
13 January 2025

New Oxide Discovery at Pigibo North Update on Exploration / Sterilisation Drilling

Highlights

- A new oxide discovery has been made between Pigibo North and Southwest Sorowar pits with favourable intercepts from surface trenching and from near surface results from two of the sterilisation focused diamond drill holes at Pigibo North.
 - Significant trench intercepts at the new oxide discovery between Pigibo North and Southwest Sorowar include:
 - **SIMTR1054: 30 m @ 1.3 g/t Au,**
 - **SIMTR1055: 40 m @ 2.0 g/t Au,**
 - **SIMTR1056: 20 m @ 0.9 g/t Au, and**
 - **SIMTR1059: 25 m @ 2.1 g/t Au.**
 - Significant near-surface diamond drill intercepts from the sulphides sterilisation drilling at Pigibo North and southwest Sorowar that forms part of the same new discovery include:
 - **SDH585: 28 m @ 1.0 g/t Au from 0 m, and**
 - **SDH595: 24 m @ 1.4 g/t Au from 0 m.**
 - Further excavator trenching and limited shallow diamond drilling has been completed with assay results due in Q3 FY25. This new oxide discovery is being fast-tracked with grade control drilling commencing in January 2025 to test a total area of approximately 250 metres long x 80 metres wide.
 - The FY25 exploration and sterilisation campaign continues to progress ahead of schedule with assay results already received for five of the exploration / sterilisation drill holes at Pigibo North and six of the resource definition drill holes at Sorowar – Pigiput Trend.
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St Barbara Limited (“**St Barbara**” or the “**Company**”) (ASX: SBM) is pleased to announce that the Pigibo North sterilisation drilling campaign has resulted in a new oxide discovery between Pigibo North and southwest Sorowar. Observation of interesting geology during access track construction led to follow up trenches being completed to test for mineralisation at surface.

St Barbara Managing Director and CEO Andrew Strelein said:

“The identification of this new oxide mineralisation between Pigibo North and Sorowar is a real boost for the current Simberi oxide operations. These significant results from trenching and the near surface drilling results are now being followed up with grade control drilling with the objective of commencing mining in Q3.”

The trench intercepts at this new oxide discovery between Pigibo North and southwest Sorowar included **SIMTR1054: 30 m @ 1.3 g/t Au, SIMTR1055: 40 m @ 2.0 g/t Au, SIMTR1056: 20 m @ 0.9 g/t Au, and SIMTR1059: 25 m @ 2.1 g/t Au**. Encouraging intercepts from surface in sterilisation drilling at the new oxide discovery between Pigibo North and Southwest Sorowar included **SDH585: 28 m @ 1.0 g/t Au from 0 m, and SDH595: 24 m @ 1.4 g/t Au from 0 m**.

The Company is also pleased to announce the completion of an additional 20 diamond drill holes during Q2 FY25 from the proposed 62 hole FY25 sulphide drilling program for 3,391.7 m. Assay results have now also been returned for an additional eleven holes (including from five of the Pigibo North sterilisation drill holes).

These include the latest new results reported from the Sorowar – Pigiput Trend since October 2024 (refer to the ASX release on 17 October 2024 titled “*Significant Intercept of 31 m at 6.1 g/t Au at Sorowar – Pigiput Trend*”). This series of results forms the second set to be reported from the FY25 resource definition, exploration and sterilisation drill program comprising 62 holes for 9,000 m that commenced on 1 July 2024. The program includes approximately 4,750 m of resource definition drilling at the Sorowar-Pigiput Trend and at Samat deposit with a further approximately 4,250 m of exploration and sterilisation drilling testing six additional target areas. To date 44 diamond drill holes have been completed for 7,777 m. Drilling is progressing ahead of schedule with approximately 70% of the overall program completed.

Explanatory Notes

Figure 1 below shows the location of the respective open pits on the mining lease (ML 136).

Figure 2 shows the location of the proposed FY25 sulphide diamond drilling program on ML136. The eight target areas include individual drill hole collar locations and drill traces. The two resource definition drilling areas include the Sorowar-Pigiput Trend and Samat deposit and are highlighted by dark red polygons. The six exploration and / or sterilisation drilling areas are highlighted by light red polygons. These targets include Pigibo North, Monun East, Southeast Pigibo, between Pigibo and Botlu, between Botlu and Pigicow, and North Samat. It should be noted that some individual drill hole locations yet to be drilled within the target areas will vary slightly as a function of clearing access in steep terrain. 44 diamond drill holes for 7,777 m were completed on ML136 between July and December 2024. Drilling has been completed at Sorowar-Pigiput Trend, Pigibo North and Pigicow-Botlu areas.

Figure 3 shows the locations of the FY25 planned and completed sterilisation and exploration diamond drill holes at Pigibo North and Southwest Sorowar. The aim of the program is to identify a suitable area for waste rock dump storage. Twelve sterilisation drill holes SDH572, SDH577, SDH579, SDH583, SDH585, SDH588, SDH593, SDH595, SDH597, SDH608, SDH615 and SDH617 have been completed for 2,475 m. Assay results have been returned for five additional sterilisation drill holes, with three previously reported on 17 October 2024.

As noted above, significant near-surface intercepts from Pigibo North and Southwest Sorowar shown in figure 3 include:

- **SDH585: 28 m @ 1.0 g/t Au from 0 m, and**
- **SDH595: 24 m @ 1.4 g/t Au from 0 m.**

The mineralisation intersected in SDH585 is located 200 m northwest of Pigibo North pit boundary and 200 m Southwest of Sorowar pit boundary. The mineralisation intersected in SDH595 is located approximately 55 m west of current Resource and Reserve limits. This area has not been tested by resource drilling previously due to the challenging topography having made access difficult.

Seven excavator trenches (SIMTR1054 to SIMTR1060) were completed for 435 m between Pigibo North and Sorowar in October and November as noted above with results shown in the figure including:

- **SIMTR1054: 30 m @ 1.3 g/t Au,**
- **SIMTR1055: 40 m @ 2.0 g/t Au,**
- **SIMTR1056: 20 m @ 0.9 g/t Au, and**
- **SIMTR1059: 25 m @ 2.1 g/t Au.**

Trenches SIMTR1055 and SIMTR1059 are located in between and outside the Pigibo North and Sorowar pit boundaries. The trenches are approximately 45 m north of Pigibo North and 90 m south of the Sorowar pit boundary. Trenches SIMTR1054 and SIMTR1056 are located between 25 m and 75 m within the southwestern Sorowar pit boundary. Two additional trenches (SIMTR1061 and SIMTR1062) for 145 m were completed adjacent to diamond hole SDH585. Assay results are expected in Q3 FY25.

