For personal use only

PORT GREGORY GARNET PROJECT PRE-FEASIBILITY STUDY

Post-tax NPV of A$322.8 million, an IRR of 47.6% and a maiden Ore Reserve

Heavy Minerals Limited (ASX: HVY) (Heavy, HVY or the Company) is pleased to announce the results of the Pre-Feasibility Study (PFS or the Study) for its 100%-owned Port Gregory Garnet Project in Western Australia. The Study confirms a conventional, low-capital and highly profitable coarse alluvial almandine garnet operation with a 24-year mine life and delivers a maiden Ore Reserve for the Project.

Key highlights

- **Post-tax NPV of A$322.8 million** (real, 8% discount rate) and an **internal rate of return of 47.6%**.
- **NPV-to-capital ratio of 2.64x** on development capital of **A$122.1 million**, including owner's costs.
- **Maiden Ore Reserve of 85.5 Mt at 4.43% THM** for **3.3 Mt of contained garnet**, classified as Probable.
- **24-year mine life generating life-of-mine EBITDA of A$1.34 billion from gross revenue of A$3.07 billion.**
- **Peak funding requirement of approximately A$89.5 million, with payback in approximately 3.1 years from first production - that is, cumulative cash flow turns positive during year four.**
- **Conventional alluvial operation** - dry, free-digging mining with no drilling and blasting, no crushing or grinding, and no permanent tailings storage facility.
- Produces coarse 20/40 and 30/60 alluvial almandine garnet, the grades the Company assesses to be in shortest supply, averaging approximately 143,000 tonnes per annum over the first nine years and 122,000 tonnes per annum across the life of mine, with the coarse 20/40 and 30/60 grades making up approximately 64% of total garnet production.
- **LNG, solar and battery hybrid power** selected following competitive tender, with a projected **renewable energy fraction of approximately 34%** in year one.
- The Project is **most sensitive to product price and least sensitive to capital cost** and remains strongly value-positive across the full range tested (Table 1).

Key results

Table 1: Key results

Measure	Result
Post-tax NPV (real, 8% discount rate)	A$322.8M
Internal rate of return	47.6%
NPV : development capital	2.64x
Development capital (incl. owner's costs)	A$122.1M
Sustaining capital (life of mine)	A$2.3M
Peak funding requirement	~A$89.5M
Payback	~3.1 years
Mine life	24 years
Plant production rate	3.63 Mtpa
Gross revenue (life of mine)	A$3,067.3M
Net revenue, post ex-mine logistics, pre-royalty	A$2,502.9M
Operating cost (life of mine)	A$1,529.1M
EBITDA (life of mine)	**A$1,343.0M**
Earnings after tax (life of mine)	A$854.6M
Unit operating cost	A$498.60 / t product
Unit cash margin	A$14.81 / t ROM

Figures are stated on a post-tax, real basis at an 8% discount rate and reflect the Company's 100% interest. Source: Port Gregory PFS financial model, PGR142 (9 July 2026).

The production target and forecast financial information in this announcement are underpinned by the Ore Reserve and, to a lesser extent, by Inferred Mineral Resources representing approximately 5.7% of mill feed. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that the production target will be realised. Refer to the Material Assumptions section of this announcement.

Commentary from Executive Chairman, Mr Adam Schofield

"The Pre-Feasibility Study confirms what we have believed about Port Gregory since prior to listing HVY - this is a high-margin, long-life garnet project that stands among the best undeveloped assets in the sector. A post-tax NPV of A$322.8 million and an internal rate of return of 47.6%, on a modest capital base, gives us a clear and fundable pathway to development.

As Shareholders are aware this Study has taken longer to reach them than we first indicated, and I want to be straightforward about why. We made a deliberate decision not to publish a headline and fill in the detail later. What is being released today is a complete Study - some 700 pages across the report and its annexures - carrying a maiden Ore Reserve, a full Mineral Resource estimate, bulk metallurgical test work on real product, a tendered power solution, an independent assessment of United States pricing, and a financial model built from first principles rather than benchmarks. Work of that depth cannot be rushed without cutting exactly the corners a Pre-Feasibility Study exists to close out.

Just as importantly, the time was not spent waiting. We ran the workstreams that normally follow a PFS alongside it instead of after it. Approvals planning and mining-lease application work, the product-qualification and distribution discussions, our funding preparation and our second development front at Kanmantoo have all advanced in parallel over the same period. The practical result is that the Company emerges from this Study further down the path to development than the Study alone would suggest. Additionally, we have used novel and ultimately extremely successful funding pathways in both our Royalties and our ATM facility with the net outcome being a company at Definitive Feasibility stage with a very low number of shares on issue which is beneficial to all shareholders at this critical next stage in the company's development where we are potentially seeking funding to develop our projects with Kanmantoo at the forefront initially.

In respect to the PFS what gives the board the most confidence is not the headline number; it is what sits underneath it. This is a free-digging deposit with no drilling and blasting, no crushing or grinding and no permanent tailings storage facility, feeding a conventional flowsheet proven on our own bulk sample rather than assumed. It sits in an established mining precinct with a workforce and a port already in place. The Board is now advancing the work needed to move toward a Definitive Feasibility Study and a final investment decision. Additionally, within the current quarter the company expects to be able to release details of its FEL3 study being undertaken for the Kanmantoo Hardrock Industrial Garnet project and provide further information about potential funding and potential distribution partners"

Adam Schofield, Executive Chairman

For personal use only

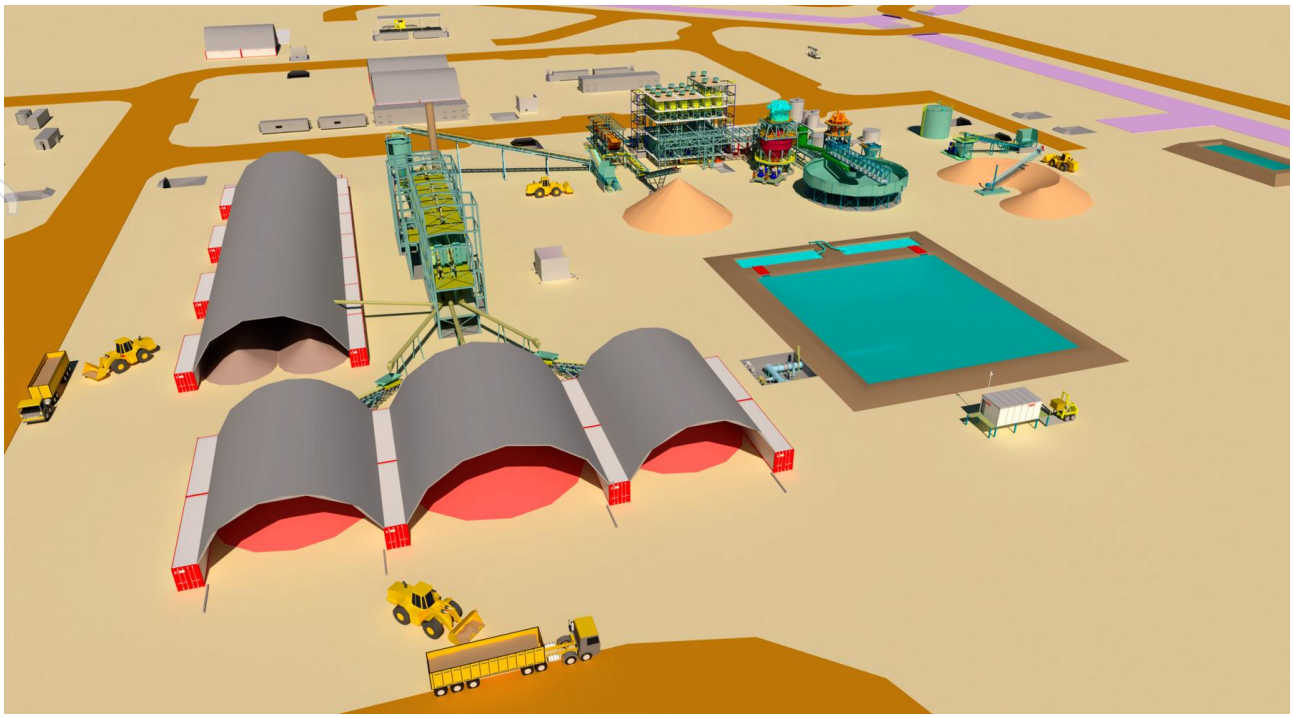

Figure 1: Port Gregory - site and plant layout, 3D visualisation (IHC Mining)

The Project

The Port Gregory Garnet Project is 100% owned by Heavy Minerals Limited and lies approximately 105 kilometers north of Geraldton on the Western Australian coast, adjacent to established garnet operations (Figure 1). The deposit is a shallow, free-digging coastal dune and strandline system requiring no drilling and blasting and no crushing or grinding. The process route produces a coarse alluvial almandine garnet product suited to the abrasive blasting and waterjet cutting markets, together with an ilmenite by-product (Figure 2).

For personal use only

For personal use only

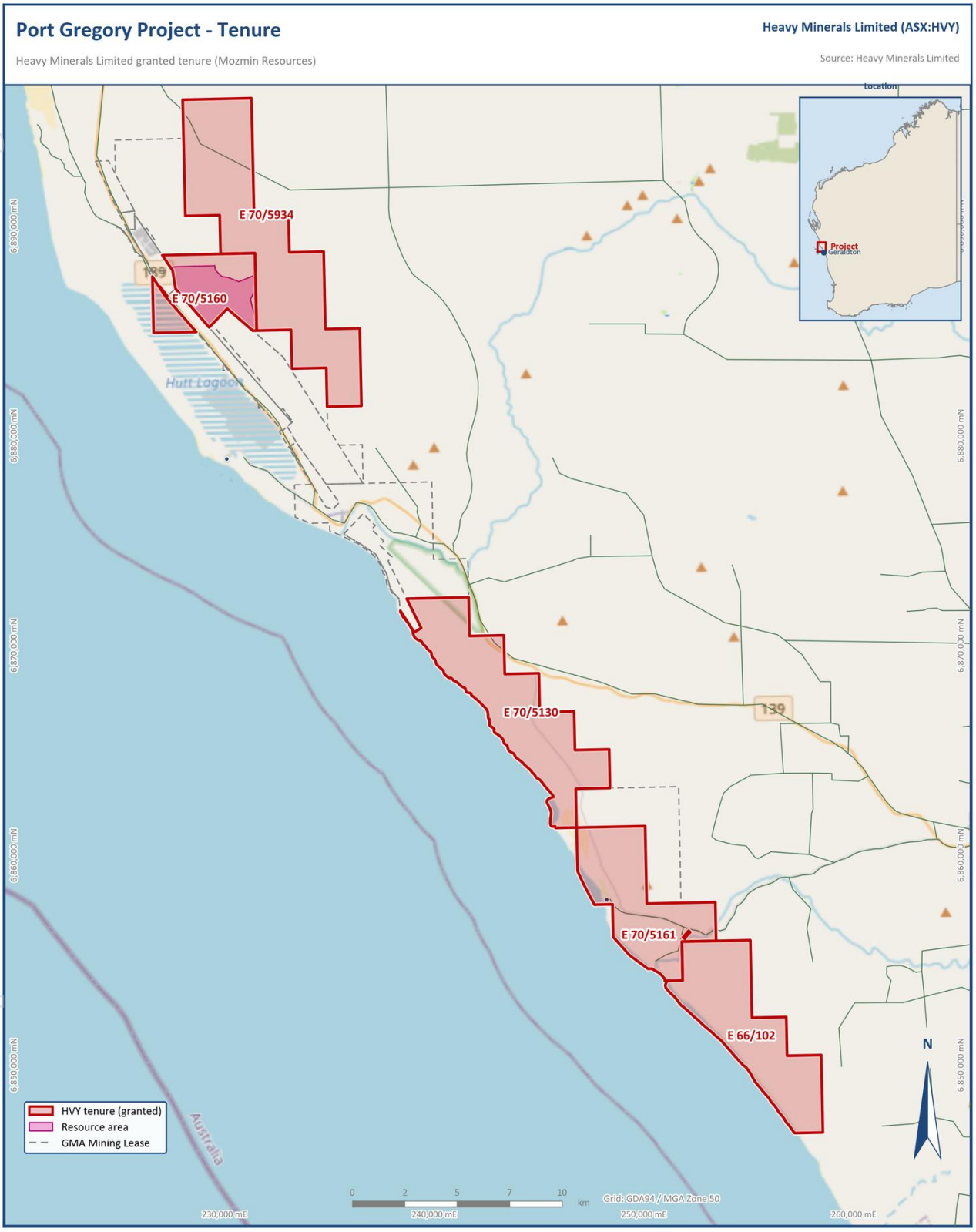

Figure 2: Port Gregory Project - granted tenure and location

For personal use only

Tenure and land access

The Study area sits within granted exploration license **E70/5160**, one of five granted tenements the Company holds over the Port Gregory strandline. The Company is in the process of **lodging a Mining Lease application** over the Study area, and a further application for a miscellaneous license covering the proposed borefield will be submitted following hydrogeological testing planned for the first quarter of 2027. The Project lies in an established mining precinct adjacent to operating garnet operations, and no part of the Study depends on tenure the Company does not hold or has not applied for.

Geology and mineralisation

Port Gregory is a coastal dune and strandline heavy-mineral sand deposit on the Gascoyne Platform. Mineralisation occurs in a sequence of dunal and fluvial marine sediments deposited along successive palaeo-shorelines, and is hosted in laterally extensive, generally continuous accumulations that begin at or very near surface. The deposit has been separated into geological domains and wireframed on that basis, with an eastern and a western drilling population distinguished during estimation.

The characteristic that distinguishes Port Gregory commercially is not grade alone but **assemblage**. The heavy-mineral fraction is approximately **89% garnet**, against roughly 4% ilmenite, 2% rutile and 1% zircon. Most heavy-mineral sand deposits are titanium-and-zircon operations that produce garnet, if at all, as an incidental stream. Port Gregory is the reverse: it is a garnet deposit with minor titanium and zircon credits, which is why the flowsheet, the product suite and the marketing are built around garnet rather than around a titanium feedstock.

Mineralisation remains open to the north and south within the Company's granted tenure, and the structural setting is simple - there is no faulting or folding of a kind that would complicate grade continuity or mine planning.

Drilling and sampling

The Mineral Resource is supported by **306 air-core drill holes for 10,174 metres and 9,614 samples**, completed over three campaigns between 2021 and 2023. Air core is the industry-standard technique for mineral sand deposits of this type: the twin-tube configuration recovers a clean sample from the face of the hole, and drilling was conducted dry, with no groundwater encountered (Table 2).

Table 2: Drilling summary by year

Year	Holes	Min depth (m)	Max depth (m)	Average depth (m)	Metres	Samples
2021	75	9	86	42	2,690	2,137
2022	208	10	60	35	6,758	6,751
2023	23	13	36	32	726	726
Total	**306**	-	-	-	**10,174**	**9,614**

Excluding twin holes. Source: Port Gregory PFS, summary of collars, metres and samples by year.

Sample preparation followed a consistent protocol: each sample was homogenised in the bag, a sub-sample of approximately 70 g scooped for visual THM estimation and logging, and samples despatched to Diamantina Laboratories for assay. There, samples were dried, split to a 250 g sub-sample, wet screened at 1 mm and 45 µm to remove oversize and slimes, and the sand fraction subjected to heavy liquid separation in tetrabromoethane to determine total heavy mineral content. Mineral assemblage was determined by quantitative X-ray diffraction (QXRD) on composite samples.

Mineral Resource

The Mineral Resource underpinning the Study is a large, coarse-grained alluvial garnet deposit estimated under the JORC Code (2012). It is dominated by higher-confidence Measured and Indicated material, providing a strong platform for the Ore Reserve and the initial mine plan. Approximately 76% of the contained tonnage is classified as Measured (Table 3).

For personal use only

Table 3: Port Gregory Mineral Resource estimate

Category	Material (Mt)	THM (%)	In-situ garnet (Mt)
Measured	125	3.8	4.1
Indicated	20	6.5	1.2
Inferred	20	2.9	0.5
Total	**165**	**4.0**	**5.8**

Reported at a 2% THM cut-off. Figures may not sum precisely due to rounding. The heavy-mineral assemblage is approximately 89% garnet, with ilmenite, rutile and zircon by-products. Source: Port Gregory PFS, Mineral Resource Estimate (IHC Mining; Competent Person Mr Greg Jones).

