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| Sustainability Focus | Established Export Infrastructure

MARCH 2024



MACARTHUR
Minerals

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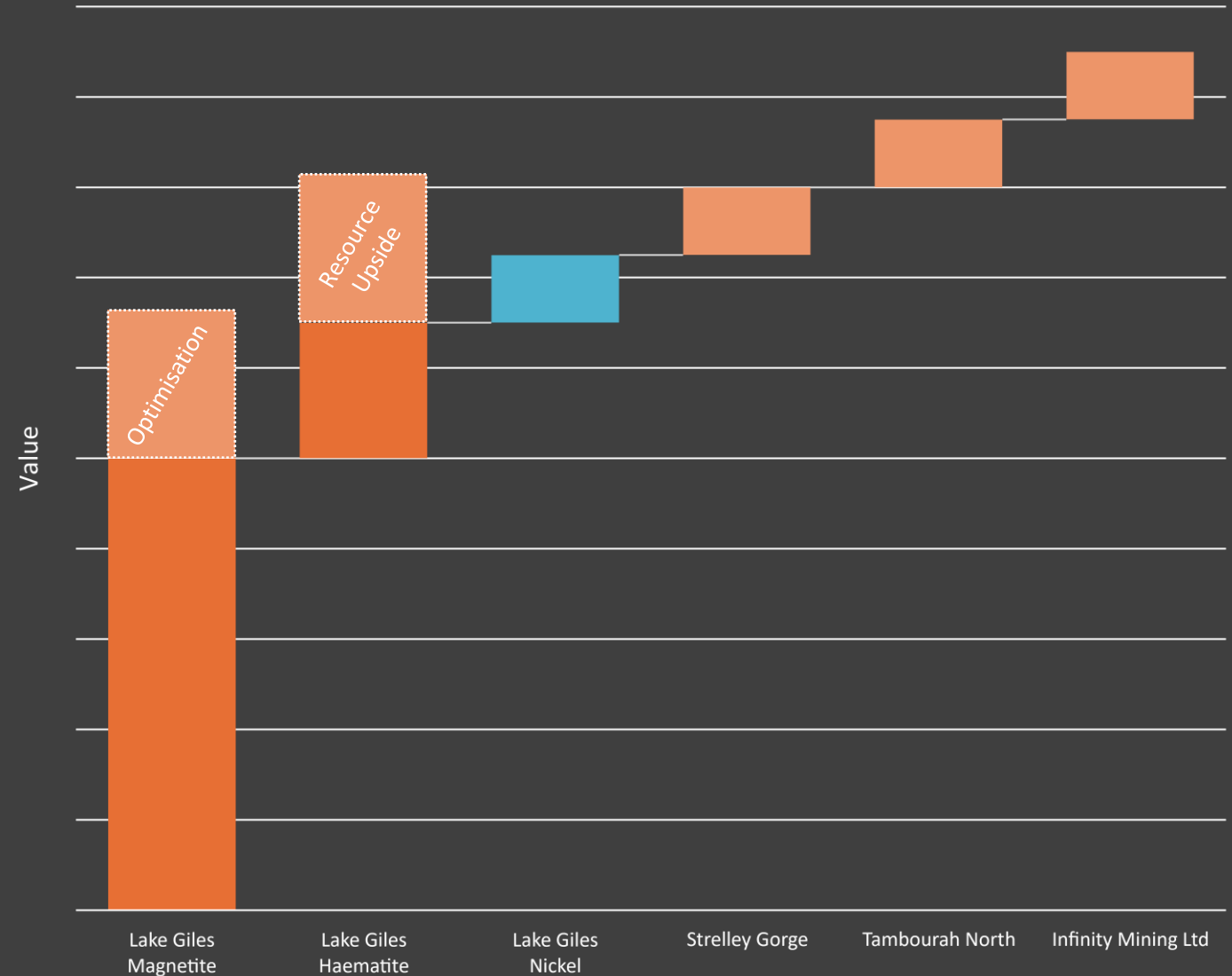
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- The information in this presentation that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr. David Williams, a Competent Person, who is an employee of CSA Global Pty Ltd, a member of the ERM group of companies, and a Member of the Australian Institute of Geoscientists (#4176). Mr Williams 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 the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Williams consents to the disclosure of information in the form and context in which it appears.
- The information in this presentation relating to Ore Reserves is based on information compiled by Stephen Craig, a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Craig is a full-time employee of Oreology Consulting Pty Ltd. Mr. Craig has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Craig consents to the disclosure of information in the form and context in which it appears.
- The information in this presentation that relates to Nickel Exploration Results at its Lake Giles Project in Western Australia is based on information compiled by Macarthur and reviewed by Mr. Tom O’Malley who is a member of the Australian Institute of Geoscientists. Mr. O’Malley is self-employed, consulting to MIO and has sufficient experience which is 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’. Mr. O’Malley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.
- All amounts are in Australian dollars unless otherwise stated.
- This presentation has been authorized for release to the market by Macarthur Minerals Limited.

