mr Reston is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient relevant experience to the style of mineralisation and type of deposit under consideration, and to the activity for which he is undertaking to qualify as a Competent Person as defined in the JORC Code.

Mr Lacorde and Mr Reston consent to the inclusion in this announcement of the matters based on their information in the form and content in which it appears.

#### Confirmation

The Company confirms that other than the MRE for Bandjougoy set out in this announcement, the remaining Baniaka Mineral Resource Statement (**Statement**) on page 38 of the Annual Report to Shareholders dated 29 April 2022 and summarised in Table 1 of this announcement has not changed, and that it is not aware of any new information or data that materially affects the Statement, and that all material assumptions and technical parameters underpinning the MRE in the Statement continue to apply and have not materially changed.





Figure 1: Location map of Genmin's iron ore projects in Gabon, central West Africa



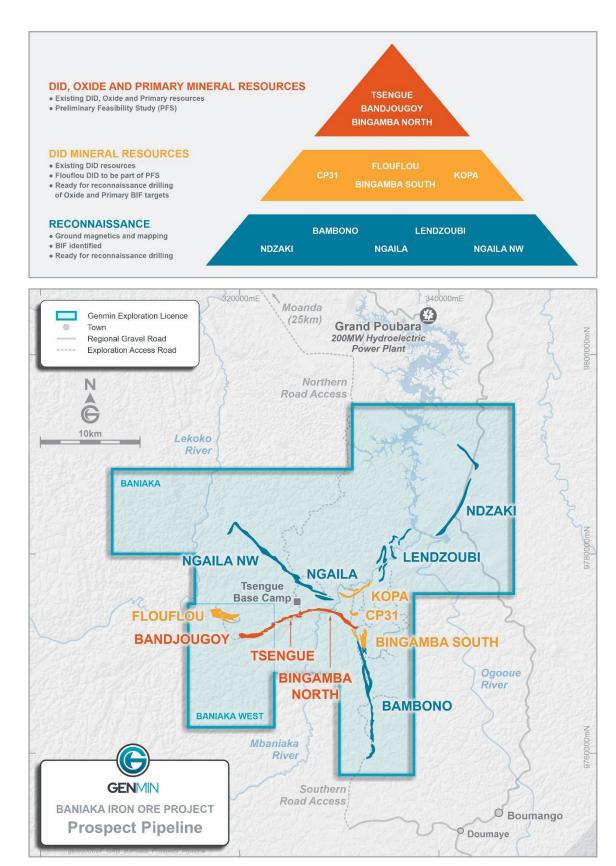


Figure 2: Baniaka prospect pipeline showing major prospect locations and maturity



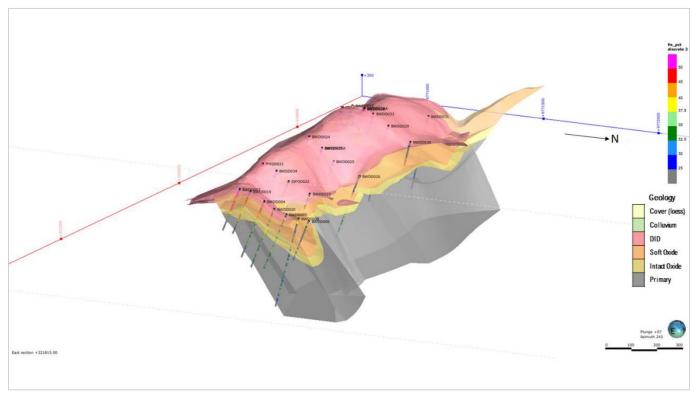


Figure 3: Bandjougoy Mineral Resource Estimate update oblique section looking south-west



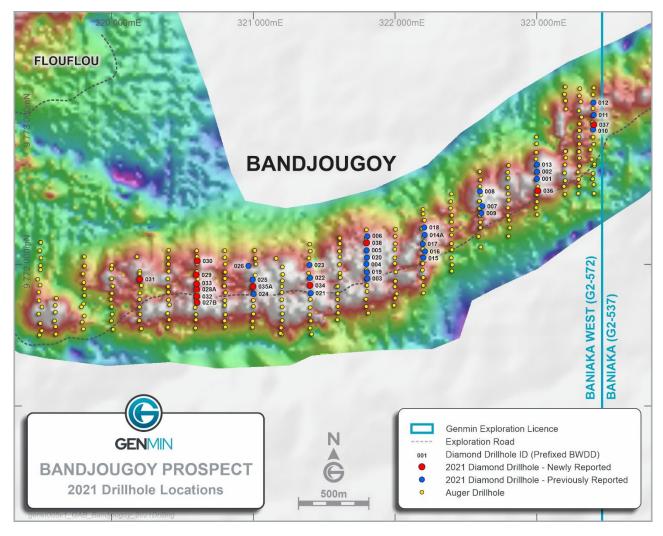


Figure 4: Drill hole collar location plan for Bandjougoy prospect showing diamond drillholes used in the Bandjougoy Maiden Mineral Resource Estimate

