

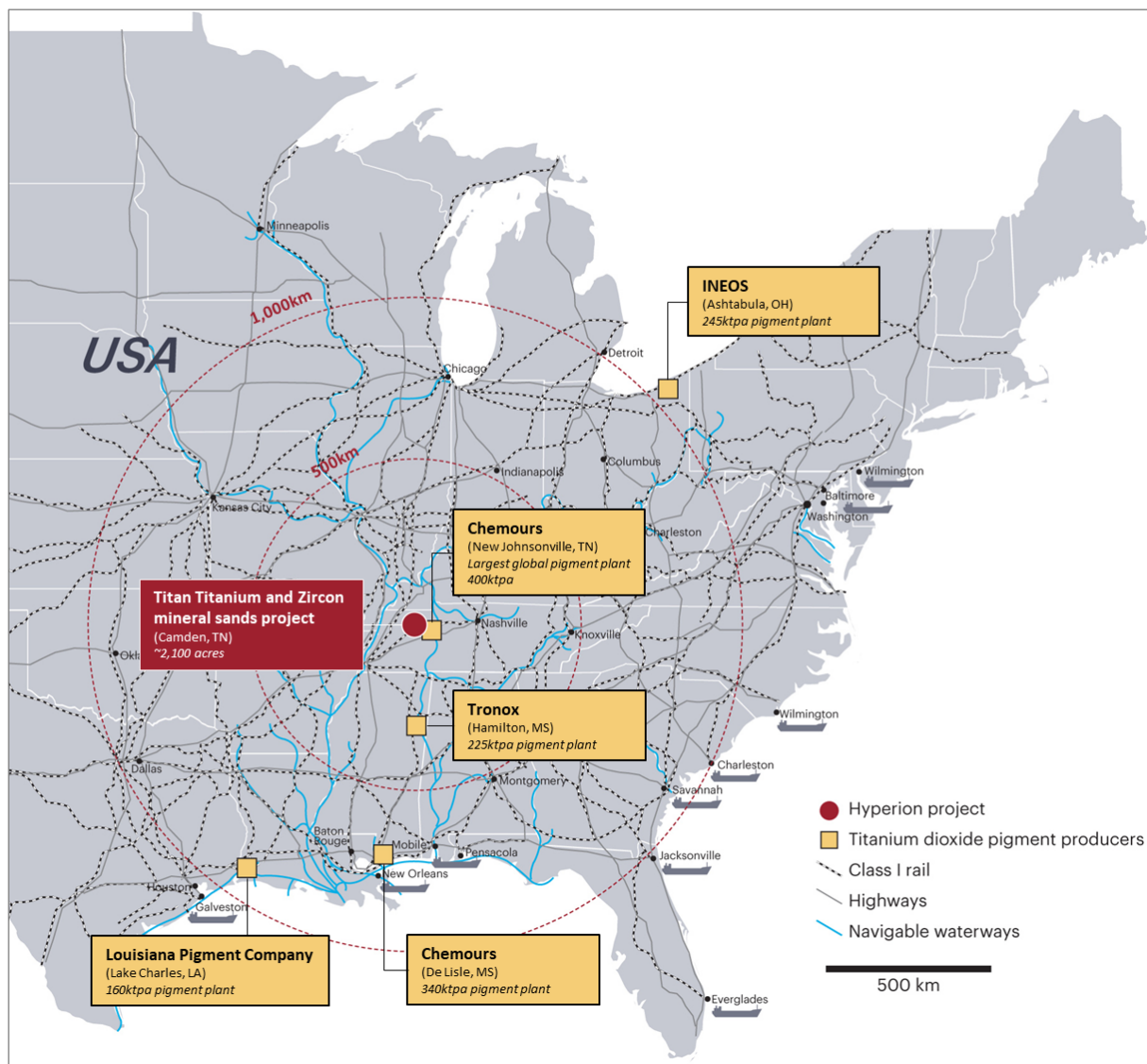
24 September 2020

ASX RELEASE

## **OPTION TO ACQUIRE A LARGE-SCALE U.S. TITANIUM & ZIRCON MINERAL SANDS PROJECT**

- Option to acquire 100% interest in 2,100 acres of titanium and zircon prospective heavy mineral sands ("HMS") properties in Tennessee, U.S.
- The Titan project ("Project") is located in an area which saw significant historic exploration from 1960 – 1990 by DuPont, BHP and others, and included:
  - Over 200 drill holes and a bulk sample mining operation
  - Definition of a high-grade deposit of 3.6% HMS with a highly valuable mineral assemblage of 15% zircon, 5% rutile and 60% high TiO<sub>2</sub> ilmenite
- Significant competitor advantage located in the USA, with benefits including:
  - Located 15km from Chemours' New Johnsonville pigment plant, one of the largest titanium consuming plants in the world, and within 1,000km of all other U.S. pigment plants
  - U.S. pigment industry is one of the largest global consumers of titanium minerals, but imports ~95% its requirements, valued at over A\$1 billion in 2019
  - Excellent access to heavy haulage rail, high voltage power, interstate highways and river ports
  - Proximal to major population centers with skilled personnel experienced in heavy equipment and plant operations
  - The U.S. has designated titanium and zircon as critical minerals, which allows for potential access to U.S. federal funding programs
- TAO has a unique opportunity to re-establish a major U.S. titanium and zircon project base ahead of large government infrastructure and military stimulus programs which are expected post COVID-19
- TAO will immediately commence exploration and continue with an aggressive land consolidation program in Tennessee, U.S.
- The Project founders include Mr. Ian Middlemas and Mr. Anastasios Arima, highly experienced company executives from the Apollo Group, an investment and management group with more than 20 years of success in the natural resources sector.
- Mr. Arima will join the board as Executive Director and oversee the exploration and development of the Project
- Firm commitments have been received for a A\$2 million placement, subject to shareholder approval, with Taylor Collison acting as Lead Manager

Tao Commodities Limited (“TAO” or “the Company”) (ASX: TAO) is pleased to announce that it has entered into an option to acquire 100% of the issued capital of Hyperion Metals Pty Ltd (“Hyperion”) (“Acquisition”). Hyperion holds a 100% interest over the Titan Project, which is comprised of ~2,100 acres of options to lease or purchase private surface and mineral rights (“Option Agreements”) that are highly prospective for titanium and zircon mineral sands proximal to the town of Camden in Benton, Henry and Carroll counties in Tennessee, USA. The material terms and conditions of the Acquisition are described in Appendix A below.



