
17 October 2024

Significant Intercept of 31 m at 6.1 g/t Au at Sorowar – Pigiput Trend

Highlights

- Assay results have been received for the first 13 resource definition, exploration and sterilisation drill holes (SDH570 to SDH582) from the FY25 Simberi drill program, significant intercepts from the Sorowar – Pigiput Trend include:
 - **SDH576: 31 m @ 6.1 g/t Au from 35 m, including 8 m @ 20.1 g/t Au from 53 m, including 4 m @ 37.8 g/t Au from 54 m,**
 - **SDH578: 45 m @ 1.5 g/t Au from 5 m,**
 - **SDH580: 25 m @ 1.9 g/t Au from 17 m, including 3 m @ 8.2 g/t Au from 35 m,**
 - **SDH581: 31 m @ 1.7 g/t Au from 96 m, including 8 m @ 3.9 g/t Au from 111 m,**
 - **SDH582: 20 m @ 2.3 g/t Au from 21 m, including 8 m @ 4.2 g/t Au from 25 m and 19 m @ 2.8 g/t Au from 50 m, including 14 m @ 3.5 g/t Au from 52 m.**
 - Resource definition holes SDH576 and SDH582 both intersected significant near-surface higher-grade mineralisation, extending vertically between 15 m and 40 m below the sulphide Ore Reserve pit design.
 - Mineralisation intersected in both SDH576 and SDH582 remains open along strike to the southeast and down dip.
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St Barbara Limited (“**St Barbara**” or the “**Company**”) (ASX: SBM) is pleased to announce the completion of 24 diamond drill holes from the proposed 62 hole FY25 sulphide drilling program, with assay results returned for the first 13 holes (including sterilisation drill holes SDH572, SDH577 and SDH579)

These include the first new results reported from the Sorowar – Pigiput Trend since June 2024 (refer to the ASX release on 17 June 2024 titled “*More Encouraging Assay Results from Sorowar – Pigiput Mineralised Zone*”). This series of results forms part of the FY25 resource definition, exploration and sterilisation drill program comprising 62 holes for 9,000 m that commenced on 1 July 2024 at the Simberi Operations in Papua New Guinea (PNG). The program includes approximately 4,750 m of resource definition drilling at both the Sorowar-Pigiput Trend and the Samat deposit; and approximately 4,250 m of exploration and sterilisation drilling testing in six further areas. Drilling is progressing ahead of schedule with approximately 40% of the overall program completed.

St Barbara Managing Director and CEO Andrew Strelein said:

“The decision to move quickly to follow up on the FY24 discovery of the new Sorowar – Pigiput mineralised zone has been rewarded with hole SDH576 returning 31 metres at 6.1 g/t Au from just 35 metres, including 8 metres at 20.1 g/t Au.”

“This assay result is another very encouraging broad intercept at shallow depth in this new mineralisation zone between Sorowar and Pigiput pits, located immediately below the sulphide Ore Reserve pit design. Hole SDH533, drilled as part of our FY24 program, is located 27 m immediately up-dip and forms part of the same trend, and returned 45 metres at 2.2 g/t Au from 0 metres including 10 metres at 5.1 g/t Au from 26 metres. An additional hole is planned to test the mineralisation 40 metres down dip from hole SDH576, some 50 metres below the sulphide Ore Reserve pit design.”

“Hole SDH582 included 20 metres at 2.3 g/t Au from 21 metres and 19 metres at 2.8 g/t Au from 50 metres and is another very encouraging intercept at shallow depth in between Sorowar and Pigiput pits, located between 15 and 40 metres vertically below the sulphide Ore Reserve pit design.”

“The shallow high-grade mineralisation intersected in both SDH576 and SDH582 remains open along strike to the southeast and down dip to the southwest.”

“During the December quarter we anticipate the return of assay results for the remainder of the 24 resource definition, exploration and sterilisation holes drilled to date at Sorowar – Pigiput trend and Pigibo North. The sterilisation and exploration holes have been proposed to close out the mineralisation boundaries and are important for the finalisation of pit designs and waste deposition plans.”

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. 24 diamond drill holes for 4,385.3 m were completed on ML136 in the September quarter.

Figure 3 shows the locations of the FY25 planned and completed resource definition and exploration diamond drill holes on the Sorowar-Pigiput trend. A total of 17 resource definition drill holes have been completed for 2,919.7 m with up to eight more resource definition drill holes for 1,035 m to be completed in the December quarter. Resource definition and exploration diamond drill holes SDH570-571, SDH573-576, SDH578, SDH580-582, SDH584, SDH586-587 and SDH589-592 have further tested the interpreted northwest trending zone of mineralisation located between the existing Sorowar and Pigiput ore bodies. The location of two key cross sections is highlighted. Assay results have been returned for 10 resource definition drill holes. Significant Sorowar – Pigiput drill hole intercepts include:

- **SDH576: 31 m @ 6.1 g/t Au from 35 m, including 8 m @ 20.1 g/t Au from 53 m, including 4 m @ 37.8 g/t Au from 54 m,**
- **SDH578: 45 m @ 1.5 g/t Au from 5 m,**
- **SDH580: 25 m @ 1.9 g/t Au from 17 m, including 3 m @ 8.2 g/t Au from 35 m,**
- **SDH581: 31 m @ 1.7 g/t Au from 96 m, including 8 m @ 3.9 g/t Au from 111 m,**
- **SDH582: 20 m @ 2.3 g/t Au from 21 m, including 8 m @ 4.2 g/t Au from 25 m and 19 m @ 2.8 g/t Au from 50 m, including 14 m @ 3.5 g/t Au from 52 m.**

Assay results for the remaining eleven drill holes completed to date are expected to be returned in the December quarter.