Background image is Analytic Signal of gridded ground magnetic data Coordinates are registered to the WGS84 Datum, UTM Zone 33 South projection Partially completed holes omitted for diagrammatic clarity



## **Appendix 1: JORC Table 1**

## **Section 1 - Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual</li> </ul>	<ul> <li>Diamond drill core is the sampling method reported in this announcement, and the associated Mineral Resource Estimate. The core is sampled as quarter (PQ diameter) or half core (HQ or NQ diameter) to a nominal 2m in the residuum and BIF and broken by changes in dominant lithology. A nominal 4m length is used in non-BIF lithologies.</li> <li>Sampling of the DID and in-situ BIF lithologies is systematically conducted over the full drilled interval of those lithologies for all drillholes. No selective methods are used in the collection of samples from diamond drill holes. The diamond drill sampling is consistent with peer iron ore projects and is considered representative of the lithologies under investigation.</li> <li>A Terraplus KT10 Plus handheld magnetic susceptibility meter is used to collect measurements every 50cm on diamond core. The instrument manual states that the KT-10 meter is calibrated at the factory and a periodic calibration is not required.</li> </ul>





Criteria	JORC Code explanation	Commentary
	commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Diamond drilling reported in this announcement and used in support of the associated Mineral Resource Estimate was completed in two (2) campaigns as follows:         <ul> <li>In 2018 using the Company's own track mounted Hanjin P7000 multi-purpose rig (12 holes), and</li> <li>In 2021 using a track mounted Longyear LF™90 chuck drive coring rig operated by contractor Boart Longyear (BLY) (26 holes).</li> </ul> </li> </ul>
		<ul> <li>Drill holes pass through the residuum blanket, with hole azimuth and dip designed to target orthogonal penetration of the underlying BIF units. Through the residuum, hole size is typically PQ3 diameter (83.1mm), HQ3 (61.1mm) diameter in soft material and NQ (47.6mm) in competent rock. Core in unconsolidated and soft material of the residuum and Soft Oxide is routinely recovered using a triple tube core barrel to optimise core recovery.</li> <li>Core is oriented in consolidated ground, below the residuum and Soft Oxide, using a Boart Longyear</li> </ul>
		<ul> <li>TruCore™ core orientation tool.</li> <li>Drill holes are surveyed using either a Reflex EZ-Gyro™ (2018) or a Stockholm Precision Tools (SPT) Gyromaster™ (2021) north seeking gyroscopic downhole survey tool for dip and azimuth.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to</li> </ul>	Diamond core recovery is measured by a technician at the drill rig and marked up on the core tray. Core recovery is recorded in the geological database and reviewed systematically. Lower recoveries are predominantly encountered in unconsolidated ground. Measures taken to ensure high recoveries are maintained in poor ground conditions include retrieval of core in short (0.3 to 0.5m) runs, and the extensive use of triple tube core barrels in oxidised lithologies.





Criteria	JORC Code explanation	Commentary
	preferential loss/gain of fine/coarse material.	
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Diamond core is cleaned to reveal undisturbed material, assembled, oriented, measured, marked-up and systematically logged for geology (regolith, lithology, texture and dominant minerals) and geotechnical parameters prior to being photographed.</li> <li>Where core is oriented, representative structures are recorded on a regular basis, with corresponding confidence in the measurements.</li> <li>Core is subsequently cut for sampling.</li> <li>All logging is cross-checked with magnetic susceptibility measurements and assay data subsequent to their receipt to ensure any anomalous or erroneous grade-lithology relationships are identified and recognised or logging corrected, as necessary.</li> <li>All remaining core is kept indefinitely on site after sampling at the Baniaka sample storage facility, including the remaining unconsolidated materials that is too friable to cut.</li> <li>All sample intervals are logged for the entire length of the drill hole regardless of lithology.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the</li> </ul>	<ul> <li>Diamond drill core is cut in quarter (PQ diameter) or half (HQ and NQ diameter) using a core saw and sampled to meet the desired sample mass.</li> <li>Samples are put into numbered plastic bags with pre-numbered sample tickets and stored in lots in labelled large plastic bags.</li> <li>In unconsolidated ground, material is split using a core splitter or large pallet knife depending on sample hardness.</li> <li>In 2018, samples were prepared at an onsite preparation laboratory operated by Setpoint Laboratories. For the 2021-2022 campaign, core samples are prepared at Intertek Genalysis Owendo near Libreville. Preparation protocol is as follows: drying at 105°C, crushing to 80% passing (P<sub>80</sub>) 2mm, riffle splitting and pulverisation to P<sub>80</sub> passing 75µm; and packaging and shipping to an external independent</li> </ul>