The trench results have been further tested by two additional diamond drill holes SDH606 and SDH607. Assay results are expected during Q3 FY25.

The next stage in the evaluation process will be follow-up grade control drilling to understand the areal extent of potential shallow oxide mineralisation.

Figure 4 shows the locations of the FY25 planned and completed resource definition and exploration diamond drill holes on the Sorowar-Pigiput Trend. All 24 resource definition drill holes planned at Sorowar-Pigiput Trend have been completed for 4,008.1 m. Resource definition and exploration diamond drill holes SDH570-571, SDH573-576, SDH578, SDH580-582, SDH584, SDH586-587, SDH589-592, SDH594, SDH596 and SDH598-602 have further tested the interpreted northwest trending zone of mineralisation located between the existing Sorowar and Pigiput ore bodies.

Assay results for the remaining eight Sorowar-Pigiput Trend resource definition drill holes completed to date are expected to be returned during Q3 FY25.

Figure 1. Simberi Island Site Layout within Mining Lease.

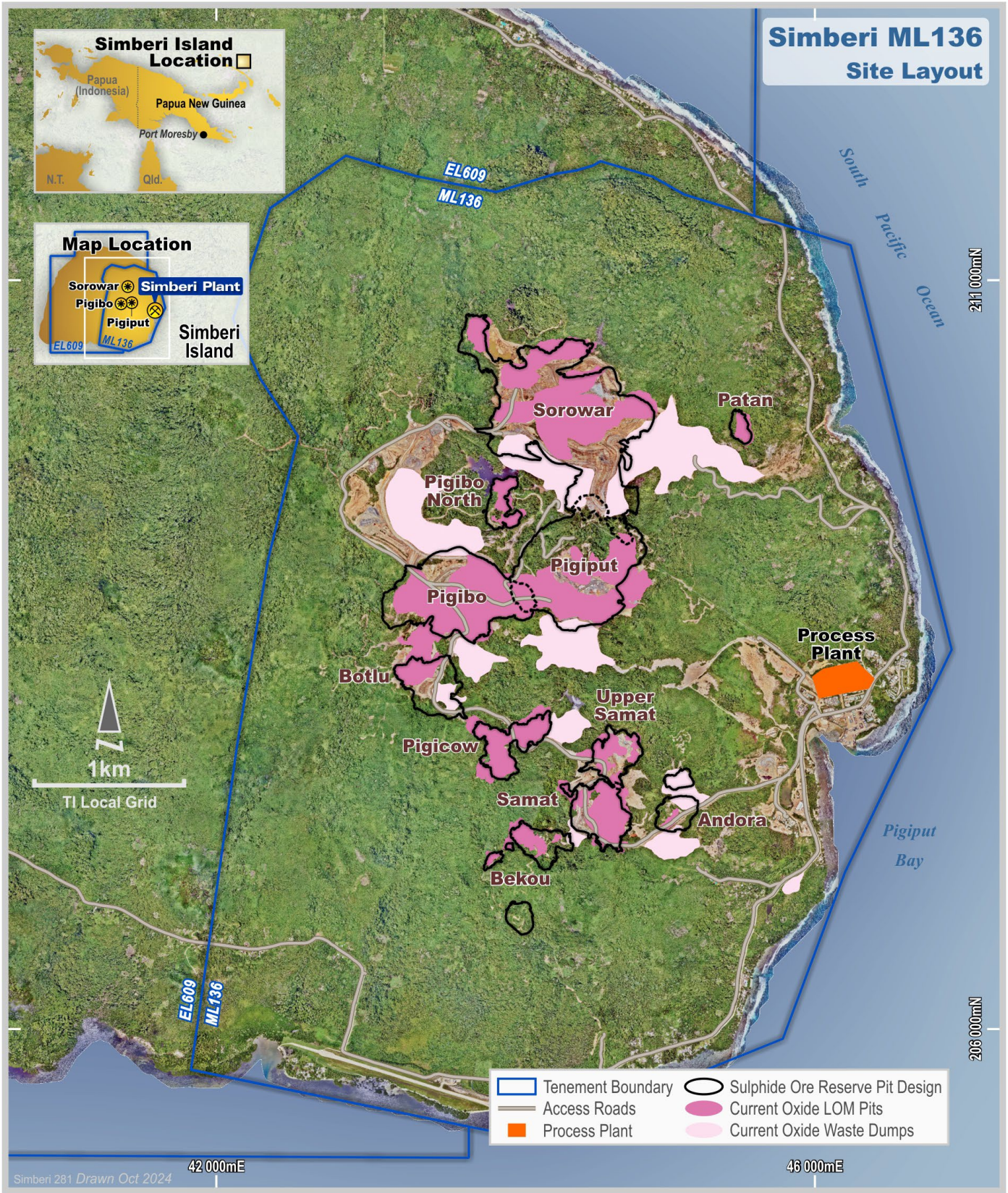


Figure 2. FY25 Completed and Planned Diamond Drilling, Simberi Island, Papua New Guinea.