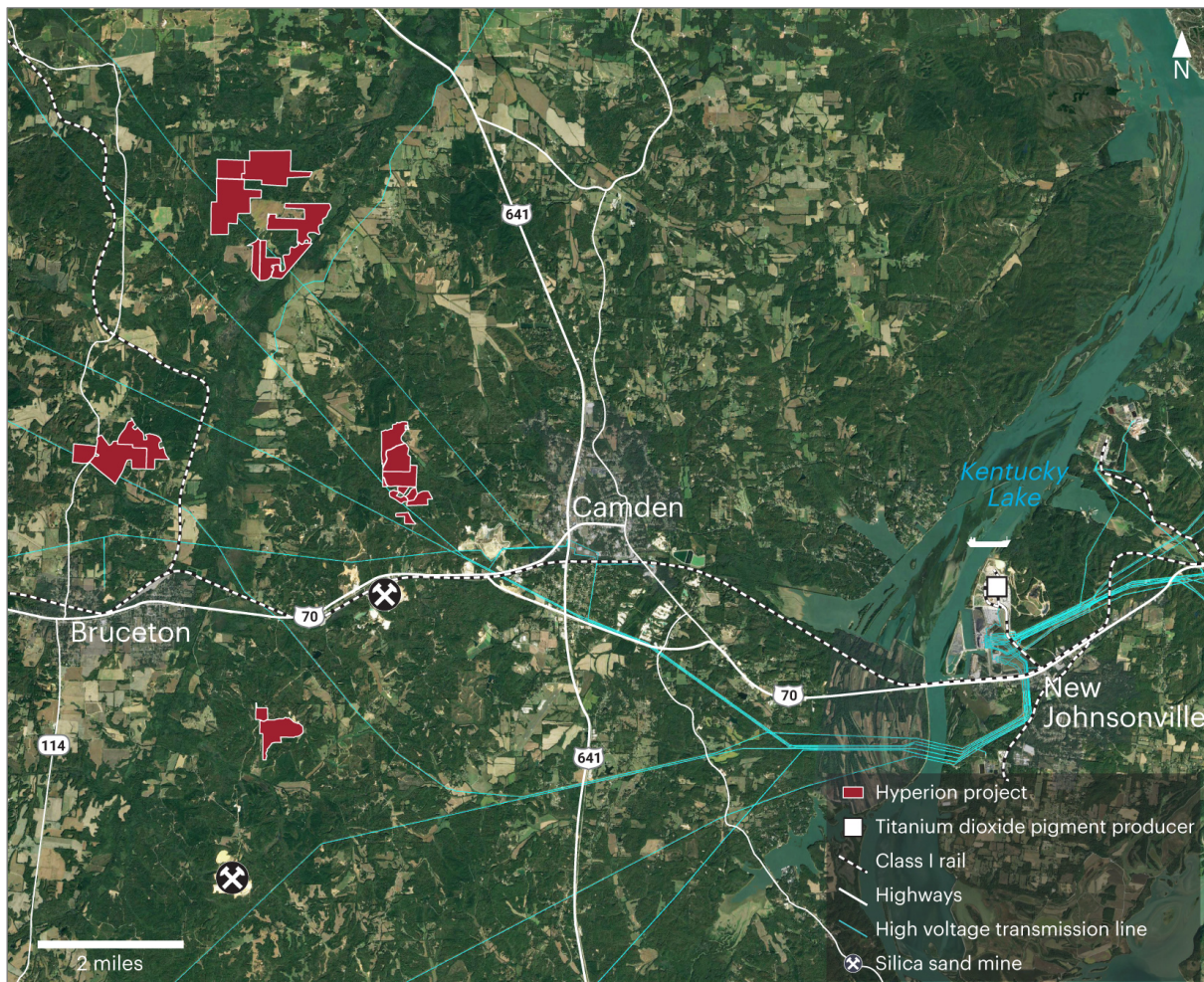
**Figure 1: Project location in relation to large U.S.  $\text{TiO}_2$  pigment producers and major infrastructure**

Commenting on the transaction, Managing Director Patrick Glovac said, “We are very excited to secure a large-scale project on the doorstep of the U.S. titanium industry, in a nation which currently imports almost all their titanium requirements. Most exciting is the fact that some of our potential customers are only a short truck, barge or rail distance from the project with the largest titanium consuming plant in the U.S. being only 15km from the Titan project. We look forward to finalising due diligence and beginning exploration activities in the U.S.”



## U.S. Strategic & Logistical Market Advantage

The Project is strategically located in the southeast of the U.S., close to significant manufacturing capacity, providing a significant logistical advantage over current U.S. supplies of imported titanium feedstock. Specifically, the Project is ~15 km from Chemours' New Johnsonville pigment plant, one of the largest pigment plants globally and within a low-cost barge, truck or rail-served distance to all other major U.S. titanium pigment and metal plants.



**Figure 2: Project land holding in Benton, Carroll and Henry counties, Tennessee, USA**

The U.S. is the second-largest global importer of titanium feedstocks where it is used to produce two main products;

1. Titanium dioxide pigment for the coatings and plastics sector; and
2. Titanium metal for the defense, aerospace, space and medical sector.

Over the last decade the U.S. has seen a significant decrease in production of both titanium mineral feedstocks (ilmenite and rutile) and zircon with the closure of Iluka's operations in

Virginia in 2016. As a result, import reliance has increased from 74% in 2010 to 95% in 2019, with import values increasing from ~A\$470 million to ~A\$1,200 million in the same period.

Importantly, the market for titanium and zircon will further benefit from global government infrastructure spending, expected to be enacted as a means of economic stimulus as a result of the COVID-19 pandemic. This has the potential to significantly increase global demand, whilst exacerbating the strategic need for the re-establishment of a U.S. production base of these minerals.