Macarthur Minerals

Value Proposition



- **Lake Giles Magnetite:** The Lake Giles Iron Project is an advanced high-grade magnetite project that is well positioned among established iron ore projects and infrastructure.
- **Lake Giles Hematite:** Indicated resources of 54.5 million tonnes at 47.2% Fe and Inferred resources of 26 million tonnes at 45.4% Fe. Completed EPA approval received in 2012 and leases granted pre-native title in 2015. Extension permitting required.
- **Lake Giles Nickel:** Recent review on the nickel prospectivity has highlighted 150 drill holes with anomalous nickel over 2,000ppm. Less than 50% of drill samples were analysed for Ni.
- **Strelley Gorge (Pilbara):** Significant DSO quality samples taken from iron rich outcropping banded iron formation.
**Iron Ore rights only.*
- **Tambourah North (Pilbara):** Previous drilling by Atlas Iron intersecting DSO grade iron ore in drillholes in the iron-rich BIF ridges.
**Iron Ore rights only.*
- **Infinity Mining:** Largest share holder (21%) of the fast-moving Pilbara lithium, gold, copper, and base metals explorer.



^ As reported in ASX/TSXV news release dated 21 March 2022. Supporting NI43-101 Technical Report filed 11 April 2022.

^ As reported in ASX/TSX news release dated 9 May 2023

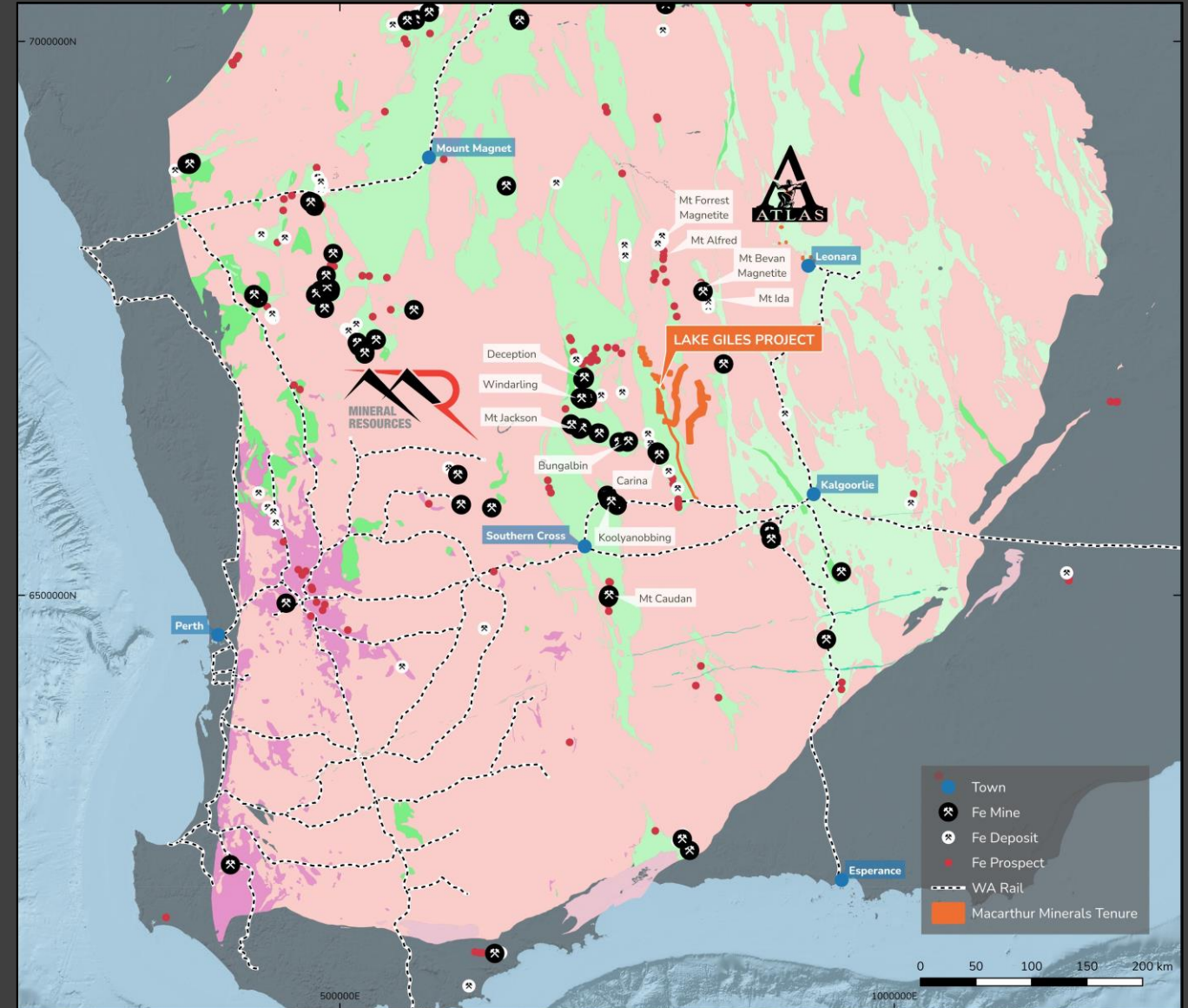
Lake Giles Iron Project

An Advanced, World Class Asset

- **Established Iron Ore Region:** The Lake Giles Iron Project is a high grade magnetite project that is well positioned among established regional iron ore projects and infrastructure.
- **Maiden Ore Reserve:** Maiden Ore Reserve announced to the market on 21 March 2022.
- **Feasibility Study:** Feasibility Study completed and key outputs announced to the market on 21 March 2022.
- **Advanced Project Approvals:** Fully granted mining leases, no native title and cultural heritage issues on mining leases, environmental approvals to align with development schedule.
- **Premium Product / Premium Price:** High grade magnetite concentrate product will attract 66.1% Fe premium pricing.
- **Product Offtake Secured:** Binding 10-year offtake agreement with Glencore for up to 4 Mtpa with option to extend for a further 10 years.



