7 January 2021 **ASX RELEASE**

MAIDEN DRILL RESULTS CONFIRM POTENTIAL FOR A THICK, HIGH GRADE U.S. TITANIUM & ZIRCON DEPOSIT

- **Thick zones of high-grade Total Heavy Mineral ("THM") assays have been returned near surface on all holes, including;**
  - ***47.2m @ 3.69% THM including 10.7m @ 8.09% THM and 10.7m @ 5.47% THM***
  - ***35.1m @ 3.04% THM including 10.7m @ 8.16% THM***
  - ***32.0m @ 3.12% THM including 10.7m @ 5.64% THM***
- **Preliminary analysis of Valuable Heavy Minerals ("VHM") (which ranges from 42% to 76% of THM across the selected drill holes) indicates a highly valuable average mineral assemblage of the VHM portion consisting of:**
  - ***16.9% Rutile, 14.5% Zircon, 21.6% Leucoxene, 46.0% other high-titanium minerals and 1.8% Monazite***
- **The results highlight the potential for a world scale, high grade U.S. Heavy Mineral Sand ("HMS") deposit in an infrastructure rich region.**
- **Phase 2 drilling results are anticipated to be released in February 2021 and will build upon the exceptional Phase 1 results.**
- **A Phase 3 drill program is commencing shortly and will including a bulk sampling program to conduct further mineralogy and metallurgical test work.**
- **The Company is focused on rapidly moving towards defining a maiden JORC mineral resource estimate ("MRE") and completing a Scoping Study in Q2 2021.**