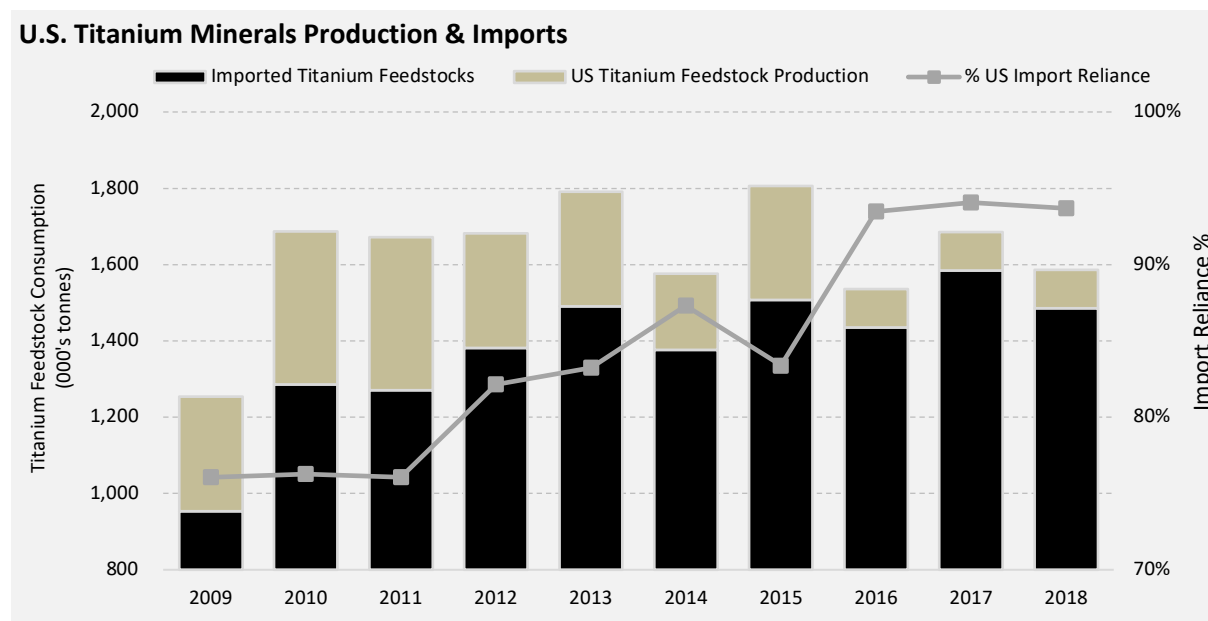


Figure 3: U.S. titanium minerals production & imports

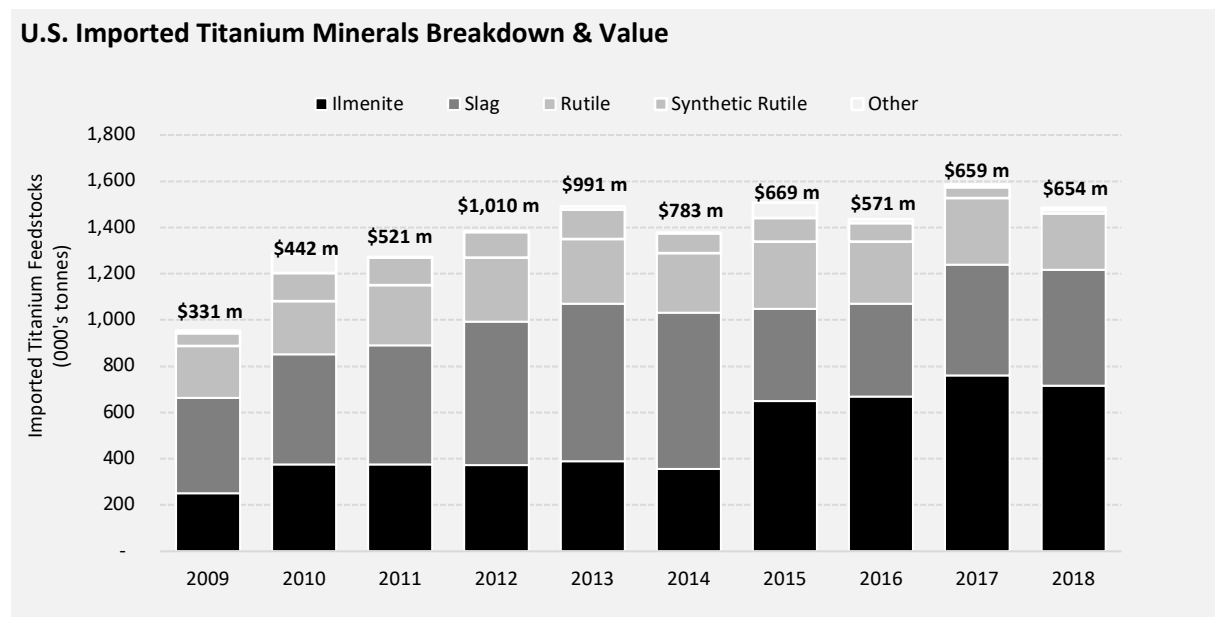


Figure 4: U.S. imported titanium minerals breakdown & value (US\$)

