30th JANUARY 2025

#### CORPORATE ANNOUNCEMENT

# **DECEMBER 2024 QUARTERLY REPORT**

#### **HIGHLIGHTS**

1. Lake Hope High Purity Alumina (HPA) Project, WA (IPT earning 80%)

Significant progress made on the Pre-Feasibility Study

# The Mine at Lake Hope:

- A maiden Measured Resource of 730,000 tonnes at 25.8% alumina
   (Al₂O₃) defined, underpinning an initial 15-year mine life which is part of
   a much larger resources that includes Indicated and Inferred Resources.
- Ongoing work towards declaring a maiden Proven Reserve, with mining and economic studies advancing.
- Funding secured to accelerate development of the pilot plant through a Federal Government grant of \$2.87 million in collaboration with CPC Engineering and Edith Cowan University.

#### The Process Plant:

- CPC Engineering continues engineering studies for the 10,000 tpa HPA plant, incorporating design improvements for acid regeneration.
- Test work progressing, with a 20 kg sample of intermediate material prepared for acid leaching under the Low-Temperature Leach process.

#### **Product Development and Offtake:**

- Joseph Casella appointed as Marketing Manager to lead engagement with potential off-take partners and customers.
- Market studies align with strong global demand, positioning Impact for successful market entry.

#### 2. Arkun-Beau, WA (IPT 100%)

- Further landholder liaison has unlocked new areas to sample
- 311 new soil samples were collected which included infill sampling at the Caligula target and over new mobile MT anomalies
- Drill targeting and planning for Q2 2025

#### COMPANY DETAILS

Market Cap: A\$33.7m (0.011 p/s)
Issued Capital: 3,059,433,718

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Website: impactminerals.com.au

**DIRECTORS** 

Mr Peter Unsworth Chairman

**Dr Michael Jones** Managing Director

**Mr Paul Ingram** Non-Executive Director

**Dr Frank Bierlein** Non-Executive Director

> **Mr Arron Canicais** Company Secretary

# 3. Commonwealth Project (IPT 100%)

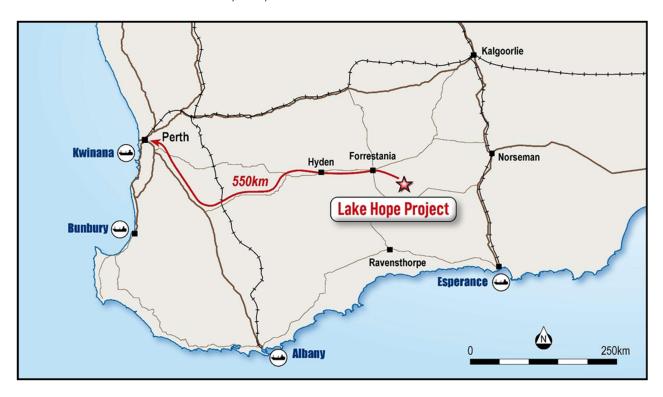
- Burrendong Minerals Limited has released its prospectus for an IPO, offering 25 million shares at \$0.20 per share, with a one-for-two free attaching option exercisable at \$0.25 within 36 months.
- Impact shareholders have a priority entitlement of \$2 million in the IPO.

# 4. Corporate/Finance

- Research and Development Tax Incentive Rebate of \$512,000 received during the quarter.
- Cash as of December 31st \$1.20 million.

## 1. LAKE HOPE HIGH PURITY ALUMINA PROJECT, WA (IPT earning 80%)

During the Quarter, significant progress continued to be made on the Pre-Feasibility Study for the Lake Hope High Purity Alumina (HPA) Project, located 500 km east of Perth, WA (Figure 1). The PFS has a focus on achieving 10,000 tonnes per annum (tpa) production of 99.99% (4N) HPA, a critical mineral for high-tech industries such as lithium-ion batteries, LEDs, and semiconductors.



**Figure 1.** Location of the Lake Hope Project and proposed haul route to Kwinana.

#### The Mine at Lake Hope

A maiden Measured Resource of 730,000 tonnes at 25.8% alumina ( $Al_2O_3$ ) for 189,000 tonnes of contained alumina was declared during the Quarter (ASX Release 19<sup>th</sup> November 2024), supporting a planned maiden Reserve for at least 15-years of production at the target rate of 10,000 tpa HPA. This resource upgrade follows a program of infill drilling designed to convert Indicated Resources into Measured Resources. It is part of a much larger resource that includes Indicated and Inferred Resources within a unique deposit of high-grade alumina hosted in extremely fine-grained evaporite and clay minerals in the top two metres of two small dry salt lakes in the Lake Hope playa system (ASX Release 21st March 2023).

