



ASX Announcement

25 October 2022

High-Grade Gold Intercepts from Latest Drilling Program at Sihayo

Highlights:

- Completed a seven-hole, 2,216 m diamond drilling program at Sihayo aiming to test for potential extensions to known deeper high-grade gold mineralisation located below and south of the planned pit shell
- Results received for all seven holes, returning some moderately thick high-grade gold intercepts, including:
 - Hole SHDD645 intersected 31.5 m @ 4.29 g/t Au from 259.0 m including 11.1 m @ 7.49 g/t Au
 - Hole SHDD639 intersected 11.1 m @ 3.77 g/t Au from 169.9 m
 - Hole SHDD642 intersected 11.8 m @ 6.98 g/t Au from 98.0 m
 - Hole SHDD644 intersected 10.0 m @ 7.90 g/t Au from 262.0 m
- Mineralisation remains open at depth and to the south
- Study initiated to assess potential for underground mining opportunities to augment planned open pit mill feed
- Results from High pH (caustic) Leach testing on composites from this drilling program are in line with and validate the new caustic leach recovery model

Sihayo Gold Limited (**ASX:SIH** – “Sihayo” or the “Company”) is pleased to announce the results of recently completed drilling on the Company’s Sihayo Starter Project (the “Project”) in North Sumatra, Republic of Indonesia. The primary objectives of the seven-hole, 2,216 m diamond drilling program were to test for potential extensions to known deeper high-grade gold mineralisation located below the planned Sihayo starter pit.

Sihayo’s Executive Chairman, Colin Moorhead, commented on the latest results:

“The existing Sihayo model clearly shows grades and thicknesses improving at depth to the south of the current optimised pit-shell, however that mineralisation has been, until now, considered to be largely refractory in nature. Encouraged by strong improvements in metallurgical recoveries arising from High pH (Caustic) Leaching at Sihayo, the Company targeted seven new holes into this area to assess the potential for an underground mining

opportunity and explore for indications of a high-grade feeder zone. Results from this drilling have confirmed the grade and thickness of some of the deeper mineralisation in the model and has indicated extensions to the known high-grade gold zones. Furthermore, mineralised composites have been tested for the impact of High pH Leaching with results very much in line with our new metallurgical model. A mining study has commenced to assess the potential for a small underground mine and assess the trade-off between open pit and underground mining at Sihayo.”

Drilling Highlights

The holes completed in this recent drilling program have tested some deeper zones within the Sihayo gold resource, which are characterised by locally high gold grades identified by historic drilling. These deeper zones fall within the Inferred Mineral Resource category and are not included in the current Ore Reserve estimate due to insufficient drilling data being available to accurately define their extent and geometry. The holes were located on the southern end of the proposed pit shell (refer to Figure 1 and Figure 2).

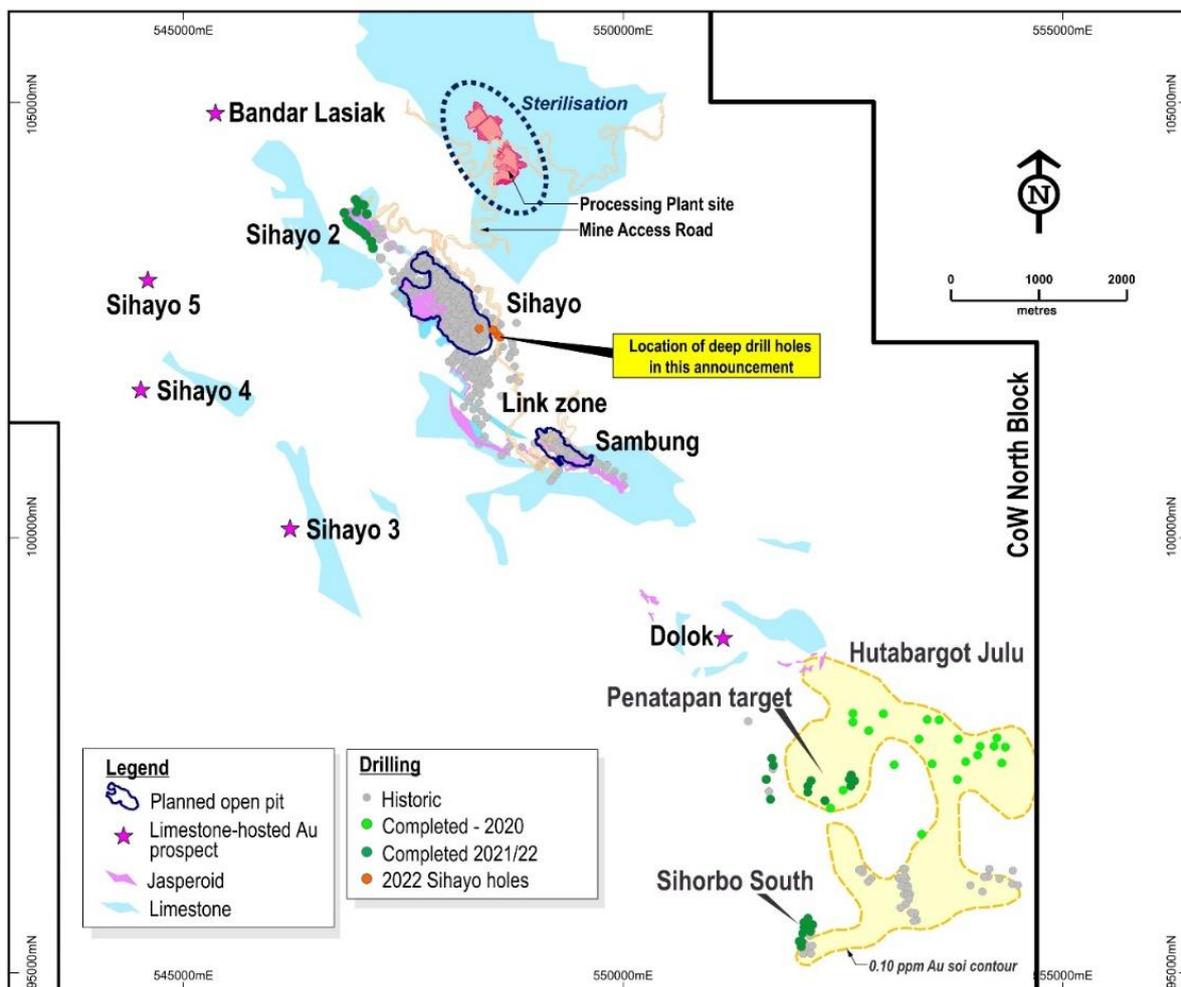


Figure 1: Location of drill holes relative to nearby deposits and exploration targets

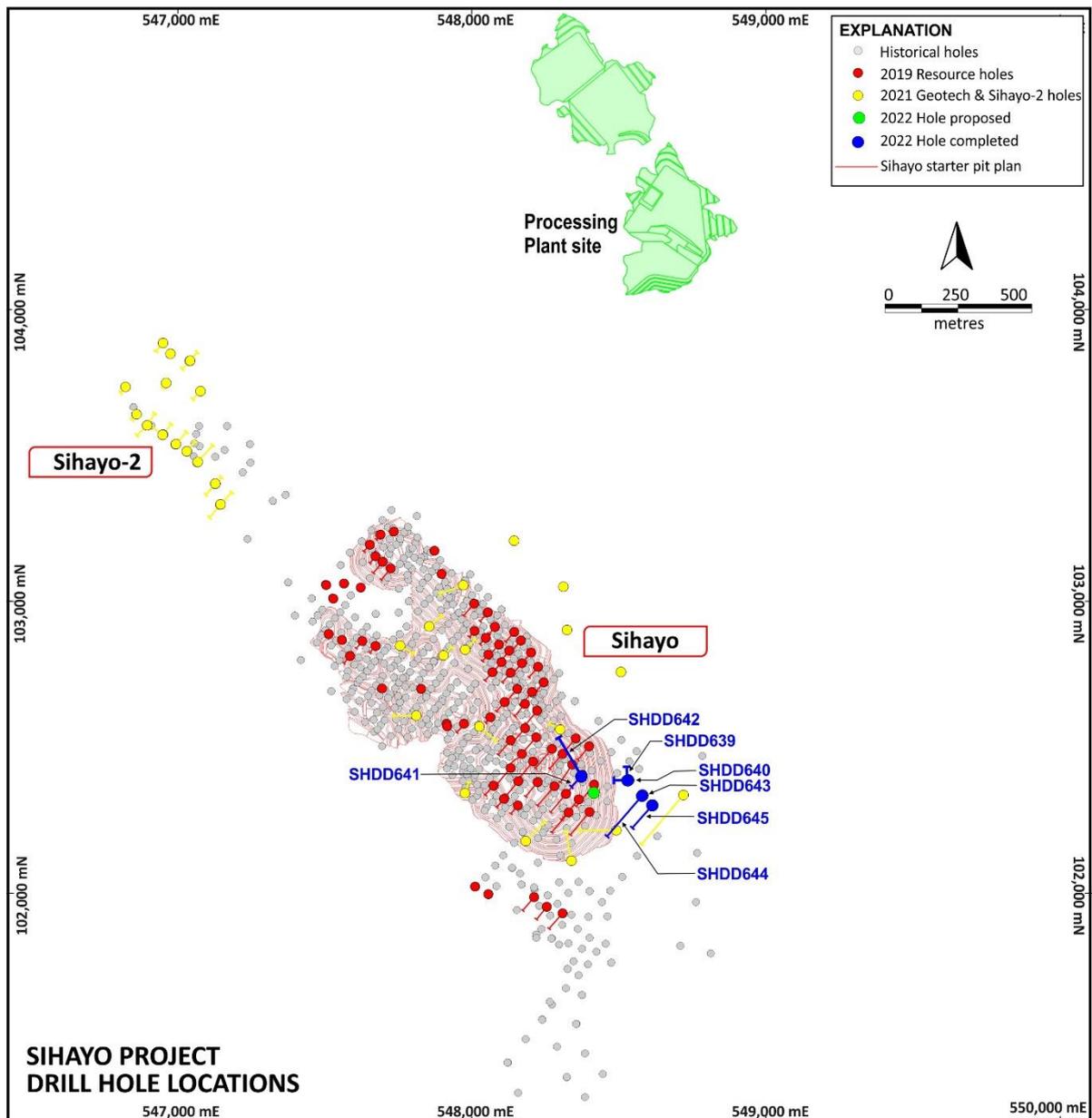


Figure 2: Location of drill holes from latest Sihayo drilling program

Gold results were received for the seven holes and are highly encouraging. Table 1 provides a summary of the results, with full details provided in Appendix 1. Five of the seven holes returned high-grade gold intercepts and confirm the continuity and extensions to some of the high-grade gold mineralisation previously identified beneath the Sihayo starter pit.