Figure 4 is a cross-section showing the significant assay results returned from resource definition drill hole SDH576 that intersected significant mineralisation between 35 m and 66 m down hole. The intercept is located at the margin of the current Resource area and sulphide Ore Reserve pit design.

The significant intercept is located 27 m down dip below a previous FY24 resource drill hole SDH533, which returned 45 m @ 2.2 g/t Au from 0 m including 10 m @ 5.1 g/t Au from 26 m (refer to ASX release on 10 April 2024 titled "*New Sorowar – Pigiput Mineralised Zone Confirmed by Latest Diamond Drilling Assays*"). Mineralisation intersected in SDH576 remains open along strike to the southeast and down dip. Holes SDH578 and SDH580 drill tested up to 50 m along strike to the southeast confirming the trend to the mineralisation continues. An additional hole is designed to test the mineralisation 40 m down dip from hole SDH576, some 50 m below the sulphide Ore Reserve pit design.

Figure 5 is a cross section showing the significant assay results returned from resource definition drill hole SDH582 that intersected mineralisation between 21 m and 69 m down hole. The significant high-grade intercept in hole SDH582 overlaps the boundary and extends outside the current Resource area and up to 40 m below the sulphide Ore Reserve pit design. Mineralisation intersected in SDH582 is open along strike to the southeast and down dip.

Figure 6 shows photographs of selected diamond drill core from the Sorowar - Pigiput Trend drill hole SDH576 between 52.50 m and 60.73 m depth. The gold grade (g/t Au) for individual metre intervals is superimposed in yellow text. Mineralisation in this hole is predominantly associated with a monomict andesite shatter breccia, which displays angular clast support in a matrix of quartz $\pm$ carbonate. Visual pyrite is estimated at between 5 to 10% and is disseminated in the altered clasts and locally within the quartz matrix. Similar photographs of diamond drill core from FY24 drilling at Sorowar – Pigiput Trend with higher grade assay results were reported previously for SDH525, SDH533, SDH534 and SDH542 (refer to two ASX releases from 10 April 2024 titled "*New Sorowar – Pigiput Mineralised Zone Confirmed by Latest Diamond Drilling Assays*" and 7 June 2024 titled "*More Encouraging Assay Results from Sorowar – Pigiput Mineralised Zone*"). Assay results for the recent resource definition hole SDH576 are announced in this release.

Note: The presence of monomict andesite breccia with 5% to 10% pyrite is a geological observation of non-economic minerals that are possibly associated with gold. It must be cautioned that visual observations and estimates are uncertain in nature and should not be taken as a substitute for appropriate laboratory analysis. Laboratory assay results will be reported when they are received and interpreted.

Figure 7 shows the locations of the FY25 planned and completed sterilisation and exploration diamond drill holes at Pigibo North. Seven sterilisation drill holes SDH572, SDH577, SDH579, SDH583, SDH585, SDH588 and SDH593 have been completed for 1,415.8 m. Assay results have been returned for three sterilisation drill holes. Up to five more sterilisation drill holes for 980 m are to be completed in the December quarter.

In addition the results of the four remaining FY24 exploration diamond drill holes (SDH546, SDH555, SDH562 and SDH569) drilled at Pigibo were returned. Results indicate that mineralisation is closed off down dip and down plunge from the current Resource.

Figure 1. Simberi Island Site Layout within Mining Lease.