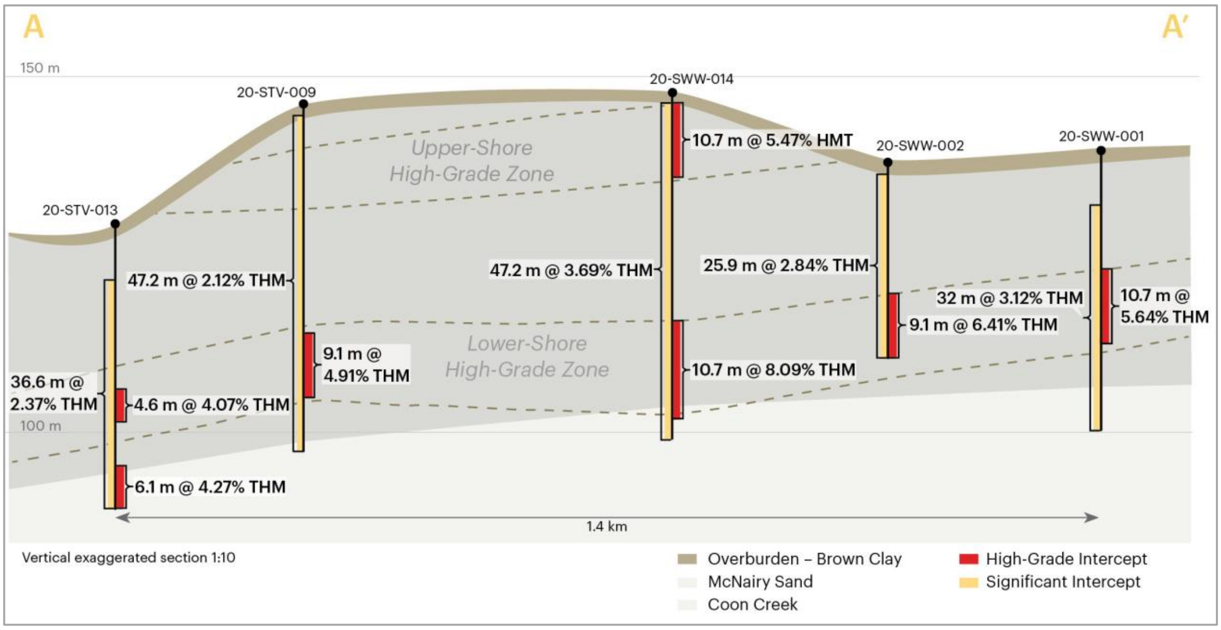

Figure 1: Cross section showing exceptional thickness and grade across deposit

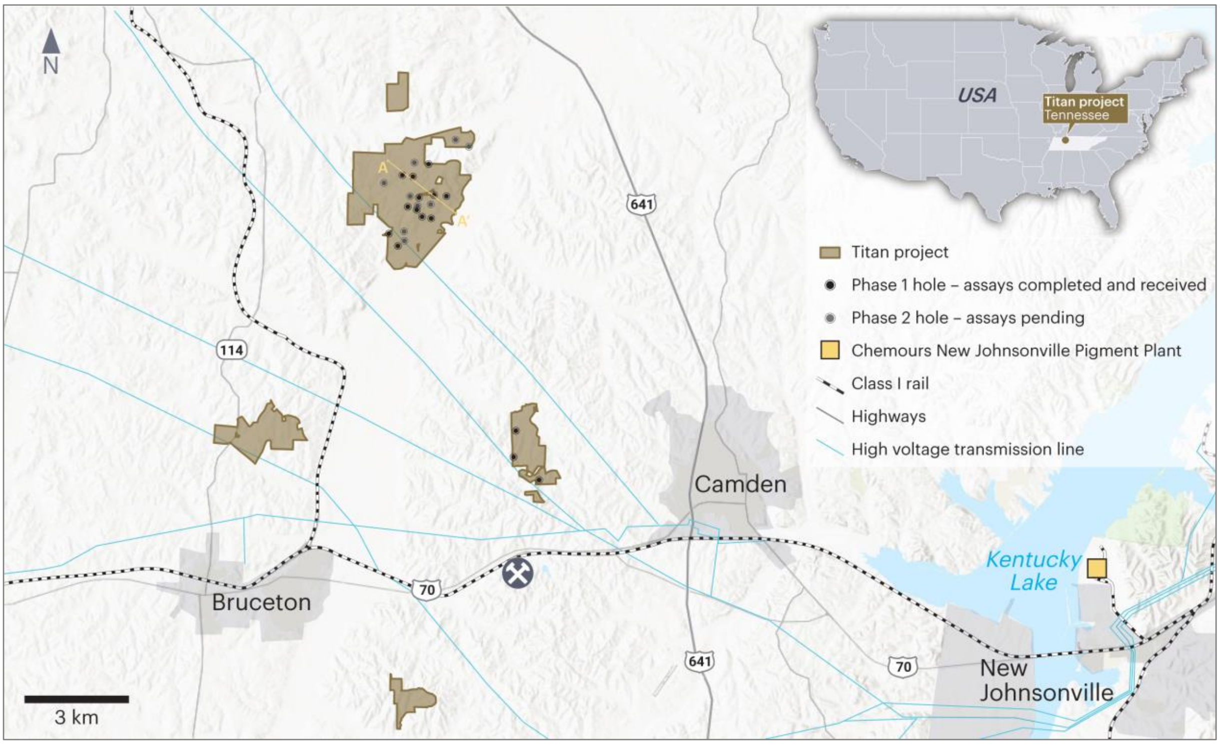

Figure 2: Regional location highlighting Phase 1 & 2 drill hole locations and local infrastructure

Commenting on the results, Executive Director Taso Arima said, *"We are very encouraged by these initial results and plan to aggressively delineate this potentially world scale HMS deposit which has exceptional characteristics including; simple geology, high grade intersections, high value assemblage, located in an infrastructure rich, low cost region in the USA with customers on our doorstep."*

This announcement has been authorised for release by the Board

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Tao Commodities Limited ("TAO" or "the Company") (ASX: TAO) is pleased to announce that the maiden drilling program at the Titan Project ("the Project") in west Tennessee has confirmed thick, high grade mineralisation in all 15 drill holes completed in the Phase 1 drilling program and a valuable mineral assemblage in drill holes selected for analysis

Phase 1 Drill Results Geological Interpretation

All Phase 1 sonic core holes encountered zones with elevated HMS mineralization (see Appendix A). Within the Phase 1 program, the thickest and highest-grade results were obtained from the Company's northern most properties following a ridge line where 12 holes intersected thick zones of mineralization. This thick zone of mineralization ranged from 12.2 to 48.8 meters with all results >1.0% THM and with values consistently ranging from 2% – 4% THM over intercepts of between 30 and 50 meters. Highlights include:

Drill hole ID	Result
20-SWW-014	***47.2m @ 3.69% THM including 10.7m @ 8.09% THM and 10.7m @ 5.47% THM***
20-SWW-003	***35.1m @ 3.04% THM including 10.7m @ 8.16% THM***
20-SWW-001	***32.0m @ 3.12% THM including 10.7m @ 5.64% THM***
20-STV-009	***47.2m @ 2.12% THM including 9.1m @ 4.19% THM***
20-SWW-006	***35.1m @ 2.80% THM including 9.1m @ 8.21% THM***
20-STV-013	***36.6m @ 2.37% THM including 4.6m @ 5.07% THM***

