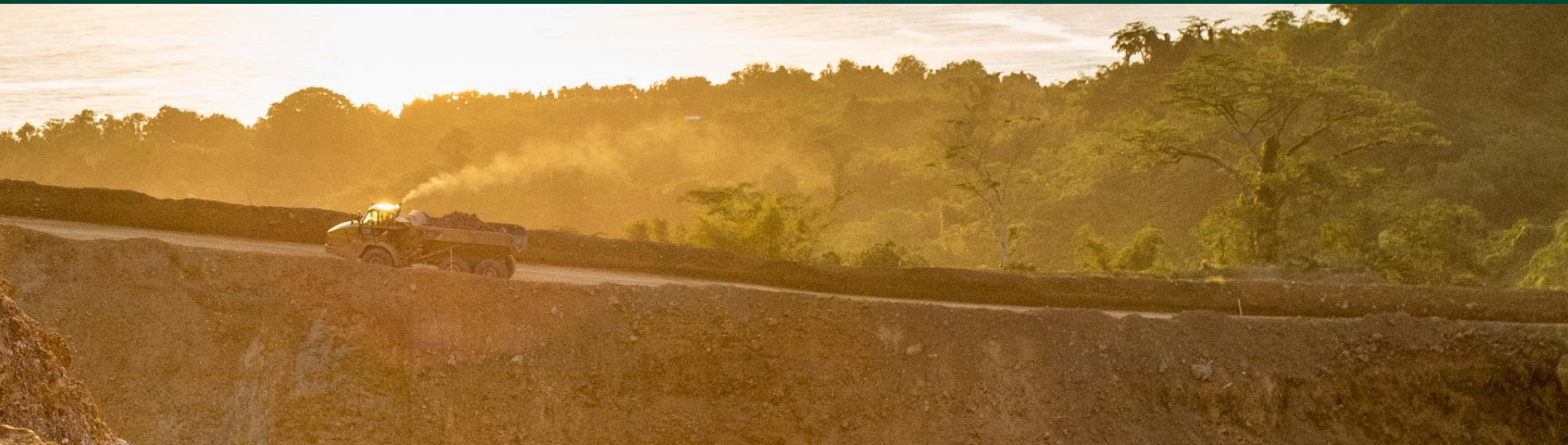




Simberi Operations

Executive General Manager: Randy McMahon
December 2023



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- The Company estimates its reserves and resources in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves 2012 Edition (“JORC Code”), which governs such disclosures by companies listed on the Australian Securities Exchange.



Acknowledgement of country

I acknowledge the **Gadigal People** of the **Eora Nation** whose land on which this conference is taking place.