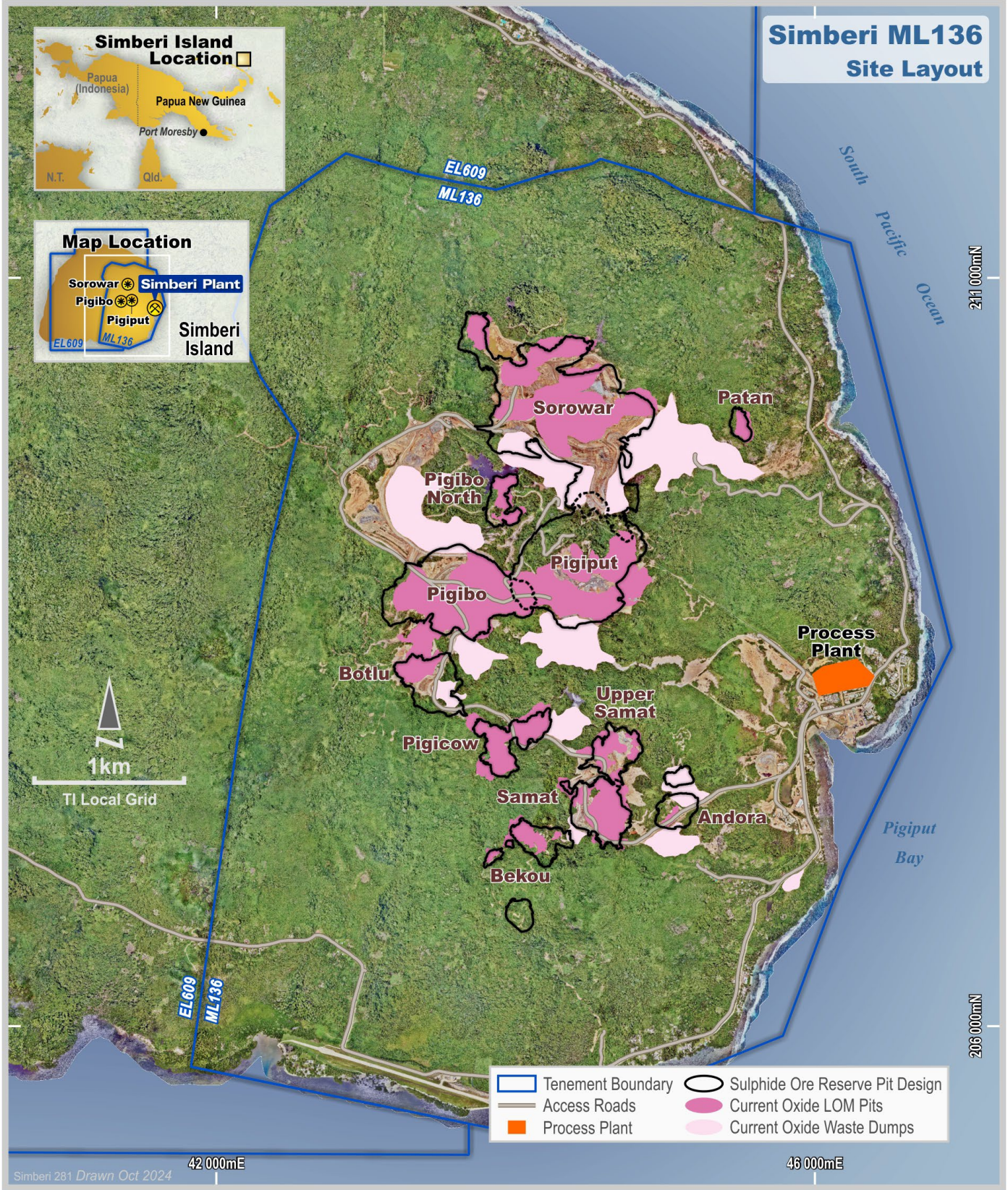
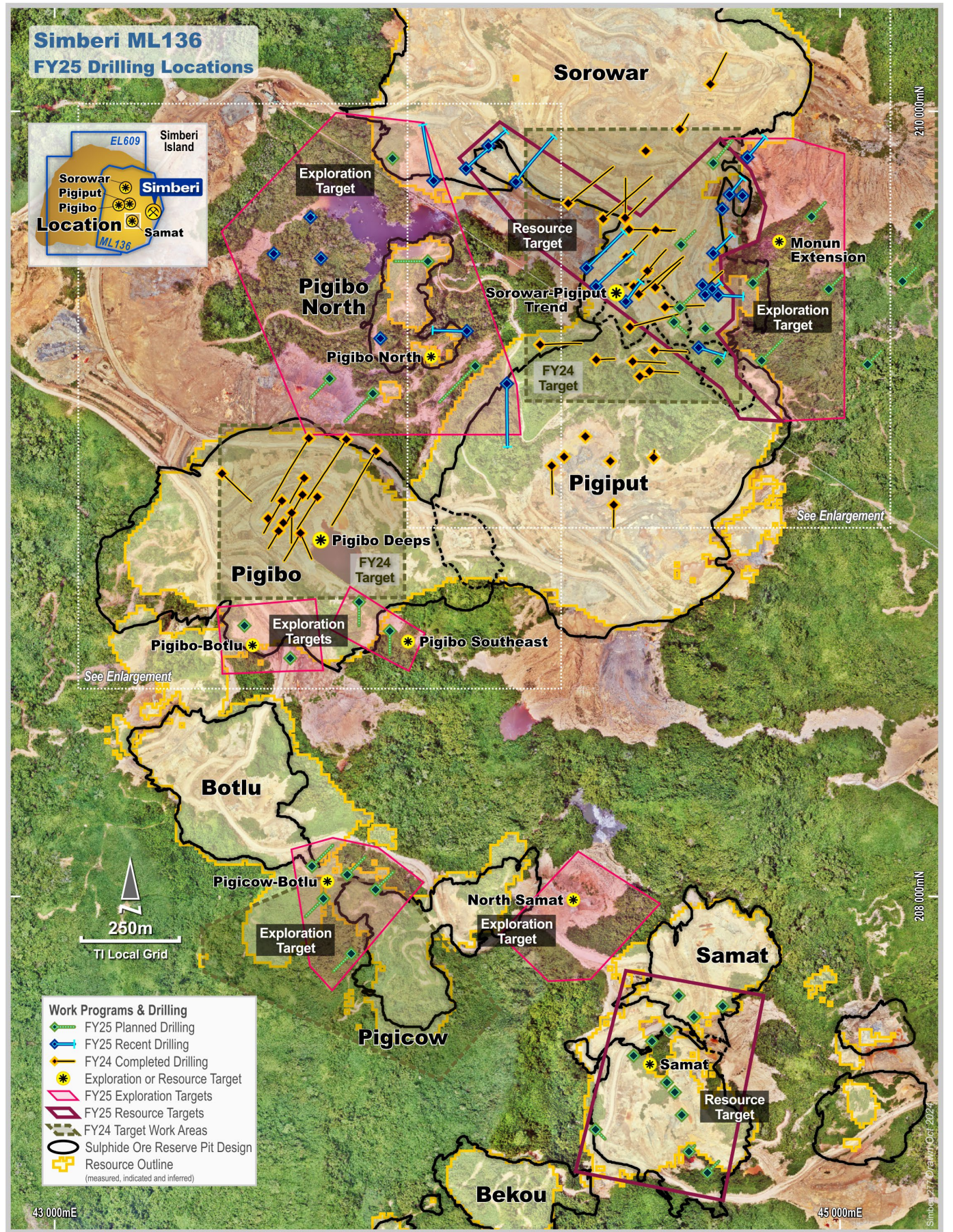


Figure 2. FY25 Completed and Planned Diamond Drilling, Simberi Island, Papua New Guinea.