Company	Plant Location	TiO <sub>2</sub> Pigment Capacity
Chemours	New Johnsonville, TN	400,000
Chemours	De Lisle, MS	340,000
Tronox	Hamilton, MS	225,000
Louisiana Pigment Company	Lake Charles, LA	160,000
INEOS	Ashtabula, OH	245,000
<b>US Capacity</b>		<b>1,370,000</b>
<b>Global Statistics</b>		
China Capacity		3,250,000
Global Capacity		7,660,000

*Table 1: Major titanium pigment producers*

## Excellent Regional Infrastructure & Utilities Access

Hyperion's location within the eastern U.S. endows the Project with extensive infrastructure options that may negate upfront, non-site related capital spending for a potential future development, including;

- Main highway and road access, with Interstate Highway 40 and U.S. Route 70 proximal to the Project connecting to Nashville to the east (160 km) and Memphis to the west (230 km);
- ~15 km from a commercial barge port on the Tennessee River, part of the 19,000 km U.S. Inland & Intracoastal Waterways network connecting to major customers and coastal ports;
- CSX Corporation's main rail line, one of the largest U.S. east coast rail operators, is proximal to the Project, connecting to major customers and coastal ports;
- High voltage power access, including multiple 132 kVa transmission lines passing directly through the Project;
- High capacity natural gas access, including multiple high capacity natural gas pipelines running proximally to the Project; and
- Major towns within 15 minutes' drive of the Project with personnel experienced in heavy equipment and plant operations, removing the need for camps, emergency services and fly-in / fly-out operations in a development scenario.

The combination of regional population centers, transport infrastructure and utilities access, together with the USA's low-cost natural gas, power and low tax regime provides the potential for a low-cost operating environment across all stages of the Project development. Key statistics on the regional cost structure are shown below.



Median Salary	Electricity Price	Natural Gas Price	Diesel Price
US\$42,292	5.41c per kWh	US\$3.21 per MMcf	US\$0.57 per Litre

*Table 2: Regional input costs (U.S. Census Bureau & U.S. Energy Information Agency)*

## U.S. Government Critical Minerals Support

The development of domestic critical minerals has been a significant focus of U.S. Federal Government agencies since President Trump published Executive Order 13817 on December 20, 2017: *A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals*. As a result, the U.S. Department of Interior published a list of 35 critical minerals, of which Titanium and Zircon were included.

Additionally, on February 27, 2020 President Trump issued a Presidential Memoranda: Memorandum on the *Effect of Titanium Sponge Imports on National Security*. The focus of which was to assess and rectify the threat of solely relying on imports of titanium sponge (feedstock for titanium metal), as it is heavily used in the defense sector (e.g. a F-35 Joint Strike Fighter comprises 35% titanium).

The intent of these actions is for federal agencies to prioritise the development of domestic sources of these critical minerals, with a focus on providing funding opportunities or easing of regulatory hurdles. Given the significant dependence by the U.S. on imported titanium feedstocks, and its use within the defense sector, TAO will monitor and consider its eligibility for any potential funding options which may arise through U.S. Federal Government programs.

## Geology & Historic Exploration

The Project targets a segment of the unconsolidated Cretaceous stratigraphy along the eastern boundary of the Mississippi Embayment in northwestern Tennessee, USA. More specifically, the Project is located in portions of Benton, Henry and Carroll Counties, where the Cretaceous McNairy Sand is approximately 90 meters (300 feet) thick and is divided into three members.