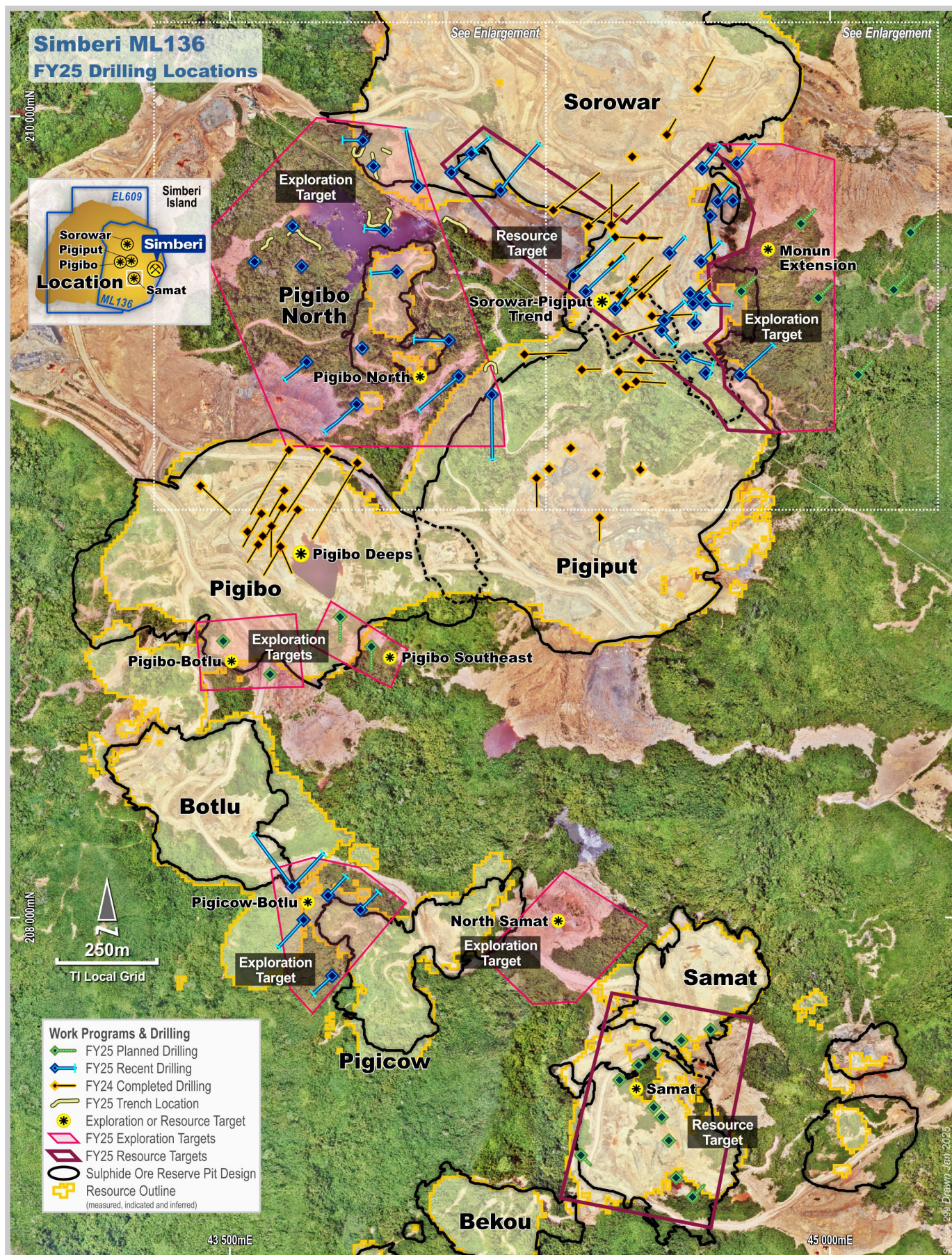
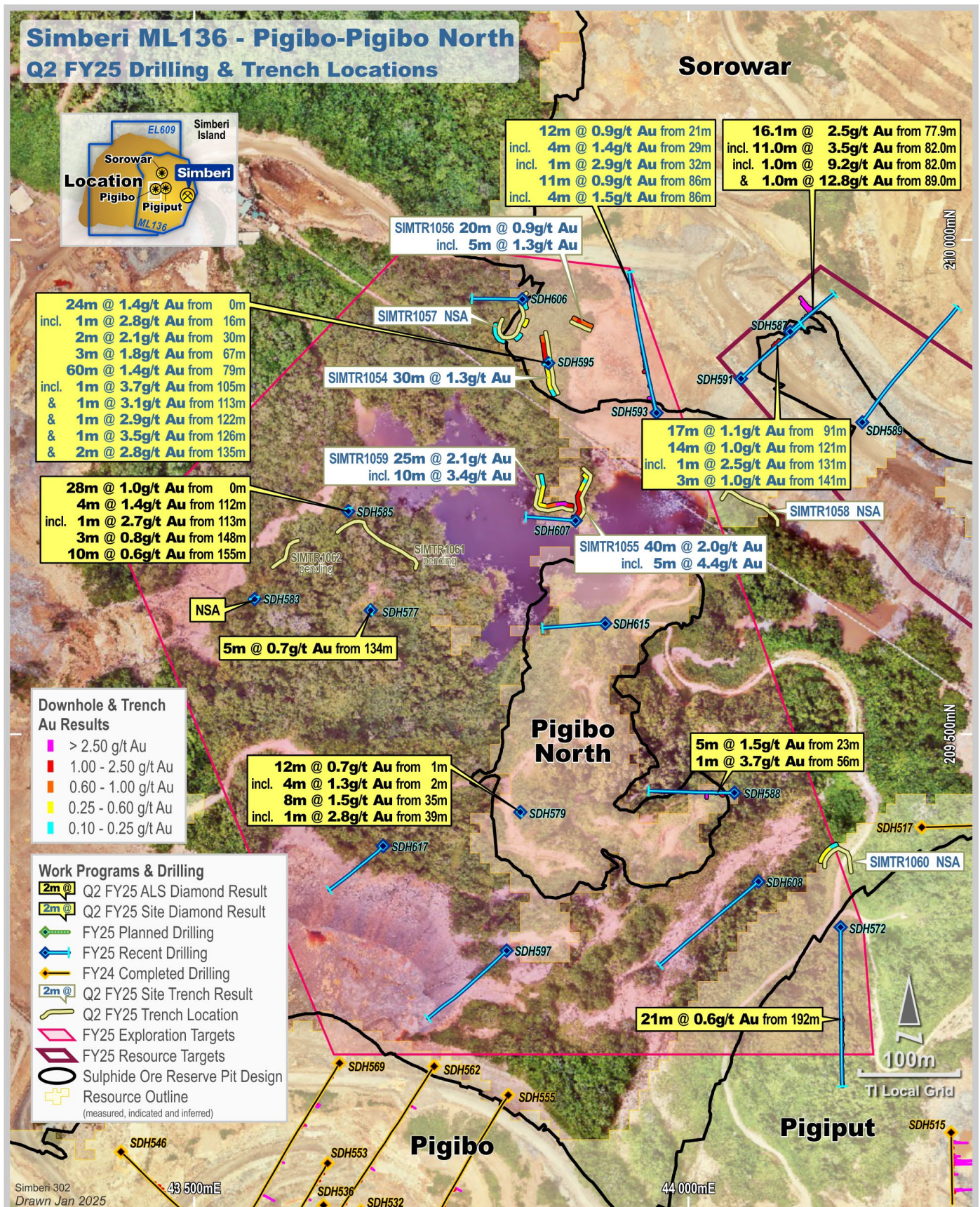


Figure 3. FY24 and FY25 Diamond Drilling at Pigibo North, Simberi Island.