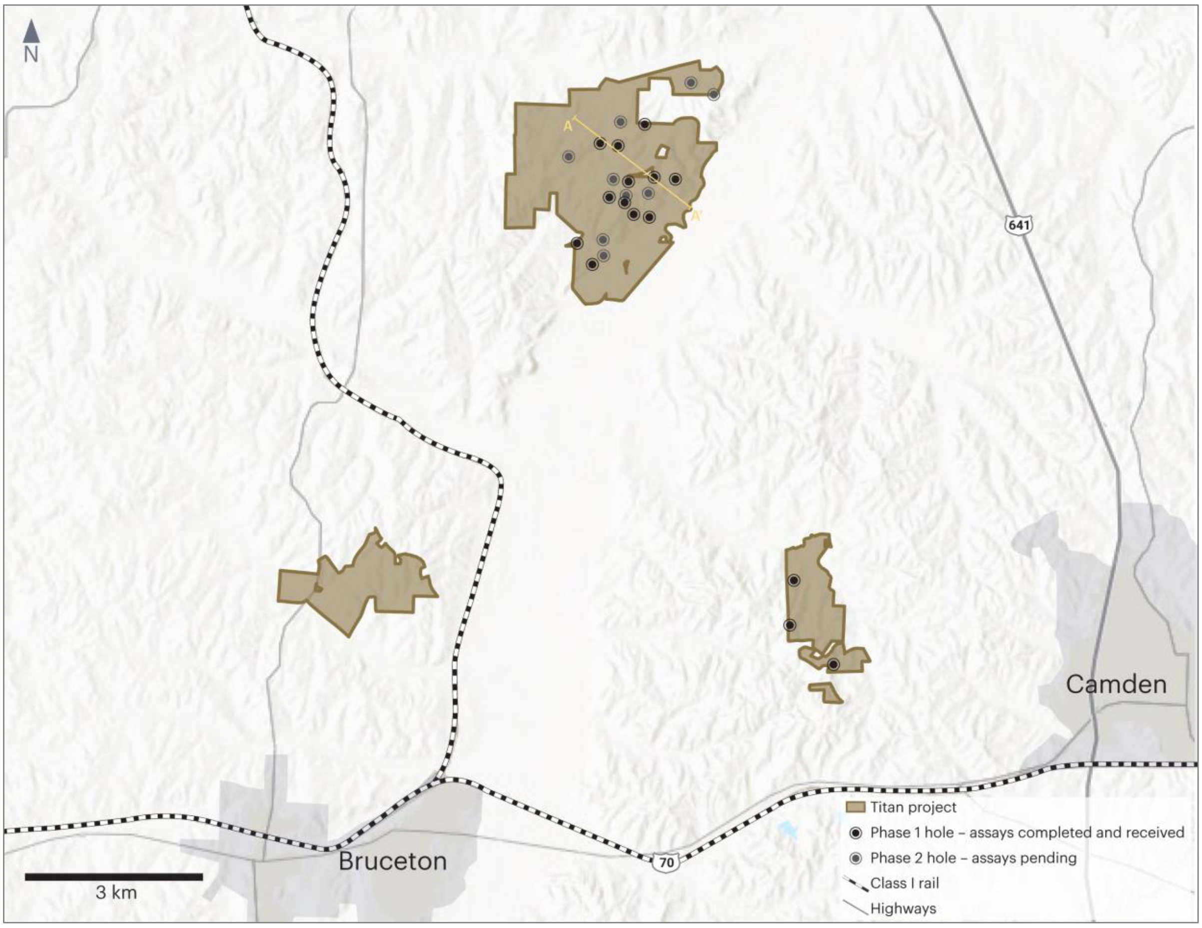

Figure 3: Phase 1 & 2 drill hole plan view

Within this thick envelope of mineralization, two zones of high-grade mineralization have been recognized, and are described as an Upper Shore Zone (USZ) and a Lower Shore Zone (LSZ). The cross section in Figure 1, oriented perpendicular to the paleo shoreline, shows the significant THM intercepts for 5 of the holes and the continuity of the upper and lower shoreline zones. Drilling remains open in all directions.

Three holes were completed in the land package located just west of Camden, Tennessee, and encountered thick zones of lower grade mineralization compared to the results seen in the northern properties, with the mineralization hosted in the lower member of the McNairy Sand.