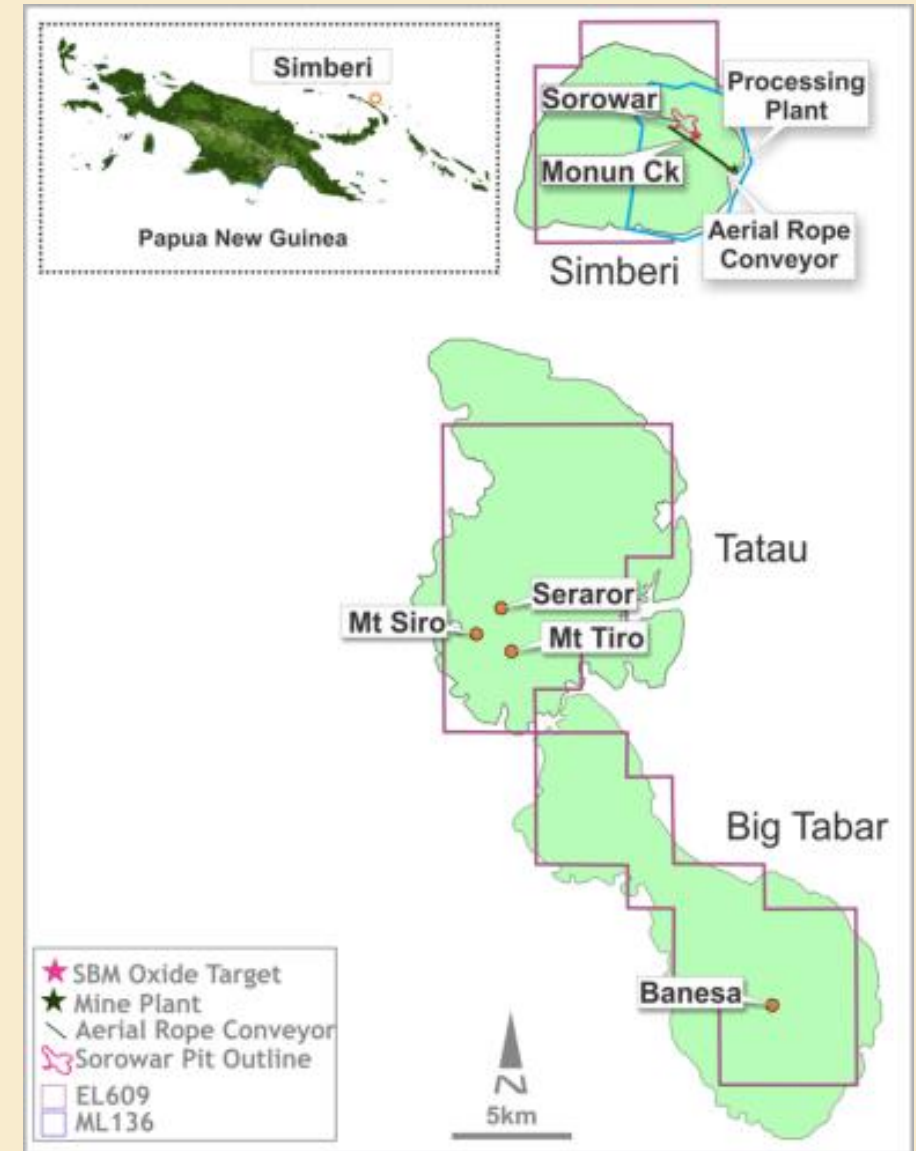
I also acknowledge the landowners of **Simberi, Tatau** and **Big Tabar** in Papua New Guinea where we operate.

And I pay respect to all **Maimais** and **Clan Leaders** of the **Tabar islands** - past, present, and emerging.




Location/Background


- Operations commenced on Simberi in 2008.
- In 2012, St Barbara expanded into Papua New Guinea, with the acquisition of Allied Gold Mining Plc. taking over the Simberi operation.
- The Simberi operation is now owned by Simberi Gold Company Limited (SGCL), a subsidiary of St Barbara Limited.
- Simberi Operations consists of an open cut mine on the northernmost island in the Tabar group of islands (TGI) in the province of New Ireland in Papua New Guinea.
- June 2022 a decision was made to defer mine expansion investment decision while the operation underwent a Strategic Review
- **December 2022 Strategic Review completed with a decision to retain the asset.**



St Barbara's New Strategic Focus

- June 30th, 2023, St. Barbara completed sale of its Leonora Assets to Genesis Minerals Limited.
- New strategic focus on delivering full value potential from its overseas assets in Simberi and in Nova Scotia, Canada.
- **St Barbara had a cash balance of AUD\$236 million as of 30 September 2023 with no debt.**
- Simberi development potential is a key strategic focus for St Barbara.
- Simberi has a large mineral inventory of 4.0Moz in Mineral Resources including 2.0Moz in Ore Reserves.
- Extension of the current mine schedule of the oxide life into FY26 has allowed a less urgent process on expansion decisions.