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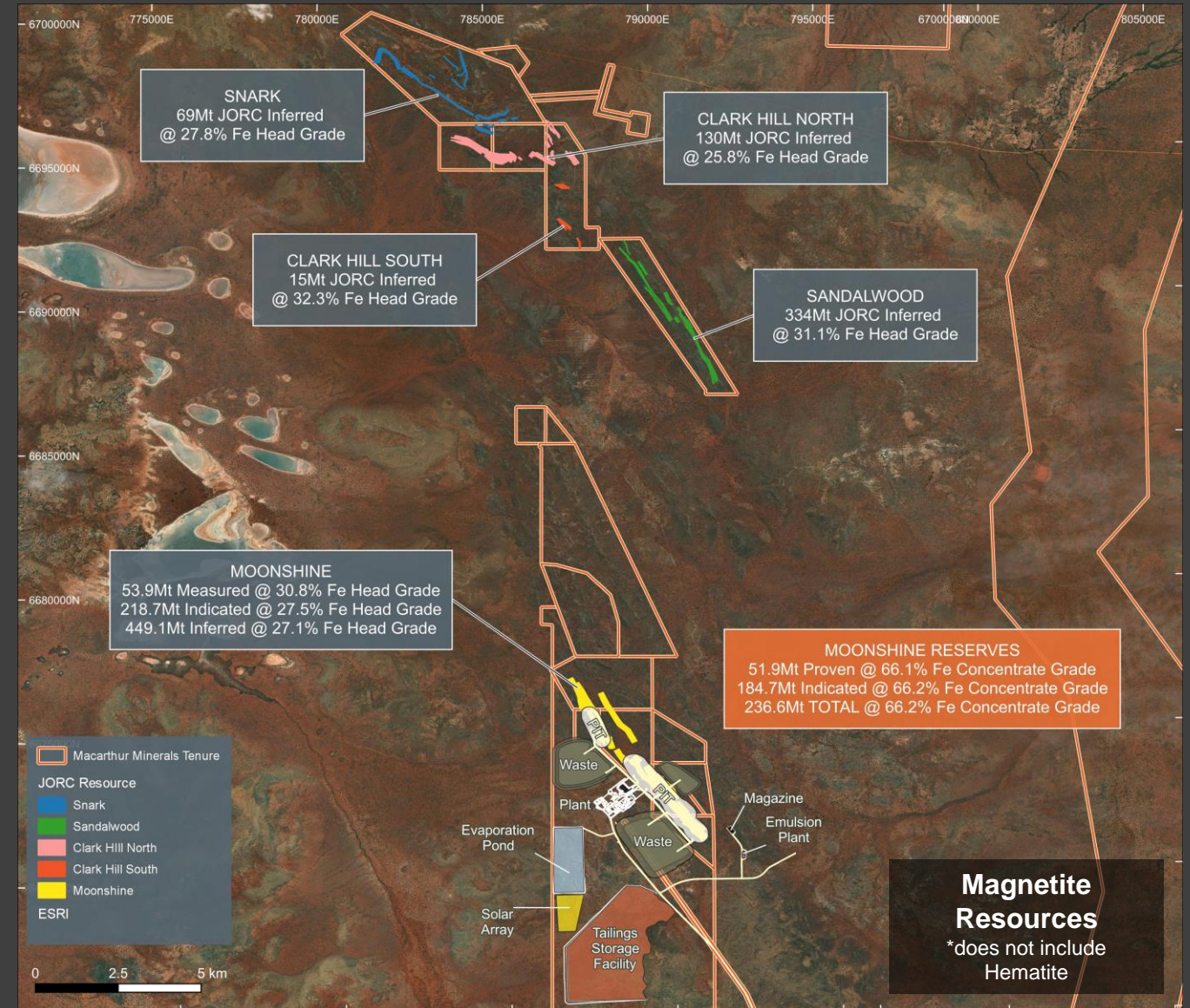


^ As reported in ASX/TSXV news release dated 21 March 2022. Supporting NI43-101 Technical Report filed 11 April 2022.

Lake Giles Iron Project

Feasibility Study Highlights

- **Production:** completed for 3 Mtpa magnetite mining and processing operation. Announced to market on 11 April 2022.
- Production volume was driven by Macarthur's financial capabilities. The establishment of a strategic alliance with a financially robust partner could potentially unlock economies of scale through increased production.
- **Mineral Reserve:** 237 Mt Ore for a 25 year mine life.
- **Product:** Production of a high-grade magnetite concentrate targeting 66.1% Fe with minimal impurities suitable for pellet feedstock.
- **Initial capital investment:** USD569m (AUD801m) with mine pre-production capital of USD43.8m (AUD 66.1m).
- **C1 operating costs** of USD71.74/dmt (AUD 101.05/dmt)
- **Positive project economics:**
 - **Pre-tax NPV** of USD 579m (AUD 816m)
 - **Post-tax NPV** of USD 315m (AUD 443m)
 - **IRR** of 13%



^ As reported in ASX/TSXV news release dated 21 March 2022. Supporting NI43-101 Technical Report filed 11 April 2022.