Table 1: 2022 Sihayo Drilling Program Summary of High-Grade Gold Intercepts

Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	True Width (m)	Comment
SHDD639	169.90	181.00	11.10	3.77	10	Infill hole
Including	173.00	174.00	1.00	7.12		
SHDD641	250.50	264.00	13.50	3.26	12	Extension
including	258.50	259.50	1.00	7.69		
SHDD642	98.00	109.80	11.80	6.98	10	Infill hole
Including	101.00	104.00	3.00	13.00		
SHDD644	262.00	272.00	10.00	7.90	9	Extension
Including	263.00	265.00	2.00	14.15		
Including	304.00	315.00	11.00	2.22	10	
Including	304.00	306.00	2.00	3.50		
SHDD645	259.00	290.50	31.50	4.29	27	Extension
Including	268.00	279.10	11.10	7.49	10	

Notes: 1) Intercepts reported at 0.3 g/t Au cut-off and up to 4 m internal dilution
 2) Gold results for hole SHDD645 are preliminary results but have passed internal QAQC checks

The high-grade gold mineralisation is open in several directions, and with additional drilling, there is potential to join some of the currently disconnected resource blocks into larger coherent zones of high-grade mineralisation or lead to the discovery of a higher-grade feeder zones below the Sihayo deposit (refer to Figure 3).

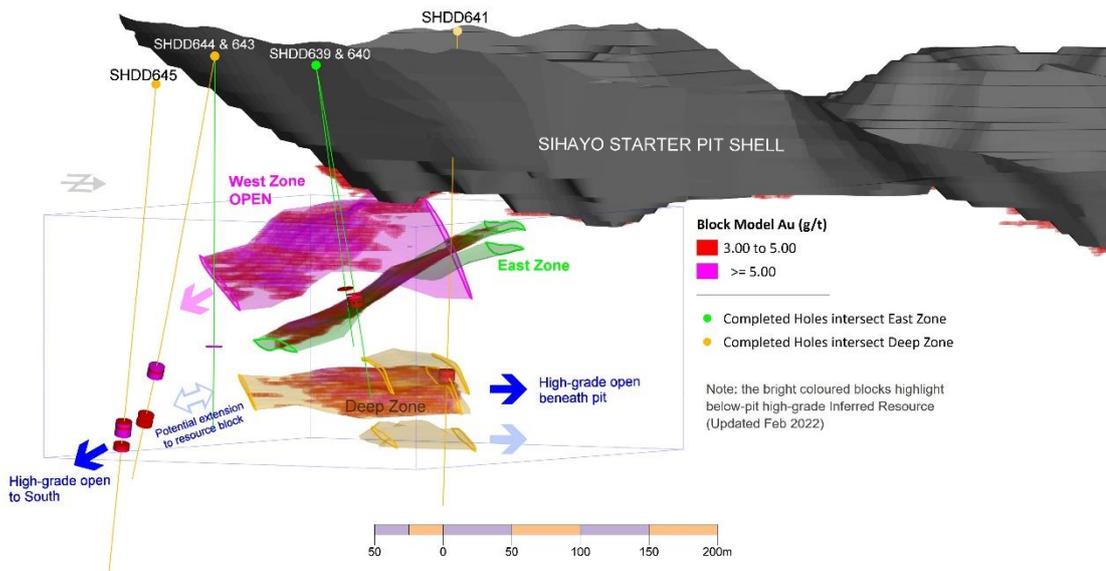


Figure 3: Long section showing beneath pit mineralisation

Background

The Company released an updated Mineral Resource and Ore Reserve statement for the Sihayo and Sambung gold deposits earlier this year (refer to the ASX:SIH announcement “*Project Update and Launch of Strategic Review Process*” dated 17 February 2022).

The Company also identified an opportunity to improve the overall metallurgical recoveries on the fresh and transition ore types within the Sihayo deposit by introducing a High pH Leaching step prior to carbon-in-leach (“CIL”) extraction. An extensive metallurgical test work program incorporating 72 transition and fresh samples was undertaken to assess the High pH Leaching opportunity. The results of this test work were previously outlined in the ASX:SIH announcements “*Further Metallurgical Test Work Results*” dated 23 September 2021, “*Significant Results from High pH Leaching Test Work*” dated 31 January 2022, and “*High pH Pre-Leaching Test Work Demonstrates Potential for Significant Uplift in Recoveries*” dated 5 July 2022.

Results from the High-pH Leaching CIL test work indicated the potential to increase overall metallurgical recoveries for the Sihayo Starter Project from 71.2% (as assumed in the 2022 Feasibility Study Update (“2022 FSU”)) to approximately 80 – 85%. These results have the potential to significantly transform the Sihayo Starter Project through higher gold production from existing Ore Reserves.

Higher metallurgical recoveries from High-pH Leaching may unlock additional known and yet to be defined high-grade mineralisation located beneath the Sihayo pit, which is not currently included in the current Ore Reserve due to the low recoveries previously assumed.

The high-grade zones below the planned Sihayo pit are largely underexplored and were previously tested by a relatively low density of drilling. This is therefore a high priority for follow-up drilling following the metallurgical test work program. The recently completed program of first phase of follow-up drilling was designed to infill and extend selected zones within the deeper high-grade Mineral Resource.

Geology of the High-Grade Gold Zones

The deeper high-grade gold zones within Sihayo are mainly hosted in Permian karstic limestones intruded by a diorite laccolith and unconformably overlain by Tertiary quartz sandstones and mudstones.

The gold mineralisation occurs as sulphide-refractory, sub-micron-size gold in arsenic-rich rims on fine-grained pyrite disseminated through decalcified clay-sulphide and jasperoidal silica altered limestone karst cavity-fill breccias, composed of varying proportions sandy matrix and polyolithic clasts of limestone, sandstone, and mudstone (refer to Figure 4 for core photos). The mineralised breccias are generally fresh to locally fractured and oxidised. They are best developed along the contact-unconformity with the overlying Tertiary rocks, and along or near the contacts of the diorite laccolith intrusion.

As with the entire Sihayo deposit, the deeper high-gold zones are anomalous in arsenic, antimony, mercury and thallium geochemistry. The breccias hosting high-grade gold mineralisation at Sihayo show physical features and alteration-mineralisation characteristics that appear to be similar to those reported in the literature from the Cortez Hills breccia-related Carlin-type gold deposit in Nevada (Bradley et al, 2020¹). Figure 5 shows a schematic of the current understanding of the geology beneath the Sihayo pit.

¹ Bradley, M.A., Anderson, L.P., Eck, N., and Creel, K.D, 2020, Giant Carlin-type gold deposits of the Cortez district, Lander and Eureka Counties, Nevada, in Sillitoe, R.H., Goldfarb, R.J., Robert, F., and Simmons, S.F., eds., *Geology of the World's Major Gold Deposits and Provinces: Society of Economic Geologists Special Publication 23*, p. 335–353.

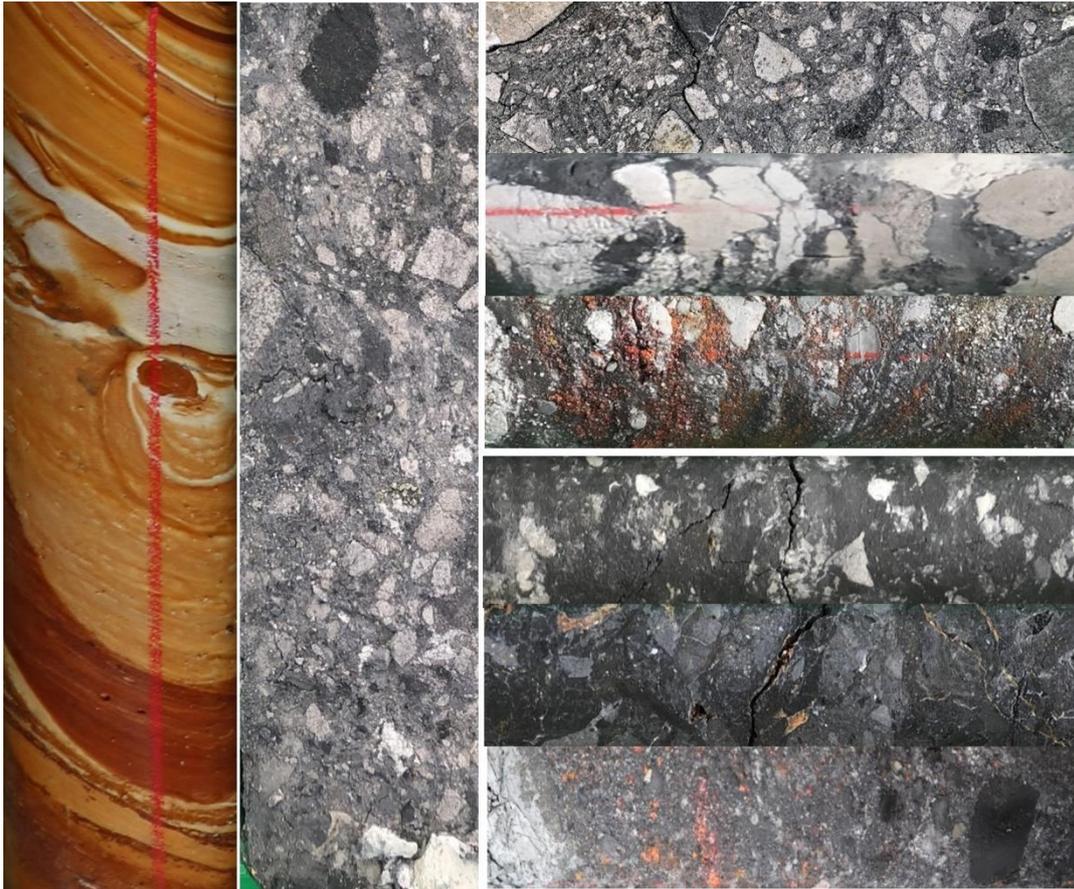


Figure 4: Sihayo 2022 Drilling Program – Selected Core Photos
 Mineralised jasperoidal and residual clay-sulphide altered polyolithic cave-fill breccia