| Simberi operations, Papua New Guinea | |
|---|---|
| Simberi Operations | |
| Ore Reserves ¹ | 34.8Mt @ 1.8 g/t for 2.0Moz Au |
| Mineral Resource ¹ | 83.1Mt @ 1.5 g/t for 4.0Moz Au |
| | <ul style="list-style-type: none"> • Extended oxide production to FY26 • Resource definition drilling and study work underway |
|  | |

| Atlantic operations, Nova Scotia | |
|---|---|
| Atlantic Operations | |
| Ore Reserves ¹ | 46.0Mt @ 1.0 g/t for 1.5Moz Au |
| Mineral Resource ¹ | 57.0Mt @ 1.1 g/t for 1.9Moz Au |
| | <ul style="list-style-type: none"> • 15-Mile PFS results announced • Update Mineral Resource and Ore Reserve for Beaver Dam |
|  | |



Safety Always – the approach

1 **Safety Always for Leaders** - Involve site leadership team through to frontline supervisors



2 **Employee Engagement** - Collect stories from employees on events and near misses



We're here today



3 **Employee Innovation** - Opinion leaders develop Care Behaviours and influence strategies

4 **Personal Ownership** - Employees “sign up” to care behaviours and action plan

5 **Operational Discipline** - Work areas execute project plan to enable and motivate care behaviours

- Make safety personal through Safety Always and **C.A.R.E** (Control – Action - Respect – Engage)
- Replaced culture of “**because the boss says so**” with “**because my ‘why’ says so**”
- **Engaging Opinion leaders, unofficial leadership**
- **Psychologically Safe Simberi!**
- **Socially responsible Simberi!**



Empowered people



- ~1200 employees (including contractors)
- 716 SGCL employees:
 - 17% women
 - 53% Tabar Islanders
 - 3% expats
- Committed to:
 - diversity
 - coaching and mentoring
 - succession planning
 - developing local talent pool
 - nationalisation



Environmental Management

Compliance monitoring/Conservation and rehabilitation



- DSTP Pipeline ROV and physical inspection
- Nearshore sediment sampling
- Waste dump monitoring
- Sediment Interruption Project
- Coral propagation
- Mangrove rehabilitation

Building stronger communities



Simberi Infrastructure Projects

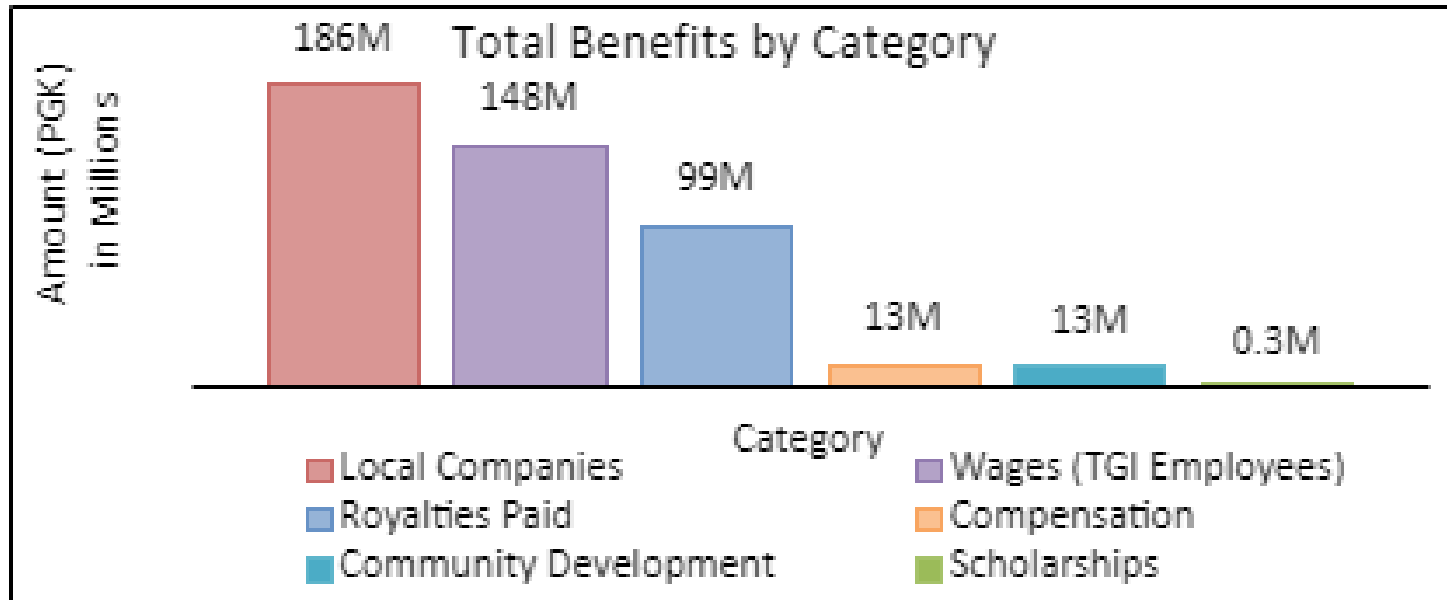
- Bodar Sports Field
- Market
- Simberi Ring road upgrades
- Classrooms built at Munun, Bekou and a third one currently in progress