The basal member is of the most significance as it consists of fine-grained grey and orange quartz sand which locally hosts heavy mineral sands in economic proportions. Wilcox (1971)<sup>1</sup> reported heavy mineral sand concentrations from the McNairy Sand, with a mineral assemblage of ilmenite, leucoxene, rutile, zircon, monazite, staurolite, kyanite and tourmaline. In 1998 Altair International Inc. reported a resource from the McNairy Sand in the vicinity of the Project which graded 3.6% HMS with the heavy mineral concentrate containing a mineral assemblage of 15% zircon, 5% rutile and 60% ilmenite.

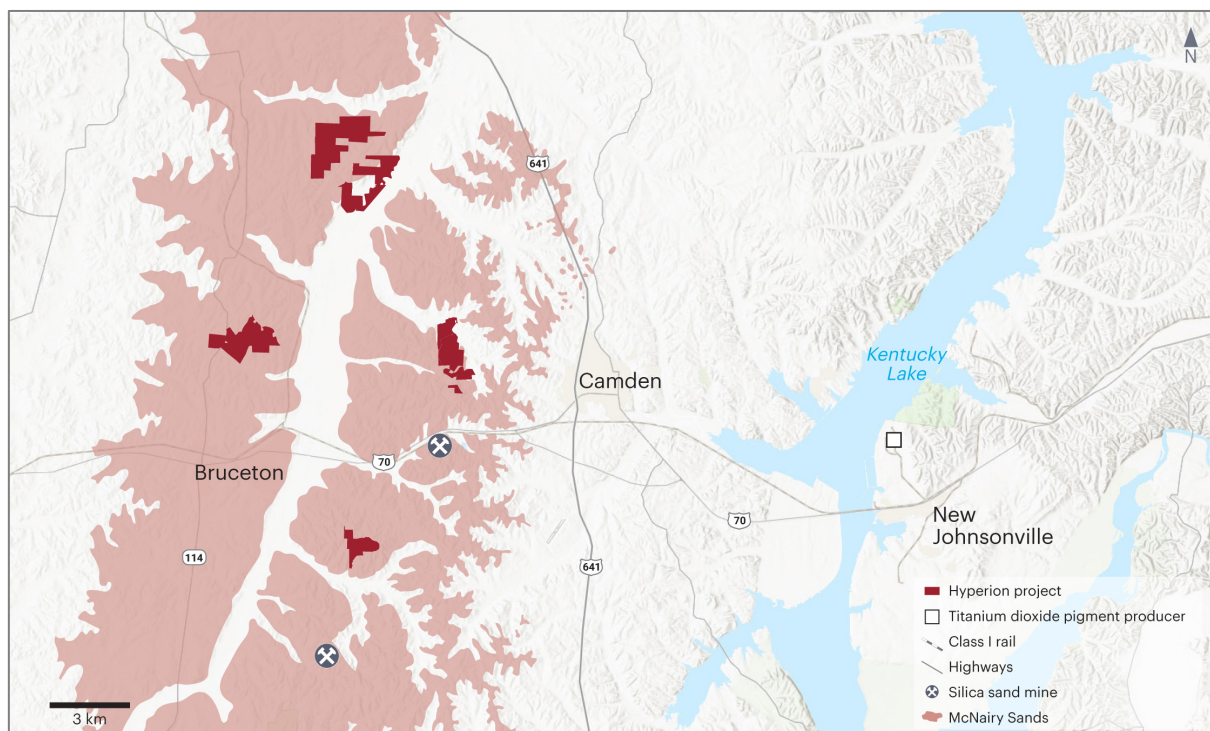
The McNairy Sand outcrops in a north – northeast trend and dips gently westward. Generally, the unit is poorly exposed. Force (1991)<sup>2</sup> describes the depositional environment for the

<sup>1</sup> Wilcox, J.T. (1971), Preliminary Investigations of Heavy Minerals in the McNairy Sand of West Tennessee, Nashville, TN, State of Tennessee Department of Conservation

<sup>2</sup> Force, E.R. (1991) Geology of titanium-mineral deposits, Boulder, CO, The Geological Society of America, Inc.

McNairy sand as “shoreline facies of the upper regressive sequence in a transgressive-regressive wedge”.

Importantly, the region includes active permitted mining operations, with the McNairy Sand hosting two mines producing high-quality quartz for the industrial glass industry.