The Resource sits within a shallow, laterally continuous strandline system that has been drilled on a close-spaced grid, which is what supports the high proportion of Measured material. Because mineralisation begins at or near surface and carries limited structural complexity, the geological risk that normally attaches to an early-stage estimate is comparatively low. Conversion of Mineral Resources to Ore Reserves is governed by the application of all of the Modifying Factors - mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental - as required by the JORC Code.

The Mineral Resource was last reported to ASX on 10 July 2023 in the announcement "Updated Port Gregory JORC Mineral Resource Increased by 23%". The estimate is unchanged. The figures above are stated directly from the block model, which totals 164.9 Mt at 4.0% THM for 6.57 Mt of contained heavy mineral; the small differences against the 2023 announcement (166 Mt and 5.9 Mt of contained garnet) are rounding only. The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement, and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed.

Mineral Resource - detailed assemblage

The full assemblage underlying the Resource is set out below. It is the garnet proportion of the heavy-mineral fraction, rather than the headline THM grade, that drives the value of the deposit (Table 4).

Table 4: Mineral Resource - detailed mineral assemblage

Category	Material (Mt)	In-situ THM (Mt)	In-situ garnet (Mt)	THM (%)	Garnet (% THM)	Ilmenite (% THM)	Zircon (% THM)
Measured	125	4.7	4.1	3.8	88	4	1
Indicated	20	1.3	1.2	6.5	92	4	1
Inferred	20	0.6	0.5	2.9	89	4	1
Total	**165**	**6.6**	**5.8**	**4.0**	**89**	**4**	**1**

Reported at a 2% THM cut-off. Mineral assemblage is expressed as a percentage of in-situ THM. Figures may not sum precisely due to rounding. Source: Port Gregory PFS, Mineral Resource Estimate - detailed mineral assemblage.

Ore Reserve

The Study delivers a **maiden Ore Reserve** for Port Gregory, estimated by AMC Consultants from the Measured and Indicated Resource with mining, processing and economic modifying factors applied (Table 5).

Table 5: Maiden Ore Reserve

Category	Material (Mt)	THM (%)	Garnet (% of THM)	Contained garnet (Mt)
Probable	**85.5**	**4.43**	**88.2**	**3.3**

Figures may not sum precisely due to rounding. All material classified as Measured Mineral Resource has been treated as Indicated Mineral Resource for Ore Reserve reporting purposes and is reported as a Probable Ore Reserve. The Ore Reserve is reported inclusive of, not additional to, the Mineral Resource. Source: Port Gregory PFS, Ore Reserve Estimate (AMC Consultants; Competent Person Mr Adrian Jones).

The mine schedule processes 90.7 Mt of ore over the 24-year life, against the 85.5 Mt Ore Reserve. The difference is 5.2 Mt of Inferred Mineral Resource that sits within the pit design. Consistent with the JORC Code, inferred material is excluded from the Ore Reserve, but it is mined and processed in the schedule and therefore forms part of the production target - approximately 5.7% of the mill feed underpinning the production target.

The detailed Ore Reserve inventory, including the full mineral assemblage, is set out (Table 6).

Table 6: Ore Reserve inventory - full mineral assemblage

Reserve category	Tonnes	THM (%)	Slimes (%)	Oversize (%)	Garnet (%)	Ilmenite (%)	Zircon (%)	Rutile (%)
Probable	85.5 Mt	4.43	9.11	6.67	88.24	3.92	0.59	1.46

Ilmenite, zircon and rutile are expressed as a percentage of total heavy mineral. Source: Port Gregory PFS, Ore Reserve statement inventory as at 8 July 2026 (AMC Consultants).

The Reserve represents the portion of the Resource that the Study demonstrates can be mined and processed economically under the assumptions adopted. Its conversion reflects pit designs constrained by slope-stability testing, a scheduled mine plan, and the processing recoveries established by bulk metallurgical test work, rather than a factored allowance.

Mining and mine plan

Mining is a simple, free-digging open-pit operation - no drilling and blasting, no crushing and no grinding - feeding a plant production rate of approximately 3.63 Mtpa. The schedule supports a 24-year life producing a consistent garnet product stream, with a low strip ratio and shallow pits developed sequentially along the strandline.

The deposit is a sequence of dunal and fluvial marine sediments hosting laterally extensive, generally continuous heavy-mineral accumulations, near surface and with limited structural complexity. Mining combines surface mining of indurated or cemented material with scraper mining of the softer sediments - a pairing that gives good selectivity and control at the mining horizon. Pits are developed as a series of panels, allowing the operation to sequence toward higher-value material early in the mine life (Figure 3).

The absence of drilling and blasting removes a whole category of cost, permitting and operational risk that a hard-rock development of comparable scale would carry - no explosives magazine, no blast management, no crushing circuit and no primary comminution power draw. It also means the mining fleet is conventional earthmoving equipment that is readily available and widely operated in the region.

Geotechnical and pit slope design

Slope stability was assessed by direct shear testing and particle size analysis on samples from selected drill holes, and modelled for single-bench, double-bench and multi-bench configurations, with and without infrastructure loading at the crest. The resulting design parameters are modest, as expected for unconsolidated to weakly indurated sands at shallow depth (Table 7).

Induration is present in the deposit as surface and at-depth calcrete and limestone, of variable intensity and discontinuous distribution. It is explicitly accounted for in the Resource model and in the mine plan: indurated material is mined by surface miner rather than by scraper, and minor calcrete coating on heavy-mineral grains is recognised in the metallurgical assumptions. The Company regards the treatment of calcrete as a matter to be stated openly rather than discovered, given its significance elsewhere in the region.

Table 7: Pit slope design parameters

Configuration	Bench height (m)	Batter face angle	Berm width (m)	Inter-ramp angle	Infrastructure stand-off
Single bench	10	34°	-	-	4 m
Double bench	20	34°	-	-	8 m
Multi bench	10	34°	5	26.8°	4 m

Source: Port Gregory PFS, pit slope design parameters.

For personal use only

For personal use only

Mining fleet

The fleet is conventional earthmoving equipment. Scrapers do the primary loading in the softer sediments, a surface miner handles indurated material, and a small support fleet manages rehandle, roads and dust suppression. No specialised mining equipment is required and every unit is widely operated in the region, which supports both availability and the local labour assumption (Table 8).

Table 8: Primary and ancillary mining equipment

Function	Model	Annual operating hours per unit
Primary loading unit	657 Scraper	5,484
Topsoil loading unit	637 Scraper	5,484
Rehandle loading unit	Caterpillar 988	5,922
Primary truck	Volvo A60H	5,922
Surface miner	Vermeer T1255	4,169
Track dozer	Caterpillar D9	4,000
Grader	Caterpillar 14	4,000
Water cart	Caterpillar 740	4,000

Source: Port Gregory PFS, primary and ancillary mining equipment and operating hours.

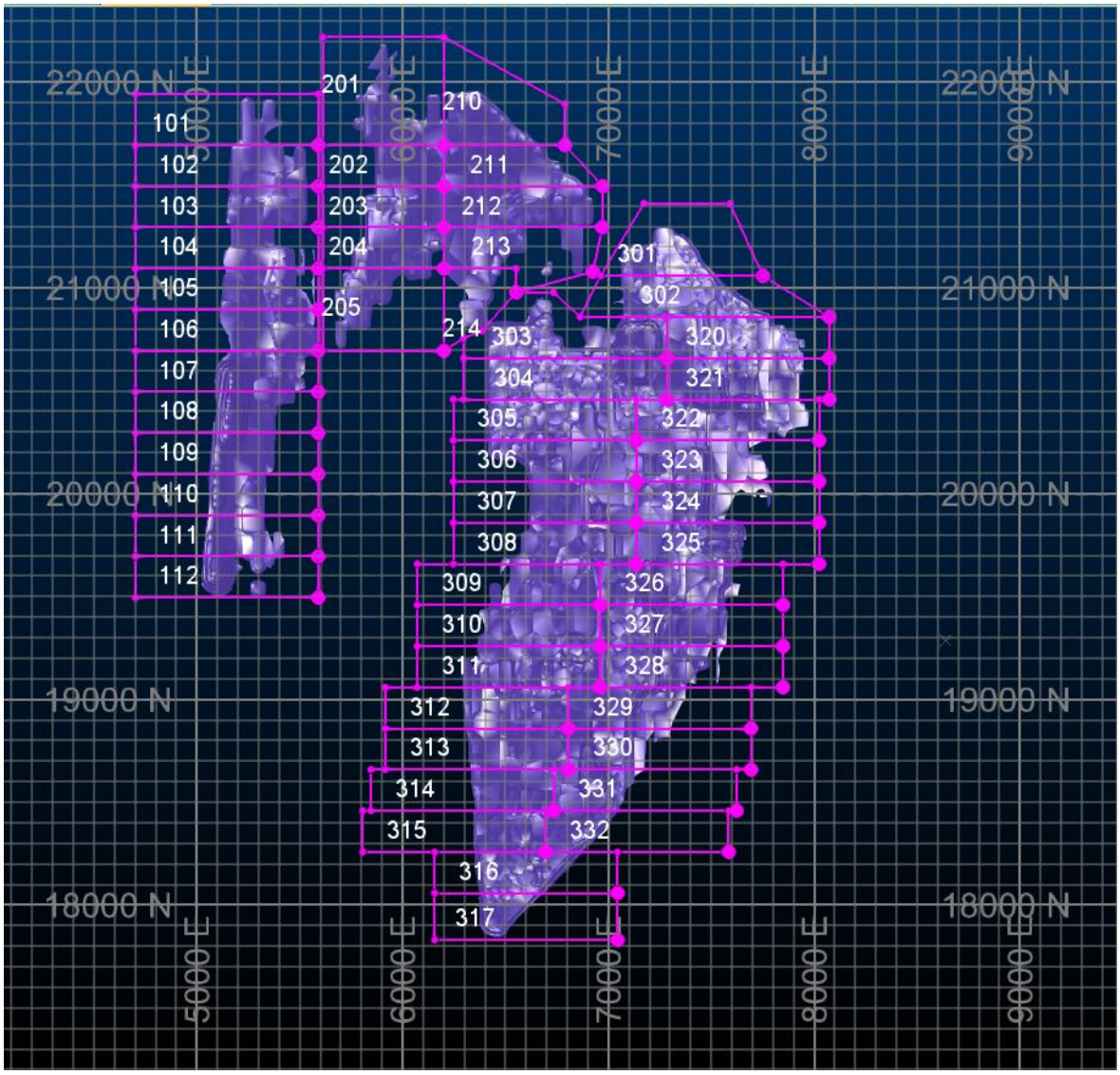

Figure 3: Port Gregory - mining panel layout

For personal use only

Pit optimisation and shell selection

Pit optimisation was run in Whittle Four-X on the Company's Mineral Resource block model, with block-by-block cost, recovery, royalty and revenue parameters assigned through Datamine macros - an approach that leaves a transparent audit trail rather than applying factors at an aggregate level. Optimisation used an economically derived cut-off based on break-even conditions, including the recovery penalties associated with elevated slimes and oversize. The resulting break-even cut-off grade is approximately 1.05% THM, subject to slimes content below 30% and oversize below 15%, with an overall slope angle of 34 degrees applied. The Mineral Resource is reported at a 2% THM cut-off, so the economic cut-off sits well below the reporting cut-off - material that would not be reported as Resource is still economic to process once it is inside the pit. The selected shell was not the value-maximising shell. Shells were evaluated on undiscounted cash flow and on total tonnage, and a shell was chosen that balances value against a practical pit geometry, a manageable strip ratio and a mine life the plant can be sized around. The pit design was then developed from that shell, with marginal areas, material beneath proposed surface infrastructure, and geometry that could not be mined practically all excluded - which is why the design inventory sits below the optimisation output (Figure 5). Panel-level economics vary across the deposit. The higher-grade material resides in a narrow corridor through Mining Unit 1, which is why the schedule sequences that material first and why grade in the early years runs above the life-of-mine average (Figure 4).

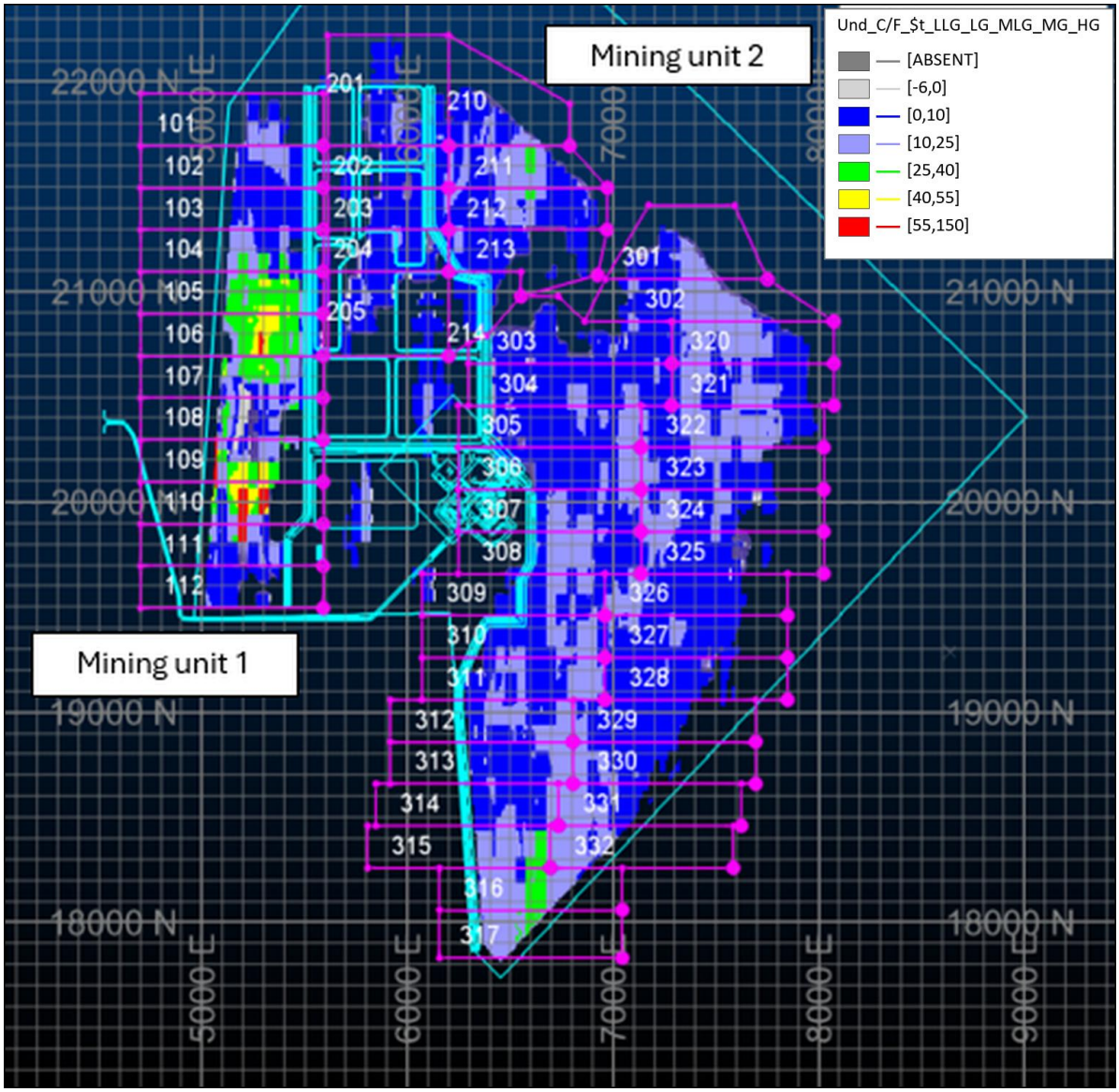

Figure 4: Undiscounted cash flow by panel (AMC Consultants)

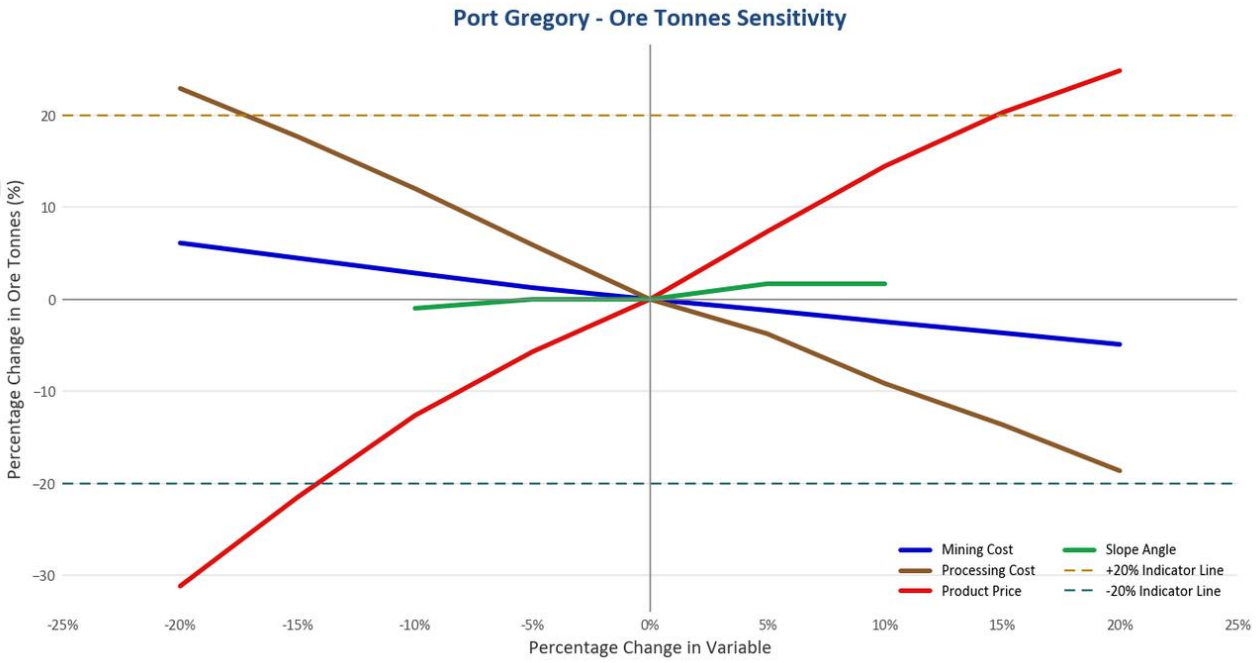

Figure 5: Pit optimisation sensitivity - percentage change in ore tonnes by input variable (AMC Consultants)

Mine inventory and schedule

The pit design carries a low strip ratio of approximately 0.22 tonnes of waste per tonne of ore - a direct consequence of shallow, near-surface mineralisation and the absence of hard overburden. Ore is scheduled at a steady plant feed rate of approximately 3.9 Mtpa after the first year (Table 9).