Building stronger communities

Total community benefits 2015 – FY24 Q1

K459 million



- **K148 million** – wages for Tabar employees
- **K186 million** – Local contractors
- **K99 million** – Royalties
- **K13 million** – Community development
- **K13 million** – Compensation
- **K0.3 million** – Tabar scholarships



Building stronger communities



Elizabeth Belas Graduating
October 2022



Elizabeth Belas, SGCL
employee, in the field 2023

SGCL supporting education in the TGI for a better future.

- SGCL Scholarship programs
- Simberi provided Flexible Open and Distance Education (FODE) - local participation has risen 358% in two years!
- First FODE graduate going on to University

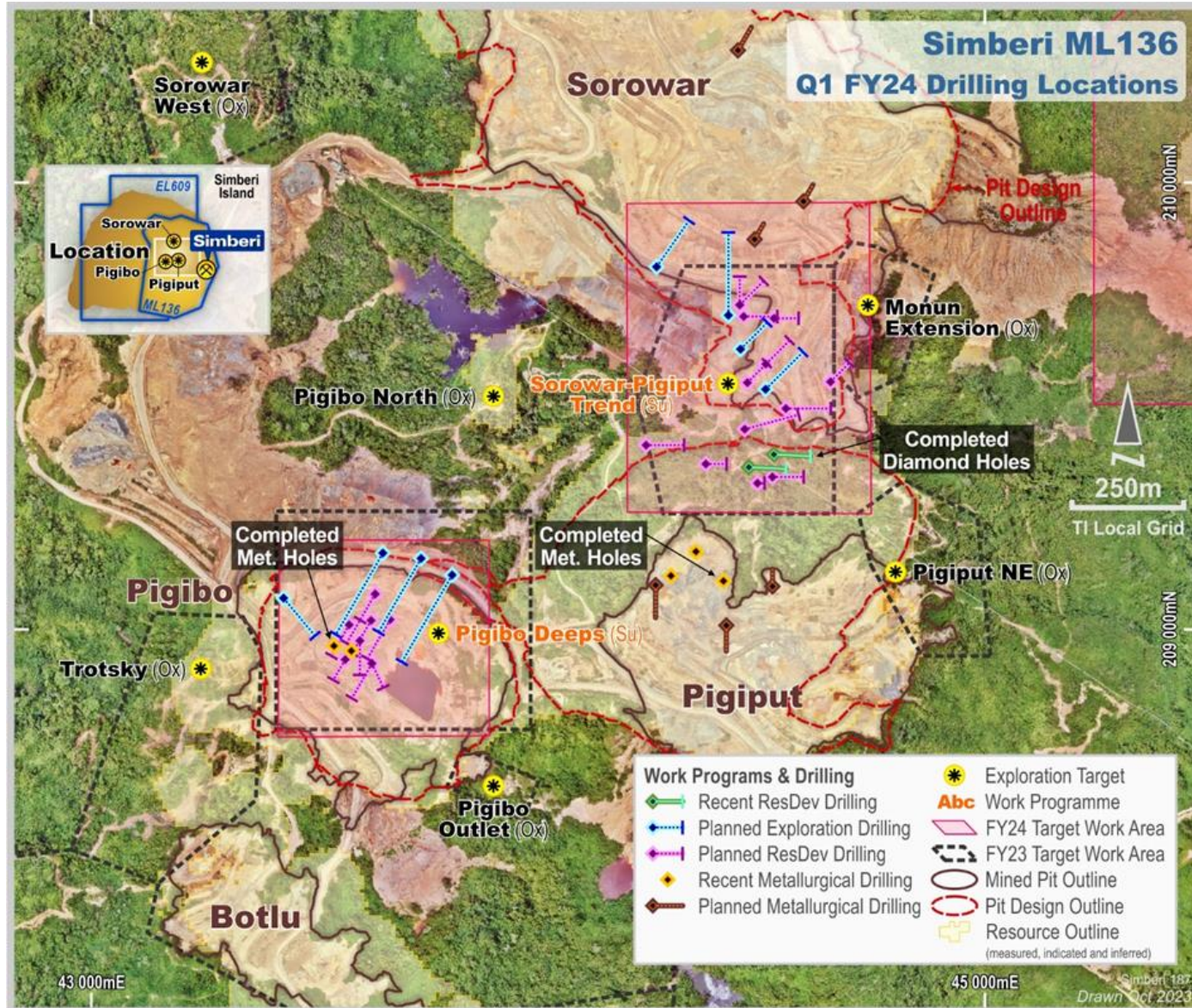


Cocoa Project – Sustainable Development

- Cocoa Farmer Cooperative formed in 2023 with farmers from TGI
- MoA signed between SGCL and Cocoa Board of Papua New Guinea (CBPNG)
- World Bank PNG Agriculture Commercialization and Diversification Project (PACD) partnership established between:
 - Simberi Gold Mine Limited (SGCL) as lead partner
 - Cocoa Board of Papua New Guinea (CBPNG)
 - New Ireland Province Department of Primary Industries,
 - Bank South Pacific (BSP)
 - Niu Ailan Savings and Loans Society with SGCL being the lead partner.
- Application for project funding progressing through PACD funding



FY24 Exploration Plan



- This programme is focussed on infill and extensions to the sulphide resource at Pigiput, Sorowar and Pigibo.
- The programme is targeting the conversion of Inferred resources outside of the current Ore Reserve pit designs, with the intention to add additional Ore Reserves to the Simberi Expansion Project.
- In addition, the metallurgical drilling will provide samples for test work on grinding, gravity recoverable gold, flotation and leach test work, rheology, concentrate analysis, mineralogical analysis and tailings geochemistry.
