HYPERION GROWS LAND POSITION AT THE TITAN PROJECT BY 78%

- Hyperion has increased its land position in west Tennessee by 4,794 acres to 10,905 acres, a 78% increase in landholding in this new critical mineral province.
- Hyperion's successful land consolidation strategy has rapidly grown its landholdings by 419% from its initial 2,100 acre position in September 2020.
- Hyperion's maiden mineral resource estimate ("MRE") identified west Tennessee as a major province of untapped critical minerals in a low risk, low cost and low tax jurisdiction, with outstanding access to the key variable cost drivers for the operation of a mineral sands operation – electricity and labor.
- The new landholdings include mineral rights near the recently reported MRE of 431Mt @ 2.2% Total Heavy Minerals ("THM"), which established the Titan Project as the largest titanium, zircon and rare earth minerals project in the U.S., as well as regional greenfield exploration properties.
- The new landholdings provide a wide range of highly prospective targets to potentially drive resource growth and mine life at the Titan Project.

Hyperion Metals Limited (ASX: HYM) is pleased to advise that it has increased its land position at the Titan Critical Minerals Project in west Tennessee by 4,794 acres to 10,905 acres, a 78% increase in landholding. The Titan Project, already the largest titanium, zircon and rare earth minerals project in the USA, now has a larger platform of highly prospective land that will allow sustained growth in the mineral resource.

The new landholdings include mineral rights contiguous to the recently reported mineral resource estimate at the Titan Project of 431Mt @ 2.2% THM, with the Company continuing to make excellent progress on its successful land consolidation strategy, which has increased landholdings by 419% from its initial 2,100 acre position in September 2020.

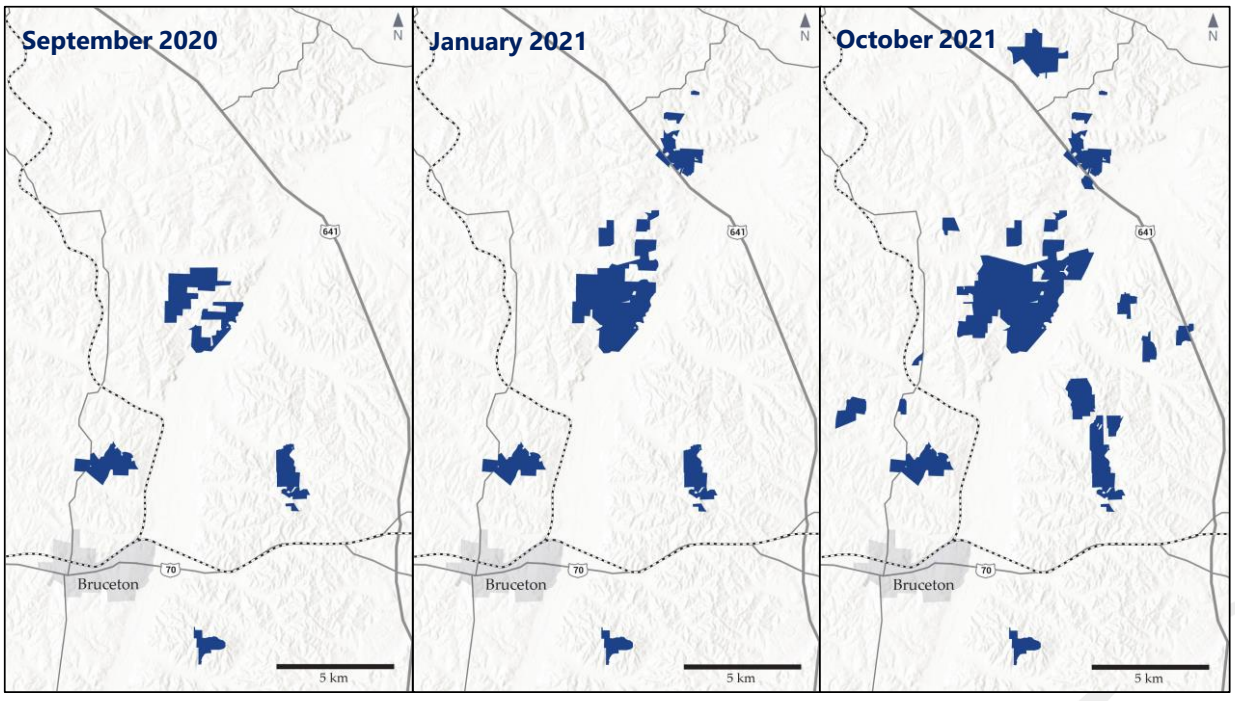

Figure 1: Growth in Hyperion's land position proximate to the Benton and Camden deposits.

