

11 July 2025

## Significant Intercepts below Samat and Sorowar Pits Update on Resource / Exploration Drilling

### Highlights

- Simberi Mining Lease FY25 resource definition, exploration and sterilisation program of 61 drill holes for 10,463.5 metres completed with assay results now reported for another 11 of those drill holes.
- **SAMAT:** Two resource definition drill holes completed at the Samat deposit intersected significant high-grade gold mineralisation, including:
  - **SDH620:** 17 m @ 4.2 g/t Au from 53 m, including 6 m @ 6.4 g/t Au from 56 m, and
  - **SDH622:** 43 m @ 2.1 g/t Au from 17 m and 27 m @ 1.7 g/t Au from 91 m
- Samat deposit has received only sparse historical diamond drilling for sulphides, and the high-grade gold mineralisation is immediately below the existing Samat open pit sulphide Ore Reserve (approx. 15 m and 30 m vertically, so just beyond the reach of historical oxide RC grade control).
- **SOROWAR – PIGIPUT TREND:** Further high-grade gold mineralisation was also intersected in resource definition/exploration diamond drilling completed at the Sorowar – Pigiput Trend and includes:
  - **SDH600:** 8 m @ 18.9 g/t Au from 54 m, including 3 m @ 45.9 g/t Au from 56 m, 55 m @ 1.2 g/t Au from 121 m including 6 m @ 3.5 g/t Au from 148 m
  - **SDH598:** 3 m @ 9.0 g/t Au from 40 m, including 1 m @ 25.2 g/t Au from 40 m
- The high-grade gold mineralisation intersected in SDH600 and SDH598 is located immediately below the Sorowar open pit sulphide Ore Reserve pit design.
- Assay results remain pending for 20 diamond drill holes; including from Samat, two from Pigibo North, two from Pigicow-Botlu, three from Pigiput Northeast Trend and two from Pigibo-Botlu.

St Barbara Limited (“**St Barbara**” or the “**Company**”) (ASX: SBM) is pleased to announce assay results from the latest 11 drill holes of the now complete FY25 resource definition, exploration and sterilisation drill program at the Simberi Operations in Papua New Guinea (PNG) comprising 61 holes for 10,463.5 m. Assay results remain pending for a further 20 diamond drill holes from the program.

Importantly, the first holes from the maiden significant diamond drilling campaign targeting Samat sulphide resource have delineated high-grade sulphide mineralisation immediately below the current Samat sulphide open pit Ore Reserve (just beyond historical oxide RC grade control drilling depths). Assay results are pending for the remaining 10 holes from the 12-hole Samat resource definition drill program.

St Barbara Managing Director and CEO Andrew Strelein said:

*“The identification of additional sulphide mineralisation extending or located immediately below the current sulphide open pit Ore Reserve at Samat and Sorowar – Pigiput Trend is very positive news. We are looking forward to the results of the remaining ten Samat drill holes to better understand the potential to define additional high-grade sulphide resources where historic diamond drilling is relatively sparse. Significantly, Samat was the first and highest grade of the oxide pits mined.”*

*“During the September quarter we anticipate the return of assay results for most of the remaining 20 resource definition, exploration and sterilisation holes drilled to date at Samat, Pigicow-Botlu, Pigibo North, Pigibo-Botlu and Pigiput Northeast Trend.”*

### **FY25 Resource Definition, Exploration and Sterilisation Drill Program**

The FY25 resource definition, exploration and sterilisation drill program completed at the Simberi Operations in PNG comprised 61 holes for 10,463.5 m. The program included:

- 34 holes for 5,166.1 m of resource definition drilling at both the Sorowar – Pigiput Trend and at the Samat deposit; and
- 27 holes for 5,297.4 m of exploration and sterilisation drill testing in five further areas, including Pigibo North, Monun Extension, between Pigicow and Botlu, Pigiput Northeast Trend and between Pigibo and Botlu.

The FY25 drill program included:

- 22 resource definition drill holes for 3,634.9 m completed at the Sorowar – Pigiput Trend;
- 12 resource definition drill holes for 1,531.2 m completed at Samat;
- 14 exploration/sterilisation drill holes for 2,680 m completed at Pigibo North;
- Six exploration drill holes for 1,088.9 m completed at Pigicow-Botlu;
- Three exploration drill holes for 946.6 m completed at Pigiput Northeast Trend;
- Two exploration drill holes at Monun Extension for 373.2 m; and
- Two sterilisation drill holes for 208.7 m completed at Pigibo-Botlu.

The final 10 diamond drill holes of the FY25 program were completed for 1,723.2 m during the June quarter.

Assay results for the FY25 resource definition, exploration and sterilisation drill program have been reported progressively in three ASX Releases to date.

Assay results for the first 13 drill holes were received during Q1 FY25, including 10 resource definition drill holes and three exploration/sterilisation drill holes (refer to ASX announcement on 17 October 2024 titled “*Significant Intercept of 31 m at 6.1 g/t Au at Sorowar – Pigiput Trend*”). Assay results for an additional 11 drill holes were received in Q2 Dec FY25, including six resource definition drill holes and five exploration/sterilisation drill holes (refer to ASX announcement on 10 January 2025 titled “*New Oxide Discovery at Pigibo North, Update on Exploration/Sterilisation Drilling*”). Assay results for 10 drill holes were received in Q3 FY25, including four Sorowar – Pigiput Trend exploration holes and six Pigibo North exploration/sterilisation drill holes (refer to ASX announcement on 30 April 2025 titled “*Quarterly Report Q3 March FY25*”).

Assay results for 11 drill holes in Q4 June FY25 are reported in this fourth update (SDH598, SDH600 to SDH605, SDH613, SDH615, SDH620 and SDH622). This includes four Sorowar – Pigiput Trend resource definition / exploration holes, four Pigicow-Botlu exploration holes, one Pigibo North exploration / sterilisation drill hole and two Samat resource definition holes.

Significant intercepts returned during Q4 FY25 include:

SDH598 (Sorowar – Pigiput Trend): **3 m @ 9.0 g/t Au** from 40 m, including 1 m @ 25.2 g/t Au from 40 m,  
SDH600 (Sorowar – Pigiput Trend): **8 m @ 18.9 g/t Au** from 54 m, including **3 m @ 45.9 g/t Au** from 56 m,  
55 m @ 1.2 g/t Au from 121 m including 6 m @ 3.5 g/t Au from 148 m,  
SDH602 (Sorowar – Pigiput Trend): 7 m @ 2.9 g/t Au from 0 m, 17 m @ 1.3 g/t Au from 20 m,  
SDH603 (Pigicow-Botlu): 28 m @ 1.2 g/t Au from 80 m,  
SDH620 (Samat): **17 m @ 4.2 g/t Au** from 53 m, including **6 m @ 6.4 g/t Au** from 56 m,  
SDH622: (Samat): 9 m @ 2.0 g/t Au from 0 m, **43 m @ 2.1 g/t Au** from 17 m and 27 m @ 1.7 g/t Au from 91 m.

Assay results remain pending for 20 diamond drill holes including 10 from Samat (SDH623, SDH625, SDH628, SDH630, SDH631, SDH656, SDH658, SDH660, SDH662, SDH665), two from Pigibo North (SDH607 to SDH608), two from Pigicow-Botlu (SDH609 to SDH610), three from Pigiput Northeast Trend (SDH667, SDH669, SDH672) and two from Pigibo-Botlu (SDH676 to SDH677).