Simberi ML136 - Sorowar-Pigiput Trend
Q2 FY25 Drilling Locations

Sorowar

Pigiput

Transform Fault

SDH519

SDH528

SDH527

SDH544

SDH540

SDH538

SDH537

SDH534

SDH529

SDH541

SDH573

SDH571

SDH531

SDH570

SDH542

SDH523

SDH599

SDH526

SDH600

SDH508

SDH507

SDH524

SDH530

SDH517

SDH521

SDH513

SDH512

SDH511

SDH522

SDH598

SDH581

SDH582

SDH574

SDH584

SDH586

SDH576

SDH533

SDH580

SDH575

SDH578

SDH602

SDH590

SDH592

SDH594

SDH596

NSA

OPEN

10m @ 1.9g/t Au from 51m
 incl. **2m @ 6.4g/t Au from 54m**
8m @ 0.8g/t Au from 188m
15m @ 0.7g/t Au from 209m
3m @ 1.6g/t Au from 234m
 incl. **1m @ 3.6g/t Au from 236m**
10m @ 1.6g/t Au from 245m
 incl. **1m @ 2.7g/t Au from 251m**

16m @ 0.6g/t Au from 33m
 incl. **2m @ 1.3g/t Au from 40m**
3m @ 1.2g/t Au from 58m
 incl. **1m @ 2.7g/t Au from 58m**
4m @ 1.5g/t Au from 85m
 incl. **1.7m @ 2.2g/t Au from 87.3m**
13m @ 1.1g/t Au from 247m

20m @ 2.2g/t Au from 21m
 incl. **8m @ 4.1g/t Au from 25m**
 incl. **2m @ 5.7g/t Au from 26m**
19m @ 3.2g/t Au from 50m
 incl. **1m @ 6.5g/t Au from 53m**
 & **1m @ 6.8g/t Au from 58m**
10m @ 0.8g/t Au from 88m

12m @ 1.5g/t Au from 34m
 incl. **1m @ 2.8g/t Au from 37m**
 & **1m @ 3.8g/t Au from 40m**

7m @ 1.7g/t Au from 64m
 incl. **2m @ 3.1g/t Au from 68m**
 & **31m @ 1.8g/t Au from 96m**
 incl. **9m @ 4.0g/t Au from 110m**
 incl. **1m @ 9.0g/t Au from 111m**
 & **1m @ 16.6g/t Au from 118m**

31m @ 6.1g/t Au from 35m
 incl. **8m @ 20.1g/t Au from 53m**
 incl. **4m @ 37.8g/t Au from 54m**
1m @ 2.8g/t Au from 83m

26m @ 2.0g/t Au from 17m
 incl. **2m @ 3.1g/t Au from 17m**
 & **3m @ 8.6g/t Au from 35m**
 incl. **1m @ 21.3g/t Au from 35m**

46m @ 1.6g/t Au from 4m
 incl. **3m @ 2.6g/t Au from 9m**
 & **10m @ 2.7g/t Au from 22m**
 incl. **1m @ 5.1g/t Au from 30m**

29m @ 1.1g/t Au from 31m
 incl. **2m @ 1.6g/t Au from 43m**
 & **8m @ 1.8g/t Au from 51m**
20m @ 0.7g/t Au from 67m

14m @ 1.0g/t Au from 16m
 incl. **1m @ 2.8g/t Au from 21m**
18m @ 1.5g/t Au from 71m
 incl. **1m @ 3.1g/t Au from 79m**
 & **1m @ 2.7g/t Au from 84m**
15m @ 1.5g/t Au from 135m
 incl. **2m @ 3.4g/t Au from 136m**
14m @ 0.7g/t Au from 164m
 incl. **3m @ 1.3g/t Au from 175m**
5m @ 0.7g/t Au from 191m

9m @ 0.7g/t Au from 71m
14m @ 1.0g/t Au from 93m
 incl. **1m @ 4.4g/t Au from 101m**
11m @ 1.1g/t Au from 118m
 incl. **4m @ 1.5g/t Au from 121m**
10m @ 1.2g/t Au from 141m

Downhole Au Results

- > 2.50 g/t Au
- 1.00 - 2.50 g/t Au
- 0.60 - 1.00 g/t Au
- 0.25 - 0.60 g/t Au
- 0.10 - 0.25 g/t Au

Work Programs & Drilling

- Q2 FY25 ALS Diamond Result
- Q2 FY25 Site Diamond Result
- Previous FY25 ALS Result
- FY25 Planned Drilling
- FY25 Recent Drilling
- FY24 Completed Drilling
- FY25 Exploration Targets
- FY25 Resource Targets
- Interpreted Gold Trend
- Sulphide Ore Reserve Pit Design
- Resource Outline

Simberi 301
Drawn Jan 2025

44 500mE

45 000mE

209 000mN

209 500mN

100m

TI Local Grid

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Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Dr Roger Mustard, who is a Member of The Australasian Institute of Mining and Metallurgy. Dr Mustard is a full-time employee of St Barbara and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Mustard consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Table 1: Simberi Diamond Drilling Significant Intercepts – Simberi Island, Papua New Guinea.