LAKE GILES IRON PROJECT

Optimisation

• **Production:**

- Production profile was had a capital cap of US\$500m given Macarthur Minerals market capitalisation, this only utilises ~30% of the Moonshine resource.
- Concentrate transport;
 - Upscaling would allow cheaper operating cost options including slurry transport to the rail head or construction of a rail spur to the project.
 - A rail spur would allow a transport hub for resources to the north (e.g. Mt Richardson).

• **Geotechnical:**

- SRK Peer review recommends an additional 8 drillholes for the current mine plan.

• **Mine Planning:**

- Opportunities to significantly expand the Moonshine North pit where Inferred resources are captured or converted to Indicated.
- Moonshine North only utilises 36Mt ore (indicated and measured) with a further 281Mt Inferred available.
- CSA Global has designed holes to upgrade the remaining Inferred resource at Moonshine North (approx. 14 holes – 10 RC and 4 DD).

• **Pelletisation:**

- Project did not consider on-site pelletisation due to project scale.
- Integration of pelletisation could deliver benefits in pellet premiums, material handling and mill offtake buyers.

• **Power:**

- Project power solution delivered by an integration of trucked LNG, solar and battery storage.
- Lower tariff rates were achieved through inclusion of wind turbines.
- Upscaling may support a lateral gas line from the APA line to be constructed north of Mt Richardson.

Lake Giles Iron Project

Resource Upside



Measured Mineral Resource[^]
(Moonshine[#])

53.9 Mt

30.8% Fe head grade
66.0% Fe concentrate grade

Indicated Mineral Resource[^]
(Moonshine[#])

218.7 Mt

27.5% Fe head grade
66.1% Fe concentrate grade

Inferred Mineral Resource[^]
(All Other Deposits^{*})

548 Mt

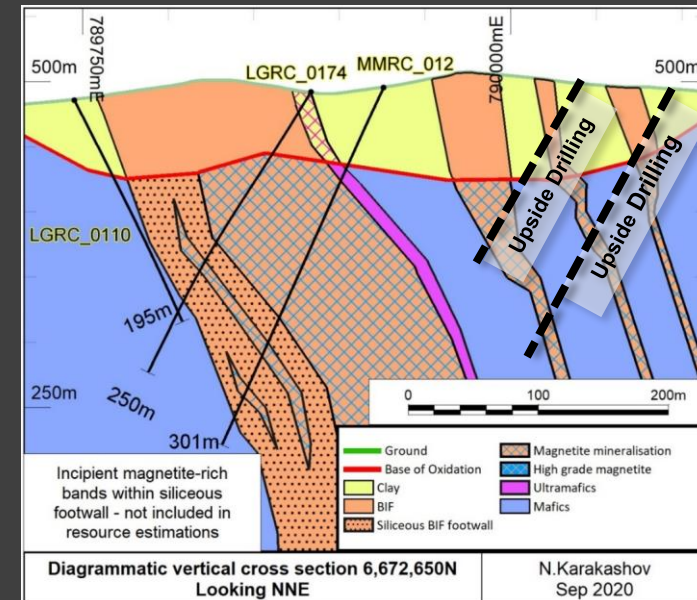
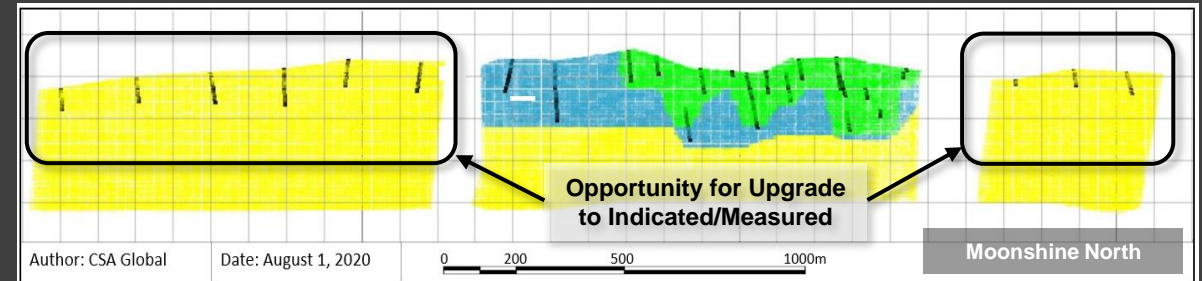
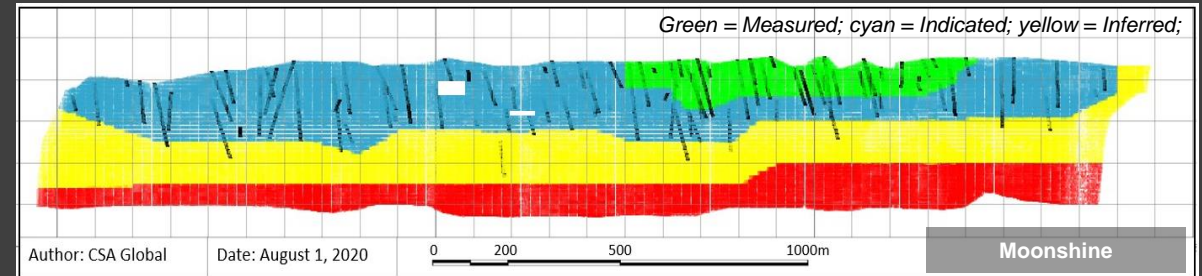
29.5% Fe head grade
64.3% Fe concentrate grade