## 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 completed FY25 sulphide diamond drilling program on ML136. The seven 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 five exploration and / or sterilisation drilling areas are highlighted by light red polygons. These targets include Pigibo North, Monun Extension, Southwest Pigibo, between Pigicow and Botlu and Pigiput Northeast trend. It should be noted that some individual drill hole locations south of Pigibo were unable to be accessed due to active mining in the area and will be completed in FY26. In addition, several Monun Extension exploration holes were not completed.

**Figure 3** shows the locations of the FY25 completed resource definition and exploration diamond drill holes at Samat. The 12 resource definition drill holes were completed for 1,531.2 m infilling as part of the resource which had lower density drilling, as well as testing below the current resource. Previous drilling at Samat mainly focussed on targeting oxide resources, where as the FY25 drilling was designed to extend deeper into the '*productive window*' to test for sulphide mineralisation (the '*productive window*' is an elevation zone in which higher gold grades are commonly encountered). The location of two cross sections for SDH620 and SDH622 are highlighted.

**Figure 4** is a cross section at Samat showing the significant assay results returned from resource definition drill hole SDH620 between 53 m and 70 m depth. The high grade gold intercept of **17 m @ 4.2 g/t Au** from 53 m, including **6 m @ 6.4 g/t Au** from 56 m in SDH620 is located between 10 m and 30 m below the Samat sulphide Ore Reserve pit design.

**Figure 5** is a cross section at Samat showing the significant assay results returned from resource definition drill hole SDH622 between 17 m and 60 m depth. The high grade gold intercept of **43 m @ 2.1 g/t Au** from 17 m in SDH622 is located within the Samat sulphide Ore Reserve pit design and extends up to 15 m vertically below the current pit limits.

Both high grade intercepts are located within a '*productive window*' between +80 m and -20 m RL.

**Figure 6** shows the locations of the completed FY25 resource definition and exploration diamond drill holes on the Sorowar – Pigiput Trend. All 22 resource definition drill holes planned at Sorowar – Pigiput Trend have been completed for 3,634.9 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. The location of the cross section for SDH600 is highlighted.

**Figure 7** is a cross section at Sorowar – Pigiput Trend showing the significant assay results returned from resource definition drill hole SDH600 between 54 m and 62 m depth. The high grade gold intercept of **8 m @ 18.9 g/t Au** from 54 m, including **3 m @ 45.9 g/t Au** from 56 m in Hole SDH600 is located immediately below the Sorowar sulphide Ore Reserve pit design.

**Figure 8** shows the locations of the completed FY25 exploration / sterilisation diamond drill holes at Pigicow-Botlu. The six drill holes (SDH603 to SDH605, SDH609 to SDH610 and SDH613) were completed for 1,088.9 m testing a 200 m long northwest striking zone between Pigicow and Botlu sulphide Ore Reserve pit designs. Assay results for four holes (SDH603 to SDH605 and SDH613) were returned in June. Assay results for the final two holes (SDH609 to SDH610) are expected in July 2025.

**Figure 9** shows the locations of the completed FY25 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. A total of 14 sterilisation drill holes (SDH572, SDH577, SDH579, SDH583, SDH585, SDH588, SDH593, SDH595, SDH597, SDH606 to SDH608, SDH615 and SDH617) have been completed for 2,680 m. Assay results have been previously reported for eight holes. Results for SDH615 were returned in June 2025, with results for the final three holes (SDH607, SDH608 and SDH617) expected in July 2025.

Drilling results to date indicate that the central to southern portion of the Pigibo North target area has been sterilised. The northern portion has returned significant oxide mineralisation at surface and warrants further drilling.



Figure 1. Simberi Island Site Layout within Mining Lease.

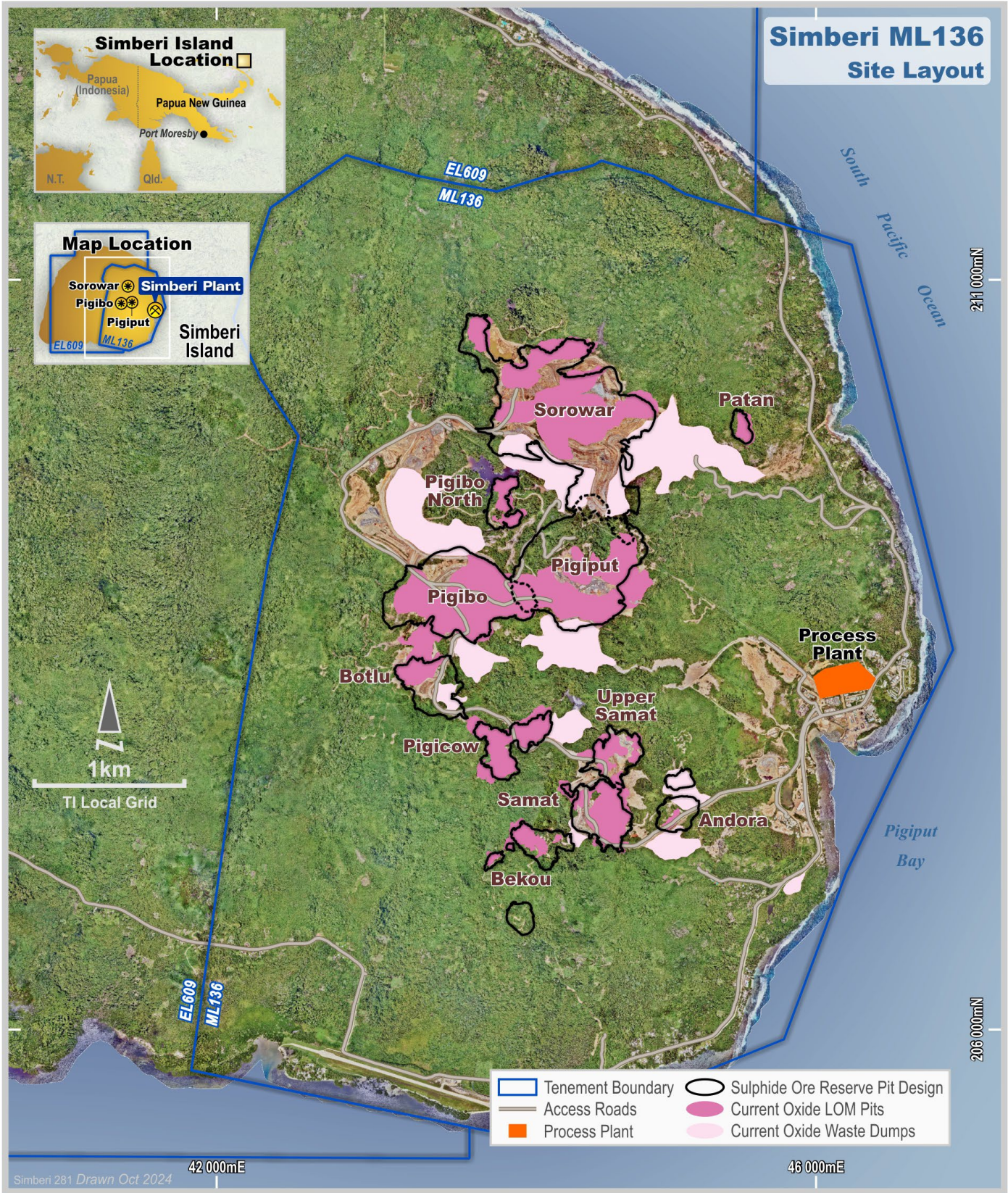




Figure 2. FY25 Completed and Planned Diamond Drilling, Simberi Island, Papua New Guinea.