Hole Id	North	East	RL	Dip/ Azimuth	Total Depth	Lode	Down-hole Mineralised Intersection			
	m	m	m	degrees	m		From	To	Interval	Gold grade
	m	m	m	degrees	m		m	m	m	g/t Au
SDH570^	209,520	44,463	149.0	-75 / 036	266.2	TR	16.0	30.0	14.0	1.0
<i>including</i>						TR	21.0	22.0	1.0	2.8
						SU	71.0	89.0	18.0	1.5
<i>including</i>						SU	79.0	80.0	1.0	3.1
<i>and</i>						SU	84.0	85.0	1.0	2.7
						SU	135.0	150.0	15.0	1.5
<i>including</i>						SU	136.0	138.0	2.0	3.4
						SU	164.0	178.0	14.0	0.7
<i>including</i>						SU	175.0	178.0	3.0	1.3
						SU	191.0	196.0	5.0	0.7
SDH571^	209,563	44,389	158.0	-62 / 046	284.6	OX,TR,SU	33.0	49.0	16.0	0.6
<i>including</i>						TR	40.0	42.0	2.0	1.3
						SU	58.0	61.0	3.0	1.2
<i>including</i>						SU	58.0	59.0	1.0	2.7
						SU	85.0	89.0	4.0	1.5
<i>including</i>						SU	87.3	89.0	1.7	2.2
						SU	247.0	260.0	13.0	1.1
SDH572	209,305	44,154	164.3	-61 / 180	331.0	SU	192.0	213.0	21.0	0.6
SDH573	209,603	44,358	164.9	-63 / 047	279.9	OX,TR,SU	51.0	61.0	10.0	1.9
<i>including</i>						OX,TR,SU	54.0	56.0	2.0	6.4
						SU	188.0	196.0	8.0	0.8
						SU	209.0	224.0	15.0	0.7
						SU	234.0	237.0	3.0	1.6
<i>including</i>						SU	236.0	237.0	1.0	3.6
						SU	245.0	255.0	10.0	1.6
<i>including</i>						SU	251.0	252.0	1.0	2.7
SDH574	209,751	44,700	75.7	-90 / 360	153.9	SU	34.0	46.0	12.0	1.5
<i>including</i>						SU	37.0	38.0	1.0	2.8
<i>and</i>						SU	40.0	41.0	1.0	3.8
SDH575	209,533	44,657	75.9	-90 / 162	115.9	SU	31.0	60.0	29.0	1.1
<i>including</i>						SU	43.0	45.0	2.0	1.6
<i>and</i>						SU	51.0	59.0	8.0	1.8
						SU	67.0	87.0	20.0	0.7
SDH576^	209,557	44,650	76.2	-89 / 158	97.0	SU	35.0	66.0	31.0	6.1
<i>including</i>						SU	53.0	61.0	8.0	20.1
<i>including</i>						SU	54.0	58.0	4.0	37.8
						SU	83.0	84.0	1.0	2.8
SDH577	209,625	43,679	208.4	-90 / 210	153.0	SU	134.0	139.0	5.0	0.7
SDH578	209,532	44,690	75.8	-63 / 095	143.4	OX,TR,SU	4.0	50.0	46.0	1.6
<i>including</i>						SU	9.0	12.0	3.0	2.6
<i>and</i>						SU	22.0	32.0	10.0	2.7
<i>including</i>						SU	30.0	31.0	1.0	5.1

NOTES:

^: Final results reported in ASX Release dated 17 October 2024.

*: Site lab preliminary results

OX: oxide, SU: sulphide, TR: transitional material

Table 1 Cont: Simberi Diamond Drilling Significant Intercepts – Simberi Island, Papua New Guinea.

Hole Id	North	East	RL	Dip/ Azimuth	Total Depth	Lode	Down-hole Mineralised Intersection			
	m	m	m	degrees	m		From	To	Interval	Gold grade
	m	m	m	degrees	m		m	m	m	g/t Au
SDH579	209,421	43,830	184.9	-90 / 222	202.2	OX,TR	1.0	13.0	12.0	0.7
<i>including</i>						OX	2.0	6.0	4.0	1.3
						TR,SU	35.0	43.0	8.0	1.5
<i>including</i>						TR,SU	39.0	40.0	1.0	2.8
SDH580	209,547	44,675	75.9	-70 / 055	80.7	TR,SU	17.0	43.0	26.0	2.0
<i>including</i>						TR,SU	17.0	19.0	2.0	3.1
<i>and</i>						SU	35.0	38.0	3.0	8.6
<i>including</i>						SU	35.0	36.0	1.0	21.3
SDH581	209,638	44,677	75.6	-60 / 046	141.7	SU	64.0	71.0	7.0	1.7
<i>including</i>						SU	68.0	70.0	2.0	3.1
						SU	96.0	127.0	31.0	1.8
<i>including</i>						SU	110.0	119.0	9.0	4.0
<i>including</i>						SU	111.0	112.0	1.0	9.0
<i>and</i>						SU	118.0	119.0	1.0	16.6
SDH582	209,788	44,719	75.8	-60 / 039	104.7	OX,TR	21.0	41.0	20.0	2.2
<i>including</i>						TR	25.0	33.0	8.0	4.1
<i>including</i>						TR	26.0	28.0	2.0	5.7
						SU	50.0	69.0	19.0	3.2
<i>including</i>						SU	53.0	54.0	1.0	6.5
<i>and</i>						SU	58.0	59.0	1.0	6.8
						SU	88.0	98.0	10.0	0.8
SDH583	209,637	43,561	175.0	-89 / 311	109.0		No Significant Results			
SDH584	209,883	44,766	74.8	-61 / 042	138.4		No Significant Results			
SDH585	209,725	43,656	172.5	-89 / 314	203.7	OX,TR,SU	0.0	28.0	28.0	1.0
						SU	112.0	116.0	4.0	1.4
<i>including</i>						SU	113.0	114.0	1.0	2.7
						SU	148.0	151.0	3.0	0.8
						SU	155.0	165.0	10.0	0.6
SDH586	209,789	44,757	75.7	-89 / 189	151.3		No Significant Results			
SDH587	209,907	44,103	213.7	-70 / 048	176.2	TR,SU	77.9	94.0	16.1	2.5
<i>including</i>						SU	82.0	93.0	11.0	3.5
<i>including</i>						SU	82.0	83.0	1.0	9.2
<i>and</i>						SU	89.0	90.0	1.0	12.8
SDH588	209,441	44,047	159.5	-60 / 270	177.4	TR	23.0	28.0	5.0	1.5
						SU	56.0	57.0	1.0	3.7
SDH591*	209,860	44,053	212.2	-60 / 047	177.4	SU	91.0	108.0	17.0	1.1
						SU	121.0	135.0	14.0	1.0
<i>including</i>						SU	131.0	132.0	1.0	2.5
						SU	141.0	144.0	3.0	1.0

NOTES:

^: Final results reported in ASX Release dated 17 October 2024.