Simberi ML136 - Sorowar-Pigiput Trend
Q1 FY25 Drilling Locations

Work Programs & Drilling

- 2m @ Q1 FY25 ALS Diamond Result
- 2m @ Q1 FY25 Site Diamond 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 (measured, indicated and inferred)

Location

Simberi Island

EL609

Sorowar

Pigibo

Pigiput

ML136

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

Sorowar

Pigiput

OPEN

Drilling Results:

- SDH516: 10m @ 1.7g/t Au from 51m incl. 2m @ 6.0g/t Au from 54m 9m @ 0.7g/t Au from 187m 15m @ 0.7g/t Au from 209m 4m @ 2.5g/t Au from 234m incl. 2m @ 4.0g/t Au from 235m 10m @ 1.6g/t Au from 245m incl. 1m @ 2.6g/t Au from 251m
- SDH517: 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
- SDH518: 7m @ 1.6g/t Au from 64m incl. 2m @ 2.9g/t Au from 68m 31m @ 1.7g/t Au from 96m incl. 8m @ 3.9g/t Au from 111m incl. 1m @ 9.2g/t Au from 111m & 1m @ 15.6g/t Au from 118m
- SDH519: 20m @ 2.3g/t Au from 21m incl. 8m @ 4.2g/t Au from 25m incl. 1m @ 6.1g/t Au from 26m & 1m @ 6.6g/t Au from 32m 19m @ 2.8g/t Au from 50m incl. 14m @ 3.5g/t Au from 52m incl. 1m @ 5.7g/t Au from 53m & 1m @ 7.7g/t Au from 58m
- SDH520: 11m @ 1.5g/t Au from 34m incl. 1m @ 2.7g/t Au from 37m & 1m @ 3.2g/t Au from 40m
- SDH521: 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
- SDH522: 25m @ 1.9g/t Au from 17m incl. 2m @ 2.8g/t Au from 17m & 3m @ 8.2g/t Au from 35m incl. 1m @ 20.4g/t Au from 35m
- SDH523: 45m @ 1.5g/t Au from 5m incl. 2m @ 2.9g/t Au from 22m & 2m @ 3.5g/t Au from 29m
- SDH524: 21m @ 0.6g/t Au from 192m
- SDH525: 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
- SDH526: 19m @ 1.2g/t Au from 41m incl. 2m @ 1.6g/t Au from 43m & 8m @ 1.6g/t Au from 51m 13m @ 0.7g/t Au from 67m
- SDH527: 21m @ 0.6g/t Au from 192m
- SDH528: 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
- SDH529: 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
- SDH530: 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
- SDH531: 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
- SDH532: 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
- SDH533: 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
- SDH534: 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
- SDH535: 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
- SDH536: 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
- SDH537: 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
- SDH538: 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
- SDH539: 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
- SDH540: 14m @ 1.0g/t Au from 16m incl. 1m @ 2.8g

Figure 4. Drill Cross Section Srpt 8 (View Looking Northwest), Sorowar-Pigiput, Simberi Island.