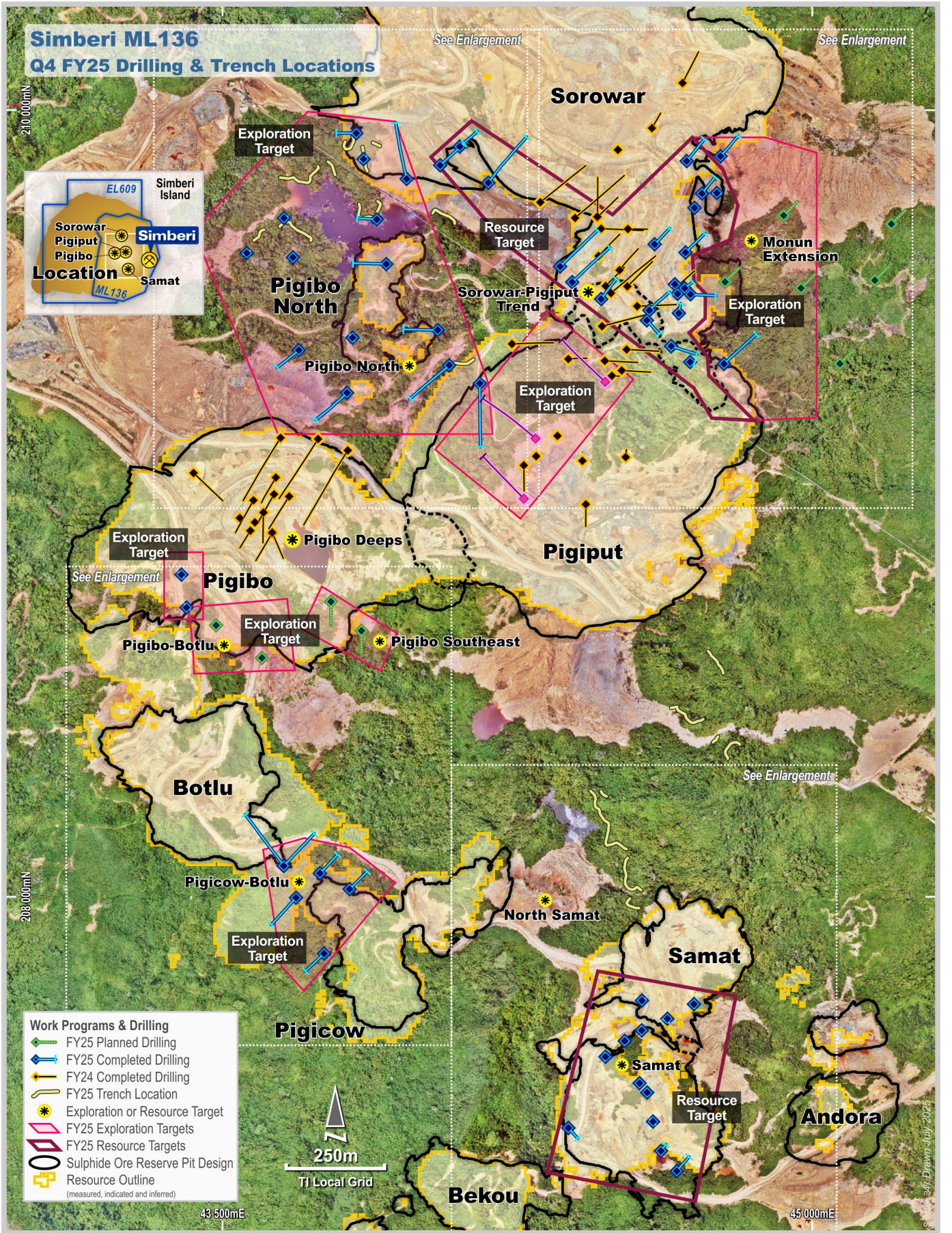




Figure 3. FY25 Completed Diamond Drilling, Samat, Simberi Island.

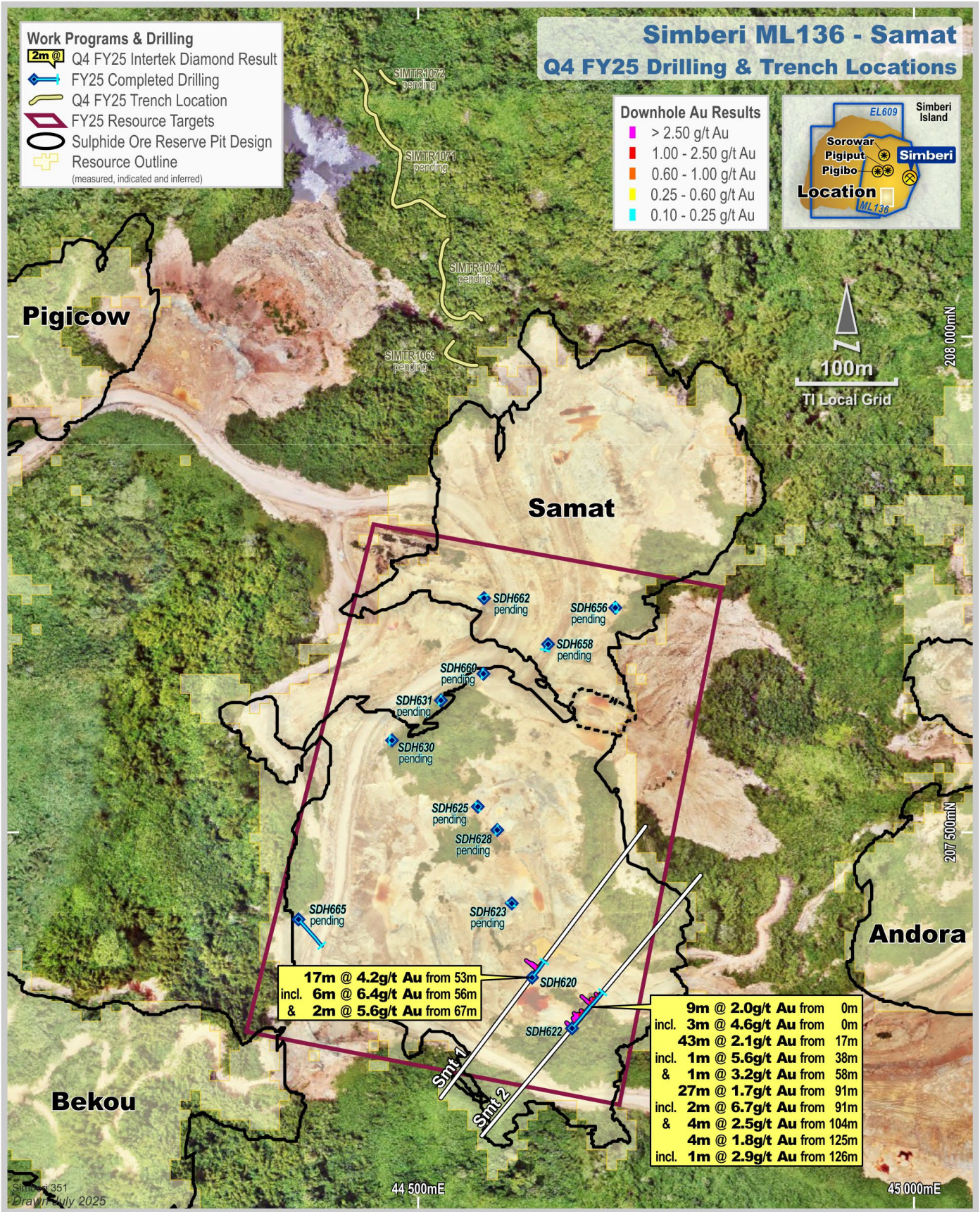




Figure 4. Drill Cross Section Smt 1 (View Looking Northwest), Samat, Simberi Island.