*: Site lab preliminary results

OX: oxide, SU: sulphide, TR: transitional material

Table 1 Cont: Simberi Diamond Drilling Significant Intercepts – Simberi Island, Papua New Guinea.

Hole Id	North	East	RL	Dip/ Azimuth	Total Depth	Lode	Down-hole Mineralised Intersection			
	m	m	m	degrees	m		From	To	Interval	Gold grade
	m	m	m	degrees	m		m	m	m	g/t Au
SDH593*	209,825	43,968	182.3	-60 / 347	177.4	OX,TR	21.0	33.0	12.0	0.9
<i>including</i>						TR	29.0	33.0	4.0	1.4
<i>including</i>						TR	32.0	33.0	1.0	2.9
						SU	86.0	97.0	11.0	0.9
<i>including</i>						SU	86.0	90.0	4.0	1.5
SDH595*	209,875	43,858	197.7	-90 / 333	177.4	OX,TR,SU	0.0	24.0	24.0	1.4
<i>including</i>						TR	16.0	17.0	1.0	2.8
						TR	30.0	32.0	2.0	2.1
						TR,SU	67.0	70.0	3.0	1.8
						SU	79.0	139.0	60.0	1.4
<i>including</i>						SU	105.0	106.0	1.0	3.7
<i>and</i>						SU	113.0	114.0	1.0	3.1
<i>and</i>						SU	122.0	123.0	1.0	2.9
<i>and</i>						SU	126.0	127.0	1.0	3.5
<i>and</i>						SU	135.0	137.0	2.0	2.8
SDH596	209,355	44,775	148.2	-61 / 048	234.8		No Significant Results			
SDH599*	209,491	44,585	131.8	-70 / 045	200.3	SU	71.0	80.0	9.0	0.7
						SU	93.0	107.0	14.0	1.0
<i>including</i>						SU	101.0	102.0	1.0	4.4
						SU	118.0	129.0	11.0	1.1
<i>including</i>						SU	121.0	125.0	4.0	1.5
						SU	141.0	151.0	10.0	1.2

NOTES:

^: Final results reported in ASX Release dated 17 October 2024.

*: Site lab preliminary results

OX: oxide, SU: sulphide, TR: transitional material

JORC Table 1 Checklist of Assessment and Reporting Criteria
Drilling: Section 1 Sampling Techniques and Data – Simberi ML136

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> Diamond Drilling comprised PQ3 (83 mm) and HQ3 (61.1 mm) sized core collected using standard triple tubes. Half core was sampled on nominal 1 metre intervals with the lower or left half (looking downhole) of the core submitted for sample preparation and analysis. Competent core is half cored using an Almonte automated coresaw whereas broken or highly weathered core is manually half cored with a masonry chisel. Half core samples were fully prepared at the company's on-site sample preparation facility on Simberi Island with 150 g to 200 g pulps sent to ALS Laboratory in Townsville for further analysis. Pulp residues are stored in Townsville for six months following assay before disposal.
Drilling techniques	<ul style="list-style-type: none"> Diamond drilling comprised PQ3 (83 mm) and HQ3 (61.1 mm) core recovered using a 1.5 m barrel. Drilling was completed by Quest Exploration Drilling (QED). When ground conditions permit, an ACT Digital Core Orientation Instrument was used by the contractor to orientate the HQ3 core.
Drill sample recovery	<ul style="list-style-type: none"> Diamond drilling recovery percentages were measured by comparing actual metres recovered per drill run versus metres recorded on the core blocks. Recoveries averaged >98 % with increased core loss present in fault zones and zones of strong weathering/alteration.
Logging	<ul style="list-style-type: none"> Diamond holes are qualitatively geologically logged for lithology, structure and alteration and qualitatively and quantitatively logged for veining and sulphide mineralogy. Diamond holes are geotechnically logged with the following attributes qualitatively recorded - strength, infill material, weathering, and shape. Whole core and half core photography is completed on wet core. All holes are logged in their entirety and data recorded in templated excel workbook prior to being uploaded to the company's secure SQL database.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> All diamond drill core was half cored with the lower or left half (looking downhole) submitted for sample preparation and analysis. All drill samples are prepared at the company's on-site sample preparation facility. After oven drying for a minimum 8 hours, sample material undergoes initial crushing in a Terminator Jaw Crusher to achieve particle size <2 mm. For samples weighing in excess of 1 kg, a 0.8 kg to 1.2 kg sample split is taken using a riffle splitter. Crushed samples of ~ 1 kg standardised weight are then completely pulverised in an Essa LM2 Pulveriser (90% passing 75 microns). Approximately 200 g of pulverised material is retained for assaying using a metal scoop to transfer material into analytical envelopes (pulp packets) before being sent to the ALS lab in Townsville. For internal reference, a second pulverised sub- sample (~100 grams) is analysed at the site lab using same QAQC reference materials as those sent to ALS lab. Quality control of sample material prepared on site consists of insertion of two (non-certified) blank control samples at the start of each hole, and between each sample, any pulverised residue in the LM2 is discarded and the bowl vacuumed and wiped clean. 150 g to 200 g pulp samples are then sent to ALS Laboratory in Townsville for assay via air freight. Pulp residues are stored in Townsville for six months following assay for re-assay if required.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> Preliminary assays are received from pulps analysed for Au at the Simberi Lab using Aqua Regia digestion with a 15 g charge and analysis by Atomic Absorption Spectrometry. Final assays are received for pulps analysed for Au at ALS Townsville via 50 g Fire Assay Atomic Absorption Spectroscopy (AAS) finish (Au-AA26 method) and multi-element (Ag, As, S, Fe, Cu, Pb, Zn, Mo and Sb) by Aqua Regia digest followed by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) instrument read (ME-ICP41S method). Analyses at both the Site Lab and ALS comprised QC included insertion of certified reference material (1:20); insertion of in-house blank control material (2 at the start of each job); and the insertion of lab duplicates (1:20 split from the initial jaw crushed material prepared by the site lab. QAQC results were assessed as each laboratory batch was received and again at resource estimation cycles. Results indicate that pulveriser bowls were adequately cleaned between samples. ALS Townsville insert certified standards, replicates, lab repeats and complete sizing checks (1:40) or higher as part of their internal QAQC protocols.
Verification of sampling and assaying	<ul style="list-style-type: none"> Sampling data is recorded electronically which ensures only valid non-overlapping data can be recorded. Assay and downhole survey data are subsequently merged electronically. All drill data is stored in a SQL database on secure company server.
Location of data points	<ul style="list-style-type: none"> All drill collars were surveyed by company appointed surveyors using a DGPS in Tabar Island Grid (TIG) which is based on WGS84 ellipsoid and is GPS compatible. All diamond drill holes were downhole surveyed using a Reflex EZ track single shot camera with the first reading at 9, 12 or 18 m and one at 30 m and then approximately every 30 m increments to the bottom-of-the hole where an end of hole survey is also taken.
Data spacing and distribution	<ul style="list-style-type: none"> Resource definition drilling to define Indicated Mineral Resources is completed on a nominal 30m * 40m pattern. This spacing is adequate to establish both geological and grade continuity for the Mineral Resource and Ore Reserve procedures. Sampling is typically based on one-metre intervals with no compositing applied.