Criteria	JORC Code explanation	Commentary
	sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.  • Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>analytical laboratory, ALS.</li> <li>Field duplicates are collected as part of the sample preparation process at a rate of one per 20 samples and examination of the results indicates no material bias is present.</li> <li>The sample size is considered adequate given the particle sizes involved. A 5kg sample weight is targeted in the residuum where particles are the largest (top size circa 35 mm) consistent with the nomogram method given in the Field Geologists' Manual Fifth Edition, Monograph 9, published by The Australasian Institute of Mining and Metallurgy, Carlton, Victoria 3053 Australia.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>Samples from the 2018 campaign were analysed at ALS or Intertek Genalysis facilities in Perth, Western Australia.</li> <li>Samples from the 2021-2022 campaign are analysed at ALS facilities at both Loughrea, Ireland and Johannesburg, South Africa. Analysis is conducted for a suite of 24 elements and oxides by ME-XRF21u (lithium borate fusion and XRF finish on fused disks) and loss on ignition at 371, 650 and 1000°C by OA-GRA05x (Muffle Furnace or TGA). The techniques are industry standard for iron ore assaying and are consistent with similar analytical packages offered by Intertek, SGS, and Bureau Veritas laboratories.</li> <li>Magnetic susceptibility is measured using as handheld KT-10 Plus Terraplus meter and the resulting data is used to aid geological interpretation.</li> <li>Certified Reference Material (CRM) samples are inserted at a rate of one per 50 samples. CRM samples are sourced from Geostats Pty Ltd and include four iron grades ranging 25.6-63.0% Fe. For the 2021-2022 program, certified blank material (OREAS 22e) is inserted at a rate of one per 50 samples, with river sand used in prior programs.</li> <li>Field duplicates are inserted at a rate of one per 20 samples.</li> </ul>
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are reviewed and validated by two (2) senior geological personnel from the Company, both designated as Competent Persons. All data and associated intersections that are to be included in the subsequent Mineral Resource Estimate have been reviewed by the respective





Criteria	JORC Code explanation	Commentary
	The use of twinned holes.	Competent Persons.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	No drill holes reported in this announcement, or used in the associated Mineral Resource Estimate, have been twinned.
	Discuss any adjustment to assay data.	A batch of approximately 430 samples has been sent to two alternate laboratory facilities for umpire analyses. Results are expected by the end of Q2 2022.
		<ul> <li>Core logging is conducted at the Baniaka core shed, where primary data is recorded directly into a Microsoft Excel spreadsheet. The data is then validated on site and electronic files sent from to independent database consultants Maxgeo, Perth, Australia who are engaged to maintain the Company's geological database. Analytical data is provided by ALS in digital ASCII format, which is imported directly into the database following satisfactory review of associated QAQC data. Following the completion of the database update process, geological logging is validated against analytical grades and drill sections.</li> </ul>
		<ul> <li>No adjustments are made by the Company to primary data such as chemical assays. Corrections are only made to subjective data, such as geological logging, where geochemical profiles indicate potential misclassification of material type.</li> </ul>
Location of data points		The topography is a Digital Elevation Model ( <b>DEM</b> ) surface created from a high-resolution LiDAR point mesh calibrated and validated with Differential Global Positioning System ( <b>DGPS</b> ) points collected throughout the airborne survey area. The LiDAR survey data was classified according to the international LAS standard and format, and the bare earth class used for topographic model generation that excludes vegetation.
		The grid system is WGS84, UTM Zone 33S. Where appropriate, DGPS points have been added to the LiDAR survey DEM to improve local accuracy.
		<ul> <li>Drill collars are pegged using handheld GPS units with a nominal accuracy of 15m. The Company has conducted a DGPS, and Total Station in thick vegetation, survey to achieve centimetre level accuracy for all drill collars following completion of the 2021 drilling program.</li> </ul>
		All drillholes that are used in BIF Mineral Resource Estimates are surveyed with the DGPS or Total





Criteria	JORC Code explanation	Commentary
		Station method, with nominal accuracies stated by the 2022 survey contractor of ±3cm for planar coordinates (X,Y), and ±5cm for elevation (Z).
		<ul> <li>All 38 diamond drill holes used in support of the subsequent Mineral Resource Estimate were surveyed using either a Reflex EZ-Gyro<sup>™</sup> (2018) or a Stockholm Precision Tools (SPT) Gyromaster<sup>™</sup> (2021) to confirm inclination and azimuth, except for BWDD012 and BWDD013, which were completed prior to provision of the survey tool by drill contractor BLY.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Diamond holes were drilled along nine (9) 400m-spaced N-S sections with a nominal 50m between holes along section which is deemed sufficient to establish geological and grade continuity to achieve an Inferred classification in BIF mineralisation.</li> <li>The intent of the subsequent 2022 infill drill program is to provide geological and analytical information of sufficient confidence to be included in a Mineral Resource upgrade to achieve the Indicated category of classification. The dominant section spacings for diamond and RC drill holes in the 2022 infill drill program is set to achieve 200m section spacing, and 50m drill spacing along sections when combined with existing diamond drilling. This spacing has achieved Indicated Mineral Resource classification in DID mineralisation both at the Bandjougoy and Tsengué prospects.</li> <li>DID, oxidised, and Primary BIF samples are composited to 2m intervals, respecting geological boundaries as necessary.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Diamond drilling targets the in-situ BIF, which generally dips from 30 to 40 degrees north or northwest at Bandjougoy. The drillhole declination is set at 50 or 60 degrees to the south, hence intercepted Oxide and Primary mineralisation is typically intersected within 10 degrees of orthogonal to achieve high levels of confidence in determining true thickness of the BIF unit.</li> <li>The residuum is a horizontal blanket of material that generally follows the topography throughout the deposits and diamond drilling provides useful geological and grade definition in the residuum.</li> </ul>





Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	Core samples are collected at the end of every day, transported to and stored at the Baniaka sample storage facility under supervision of Genmin technical staff.
		Sub-samples are submitted to Intertek preparation facility in Owendo, Gabon, in sealed bags or boxes.  Pulps are sent from the preparation facilities to ALS or Intertek.  The Chair of Custody is represented by Committee and in Porth.
		The Chain of Custody is managed by Genmin personnel on site, in Libreville, and in Perth.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Independent consultant Golder has visited Baniaka twice, in October 2016 and in October 2017 as part of conducting ongoing Mineral Resource Estimates. Sampling techniques and data were considered fit for the estimation of Mineral Resources by Golder.</li> </ul>

## **Section 2 - Sampling Reporting of Exploration Results**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Bandjougoy prospect is on the Baniaka West Exploration Licence (Permis de Recherche Minière) G2-572 that covers 107km². Reminac S.A., a wholly indirectly owned subsidiary of Genmin, owns 100% of the licence.</li> <li>The Company declares herewith that the tenement is in good standing and in compliance with the appropriate regulations. Baniaka West was renewed on 18 December 2020 for a further three (3) years.</li> <li>There is no history of difficulties with compliant mineral tenure in the Republic of Gabon, and the government is generally supportive of mineral development projects.</li> </ul>





Criteria	JORC Code explanation	Commentary	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>COMILOG (Compagnie minière de l'Ogooué, Moanda, Gabon) had a permit over the immediately adjacent area to the East in the late 1970s. Ground magnetic reconnaissance and pitting was conducted on the BIF units at Baniaka. No results were available for Genmin to review.</li> <li>Several COMILOG pits in the Company's adjacent Baniaka Exploration Licence were located and resampled (e.g. COMILOG Pit 31 or CP31 in the eponymous prospect).</li> </ul>	
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>A residual blanket of colluvial and eluvial/lag gravels and duricrusts derives from weathering and erosion of bedrock. Laterite duricrust (LAT) and gravels (LCOL) are developed on the metamorphic rocks that flank the BIF units. Canga duricrust (CAN) and DID gravels are developed on BIF bedrock, forming the mineralised body. The LAT, LCOL, CAN, DID and HYB units are collectively termed the residuum. The residuum varies from 1m to 16m thick.</li> </ul>	
		• In-situ BIF underlies the residuum and is divided into three main categories based on changes in the degree of weathering, iron oxide mineralogy, magnetic susceptibility and material strength with increasing depth below the residuum. The three (3) categories ordered by reducing oxidation state are as follows:	
		<ul> <li>Soft Oxidised BIF (Soft Oxide);</li> <li>Intact Oxidised BIF (Intact Oxide); and</li> <li>Fresh primary BIF (Primary).</li> </ul>	
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> </ul> </li> </ul>	See Table 4 and Table 5 in the body of this announcement for details regarding additional drillholes received subsequent to the Company's ASX announcement dated 24 February 2022 and included in the current Mineral Resource Estimate.	





Criteria	JORC Code explanation	Commentary	
	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>		
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>In reporting Exploration Results in this announcement:         <ul> <li>No grade capping has been applied</li> <li>Grades are weight averaged by individual sample length, and overall length of significant intercept in the form</li></ul></li></ul>	
Relationship between mineralisation widths and	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with</li> </ul>	<ul> <li>The residuum within the project is horizontal to sub-horizontal and is closely related to topographic variations.</li> <li>In-situ mineralisation is constrained to BIF lithologies that dip at approximately 30 to 60 degrees to the</li> </ul>	





Criteria	JORC Code explanation	Commentary	
intercept lengths	respect to the drill hole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	<ul> <li>North. Drill hole direction and inclination has been planned to intersect BIF lithologies orthogonally where possible, with drill sections completed perpendicular to strike of the BIF.</li> <li>The significant DID, Oxide and Primary intercepts reported in this announcement are down-hole lengths unless specifically stated as true thicknesses.</li> <li>Sample intervals are considered appropriate for the style of mineralisation in the project area and are consistent with other publicly reported iron ore assets.</li> </ul>	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	See Figures 3 and 4 of this announcement.	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>No selective reporting has been used. During the course of the 2021 campaign, five (5) drill holes for 168m were abandoned and redrilled from the same drill pad due to poor drilling conditions. In these instances, significant intercepts have only been reported for the redrill holes that reached target depth.</li> <li>All results for all drillholes where assays have been received have been reported according to the aggregation criteria given above, and included in the subsequent Mineral Resource Estimate.</li> </ul>	
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating	<ul> <li>Genmin has undertaken surface mapping over most of the Baniaka project since 2012 and has utilise airborne and surface magnetic surveys to locate and define the strike length of the underlying BI geology. Drilling, pitting and costean programs have confirmed the relationship between groun magnetic data and the presence of BIF, and typically associated residuum mineralisation.</li> <li>Sighter metallurgical test work indicated that wash and screen followed by density separation product saleable products with low concentrations of deleterious elements with an appreciable mass yield for material with a head grade of residuum samples down to ~30% Fe.</li> </ul>	