- The programme comprises of 24 holes for 4,415 metres of resource development drilling, eight holes for 2,795 metres of exploration drilling, and 12 metallurgical holes for 1,706 metres.



Landowner Association

Landowner Association has had a difficult period

- Court requested to decide legitimate representatives between factions
- Legal compliance, management and governance challenges
- Royalty account frozen by MRA since 2017
- Multiple matters currently before the Courts

SGCL facilitating external assistance to Association and related commercial umbrella company to:

- Provide training for Directors on roles and responsibilities
- Fund access to external advisors to support compliance and AGM/Audit initiatives
- Provide direction to Association to restore relationship with MRA and facilitate the MOA process

SGCL has taken on some of the Association's community commitments

- Of those initiatives, SGCL is paying 100% of planned 50/50 joint infrastructure projects Funding Association's financial commitments to community health and education



Simberi Oxide Mine Life

- The 2022 Strategic Review successfully identified that there was sufficient oxide feed at Simberi to support existing operations until at least the end of FY26
- St Barbara is undertaking significant refurbishment of the plant and upgrading of the mine fleet resulting increased sustaining capital investment in FY24 compared to previous years.
- Sustaining Capital Guidance for FY24 for Simberi is A\$15-20M
- Furthermore, investment in Resource Development drilling, metallurgical sample drilling and test work and associated studies on the Simberi Expansion is anticipated to be between A\$10 and A\$13 million