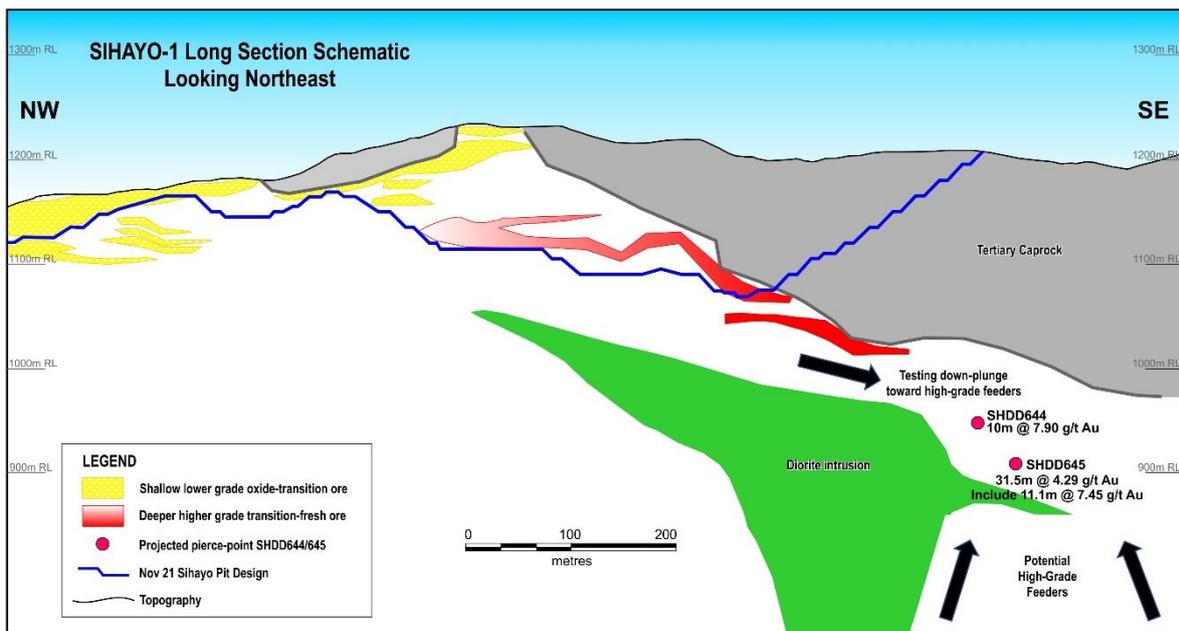


Figure 5: Schematic long section of Sihayo underground geology

Additional High-pH Pre-Leaching CIL Test Work

Additional High-pH Leaching CIL test work was conducted on selected mineralised samples. This test work was conducted by ALS Metallurgy in Perth on 12 composites comprising 31 individual samples selected from the first four holes (SHDD639-642) in the recently completed drilling program. The composite samples are of fresh (unoxidized) mineralised jasperoid containing varying proportions of silica, clays and sulphides.

The test work conditions mimicked a 24-hour pre-leach at high pH (≥ 13), with 40-80 kg/t of caustic, followed by a conventional 24-hour cyanide leach (CIL) bottle-roll.

As shown in Table 2, results from 10 of the 12 composite samples show High pH Leaching CIL gold recoveries ranging from 63% to 84%, with an average uplift in recovery of approximately 40% on the original LeachWELL results, representing a 130% increase in gold recovered. Two of the composite samples showed anomalously low recoveries in clay-rich mineralised material. Although the clay-rich mineralisation appears to be volumetrically less important in the deeper high-grade zones, these samples are being tested for clay composition and potential preg-robbing.

The results are consistent with previously reported test work and confirm our latest metallurgical model. Full details of the results are presented in Table 5 of Appendix 1.

Table 2: Leachwell and High pH Leaching CIL recoveries from recent drill hole samples

Hole ID	Calculated Head Grade Gold (g/t)	LeachWELL Recovery (%)	High pH Leaching CIL Recovery (%)	Recovery uplift (%)	Sample Oxidation State
SHDD639	4.17	31%	30%	(1%)	Fresh, clay-rich
SHDD639	4.64	36%	63%	27%	Fresh, Clay rich
SHDD639	3.03	32%	70%	38%	Fresh
SHDD369	3.17	44%	79%	35%	Fresh
SHDD640	1.86	14%	37%	23%	Fresh, clay rich
SHDD641	3.74	22%	83%	61%	Fresh
SHDD641	5.19	8%	84%	76%	Fresh
SHDD641	0.99	22%	81%	59%	Fresh
SHDD642	2.45	35%	80%	45%	Fresh
SHDD642	12.1	41%	84%	43%	Fresh
SHDD642	5.98	50%	79%	29%	Fresh
SHDD642	6.05	31%	70%	39%	Fresh

Implications for Exploration and the Sihayo Starter Project

The results of the latest drilling program provide further confirmation of the geological model for the Sihayo deposit and indicate the continuity and extensions to some of the high-grade gold mineralisation previously identified beneath the planned Sihayo pit. Furthermore, drilling indicates the orebody remains open in several directions. A follow up program is being planned to better define the resource potential immediately below and south of the currently

planned pit. A study has also commenced to understand potential mining methods, access options and associated capital and operating costs for an underground mine at Sihayo which could augment planned open pit mill feed with higher grade ore. This study will also evaluate trade off options between open pit and underground mining with a view to minimising cost and risk through a potentially material reduction in open pit waste movement.

These results also strengthen confidence in The Company's exploration model, which is based on similar geologic settings seen in some of the Carlin style gold deposits in Nevada, USA. This model suggests the potential for high-grade discordant feeder zones linked to deeper fault structures and contacts on a diorite intrusion below the southern edge of the current optimised pit-shell (Figure 5). The occurrence of high-grade gold within polyolithic breccia bodies at Sihayo is interpreted to be similar to those documented at Cortez Hills in Nevada² for example.

In conjunction with the underground study, Sihayo is using the updated metallurgical model to refresh the pit optimisations for the Sihayo and Sambung pits, which will provide an updated Ore Reserve and economic model for the Sihayo Starter Project.

Longer term, with further drilling and confidence in the resource model as well as outcomes from the underground study, the Company is likely to re-optimize the current Sihayo pit shell and adopt underground mining in some areas currently intended for open pit mining. This may result in benefits by reducing the volume of waste mined and reducing costs and risks to the operation given the steep topography and engineering required for waste management and storage.

This announcement has been authorised by Sihayo's Board of Directors.

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² Refer to attached Appendix 1: JORC Code, 2012 Edition – Table 1, Section 2 – Geology - Deposit type, geological setting and style of mineralisation for description of Sihayo gold deposit and its similarities to Carlin-style mineralisation

Appendix 1: Details of Sihayo drilling program

Table 3: 2022 Sihayo Drilling Program – Drill Hole Collar Details

Hole ID	mE	mN	RL	Dip/Az (°)	Depth(m)
SHDD639	548,531	102,386	1174	-78°/000°	248.70
SHDD640	548,533	102,387	1174	-75°/270°	214.50
SHDD641	548,375	102,400	1198	-80°/224°	355.30
SHDD642	548,375	102,399	1198	-65°/330°	371.80
SHDD643	548,579	102,333	1175	-90°/ -	275.20
SHDD644	548,580	102,333	1175	-60°/221°	360.00
SHDD645	548,625	102,300	1166	-70°/221°	390.40

Table 4: 2022 Sihayo Drilling Program– All significant intercepts
Reported at 0.3 g/t Au cut-off and up to 4m internal dilution

Hole ID	From	To	Length	Au	As	Sb	Est True
SHDD639	169.90	181.00	11.1	3.77	3082	4186	10
including	173.00	174.00	1.00	7.12	11100	8090	
SHDD640	170.40	173.60	3.20	2.00	3056	153	1.8
SHDD641	222.50	236.00	13.50	0.56	1554	181	12
	240.50	247.50	7.00	0.81	3404	45	6
	250.50	264.00	13.50	3.26	2113	149	12
including	258.50	259.50	1.00	7.69	5320	126	
SHDD642	98.00	109.80	11.80	6.98	1188	181	10
including	101.00	104.00	3.00	13.00	1013	211	
SHDD643	205.00	215.00	10.00	1.23	2215	580	9
including	213.00	214.00	1.00	5.14	3450	1790	
SHDD644	262.00	272.00	10.00	7.90	1.47%	464	9
including	263.00	265.00	2.00	14.15	2.01%	500	
	269.00	271.00	2.00	9.76	1.02%	548	
	292.00	304.00	12.00	0.45	4158	116	11
	304.00	315.00	11.00	2.22	1526	69	10
including	304.00	306.00	2.00	3.50	4520	113	
SHDD645	259.00	290.50	31.50	4.29			27
including	268.00	279.10	11.10	7.49			10