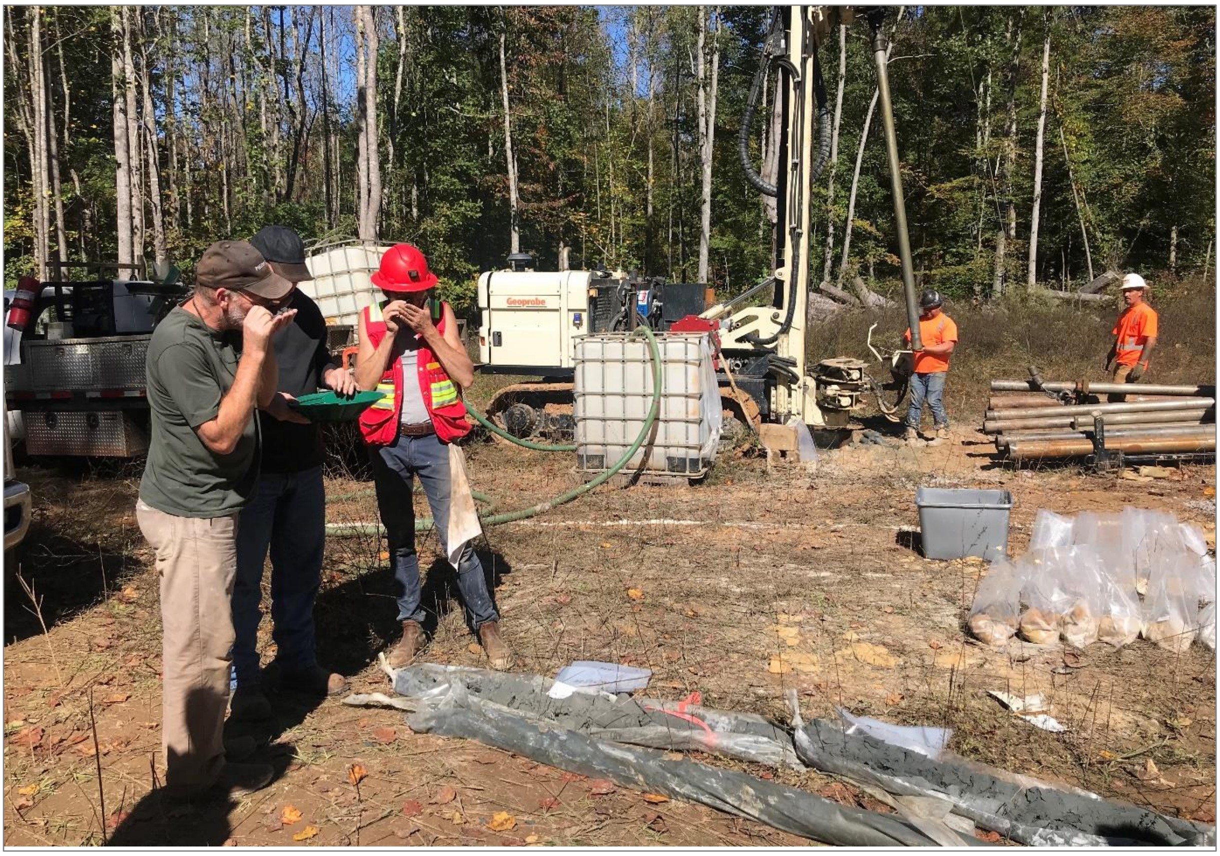

Figure 4: Chief Geologist Lamont Leatherman inspecting the sonic core

Phase 1 Total Heavy Minerals (THM) Interpretation

The Phase 1 drill program utilized a sonic drill rig, which allowed for core samples to be taken every ~1.5 meters (5 ft). These samples were then bagged and shipped to SGS Laboratories in Lakefield, Ontario, where a Heavy Mineral Concentrate ("HMC") was prepared.

The HMC was prepared via screening for oversize (+600 microns) and slimes (-45 microns) and then subjecting an 85-gram sub-sample from the screened fraction to heavy liquid separation at 2.95 specific gravity. Weights were recorded for the HMC, oversize fraction (+600 microns) and the slimes (-45 microns) for each sample. The Total Heavy Mineral ("THM") percentage was then calculated by including the mass of the oversize material and the slimes.

Phase 1 Valuable Heavy Minerals (VHM) Assemblage Interpretation

Subsequent to the THM interpretation, 70 select HMC samples from 4 drill holes were sent to SGS Lakefield and subjected to QEMSCAN analysis to determine the mineral assemblage within the HMC. Valuable Heavy Minerals ("VHM") assemblage was derived from the HMC samples by adding the rutile, leucoxene, pseudorutile /Hi-Ti Ilmenite, ilmenite, Ti-magnetite/hematite, zircon and monazite (rare earths). This calculation excludes quartz, staurolite, kyanite and all other non-valuable minerals.

The initial results highlight a favorable VHM range of 42% - 76% across the selected drill holes with the average THM assemblage and VHM assemblage shown in Figure 5.

Particularly encouraging are initial indications of a highly valuable potential product suite within the VHM portion of the THM comprising of large proportions of rutile (16.9%) and zircon (14.5%) with the majority of the remaining VHM being titanium minerals including leucoxene and pseudorutile with minor amounts of ilmenite and titanium magnetite/hematite.