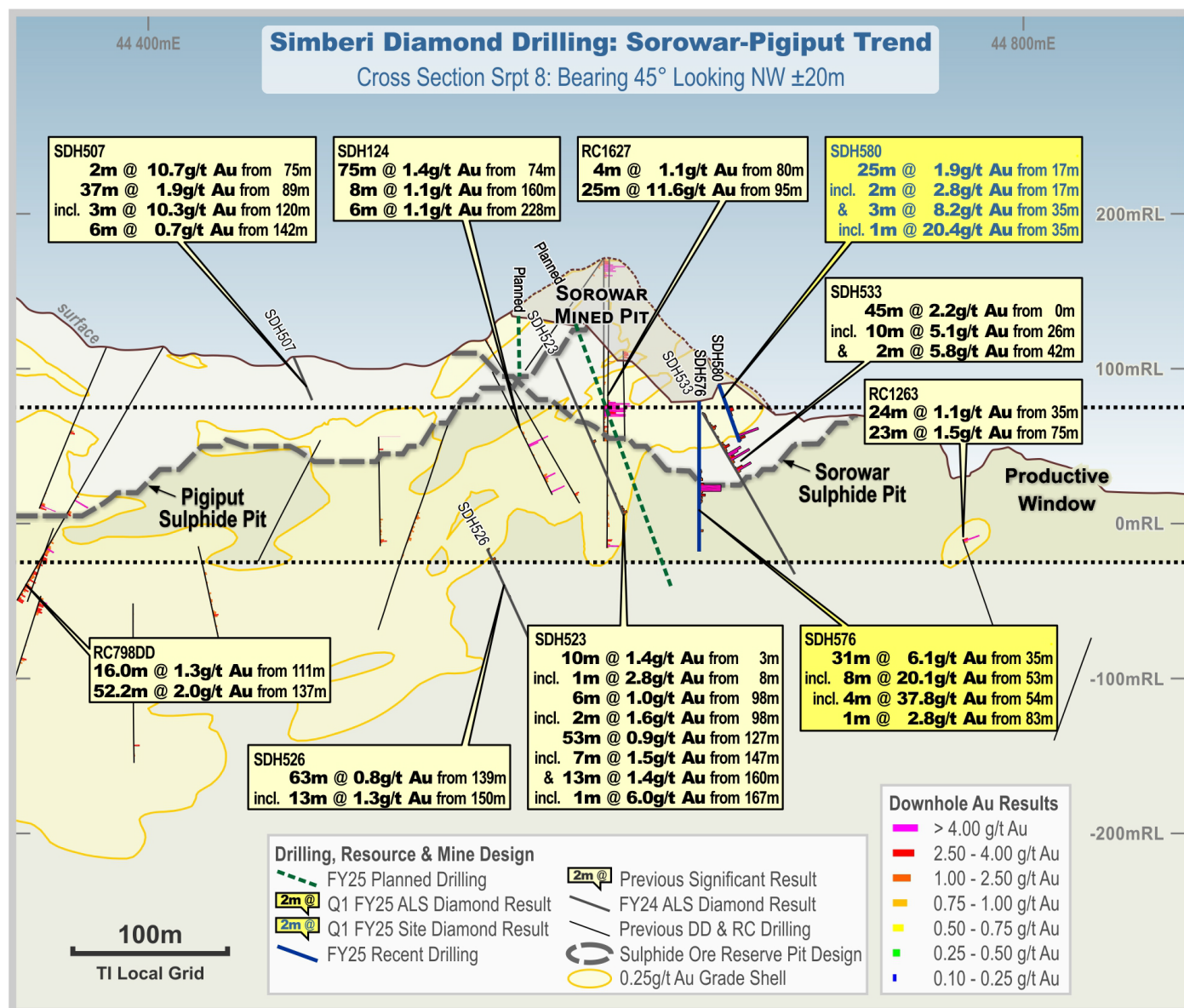


Figure 5. Drill Cross Section Srpt 6 (View Looking Northwest), Sorowar-Pigiput Trend, Simberi.