Notes: 1) Gold results for holes SHDD644 and SHDD645 are preliminary results but have passed internal QAQC checks; multielement results are awaited

Table 5: 2022 Sihayo-1 Drilling Program – Comparison of Original LeachWELL with High pH Leaching CIL Recoveries on composite samples of jasperoid ore

Hole ID	Composited Samples	Sample Interval Down-hole		Calculated Head Grade Gold (g/t)	LeachWELL Recovery (%)	High pH Pre-Leach CIL Recovery (%)	Sample Oxidation State
		From _m	To _m			High pH/CIL ALS (Perth)	
SHDD639	1032853 1032854	169.9	173.0	4.17	31%	30%	Fresh Clay-rich
SHDD639	1032856 1032858	173.0	175.0	4.64	36%	63%	Fresh Clay-rich
SHDD639	1032859 1032860 1032861	175.0	177.0	3.03	32%	70%	Fresh
SHDD369	1032862 1032864	178.0	180.0	3.17	44%	79%	Fresh
SHDD640	1032926 1032927 1032928	170.4	172.8	1.86	14%	37%	Fresh Clay-rich
SHDD641	1033096 1033097 1033098 1033099	253.4	257.5	3.74	22%	83%	Fresh
SHDD641	1033100 1033101	257.5	259.5	5.19	8%	84%	Fresh
SHDD641	1033104 1033105	261.0	263.0	0.99	22%	81%	Fresh
SHDD642	1033153 1033154	99.1	101.0	2.45	35%	80%	Fresh
SHDD642	1033155 1033157 1033158	101.0	104.0	12.1	41%	84%	Fresh
SHDD642	1033159 1033160 1033162	104.0	107.0	5.98	50%	79%	Fresh
SHDD642	1033163 1033164 1033165	107.0	109.8	6.05	31%	70%	Fresh

Competent Person's Statement

Exploration Results

The information in this report which relates to Exploration Results is based on, and fairly represents, information compiled by Mr Bradley Wake (BSc Hons. (Applied Geology)), who is a contract employee of the Company. Mr Wake does not hold any shares in the company, either directly or indirectly.

Mr Wake is a member of the Australian Institute of Geoscientists (AIG ID: 3339) and 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 Wake consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

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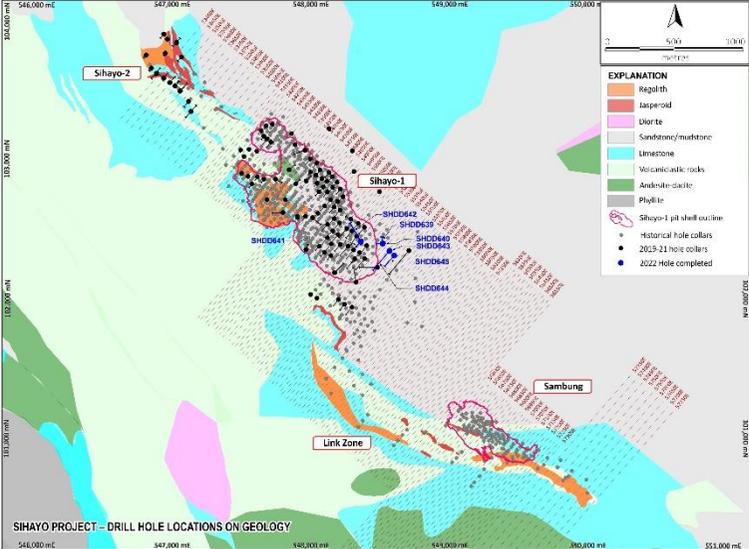
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Appendix 2: JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques

Criteria	JORC Code Explanation	Commentary
<p>Sampling Techniques</p>	<p>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</p>	<ul style="list-style-type: none"> • Samples were collected by diamond drilling using PQ3, HQ3 and less commonly, NQ diameter coring sizes. • Drilling and the transportation of core in sealed boxes from drill site to the Site Core Shed was fully supervised by the Company's project geologists and geotechnicians. The core was logged and marked up by the project geologists for cutting and sampling. The core was cut using a petrol-driven core saws and sampled by trained geotechnicians under the full supervision of the project geologists at the Site Core Shed. • Most holes were split for half-core samples and assayed over continuous 0.5 to 2 metre intervals down the entire length or along selected intervals within each drill hole. • Core recovery was recorded for every sample interval. Where possible, all core was oriented and cut along the orientation mark retaining down-hole arrows. • Core samples are bagged in numbered calico bags that are each lined with a plastic bag and sample ticket and sealed with heavy duty cable ties. Groups of 5-6 samples are bagged in hessian sacks and sealed with a numbered security tag. The sacks are clearly labelled and transported to the laboratory by road transport under the escort of the Company's security personnel. <p>The number of drill core samples relating to this announcement: Sihayo-1: 2022 Drilling Program = 678 samples (from drill holes highlighted in blue collars below)</p> 

Criteria	JORC Code Explanation	Commentary
Drilling techniques	<p>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</p>	<p>All samples reported in this announcement are from the 2022 exploration drilling program:</p> <ul style="list-style-type: none"> The drilling methods were wire-line triple-tube diamond drilling using PQ3, HQ3, and less commonly, NQ3 diameter coring sizes and using a man-portable diamond drill rig owned and operated by PT Indodrill Indonesia of Bogor, Indonesia. Drilling activities are operated on two 12-hour shifts per day, 7 days per week. The drill holes are surveyed at 25m down-hole intervals using a Digital ProShot downhole camera. Drill core is oriented on each drill run in competent ground conditions using a Coretell ORIshot down-hole orientation tool.
Drill sample recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</p>	<ul style="list-style-type: none"> Core recoveries were excellent and averaged greater than 95% within the mineralised and wallrock zones. Ground conditions are highly variable and locally poor due to a number of factors: 1) The occurrence of incohesive fault structures related to movements along fault arrays within the active Trans Sumatra Fault Zone, and 2) contrast in rock strength associated with variations in alteration and reactivation by younger fault movements. Core recovery is maximised by the careful control of water/mud injection pressure, use of specialised drilling muds, and the drilling of shorter runs in highly broken ground conditions. Core recoveries (and losses) are directly measured from the inner tube splits after each drill run at the drill site by trained core handling technicians ("core checkers"). The core checker is on-site during the entire 12-hour shift. The core checker takes a photograph of the core from each drill run on the inner tube splits and ensures that the core is properly assembled (reconnected) and the orientation line is properly marked along the core on the inner tube splits before it is transferred into core trays. Drill runs and core losses are marked up by the driller on core blocks placed in the core box after each drill run. The positions of any obvious sections of core loss (e.g. cavities) are noted in the core boxes. The drill intervals, operational activities and core recoveries are recorded on Daily Shift Drilling Reports for each drilling shift. These are checked, validated and approved at the Site Office and the data are entered in an Excel database. The drilling contractor maintains appropriate mud mixtures and a high standard of operational procedure to maximise core recovery. Maximum drill runs are 1.5 m in length and are shortened if necessary to optimise sample recovery in broken ground conditions. The drill rigs are checked daily by the project geologists to ensure that maximised core recoveries, high safety and operating procedures are maintained by the drilling contractor and support personnel. There is no evidence of a grade bias due to variations in core recovery in the results reported.
Logging	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	<ul style="list-style-type: none"> Drill core recovered from the entire hole(s) is geologically and geotechnically logged by the project geologist(s) and geotechnical engineer(s). Predicted zones of mineralisation and surrounding wall rocks are selected and recorded for mark-up in core trays by the project geologist(s) for geochemical sampling and assaying. Drill hole logs record lithology (rock types), alteration and mineralisation, structure, rock strength and hardness, weathering condition, RQD and other structural defects. A standardised logging coding and nomenclature are used by the project geologist(s) and geotechnical engineers(s). Logging data are captured on A3 paper logging sheets designed for the project and these data are transferred into a digital format using Excel spreadsheet software for import into Micromine. Geological and geotechnical logging are qualitative in nature except for the recoding of logging and sampling intervals, core recoveries, oriented core measurements (α and β), RQD and fracture frequency.