Hyperion has also acquired land positions over greenfield locations up to 80 kilometers from the Titan Project, with planned exploration work on these properties to help guide future land consolidation.

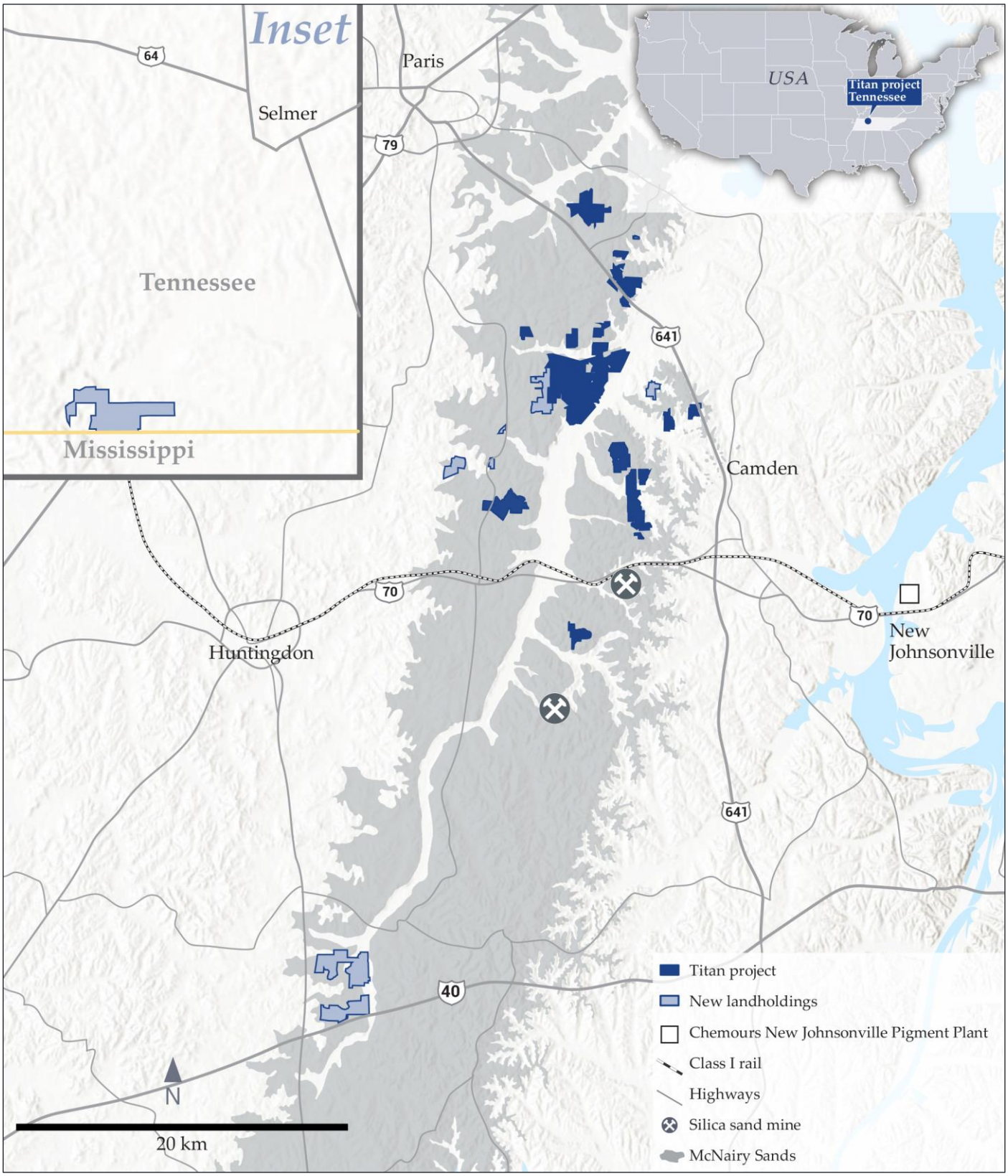

Figure 2: Total Hyperion west Tennessee land position, including greenfield exploration properties.