Table 9: Mine inventory and schedule summary

Mine inventory	Quantity
Ore mined and processed (life of mine)	90.7 Mt
- of which Ore Reserve (Probable)	85.5 Mt
- of which Inferred Mineral Resource	5.2 Mt
Waste mined	19.5 Mt
Strip ratio (waste : ore)	0.22 : 1
Average THM grade of scheduled ore	4.4%
Garnet proportion of THM	88.5%
Slimes	9.1%

Source: Port Gregory PFS, pit inventory by Ore Reserve category and mine schedule. Inferred Mineral Resource within the pit design is excluded from the Ore Reserve but is processed in the schedule.

Production schedule

Total material movement follows the same pattern, with waste movement modest throughout on a strip ratio of 0.22 : 1 (Figure 6 and Figure 7).

For personal use only

For personal use only

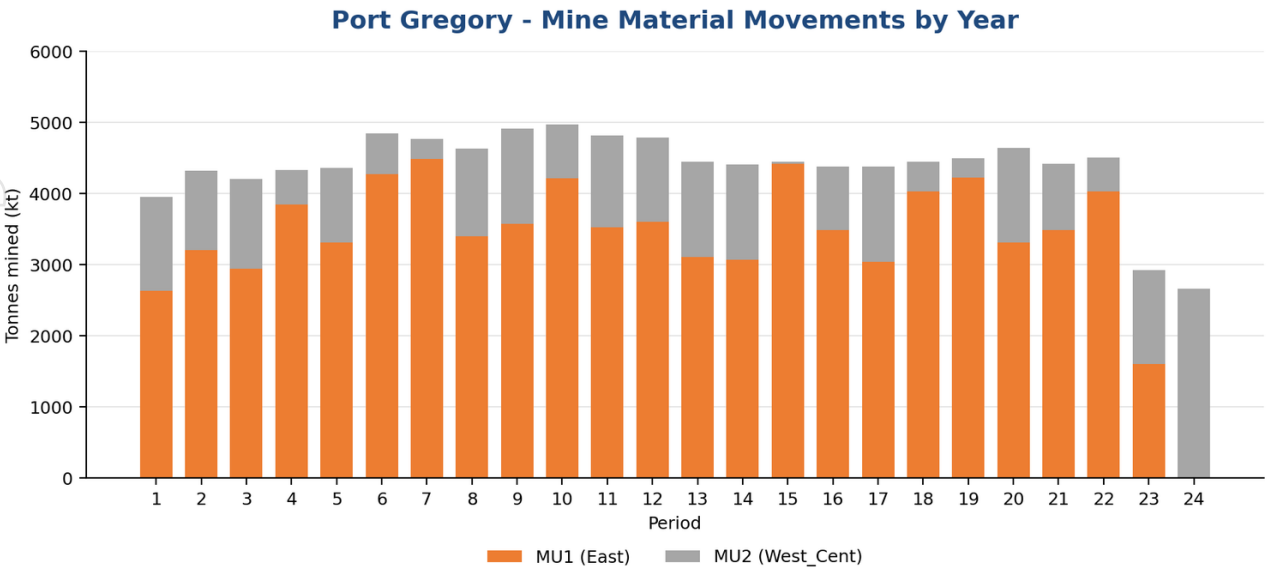

Figure 6: Total material movement by mining unit

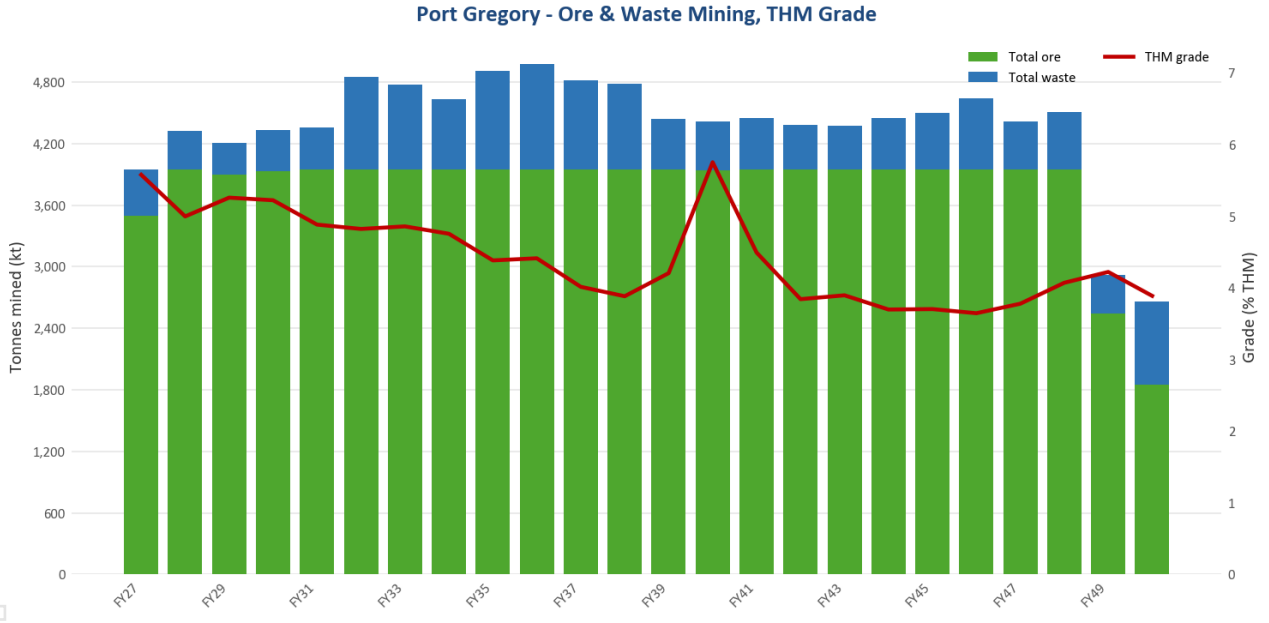

Figure 7: Total ore and waste mined, and THM grade, by year

Grade is highest in the early years - 5.7% THM in year one against a life-of-mine average of 4.4% - because the schedule sequences the higher-grade panels first. That is what produces the early-years garnet average of approximately 143 ktpa against the life-of-mine average of 122 ktpa, and it front-loads cash flow into the period when the Project is repaying development capital (Figure 8 and Figure 9).

For personal use only

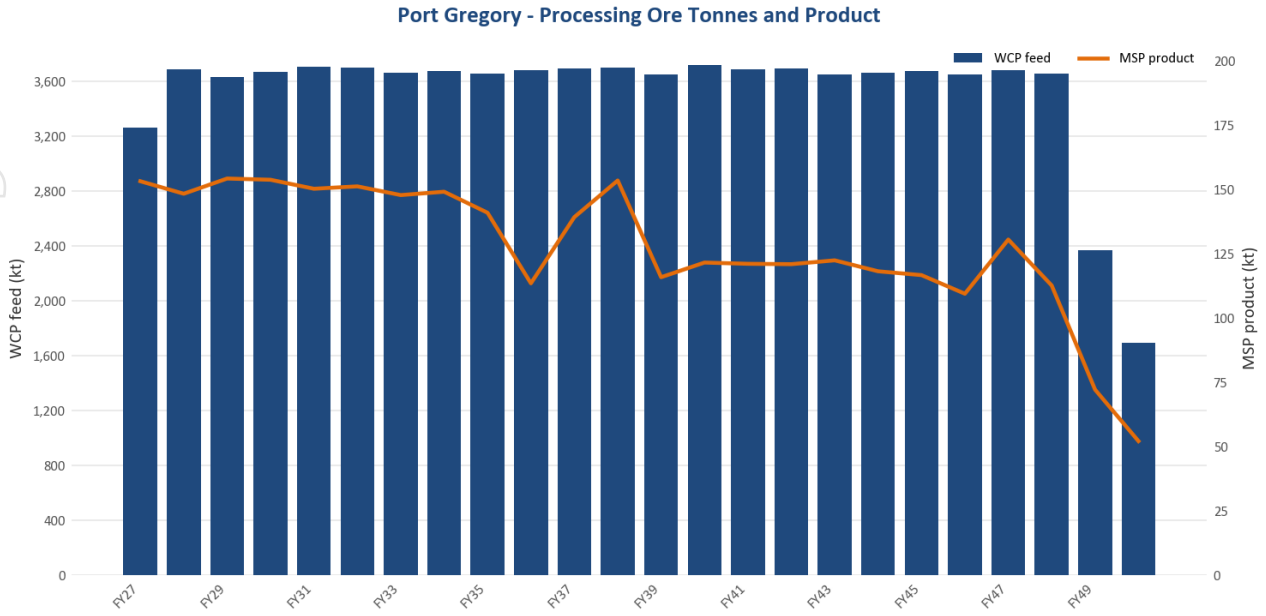

Figure 8: Processing - ore feed and product by year

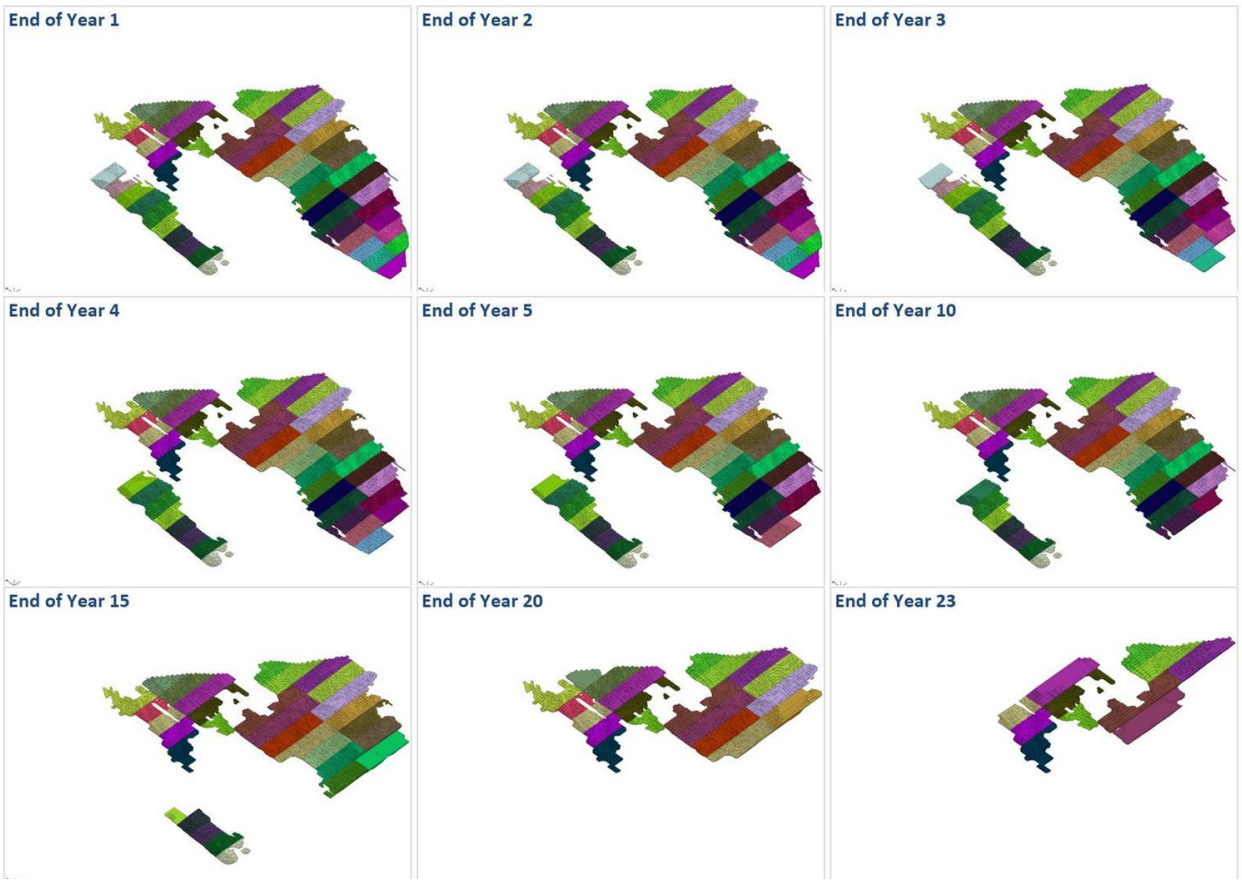

Figure 9: Pit progression, end of year 1 to year 23

For personal use only

Metallurgy and processing

The process route is conventional and well proven. Run-of-mine (ROM) material is screened and de-slimed, upgraded through a Wet Concentration Plant (WCP) (spiral gravity separation with up-current classification) to a single heavy-mineral concentrate, and refined in a Mineral Separation Plant (MSP) into final saleable products. Suitable technology is readily available, allowing a significant portion of the process scope to be procured as packaged plant.

Bulk metallurgical test work processed run-of-mine material through the full flowsheet - screening and de-sliming, rougher and mids-scavenger spirals, cleaner spirals, up-current classification and attritioning - confirming both recovery and product specification. The program produced coarse garnet assaying approximately **99% garnet** in the coarse fraction and **98%** in the fine fraction, together with an ilmenite by-product. Because the test work was conducted stage by stage rather than continuously, further optimisation is expected during plant commissioning, and the Study carries expected optimised operational recovery ranges on that basis (Figure 10).