The larger resource underpins a potentially much longer mine life of at least 25 years, as reported in the Scoping Study on Lake Hope. The study showed that the project had very robust economics, with an after-tax Net Present Value (NPV8) of A\$1.3 billion and one of the lowest operating costs per tonne of HPA globally (ASX Release 9th November 2023). Impact confirms that all material assumptions underpinning the production target and forecast financial information in the Scoping Study continue to apply.

Other key developments at the mine include:

- The lodgement of the Mining Lease Application (MLA63/684) and associated Miscellaneous Licence L63/99 (ASX Release 12th August 2024).
- A review of mining schedules and logistics planning, with quotes for mining and haulage operations to Kwinana awaited.
- Ongoing discussions with the Ngadju Aboriginal people under a signed Negotiation Protocol aim to secure Land Access Agreements and Cultural Heritage Management Plans.
- Planning of flora, fauna, and heritage surveys for the proposed haul road and other infrastructure is underway.

#### The Process Plant at Kwinana

Kwinana has been confirmed as the optimal location for the HPA processing plant due to its strategic advantages, including proximity to suppliers of chemical reagents required for the processing of Lake Hope clays and access to buyers for fertiliser and acid by-products, which reduces transport and operating costs.

#### **Engineering Progress**

CPC Engineering continued detailed design work for the 10,000 tpa processing plant, including cost estimates and process flow improvements. Significant focus has been placed on integrating an acid regeneration system, a critical step to reduce chemical consumption and operational costs. Discussions to secure State Government-controlled land for the plant in Kwinana remain on track.

# **Test Work and Product Development**

Metallurgical test work remains on schedule, with promising results to date. A 20 kg sample of intermediate material was prepared for advanced acid-leaching trials as part of the Low-Temperature Leach (LTL) Process. The continued development of fertiliser by-products demonstrates the potential for additional revenue streams. Bench-scale tests confirm that HPA produced from Lake Hope meets 99.99% purity standards required for high-tech applications, positioning Impact to deliver a cost-competitive and sustainable product.

## Market Strategy and Off-Take

Impact strengthened its commercialisation strategy through the appointment of Joseph Casella as Marketing Manager (ASX Release 9<sup>th</sup> October 2024). Joseph, formerly of Tianqi Lithium, brings extensive experience in critical minerals markets, product development, and international supply chain management. The global HPA market continues to experience strong demand, growing at a compound annual growth rate (CAGR) of 15% to 20%. Recent market activity highlights robust investor and customer interest, with companies such as Alpha HPA Limited (ASX:A4N) receiving substantial funding and indicative interest exceeding 30,000 tpa with a forecast production rate of only 10,000 tpa. Joseph will lead efforts to engage customers, establish off-take agreements, and refine product specifications to meet market needs.

#### Pilot Plant and CRC-P Grant

A major milestone was achieved with Impact Minerals securing a \$2.87 million CRC-P Grant under the Federal Government's Cooperative Research Centres Projects (CRC-P) program (ASX Release 22<sup>nd</sup> October 2024). The grant, awarded in collaboration with CPC Engineering and Edith Cowan University (ECU), will fund the construction of a pilot plant to produce consistent HPA samples for customer qualification trials and off-take agreements. It will also support the implementation of Membrane Selective Technology (MST), which enhances reagent regeneration, reduces waste, and aims for "zero-liquid discharge". This positions Impact to advance toward a Definitive Feasibility Study (DFS) following the completion of the PFS. CPC Engineering will design, construct, and manage the pilot plant, leveraging their expertise in HPA processing

#### **Next Steps**

Impact remains on track to complete the Pre-Feasibility Study (PFS) for Lake Hope at the end of Q1 2025. Key deliverables include:

- 1. Finalised mining schedules and cost estimates.
- 2. Results from acid regeneration studies and advanced metallurgical testing.
- 3. Engineering designs and capital cost estimates for the full-scale process plant.

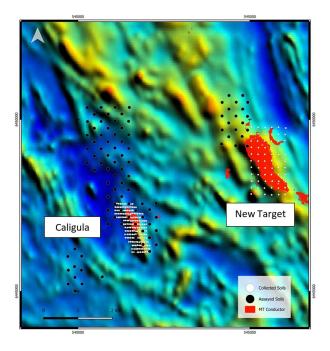
The pilot plant construction, scheduled to begin this quarter, represents a critical step toward commercial production and customer engagement.