Criteria	JORC Code explanation	Commentary	
	substances.	<ul> <li>Subsequent results from tonnage scale pilot scale metallurgical test work were reported to the ASX on 15 September 2021. This work determined that iron product grades for Lump and Fines from the Soft Oxide samples were 62.3 and 65.4% Fe, at mass yields of 30 to 45%. A pilot scale test work program on the pellet feed size fraction (-0.5 + 0.05mm) is ongoing, and is expected to increase the overall ROM yield.</li> </ul>	
		• Sighter Heavy Liquid Separation ( <b>HLS</b> ) and Davis Tube Recovery ( <b>DTR</b> ) test work on an Intact Oxide sample from Tsengué achieved HLS concentrates with yields and grades between 53.9% yield at 67.4% Fe and 54.3% yield at 62.7% Fe at sizes ranging from 0.5mm to 3.35mm respectively. DTR work on the same sample achieved concentrate yields and grades of 41.4% yield grading 70.7% Fe at a feed size passing 0.05mm to 51.3% yield grading 66.5% Fe at a feed size passing 0.3mm.	
		Other sighter metallurgical test work has been conducted on composite diamond drill core samples of Primary magnetite BIF by ALS Metallurgy in Perth, Western Australia. A total of 10 samples were tested comprising four (4) slightly weathered Transition BIF samples, and six (6) Fresh BIF samples.	
		<ul> <li>Results for the tests indicated yields from 27% to 51% averaging 35% for transition and 44% for fresh mineralisation at grades of 70–72% Fe for a P<sub>80</sub> -45µm.</li> </ul>	
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Genmin has conducted infill drilling to achieve a nominal drill spacing of 200m x 50m for the Oxide portion of in-situ Bandjougoy mineralisation. This drilling is complete, and samples are in the process of preparation and analyses.	
	Diagrams clearly highlighting the areas of possible extensions, including the main	Further infill drilling to achieve a drill spacing of 200m x 50m for the Oxide portion of in-situ Tsengué mineralisation has been completed during May 2022.	
	geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Following completion of the Tsengué infill drilling, further infill Oxide drilling will be completed at Bingamba North to achieve nominal 200m x 50m spacing. In addition to exploration works, the following major work packages are underway:	
		<ul> <li>Preliminary Feasibility Study based on DID Mineral Resources at Flouflou, Bandjougoy, Tsengué and Bingamba North prospects and Soft Oxide Mineral Resources at Bandjougoy and Tsengué prospects.</li> </ul>	



Criteria	JORC Code explanation	Commentary	
		<ul> <li>Ongoing Social and Environmental Impact Assessment (SEIA).</li> </ul>	

## **Section 3 - Estimation and Reporting of Mineral Resources**

JORC Code Explanation	Commentary	
Database integrity	Collar Information: Positional data is loaded into the database by an independent contractor	
Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation	Survey Information: Survey data is captured digitally and validated on site; where it significantly differs from theoretical drilling parameters, confirmation readings are collected.	
purposes.  Data validation procedures used.	Geology Data: The geology data is recorded in Excel spreadsheets designed with drop-down lists to minimize data entry & transcription errors. It is then validated on site, prior to being sent to an independent contractor to load in a master database.	
	Upon receipt of assays, a final validation is conducted before use in resource modelling.	
	Assay Data: Assays are merged into the database from assay certificates and cross-validated with geological data.	
	Bulk Density Data: Bulk density data obtained in pits and costeans and on core samples is periodically statistically validated to identify any outliers and underlying measurement errors.	
	QAQC Data: QC sample (field duplicates, blanks and CRM) lists are pre-populated before sampling. The data is systematically checked for errors before upload to the database.	
Site visits	Golder has visited the Project twice; once in October 2016 by Jorge Peres, an employee of Golder at the	
Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	time of the visit, and in October 2017, by Geordie Matthews, an employee of Golder and under the supervision of Richard Gaze (Competent Person).	
If no site visits have been undertaken indicate why this is the case.	During the 2016 visit, Golder observed sites at Bingamba North, Bingamba South and the eastern end of Tsengué. Auger drilling, pits and costeans were inspected and field observations of the excavations confirm details of the geology and morphology of the mineralisation and genetic model proposed by Genmin.	
	Outcropping BIF was observed.	
	During the 2017 visit, Golder travelled to the Tsengué Base Camp, and from there observed field activities including auger and diamond drilling, recently dug pits and road cuttings. Sample storage, drying, geological logging and sampling procedures were observed in practice. Historic and in progress drilling sites were	