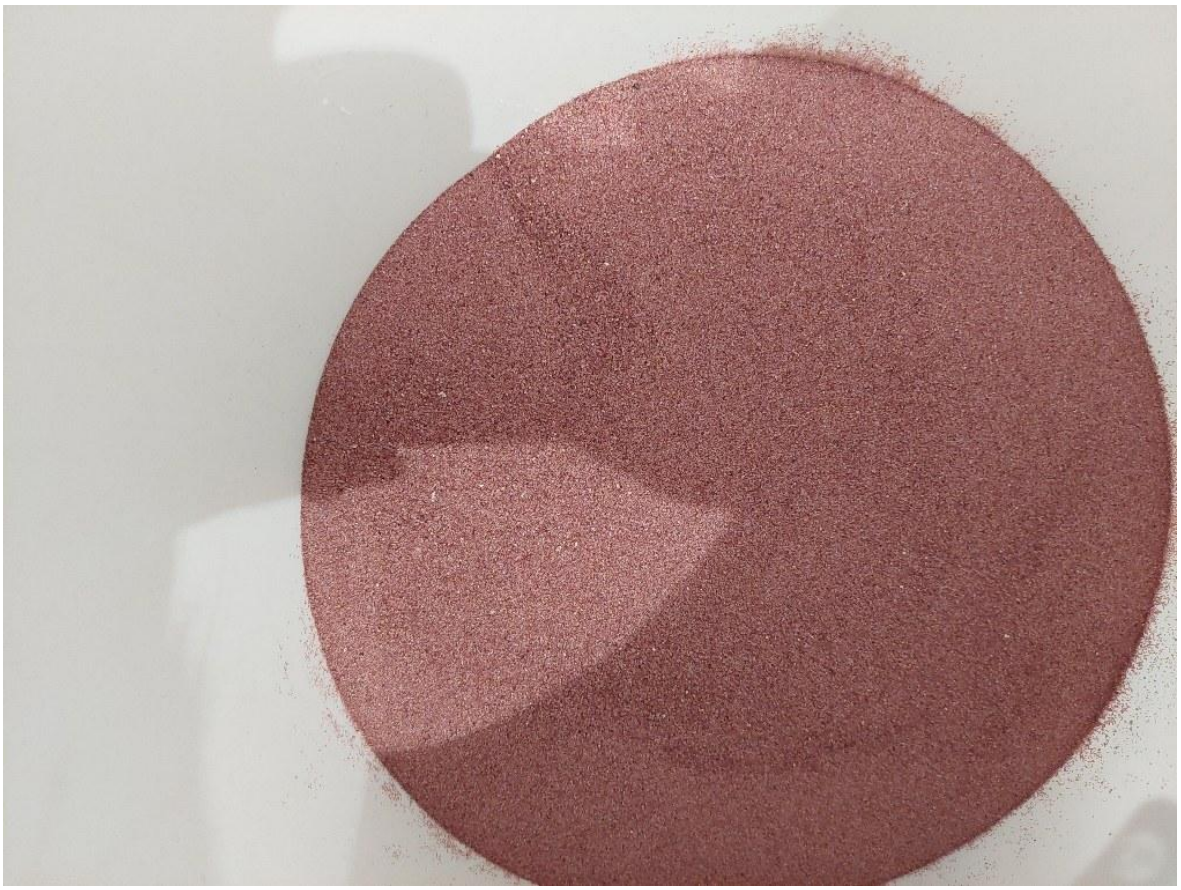

Figure 10: Coarse alluvial almandine garnet product produced during bulk metallurgical test work

Two features of the flowsheet matter commercially. The first is that the product is recovered by gravity separation alone, so there is no reagent-intensive circuit and no associated cost or environmental exposure. The second is that a significant portion of the process scope can be procured as packaged plant, which shortens the construction program and shifts a proportion of the execution risk to the vendor.

Metallurgical recovery

Bulk test work established the recoveries carried into the financial model. Because the program was run stage by stage rather than continuously, a range is carried for expected performance once the plant is operating and optimised (Table 10).

Table 10: Metallurgical recovery - test work and expected operation

Recovery	Test work	Expected in operation
Garnet to total garnet product (coarse + fine)	87.0%	87 - 90%
Ilmenite to ilmenite product	87.0%	87 - 90%

Coarse garnet product assays approximately 99% garnet and fine garnet product approximately 98%. Source: Port Gregory PFS, test work and expected optimised operational recoveries.

Plant configuration

The plant comprises four stages (Figure 11). Run-of-mine (ROM) material is won by scraper and surface miner and fed by front-end loader to relocatable in-pit Mining Unit Plants (MUP), where it passes a static grizzly and a double-deck vibrating screen; oversize is rejected to void and undersize is slurrified and pumped to the concentrator by overland pipeline. The **Wet Concentrator Plant** de-slimes the feed and upgrades it through rougher, mids-scavenger and cleaner spiral circuits and up-current classification, producing a single heavy-mineral concentrate at approximately 83% garnet. The **Mineral Separation Plant** dries the concentrate and separates it by magnetic and electrostatic means into coarse and fine garnet products and an ilmenite by-product. A **bagging and screening plant** completes final sizing before despatch (Table 11).

Table 11: Process stream mass yields and garnet recovery

Stream	Mass yield (%)	Garnet grade (%)	Garnet recovery (%)
Feed preparation - sand	84.9	4.5	99.0
WCP - tailings	95.1	0.0	6.2
WCP - heavy mineral concentrate	4.58	83	89.7
MSP - coarse garnet product	23.4	99	28.2
MSP - fine garnet product	58.4	98	69.6

Mass yields are stated relative to the feed of each stage. Source: Port Gregory PFS, overall process summary and test work recoveries.

For personal use only

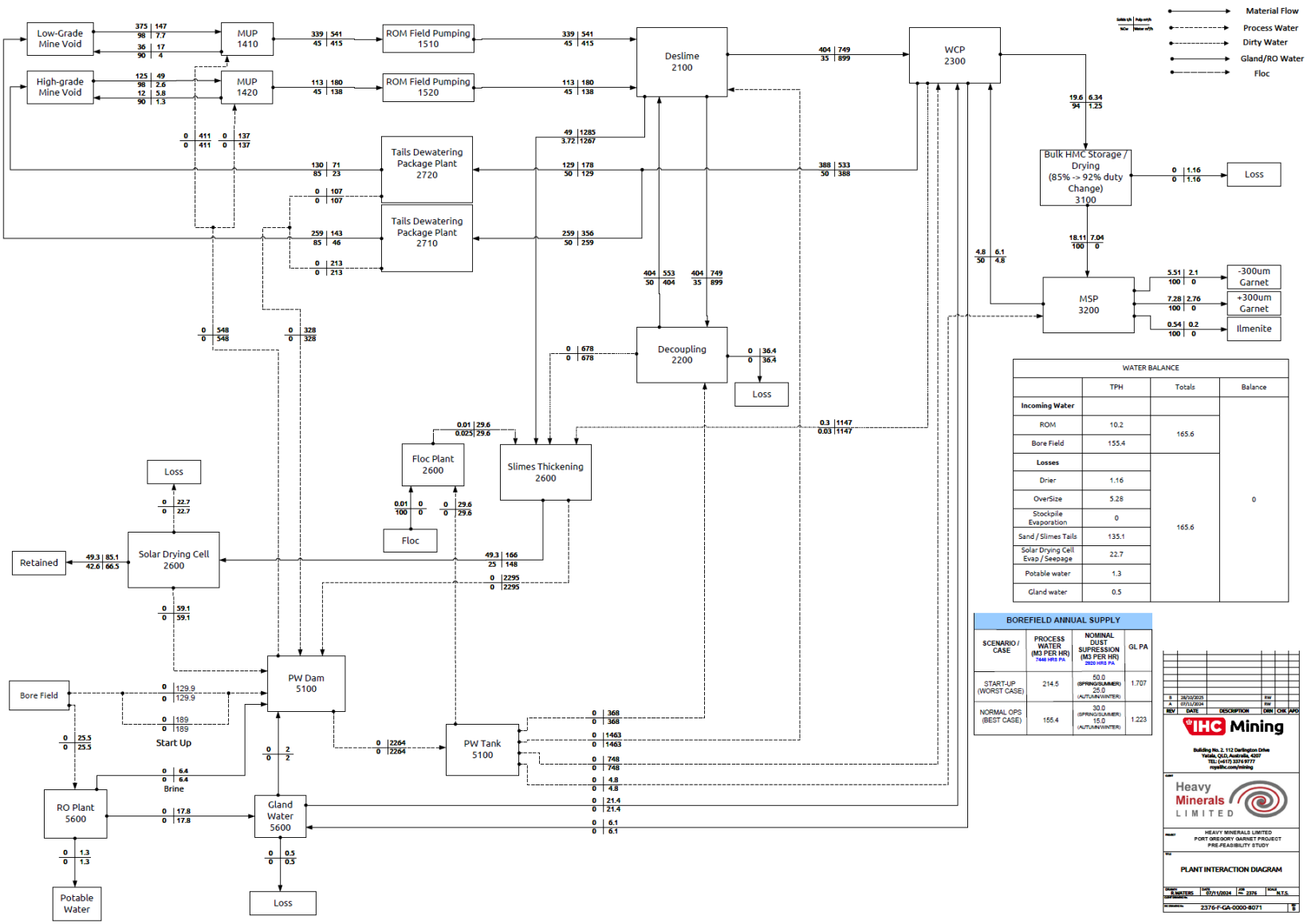

Figure 11: Port Gregory - plant interaction diagram (IHC Mining)

personal use only

For personal use only

Products and production

The Project will produce a suite of coarse and fine alluvial almandine garnet products - the 20/40, 30/60, WJ80 and WJ120 grades - together with an ilmenite by-product. Production is weighted toward the coarse 20/40 and 30/60 grades that command the strongest market pricing (Figure 12).

Garnet content is the point of difference. The coarse product assays approximately 99% garnet and the fine product approximately 98%. Alluvial garnet of this purity is in structurally short supply; hard-rock and lower-purity material is not a direct substitute for the applications Port Gregory is targeting (Table 12).

Table 12: Product suite and production profile

Product	Life-of-mine (kt)	Average (ktpa)	Peak year (kt)
Garnet 20/40	583.1	24.3	30.3
Garnet 30/60	1,298.1	54.1	69.6
Garnet WJ80	286.3	11.9	15.8
Garnet WJ120	769.9	32.1	45.0
Total garnet	**2,937.4**	**122.4**	**-**
Ilmenite by-product	129.6	5.4	8.1

Garnet production averages approximately 143 ktpa over the first nine years of operation, moderating over the later mine life. Source: Port Gregory PFS financial model, PGR142 (9 July 2026).

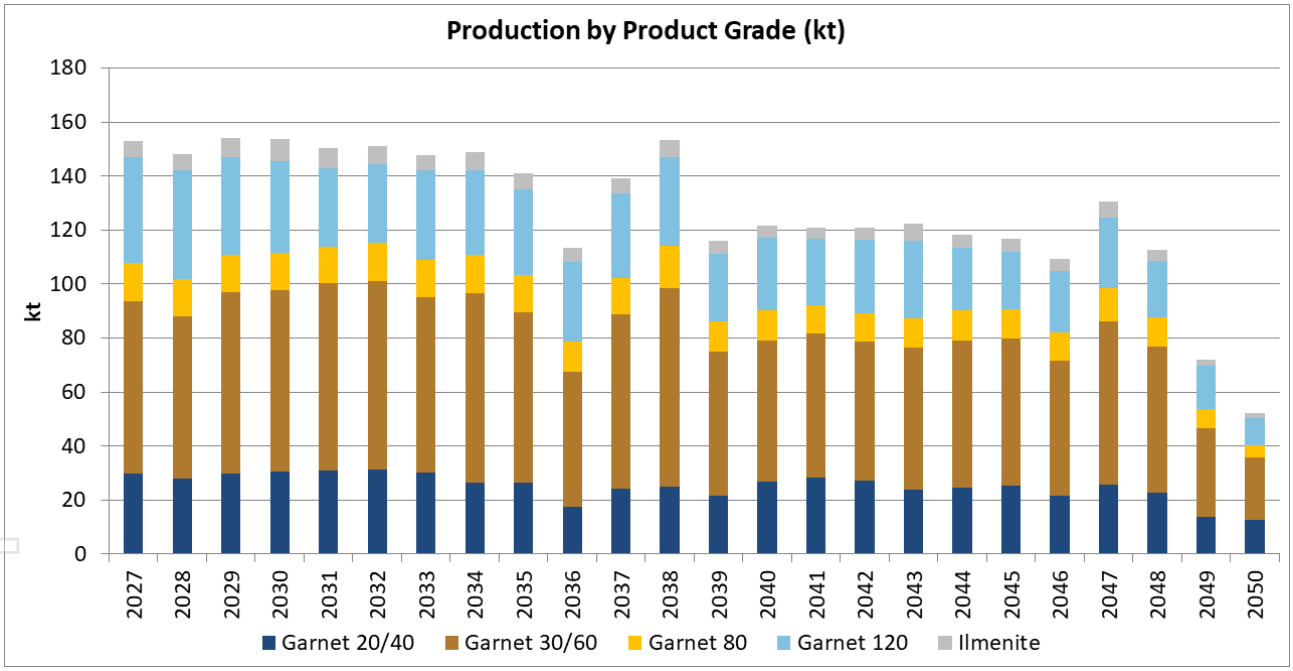

Figure 12: Product sales by garnet grade

For personal use only

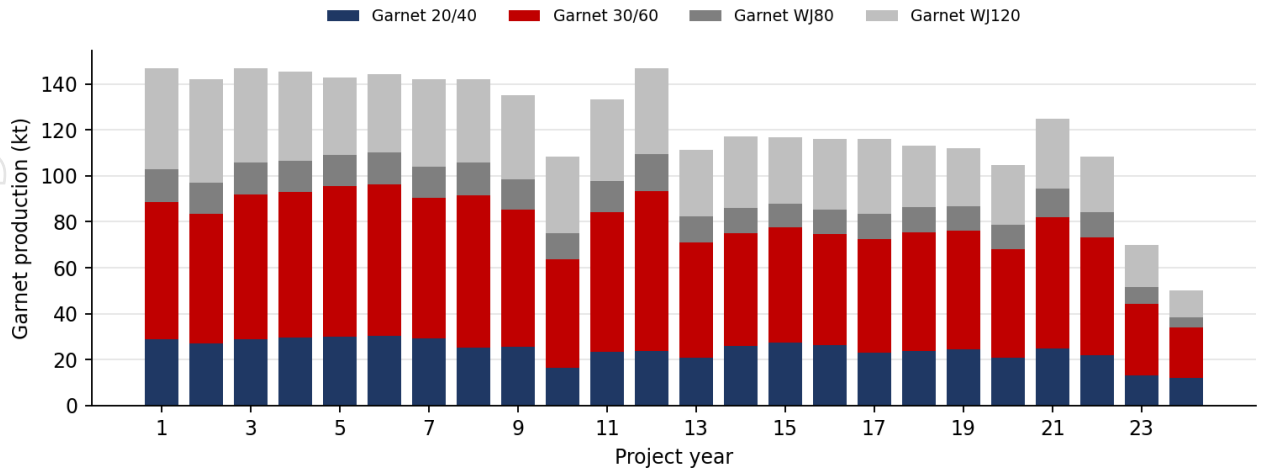

Figure 13: Port Gregory - garnet production by grade and project year (kt)

Product mix, rather than tonnage alone, drives revenue. The coarse 20/40 and 30/60 grades attract the strongest pricing and, on the Company's assessment, are the grades in shortest supply; the schedule is sequenced to bring that material forward. That is why the early-years average of approximately 143 ktpa sits well above the life-of-mine average of 122 ktpa (Figure 13). The ilmenite by-product is sold free on board at Geraldton: the Company bears the cost of delivering it onto the vessel and the purchaser bears the sea freight, so it adds revenue at low marginal logistics cost.

Product specifications

Garnet abrasives are traded to defined size specifications. The Project's products are cut to the internationally recognised mesh ranges under ISO 11126-10, which is what allows the product to be qualified and substituted by end users without requalifying their equipment.

The product suite is cut to the internationally recognised almandite garnet specification under ISO 11126-10, and abrasive properties are determined using the ISO 11127 series of test methods. Product qualification against individual end-user and defence specifications is progressing as part of the marketing and distribution workstream (Table 13).

Table 13: Garnet product size specifications (ISO 11126-10)

Specification	20/40 mesh	30/60 mesh	80 mesh	120 mesh
Metric size range	350 - 850 µm	200 - 600 µm	180 - 355 µm	80 - 180 µm
Nominal (> 85%)	350 - 850 µm	200 - 600 µm	180 - 355 µm	80 - 180 µm
Oversize (< 10%)	> 850 µm	> 600 µm	> 355 µm	> 180 µm
Undersize (< 5%)	< 350 µm	< 200 µm	< 180 µm	< 80 µm

Source: Port Gregory PFS, typical particle size ranges (ISO 11126-10).