#### 2. ARKUN-BEAU-JUMBO Ni-Cu-PGM-REE PROJECT, WA (IPT 100% and 80%)

During December 2024, ongoing landholder liaison facilitated access to new target areas within the Arkun project. During the quarter, 311 soil samples were collected in key target areas. These samples were primarily collected over Mobile MT anomalies, including targeted infill sampling at the Caligula copper target to refine drill targets further (Figure 2). In May 2024, Impact was awarded an EIS funding of \$180,000 to support drill testing at Caligula (ASX Release 1 May 2024). The company plans to execute and complete a substantial drill program in Q2 this year.

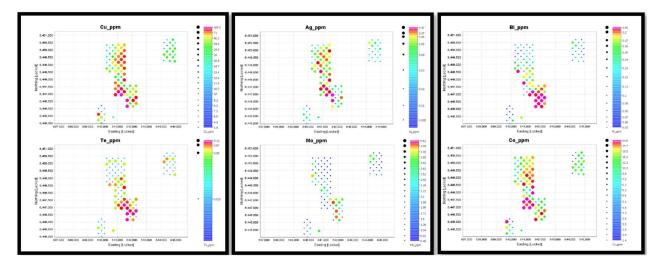
### About the Recent Soil Geochemistry Survey

A total of 311 soil samples were collected during December 2024. Of these, 197 samples focus on an infill over the Caligula copper-in-soil and MT anomaly (ASX Release 24 January 2024) at a tighter 50m x 50m spacing, while 97 samples targeted a newly identified deep mobile MT anomaly (Figure 2, 3 and 4). The remaining samples were collected over additional anomalies, although only partial soil sampling grids could be completed due to cropping and landholder access constraints. The assays for these soil samples have not yet been received.



**Figure 2.** Magnetic map highlighting Mobile MT anomalies (in red) at the Caligula and New Target showing previous assayed soil sampling (black points) and new collected soil locations (white points).

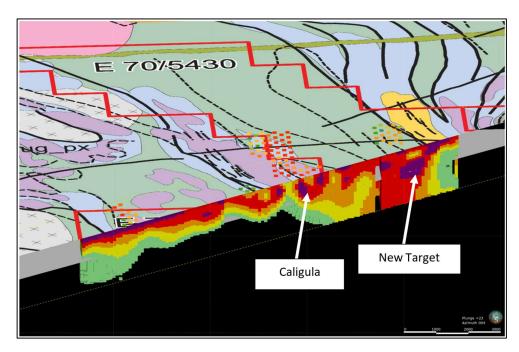
In January 2024, Impact delineated a copper-in-soil anomaly extending approximately 5,000 meters north-south and at least 2,000 meters east-west, remaining open to the east and southwest (Figures 3 and 4). This anomaly is characterized by elevated levels of copper associated with silver, cobalt, and, in its southern extent, bismuth, tellurium, and minor molybdenum. This metal assemblage is typical of porphyry copper deposits, presenting encouraging prospects for future exploration.



**Figure 3.** Previous soil geochemistry results for copper (Cu)-silver (Ag)-Cobalt (Co)-Bismuth (Bi)-Tellurium (Te)-Molybdenum (Mo) in soils at Caligula which have been highlighted in black points in Figure 2. (ASX Release 24 January 2024).

In late 2023, a helicopter-borne MMT survey was conducted to investigate several airborne EM targets. This survey identified several conductive anomalies coinciding with or near the Caligula copper anomaly, including an example shown in Figure 4 (ASX Release, 24 January 2024). These conductors may represent disseminated or massive sulphides.

A notable conductor was also detected a few kilometers east of Caligula, near a major fault identified in regional airborne magnetic data. This area was included in the recent soil sampling for further evaluation.



**Figure 4.** A tilted 3D view of an image of the bedrock geology of the Caligula area showing the soil geochemistry anomaly (coloured squares) and a section line of the MMT data. Purple areas are zones of high conductivity, and two such zones coincide with the geochemistry. A large conductive anomaly close to a major structure occurs at the eastern end of the section line. This is a priority area for further exploration.

The identification of the Caligula prospect, with its potential for a significant porphyry copper and/or gold deposit, represents a critical development at Arkun. The region hosts world-class deposits, including the Boddington porphyry gold-copper deposit (>25 million oz gold and ~1 million tonnes copper, Newmont Corp) and the Calingiri porphyry copper-molybdenum deposit (>3 million tonnes copper, ASX: Caravel Minerals Limited).