Criteria	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Drilling is orientated perpendicular to the major structures controlling the distribution of gold mineralisation. The orientation of the drilling ensures unbiased sampling of structures. Exceptions occur when topography restricts access and prevents mineralisation being tested from an optimal orientation. In the Sorowar-Pigiput Trend area mineralisation is interpreted to strike northwest-southeast and dip moderately to shallowly to the southwest. In this area the optimum drill orientation is to drill to the northeast. In the Pigibo North area, due to the lower density drilling, the orientation to mineralisation is less well understood. In plan view, broad scale mineralisation is interpreted to be arcuate in geometry. In the central area it is interpreted to strike north-south and dip moderately to the east. In this area the optimum drill orientation is to drill to the west or sub vertically. In the southern area it is interpreted to strike northwest and dip moderately to the northeast. In this area the optimum drill orientation is to drill to the southwest.
Sample security	<ul style="list-style-type: none"> Only company personnel or approved contractors are allowed on drill sites; drill core is only removed from drill site to secure core logging/processing facility within the gated exploration core yard; core is promptly logged, cut, and prepped on site. The samples sent to ALS are stored in locked and guarded storage facilities until receipted at the Laboratory.
Audits or reviews	<ul style="list-style-type: none"> No audits or reviews of sampling protocols have been completed.

Drilling: Section 2 Reporting of Exploration Results – Simberi ML136

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> SBM has 100 % ownership of the three tenements over the Simberi Islands; ML136 on Simberi Island, EL609 which covers the remaining area of Simberi Island, as well as Tatau Island and Big Tabar Island and 4 sub-block EL2462 which covers part of Tatau and Mapua Islands.
Exploration done by other parties	<ul style="list-style-type: none"> CRA, BHP, Tabar JV (Kennecott, Nord Australer and Niugini Mining), Nord Pacific, Barrick and Allied Gold have all previously worked in this area. Nord Pacific followed by Allied Gold was instrumental in the discovery and delineation of the 5 main oxide and sulphide deposits at Simberi.
Geology	<ul style="list-style-type: none"> The Simberi gold deposits are low sulphidation, intrusion related adularia-sericite epithermal gold deposits. The dominant host rocks for mineralisation are andesites, volcanoclastics and lesser porphyries. Gold mineralisation is generally associated with sulphides or iron oxides occurring within a variety of fractures, such as simple fracture in-fills, single vein coatings and crackle brecciation in the more competent andesite units, along andesite/polymict breccia contact margins as well as sulphide disseminations. Several holes in the area between Sorowar and Pigiput intersected zones of between 20 m and 100 m of semi continuous carbonate \pm quartz base metal / Au veining, similar in style to mineralisation occurring on Tatau and Big Tabar islands to the south, which are also prospective for Porphyry Cu/Au deposits.
Drill hole Information	<ul style="list-style-type: none"> Drill hole information is included in intercept table outlining collar position obtained by DGPS pickup, hole dip and azimuth acquired from a downhole surveying camera as discussed in Section 1, composited mineralised intercepts lengths and depth as well as hole depth.
Data aggregation methods	<ul style="list-style-type: none"> Both Preliminary intercepts from the Simberi Site Lab and final intercepts from ALS Townsville for gold only epithermal mineralisation, comprise broad down hole intercepts reported as length weighted averages using a cut-off of 0.6 g/t Au, minimum width of 2 m, and a minimum grade*length of 2.5 gmpt (gram metre per tonne). Such intercepts may include material below cut-off but no more than 5 sequential metres of such material and except where the average drops below the cut-off. Supplementary cut-offs, of 1.0 g/t, 2.5 g/t, 5.0 g/t and 10.0 g/t Au may be used to highlight higher grade zones and spikes within the broader aggregated interval. Single assays intervals are reported only where ≥ 2.5 g/t Au and ≥ 1 m down hole. Core loss is assigned the same grade as the sample grade; no high-grade cut is applied; grades are reported to one decimal figure and no metal equivalent values are used for reporting exploration results.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> Down hole length was reported for all holes. Simberi lodes display high variability in orientation and complex geometries because of the interplay of veining, brecciation intensity, host lithology and oxidation fronts. Four of the resource definition drill holes at Sorowar-Pigiput trend (SDH584, 587, 596 and 599) are drilled toward the northeast (between azimuth 042° and 048°) roughly perpendicular to the interpreted northwest strike of the Sorowar - Pigiput trend mineralisation and at angles between 60° and 70° from horizontal. A single resource definition drill hole at Sorowar-Pigiput trend (SDH586) was drilled vertically due to a lack of ground access in steep topography. SDH599 which was drilled to the northeast (azimuth 045°) at an angle of 70° resulted in mineralised intercepts with an exaggeration over true widths by 1.1 times. Three of the sterilisation holes drilled at Pigibo North (SDH583, 585 and 595) were drilled vertically, one hole (SDH588) were drilled towards the west (azimuth 270°) and one hole (SDH593) was drilled towards the north-northwest (azimuth 347°). This is to test a broad area where mineralisation has a potential arcuate north-south strike (and/or any east west connection) and moderate to shallow east dip. The drilling density in this area is low and as a result the detailed orientation to mineralisation is less well understood.
Diagrams	<ul style="list-style-type: none"> Included in the body of the report.
Balanced reporting	<ul style="list-style-type: none"> Details of all holes material to Exploration Results are reported in intercept tables. This report covers eleven new holes (SDH583 to SDH588, SDH591, SDH593, SDH595, SDH596 and SDH599) of a sixty two hole FY25 resource definition, exploration and sterilisation diamond drilling program. Assay results from five FY25 resource definition diamond drill holes at Sorowar-Pigiput trend and six exploration / sterilisation diamond drill holes at Pigibo North are reported in Table 1. In addition, final ALS results have been reported in this table for 10 holes previously reported from the Simberi site laboratory (including SDH572 to SDH575 and SDH577 to SDH582).
Other substantive exploration data	<ul style="list-style-type: none"> Included in the body of the report.