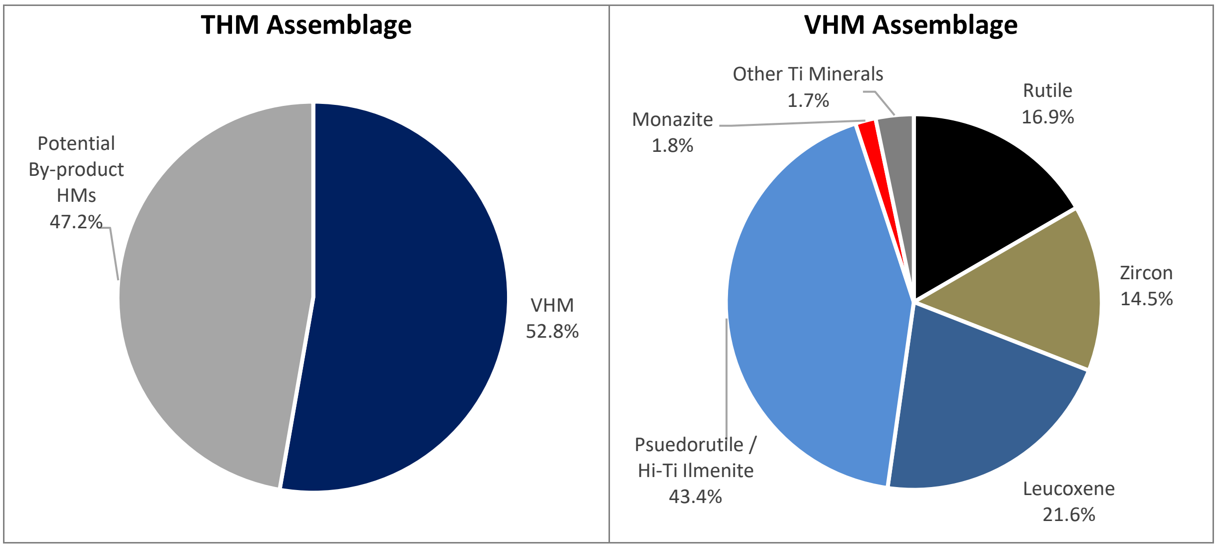

Figure 5: Mineral assemblage displayed as both THM and VHM

Phase 2 & 3 Drilling and Metallurgical Programs

In December 2020, the company completed a Phase 2 program totaling 10 holes for 344 meters. Samples have been received by SGS Laboratories with assays pending. The program was designed to follow up on visual HMS estimates from the Phase 1 program with initial Phase 2 visual observations being very encouraging and similar to the observations in the Phase 1 campaign.

The Company is now planning a follow up Phase 3 drilling program for early in Q1 2021 with the aim of delineating a maiden resource estimate in Q2 2021, intended to form the basis of a project scoping study. The Phase 3 drill program will include a bulk sampling program to conduct further mineralogy and metallurgical test work.

McNairy Sand Geology Overview

The unconsolidated Cretaceous age McNairy Sand, in western Tennessee, is interpreted to be a clastic wedge sequence within the Mississippian Embayment. In the Project area, the McNairy Sand strikes north-northeast and dips slightly to the west-northwest and lies on the marine Coon Creek formation. The McNairy Sand is divided into an upper and lower member, the upper member is described as predominately medium to fine grained sand whereas the lower member is fine grained sand that increases in silt and clay towards the base. The top of underlying Coon Creek formation is marked by a dark grey sandy clay that is locally enriched with HMS mineralization.

Figure 6: Adam Karst, CP inspecting a pan of the heavy minerals from the Phase 1 drill program

In the Project area, typically 1- 3 meters of overburden is encountered and described as red sandy clay which transitioned into a light grey to white sand. Locally, the sand contains red to brown to purplish iron concretions followed by light yellowish silty/clayey sand. Mineralization is primarily as disseminations of heavy minerals in the grey and yellowish sand, locally, individual millimeter scale seams composed of concentrations of black sand are recognized with in the high-grade zones. These seams or zones are interpreted to be shoreline wave or storm concentrations.

About Tao Commodities

Tao Commodities Limited ("TAO") holds a 100% interest in the Titan Project ("the Project"), covering ~3,000 acres of titanium and zircon prospective heavy mineral sands ("HMS") properties in Tennessee, U.S. The 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.

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.

The U.S. is the second-largest global importer of titanium feedstocks where it is primarily used to produce TiO_2 pigment for the coatings and plastics sector and Ti 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 feedstocks and zircon with the closure of Iluka's operations in Virginia in 2016. As a result, import reliance has risen to 95% in 2019, with import values of ~A$1,200 million.

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 Person's Statement – JORC Code 2012

The information in this announcement that relates to Exploration Results is based on information compiled and/or reviewed by Mr. Adam Karst, P.G. Mr. Karst is an independent consultant to Hyperion Metals Pty Ltd. Mr. Karst is a Registered Member of the Society of Mining, Metallurgy and Exploration (SME) which is a Recognized Overseas Professional Organization (ROPO) as well as a Professional Geologist in the state of Tennessee. Mr. Karst has sufficient experience which is relevant to the style and type of mineralization present at the Titan Project area and to the activity that 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 2012 JORC Code). Mr. Karst consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