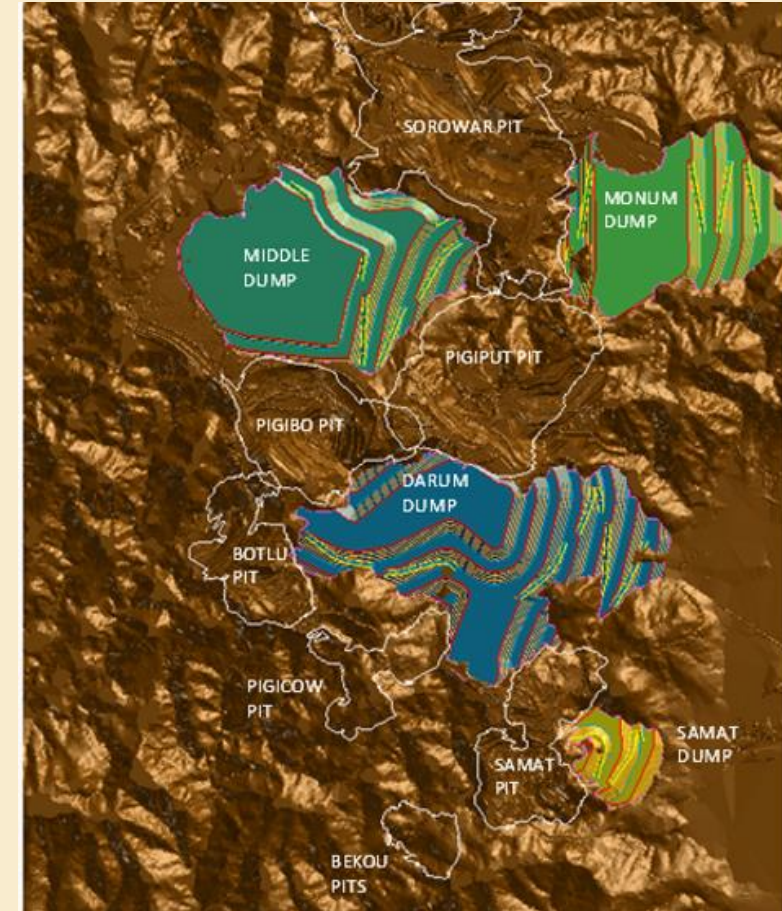


Mine Expansion Project

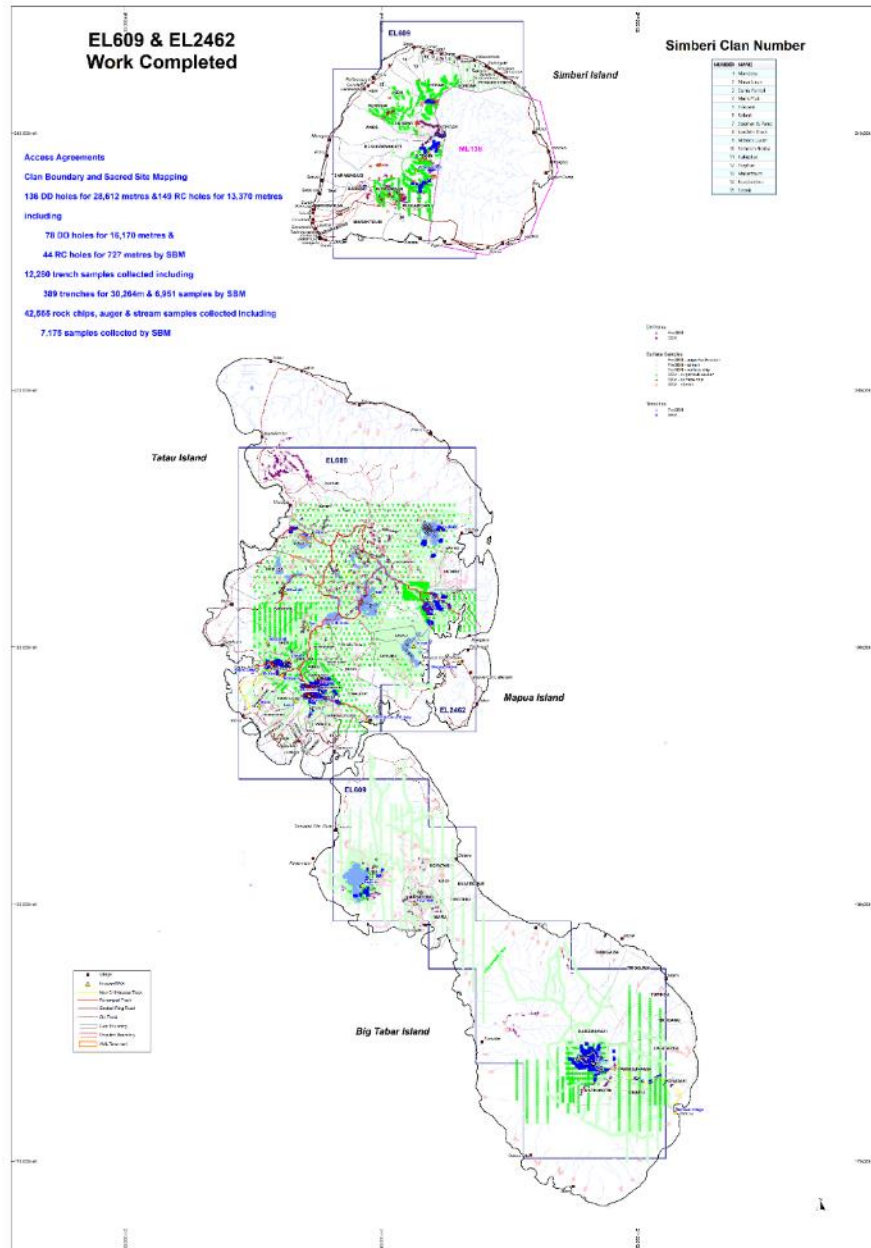
The Simberi Expansion Project is expected to extend Simberi's life by more than ten years.

This mine extension will see more work in the following areas:

- Drilling to further extend and increase Sulphide reserves
- Continuing the Sulphide expansion study
 - *Work commenced on parallel study updates for a revised mining fleet options assessment, updated geotechnical parameters and on a revisit to processing scale and concentrate treatment options.*
- Simberi currently has a Conditional Environmental Permit for the mining of Sulphides
 - *Work is being undertaken to complete the management plans and designs to complete and satisfy these conditions*
- Revisit development decision on Simberi Expansion by FY26
- Renewal of Mining Permit to be sought before expiry (current permit expires 2028)



Exploration Activity over last 10 years



Over the last 10 years under St Barbara ownership we have achieved:

- 122 drill holes for 16,900 metres,
- 389 trenches over a 30 kilometre distance, collecting just under 7,000 samples,
- Over 7,000 surface samples,
- In total that amounts to collecting and analysing 31,000 samples,
- Wherever we have worked we have completed Clan boundary and sacred site mapping first.
- The company has spent K75 million on exploration during this time.
- This map shows that the work has been conducted across all 3 Islands.



Summary

St. Barbara, a responsible developer, has a clear strategy to advance Simberi to the next phase for the benefit of all stakeholders



- Simberi Operations' steady performance in safety / environment / production since the restart Feb. 2022
- Oxide mine life extended to FY26
- Extensive drilling campaign underway to grow the Mineral Resource and Ore Reserve
- Work progressing on Expansion Project and license renewal
- Working with landowners to improve governance and increase business spin off benefits





St Barbara