Test work on the 30/60 coarse product returned a size distribution sitting squarely inside that specification, with 84.9% passing 425 µm and 96.4% retained above 212 µm. The product is therefore cut cleanly, with little oversize and little fines loss - which is what determines both saleability and blasting performance.

For personal use only

Product chemistry

Product chemistry determines saleability as much as sizing does. The garnet product is a clean almandine with low titanium and negligible deleterious elements, and the ilmenite by-product assays at a grade that is saleable in its own right (Table 14).

Table 14: Product chemistry - garnet and ilmenite (XRF)

Analyte	Garnet product (%)	Ilmenite product (%)
TiO2	1.93	53.3
Fe2O3	34.8	45.6
SiO2	35.8	1.05
Al2O3	20.1	0.39
MgO	5.96	0.51
CaO	1.92	0.53
Cr2O3	0.06	0.05
Uranium and thorium	Not detected	Not detected

XRF assay. Uranium and thorium reported at 0 ppm in the ilmenite product - relevant to transport and handling classification. Source: Port Gregory PFS, garnet XRF assay and ilmenite product assay.

Product mineralogy

QEMSCAN analysis confirms the products are mineralogically clean. Titanium-bearing contaminants in the coarse 30/60 product total under 2% by mass, and the total product carries 3.6% altered ilmenite with negligible rutile, leucoxene or titanite. Low contaminant loading is what allows the product to be used in blasting applications where surface contamination matters, and in waterjet cutting where hardness consistency governs nozzle life (Table 15).

Table 15: Product mineralogy - contaminant minerals (QEMSCAN)

QEMSCAN - contaminant minerals	-212 µm product	30/60 product	Total product
Mass proportion of product	29.2%	70.8%	100.0%
Altered ilmenite	8.8%	1.5%	3.6%
Ilmenite	0.9%	0.1%	0.4%
Rutile / anatase	0.2%	0.0%	0.1%
Leucoxene	0.1%	0.0%	0.0%
Titanite	0.3%	0.2%	0.3%

Source: Port Gregory PFS, QEMSCAN mineralogy.

Fine garnet product sizing

The fine product is cut to a tight distribution suited to the waterjet grades, with 75.4% retained above 150 µm and only 2% passing 106 µm (Table 16).

Table 16: Fine garnet product size distribution

Size (µm)	Mass retained (%)	Cumulative retained (%)	Mass passing (%)
212	0.6	0.6	99.4
180	30.9	31.4	68.6
150	44.0	75.4	24.6
125	17.0	92.4	7.6
106	5.6	98.0	2.0
90	1.6	99.6	0.4
75	0.4	100.0	0.0

Source: Port Gregory PFS, 212 µm fine garnet product size distribution.

For personal use only

Market and marketing

Garnet demand has grown consistently over the past 25 years, driven by abrasive blasting and waterjet cutting, while supply remains concentrated in a small number of producers, and the United States is increasingly import-reliant. The Company's assessment is that the shortage is concentrated in the coarse alluvial grades, and Port Gregory is positioned to supply them.

Supply-side conditions have tightened further during the Study period. Mineral Resources Limited placed the Lucky Bay garnet operation into care and maintenance effective 1 July 2026, removing a potential major Australian supplier of coarse alluvial garnet from the market indefinitely. Port Gregory is positioned in the same segment, and the Company also expects an experienced garnet-processing workforce to become available in the region as a result (Figure 14).

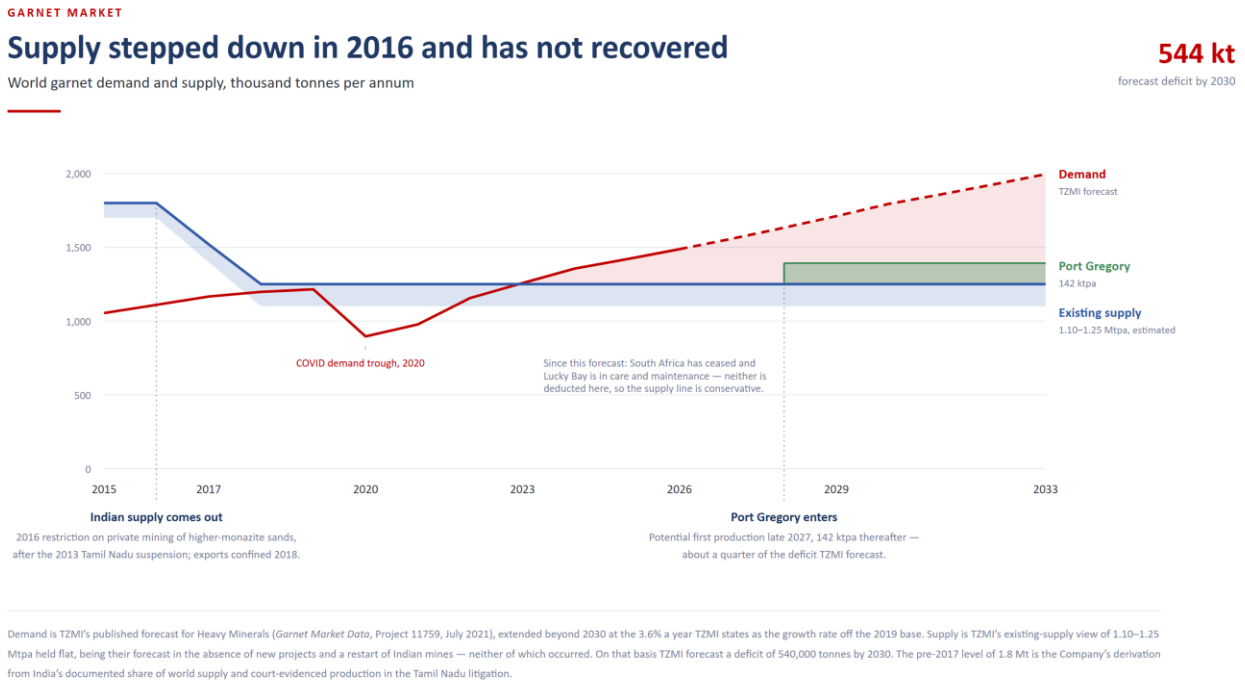

Figure 14: World garnet demand and supply balance (TZMI, Project 11759)

Demand is TZMI's published forecast for the Company, extended beyond 2030 at the 3.6% a year TZMI states off the 2019 base. Supply is TZMI's existing-supply view of 1.10-1.25 Mtpa, being their forecast in the absence of new projects and a restart of Indian mines. Source: TZMI, Garnet Market Data, Project 11759 (July 2021).

Market data in this section is drawn from TZMI's Garnet Market Data study prepared for the Company (Project 11759, July 2021). The Company has engaged an independent industry expert to assess United States garnet pricing, filtered to alluvial (comparable) garnet, and is in discussion with distributors toward binding distribution agreements. The financial model applies 2% real annual escalation to the bulk 20/40, 30/60 and 80 grades, and nil escalation to the 120 grade and the ilmenite by-product. That assumption rests on the structural shortage of coarse alluvial supply. The blended United States import unit value has been broadly flat in real terms over 25 years, but pricing power sits in graded coarse product rather than in the blended average, which is where the Port Gregory suite is positioned.

Pricing adopted in the Study derives from that independent assessment. The **weighted average year-one basket price is US$555 per tonne (25.2 US cents per pound)**, stated ex-warehouse and inclusive of freight. The detailed underlying pricing is commercially sensitive and was obtained under confidentiality agreements with distributors

For personal use only

and end users and is not disclosed. The supply side of the market has tightened rather than eased. India, which supplied approximately 44% of world garnet to 2016, fell to approximately 8% over the course of the Indian beach-sand restrictions — the Tamil Nadu suspension of 2013, the 2016 prohibition on private mining of higher-monazite sands, and the August 2018 confinement of exports to the state-owned producer. Reported world production fell from approximately 1.57 Mt in 2016 to approximately 1.09 Mt in 2017, removing on the order of 500 kt of annual supply that has not been replaced at scale. TZMI forecast that, in the absence of new projects and a restart of Indian mines, the global supply deficit would reach 540,000 tonnes by 2030. Neither has occurred. Demand over the same period has been driven by abrasive blasting and waterjet cutting, the two applications that account for approximately 80% of world garnet consumption.

Capital cost

Development capital is estimated at **A$122.1 million** including owner's costs, comprising A$116.2 million of direct project capital and A$5.9 million of owner's costs. Life-of-mine sustaining capital of A$2.3 million takes the total to A$124.4 million. The estimate is split between an EPCM scope and a packaged-plant scope (Table 17).

Table 17: Summary of capital estimate by WBS

WBS	Cost centre	EPCM (A$M)	Packaged plant (A$M)
0000	Site civils and non-process infrastructure	15.86	-
1000	Mining unit plants and field assets	1.05	8.07
2000	Wet Concentrator Plant	7.08	28.27
3000	Mineral Separation Plant	0.80	21.62
5000	Plant utilities and process infrastructure	6.84	1.32
6000	Fire water system	0.81	-
7000	Bagging and screening plant	2.17	-
	Total direct costs	**34.60**	**59.28**
	Total indirect costs	10.72	-
	Contingency	5.98	5.98
	Total start-up capital	**51.30**	**65.21**

Source: Port Gregory PFS, summary of capital estimate.

The estimate is split deliberately between an EPCM scope and a packaged-plant scope. The packaged element covers the process plant modules, where competitive vendor pricing is available and the scope is well defined; the EPCM element covers site civils, infrastructure and integration, where the work is site-specific. Contingency is carried on both.

Operating cost

Life-of-mine operating cost is **A$1,529.1 million**, equivalent to **A$498.60 per tonne of product** delivered to the sales point (Table 18).

Table 18: Life-of-mine operating cost by centre

Cost centre	Life of mine (A$M)	A$/t product
Mining	264.1	86.12
Mining Unit Plant	150.4	49.04
Wet Concentrator Plant	317.3	103.46
Mineral Separation Plant	128.3	41.84
Bagging Plant	45.7	14.90
General and administration	59.0	19.24

Cost centre	Life of mine (A$M)	A$/t product
Mine site operating cost	**964.7**	**314.56**
Logistics	564.4	184.04
Total operating cost	**1,529.1**	**498.60**

Real terms. Source: Port Gregory PFS financial model, PGR142 (9 July 2026).

Unit operating cost by area

Table 19: Unit operating cost by area

Area	Item	Unit operating cost
Mining	Ore	A$2.17 /t ore
	Waste	A$4.66 /t overburden
Mining Unit Plant	Power	A$0.48 /t MUP feed
	Labour	A$0.49 /t MUP feed
	Maintenance and spares	A$0.12 /t MUP feed
Wet Concentrator Plant	Power	A$1.01 /t WCP feed
	Labour	A$0.88 /t WCP feed
	Maintenance and spares	A$0.49 /t WCP feed
	Diesel and flocculant	A$0.16 /t WCP feed
Mineral Separation Plant	Gas - rotary dryer	A$4.75 /t MSP feed
	Power	A$5.23 /t MSP feed
	Labour	A$14.77 /t MSP feed
	Maintenance and spares	A$7.65 /t MSP feed
Bagging Plant	All-in cost	A$15.56 /t final product

Source: Port Gregory PFS, unit operating cost by area.

The cost structure is unusual for a mineral development in that mining is a small part of it. Free-digging material and a low strip ratio hold mining to A$2.17 per tonne of ore, while the largest single cost centre is logistics at A$184.04 per tonne of product - a consequence of shipping a bulk product to distant markets. That concentration is why the loose-in-bulk shipping and bag-at-destination approach materially affects Project economics (Table 19).

Financial model assumptions

The model was prepared by Mining Insights Pty Ltd on a **real, post-tax, unlevered basis**. It excludes financing structures - project funding is treated as wholly equity - so the results express the intrinsic economics of the Project rather than a financed return (Table 20).

Table 20: Financial model assumptions

Assumption	Basis
Model basis	Real (uninflated), post-tax, unlevered
Discount rate	8% real
Corporate tax rate	30%
Exchange rate	US$:A$ 0.65
Price escalation - garnet 20/40, 30/60, 80	2% real per annum
Price escalation - garnet 120 and ilmenite	Nil
Ownership basis	100% Company interest
Financing	Excluded; assumed wholly equity
Product price basis	Weighted average year-one basket price of US$555/t

Source: Port Gregory PFS, financial analysis - assumptions.

For personal use only

For personal use only

Financial outcomes and sensitivity

The Project generates life-of-mine gross revenue of A$3.07 billion and EBITDA of A$1.34 billion, for a post-tax NPV of A$322.8 million and an IRR of 47.6% on development capital of A$122.1 million (Figure 15).

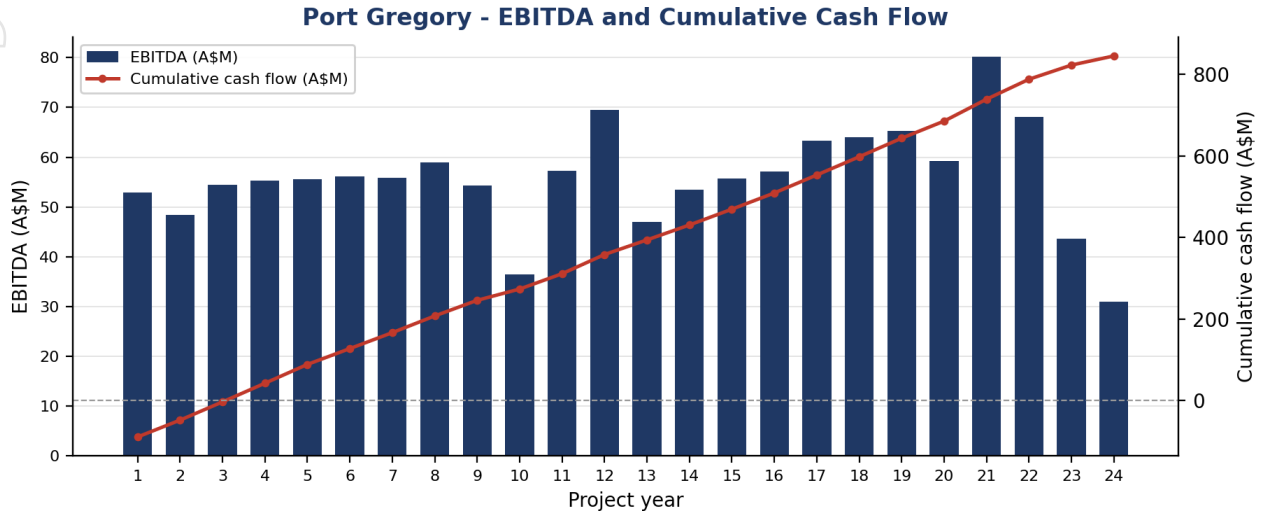

Figure 15: Port Gregory - EBITDA and cumulative cash flow by project year (A$M, real)

Sensitivity analysis confirms the Project is most sensitive to product price and least sensitive to capital cost, and remains value-positive across the full range tested. A 20% reduction in product price reduces post-tax NPV to A$137.3 million (Table 21).

Table 21: Single-factor NPV sensitivity

Variable (multiplier)	0.80	0.85	0.90	0.95	Base (1.00)
Product price	137.3	183.7	230.0	276.4	322.8
Operating cost	426.1	400.3	374.5	348.6	322.8
Capital cost	340.2	335.9	331.5	327.2	322.8

Single-factor NPV sensitivity, A$M post-tax real at 8%. Source: Port Gregory PFS financial model, PGR142 (9 July 2026).