Appendix A: Phase 1 drilling significant intersections

Hole ID	Easting	Northing	Elev. (m)	Az. (°)	Dip (°)	Depth (m)		From (ft)	To (ft)	From (m)	To (m)	Intercept (m)	HMT (%)	Unit
20-SWW-001	4000084	392459	139.9	0	-90	39.6		25	130	7.6	39.6	32.0	**3.12**	**Lower McNairy**
							including	55	90	16.8	27.4	10.7	**5.64**	**Lower McNairy**
							Including	60	70	18.3	21.3	3.1	**9.00**	**Lower McNairy**
20-SWW-002	4000108	392099	137.9	0	-90	27.4		5	90	1.5	27.4	25.9	**2.84**	**Upper and Lower McNairy**
							Including	60	90	18.3	27.4	9.1	**6.41**	**Lower McNairy**
20-SWW-003	3999482	391745	137.7	0	-90	36.6		5	120	1.5	36.6	35.1	**3.04**	**Upper and Lower McNairy**
							including	85	120	25.9	36.6	10.7	**8.16**	**Lower McNairy**
20-SWW-004	3999433	392019	116.3	0	-90	12.2		0	40	0.0	12.2	12.2	**4.58**	**Upper and Lower McNairy, Coon Creek**
							including	20	35	6.1	10.7	4.6	**9.02**	**Lower McNairy, Coon Creek**
20-SWW-005	3999689	391590	158.0	0	-90	15.2		10	50	3.1	15.2	12.2	**1.66**	**Upper McNairy**
20-SWW-006	391339	3999770	138.5	0	-90	36.6		5	120	1.5	36.6	35.1	**2.80**	**Upper and Lower McNairy, Coon Creek**
							including	90	120	27.4	36.6	9.1	**8.21**	**Lower McNairy, Coon Creek**
20-SWW-007	3998991	390782	124.1	0	-90	27.4		20	90	6.1	27.4	21.3	**2.94**	**Upper and Lower McNairy, Coon Creek**
							including	75	90	22.9	27.4	4.6	**8.68**	**Lower McNairy, Coon Creek**
20-STV-008	4001011	391936	135.6	0	-90	36.6		10	120	3.1	36.6	33.5	**2.01**	**Upper and Lower McNairy, Coon Creek**
							including	55	90	16.8	27.4	10.7	**3.35**	
20-STV-009	4000645	391476	146.1	0	-90	48.8		5	160	1.5	48.8	47.2	**2.12**	**Upper and Lower McNairy, Coon Creek**
							Including	105	135	32.0	41.2	9.1	**4.91**	**Lower McNairy, Coon Creek**
20-SRS-010	3991751	395096	165.0	0	-90	21.3		5	70	1.5	21.3	19.8	**1.69**	**Upper and Lower McNairy, Coon Creek**
							including	45	60	13.7	18.3	4.6	**3.06**	**Lower McNairy**
20-SLS-011	3992416	394351	162.5	0	-90	30.5		35	100	10.7	30.5	19.8	**1.04**	**Lower McNairy**
20-SLS-012	3993184	394419	145.7	0	-90	15.2		10	50	3.1	15.2	12.2	**1.08**	**Lower McNairy, Coon Creek**

Hole ID	Easting	Northing	Elev. (m)	Az. (°)	Dip (°)	Depth (m)		From (ft)	To (ft)	From (m)	To (m)	Intercept (m)	HMT (%)	Unit
20-STV-013	4000687	391174	129.2	0	-90	39.6		10	130	3.1	39.6	36.6	**2.37**	**Upper and Lower McNairy, Coon Creek**
							including	75	90	22.9	27.4	4.6	**5.07**	**Lower McNairy**
							including	110	130	33.5	39.6	6.1	**4.27**	**Lower McNairy, Coon Creek**
20-SWW-014	4000035	391659	147.9	0	-90	48.8		5	160	1.5	48.8	47.2	**3.69**	**Upper and Lower McNairy, Coon Creek**
							including	10	45	3.1	13.7	10.7	**5.47**	**Upper McNairy**
							including	115	150	35.1	45.7	10.7	**8.09**	**Lower McNairy, Coon Creek**
20-SWW-015	3998628	391048	118.8	0	-90	18.3		20	60	6.1	18.3	12.2	**1.12**	**Lower McNairy, Coon Creek**