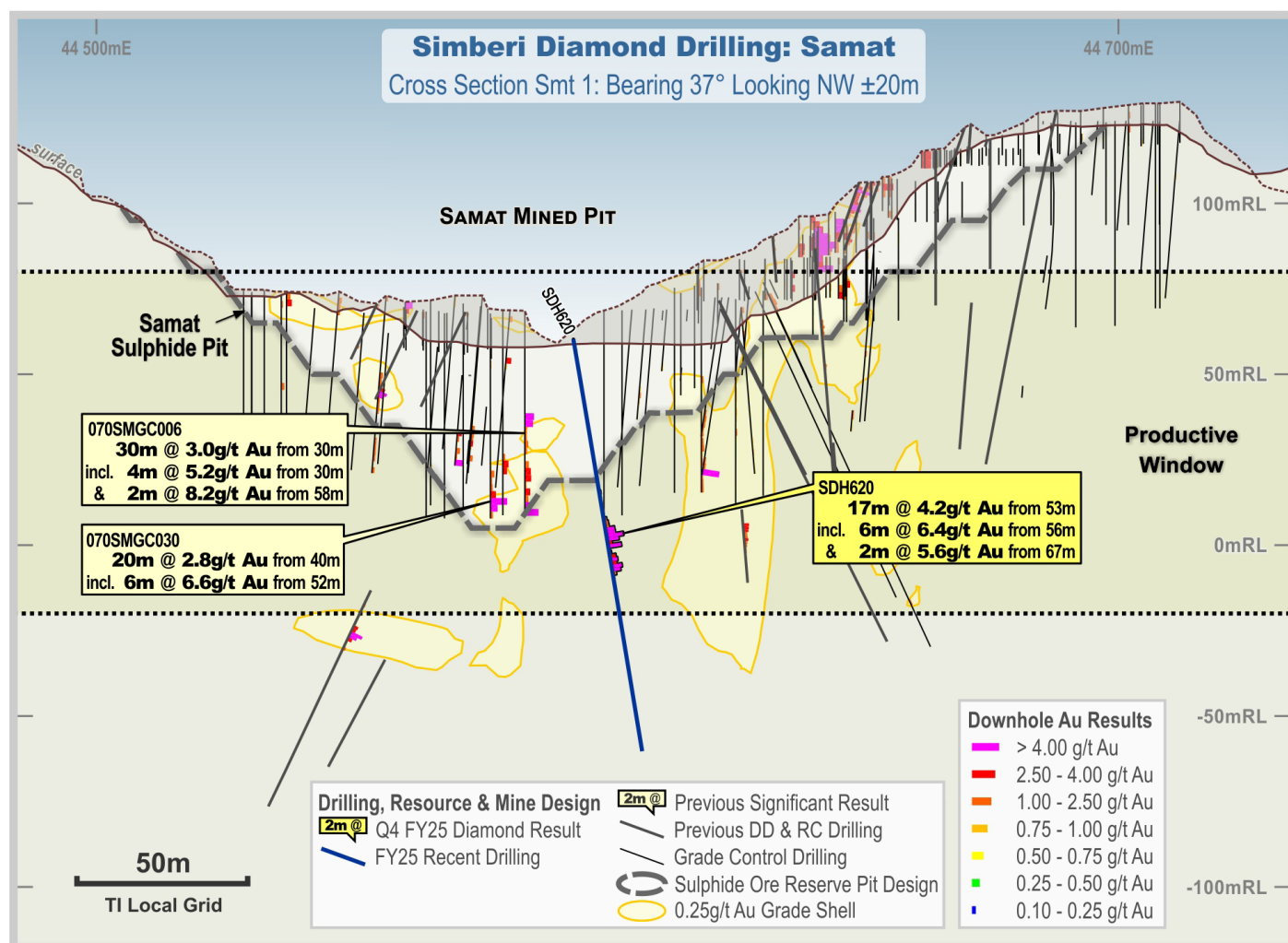


Figure 5. Drill Cross Section Smt 2 (View Looking Northwest), Samat, Simberi Island.

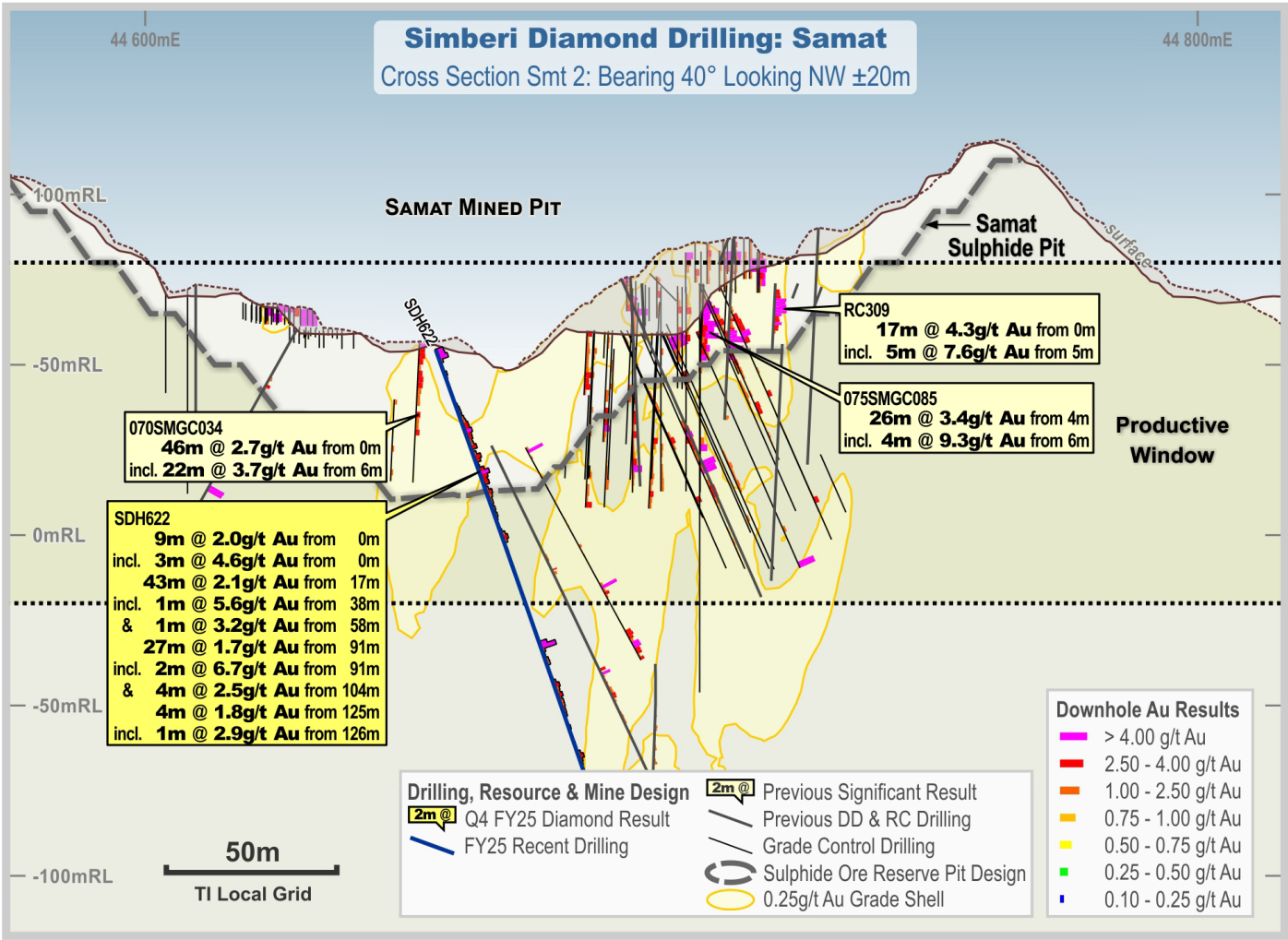




Figure 6. FY25 Completed Diamond Drilling, Sorowar – Pigiput Trend, Simberi Island.