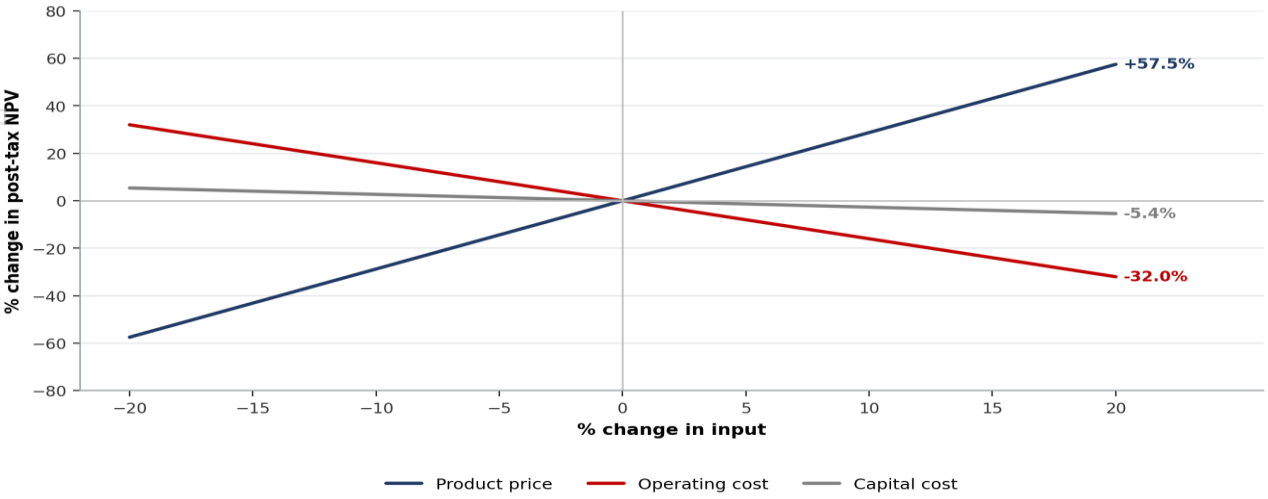

Figure 16: Port Gregory - post-tax NPV sensitivity to product price, operating cost and capital cost

For personal use only

The shape of the sensitivity is as important as its magnitude. A 20% movement in product price moves post-tax NPV by approximately 57%, against 32% for operating cost and only 5% for capital cost. In practice this means the Project is not capital-fragile: cost overruns of the kind that trouble capital-intensive developments have limited effect on value, while the return is leveraged to the price of a product the market is short of. Even at a 20% price reduction the Project retains a post-tax NPV of A$137.3 million.

Site layout and infrastructure

The Project benefits from established regional infrastructure, with export through the Port of Geraldton approximately 105 kilometres to the south, and a defined non-process infrastructure scope covering site civils, roads, power supply, water and site services. Because the operation is dry and free-digging, and requires only temporary tailings storage rather than a permanent facility, its environmental and approvals footprint is comparatively modest.

The layout is conventional and compact, with the wet concentration plant sited close to the mining area to limit slurry pumping distance, and product storage and load-out positioned for road haulage to Geraldton. Requiring only temporary tailings storage rather than a permanent facility removes the largest single piece of infrastructure - and much of the closure liability - that a comparable operation would carry.

Non-process infrastructure

The non-process scope is deliberately modest and largely modular. Site administration, amenities, ablutions, first aid and stores are provided as modular or containerised buildings rather than constructed facilities, which shortens the construction program and leaves the site easier to rehabilitate at closure. Site roads are designed to Restricted Access Vehicle (RAV) standards, with maximum grades of 5% on sealed roads and 3% on gravel for the largest category 9-10 combinations that will carry product to Narngulu. Regional telecommunications coverage reaches the site (Table 22).

Table 22: Maximum road grades by RAV rating

Road standard	Sealed roads (max. grade)	Gravel roads (max. grade)
RAV category 2 - 6	8%	5%
RAV category 7 - 8	6%	4%
RAV category 9 - 10	5%	3%

Source: Port Gregory PFS, maximum road grades by RAV rating.

Power

Power scope was tendered to independent power providers on both diesel-plus-renewable and LNG-plus-renewable bases. Following technical and commercial review, an **LNG, solar and battery energy storage system (BESS) hybrid** was selected for the Study, on a 15-year term expressed as a levelised cost of electricity. Year one generation carries a projected **renewable energy fraction of approximately 34%**. LNG is delivered by virtual pipeline to on-site storage. Diesel is applied only to light vehicles and pumps, not to bulk power generation (Figure 17).

Selecting a hybrid rather than diesel generation has three effects: it lowers the levelised cost of electricity over the contract term, it reduces exposure to diesel price movement, and it materially lowers the emissions profile of the operation from first production. Because the power station is provided under an independent power provider contract, the capital sits with the provider rather than the Company.

Site demand is modest for an operation of this throughput: **5,265 kW consumed** against 7,049 kW installed. That is a direct consequence of the flowsheet - there is no crushing or grinding circuit, which is normally the dominant power draw on a mineral processing plant (Table 23).

For personal use only

Table 23: Estimated annual energy generation by component

Component	Year 1 generation	Installed
Solar PV (direct to load)	14,324 MWh (35.1%)	12.28 MWdc / 10 MWac
Battery energy storage	2,788 MWh	6 MW / 13.4 MWh
LNG generation	23,495 MWh	10 MW

Year 1 renewable energy fraction of approximately 34%. Annual LNG charge estimated at A$5.86 million for 272,632 GJ. Source: Port Gregory PFS, estimated annual energy generation by component.

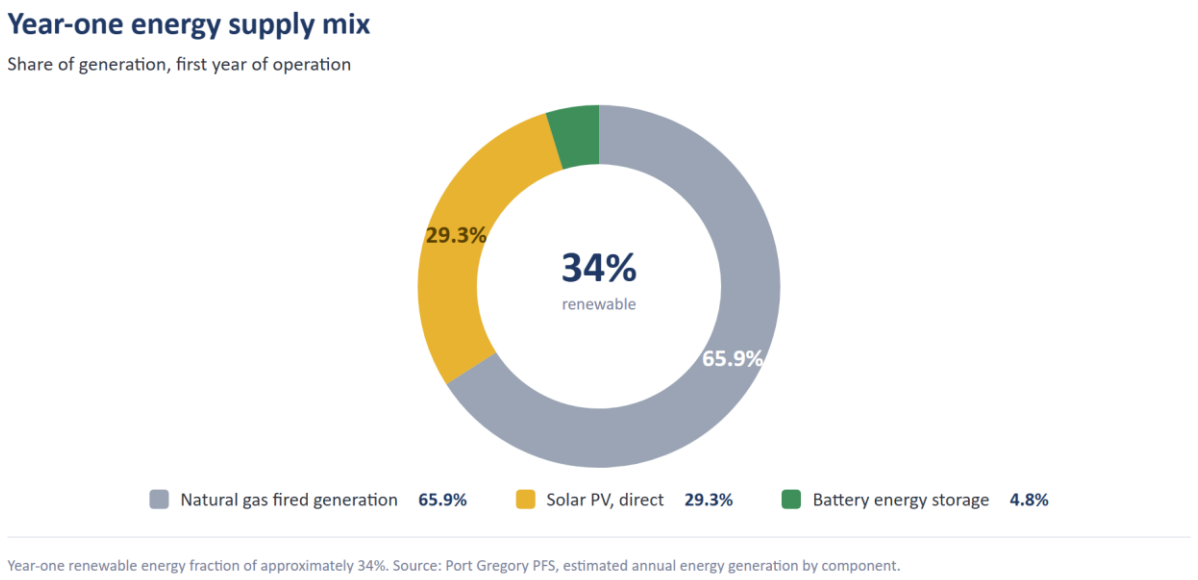

Figure 17: Port Gregory - year 1 energy supply mix

Water supply

Process water is drawn from a borefield rather than from a surface source. Requirements are approximately 155 m³ per hour under normal operations and 215 m³ per hour in the start-up worst case, equating to 1.2 to 1.7 GL per annum including dust suppression. A hydrogeological assessment was completed by Rockwater as part of the Study, and site bore water was tested for its effect on processing. Residual calcite and dissolved solids in the product stream were identified as a process risk requiring further work in the next study phase - it is an identified item, not an unknown.

Logistics and market access

Product is trucked to an offsite storage and screening facility at Narngulu, approximately 10 kilometers from the Port of Geraldton, where final product screening is completed before shipping (Figure 18). Loading is planned through Berth 4 at Geraldton, which handles the 10,000 to 20,000 tonne parcel shipments that suit the Project's product volumes. Product ships loose in bulk and is bagged close to the end user, an approach that is materially cheaper than containerised shipping and protects product integrity. Initial market focus is the United States Gulf Coast and East Coast, with the West Coast to follow once bulk handling is established.

Port of Geraldton

Geraldton is an established multi-commodity bulk port. Garnet is already handled there as a bulk mineral sands product through Berth 4, which is the berth the Study assumes and which suits the 10,000 to 20,000 tonne parcel sizes the Project will ship. The Project therefore does not depend on new port infrastructure or on a berth conversion (Table 24).

For personal use only

Table 24: Bulk commodities handled at the Port of Geraldton, by berth

Commodity group	Product	Loading berth
Sands	Mineral sands - garnet	Bulk via Berth 4
Sands	Clean fill and construction sands	Bulk via Berths 4 and 5
Heavy minerals and concentrates	Copper, lead and zinc concentrates	Bulk via Berth 4 / containers via Berth 6
Heavy minerals and concentrates	Mineral sands concentrate	Containers via Berth 6
Ores	Iron ore	Bulk via Berths 5 and 7

Source: Port Gregory PFS, bulk commodities handled by loading berth.



Figure 18: Narngulu offsite storage to Port of Geraldton shuttle route

Workforce and community

The Project sits in an established mining precinct with access to local labour and infrastructure. The proximity of Kalbarri, Gregory and Northampton means **no mine camp or mess facility is required** for either construction or operations - a meaningful saving against comparable developments. The Company expects to source most semi-skilled and skilled roles locally and regionally, with a limited number of highly skilled technical roles potentially drawn from Perth on a fly-in fly-out basis.

Avoiding a camp is not only a capital saving. It removes the operating cost of running a village, reduces the environmental and approvals footprint, and supports a residential workforce - which is materially better for retention and for the economic benefit retained in the region.

Regional labour market

The residential workforce assumption rests on a real labour pool. Geraldton carried a labour force of approximately 20,900 in June 2024 at an unemployment rate of 3.4%. The Company has assumed that most semi-skilled and skilled roles can be sourced locally and regionally, with a limited number of highly skilled technical roles potentially drawn from Perth on a fly-in fly-out basis. It is also cognisant of competition for operators, maintainers and technical staff across the region (Table 25).

Table 25: Geraldton labour market summary

Geraldton labour market	June 2024	June 2023	Change
Labour force	20,856	21,039	-0.9%
Unemployed	718	633	+13.4%
Unemployment rate	3.4%	3.0%	+0.4 pts

Source: Port Gregory PFS, Geraldton labour market summary.

Approvals

Hydrogeological, environmental-approvals and non-process-infrastructure studies have been completed by specialist consultants as part of the PFS, and approvals and mining-lease workstreams are being progressed toward development.

Approvals pathway

An environmental approvals strategy was prepared by MBS Environmental as part of the Study, mapping the State and Commonwealth pathway and the sequence in which approvals must be obtained. Because the operation is free-digging, has no tailings storage facility and does not require a process water dam of significant scale, its approvals footprint is materially smaller than a comparable hard-rock development (Figure 19).

For personal use only

For personal use only

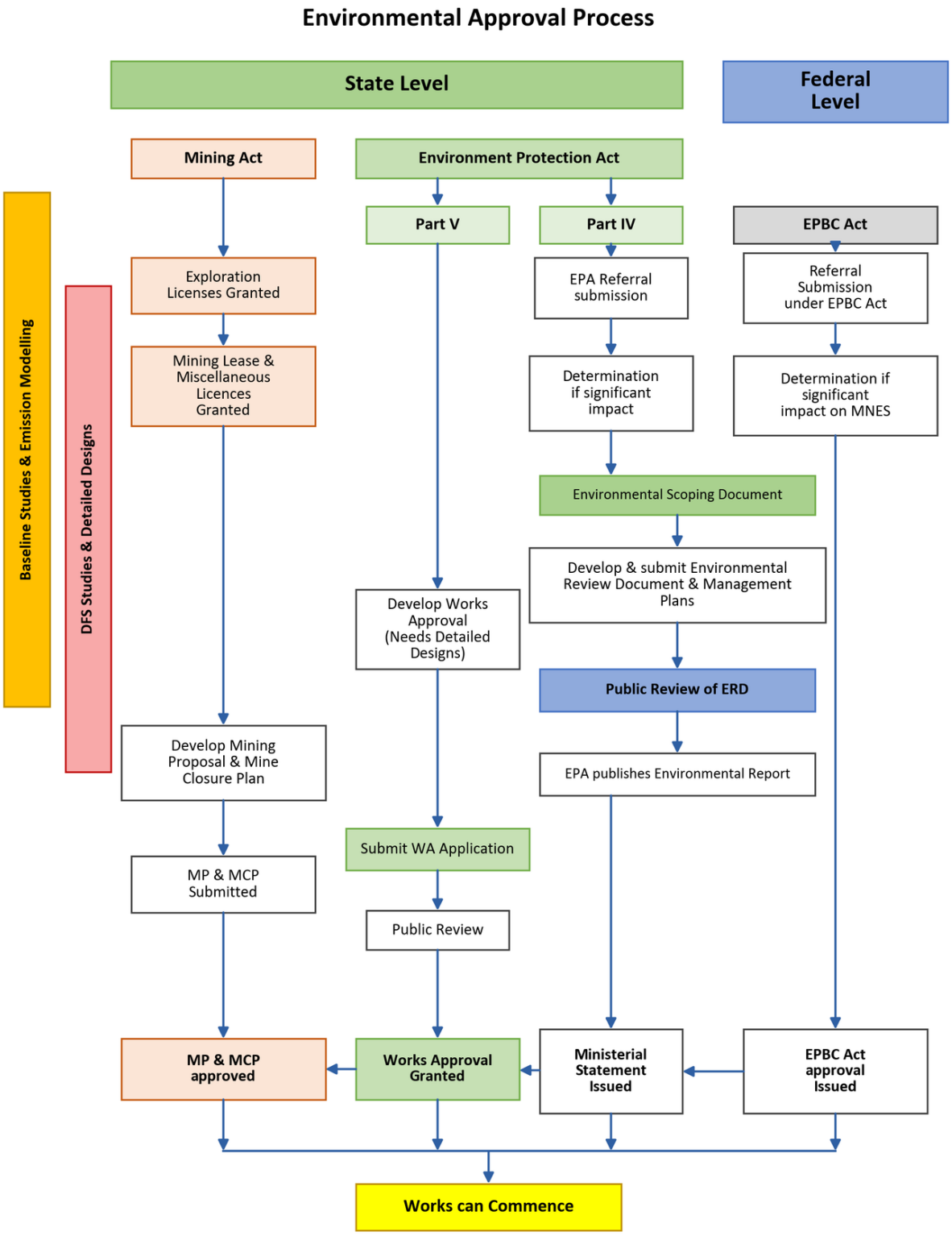

Figure 19: Environmental approval process (MBS Environmental)

For personal use only

Rehabilitation and closure

A rehabilitation provision of approximately **A$12 million** is carried, comprising progressive rehabilitation through the mine life and final close-out. Progressive rehabilitation is straightforward for a strandline operation of this type: mining advances as a series of panels, topsoil is stripped and stored separately for replacement, and voids are backfilled with processed sand behind the advancing face. Tailings storage is temporary rather than permanent, which materially reduces the closure liability a comparable operation would carry.

Project implementation and risk

An indicative execution schedule covering a Bankable Feasibility Study and the engineering, procurement and construction management (EPCM) program is expected to take approximately **35 months**, with a number of the constituent durations running in parallel rather than in sequence. The PFS includes a structured risk assessment across compliance, plant and equipment, mining and production, and technical services and design, with key risks identified and mitigation measures defined. A rehabilitation provision of approximately A$12 million has been included, comprising progressive rehabilitation through the mine life together with final close-out costs (Table 26).

Preliminary execution schedule

Table 26: Preliminary execution schedule

Project phase	Duration
Bankable Feasibility Study	40 weeks
EPCM execution	87 weeks
Engineering	22 weeks
Procurement	55 weeks
Offsite construction works	14 weeks
Onsite construction works	70 weeks
Commissioning	16 weeks

Indicative durations; a number run in parallel rather than in sequence. Source: Port Gregory PFS, preliminary execution schedule.

The program is sequenced so that engineering and procurement overlap, and so that packaged plant is being fabricated offsite while site civils proceed. The risks carried forward into the next study phase are concentrated in product qualification and distribution, approvals timing, and confirmation of the pricing basis - each of which is the subject of a defined workstream rather than an open item.

Risk profile

The Study carried out a structured risk assessment across ten areas, identifying 38 risks with mitigation measures defined for each. No risk was assessed as extreme. The concentration of risk sits in commercial matters - product qualification, distribution and pricing - which is consistent with a project whose technical route is conventional and whose value is leveraged to product price (Table 27).