Previous re-assays for four acid analysis at Beau in the previous quarter returned similar anomalies determined by the ionic leach assays (ASX Release 18 August 2022).

#### 3. COMMONWEALTH PROJECT (IPT 100%)

During the Quarter, significant progress was made regarding the Commonwealth Project in New South Wales, with the advancement of an Initial Public Offering (IPO) by Burrendong Minerals Limited, an unrelated public company set to take ownership of a majority interest in the project (ASX Release 21<sup>st</sup> November 2024).

#### Burrendong Minerals IPO – Unlocking Value

Burrendong Minerals Limited released its prospectus for an IPO, offering 25 million shares at \$0.20 per share, with a one-for-two free attaching option exercisable at \$0.25 within 36 months. Impact shareholders have a priority entitlement of \$2 million in the IPO. Upon successful listing, Impact will receive a \$275,000 cash payment, a 12.5% shareholding in Burrendong, making Impact its largest shareholder, and retain of a 49% interest in the Commonwealth Project. Burrendong has the option to acquire an additional 24% interest by investing \$5 million over the next three years. This agreement positions Impact Minerals to retain significant exposure to the Commonwealth Project while focusing on its flagship Lake Hope HPA Project.

All shareholders and other interested parties of interest are encouraged to review the prospectus which can be found at:

https://impactminerals.com.au/burrendong-priority-offer

https://www.burrendongminerals.com.au

#### Project Overview and Exploration Upside

The Commonwealth Project, located in the Lachlan Fold Belt—home to world-class deposits like Cadia-Ridgeway and recent discoveries such as Boda-Kaiser—covers a 675 km² tenement package. Burrendong will initially focus on extending and expanding known resources through an aggressive drill program of up to 5,000 metres of diamond and RC drilling once listed.

Burrendong has three JORC-compliant Resources include:

- 1. Commonwealth Mine (Main Shaft and Commonwealth South)
- 2. Silica Hill
- 3. Galwadgere

Key target areas include:

#### 1. Commonwealth Mine:

- Extensions at Main Shaft, where high-grade massive sulphide mineralisation remains open at depth and along trend (ASX Release 26<sup>th</sup> November 2024).
- Significant drill intercepts to be followed up include:
  - o 5.7 m at 3.8 g/t gold, 347 g/t silver, 10.8% zinc, and 3.7% lead.
  - o 8.1 m at 6.0 g/t gold, 193 g/t silver, 5.9% zinc, and 2.3% lead.

#### 2. Silica Hill:

- Follow-up drilling at this virgin discovery to target extensions of bonanza-grade silver and gold veins.
- Exceptional previous results include (ASX Release 26<sup>th</sup> November 2024):
  - o 22.5 m at 1.7 g/t gold and 276 g/t silver, including 0.3 m at 4,200 g/t silver.
  - o 21.8 m at 0.6 g/t gold and 273 g/t silver, with intervals up to 6,240 g/t silver.

#### 3. Galwadgere:

- A copper-gold resource located 10 km south of Commonwealth, with historical intercepts of:
  - o 53 m at 0.55% copper and 0.75 g/t gold, including 6 m at 1.0% copper.

#### Strategic Potential and Geological Significance

The Commonwealth Project demonstrates strong geological similarities to the Eskay Creek Deposit in Canada's renowned Golden Triangle, one of the world's premier high-grade VMS (volcanogenic massive sulphide) deposits. Both projects are characterised by high-grade gold and exceptionally high-grade silver veins, as well as the same sulphide mineral assemblage, including gold, silver sulphosalts, zinc, lead, and barite. The Main Shaft and Silica Hill prospects remain underexplored, with the potential to discover further massive sulphide lenses. Historical drilling has identified zones of exceptional silver grades, including up to 6,240 g/t silver (200 oz/t) over narrow intervals (ASX Release 26<sup>th</sup> November 2024).

#### **Next Steps**

With a fully funded drill program on listing and a focus on extending known high-grade resources, Burrendong Minerals is poised to unlock the significant exploration upside at the Commonwealth Project. Impact Minerals will continue to benefit through its retained equity and interest in the project.

#### 4. OTHER PROJECTS

No significant work was done on Impact's other projects.

### 5. CORPORATE

## **Financial Commentary**

During the Quarter Impact Minerals Limited (ASX:IPT) announced that it had received a rebate of \$512,000 before costs from the Research and Development Tax Incentive scheme for the financial year ending June 2024 (ASX Release 20<sup>th</sup> November 2024).