JORC Code Explanation	Commentary	
	visited and comparison of diamond drill pads photographs to the LiDAR topography compared as a visual check of spatial conformity and consistency. The difficulties in collecting handheld GPS readings under heavy canopy were noted.	
Geological interpretation	The geology model was derived from all available validated data and created with Leapfrog Geo with	
Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	additional manual controls in the interpretation process where data was insufficient to support an implicit interpretation.	
Nature of the data used and of any assumptions made.	Residuum:	
The effect, if any, of alternative interpretations on Mineral Resource estimation.  The use of geology in guiding and controlling Mineral Resource estimation.	While the interactions between the in-situ profile, paleo-erosional events (colluvial movement) and recent erosional events (as a result of the progression of the current drainage network) are not fully understood,	
The factors affecting continuity both of grade and geology.	these subtleties are considered to have a relatively minor impact on the total volume and are mitigated in part by the recognition of soft geological boundaries.	
The factors affecting continuity both of grade and geology.	The residuum geology model is created in three stages, as follows:	
	<ul> <li>The first stage defines the upper and lower limits of the residuum, with loess and soil above and basement beneath. The shape and trends of the residuum is guided by the topography to which it is closely related.</li> </ul>	
	<ul> <li>Then, within the residuum, a HYB shell is defined by sample intervals being logged as DID, CAN, HYB or LCOL, containing a dominant or major population of eBIF particles (&gt;25% passing 1 mm) or by sample intervals having a grade greater than or equal to 40% Fe, and</li> </ul>	
	<ul> <li>Lastly, a 40% Fe grade shell, or DID shell, is created using a 40% Fe cut-off grade and limited within the HYB shell. The HYB shell may be coincident with the 40% Fe grade shell, indicating a hard boundary between mineralised and unmineralized residuum.</li> </ul>	
	The remaining residuum is termed LCOL and is un- or marginally mineralised (waste).	





## **JORC Code Explanation** Commentary Pit and costean sample data are used where the samples are derived from wall channels. Floor samples and attributed geology were discarded as they could not be effectively located spatially and lacked continuous grade sampling. There are no current alternate hypotheses or interpretations that assist the geology model better match the available data. BIF: The main basement geological units were modelled based on geological logging. The younger features, such as dykes and faults, were modelled first, followed by the basement lithologies. Except for intrusive bodies cross-cutting the BIF, all basement lithologies were grouped together. A basement BIF unit was modelled discretely irrespective of oxidation state. The Soft Oxide, Intact Oxide and Primary BIF mineralisation zones are modelled as horizons within the BIF basement unit. The zones were interpreted based on the degree of weathering observed in the DDH core. The topography was used as an offset surface to model the weathering profile between drilled sections ensuring that the depth of weathering modelled between the sections was consistent with the depth in the vicinity of the nearest drill hole even in areas of significant topographic relief. Bands of internal waste (showing low Fe and high SiO<sub>2</sub> grade) were modelled separately within BIF as conformable bedded horizons. General: Two influences have been shown to have a material effect on the geological and grade continuity of the mineralisation, being the following: • Recent surficial erosion as expressed by the current drainage system. Erosion may result in the depletion or removal of the residuum horizon, downslope (colluvial) movement and mixing or

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where there are incisions into the plateaux or ridge lines, absence of the entire profile.

For the Mineral Resource Estimation, extrapolation beyond the limits of the data was nominally limited to half the drill spacing laterally and to the limits of the drill data vertically on a section-by-section basis.

Structural complexity, particularly faulting of and intrusive bodies within, the underlying BIF units.





JORC Code Explanation	Commentary	
	All geology models were based on sectional interpretations provided by Genmin. All geology models are reviewed, validated and approved for use in Mineral Resource Estimation by senior Genmin personnel.	
Dimensions	The geological zones are viewed as continuous with local variability due to a network of faults causing	
The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth	displacements of several metres. The strike of mineralisation changes from 90° to 60° from West to Easi due to regional structural influence.	
below surface to the upper and lower limits of the Mineral	The strike length of the main domains is as follow:	
Resource.	Soft and Intact Oxide: 4300m	
	The width of the domain varies with topography (past and present) and width of the underlying BIF. The plan view width of the domains range between 90m and 290m.	
	The domains are constrained between the Hybrid/DID and Primary BIF units and the top of the Soft Oxide domain is located roughly 10m below surface.	
	The combined vertical thickness of the domains range between 15m and 40m, with the Soft Oxide generally thicker than the Intact Oxide domain.	
	Primary: 4300m	
	The true width of the BIF unit varies in thickness from 50m to up to 250m, with an average thickness of approximately 150m. the model is extrapolated down to an elevation of 325 mRL elevation which is roughly 180m below surface.	
	Golder considered material down to 340 mRL as a supportable depth limit for extrapolation for Mineral Resource reporting purposes even though the geology model extrapolates the BIF below this elevation.	
Estimation and modelling techniques	The Mineral Resource block model used Ordinary Kriging ( <b>Kriging</b> ) for grade estimation. All geological and	
The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme	grade domains, including waste domains, are estimated where an adequate number of samples a present.	
grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a	Spatial grade continuity was quantified by semi-variogram (variogram) models based on directional experimental variograms for each element. The resulting variogram models provided the sample weights for the Kriging grade estimate.	
description of computer software and parameters used.	The search ellipse orientation is indirectly adjusted as estimation was completed in the unfolded space.	