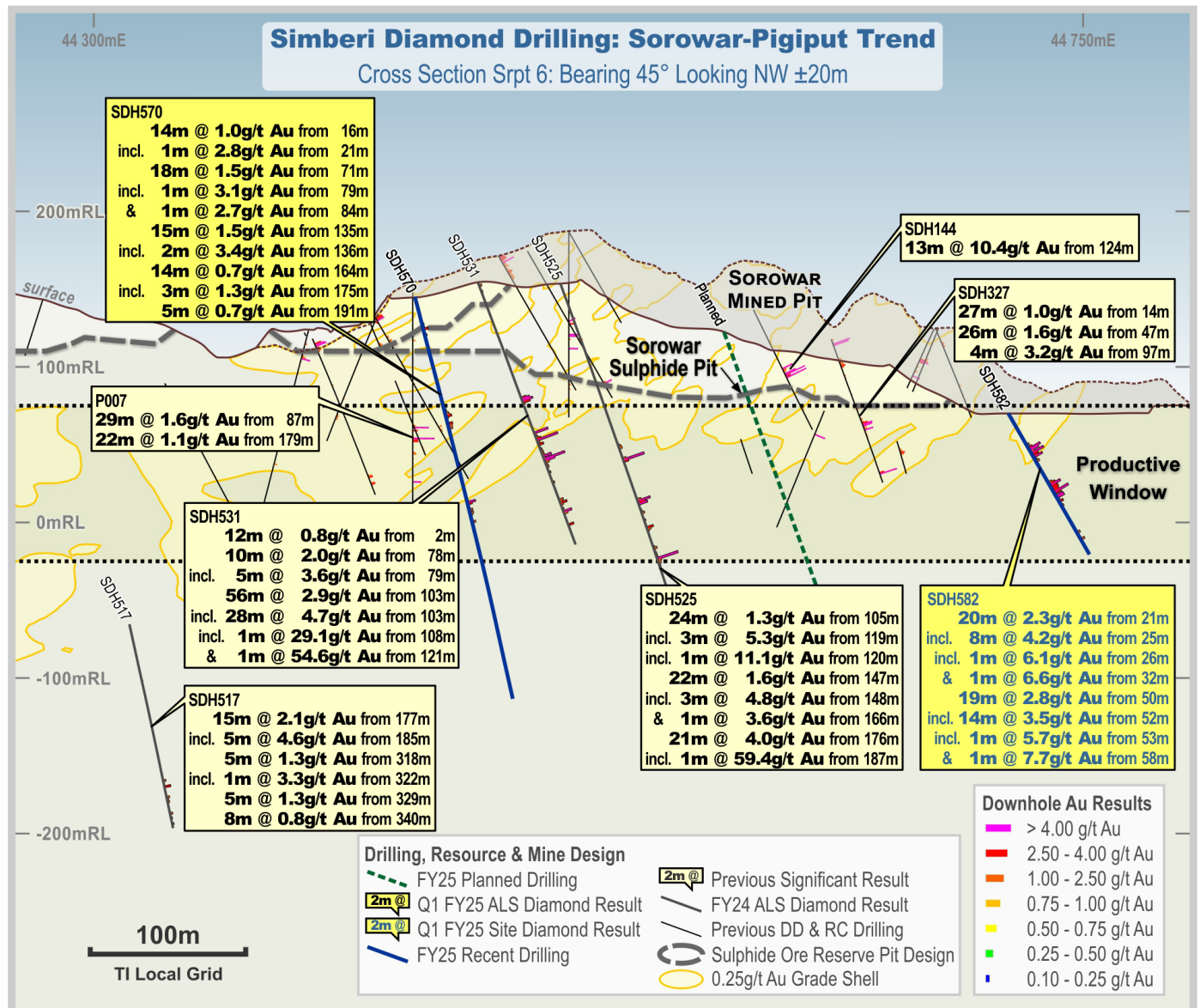
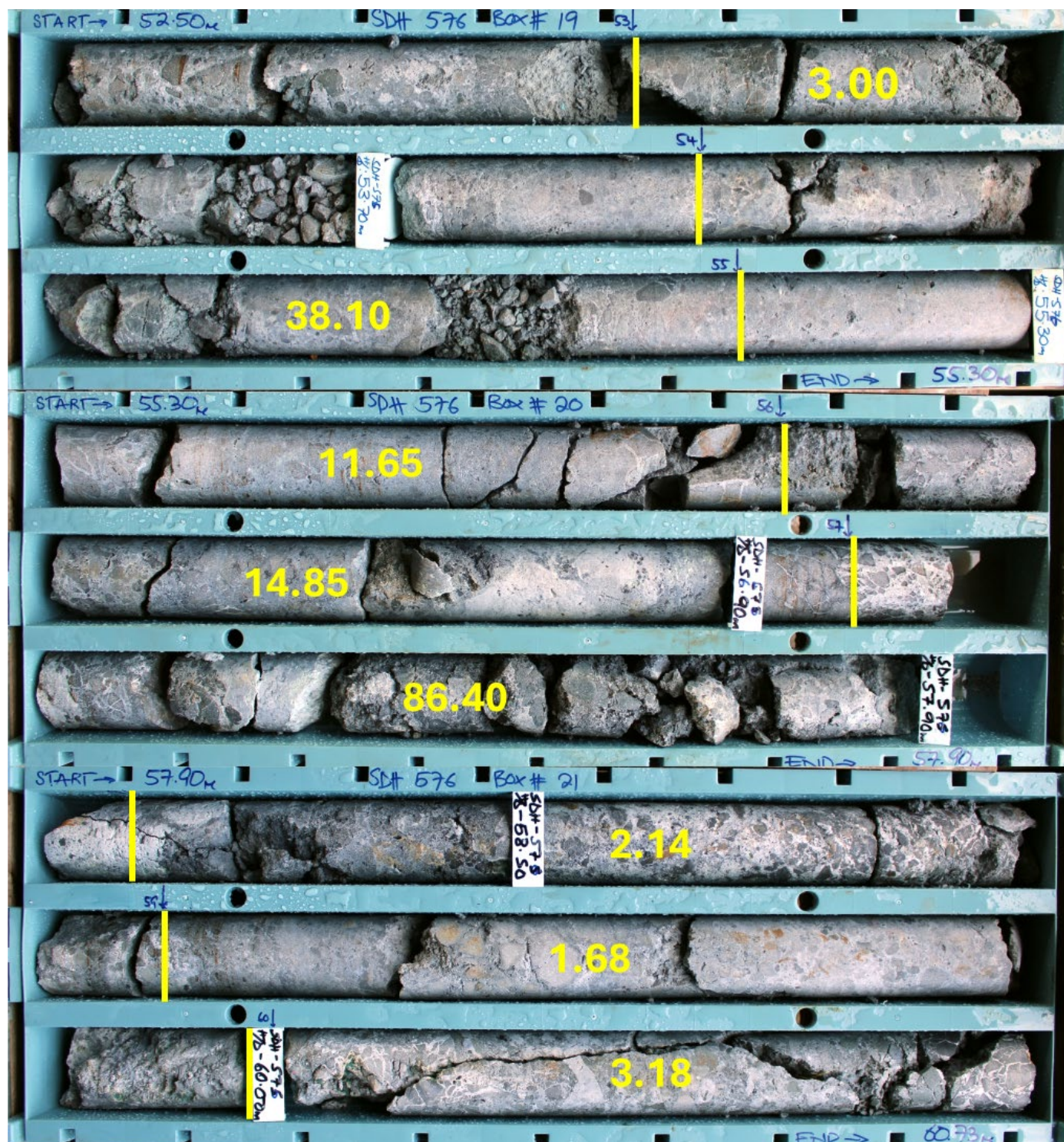