Inferred Mineral Resource[^]
(Moonshine[#])

449.1 Mt

27.1% Fe head grade
65.0% Fe concentrate grade

- **Moonshine North:** Opportunity to upgrade Moonshine North Inferred to Measured/Indicated and Reserved to be included into the mine-plan. Moonshine North has a higher Head Grade and DTR of 32.9% and 35.1%, compared to Moonshine 27.4% and 30.6% respectively.
- **Additional targets:** Further mineralised intercepts can be drilled out on Moonshine
- **Hematite:** Opportunity to include the Hematite mineralisation.



[^] As reported in news release dated 12 August, 2020. Supporting NI43-101 Technical Report filed 1 October, 2020.
[#] "Moonshine" includes Moonshine and Moonshine North.
^{*} "All Other Deposits" includes Sandalwood, Clark Hill North, Clark Hill South and Snark

Strelley Gorge

Pilbara Fe

- **Location:** Central Pilbara, ~100km South of Port Hedland, ~55km west of Marble Bar
- **Neighbours:** Immediately adjacent on the Western boundary is the Abydos iron ore deposit and mine previously operated by Atlas Iron. The Sandtrax deposit also owned by Atlas Iron and planned for development is also located on the north-eastern boundary.
- **Geology:** ironstone sequence transgresses through the Northwest part of the tenement. Marker Chert interpreted to continue through the Magnetite Target area for ~1km.
- **Geochemistry:** Reconnaissance rock sampling completed on the ironstone returned several high iron grades (61.3% and 58.11%).