**Figure 5: Geology of the region including the McNairy Sands**

Several HMS exploration campaigns have focused on this region over the past 60 years, with DuPont reportedly being the first company to investigate this region, followed by Kerr-McGee Chemical Corporation that had exploration success but never commenced mining. BHP Titanium Minerals had an interest in the region in the 1990's and Mineral Recovery Systems, a company associated with Altair International Inc., had significant activities in the region in the late 1990's, including land acquisition, drilling and metallurgical studies.

## Hyperion's Founders

Hyperion's founders include Mr. Ian Middlemas and Mr. Anastasios Arima, who have been instrumental in the development of Piedmont Lithium Ltd (ASX: PLL) which is developing the Piedmont Lithium Project outside of Charlotte, North Carolina.

Upon completion of the transaction Mr. Anastasios Arima will join the board as Executive Director and will be based out of Charlotte, North Carolina.

Mr. Arima brings recent successful experience in the exploration, development and permitting of mineral resource projects in the south eastern USA. Mr. Arima is a resource company

executive with a strong history of identifying company-making resource projects. He has extensive experience in the formation, development and financing of resource projects in North America. Mr Arima is currently the Director of Piedmont Lithium Ltd (ASX: PLL) where he was the founder of Piedmont's lithium project in North Carolina and instrumental in raising over A\$83 million towards its development.

Subject to shareholder approval, the Company will issue 3.5 million unlisted management options (exercisable at \$0.25 each and expiring 31 December 2023) to incoming management as ongoing incentivisation for their roles.

## Placement

TAO has secured commitment letters for a placement of A\$2,000,000 via the issue of 25 million shares at A\$0.08 per share ("Placement") to occur concurrent to the closing of the transaction. Shareholder approval will be sought for the issue of shares pursuant to the Placement. Funds from the Placement and existing cash reserves will be used to fund the Acquisition, exploration activities at the Project, transaction costs, and for working capital.

Taylor Collison Limited will act as the lead manager to the Placement and GTT Ventures will act as Corporate Advisor. Subject to shareholder approval, the Company will issue 5 million unlisted broker options (exercisable at \$0.20 each, expiring 31 December 2023) in connection with the Placement.

Subject to shareholder approval under Listing Rule 10.11, Mr. Patrick Glovac, a director of TAO, intends to participate in the Placement up to the extent of \$80,000 for 1 million shares.

Subject to shareholder approval at the Company's upcoming Annual General Meeting, the Company will also issue 3.5 million unlisted management options (exercisable at \$0.25 each and expiring 31 December 2023) to current management as ongoing incentivisation for their roles.

## Upcoming Q4 2020 Hyperion Milestones

- Commencement of an exploration drilling program;
- Build-out of the U.S. development team;
- Results of exploration drilling program including HMS grade and assemblage; and
- Ilmenite, zircon and rutile metallurgical test work to determine product quality.

## Terms of Option Agreements

Hyperion, through its 100% owned U.S. subsidiary, has entered into exclusive option agreements with local landowners in Tennessee, which upon exercise, allows Hyperion to lease or purchase approximately 2,100 acres of surface property and the associated mineral rights from the local landowners.



During the option period, 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). 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 (generally between US\$1,750 – US\$1,950 per acre).

## Pro-Forma Capital Structure

	Shares	Listed Options	Unlisted Options	Performance Shares	Performance Options	Performance Rights
Existing shares & options	31,386,667	15,693,334	-	-	-	3,000,000
Issue of vendor consideration	26,500,000	-	5,000,000	36,000,000	8,000,000	-
Issue of facilitator consideration	2,650,000	-	-	3,600,000	-	-
Issue of placement shares & broker options	25,000,000	-	5,000,000	-	-	-
Issue of management options	-	-	7,000,000	-	-	-
<b>Total (after Acquisition)</b>	<b>85,536,667</b>	<b>15,693,334</b>	<b>17,000,000</b>	<b>39,600,000</b>	<b>8,000,000</b>	<b>3,000,000</b>

*Table 3: Pro-forma Capital Structure*

## Timetable

Item	Date
TAO enters into Hyperion Option Agreement and Trading Halt	18 Sep 2020
TAO announces Hyperion Transaction and Resumes Trading	24 Sep 2020
TAO deadline to exercise Option	9 Oct 2020
Dispatch of Notice of Meeting	21 Oct 2020
Annual General Meeting to approve transaction	20 Nov 2020
Completion and Settlement of Placement	23 Nov 2020

\*The timetable is indicative only and may vary at the Company's discretion

## Milford Project Update

As announced 17 August 2020, a total of 197 soil and 4 rock samples were dispatched to the laboratory for assay. Due to a backlog of works, the Company is now expecting the results to be received in the coming weeks. Further planned exploration will be finalised once results have been received and interpreted.