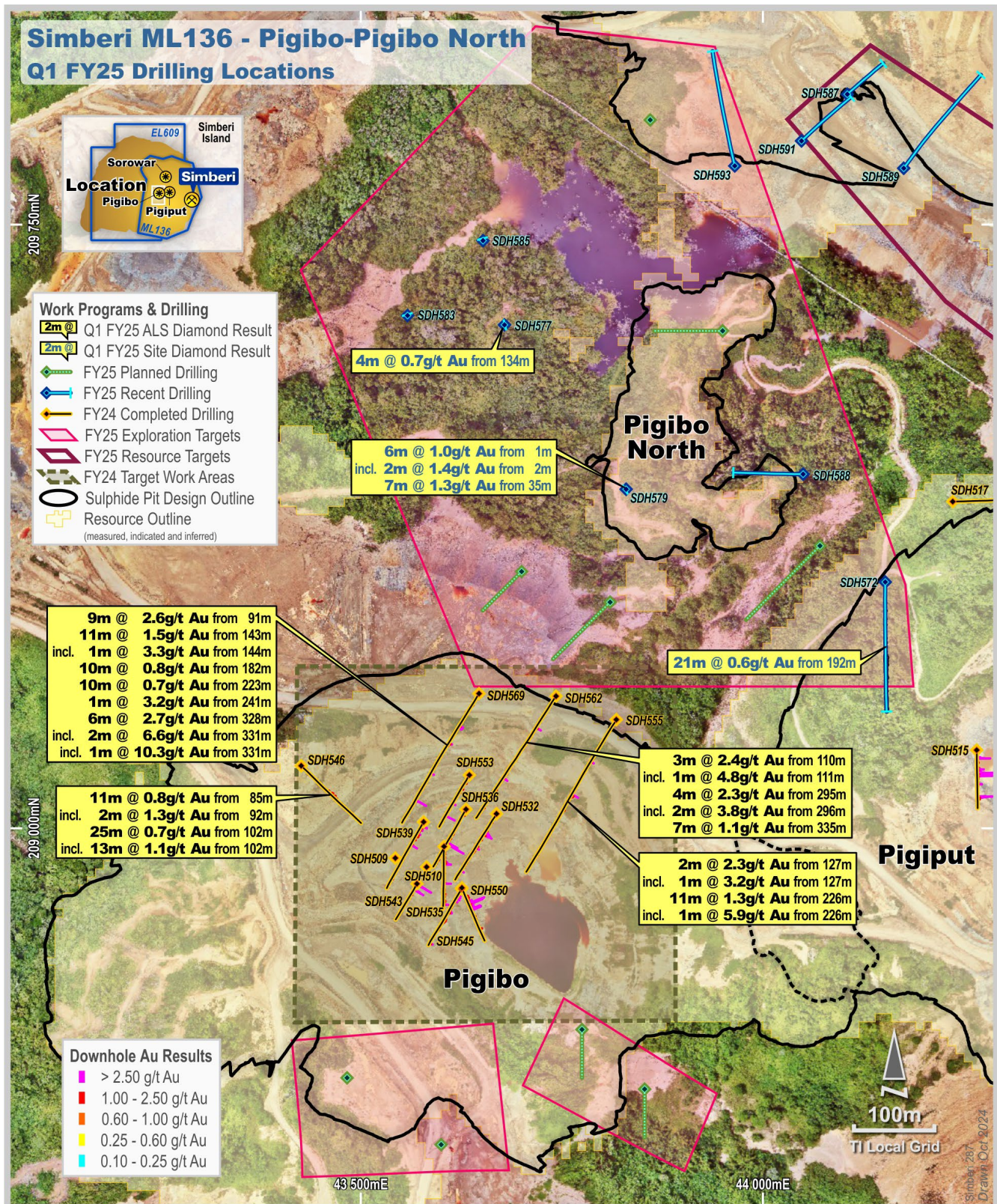
Figure 6. Diamond Drill Core Photographs from SDH576 interval 52.50 m to 60.73 m.



SDH576: 52.50m – 60.73m.

Note: Individual metre interval gold assay grades shown in g/t Au.

Figure 7. FY24 and FY25 Diamond Drilling at Pigibo and Pigibo North, Simberi Island.



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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		m		m	m	m	g/t Au
SDH546	209,077	43,426	222.7	-60 / 134	214.2	TR	85.0	96.0	11.0	0.8
<i>including</i>						TR	92.0	94.0	2.0	1.3
						TR	102.0	127.0	25.0	0.7
<i>including</i>						TR,SU	102.0	115.0	13.0	1.1
SDH555	209,135	43,818	226.5	-61 / 213	487.4	SU	127.0	129.0	2.0	2.3
<i>including</i>						SU	127.0	128.0	1.0	3.2
						SU	226.0	237.0	11.0	1.3
<i>including</i>						SU	226.0	227.0	1.0	5.9
SDH562	209,164	43,743	224.1	-65 / 213	451	SU	110.0	113.0	3.0	2.4
<i>including</i>						SU	111.0	112.0	1.0	4.8
						SU	295.0	299.0	4.0	2.3
<i>including</i>						SU	296.0	298.0	2.0	3.8
						SU	335.0	342.0	7.0	1.1
SDH569	209,167	43,647	222.0	-60 / 212	409.2	SU	91.0	100.0	9.0	2.6
						SU	143.0	154.0	11.0	1.5
<i>including</i>						SU	144.0	145.0	1.0	3.3
						SU	182.0	192.0	10.0	0.8
						SU	223.0	233.0	10.0	0.7
						SU	241.0	242.0	1.0	3.2
						SU	328.0	334.0	6.0	2.7
<i>including</i>						SU	331.0	333.0	2.0	6.6
<i>including</i>						SU	331.0	332.0	1.0	10.3
SDH570	209,515	44,455	150.0	-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	209,554	44,379	142.0	-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*	209,306	44,152	127.0	-61 / 180	331.0	SU	192.0	213.0	21.0	0.6

NOTES:

*: 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
SDH573*	209,601	44,355	181.0	-63 / 047	279.9	OX,TR,SU	51.0	61.0	10.0	1.7
<i>including</i>						OX,TR,SU	54.0	56.0	2.0	6.0
						SU	187.0	196.0	9.0	0.7
						SU	209.0	224.0	15.0	0.7
						SU	234.0	238.0	4.0	2.5
<i>including</i>						SU	235.0	237.0	2.0	4.0
						SU	245.0	255.0	10.0	1.6
<i>including</i>						SU	251.0	252.0	1.0	2.6
SDH574*	209,751	44,700	75.7	-90 / 360	153.9	SU	34.0	45.0	11.0	1.5
<i>including</i>						SU	37.0	38.0	1.0	2.7
<i>and</i>						SU	40.0	41.0	1.0	3.2
SDH575*	209,533	44,657	75.9	-90 / 162	115.9	SU	41.0	60.0	19.0	1.2
<i>including</i>						SU	43.0	45.0	2.0	1.6
<i>and</i>						SU	51.0	59.0	8.0	1.6
						SU	67.0	80.0	13.0	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	138.0	4.0	0.7
SDH578*	209,532	44,690	75.8	-63 / 095	143.4	OX,TR,SU	5.0	50.0	45.0	1.5
<i>including</i>						SU	22.0	24.0	2.0	2.9
<i>and</i>						SU	29.0	31.0	2.0	3.5
SDH579*	209,421	43,830	184.9	-90 / 222	202.2	OX	1.0	7.0	6.0	1.0
<i>including</i>						OX	2.0	4.0	2.0	1.4
						TR,SU	35.0	42.0	7.0	1.3
SDH580*	209,547	44,675	75.9	-70 / 055	80.7	TR,SU	17.0	42.0	25.0	1.9
<i>including</i>						TR,SU	17.0	19.0	2.0	2.8
<i>and</i>						SU	35.0	38.0	3.0	8.2
<i>including</i>						SU	35.0	36.0	1.0	20.4
SDH581*	209,638	44,677	75.6	-60 / 046	141.7	SU	64.0	71.0	7.0	1.6
<i>including</i>						SU	68.0	70.0	2.0	2.9
						SU	96.0	127.0	31.0	1.7
<i>including</i>						SU	111.0	119.0	8.0	3.9
<i>including</i>						SU	111.0	112.0	1.0	9.2
<i>and</i>						SU	118.0	119.0	1.0	15.6
SDH582*	209,788	44,719	75.8	-60 / 039	104.7	OX,TR	21.0	41.0	20.0	2.3
<i>including</i>						TR	25.0	33.0	8.0	4.2
<i>including</i>						TR	26.0	27.0	1.0	6.1
<i>and</i>						TR	32.0	33.0	1.0	6.6
						SU	50.0	69.0	19.0	2.8
<i>including</i>						SU	52.0	66.0	14.0	3.5
<i>including</i>						SU	53.0	54.0	1.0	5.7
<i>and</i>						SU	58.0	59.0	1.0	7.7

NOTES:

*: Site lab preliminary results

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

JORC Table 1 Checklist of Assessment and Reporting Criteria

Section 1 Sampling Techniques and Data – Simberi ML136 (Sorowar-Pigiput and Pigibo North)

Criteria	Commentary
Sampling techniques	- 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	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	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	- 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	- 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	- Preliminary assays are received from pulps analysed for Au at the Simberi Lab using Aqua Regia digestion with a 15g 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	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	- 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	- 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.
Orientation of data in relation to geological structure	Drilling is orientated perpendicular to the major structures controlling the distribution of gold mineralisation. The orientation of the drilling ensures unbiased sampling of structures. Two exceptions at Sorowar-Pigiput trend include resource definition drill holes SDH578 and SDH592 which were drilled at an azimuth of 87 degrees and 106 degrees respectively. This is due to topography restricting access and preventing the Sorowar-Pigiput mineralisation being tested from the optimal orientation in these areas.

Criteria	Commentary
Sample security	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	No audits or reviews of sampling protocols have been completed.

Section 2 Reporting of Exploration Results – Simberi ML136 (Sorowar and Pigiput)

Criteria	Commentary
Mineral tenement and land tenure status	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	CRA, BHP, Tabar JV (Kennecott, Nord Australex 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	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	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	- 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	- 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. - Six of the resource definition drill holes (SDH570, 571, 573, 580, 581 and 582) are drilled toward the northeast (azimuth 045°) roughly perpendicular to the interpreted northwest strike of the Sorowar - Pigiput trend mineralisation and at angles between 60° and 75° from horizontal. - Other holes are drilled vertically (SDH574, 575 and 576) or oblique (SDH578) to the rest of the program due to a lack of ground access in steep topography to either test cross cutting potential mineralisation or infill gaps in existing mineralisation with down-hole mineralised intercepts likely to be exaggerated over true widths by between 1.2 times (vertical holes) and 1.4 times (oblique holes). - Pigibo sulphide mineralisation forms a 40 m to 70 m thick shallow dipping tabular body which is thickest in the centre. A feeder structure below the main body of mineralisation dips to the northeast at approximately 30° but steepens to -65° in the centre of the orebody and progressively thins out in the steeper section unlike the Pigiput orebody that dips to northeast at approximately 30°. The relatively flat geometry of Pigibo is such that drill holes intersect the mineralisation at angles of between 60° and 65° respectively depending on their inclination and down-hole mineralised intercepts are exaggerated over true widths by between 1.2 and 1.3 times.
Diagrams	Included in the body of the report.
Balanced reporting	Details of all holes material to Exploration Results are reported in intercept tables. This report covers thirteen holes of a sixty two hole FY25 resource definition, exploration and sterilisation diamond drilling program. Assay results from the last four FY24 exploration drill holes at Pigibo, the first ten FY25 resource definition diamond drill holes at Sorowar-Pigiput trend and the first three exploration / sterilisation diamond drill holes at Pigibo North are reported in Table 1.
Other substantive exploration data	Included in the body of the report.
Further work	Included in the body of the report.