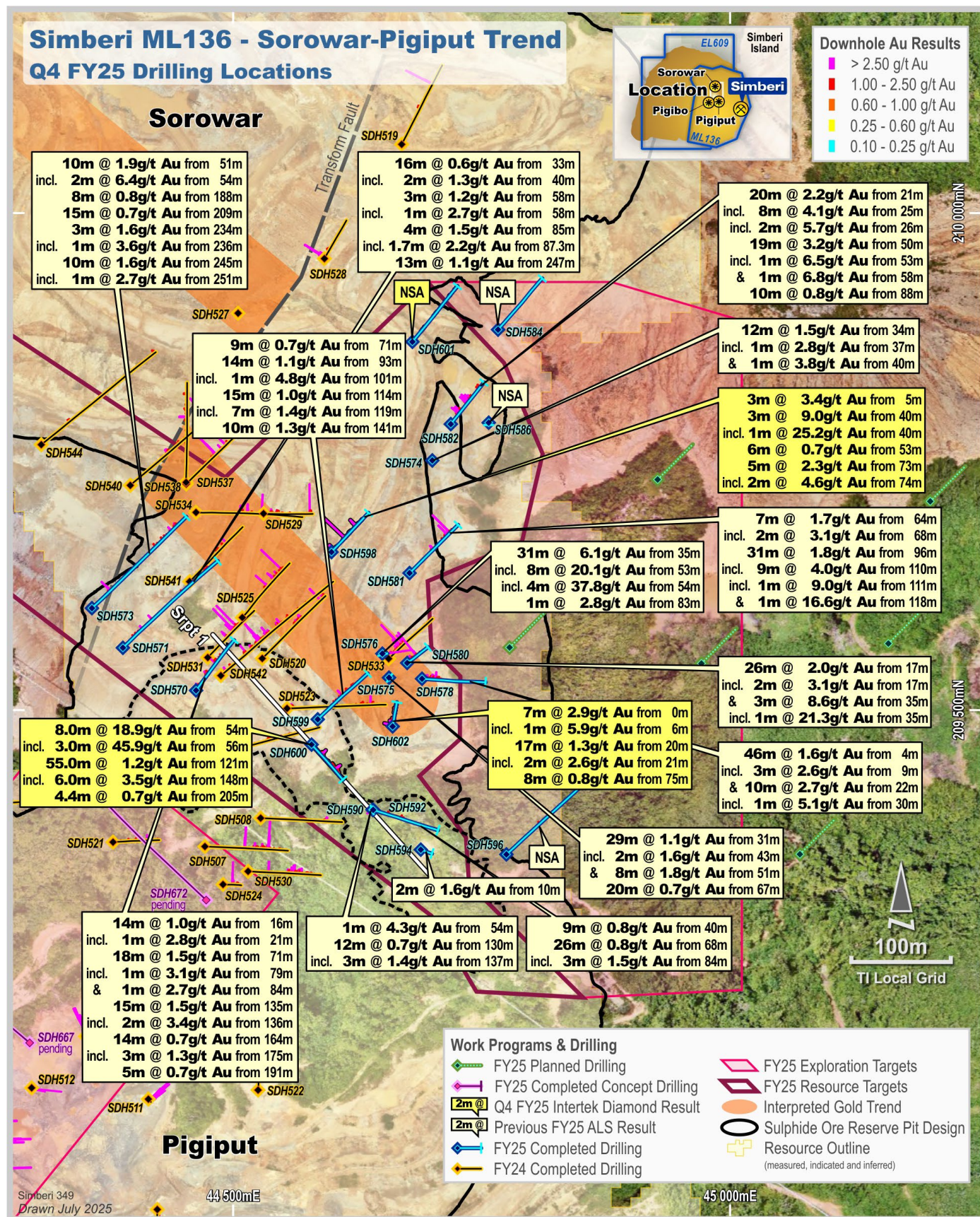




Figure 7. Drill Cross Section Srpt 1 (View Looking Northeast), Sorowar-Pigiput Trend, Simberi.