Table 27: Risk summary by risk area

Risk area	Risks	Very high	High	Medium	Low or very low
Commercial	8	-	4	3	1
ESG	6	1	-	2	3
HSEC	5	2	1	1	1
Technical services and design	5	2	-	-	3
Mining and production	4	-	2	2	-
Compliance	3	-	3	-	-
Final product	3	-	1	2	-

Risk area	Risks	Very high	High	Medium	Low or very low
Plant and equipment	2	-	1	1	-
Market	1	-	-	1	-
HR and people	1	1	-	-	-
Total	**38**	**6**	**12**	**12**	**8**

Source: Port Gregory PFS, risk summary by risk area.

Long-lead procurement

The critical path through construction runs on the power station and its associated infrastructure rather than on the process plant, which is procurable as packaged modules. Lead times were obtained from the independent power provider as part of the tendered proposal (Table 28).

Table 28: Long-lead equipment procurement times

Long-lead item	Lead time (months)
Gas generation	12
LNG infrastructure	12
Step-up transformers	12
Solar DC	8
Battery energy storage system	8
AC solar central inverter	8
11 kV switch room	8
Diesel generation	6

Source: Port Gregory PFS, equipment procurement lead times.

Principal commercial risks

The Study's highest-rated risks are commercial rather than technical, which is consistent with a project whose process route is conventional and proven. The principal items, and the work directed at them, are set out (Table 29).

Table 29: Principal commercial risks

Risk	Likelihood	Consequence	Rating
Australian dollar depreciates against the US dollar	Possible	Major	High
Domestic logistics costs increase beyond assumed inflation	Possible	Major	High
Upward variation in international shipping costs and availability	Possible	Major	High
Unable to secure debt funding	Unlikely	Severe	High

Source: Port Gregory PFS, key risks - commercial. Note that a weaker Australian dollar is favourable to revenue, which is received in US dollars; the risk as assessed relates to cost and funding exposure.

Each of these is the subject of a defined workstream - the pricing and distribution discussions, the logistics approach of shipping loose in bulk and bagging close to the end user, and the funding process now underway.

Health, safety, environment and compliance risks

Two risks were rated **Very High**, and both concern water. The Study identifies that no water supply has yet been secured for the operation, and that mining could adversely affect neighbouring users or the area water supply. Both are the subject of the hydrogeological program, with borefield testing planned for the first quarter of 2027 and a miscellaneous licence application to follow. The Company regards securing water as a defined workstream on the critical path to a Definitive Feasibility Study. The compliance risks rated High all concern dust and noise control - haul road dust suppression given limited water availability, dust control in the Mineral Separation Plant,

For personal use only

and noise. Each is a design and operating-practice matter to be closed out in the next study phase rather than a fundamental constraint (Table 30).

Table 30: Principal HSEC and compliance risks

Risk area	Principal risk	Rating
HSEC	No water supply secured for the proposed operation	Very High
HSEC	Mining adversely impacting neighbours or area water supply	Very High
Compliance	Haul road dust suppression inadequate given limited water	High
Compliance	Dust control in the Mineral Separation Plant inadequate	High
Compliance	Noise control measures inadequate	High
ESG	Construction accommodation capacity	Very High

Source: Port Gregory PFS, key risks by area. Ratings are the Study's own assessment prior to mitigation.

Next steps

- Advance the Definitive Feasibility Study work program.
- Progress mining lease and environmental approvals.
- Continue offtake and product qualification discussions with end users.
- Advance funding workstreams toward a final investment decision.

Study basis and supporting documentation

The Pre-Feasibility Study was led by IHC Mining, with the Ore Reserve estimate prepared by AMC Consultants and specialist input from Rockwater (hydrogeology), MBS Environmental (approvals), Prosolme (pricing) and Allied (non-process infrastructure). It runs to some 700 pages across the main report and thirteen supporting annexures, each prepared by the responsible consultant (Table 31 and Table 32).

Table 31: Study documentation

Document	Pages
Port Gregory Garnet Pre-Feasibility Study report (main document)	209
Supporting annexures	491
Total Study documentation	**700**

Page counts as at 26 July 2026. Appendix 2 is AMC's final Port Gregory Technical Study and Ore Reserve report, dated 27 July 2026.

Table 32: Annexures to the Pre-Feasibility Study

Ref	Annexure	Pages
App 1	IHC Mining - Port Gregory Mineral Resource Estimate report	202
App 2	AMC Consultants - Technical Study and Ore Reserve Statement	125
App 3	IHC Mining - Metallurgical Bulk Sample Report	8
App 4	Summary of composite assays and drill holes	11
App 5	Garnet Product Investigations Report (Rev 1)	6
App 6	Mineral assemblage composite IDs (MACNUM) and results	2
App 7	Prosolme - International pricing information	13
App 8	Sizing analysis of mineral assemblage composites	8
App 9	Port Gregory PFS financial model (PGR142)	19
App 10	MBS Environmental - Environmental Approvals Strategy	48
App 11	Rockwater - Hydrogeological Assessment	31
App 13	Competent Person consents (register and signed consents)	18
	Total annexure pages	**491**

Appendix 12 (non-process infrastructure) is not a standalone annexure; that content sits within the main PFS report.

For personal use only

For personal use only

Study contributors and responsibility

The Study was not prepared by a single party. Each discipline was assigned to a specialist consultant with a named responsible person and a technical report standing behind it, which is set out (Table 33).

Table 33: Study contributors and responsible persons

Discipline	Consultant	Responsible person
Mineral Resources	IHC Robbins Pty Ltd trading as IHC Mining	Greg Jones (Competent Person)
Mining and geotechnical	AMC Consultants Pty Ltd	Adrian Jones (Competent Person)
Metallurgy and processing	IHC Robbins Pty Ltd trading as IHC Mining	Mitch Ryan (Competent Person)
Marketing and pricing	Prosolme Industrial Solutions	Bob McMurdy
Financial modelling	Mining Insights Pty Ltd	Manish Garg
Environmental, permitting and closure	MBS Environmental Pty Ltd	Kristy Sell
Hydrogeology	Rockwater Pty Ltd	Steve Bolton
Non-process infrastructure	Allied Project Developments Pty Ltd	Matthew Robbins
Legal, tenements and native title	Heavy Minerals Limited	Adam Schofield

Source: Port Gregory PFS, contributing consultants and responsible persons.

Competent Person statements

Mineral Resources

The information in this announcement that relates to the Mineral Resource estimate for Heavy Minerals Limited is based on, and fairly represents, information and supporting documentation prepared by Mr Greg Jones, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. The Mineral Resource estimate was originally completed by Mr Jones while employed by IHC Mining. Mr Jones is now employed by Mineral Technologies and has reviewed the estimate and confirms that it is consistent with the data and interpretation previously reported. Mr Jones has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jones consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Ore Reserves

The information in this announcement that relates to the Ore Reserve estimate is based on, and fairly represents, information prepared under the direction of Mr Adrian Jones, a full-time employee of AMC Consultants Pty Ltd and a Member of the Australasian Institute of Mining and Metallurgy. Mr Jones is the Competent Person for the Port Gregory Ore Reserve estimate and has sufficient experience relevant to the style of mineralisation, type of deposit and open pit mining methods under consideration to qualify as a Competent Person as defined in the JORC Code (2012). Mr Jones consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Process metallurgy

The information in this announcement that relates to process metallurgy is based on information reviewed and work completed by Mr Mitch Ryan, a Member of the Australasian Institute of Mining and Metallurgy and Principal Metallurgist of IHC Mining. Mr Ryan has sufficient experience that is relevant to the type of processing under consideration and to the activity being undertaken to qualify as a Competent Person as defined by the JORC Code (2012). Mr Ryan consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Basis of the production target and forecast financial information.

The production target and the forecast financial information in this announcement are derived from the Pre-Feasibility Study. The Study was completed to a level of accuracy appropriate to a Pre-Feasibility Study by the specialist consultants identified above, each responsible for their own discipline, and the Company confirms that it has a reasonable basis for providing the forward-looking statements included in this announcement.

Material assumptions

For personal use only

The material assumptions on which the production target and forecast financial information are based are set out in this announcement and comprise:

- the Mineral Resource and Ore Reserve estimates and their classification;
- the mine plan, pit designs and production schedule;
- metallurgical recoveries established by bulk test work;
- capital and operating cost estimates;
- a product price basis of a weighted average year-one basket price of US$555 per tonne, with 2% real annual escalation applied to the bulk 20/40, 30/60 and 80 grades and nil escalation to the 120 grade and ilmenite;
- an exchange rate of US$:A$ 0.65;
- a corporate tax rate of 30%; and
- a real discount rate of 8% on an unlevered basis.

The production target comprises 2,937.4 kt of garnet product and 129.6 kt of ilmenite by-product over the 24-year life. Approximately 94.3% of the mill feed underpinning that production target is classified as Probable Ore Reserve and approximately 5.7% as Inferred Mineral Resource. No part of the Ore Reserve is classified as Proved. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources, or that the production target itself will be realised. The Company has concluded that it has reasonable grounds for including this material, and that the production target is not dependent on it - the Ore Reserve alone supports a substantial majority of the schedule.

Funding

The Study indicates development capital of A$122.1 million and a peak funding requirement of approximately A$89.5 million. The Company does not currently have this funding in place. The Company is advancing funding workstreams and will require additional funding, which may comprise debt, equity, royalty or pre-sale arrangements or a combination of them, to develop the Project. There is no certainty that the Company will be able to source funding on acceptable terms, or at all, and any equity funding may be dilutive to existing shareholders. Investors should note that the Project cannot proceed to development without it.

The Company is not aware of any new information or data that materially affects the information included in this announcement, and confirms that all material assumptions and technical parameters underpinning the Mineral Resource and Ore Reserve estimates, the production target and the forecast financial information continue to apply and have not materially changed.

Forward-looking statements

This announcement contains forward-looking statements concerning Heavy Minerals Limited's plans for the Port Gregory Garnet Project, including statements about the Pre-Feasibility Study outcomes, production targets, capital and operating costs, financial results and development timing. Forward-looking statements are based on assumptions and judgements of management regarding future events and results, and involve known and unknown risks, uncertainties and other factors, many of which are outside the control of the Company. Actual results may differ materially from those expressed or implied. The production target and forecast financial information in this announcement are underpinned by the Ore Reserve and, to a lesser extent, by Inferred Mineral Resources, which represent approximately 5.7% of the mill feed underpinning the production target. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources, or that the production target itself will be realised. The Company confirms that all material assumptions underpinning the production target and the forecast financial information continue to apply and have not materially changed. Investors should not place undue reliance on forward-looking statements, which speak only as at the date of this announcement. The Company does not undertake to update them except as required by law.

Authorisation

This announcement has been authorised for release by the Board of Heavy Minerals Limited.

For further information:

Heavy Minerals Limited | info@heavyminerals.com | heavyminerals.com

About Heavy Minerals Limited

Heavy Minerals Limited (ASX: HVY) is an Australian listed industrial mineral exploration and development company. The Company's projects are prospective for industrial minerals including but not limited to garnet, zircon, rutile and ilmenite.

The Company owns 100% of the **Port Gregory Garnet Project** in Western Australia, which hosts a Mineral Resource of 165 Mt at 4.0% THM containing 5.8 Mt of garnet. The Pre-Feasibility Study the subject of this announcement reports a maiden Probable Ore Reserve of 85.5 Mt at 4.43% THM for 3.3 Mt of contained garnet, a 24-year mine life and a post-tax NPV of A$322.8 million.

The Company has entered into a Binding Tailings Processing Agreement with Hillgrove Resources Limited (ASX: HGO) to produce garnet from the **Kanmantoo** Copper Mine tailings in South Australia, with a target production rate of 50,000 tonnes per annum and the potential to expand to 100,000 tonnes per annum. The Kanmantoo Garnet Exploration Target was reported to ASX on 9 March 2026 in the announcement "Kanmantoo Garnet Exploration Target"[1].

The Company also owns 100% of the **Red Hill Garnet Project** in Western Australia, where a Mineral Resource estimate is being defined, and holds a 70% interest in the **Inhambane** heavy mineral sands project in Mozambique. The Red Hill Exploration Target was reported to ASX on 4 May 2023 in the announcement "Red Hill Assay Results - Exploration Target Revised"[2], and the Inhambane Mineral Resource was reported to ASX on 6 December 2021 in the announcement "Mineral Resource Increased at Inhambane to 90 Mt at 3% THM"[3]. The Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements. An Exploration Target is conceptual in nature; there has been insufficient exploration to estimate a Mineral Resource and it is uncertain that further exploration will result in the estimation of a Mineral Resource.

[1] Kanmantoo Garnet Exploration Target, ASX announcement 9 March 2026. https://heavyminerals.com/wp-content/uploads/2026/05/20260308-kanmantoo-garnet-exploration-target-6A1315298.pdf

[2] Red Hill Assay Results & Exploration Target - Revised, ASX announcement 4 May 2023. https://heavyminerals.com/wp-content/uploads/2026/05/20230504-red-hill-assay-results-exploration-target-revised-6A1148783.pdf

[3] Mineral Resource Increased at Inhambane to 90Mt at 3pc THM, ASX announcement 6 December 2021. https://heavyminerals.com/wp-content/uploads/2026/05/20211205-mineral-resource-increased-at-inhambane-to-90mt-at-3pc-thm-6A1067130.pdf

For personal use only

For personal use only

APPENDIX - JORC CODE (2012) TABLE 1

The following tables are reproduced from the Port Gregory Pre-Feasibility Study and are provided in accordance with the reporting requirements of the JORC Code (2012).

Section 1 - Sampling techniques and data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Aircore drilling was used to obtain samples for analysis at a mixture of 1, 1.5 and 2 m intervals Each sample was homogenized within the sample bag by rotating the sample bag A appropriate sample of sand, approx. 70 g (or the size of a matchbox), is scooped from the sample bag for an initial visual THM% estimation and logging. A similar sample mass is used for every pan sample for visual THM% estimation The standard sized sample is to ensure calibration is maintained for consistency in visual estimation A sample ledger is kept at the drill rig for recording sample numbers The aircore drill samples have an average range between 6 kg and 9 kg and were split down using a rig based rotary splitter to 1.5 to 2.5 kg. Samples were transported to Diamantina Laboratories for assaying The laboratory sample was dried for up to 24 hours @ 105-110 degrees Celsius The sample was then loosened until friable and passed through a rotary splitter to take a 250 g sub-sample This sub-sample was then wet screened on a Sweco vibrating screen deck at a top aperture of 1 mm (oversize - OS) and a bottom screen of 45 µm (SLIMES fraction) The sand fraction containing the THM (-1 mm and +45 µm) is then dried and a sub- split of approximately 100 g is taken using a micro riffle splitter and used for heavy liquid separation using funnels and a heavy liquid, Tetrabromoethane (TBE), with a density of between 2.92 and 2.96 gcm-3 to determine total heavy mineral (THM) content.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Aircore drilling with inner tubes for sample
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	AC drill sample recovery is monitored by reviewing the sample mass of the total weight of the 1.0, 1.5 or 2.0 m interval weighed both on site as a wet sample and at the laboratory as a dried sample Industry leading mineral sand drilling specialists were engaged to drill the holes with experienced drillers to maximize drill recovery such as maintaining drill penetration rates, airflow and water injection While initially collaring the hole, limited sample recovery can occur in the initial 0 m to 2 m sample interval owing to sample and air loss into the surrounding loose soils The initial 0 m to 2 m sample interval is drilled very slowly in order to achieve optimum sample recovery The entire sample passes through the on board rotary splitter and the sample collected in a pre-numbered calico bag. The bulk reject is not collected and is shovelled back down the hole upon completion About 5 samples are placed in numbered poly weave bags and secured with a cable tie All samples were drilled in dry conditions, with no groundwater encountered. Water injection was used to keep dust down and maintain the integrity of the drill hole