This announcement has been authorised for release by the board

**END**

For further information, please contact

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## Appendix A: Transaction Details

TAO, Hyperion and the major vendors of Hyperion representing 69% of the Hyperion (“Major Vendors”) have executed a binding term sheet providing a 21-day exclusive option (“Option”) for TAO to acquire 100% of the issued capital of Hyperion (“Acquisition”). In consideration for the Option, the Company has paid a non-refundable option fee of US\$25,000. TAO may exercise the Option at any time during the option period.

In the event the TAO exercises the Option, TAO will advance to the Company a loan of USD\$125,000 (interest free) to be applied towards exploration work on the Camden Project (**Loan**). If the Acquisition does not complete (for any reason) then the Loan is fully refundable within 7 days of notice from TAO.

Upon exercise of the Option by the Company, the Consideration for the Acquisition shall be comprised of the following ordinary shares, unlisted options, performance shares, and performance options, to be issued by the Company at Settlement to the vendors:

- 26,500,000 fully paid ordinary TAO shares at a deemed issue price of \$0.08 (8 cents) (“Consideration Shares”);
- 5,000,000 unlisted options with an exercise price of \$0.20 and expiry of 5 years from their date of issue (“Consideration Options”);
- 18,000,000 unlisted Class A performance shares (“Class A Performance Shares”) that convert into an equal number of ordinary shares upon completion of a positive pre-feasibility study (prepared in accordance with the JORC Code and independently verified by a Competent Person) for HMS mining and processing on any of the Project area which demonstrates a net present value of at least A\$200,000,000, within 4 years from the date of execution of the Term Sheet (“Class A Milestone”);
- 18,000,000 unlisted Class B performance shares (“Class B Performance Shares”) that convert into an equal number of ordinary shares upon commencement of commercial production from the Project area, within 5 years from the date of execution of the Term Sheet (“Class B Milestone”);
- 4,000,000 Class A performance options (“Class A Performance Options”) on the same terms and conditions as the Consideration Options that vest upon satisfaction of the Class A Milestone; and
- 4,000,000 Class B performance options (“Class B Performance Options”) on the same terms and conditions as the Consideration Options that vest upon satisfaction of the Class B Milestone.

All consideration securities will be subject to a 12-month voluntary escrow from the Settlement Date.

The Acquisition is subject to condition precedents including:

- TAO exercising its Option to acquire Hyperion;
- TAO and Hyperion completing due diligence to their satisfaction;
- TAO completing a capital raising of \$2,000,000 at an issue price of \$0.08;
- TAO maintaining a cash balance of at least \$1,300,000;
- TAO obtaining the necessary shareholder and regulatory approvals required (including but not limited to approvals required by ASX under the Listing Rules and shareholder approval for the Acquisition and the issue of the Consideration Shares, Consideration Options, Performance Shares and Performance Options);
- Each remaining minority vendor (representing 31% of Hyperion) providing TAO with a duly executed share transfer form for the transfer of their Hyperion Shares to TAO; and
- TAO and the Majority Vendors obtaining all necessary third party consents and governmental/ministerial approvals.

The Agreement includes pre-completion obligations on both parties and standard representations and warranties.

Subject all necessary shareholder and regulatory approvals, and subject to completion of the Acquisition, GTT Ventures Pty Ltd will be paid the following consideration for GTT's services in facilitating the Acquisition:

- 2,650,000 fully paid ordinary shares;
- 1,800,000 unlisted Class A performance shares that convert into an equal number of ordinary shares upon completion of the Class A Milestone; and
- 1,800,000 unlisted Class B performance shares that convert into an equal number of ordinary shares upon completion of the Class B Milestone.

TAO director Patrick Glovac is also a director and shareholder of GTT Ventures Pty Ltd.



## 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.