#### **JORC Code Explanation**

The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.

The assumptions made regarding recovery of by-products.

Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).

In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.

Any assumptions behind modelling of selective mining units.

Any assumptions about correlation between variables.

Description of how the geological interpretation was used to control the resource estimates.

Discussion of basis for using or not using grade cutting or capping.

The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

#### Commentary

Grade estimates used an unfolding approach to minimise the effects of structural variation on the grade model. he unfolding surface addressed regional changes in the strike of the orebody.

Samples are length-weighted for estimation.

Propriety Golder software was used for exploratory data analysis, unfolding, to perform variography, interpolate grades and validate the resulting models. Maptek Vulcan was used to create, composite and flag the drill dataset and to create and flag the block model.

Conformance between sample data and the grade estimate is acceptable, and visual validation and trend plots confirm grade data is honoured spatially.

The grade estimation includes the following 14 variables: Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, S, LOI<sub>1,000</sub>, CaO, MgO, Mn, Na<sub>2</sub>O, K<sub>2</sub>O, TiO<sub>2</sub> LOI<sub>371</sub> and LOI<sub>650</sub>.

The block model block sizes are as follows:

- Parent Block Size: 25m × 25m × 4m
- Sub-block Size: 12.5m × 12.5m × 2m

Block sizes were chosen to accommodate the vertical thickness of the mineralised domains and sample lengths of the drill data.

No selective mining unit or minimum mining width and height was used in either the estimation process or classification.

Iron ore assay suites tend to be a whole rock assay, with the sum of the proportion all components totalling to ~100%. The estimation approach honours this relationship and any relationship between analytes by estimating all grade variables together and selecting the same sample population for estimation of each variable. On a global basis the total assay and total estimated values agree within acceptable tolerance.

The following geological and/or grade domains were estimated independently (using hard boundaries):

- Soft Oxide (eBIF-1)
- Intact Oxide (eBIF-2)
- Primary BIF (mBIF)

Grade capping is not applied to the dataset prior to estimation as the population distributions are negatively skewed, meaning that apparent grade outliers existing in the low-grade portion of the distribution. Typically,





JORC Code Explanation	Commentary	
	the lowest grades within mineralised domains are internal waste and therefore were not capped. All waste domains (estimated grade < 20% Fe) are unclassified and excluded from the Mineral Resource.	
	The grade estimates were compared to the sample data visually and statistically and the grade estimate was found to be globally representative of the sample data, with average grade conformance. There are no other datasets to compare the model to.	
Majatura		
Moisture	Tonnages are estimated and quoted on a dry basis.	
Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.		
Cut-off parameters	The cut-off grade is estimated by comparison of the break-even unit costs compared to product revenue	
The basis of the adopted cut-off grade(s) or quality parameters applied.	factored with metallurgical recoveries.	
Mining factors or assumptions	A preliminary open pit optimisation and schedule was undertaken for the BIF mineralisation. Reasonable	
Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable,	prospects of eventual economic extraction ( <b>RPEEE</b> ) have been determined through assessment of the resource using pit optimisation and schedule.	
external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual	A resource model with parent block size 25m (X) by 25m (Y) by 4m (Z) was used for the assessment of the RPEEE, with an assumed ore loss and dilution of 0.5% ore loss and 6% dilution.	
economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be	Within the Prospect, the pit optimisation recovered 99% of in-situ mineralisation at the RF 1.4 shell. The total BIF material recovered amounts to 475Mt of potential mine feed within the RF 1.4 resource reporting shell.	
reported with an explanation of the basis of the mining assumptions made.	Mining is via conventional open pit load and haul. Mining costs are estimated at US\$3.59/t mined. Incremental haulage costs of US\$0.15/t.km have also been included in the assessment.	
	Consideration was given to processing costs based on the requirement for processing the BIF material, mass yield and rail transport from site to port. Processing costs are estimated to be US\$2.95/t ore for DID	