For personal use only

Criteria	JORC Code explanation	Commentary
		At the end of each drill rod, the drill string is cleaned by blowing down with air/water to remove any clay and silt potentially built up in the sample hose At the end of each hole the cyclone is inspected for material build up and cleanliness (for potential contamination) The twin-tube aircore drilling technique is known to provide high quality samples from the face of the drill hole
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	The aircore samples were each qualitatively
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	The AC drill sample collected at the source was split down to 1.5 to 2.5 kg using a rig based rotary splitter The sample size and process is considered an appropriate technique for mineral sands The sample sizes were deemed suitable to reliably capture THM, slime, and oversize characteristics, based on industry experience of the geologists involved and consultation with laboratory staff Field duplicates of the samples were completed at a frequency of 1 per 40 primary samples Standard Certified Reference Material samples are inserted into numbered sample bags in the field at a frequency of 1 per 40 samples. These are blind to the laboratory staff and laboratory processing flowsheet
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometres, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	The wet panning at the drill site provides an
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	All results are checked by the Competent Person The Competent Person makes periodic visits to the laboratory to observe sample processing A process of laboratory data validation using mass balance is undertaken to identify entry errors or questionable data Field and laboratory duplicate data pairs (THM / OS / SLIMES) of each batch are plotted to identify potential quality control issues Standard Certified Reference Material sample results are checked from each sample batch to ensure they are within tolerance (<2SD) and that there is no bias or drift The field and laboratory data has been updated into a Microsoft Access database and then imported into Datamine drill hole files Data validation criteria are included to check for overlapping sample intervals, end of hole match between 'Lithology', 'Sample', 'Survey' files, duplicate sample numbers and other common errors No adjustments are made to the primary assay data
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	Down hole surveys for shallow vertical
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Aircore Drilling

Criteria	JORC Code explanation	Commentary
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. *Whether sample compositing has been applied.*	The planned drill density was 100 m east- west by 250 m north-south Drilling completed to date consists of 325 AC holes spread across 19 parallel East/West orientated lines spaced 250 m apart in a North/South direction. Of these holes, a total of 306 were used in the Mineral Resource estimate preparation. Holes were omitted due to issues identified on site with sampling, holes collapsing and abandoned from the early stages of the previous drill program, and those holes strongly suspected sample contamination due to poor drilling technique. Of this, 19 of the excluded drill holes were twin holes before the grade interpolation was undertaken. This spacing is designed for supporting the development of Mineral Resource Estimation Each aircore drill sample is a single 1, 1.5 or 2 m sample of material intersected down the hole No compositing has been applied for values of THM, slime and oversize, other than the summary reporting of mineralisation intervals in this announcement Compositing of samples (107 composite samples) was undertaken on THM concentrates for mineral assemblage determination. The mineral assemblage composite samples were determined by geological domains.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The aircore drilling section lines were oriented perpendicular to the strike of mineralisation The strike of the mineralisation is sub- parallel to the contemporary coastline and is interpreted to be controlled by limestone basement Drill holes were vertical because the nature of the mineralisation is relatively horizontal
Sample security	*The measures taken to ensure sample security.*	Aircore samples remained in the custody of Company representatives until they were trucked to Perth using an independent contractor or samples were transported by Company representatives The samples were transported to Perth and delivered directly to the laboratory along with a sample manifest for checking of samples The laboratory inspected the packages and did not report tampering of the samples
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Internal reviews were undertaken. No audits or reviews of the mineral resource estimate have been undertaken at this point in time.

Source: Port Gregory Garnet Pre-Feasibility Study, document 2016-CI-REP-0000-8060.

For personal use only

For personal use only

Section 2 - Reporting of exploration results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The completed drilling and Mineral Resource estimate lies within the granted exploration licences The drill samples for this Mineral Resource estimate were taken from tenement E70/5160 and E70/5934 At the time of reporting all tenure was secure and any administer active costs or fees were fully paid up
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Previous tenement holders in the area, GMA,
Geology	*Deposit type, geological setting and style of mineralisation.*	The deposit style is a combination of dunal and fluvial / marine sediments. Heavy mineral accumulations are preserved throughout the stratigraphic sequence
Drill hole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* *easting and northing of the drillhole collar* *elevation or RL (Reduced Level - elevation above sea level in metres) of the drillhole collar* *dip and azimuth of the hole* *downhole length and interception depth* *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	All significant drill results and drill hole collar
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* *If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	All drill holes are vertical and perpendicular to the dip and strike of mineralisation and therefore all interceptions are approximately true thickness. Drill holes are inferred to intersect the mineralisation approximately perpendicularly. The deposit style is flat-lying and so the vertical holes are assumed to intersect the true width of any mineralisation.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	Figures and plans are displayed in the main text of the report
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All drill results > 2.0% THM have been
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Samples have not yet been tested for in situ density Passive seismic surveys have been carried out over the deposit in alignment with planned drilling. Preliminary results correlate to the identification of bands of limestone and calcrete in the drilling carried out to date Detailed mineral assemblage work was undertaken on composite samples from across the resource area using whole

Criteria	JORC Code explanation	Commentary
		rock XRF analysis and QXRD analysis by Bureau Veritas Minerals Pty Ltd, South Australia
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Pre-feasibility study ('PFS') Further work via additional exploration and in-fill drilling to target high grade and continuous mineralisation is recommended

Source: Port Gregory Garnet Pre-Feasibility Study, document 2016-CI-REP-0000-8060.

For personal use only

For personal use only

Section 3 - Estimation and reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	Exploration data provided by the company to IHC Mining in the form a Microsoft Access database Checks of data by visually inspecting on screen (to identify translation of samples), duplicate assays was visually examined to check the reproducibility of assays Database assay values have been subjected to random reconciliation with laboratory certified value is to ensure agreement Visual and statistical comparison was undertaken to check the validity of results
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	Regular site trips before and during the resource drilling program were undertaken by Competent Person Mr Greg Jones to observe the drilling data collection, and sampling activities
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	The geological interpretation was undertaken by IHC Mining in collaboration with the company's Executive Director and then validated using all logging and sampling data and observations Current data spacing and quality is sufficient to indicate grade continuity Interpretation of modelling domains was restricted to the main mineralised envelopes utilising THM, SLIMES, oversize, mineralogy and geological logging. The interpretation of domains was also aided by the utilisation lithological colour logging which assisted with distinguishing domain boundaries Optical mineral scanning was undertaken on THM sink fractions by Diamantina Laboratories. This was a rapid scan and estimate process with rounding to the nearest 5% and 1% for trace mineral species. This scanned mineralogy was used to guide the domain interpretation and the design of the mineral assemblage composites There is a high degree of confidence in the geological interpretation and of the enclosed mineralised envelopes Grade trends have been used with cross- sectional data and variography analysis to define search ellipsoid orientation and size in populating the resource model three geological domains and a basement zone were identified and are used as constraints in the Mineral Resource Estimation There are two primary geological domains for the deposit, an upper near surface high THM grade domain (Zone 1) and a lower low THM grade domain (Zone 2) A smaller discontinuous geological domains located at the western extents of the deposit consists of high THM grade located at depth along the western edge of the deposit exhibiting elevated garnet grades
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Mineral Resource field for the Project is
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the MRE takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*	The mineral resource estimate was conducted using Datamine Studio RM mining software. Inverse distance weighting techniques were used to interpolate assay grades from drill hole samples into the block model and nearest neighbour techniques were used to interpolate index values and nonnumeric sample identification into the block model. The mostly regular dimensions of the drill grid and the anisotropy of the drilling and sampling grid allowed for the use of inverse distance methodologies as no de-clustering of samples was required. Appropriate and industry standard search ellipses were used to search for data for the interpolation and suitable limitations on the number of samples and the impact of those samples was maintained. An inverse distance weighting power of 3 ('ID3') was used so as not to over smooth the grade interpolations. Ordinary Kriging was also used as check against the inverse distance weighting using THM grade as a comparison which proved successful demonstrating comparable results. Hard domain

For personal use only

Criteria	JORC Code explanation	Commentary
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	boundaries were used and these were defined by the geological wireframes that were interpreted No assumptions were made during the resource estimation as to the recovery of by- products SLIMES and oversize contents are estimated at the same time as estimating the THM grad The average parent cell size used for the interpolation was half the standard drill hole width and half the standard drill hole section line spacing No assumptions were made regarding the modelling of selective mining units however it is assumed that a form of dry mining will be undertaken, and the cell size and the sub cell splitting will allow for an appropriate dry mining preliminary reserve to be prepared. Any other mining methodology will be more than adequately catered for with the parent cell size that was selected for the modelling exercise No assumptions were made about correlation between variables The Mineral Resource estimates were controlled to an extent by the geological / mineralisation and basement surfaces Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing and the fact that samples were not clustered nor
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Cut-off grades for THM were used to prepare
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	Cut-off grades for THM% grade were used to prepare the reported resource estimates. The selection of the THM% cut-off grade used for reporting was based on the experience of the Competent Person, grade tonnage curves along with grade distribution along the length of the deposit The chosen cut-off grade is >2% THM
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	No specific mining method is assumed other
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Metallurgical assumptions were used based on mineral assemblage composites which at this stage only allow for preliminary commentary with no final products being defined from the reported mineral species.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	No assumptions have been made regarding possible waste and process residue however disposal of by products such as SLIMES, sand and oversize are normally part of capture and disposal back into the mining void for eventual rehabilitation. This also applies to mineral products recovered and waste products recovered from metallurgical processing of heavy mineral.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used,*	A bulk density algorithm was prepared using first principles techniques coupled with industry experience that is exclusive to

Criteria	JORC Code explanation	Commentary
	whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	IHC Mining. We believe the bulk density formula to be conservative and fit for purpose at this level of confidence for the Mineral Resource estimates and based on our experience and we would also recommend that bulk density test work be undertaken going forward A bulk density (BD) was applied to the model using a standard linear formula originally described by Baxter (1977). This approach was refined in a practical application by this author using the following first principles calculations to develop a regression formula. This regression formula was then used to calculate the conversion of tonnes from each cell volume and from there the calculation of material, THM and SLIMES tonnes The bulk density formula is described as: Bulk Density = (0.009 * HM) + 1.698
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The resource classification for the Port Gregory deposit was based on the following criteria: drill hole spacing, geological and grade continuity, variography of primary assay grades and the distribution of bulk samples. The classification of the Indicated and Inferred Mineral Resources was supported by all the supporting criteria as noted above. As a Competent Person, Greg Jones considers that the result appropriately reflects a reasonable view of the deposit categorisation.
Audits or reviews	*The results of any audits or reviews of MREs.*	Internal reviews were undertaken. No audits or reviews of the mineral resource estimate have been undertaken at this point in time.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the MRE using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Variography was undertaken to determine

Source: Port Gregory Garnet Pre-Feasibility Study, document 2016-CI-REP-0000-8060.

For personal use only

For personal use only

Section 4 - Estimation and reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	*Description of the MRE used as a basis for the conversion to an Ore Reserve.* *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Ore Reserve estimate for the Port Gregory Garnet Project is based on the 2025 Mineral Resource estimate prepared by IHC Mining Pty Ltd. The Ore Reserve represents the economically mineable portion of the Mineral Resource after application of mining, metallurgical, processing, economic, environmental and other relevant Modifying Factors, as required by the JORC Code (2012).
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	The Competent Person for mining and Ore Reserves completed a site visit to the Port Gregory Project area in December 2024. The site visit provided familiarity with the deposit setting, access, existing disturbances, proposed mining areas and site conditions relevant to mine planning, scheduling and Ore Reserve estimation.
Study status	*The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *The Code requires that a study to at least PFS level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The Ore Reserve estimate has been prepared to Pre-Feasibility Study level, with an expected level of accuracy of ±25%. The estimate is supported by mine planning, pit optimisation, geotechnical assessment, metallurgical and mineral processing studies, cost estimation and economic evaluation undertaken as part of this Study.
Cut-off parameters	*The basis of the cut-off grade(s) or quality parameters applied.*	Ore Reserve estimation is based on an economically derived cut-off grade of approximately 1.05% THM. The cut-off incorporates processing costs, recoveries, RF-related recovery penalties, and product pricing assumptions, subject to slimes content less than 30% and oversize content less than 15%.
Mining factor assumptions	*The method and assumptions used as reported in the PFS or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.* *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* *The mining dilution factors used.* *The mining recovery factors used.* *Any minimum mining widths used.* *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* *The infrastructure requirements of the selected mining methods*	Mining is assumed to be undertaken by open pit methods using surface miners for indurated material and scraper-based mining for softer sediments. Pit optimisation was undertaken using the Whittle Four-X implementation of the Lerchs–Grossmann algorithm, applying an overall slope angle of 34 degrees. Practical pit designs, mine staging and a life-of-mine schedule were developed from the selected optimisation shell. Minor inclusion of Inferred Mineral Resource within the pit shell does not materially influence the Ore Reserve outcome.
Metallurgical and mineral processing factors	*The metallurgical process proposed and the appropriateness of that process to the style of factors or mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.* *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* *Any assumptions or allowances made for deleterious elements.* *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.*	Metallurgical assumptions are based on testwork and process studies completed for the Project. Garnet recovery, product quality and sizing distributions incorporated into the Mineral Resource model underpin the mining and treatment schedule used for Ore Reserve estimation. Variability testing is expected to be undertaken during subsequent study phases.

For personal use only

Criteria	JORC Code explanation	Commentary
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications	
Environmental	*The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste drum s should be reported.*	The mining strategy assumes progressive backfilling of mined panels with waste material, including sand tailings, oversize and slimes, thereby minimising surface disturbance. Environmental considerations applied are consistent with existing approvals and assumptions appropriate for Pre-Feasibility Study level assessment.
Infrastructure	*The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.*	The Project benefits from sealed road access and proximity to established regional infrastructure and services. Mine planning assumes conventional supporting infrastructure suitable for a dry mining operation, with no reliance on specialised or unproven infrastructure solutions.
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.* *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.* *The source of exchange rates used in the study.* *Derivation of transportation charges.* *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* *The allowances made or royalties payable, both government and private.*	Mining costs were estimated by AMC using a schedule-driven, first-principles approach based on fleet selection, productivity assumptions and operating hours. Processing, infrastructure and other cost inputs were supplied by HVY and reflect current prevailing economic conditions.
Revenue factors	*The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	Revenue assumptions are based on forecast Garnet product pricing supplied by HVY. Adjustments for product sizing, recoveries and RF-related penalties have been incorporated into the NSR model used for pit optimisation and Ore Reserve estimation.
Market assessment	*The demand, supply and stock situation for the particular commodity, consumption trends assessment and factors likely to affect supply and demand into the future.* *A customer and competitor analysis along with the identification of likely market windows for the product.* *Price and volume forecasts and the basis for these forecasts.* *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	The Garnet market is well established, with demand across abrasive, waterjet cutting and industrial applications. No material market constraints have been identified that would preclude sale of the forecast product volumes assumed in the Ore Reserve estimate.
Economic	*The inputs to the economic analysis to produce the NPV in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	Economic evaluation based on the mine plan, production schedule and cost assumptions demonstrates that the Project is economically viable under the assumptions adopted for the Ore Reserve estimate.
Social	*The status of agreements with key stakeholders and matters leading to social licence to operate.*	The Project is located in an established mining region. Land access, tenure and Native Title considerations have been addressed to a level appropriate for Ore Reserve estimation and are not considered to present material impediments to development.
Other	*The status of agreements with key stakeholders and matters leading to social licence to operate.* *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* *Any identified material naturally occurring risks.*	The Project lies within granted exploration licence E70/5160, one of five granted tenements held by Heavy Minerals Limited over the Port Gregory strandline. A Mining Lease application over the Study area is in the process of being lodged, and a miscellaneous licence application covering the proposed borefield will follow hydrogeological testing planned for the first quarter of 2027. State royalties applicable to the product have been applied at the

Criteria	JORC Code explanation	Commentary
	The status of material legal agreements and marketing arrangements. *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary government approvals will be received within the timeframes anticipated in the PFS or feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	block level in pit optimisation and are included in the financial model. No other naturally occurring risks, or material marketing, legal, environmental, social or governmental factors, are known that would materially affect the Ore Reserve estimate.
Classification	*The basis for the classification of the Ore Reserves into varying confidence categories.* *Whether the result appropriately reflects the Competent Person's view of the deposit.* *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	All Ore Reserves are reported as Probable Ore Reserves. Material originally classified as Measured Mineral Resource has been treated as Indicated Mineral Resource for Ore Reserve reporting purposes, consistent with the Resource model review conclusions documented in this report.
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates.*	The Mineral Resource model and key technical inputs have been reviewed by AMC for suitability for Ore Reserve estimation. No material issues were identified that would preclude use of the inputs for Ore Reserve reporting.
Discussion of relative accuracy/confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Ore Reserve estimate has been prepared to Pre-Feasibility Study accuracy (±25%). Confidence reflects the shallow, laterally continuous nature of the mineralisation, the use of conventional mining methods, and the level of supporting technical work completed to date.

Source: Port Gregory Garnet Pre-Feasibility Study, document 2016-CI-REP-0000-8060.

For personal use only