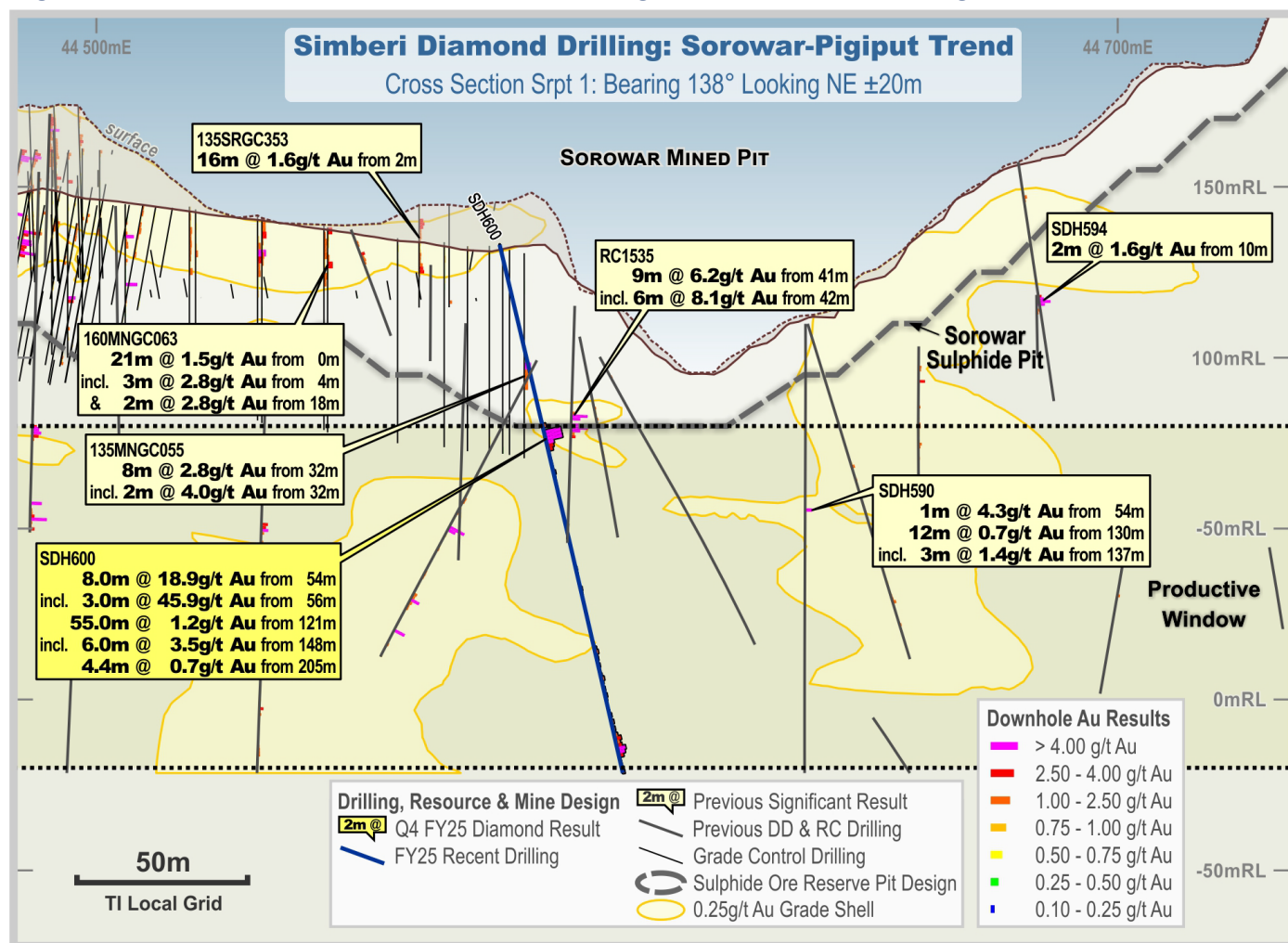
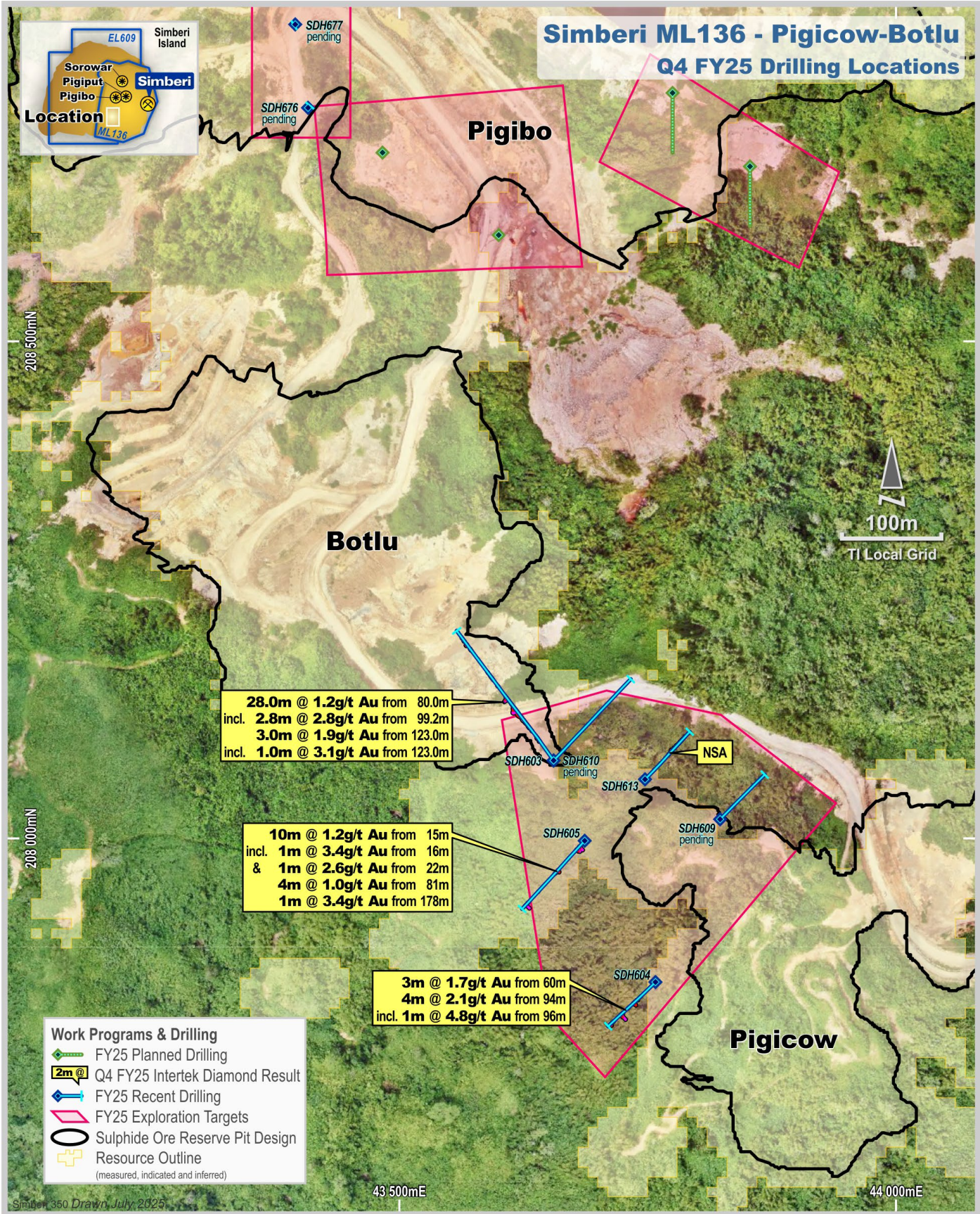




Figure 8. FY24 and FY25 Diamond Drilling at Pigicow-Botlu, Simberi Island.





**Simberi ML136 - Pigibo North**  
Q4 FY25 Drilling & Trench Locations

**Location**  
Simberi Island  
Sorowar  
Pigibo  
Pigiput  
ML136

**Downhole & Trench 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**

- FY25 Completed Concept Drilling
- Q4 FY25 Intertek Diamond Result
- Previous FY25 ALS Result
- FY25 Recent Drilling
- FY24 Completed Drilling
- Q2 FY25 Site Trench Result
- Q2 FY25 Trench Location
- FY25 Exploration Targets
- FY25 Resource Targets
- Sulphide Ore Reserve Pit Design
- Resource Outline (measured, indicated and inferred)

**Drilling Results:**

- 6m @ 1.2g/t Au from 50m**  
**5m @ 0.8g/t Au from 71m**
- 24m @ 1.5g/t Au from 0m**  
incl. **1m @ 2.6g/t Au from 9m**  
& **1m @ 3.1g/t Au from 16m**  
**2m @ 2.3g/t Au from 30m**  
**3m @ 2.0g/t Au from 67m**  
**60m @ 1.7g/t Au from 79m**  
incl. **1m @ 4.0g/t Au from 105m**  
& **1m @ 3.6g/t Au from 113m**  
& **5m @ 2.7g/t Au from 122m**  
& **1m @ 2.6g/t Au from 131m**  
& **2m @ 3.2g/t Au from 135m**
- 28m @ 1.0g/t Au from 0m**  
incl. **4m @ 1.4g/t Au from 112m**  
**1m @ 2.7g/t Au from 113m**  
**3m @ 0.8g/t Au from 148m**  
**10m @ 0.6g/t Au from 155m**
- 5m @ 0.7g/t Au from 134m**
- 12m @ 0.7g/t Au from 1m**  
incl. **4m @ 1.3g/t Au from 2m**  
**8m @ 1.5g/t Au from 35m**  
incl. **1m @ 2.8g/t Au from 39m**
- 12m @ 0.9g/t Au from 21m**  
incl. **4m @ 1.4g/t Au from 29m**  
incl. **1m @ 2.8g/t Au from 32m**  
**11m @ 0.9g/t Au from 86m**  
**2m @ 2.3g/t Au from 86m**
- 16.1m @ 2.5g/t Au from 77.9m**  
incl. **11.0m @ 3.5g/t Au from 82.0m**  
incl. **1.0m @ 9.2g/t Au from 82.0m**  
& **1.0m @ 12.8g/t Au from 89.0m**
- 17m @ 1.2g/t Au from 91m**  
**14m @ 1.0g/t Au from 121m**  
incl. **1m @ 2.8g/t Au from 131m**  
**3m @ 1.1g/t Au from 141m**
- 19m @ 1.7g/t Au from 164m**  
incl. **6m @ 2.8g/t Au from 165m**  
**7m @ 0.8g/t Au from 218m**
- 7.0m @ 0.8g/t Au from 15.0m**  
**15.6m @ 0.7g/t Au from 95.4m**  
incl. **3.0m @ 1.2g/t Au from 101.0m**  
& **4.0m @ 1.0g/t Au from 107.0m**
- 5m @ 1.5g/t Au from 23m**  
**1m @ 3.7g/t Au from 56m**
- 21m @ 0.6g/t Au from 192m**