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> All drill core trays are digitally photographed in both wet and dry condition as whole-core, and in both wet and dry condition at half-core splitting and sampling. A complete photographic record of the core trays is kept on file in the Company's project database. Dry Bulk density is measured from 10 cm long blocks of whole core taken at systematic 5 m intervals down the entire hole using the wax-sealed sample submersion/water displacement method. Logging is of a suitable standard for detailed geological and geotechnical analysis, and for resource modelling. Revision of the drill logs is done (if necessary) on the receipt of final assay results to assist with the accuracy of interpretations and assessment of the drilling results.
<p>Sub-sampling techniques and sample preparation</p>	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<ul style="list-style-type: none"> Drill core is manually split (cut) using petrol-driven core saws and diamond-impregnated core saw blades. Continuous half-core samples are split and collected over nominal 0.5 to 2 metre sample intervals down the drill hole. Samples are methodically marked-up, labelled, split and sampled under supervision of project geologist(s) at the Company's Sihayo core shed located in the project area. The remaining half-cores are stored in the core boxes at the Company's Sihayo core shed as a physical archive of the drilling program(s). Quarter-core samples were collected for duplicate testing of grade variations within core; Quarter core samples were taken at a frequency of 1 in every 30 consecutive samples down each drill hole. The quarter-core duplicate assay results show a generally low variation in grade distribution between the duplicate sample pairs. Boyd crush sample duplicates testing for assaying repeatability were part of the QAQC. These were prepared by PT Intertek Utama Services at their sample preparation facility in Medan. Two duplicate 1-1.5 kg samples are split from core crushed to 95% passing 2 mm from the Boyd crusher at a frequency of 1 in every 15 samples. The Boyd crusher duplicate assay results show low variation and a high degree of repeatability between the duplicate pairs. The nominal 0.5-2 m long PQ3/HQ3 and sometimes NQ3 half-core samples provided sample weights ranging between about 2- to 6-kg, and averaged around 3-4 kg. These relatively large sample weights and the sample preparation protocols adopted for these drilling programs are representative and appropriate for the epithermal style of gold mineralization being investigated. QAQC procedures implemented by the Company and results reported by Intertek as part of their own internal QAQC procedures are considered sufficient to highlight any need for revision of the sample preparation procedures in forward drilling programs. However, the QAQC results to-date support that the sample-preparation techniques are robust and appropriate to the determination of the metal grade of the rocks being investigated.
<p>Quality of assay data and laboratory tests</p>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>For geophysical tools, spectrometers, hand held XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</p>	<p>PT Intertek Utama Services: PT Intertek Utama Services (Jakarta/Medan) was the primary sample preparation and assaying laboratory used for this drilling program.</p> <ul style="list-style-type: none"> Coarse crush samples were prepared at the Intertek sample preparation facility in Medan, North Sumatra. Core samples are weighed and dried at 60°C. The entire sample is crushed to P95 (95%) passing minus-2mm and 1.5kg is split off and pulverized to P95 (95%) passing minus-75 microns. Sample pulps prepared at the facility in Medan are air freighted to Intertek's analytical laboratory in Jakarta. The samples were assayed for gold by 50 g charge Pb collection Fire Assay with AAS finish (FA51/AAS) and 46 multi-elements by four-acid digest (HClO₄, HCl, HNO₃, HF) and a combination of determinations using Inductively Coupled Plasma/Optical Emission Spectrometry (ICP/OES) (Al, Ca, Cr, Cu, Fe, K, Mg, Mn,

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	<p>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</p>	<p>Na, Ni, P, S, Sc, Ti, V, Zn) and Inductively Coupled Plasma/Mass Spectrometry (ICP/MS) (Ag, As, Ba, Be, Bi, Cd, Co, Cs, Ga, Ge, Hf, In, Li, Mo, Nb, Pb, Rb, Sb, Se, Sn, Sr, Ta, Te, Th, Tl, U, W, Y, Zr) determinations (4A/OM10).</p> <ul style="list-style-type: none"> In addition, the mineralised jasperoid intersections were tested for a more comprehensive set of analyses to investigate the geometallurgical properties of the mineralised material. This includes assaying for gold by 200-g accelerated cyanide (LeachWELL) with AAS finish (LW200/AA) and Au-tail analysis by FA (TR200/AA), mercury by Cold Vapour AAS determination (HG1/CV), and several different sulphur and carbon analyses for soluble and insoluble components (sulphates, organic carbon) (CSA03 – determination of Total Carbon & Sulphur by CS analyser, CSA104 – SCIS determination of carbonate-extract for soluble sulphate, C71/CSA – determination of Carbon non-carbonate or Carbon graphitic). The nature of the large core size (PQ3/HQ3/NQ3), the total and partial preparation procedures (total crush to P95 -2mm, 1.5kg split pulverized to P95 -75 micron), and the multiple analytical methods used to assay for gold (FA, CN) and its associated elements (silver, sulphur, carbon & multielements) are considered appropriate for evaluating the potential geometallurgical characteristics of jasperoid- gold mineralization. The Company inserted OREAS Certified Reference Materials (CRMs) and blanks at a rate of 1 in every 10-12 core samples (~10%) of the sample sequence to evaluate the lab's sample preparation procedures, analytical quality and/or biases. Intertek also conducts and reports its own internal laboratory QAQC checks which are reviewed as part of the QAQC analysis. The results relating to this announcement fall well within acceptable tolerances of accuracy and precision. <p><u>ALS Metallurgy (Balcatta, WA):</u> Produced the high pH cyanide leach results referenced in this announcement</p> <ul style="list-style-type: none"> The metallurgical test work results pertaining to this announcement was done by ALS Metallurgy in Balcatta, WA. This laboratory operates to international standards and procedures and participate in Geostatistical Round Robin interlaboratory test surveys. The samples pertaining to these latest results were individual minus-2mm crushed core samples split from remaining coarse-reject sample stock held in refrigeration at the sample preparation facility of PT Intertek in Medan. A total of 31 samples of mineralised jasperoid and residual clay-sulphide minus-2mm crushed core was selected from four holes (SHDD639-642) The samples averaged 0.5-kg. Samples were individually packaged and air freighted to Perth from Jakarta. At ALS Metallurgy the samples were sorted and composited as per the Client's instruction to make 12 composite samples (See Table 4 in this announcement). The samples were then pulverized in a rod mill to greater than 80% passing 106 microns. The samples were then split into 250-g charges for the following test work: <ul style="list-style-type: none"> - 24-hour caustic pre-leach (pre-oxidation) - Followed by a 24-hour Carbon-In-Leach test at pH13 (NaOH buffer), DO >15 ppm and 0.05% NaCN in a continuous bottle-roller. - Solution and residue for each sample was removed for assaying: leachate (Au, Ag, As, Ag), residue (Au, Ag, As, Sb, S (total), S (sulphide), C (total) and C (organic) analyses The analytical methods used to assay for gold (FA, CN) and its associated elements (silver, sulphur, carbon and multielements) are considered appropriate for evaluating the potential geometallurgical characteristics of jasperoid-gold mineralization. QA/QC procedures for metallurgical test results followed standard practices of developing mass balances for

Criteria	JORC Code Explanation	Commentary
		each test and comparing calculated and assay head grades for all elements of interest. Where the comparison showed a significant discrepancy between calculated and assay head grades, assays were repeated.
Verification of sampling and assaying	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	<ul style="list-style-type: none"> Assay results are received from the laboratory in digital format and hard-copy final certificates. Digital data are stored on a dedicated database server and back-up database server. Hard-copy certificates are stored in Jakarta Office. Results are received and validated by the Company's Consultant against QAQC protocols. Results are reported by the Company's Competent Person. No adjustments or calibrations are applied to any of the assay results.
Location of data points	<p>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<ul style="list-style-type: none"> Planned holes were initially staked in the field using a hand-held Garmin GPSMAP 66s with accuracy of $\pm 3-5$m. The coordinates presented for drill hole collars and rock sample locations in this announcement are field GPS measurements. The drill hole collars will be accurately surveyed by Total Station. The Grid System used is WGS84/ UTM Zone 47 North. The drill hole paths were surveyed with a Digital Proshot camera at 25-metre down-hole intervals. Drill hole paths are tracked, and data is plotted daily using Micromine software.
Data spacing and distribution	<p>Data spacing for reporting of Exploration Results.</p> <p>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.</p> <p>Whether sample compositing has been applied.</p>	<ul style="list-style-type: none"> The drilling program is conducted on approximately 50 m spaced lines/sections oriented near-perpendicular to the strike-projection of the gold-jasperoid target. No sample compositing is applied to the samples.
Orientation of data in relation to geological structure	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	<ul style="list-style-type: none"> Geological modelling of the Sihayo-1 gold deposit shows that the gold mineralization, host stratigraphic package and associated controlling structures related to the Trans-Sumatran Fault Zone are NW-SE striking. The gold-jasperoid target is interpreted to be stratabound by the host Permian limestone-volcaniclastic rock package. This host rock package is interpreted to have a moderate-dip to the northeast. The drilling program was designed in plan and section to test up-dip and along-strike projections of mineralised jasperoid intersected in historic scout drilling programs and 2019 infill drilling. The hole(s) intersect the gold jasperoid target at moderate to high angle to the dip of the interpreted mineralised stratabound zone.
Sample Security	<p>The measures taken to ensure sample security.</p>	<ul style="list-style-type: none"> A detailed Chain-of-Custody protocol is established to ensure the safe and secure transportation of all core samples from the remote project site to the PT Intertek Utama Services sample preparation laboratory in Medan, North Sumatra. Sihayo-1 drilling location is located within a few hundred metres from the Company's Sihayo exploration camp and core shed.