Appendix B: Phase 1 drilling VHM% from QEMSCAN analysis

HoleID	SampleID	From_FT	To_FT	From_M	To_M	HMS%	THM%	VHM%
20-SWW-001	E00097512	55	60	16.8	18.3	1.7%	1.67%	67.20%
20-SWW-001	E00097513	60	65	18.3	19.8	6.9%	6.68%	80.45%
20-SWW-001	E00097514	65	70	19.8	21.3	11.9%	11.32%	79.32%
20-SWW-001	E00097515	70	75	21.3	22.9	4.7%	4.45%	71.38%
20-SWW-001	E00097516	75	80	22.9	24.4	7.4%	7.00%	74.78%
20-SWW-001	E00097517	80	85	24.4	25.9	5.0%	4.69%	74.20%
20-SWW-001	E00097518	85	90	25.9	27.4	3.9%	3.66%	73.28%
20-STV-008	E00097651	0	5	0.0	1.5	1.0%	0.77%	29.06%
20-STV-008	E00097652	5	10	1.5	3.0	0.7%	0.58%	29.67%
20-STV-008	E00097653	10	15	3.0	4.6	1.2%	1.06%	34.52%
20-STV-008	E00097654	15	20	4.6	6.1	1.1%	0.92%	25.80%
20-STV-008	E00097655	20	25	6.1	7.6	0.3%	0.33%	44.30%
20-STV-008	E00097656	25	30	7.6	9.1	0.4%	0.33%	44.46%
20-STV-008	E00097657	30	35	9.1	10.7	0.5%	0.45%	30.63%
20-STV-008	E00097658	35	40	10.7	12.2	1.1%	1.05%	40.53%
20-STV-008	E00097659	40	45	12.2	13.7	0.8%	0.69%	56.10%
20-STV-008	E00097661	45	50	13.7	15.2	1.6%	1.54%	64.64%
20-STV-008	E00097662	50	55	15.2	16.8	2.0%	1.88%	65.65%
20-STV-008	E00097663	55	60	16.8	18.3	3.8%	3.64%	75.76%
20-STV-008	E00097664	60	65	18.3	19.8	3.6%	3.51%	74.50%
20-STV-008	E00097665	65	70	19.8	21.3	2.5%	2.44%	76.74%
20-STV-008	E00097666	70	75	21.3	22.9	5.8%	5.61%	73.83%
20-STV-008	E00097667	75	80	22.9	24.4	3.5%	3.33%	71.91%
20-STV-008	E00097668	80	85	24.4	25.9	2.4%	2.28%	68.96%
20-STV-008	E00097669	85	90	25.9	27.4	2.9%	2.61%	73.44%
20-STV-008	E00097670	90	95	27.4	29.0	2.0%	1.84%	69.39%
20-STV-008	E00097671	95	100	29.0	30.5	1.9%	1.71%	71.79%
20-STV-008	E00097672	100	105	30.5	32.0	1.7%	1.51%	69.90%
20-STV-008	E00097673	105	110	32.0	33.5	4.0%	3.47%	65.27%
20-STV-008	E00097674	110	115	33.5	35.1	3.0%	2.70%	65.71%
20-STV-008	E00097675	115	120	35.1	36.6	1.4%	1.32%	56.79%
20-STV-009	E00097676	0	5	0.0	1.5	0.8%	0.56%	29.74%
20-STV-009	E00097677	5	10	1.5	3.0	1.7%	1.45%	26.05%
20-STV-009	E00097678	10	15	3.0	4.6	1.4%	1.38%	26.68%
20-STV-009	E00097679	15	20	4.6	6.1	0.7%	0.69%	20.75%
20-STV-009	E00097681	20	25	6.1	7.6	2.3%	2.25%	43.93%
20-STV-009	E00097682	25	30	7.6	9.1	1.5%	1.44%	24.54%
20-STV-009	E00097683	30	35	9.1	10.7	1.7%	1.61%	28.84%
20-STV-009	E00097684	35	40	10.7	12.2	1.1%	1.09%	22.88%
20-STV-009	E00097685	40	45	12.2	13.7	1.7%	1.57%	33.45%
20-STV-009	E00097686	45	50	13.7	15.2	0.8%	0.81%	13.51%
20-STV-009	E00097687	50	55	15.2	16.8	2.1%	2.02%	19.40%
20-STV-009	E00097688	55	60	16.8	18.3	0.4%	0.34%	10.28%
20-STV-009	E00097689	60	65	18.3	19.8	0.4%	0.38%	15.82%
20-STV-009	E00097690	65	70	19.8	21.3	0.6%	0.56%	20.01%
20-STV-009	E00097691	70	75	21.3	22.9	0.6%	0.56%	18.93%
20-STV-009	E00097692	75	80	22.9	24.4	0.4%	0.38%	32.08%
20-STV-009	E00097693	80	85	24.4	25.9	0.7%	0.62%	17.42%
20-STV-009	E00097694	85	90	25.9	27.4	0.5%	0.47%	25.97%
20-STV-009	E00097695	90	95	27.4	29.0	1.2%	1.16%	55.55%
20-STV-009	E00097696	95	100	29.0	30.5	1.0%	1.00%	61.29%
20-STV-009	E00097697	100	105	30.5	32.0	2.2%	2.10%	67.70%
20-STV-009	E00097698	105	110	32.0	33.5	3.9%	3.74%	75.28%
20-STV-009	E00097699	110	115	33.5	35.1	5.3%	5.00%	74.82%
20-STV-009	E00097701	115	120	35.1	36.6	8.7%	8.01%	72.82%
20-STV-009	E00097702	120	125	36.6	38.1	3.1%	2.83%	66.68%
20-STV-009	E00097703	125	130	38.1	39.6	5.4%	5.10%	67.44%
20-STV-009	E00097704	130	135	39.6	41.1	5.0%	4.79%	64.30%
20-STV-009	E00097705	135	140	41.1	42.7	2.5%	2.42%	60.72%
20-STV-009	E00097706	140	145	42.7	44.2	3.6%	3.41%	66.68%
20-STV-009	E00097707	145	150	44.2	45.7	2.3%	2.05%	43.13%
20-STV-009	E00097708	150	155	45.7	47.2	5.7%	5.05%	63.94%
20-STV-009	E00097709	155	160	47.2	48.8	1.8%	1.59%	58.68%
20-STV-013	E00097774	65	70	19.8	21.3	2.5%	2.38%	68.58%
20-STV-013	E00097775	70	75	21.3	22.9	3.9%	3.68%	68.47%
20-STV-013	E00097776	75	80	22.9	24.4	4.5%	4.20%	66.86%
20-STV-013	E00097777	80	85	24.4	25.9	7.1%	6.49%	64.30%
20-STV-013	E00097778	85	90	25.9	27.4	4.9%	4.52%	66.74%
20-STV-013	E00097779	90	95	27.4	29.0	3.5%	3.34%	63.43%
20-STV-013	E00097781	95	100	29.0	30.5	2.5%	2.32%	64.83%