**Drilling Locations:**

- SDH586
- SDH587
- SDH591
- SDH589
- SDH593
- SDH585
- SDH583
- SDH577
- SDH615
- SDH579
- SDH617 pending
- SDH597
- SDH569
- SDH562
- SDH555
- SDH546
- SDH553
- SDH536
- SDH532
- SDH517
- SDH588
- SDH608 pending
- SDH572
- SDH667 pending
- SDH515
- SDH669 pending

**Trench Locations:**

- SIMTR1056
- SIMTR1057 NSA
- SIMTR1054
- SIMTR1059
- SIMTR1055
- SIMTR1058 NSA
- SIMTR1060 NSA

**Other Labels:**

- Sorowar
- Pigibo North
- Pigiput
- Simberi
- Simberi Island
- ML136
- 100m
- 43 500mE
- 44 000mE
- 210 000mN
- 209 500mN
- TI Local Grid

Simberi 348  
Drawn July 2025



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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
<b>SDH598</b>	209,659	44,599	111.6	-61 / 044	113.5	TR	5.0	8.0	3.0	3.4
						TR	40.0	43.0	3.0	9.0
<i>including</i>						TR	40.0	41.0	1.0	25.2
						SU	53.0	59.0	6.0	0.7
						SU	73.0	78.0	5.0	2.3
<i>including</i>						SU	74.0	76.0	2.0	4.6
<b>SDH600</b>	209,465	44,579	133.1	-77 / 135	209.4	SU	54.0	62.0	8.0	18.9
<i>including</i>						SU	56.0	59.0	3.0	45.9
						SU	121.0	176.0	55.0	1.2
<i>including</i>						SU	148.0	154.0	6.0	3.5
						SU	205.0	209.4	4.4	0.7
<b>SDH601</b>	209,871	44,680	87.0	-61 / 039	152.3		No Significant Results			
<b>SDH602</b>	209,484	44,660	80.1	-76 / 0010	107.1	TR	0.0	7.0	7.0	2.9
<i>including</i>						TR	6.0	7.0	1.0	5.9
						SU	20.0	37.0	17.0	1.3
<i>including</i>						SU	21.0	23.0	2.0	2.6
						SU	75.0	83.0	8.0	0.8
<b>SDH603</b>	208,078	43,655	205.3	-51 / 324	262.8	SU	80.0	108.0	28.0	1.2
<i>including</i>						SU	99.2	102.0	2.8	2.8
						SU	123.0	126.0	3.0	1.9
<i>including</i>						SU	123.0	124.0	1.0	3.1
<b>SDH604</b>	207,855	43,758	145.9	-61 / 225	132.1	TR	60.0	63.0	3.0	1.7
						SU	94.0	98.0	4.0	2.1
<i>including</i>						SU	96.0	97.0	1.0	4.8
<b>SDH605</b>	207,998	43,686	172.0	-60 / 222	190.0	TR,SU	15.0	25.0	10.0	1.2
<i>including</i>						TR	16.0	17.0	1.0	3.4
<i>and</i>						SU	22.0	23.0	1.0	2.6
						SU	81.0	85.0	4.0	1.0
						SU	178.0	179.0	1.0	3.4
<b>SDH613</b>	208,059	43,747	189.1	-60 / 045	135.8		No Significant Results			
<b>SDH615</b>	209,609	43,916	169.5	-59 / 272	172.9	OX,TR	15	22.0	7.0	0.8
						SU	95.4	111.0	15.6	0.7
<i>including</i>						SU	101	104.0	3.0	1.2
<i>and</i>						SU	107.0	111.0	4.0	1.0
<b>SDH620</b>	207,354	44,615	60.3	-80 / 038	122.3	SU	53.0	70.0	17.0	4.2
<i>including</i>						SU	56.0	62.0	6.0	6.4
<i>and</i>						SU	67.0	69.0	2.0	5.6

NOTES:

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	g/t Au
<b>SDH622</b>	207,302	44,655	54.4	-70 / 040	144.4	OX,TR	0.0	9.0	9.0	2.0
<i>including</i>						OX,TR	0.0	3.0	3.0	4.6
						TR,SU	17.0	60.0	43.0	2.1
<i>including</i>						SU	38.0	39.0	1.0	5.6
<i>and</i>						SU	58.0	59.0	1.0	3.2
						SU	91.0	118.0	27.0	1.7
<i>including</i>						SU	91.0	93.0	2.0	6.7
<i>and</i>						SU	104.0	108.0	4.0	2.5
						SU	125.0	129.0	4.0	1.8
<i>including</i>						SU	126.0	127.0	1.0	2.9

NOTES:

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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Prior to 31 March 2025, 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.</li> <li>Since 1 April 2025, including for this ASX Release, half core samples were fully barged to the Intertek Laboratory in Lae (PNG) for sample preparation. A 250 g pulp sample is sub split into a geochem packet for analysis in Lae and a 35g sample is sub split, packaged, and air freighted for multi element analysis to Intertek's Perth Laboratory. Coarse and pulp residues are returned to Simberi for storage.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Diamond drilling recovery percentages were measured by comparing actual metres recovered per drill run versus metres recorded on the core blocks. Recoveries averaged &gt;98 % with increased core loss present in fault zones and zones of strong weathering/alteration.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>All diamond drill core was half cored with the lower or left half (looking downhole) submitted for sample preparation and analysis.</li> <li>Prior to 31 March 2025: <ul style="list-style-type: none"> <li>All drill samples were 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 &lt;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.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul> </li> <li>Since 1 April 2025, including for this ASX Release: <ul style="list-style-type: none"> <li>All drill samples were prepared at the at the Intertek laboratory in Lae, PNG.</li> <li>The entire half core underwent drying at &lt;105°C in an electric oven. Samples then pass through a 2-stage crushing process, firstly crushed to ~85% passing 10mm, followed by crushing in a fine crusher to 85% passing 2mm. 2 kg of the crushed material is rotary sub split and then pulverised in a LM5 pulveriser to 90% passing 75µm (Method PB04).</li> <li>For internal reference, St Barbara inserted two in house blanks at the start of the batch and then inserted OREAS standard certified reference material (1:20).</li> <li>A 250 g pulp sample is sub split into a geochem packet for analysis in Lae and a 35g sample is sub split, packaged, and air freighted for multi element analysis to Intertek's Perth Laboratory.</li> <li>Coarse and pulp residues are returned to Simberi for storage for re-assay if required.</li> </ul> </li> </ul>