Hyperion's landholdings benefit from significant cost advantages due to the location and proximity to low cost, world-class infrastructure, expected to provide material cost and logistics advantages compared to projects located in more remote areas, as well as a large skilled local labor pool, low-cost power and gas and abundant transportation infrastructure.

These factors have contributed to a huge amount of recent investment in Tennessee, highlighting the region as a leading jurisdiction for business, including by major auto manufacturers Ford and Volkswagen, world leading battery producers LG Chem and SK Innovation, as well as major chemical organizations and end users including Chemours.

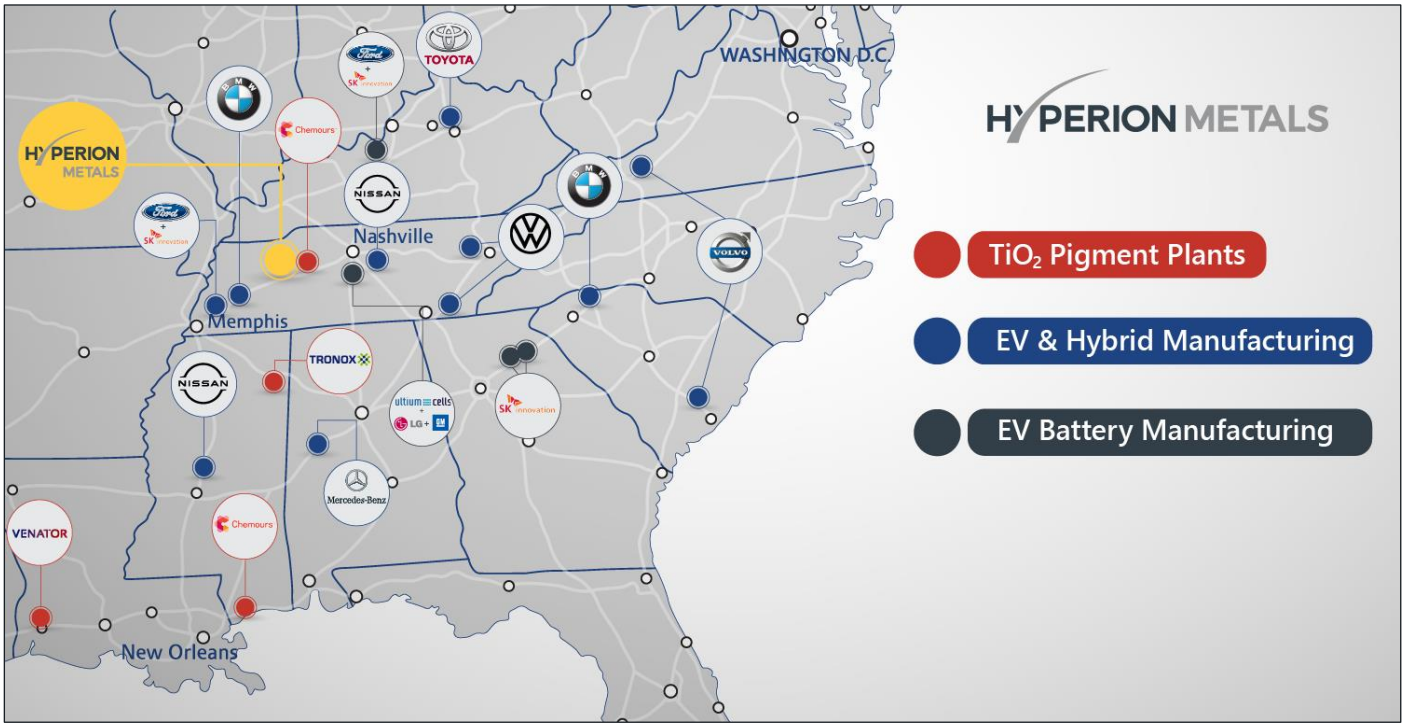

Figure 3: Major automotive, battery and chemical operations in close proximity to the Titan Project.