Criteria	Commentary
Further work	<ul style="list-style-type: none"> Included in the body of the report.

Trenching: Section 1 Sampling Techniques and Data – Simberi ML136

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> Sampling of trenches was done over measured intervals of between 1 and 5 metres dependent on geology. A geo-pick was used to collect a continuous channel sample from the trench faces across the designated interval with the samples collected in calico bags. Samples (3 to 5 kg) were prepped on-site (jaw crushed, disk mill pulverised and then split) to produce a 200 g pulp sample. A 25 g charge was then extracted from the pulp for Au analyses by Aqua Regia digestion followed by an Atomic Absorption Spectroscopy (AAS) instrument finish.
Trenching techniques	<ul style="list-style-type: none"> Mechanised trenches were dug by an excavator or dozer exposing up to 5 meters of trench wall. Hand dug trenches are cut using shovels and picks approximately along contours exposing up to 1.5 m of trench wall.
Sample recovery	<ul style="list-style-type: none"> NA
Logging / Mapping	<ul style="list-style-type: none"> All trenches were qualitatively geologically mapped for lithology, structure and alteration.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> Samples are routinely submitted for total pulverisation (85 % passing <75 µm) at the company onsite sample preparation facility on Simberi Island. 200 g pulps are sent to St Barbara's Simberi Laboratory where a 25 g sub-sample is taken.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> Samples were analysed for gold at the Simberi Lab using Aqua Regia digestion with a 15 g charge and analysis by Atomic Absorption Spectrometry. QC included the insertion of two in house blanks at the start of each batch of trench samples, the insertion of certified gold standards (1:20) and crush duplicates collected during sample preparation (1:20). Over the duration of the quarter St Barbara inserted OREAS standards 238b and 252b as matched to material type and grade approximation.
Verification of sampling and assaying	<ul style="list-style-type: none"> Sampling data is recorded electronically which ensures only valid non-overlapping data can be recorded. Assay and trench survey data are subsequently merged electronically. All data is stored in a SQL database on secure company server.
Location of data points	<ul style="list-style-type: none"> All Simberi Island trenches were initially surveyed by a handheld GPS to capture the trench start point. The GPS used the Tabar Island Grid (TIG) which is based on WGS84 ellipsoid. The path of the trench from the initial start point to the end was surveyed by Tape & Compass method. Trench interval coordinates were then generated using basic trigonometry.
Data spacing and distribution	<ul style="list-style-type: none"> Trench data spacing is irregular and broad spaced.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Where preceding surface mapping and sampling of trenches have contributed to the understanding of outcropping geological structures, trenching and sampling has been undertaken to extend the strike length of the mapped structure. However, in many of the areas the lode orientation is poorly understood.
Sample security	<ul style="list-style-type: none"> Only trained company personnel were allowed to collect the samples. All samples were held within a secure company building before dispatch. The samples were prepared on site at the sample preparation facility.
Audits or reviews	<ul style="list-style-type: none"> No audits or reviews of sampling protocols have been completed.

Trenching: Section 2 Reporting of Exploration Results – Simberi ML136

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> SBM has 100 % ownership of the three tenements over the Simberi Islands; ML136 on Simberi Island, EL609 which covers the remaining area of Simberi Island, as well as Tatau Island and Big Tabar Island and 4 sub-block EL2462 which covers part of Tatau and Mapua Islands.
Exploration done by other parties	<ul style="list-style-type: none"> CRA, BHP, Tabar JV (Kennecott, Nord Australalex and Niugini Mining), Nord Pacific, Barrick and Allied Gold have all previously worked in this area. Nord Pacific followed by Allied Gold was instrumental in the discovery and delineation of the 5 main oxide and sulphide deposits at Simberi.
Geology	<ul style="list-style-type: none"> The Simberi gold deposits are low sulphidation, intrusion related adularia-sericite epithermal gold deposits. The dominant host rocks for mineralisation are andesites, volcanoclastics and lesser porphyries. Gold mineralisation is generally associated with sulphides or iron oxides occurring within a variety of fractures, such as simple fracture in-fills, single vein coatings and crackle brecciation in the more competent andesite units, along andesite/polymict breccia contact margins as well as sulphide disseminations. On Tatau and Big Tabar Islands, located immediately south of Simberi, potential also exists for porphyry Cu-Au, epithermal quartz Au-Ag and carbonate-base metal Au mineralisation.
Trench Information	<ul style="list-style-type: none"> Included in the report text and annotated on diagrams.
Data aggregation methods	<ul style="list-style-type: none"> Broad trench intercepts are reported as length weighted averages using a cut-off of 0.6 g/t Au and a minimum grade*length of 2.5 gmpt. Such intercepts may include material below cut-off but no more than 5 sequential meters of such material and except where the average drops below the cut-off. Using the same criteria for included sub-grade, supplementary cut-offs, of 1.0 g/t Au, 2.5 g/t Au, 5.0 g/t Au and 10 g/t Au, may be used to highlight higher grade zones and spikes within the broader aggregated interval. Single assays intervals are reported only where ≥ 1.0 g/t and ≥ 5 m trench length is intercepted. Grades are reported to 1 decimal figure & no high-grade cut is applied.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> Trench intercepts are sampled along the length of the trench and are reported for all trenches; true width is not reported.
Diagrams	<ul style="list-style-type: none"> Included in the body of the report.
Balanced reporting	<ul style="list-style-type: none"> Figures when included show all sample sites material and immaterial to Exploration Results.
Other substantive exploration data	<ul style="list-style-type: none"> Included in the body of the report.
Further work	<ul style="list-style-type: none"> Included in the body of the report.