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		<ul style="list-style-type: none"> • On the drill site, the core is checked and recorded by the company's assigned "Core Checkers" (geotechnicians) as drilling proceeds. The core checkers are assigned to the drill rig for the entire shift (night/day) and effectively guard the drill core 24/7. The core checkers are responsible for recording and documenting the drill core, including photographing the core in the inner tube splits as it "comes out of the ground". The shift activities and photographs are reported to the project geologists at the end of each shift. • The drill core is packed and sealed in core trays at the drill site; the core trays were sealed with lids and locked with cable-tie strapping, immediately after each tray has been filled with core. • The core trays were man-portered daily from the drill site to the Sihayo core shed. • The project geologists check the drill site activity daily and directly supervise the security, handling and cleaning of the drill core. • After logging and sample splitting at Sihayo core shed, the core samples are each separately bagged and sealed. Each sample package consists of an inner-lining plastic bag with an individual sample ID ticket stub (cable-tied), and an outer-lining calico bag that is marked with the sample ID in permanent marker pen. The bag is then sealed with a cable tie. • The core samples are then packed into double-lined hessian (polyweave) sacks which are individually sealed with cable-ties and a unique numbered security tag. The hessian sacks are weighed and registered (hard copy and computer). • The hessian sacks are man-portered from Sihayo core shed by local labour accompanied by the Company's security personnel to the Tanjung Sialang road-side staging point (about 8-km distance), where they are met by the Company's logistics personnel. • The hessian sacks are checked, weighed (weights are verified by the project geologists) and then directly loaded into a sealable box truck, which is outer-locked and sealed with the Company's assigned security tag (photographed) for transport and delivery direct to PT Intertek Utama Services in Medan, North Sumatra. The truck is accompanied by Company security personnel. The PT Intertek sample preparation laboratory is located about 10-12 hours by road (430 km) from the project area. • On delivery to PT Intertek Utama Services in Medan, the laboratory manager confirms that the truck and hessian sack security seals are intact (photographed), weighs the hessian sacks, and reports to the project geologist(s) for verification and permission to proceed with the sample preparation. • PT Intertek Utama Services ensures the safe and secure transportation of pulp samples prepared at its sample prep facility in Medan, which are dispatched under their custodianship to the assaying laboratory in Jakarta, via DHL air courier. The pulp samples are packaged and securely wrapped in standard-sized Intertek-signatured boxes that are sealed with Intertek-signatured packaging tape. The pulp samples are accompanied by Intertek dispatch/security forms to ensure the acknowledgement of receipt and integrity of the samples (i.e. sample registration is completed and confirmed at both ends). • A detailed Chain-of-Custody protocol has been established to ensure the safe and secure transportation of samples from the remote project site to PT Intertek Utama Services sample preparation laboratory in Medan, North Sumatra and then by air freight to ALS Metallurgy laboratory in Balcatta, WA. • All crushed core samples were individually packed and labelled.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul style="list-style-type: none"> • The exploration drilling programs are supervised by the Exploration Manager, Chief Geologist and Project Geologists who are based on site • The database is internally checked by the Company's Database Manager • The results of this metallurgical test work have been audited and reviewed by an independent metallurgical consultant, using industry recognised QA/QC techniques when comparing mass balances of each individual test

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		for elements of interest such as Au, Ag, As, Sb, Hg, total and organic carbon and total and sulphide sulphur.

Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<p>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.</p> <p>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.</p>	<p>The mineral tenement is a 7th Generation Contract of Work (CoW) granted in February 1998 to PT Sorikmas Mining, an Indonesian joint venture company owned by Aberfoyle Pungkut Investments Pte Ltd (75%) and PT Aneka Tambang Tbk (25%). Sihayo Gold Limited (formerly Oropa Limited) acquired all of the shares of Aberfoyle Pungkut Investments Pte Ltd in April 2004. The CoW is located in North Sumatra in the Republic of Indonesia and is approximately 80km south-east from the Martabe Gold Mine.</p> <p>The joint venture remains as Sihayo Gold Limited (ASX:SIH) owning a 75% interest in PT Sorikmas Mining which in turn holds the Sihayo-Pungkut 7th Generation Contract of Work ("CoW"). PT Aneka Tambang Tbk is the Company's joint venture partner in the CoW with a 25% interest.</p> <p>The original CoW area covered 201,600 hectares. This was reduced to the current 66,200 hectares after two mandatory partial relinquishments; 1) to 151,000 ha in Feb 1999, and 2) to 66,200 ha in Nov 2000. As a consequence of these two partial relinquishments, the current CoW is subdivided into two separate blocks; North block and South block. The tenement is currently under the Operation/Production phase of the CoW. There is no future requirement for area relinquishment. Tenure on the CoW is until 2049 with an option to extend for two additional 10-year periods.</p> <p>The PT Sorikmas Mining CoW area is located along on a fertile segment of the Sumatra magmatic arc in North Sumatra. The same arc segment includes the giant Martabe gold-silver deposit (located about 80km NW) and the high-grade Dairi lead-zinc deposit (located about 250km NW). The CoW and is considered highly prospective for gold, silver and base metal mineralisation. Multiple mineral prospects have been identified during previous exploration within the CoW area and various mineralisation target-styles are represented including replacement-style carbonate-hosted gold (Carlin-style), intermediate-sulphidation epithermal gold-silver veins, gold-base metal skarns and porphyry-related copper-gold.</p> <p>The Sihayo Starter Project is the most advanced project within the CoW and a Definitive Feasibility Study for the project was completed in June 2020.</p> <p>Updated economics for the Sihayo Starter Project following Optimisation Studies, culminating in the 2022 Feasibility Study Update was released on 17th February 2022. The project has an updated combined Mineral Resources of about 27.8 Mt at 1.8 g/t for 1.565 Moz of contained gold and an updated Ore Reserve of 11.504 Mt at 2.0 g/t for 741 koz of contained gold in the Sihayo-1 and Sambung gold deposits. The bulk of this gold in the Sihayo-1 gold deposit.</p> <p>The Company has been active with exploration programs during 2021-22 including exploration and extension drilling within and surrounding the Sihayo-1 gold deposit, notably on the near-mine Sihayo-2 gold jasperoid target, extensive exploration drilling on the large Hutabargot Julu epithermal gold-silver project located 6km south of the</p>

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		<p>Sihayo Starter Project, and target generation, notably recent prospecting in the Tambang Tinggi project area of the South CoW block.</p> <p>Sihayo Starter Project is located within heavily forested and partly cleared rugged terrain of the Barisan Mountains, in the Siabu subdistrict of Mandailing Natal regency, North Sumatra. The Sihayo and Sambung gold resources are located between about 900m and 1230m elevation above sea level. Field activities are based from Sihayo exploration camp. The nearest villages are located within 8 km of the camp on the Batang Gadis river plain of the Panyabungan graben valley, immediately the east of the northern block CoW boundary.</p> <p>Access to the Sihayo Starter Project is via walking tracks. The camp is located about 8 km walking distance from a vehicle drop-off point at Hutagodang village on the Batang Gadis River. The vehicle drop-off point is located about 10 km from the Company's administration office at Bukit Malintang and is accessible via a largely unsealed government road.</p> <p>Panyabungan, the closest major regional town to the CoW North block, has a population of just under 100,000 people. Panyabungan is located about 140 km SE from Ferdinand Lumban Tobing airport and about 165 km from the regional city and port of Sibolga. Both the airport and Sibolga are connected to Panyabungan by a major sealed road and can be reached by vehicle in 3.5 hours and 4.5 hours respectively. There are daily flights between Ferdinand Lumban Tobing airport and both Jakarta and Medan. Hutabargot Julu prospect lies within a protected forest designated area however much of it contains a mixture of primary and secondary forest, rubber plantation and areas of fruit and vegetable cultivation under informal landholdings.</p> <p>Much of the PT Sorikmas Mining CoW is covered by state-owned protected forest that is managed by the Ministry of Environment and Forestry. The Company requires an <i>Ijin Pinjam-Pakai Kawasan Hutan (IPPKH)</i>, translated as a Borrow-Use forestry area permit, from the the Ministry of Environment and Forestry to access and use a forestry area for any purpose that is outside of forestry activities, including mineral exploration and mining activities. The PT Sorikmas Mining CoW contains caveats that allow the Company to conduct open-cut gold mining in protected forest.</p> <p>The Company holds a valid 485 ha <i>IPPKH (Operasi)</i> permit that contains the proposed Sihayo mine development area and, on the 4 September 2020, was granted a 13,800 ha <i>IPPKH (Eksplorasi)</i> permit that surrounds the operating permit. This allows the Company to conduct exploration activities including drilling on prospects located along the Sihayo Gold Belt in the North Block of the CoW, which includes Hutabargot Julu, Sihayo and near-by prospects. The 13,800 ha <i>IPPKH (Eksplorasi)</i> permit is valid for 2-years until 3 September 2022, and is in the process of being extended.</p>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Exploration commenced on the PT Sorikmas Mining CoW in 1995, originally under a domestic investment Kuasa Pertambangan (KP) title held by Antam with work managed by PT Aberfoyle Indonesia, a subsidiary of Aberfoyle Limited (Australia). Work continued under a pre-CoW permit (SIPP) from February 1997 to January 1998, and then under the joint venture company, PT Sorikmas Mining, when the CoW was signed in February 1998. Exploration carried out over this initial 3-year period included regional drainage geochemical sampling, prospecting, geological mapping, soil geochemical surveys and investigations on some of the historic Dutch mine workings in the district. Scout drilling was conducted by Aberfoyle on the Mandagang porphyry target in 1996 and produced some broad low-grade Cu-Mo-Au intercepts. The regional work highlighted numerous gold and multielement anomalies across