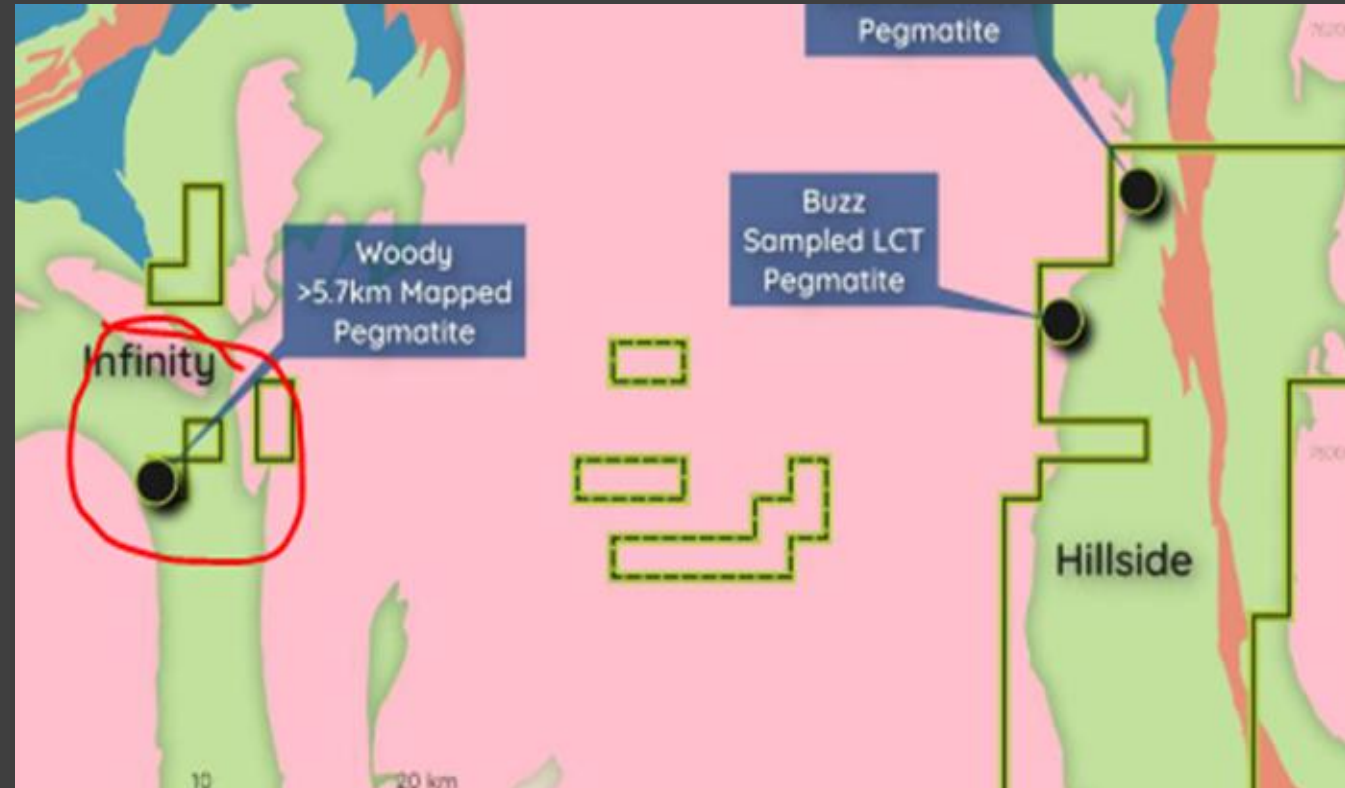
Tambourah North

Pilbara Fe



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- **Location:** The Tambourah North project is located south of Port Hedland and 7.5 km north of Infinity's Tambourah South lithium project.
- **Previous Drilling:** In 2012, Atlas Iron drilled 26 RC holes in the northern area of the tenement over 400m of strike intersecting DSO quality goethite and goethitic hematite.
- **Geology:** Prospect within the Pincunah Banded-Iron Member which hosts the nearby Ibanez, Fender and Dalton deposits.