These funds will be used to continue the Pre-Feasibility Study on Impact's flagship Lake Hope High Purity Alumina (HPA) Project, which is scheduled for completion in Q1 2025. They will also contribute to the accelerated start of the recently announced research and development project in conjunction with CPC Engineering and Edith Cowan University to help build a pilot plant for the Lake Hope Project. The project will also be funded by the recently announced grant of \$2.87 million under the Federal Government's CRC-P programme (ASX Releases October 22nd, 2024, and November 18th, 2024).

The Quarterly Cashflow Report (Appendix 5B) for the current period provides an overview of the Company's financial activities.

Cash exploration expenditure for the period was \$893,000. Corporate and administration expenses amounted to \$477,000. The total amount paid to directors of the entity and their associates in the period (item 6 of Appendix 5B) was \$118,000, including salary, directors' fees and superannuation.

Cash at December 31st was \$1.20 million.

Dr Michael G Jones

**Managing Director** 

Competent Person's Statement

The review of exploration activities and results contained in this report, except the Lake Hope Project, is based on information compiled by Dr Mike Jones, a Member of the Australian Institute of Geoscientists. He is a director of the company and works for Impact Minerals Limited. He has sufficient experience relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mike Jones has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The review of exploration activities and results about the Lake Hope Project and the metallurgical test work contained in this report is based on information compiled by Roland Gotthard, a Member of the Australian Institute of Mining and Metallurgists. He is an consultant to Impact Minerals Limited. He has sufficient experience relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr Gotthard has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The data in this report that relates to Mineral Resource Estimates are based on information evaluated by Mr Simon Tear, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Tear is a Director of H&S Consultants Pty Ltd and consents to the inclusion in the report of the Mineral Resource in the form and context in which they appear.

Impact confirms that it is not aware of any new information or data that materially affects the information included in this market announcement and, in the case of estimates of mineral resources or reserves, that all material assumptions and technical parameters underpinning the estimates in this market announcement continue to apply and have not materially changed.

# **Tenement Information by Listing Rule 5.3.3**

Project /	Location	Status	IPT Interest	IPT Interest
Tenement	Now Courts		at start of	at end of
Commonwealth	New South Wales			
EL5874		Granted	100%	100%
EL8212		Granted	100%	100%
EL8252		Granted	100%	100%
EL8504		Granted	100%	100%
EL8505		Granted	100%	100%
Broken Hill	New South Wales			
EL7390		Granted	100%	100%
EL8234		Granted	100%	100%
EL8636		Granted	100%	100%
EL8674		Granted	100%	100%
EL8609		Granted	100%	100%
EL9036		Granted	100%	100%
EL9037		Granted	100%	100%
EL9115		Granted	100%	100%
EL9294		Granted	100%	100%
EL9384		Granted	100%	100%
EL9481		Surrendered	100%	-
Blackridge	Queensland			
EPM26806		Granted	100%	100%
EPM27571		Granted	100%	100%
EPM27410		Granted	100%	100%
Lake Hope	Western Australia			
E74/763		Granted	Earning in	-
E63/2318		Granted	Earning in	-
E63/2319		Granted	Earning in	-
E63/2086		Granted	Earning in	-
M63/684		Application	Earning in	-
L63/99		Application	Earning in	-
E74/779		Granted	Earning in	-
E63/2370		Granted	Earning in	
E63/2257		Granted	Earning in	

Project / Tenement	Location	Status	IPT Interest at start of	IPT Interest at end of
E63/2492		Granted	Earning in	at end of
E63/2493		Granted	Earning in	
E63/2504		Application	Earning in	
E63/2505		Application	Earning in	
E63/2506		Application	Earning in	
E63/2507		Application	Earning in	
2007	Western	Аррисации	Larring	
Arkun	Australia			
E70/5424		Granted	100%	100%
E70/5430		Granted	100%	100%
E70/5431		Granted	100%	100%
E70/5432		Granted	100%	100%
E70/5433		Granted	100%	100%
E70/5434		Granted	100%	100%
E70/5490		Granted	100%	100%
E70/5504		Granted	100%	100%
E70/5505		Granted	100%	100%
E70/6598		Granted	100%	100%
E70/6595		Application	-	-
E70/6604		Granted	100%	100%
Doonia	Western Australia			
E15/1790		Granted	80%	80%
Jumbo	Western Australia			
E70/5852	+	Granted	80%	80%
Dalgaranga	Western Australia			
E59/2620		Granted	80%	80%
Narryer	Western Australia			
E52/3967		Granted	80%	80%
E52/3985		Granted	80%	80%