Criteria	JORC Code Explanation	Commentary
		<p>the CoW. Subsequent prospecting identified multiple targets, representing a broad spectrum of precious and base metal mineralisation styles, including:</p> <ul style="list-style-type: none"> • Carbonate-hosted jasperoid gold at Sihayo, Sambung, Link Zone, Sihayo-2, Sihayo-3, Sihayo-4, Mentari and Nabontar prospects (North CoW Block); • Epithermal gold-silver veins and disseminated mineralisation at Hutabargot Julu (Dutch working), Sihayo-5 (North CoW Block), and Tambang Hitam, Tarutung, Babisik, Nalan Jae, Nalan Julu, and Rotap prospects (South CoW Block); • Porphyry-style copper ± gold-molybdenum mineralisation at Rura Balancing, Singalancar, Sihayo-2 Copper (North CoW Block), and Mandagang, Tambang Tinggi, Namilas and Siandop prospects (South CoW Block); • Polymetallic skarn at Bandar Lasiak (North CoW Block), and Pagar Gunung, Huta Pungkut prospects and Tambang Ubi/Pagaran Siayu (Dutch mine) prospects. <p>Aberfoyle was taken over by Western Metals Ltd in late 1998. Western Metals farmed out part of their beneficial interest in the CoW to Pacmin Mining Corp in 1999. Pacmin funded and managed detailed prospect-scale work at Sihayo and on some neighbouring prospects during 1999 until early 2000. This work included grid-based soil geochemical surveys, ground IP-Resistivity surveys, detailed geological mapping, trenching on various prospects and the first scout drilling program on the Sihayo gold discovery.</p> <p>The CoW was placed into temporary suspension from November 2000 to February 2003 due to depressed gold prices, lack of funding and changes to the forestry regulations and status that restricted access to the CoW area.</p> <p>PacMin was taken over by Sons of Gwalia (SoG) (Australia) in late 2001. Oropa Limited entered into an agreement to purchase the 75% beneficial interest in the CoW held by SoG/Western Metals in late 2002. Oropa exercised its option to purchase the 75% beneficial interest in the CoW held by SoG/Western Metals in early 2004. Oropa changed its name to Sihayo Gold Limited in late 2009. Exploration resumed on the CoW in early 2003, fully funded by Oropa/Sihayo. This work included detailed prospect-scale exploration such as grid-based soil geochemical surveys, ground IP-Resistivity and magnetics surveys, detailed geological mapping, trenching and drilling campaigns in the North Block (Sihayo, Sihayo-2, Link Zone, Sambung & Hutabargot) and South Block (Tambang Tinggi, Tambang Ubi and Tambang Hitam) that steadily increased from 2003 to 2013. An airborne magnetic and radiometric survey was flown over the CoW in 2011.</p> <p>A total of 86,499 m of diamond drilling in 824 holes was drilled on the CoW up to 2013 including a total of 59,469 m in 547 holes on Sihayo-1, 12,475 m in 165 holes on Sambung, 1,571 m in 17 holes at Sihayo-2, 6,979.5 m in 57 holes at Hutabargot Julu, and 6,005 m in 38 holes in the Tambang Tinggi district.</p> <p>Another hiatus in exploration activity occurred from 2013 to early-2019 due to lack of funding.</p> <p>New investment was injected into Sihayo Gold Limited in 2018 and the Company recommenced ground work at Sihayo in 2019 with an infill drilling program in support of a new Mineral Resource estimate on Sihayo and Sambung</p>

Criteria	JORC Code Explanation	Commentary
		<p>gold deposits. A total of 7,338 m in 74 holes of infill drilling was completed at Sihayo in 2019 (<i>See</i> ASX:SIH Quarterly reports released in January 2020, April 2020, and ASX release by Sihayo (ASX:SIH) on 23 June 2020).</p> <p>Another significant capital raising was achieved in August 2020, the proceeds of which are being used to fund exploration at Hutabargot Julu and elsewhere, early project works on the Sihayo Starter Project and working capital (<i>See</i> ASX:SIH Quarterly reports released on 20 August 2020). A total of 4806-m/25 holes of reconnaissance drilling was completed over the greater Hutabargot project area in early 2020, 1740-m/8 holes completed on the Sihorbo North vein target and 2577-m/11 holes on the Penatapan stockwork target were completed in mid-late 2021 (<i>See</i> ASX releases by Sihayo ASX:SIH on 12 April 2021, 5 July 2021 and 17 November 2021). 30 diamond drill holes for 5,216 m was completed on the Sihorbo South vein-stockwork target in late 2021-early 2022; and, a Maiden Inferred Mineral Resource Estimate of 6.4 Mt at 0.5 g/t gold and 17 g/t silver (0.7 g/t gold-equivalent), containing 100,000 ounces of gold and 3,600,000 ounces of silver (150,000 gold-equivalent ounces) at a 0.3 g/t gold-equivalent cut-off was announced (<i>See</i> ASX release by Sihayo ASX:SIH on 7 September 2022).</p> <p>Historic resource estimates previously announced on the Sihayo-1 and Sambung gold deposits.</p> <p>Historic resource estimates: Sihayo gold deposit</p> <p>Runge Limited Indicated and Inferred resource of 15.2 Mt at 2.8 g/t Au (1,368,200 oz) at 1.2 g/t Au cut-off in oxide/transitional/fresh ore types. Released by Sihayo (ASX:SIH) on 12 June 2012.</p> <p>H & S Consultants P/L Measured, Indicated and Inferred resource of 15.3 Mt at 2.7 g/t Au (1,322,000 oz) at 1.2 g/t Au cut-off in oxide/transitional/fresh ore types. Released by Sihayo (ASX:SIH) on 17 June 2013.</p> <p>PT Sorikmas Mining Measured, Indicated and Inferred resource of 23.399 Mt at 2.11 g/t Au (1,585,000 oz) at 0.6 g/t Au cut-off in oxide/transitional/fresh ore types. Released by Sihayo (ASX:SIH) on 23 August 2018.</p> <p>Historic resource estimates: Sambung gold deposit</p> <p>H & S Consultants P/L Indicated and Inferred resource of 1.58 Mt at 2.0 g/t Au (102,025 oz) at 1.2 g/t Au cut-off in oxide/transitional/fresh ore types. Released by Sihayo (ASX:SIH) on 17 June 2013.</p> <p>Historic resource estimates: Sihayo-1 & Sambung gold deposits (combined)</p> <p>PT Sorikmas Mining A Sihayo-1/Sambung combined updated Measured, Indicated and Inferred resource of 24 Mt at 2 g/t Au for 1.5</p>

Criteria	JORC Code Explanation	Commentary
		<p>Moz contained-gold at 0.6 g/t Au cut-off, and an updated Ore Reserve of 12.5 Mt at 2.1 g/t for 840 koz of contained gold at 0.6 g/t Au cut-off in oxide/transition/fresh ore types. Released by Sihayo (ASX:SIH) on 23 June 2020.</p> <p>Illegal (artisanal) gold mining activity has been operating at the top of the Sambung gold deposit since 2012. This has been small-scale highly selective hand-tool mining from reworked regolith, fracture-oxidised jasperoid and oxidised cavity-fill sediments in limestone. Gold is won by amalgamation in tromol barrels that are operated in villages located outside the CoW area. The Company believes that mostly the top 5-meters or less of the Sambung orebody has been depleted by local mining and this is excluded from the Sambung resource reported herewith.</p>
Geology	Deposit type, geological setting and style of mineralisation	<p>Regional Setting</p> <p>The CoW is located at the western end of the 7,000 km long Sunda-Banda magmatic arc. Sumatra lies on the south-western margin of the Sundaland promontory at the edge of the Eurasian plate. The promontory basement is composed of accreted and fault-transposed continental plate and magmatic arc terranes that were derived from Gondwana during the Late Palaeozoic and Mesozoic.</p> <p>The CoW straddles a NW-SE trending collisional boundary separating two basement segments: namely the Late Palaeozoic West Sumatra terrane (eastern segment) and Mesozoic Woyla terrane (western segment). The West Sumatra segment is composed of intermediate-felsic volcano-sedimentary rocks and associated shallow marine carbonate rocks. The Woyla segment is an accretionary complex composed of deep to shallow marine sedimentary rocks and associated mafic volcanic rocks. The collisional contact between these two terranes, referred to as the Medial Sumatra Tectonic Line, is stitched by Mesozoic granitic intrusions. Extension on these basement rocks during the early Palaeogene produced local rift basins that were filled by fluvio-lacustrine, coal-bearing siliciclastic-volcano-sedimentary rocks. These rocks have been uplifted, structurally inverted and partly eroded by the development and formation of the Trans Sumatran Fault Zone (TSFZ), commencing in the Miocene. The evolution of the TSFZ was accompanied by Palaeogene magmatism (diorite/andesite – tonalite/dacite intrusions and volcanics) and associated hydrothermal activity and mineralisation within the CoW and surrounding region. Younger volcanic tephra erupted from nearby Quaternary volcanoes (eg Sorikmarapi, Toba) mantle the landscape in parts of the CoW.</p> <p>Sihayo Gold Belt</p> <p>The Sihayo Gold Belt straddles the Angkola fault segment and associated fault strands (western margin) of the Barumun-Angkola dextral transtensional jog in the NW-SE trending TSFZ and is immediately adjacent to a major dilatational pull-apart basin (Panyabungan Graben: approximately 100 km long, 12 km wide and 1 km deep) that is controlled by the TSFZ. The TSFZ and associated deep seated dilatational structures that control the pull-apart basin are interpreted to be major structural controls on the alignment and evolution of Tertiary magmatism and mineralisation within the CoW.</p> <p>The Sihayo Gold Belt is one of three parallel/near-parallel prospect-aligned mineral belts recognised across the CoW area. It is a +15 km long NW-SW trending corridor of Permian calcareous volcano-sedimentary rocks, Tertiary siliciclastic-volcaniclastic rocks and associated intrusions. These rocks are highly prospective for replacement-style carbonate-hosted gold, epithermal gold-silver veins, polymetallic skarn and porphyry-related gold and copper mineralisation. It is host to the Sihayo-Sambung gold resources and near-mine prospects of Sihayo-2,-3, -4, -5, Bandar Lasiak, Sihayo-Sambung Link Zone, Hutabargot Julu and Dolok.</p>