Criteria	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>Prior to 31 March 2025: <ul style="list-style-type: none"> <li>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.</li> <li>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).</li> <li>Analyses at both the Site Lab and ALS comprised QC including 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.</li> </ul> </li> <li>Since 1 April 2025, including for this ASX Release: <ul style="list-style-type: none"> <li>Assays are received for pulps analysed for Au via 50 g Fire Assay / AAS Finish (Method FA50 / AA) at Intertek's Lae Laboratory. Multi-element analysis was completed via 1 g Aqua Regia Digest and OES and MS finish for 9 elements Ag, As, Cu, Fe, Mo, Pb, S, Sb, Zn (Method AR1 / OM) at Intertek's Perth Laboratory.</li> <li>St Barbara QAQC included the insertion of two in house blanks at the start of the batch and the insertion of OREAS standard certified reference material (1:20). St Barbara inserted OREAS standards (238b, 607c, 61h and 245) as matched to material type and grade approximation.</li> <li>Intertek Laboratory QAQC involved the insertion of Reagent Blanks and Certified Reference Materials (1:25) and analytical pulp duplicates were assayed (1:25).</li> <li>The Fire Assay gold analysis technique is considered a complete extraction method. The Aqua Regia digestion is considered a partial digestion technique that effectively dissolves metals not tightly bound within silicate structures.</li> </ul> </li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>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.</li> <li>No adjustments to assay data have been made.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Resource definition drilling to define Indicated Mineral Resources is completed on a nominal 30m x 40m pattern. This spacing is adequate to establish both geological and grade continuity for the Mineral Resource and Ore Reserve procedures.</li> <li>Sampling is typically based on one-metre intervals with no compositing applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>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.</li> <li>In the Sorowar-Pigiput Trend area broad 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. Locally, several northeast striking, steeply dipping high-grade zones are being recognised in recent drilling and outcrop. In this area the optimum drill orientation is to drill to the northwest.</li> <li>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.</li> <li>In the Pigicow-Botlu area mineralisation is interpreted to strike northwest-southeast and dip sub-vertically. In this area the optimum drill orientation is to drill to the northeast or southwest.</li> <li>In the Samat area broad mineralisation is interpreted to strike northeast-southwest and dip moderately to the southwest. In this area the optimum drill orientation is to drill to the southeast.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Prior to 31 March 2025: <ul style="list-style-type: none"> <li>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.</li> </ul> </li> <li>Since 1 April 2025, including for this ASX Release: <ul style="list-style-type: none"> <li>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 packaged on site. The samples sent to Intertek Lae are stored in locked and guarded storage facilities until receipted at the Laboratory.</li> </ul> </li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>No audits or reviews of sampling protocols have been completed.</li> </ul>

## Drilling: Section 2 Reporting of Exploration Results – Simberi ML136

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>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.</li> <li>St Barbara has undertaken exploration on the tenements since acquisition from Allied Gold in September 2012.</li> <li>St Barbara (through its wholly owned PNG subsidiary Nord Australer Nominees (PNG) Ltd) had an Option and Farm-In Agreement with Newcrest PNG Exploration Limited (a wholly owned subsidiary of Newcrest Mining Limited) between 2016 and 2019. During this time, exploration was conducted for Cu-Au porphyry deposits on tenements EL609 and EL2462 covering Tatau and Big Tabar Islands.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The Tabar group of islands is located in the New Ireland Province, Papua New Guinea. The Tabar-Feni island chain comprises a series of Pliocene to Recent volcanoes that occupy a fore-arc position in the New Ireland Basin, part of the Bismarck archipelago. Volcanism in the area began about 3.7 Ma ago, coeval with the initiation of back-arc spreading in the Manus basin. Volcanism in the Bismarck archipelago is dominantly calc-alkaline to high K calc-alkaline generated as a result of stalled subduction and partial melting of the Pacific plate beneath the Indo-Australian plate along the Manus-Kilinau trench.</li> <li>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 infills, 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 <math>\pm</math> 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.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>All results have been reported.</li> <li>No top-cutting has been applied.</li> <li>No assumptions on metal equivalents have been made.</li> <li>Intercepts from the ALS (Townsville) and Intertek (Lae / Perth) laboratories 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 <math>\geq 2.5</math> g/t Au and <math>\geq 1</math> m down hole.</li> <li>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.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>Down hole length was reported for all holes.</li> <li>Simberi lodes display high variability in orientation and complex geometries because of the interplay of veining, brecciation intensity, host lithology and oxidation fronts.</li> <li>Two of the resource definition drill holes at Sorowar-Pigiput trend (SDH598 and SDH601) are drilled toward the northeast (between azimuth 034° and 044°) roughly perpendicular to the interpreted northwest strike of the Sorowar - Pigiput trend mineralisation and at angles between 61° and 76° from horizontal. SDH602 is drilled at 010° azimuth resulting in exaggeration of true width by 1.1 times. A single resource definition drill hole at Sorowar-Pigiput trend (SDH600) was drilled toward the southeast at azimuth 135° at an angle of 77° from horizontal targeting some localised northeast striking, northwest dipping mineralisation observed in outcrop with mineralisation potentially exaggerated by at least 1.1 times true width. The geometry of mineralisation is poorly constrained and the amount of exaggeration is hard to define.</li> <li>Sterilisation hole SDH615 at Pigibo North was drilled towards the (azimuth 272°) and one hole (SDH593) was drilled towards the north-northwest (azimuth 347°) at an angle of 59° from horizontal. This is to test a broad area where mineralisation with a potential arcuate north-south strike 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.</li> <li>Two resource definition drill holes at Samat (SDH620 and SDH622) are drilled toward the northeast (between azimuth 038° and 040°) at angles between 70° and 80° from horizontal. In the Samat area broad mineralisation is not as well understood but currently interpreted to strike northeast-southwest and dip moderately to the northwest. As a result, the holes were not drilled in an optimum drill orientation possibly being along strike although the geometry of mineralisation is poorly constrained and the amount of exaggeration is hard to define. The drill holes infill a gap in and extend below the grade control drilling.</li> <li>Three of the exploration drill holes at Pigicow-Botlu (SDH604, SDH605 and SDH613) were drilled either northeast (azimuth 045°) or southwest (azimuth 222° to 225°) roughly, perpendicular to the interpreted northwest strike to mineralisation in the area at angles between 60° and 61° from horizontal. A single exploration drill hole at Pigicow-Botlu (SDH603) was drilled toward the northwest at azimuth 324° at an angle of 51° from horizontal targeting some localised mineralisation in grade control that has poorly understood orientation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Included in the body of the report.</li> </ul>

Criteria	Commentary
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Details of all holes material to Exploration Results are reported in intercept tables. This report covers eleven new holes (SDH598, SDH600 to SDH605, SDH613, SDH615, SDH620 and SDH622) of a sixty one hole, 10,463.5 metre FY25 resource definition, exploration and sterilisation diamond drilling program. Assay results from four Sorowar-Pigiput Trend resource definition / exploration holes, four Pigicow-Botlu exploration holes, one Pigibo North exploration / sterilisation hole and 2 Samat resource definition holes are reported in Table 1.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Included in the body of the report.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Included in the body of the report.</li> <li>Assay results are pending for 20 diamond drill holes for 3,376.3 metres, including ten from Samat (SDH623, SDH625, SDH628, SDH630, SDH631, SDH656, SDH658, SDH660, SDH662, SDH665), two from Pigibo North (SDH607 to SDH608), two from Pigicow-Botlu (SDH609 to SDH610), three from Pigiput Northeast Trend (SDH667, SDH669, SDH672) and two from Pigibo-Botlu (SDH676 to SDH677).</li> <li>Further diamond drilling will be conducted once all the assay results have been returned from the programs described above.</li> </ul>