JORC Code Explanation	Commentary	
	material and US\$7.00/t ore for the BIF material, general and administration costs of US\$2.00/t ore and transport from mine to port US\$26.36/t product.	
	A capital cost allowance has been included in the RPEEE optimisation for the provision of crush and screen processing plant and mine site infrastructure. Third-party capital costs including rail are excluded as they are covered under operating charges. An additional annual allowance was made for sustaining capital and a capital provision for the upgrade of the plant to process the intact and Primary BIF material in Year 8 of production. Golder considers the capital cost allowances to be appropriate for the purposes of assessing RPEEE.	
	Product prices were based on consensus reporting and conservatively only include value-in-use adjustment for a 15% uplift for the lump product. No fines premium was included. The average price from all the products produced is US\$115/t product.	
	Shipping costs from Gabon to northern China were estimated to be US\$15.00/t product.	
	Royalty rates are based on the 2019 Mining Code of Gabon. The Mining Code Article 205 specifies that royalty rates for Base Metals and Other substances is between five and ten percent of the sale price of the mineral product following deduction of allowable fees, taxes and costs. An assumed midpoint royalty rate of seven and a half percent has been used for RPEEE optimisation purposes. NPV was calculated at a 15% discount rate.	
Metallurgical factors or assumptions	Pilot scale metallurgical test work demonstrates that a saleable concentrate of lump and fines at an acceptable mass yield is achievable from the Soft Oxide.	
The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual	Sighter metallurgical test work demonstrates that samples of Intact Oxide and Primary BIF have produced concentrates of saleable grade and sizing comparable to other similar iron ore projects.	
economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Although the Intact Oxide is amenable to density-based beneficiation, it will require fine crushing to achieve saleable grades.	
Environmental factors or assumptions	Work on Baniaka PFS and associated SEIA considers the potential environmental impacts of the mining	
Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual	and processing operation, including the investigation of dry-stacking of mine and process waste.	



# JORC Code Explanation Commentary economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this

stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.

#### **Bulk density**

Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.

The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.

Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.

Hand-dug pits are used to estimate the dry bulk density of unconsolidated material. Once the desired material type is reached, a sub-pit is excavated, and the extracted material weighted. The excavation is lined with a plastic sheet and filled with water to estimate its volume. The material was air dried prior to September 2017, and oven dried on site after that date, to obtain the moisture content and calculate a dry bulk density. Moisture content typically ranges 5% - 10%.

Two large volume samples from pits at Tsengué and Bingamba have also been used to check the in-situ bulk density. A pit is mechanically dug into the desired material type with the material loaded directly into a truck, then volume of the hole is calculated from field measurement. The truck is then weighed at a calibrated weigh bridge and the difference between the empty and full truck giving a wet in situ density for the pit. Representative moisture samples were collected to estimate a dry bulk density (8% – 11% moisture).

The water displacement method is not appropriate for unconsolidated core samples and has only been used on competent samples from the BIF and country rocks.

Bulk density values were assigned to the Mineral Resources as follows:

Unit	MINCODE	Density Assignment (g/cm³)
eBIF-1	31	2.82
eBIF-2	32	3.01
mBIF	33	3.34
Basement (BASE)	40	2.24

#### Classification

The basis for the classification of the Mineral Resources into varying confidence categories.

The Mineral Resource is classified as follows:

• There are currently no Indicated or Measured Resources.





JORC Code Explanation	Commentary
Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).  Whether the result appropriately reflects the Competent Person's view of the deposit.  Audits or reviews  The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>Inferred Resources have a maximum drill spacing of 400m between drill lines and 50m between drill holes.</li> <li>There is generally a high level of confidence in the geological model and interpretation.</li> <li>The geomorphic model of the mineralisation has been demonstrated as a robust predictor of the extent, continuity and grade profile of the mineralisation between drill lines and promotes confidence in the Mineral Resource.</li> <li>The Competent Persons consider the Mineral Resource outcome adequate given their knowledge of the Project, the available data, the methods employed, and validations undertaken.</li> <li>SRK Consulting (Australasia) (SRK) compiled in November 2017 an Independent Technical Report on Genmin's projects in Gabon, covering the Baniaka and Baniaka West licences. As part of the report, a high-level review of the Maiden DID Mineral Resource Estimate prepared by Golder was undertaken.</li> <li>SRK subsequently compiled an Independent Geologist's Report, effective 21 January 2021 that reviewed and summarized all Mineral Resource Estimates completed by Golder prior to that date.</li> <li>The Baniaka Project Detrital Iron Deposits Mineral Resource Update prepared by Golder and reported to the ASX on 21 July 2021 has not been independently reviewed.</li> <li>This Mineral Resource Estimate has not been independently reviewed</li> </ul>
Discussion of relative accuracy/confidence	No numerical quantification of the confidence level of the Mineral Resource in terms of tonnage or grade
Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the	has been undertaken.  Confidence in the model is directly related to drill spacing. Prior work by Golder indicated that a 400m section spacing is the limit of an Inferred Resource, and where geological continuity is assessed to be good, a 200m section spacing is the limit of an Indicated Resource. Classification confidence decreases with structural complexity and with decreasing strike length and width.  There is no production or trial mining data with which to compare the Mineral Resource.





JORC Code Explanation	Commentary
factors that could affect the relative accuracy and confidence of the estimate.	
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	