Infinity Mining

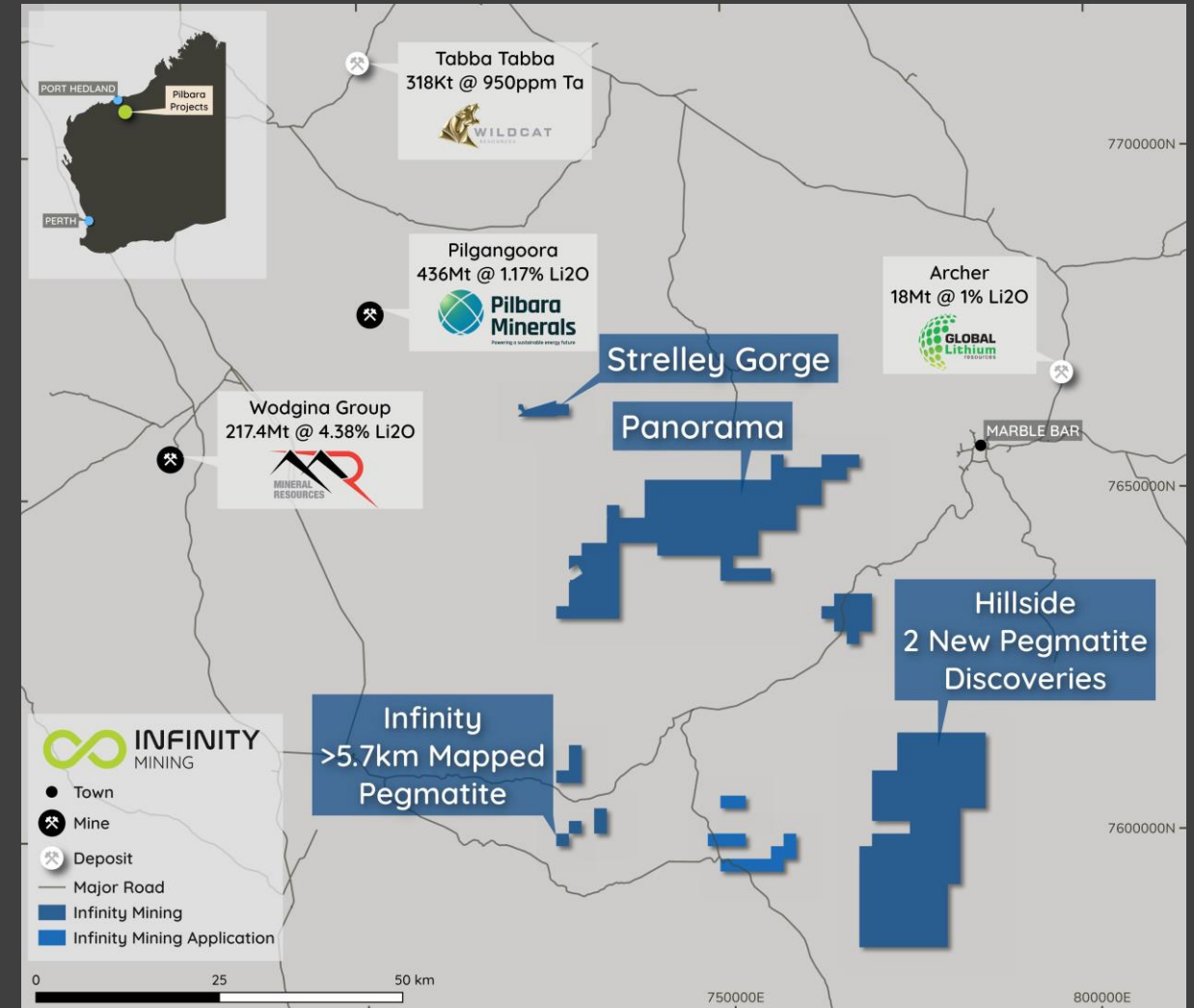
Fast Moving Pilbara Explorer

Macarthur holds 21.1% of the issued equity and is the largest shareholder in Infinity.

- Focus:** Infinity Mining's focus is to target and explore gold, copper, lithium, and base metals, developing its Pilbara and Central Goldfields tenements into world class mining projects.
- Large Footprint:** Growing portfolio of ~700km² in the East Pilbara across greenstone units adjacent to Split Rock Suite younger granites, with more acquisitions in the pipeline.
- Fast Moving:** Completed Geological Mapping, Geochemical Sampling, Helicopter-EM (VTEM) Survey, and Drilling across 4 Projects within the last 12 months.
- Forward Plan:** Abundance of upcoming news flow:
 - Release results from the RC drilling program completed at Tambourah South, which tested the highest priority lithium-bearing pegmatites.
 - Plan following up drilling programs at Tambourah South.
 - Interpret 2022 VTEM and 2018 SkyTEM datasets, to identify and prioritise conductive targets.
 - Maiden JORC Inferred Gold Resource estimate 63,000 ounces Au in the Goldfields Projects.



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[^] As reported in ASX IMI news release dated 30 January 2023
[^] As reported in ASX IMI news release dated 16 January 2024



Have questions?

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Macarthur Minerals Limited

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