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		<p>Sihayo – Sambung gold deposits</p> <p>Sihayo and Sambung resources are located about 800m apart but are interpreted to occur at about the same stratigraphic position and on the same controlling regional fault structures.</p> <p>Primary gold mineralisation is hosted in stacked stratabound lenses of hydrothermally altered (‘jasperoid’ or sulphidic microcrystalline silicification and argillic/clay-sulphide alteration), microbrecciated silty-sandy (“dirty”) limestone and calcareous carbonaceous mudstone-siltstone, and in pods of similarly altered cavity-fill sediments within karstified fossiliferous limestone/marble. These rocks occur at the top of a Permian mixed carbonate-clastic volcano-sedimentary rock unit that has been openly folded and strongly faulted. The Permian rock unit is unconformably overlain by a package of Tertiary fluvio-lacustrine carbonaceous siliciclastic sedimentary “cap” rocks (sandstone, siltstone, mudstone, lignite, conglomerate, and agglomerate) that are sometimes mineralised at the basal unconformity with the underlying Permian rock unit. Diorite intrusions as dykes, sills and laccolith are locally spatially associated with mineralised jasperoid lenses.</p> <p>A steeply dipping discordant jasperoid body (feeder structure?) is apparent within the Sambung deposit. Similar large mineralised discordant jasperoid bodies (feeder structures) are predicted to occur below Sihayo.</p> <p>Sihayo and Sambung are stratabound carbonate-hosted gold deposits or more broadly categorised as Sedimentary Rock Hosted Disseminated Gold Deposit type (SRHGD). Northwest to northerly striking vertical faults controlled by TSFZ dextral movement and associated northeast to easterly striking cross-faults were probably conduits for mineralising hydrothermal fluids from depth. Where vertical structures have met favourable sub horizontal to moderately northeast-dipping lithological contacts, and likely the meteoric fluid interface, hydrothermal fluids have migrated laterally depositing gold mineralisation.</p> <p>Favourable lithological contacts for the development of gold-bearing jasperoid at Sihayo and Sambung are rheologically different stratigraphic units, most notably: i) on the unconformity/contact between Permian calcareous rocks and Tertiary carbonaceous argillaceous rocks, ii) between silty-sandy (“dirty”) limestone and fossiliferous limestone/marble or volcaniclastic rocks within the Permian stratigraphy; iii) within Permian calcareous rocks near diorite intrusion contacts.</p> <p>The subordinate regolith-hosted (eluvium/colluvium) mineralisation occurs on the present land surface and is associated with Quaternary residual weathering and erosion of the primary mineralisation.</p> <p>Sihayo gold department</p> <p>A gold department study on jasperoid sulphide mineralisation at Sihayo was previously done by researchers of CODES University of Tasmania (Hutchinson et al, 2011). This study was completed on six mineralised core samples taken from holes SHDD491 (54.3m), SHDD492 (207.1m), SHDD494 (208.2m), SHDD495 (139.3m), SHDD497 (140m) and SHDD506 (256.2m). Methodologies used were MLA (Mineral Liberation Analyzer) to search for free gold particles greater than 1 micron-size and La-ICP-MS (Laser ablation inductively coupled mass spectroscopy) to detect gold nano-particles and quantify concentrations of trace elements in the sulphide host minerals (Hutchinson et al, 2011).</p> <p>The conclusions of this study are summarised as follows:</p>

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> • Main sulphides present are pyrite, subordinate arsenian pyrite and rare arsenopyrite. • Common sulphide textures are mm-sized euhedral-suhedral pyrite cores surrounded by narrow arsenian pyrite rims and sub-rounded aggregates composed of small equigranular to acicular grains of pyrite, arsenian pyrite, and rare arsenopyrite. • Most gold (>90% estimated) is “invisible” and concentrated in arsenian pyrite rims and domains within pyrite grains and aggregates but it has not been determined whether it occurs in the host mineral structure or as discrete nano-particles. • Free gold (and silver) grains are rare, show a range in size up to a maximum of 40 microns containing >70 wt % Au and <30 wt % Ag (electrum), and often occurring as small 3-5 µm grains within patches of organic carbon between hydrothermal quartz and feldspar. • The texture and composition of the Sihayo arsenian pyrite are considered to be very similar to the fine grained ore stage pyrite from the Carlin deposits on the north Carlin Trend Nevada. In particular the Au-As characteristics of the pyrite and the elevated levels of Sb, Tl, Ag and Cu. <div data-bbox="990 576 2132 1082"> <p>The figure consists of three main components: a large grayscale photograph of a mineralised sulphidic jasperoid breccia sample (SHDD506) on the left; a central Laser Ablation ICP-MS image of a 0.01 mm sulphide grain; and two vertical color scale legends on the right. The top legend is labeled 'Au197_ppm' and has a logarithmic scale from 1e-001 to 100. The bottom legend is labeled 'As75_ppm' and has a logarithmic scale from 1000 to 1e+006. The central image shows a core of low Au-Ag As-poor pyrite (blue-green) surrounded by a high Au-Ag arsenian pyrite/arsenopyrite rim (yellow-red).</p> </div> <p>Figure: SHDD506 (256.2m) Mineralised sulphidic jasperoid breccia (10 cm long) Shows Laser Ablation ICP-MS image of a 0.01 mm sulphide grain with high Au-Ag arsenian pyrite/arsenopyrite rim (yellow-red) around low Au-Ag As-poor pyrite core (blue-green).</p> <p>Reference: Hutchinson., D, Large, R., Gilbert, S., and Goemann, K. (2011). Sihayo Gold Study: Application of MLA and LA-ICPMS to Characterise the Gold Mineralogy. Report for Sihayo Gold Ltd, 164p.</p>

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		<table border="1" data-bbox="925 161 2134 403"> <thead> <tr> <th>Hole</th> <th>Depth</th> <th>Au g/t</th> <th>Ag g/t</th> <th>As ppm</th> <th>Sb ppm</th> <th>Weathering State</th> <th>Lithology</th> </tr> </thead> <tbody> <tr> <td>SHDD491</td> <td>54.3m</td> <td>0.88</td> <td>8</td> <td>230</td> <td>63</td> <td>POX</td> <td>Jasperoid</td> </tr> <tr> <td>SHDD492</td> <td>207.1m</td> <td>6.23</td> <td>9</td> <td>2410</td> <td>42</td> <td>POX</td> <td>Jasperoid</td> </tr> <tr> <td>SHDD494</td> <td>208.15m</td> <td>5.46</td> <td>3</td> <td>534</td> <td>128</td> <td>POX</td> <td>Jasperoid</td> </tr> <tr> <td>SHDD495</td> <td>139.3m</td> <td>11.2</td> <td>10</td> <td>2930</td> <td>65</td> <td>POX</td> <td>Jasperoid</td> </tr> <tr> <td>SHDD497</td> <td>140m</td> <td>9.61</td> <td>7</td> <td>6500</td> <td>528</td> <td>POX</td> <td>Jasperoid</td> </tr> <tr> <td>SHDD506</td> <td>256.2m</td> <td>11.6</td> <td>4</td> <td>5200</td> <td>93</td> <td>FR</td> <td>Jasperoid</td> </tr> </tbody> </table> <p data-bbox="925 411 1816 437">List of samples studied at CODES showing corresponding assays within 1-m interval</p>	Hole	Depth	Au g/t	Ag g/t	As ppm	Sb ppm	Weathering State	Lithology	SHDD491	54.3m	0.88	8	230	63	POX	Jasperoid	SHDD492	207.1m	6.23	9	2410	42	POX	Jasperoid	SHDD494	208.15m	5.46	3	534	128	POX	Jasperoid	SHDD495	139.3m	11.2	10	2930	65	POX	Jasperoid	SHDD497	140m	9.61	7	6500	528	POX	Jasperoid	SHDD506	256.2m	11.6	4	5200	93	FR	Jasperoid
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Drill hole Information	<p data-bbox="353 576 875 683">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:</p> <ul data-bbox="353 699 864 930" style="list-style-type: none"> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. <p data-bbox="353 946 887 1086">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.</p>	<ul data-bbox="925 576 2123 743" style="list-style-type: none"> • Tables 1, 3 and 4 provide details of drill hole collar coordinates, hole dip & azimuth, final depths and intercepts for holes completed to-date in drilling program. • These holes are of an exploration nature and no material drill hole information has been excluded from this report. • Tables 2 and 5 provide details on samples selected for metallurgical testwork including the drill holes and original samples used to create the composite samples in this testwork. 																																																								
Data aggregation methods	<p data-bbox="353 1106 875 1241">In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <p data-bbox="353 1257 887 1393">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</p>	<ul data-bbox="925 1106 2092 1217" style="list-style-type: none"> • Length-weighted average gold intercepts are reported at a 0.3 g/t gold cut-off with up to 4-m of consecutive internal dilution allowed. • No high-cuts were applied. • No metal-equivalent values are used in the reporting of the gold intercepts. 																																																								

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	<p>in detail.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</p>	<ul style="list-style-type: none"> The results reported in this announcement provide preliminary data on the potential extensions to high-grade gold mineralisation beneath the Sihayo-1 starter pit. There is sufficient data to estimate true-thickness of the mineralised intercepts, however, additional drilling is required to define the actual geometry of the mineralised karst cave-fill zones, which are inherently complex. The results of this initial drilling program will be used to plan follow-up drill testing. Structural data acquired from oriented core in the drilling program generally support the broad structural trends interpreted from extensive previous drilling on Sihayo-1. There is no significant sample bias believed to influence or exaggerate the results reported in this announcement, there is insufficient data to support or infer the true-width of the mineralised down-hole intercepts. Data and interpretations derived from this latest drilling program will significantly refine the the geologic model for future drill hole targeting.
Diagrams	<p>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.</p>	<ul style="list-style-type: none"> A drill hole location plan showing the hole locations, an isometric view of the drill hole traces below the Sihayo-1 starter pit, are contained in this announcement.
Balanced reporting	<p>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.</p>	<ul style="list-style-type: none"> This announcement is believed to contain sufficient relevant information such as range of exploration results, geologic context, historic results, type and sampling methodology, maps/figures and spatial distribution of data points to represent balanced reporting.
Other substantive historic exploration data	<p>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 substances.</p>	<ul style="list-style-type: none"> For details on the 2019 Sihayo-1 Resource Infill Drilling Program Refer to ASX:SIH Announcement – Results of Feasibility Study – 23 June 2020 For details on the 2022 Sihayo-1 Project Development Update Refer to ASX:SIH Announcement –Project Update and Launch of Strategic Review Process – 17 February 2022 For details on the 2022 Metallurgical Update on Sihayo-1 Refer to ASX:SIH Announcement – High pH Pre-Leaching Test Work Demonstrates Potential for Significant Uplift in Recoveries – 5 July 2022.