Anastasios (Taso) Arima, CEO and Managing Director said:

"We are very proud of the Hyperion team on the ground in Tennessee who have rapidly grown the Company's land position by a factor of 5 since listing on the ASX in September 2020.

We are also highly appreciative of the deep support we have received from the local west Tennessee community that will help us to establish zero carbon, sustainable, critical material supply chains for advanced American industries.

The Titan Project has a compelling combination of scale, grade, high value critical mineral products, low-cost inputs, world class infrastructure and location, and we look forward to rapidly advancing this critical mineral project."

This announcement has been authorized for release by the CEO and Managing Director.

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Land position – Agreement Details

Hyperion, through its 100% owned U.S. subsidiary, has entered into new exclusive option agreements with local landowners in Tennessee, which upon exercise, allows Hyperion to lease approximately 4,794 acres of surface property and the associated mineral rights from the local landowners.

During the option period (generally 6 years), Hyperion has the exclusive right to access, enter, occupy, and use the surface property for all purposes related to exploring for and evaluating all minerals (except hydrocarbons) in return for Hyperion making annual cash option payments to the landowners (generally between US$25 – US$75 per acre per year).

Upon exercise, in the case of an option to lease, Hyperion will pay a production royalty to the landowners (generally a 5% net smelter return royalty for all product mined and sold), subject to a minimum royalty (generally US$75 per acre per year). This royalty rate is comparable to that paid by major mineral sand producers in Australia, with royalty rates ranging between 2.75% and 5.00% in the states of Western Australia, South Australia, Queensland and Victoria. No Federal or State royalties are payable in the state of Tennessee.

Upon exercise, in the case of a purchase, Hyperion will pay cash consideration approximating the fair market value of the property, excluding the value of any minerals, plus a premium.

About Hyperion Metals

Hyperion's mission is to be the leading developer of zero carbon, sustainable, critical material supply chains for advanced American industries including space, aerospace, electric vehicles and 3D printing.

Hyperion holds a 100% interest in the Titan Project, covering approximately 11,000 acres of titanium, rare earth minerals, high grade silica sand and zircon rich mineral sands properties in Tennessee, USA.

Hyperion has secured an option to acquire Blacksand Technology, LLC, which holds the rights to produce low carbon titanium metal and spherical powers using the breakthrough HAMR & GSD technologies. The HAMR & GSD technologies were invented by Dr. Z. Zak Fang and his team at the University of Utah with government funding from ARPA-E.

The HAMR technology has demonstrated the potential to produce titanium powders with low-to-zero carbon intensity, significantly lower energy consumption, significantly lower cost and at product qualities which exceed current industry standards. The GSD technology is a thermochemical process combining low-cost feedstock material with high yield production and can produce spherical titanium and titanium alloy powders at a fraction of the cost of comparable commercial powders.

Hyperion also has signed an MOU to establish a partnership with Energy Fuels (NYSE:UUUU) that aims to build an integrated, all-American rare earths supply chain. The MOU will evaluate the potential supply of rare earth minerals from Hyperion's Titan Project to Energy Fuels for value added processing at Energy Fuels' White Mesa Mill. Rare earths are highly valued as critical materials for magnet production essential for wind turbines, EVs, consumer electronics and military applications.

Forward Looking Statements

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance, and achievements to differ materially from any future results, performance, or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements, or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

Competent Persons Statement – JORC Code 2012

The information in this announcement that relates to Exploration Results and Mineral Resources is extracted from Hyperion's ASX Announcement dated October 6, 2021 ("Original ASX Announcement") which is available to view at Hyperion's website at www.hyperionmetals.us. Hyperion confirms that a) it is not aware of any new information or data that materially affects the information included in the Original ASX Announcement; b) all material assumptions included in the Original ASX Announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially changed from the Original ASX Announcement.

The MRE for the Titan Project comprises 431Mt @ 2.2% THM, containing 9.5Mt THM at a 0.4% cut-off, including 241Mt @ 2.2% classified in the Indicated resource category and 190Mt @ 2.2% classified in the Inferred resource category.