Appendix C: JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• A roto-sonic drill rig, the Geoprobe 5140LS, utilized a 10 foot core barrel to obtain direct 5-foot samples of the unconsolidated geological formations hosting the mineralization in the project area. All holes were drilled vertically which is essentially perpendicular to the mineralization. The sonic cores were used to produce approximately 2kg samples for heavy liquid separation as well as further mineralogical analysis.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg*	• All drilling thus-far for the project has been roto-sonic. This method alternates advancement of a core barrel and a removeable casing. The core barrel utilized for this project is 4" in diameter with a 6" diameter outer casing. The core barrel is retrieved

Criteria	JORC Code explanation	Commentary
	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).	from the ground and the samples are recovered directly from the barrel into a plastic sleeve. All holes are drilled vertically.
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.*	• Each core is measured, and the recovery is calculated as length of recovered core divided by length drilled (typically 10'). Some interpretation is involved as the material can expand or compact as it is recovered from the core barrel into the plastic sleeve. • The driller and geologist keep a careful eye on formation run-up into the casing as the core barrel is run down the hole for sample collection. Any run-up is removed from the casing prior to sampling. • The sonic drilling method has been shown to provide representative unconsolidated mineral sands samples across a variety of deposits as it is a direct sampling method of the formation(s). At times water is used to create a head on the formation to help prevent run-up.
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.*	• Samples are logged for lithological, geological, and mineralogical parameters in the field to help aid in determining depositional environment, major geologic units, and mineralized zones. All samples are panned and estimates made for the %HM and %SL. • Logging is both qualitative (sorting, color, lithology) and quantitative (estimation of %HM, %SL) to help support the integrity of the Exploration Results and Mineral Resource estimate. Photographs are taken of the sonic cores. • Total depth of the drillhole is recorded. Samples are collected at regular (5 foot) intervals unless the geology/mineralogy warrant altering this as to co-mingle samples across major geological/mineralized boundaries. The total hole is logged by the field geologist and recorded in custom logging software on a Panasonic Toughbook (or similar) laptop. The data is transferred weekly to the project's GeoSpark database.
Sub-sampling 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.*	• The unconsolidated sonic cores are sampled by splitting the core in half lengthwise using a machete then recovering an even fillet with a trowel along the entire length of the sample interval.

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	• *Quality control procedures adopted for all sub-sampling 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.*	 • Samples are collected directly to the pre-labeled/pre-tagged sample bags; the remaining sample is further split into a replicate/archival sample and what remains is used to backfill the drillhole. • A chip tray is maintained for each hole to keep a representative sample for each interval for later use during geological interpretation or between holes in the field. • Field duplicates are collected at a 3% rate by splitting the sample from the sonic core as described above into two samples bags. • The sample size (approx. 2kg) is appropriate for the type of material and concentration of the HM mineralization.
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, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and*	• Standard mineral sands industry assay procedures (sizing 44-micron [325 mesh] for slimes and 595-micron [30 mesh] for oversize) heavy-liquid separation of an 85g split of the -30/+325 sand using methylene iodide. For mineralogy, QEMSCAN analysis was utilized. • Accuracy monitoring will be achieved through submission of in-house heavy mineral sand standard reference materials (SRM) developed specifically for the project. At least 5 repeat HLS of these materials were analyzed to establish an average value and standard deviation. A low-grade and a high-grade SRM were produced with materials

Criteria	JORC Code explanation	Commentary
	model, reading times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	(HMs and silica sand) from the project area. A quality control sample failure is any single sample 3 standard deviations from the true value for the comparison for each sample, or two out of three consecutive samples between 2 and 3 standard deviations, on the same side of the mean value (i.e. both above or both below the mean value). Should the errors for a particular batch exceed these limits, the section of a batch bracketed by the SRM samples (i.e. number samples on either side) should be re-analyzed. Overall, the objective of the quality assurance program for resource purposes should be a pass rate of >95%. A lower pass rate, on the order of 90% is acceptable for exploration purposes. Six SRMs (3 high and 3 low grade) were submitted during the drilling campaign for analysis and results were all within 3 standard deviation of the mean of the SRM. • Sampling precision will be monitored by selecting a sample interval likely to be mineralized and taking a second fillet sample over the same sample interval. These samples should be consecutively numbered after the primary sample and recorded in the sample database as “field duplicates” and the primary sample number recorded. Field duplicates should be collected at the rate of approximately 3 in 100 samples and ideally should be collected when sampling mineralized sonic core intervals containing visible HM (panning). Random sampling precision will be monitored by duplicating core samples. Analytical precision will also be monitored using HLS duplicates that will need to be requested from the laboratory at a similar rate (i.e. 3 in 100 samples), with the duplicate HLS analysis to be completed on the duplicate core sample. Data from these two types of duplicate analyses can be used to constrain sampling variance at different stages of the sampling and preparation process. It is critical to record the primary sample of the field duplicate. By convention, this should be the preceding sample. Field duplicates should have an average coefficient of variation (CoV) <10%, whereas laboratory duplicates should have an average CoV <5%. For the drilling results reported, 9 field duplicates were submitted to the laboratory with results showing a CoV of less than 10%. • The use of an 85 g sub-sample for heavy liquid separation (HLS) results in a relative precision of 4% based on repeat analyses of standard reference materials (SRM) at SGS. This sub-sample mass is therefore appropriate for the grain size being sampled. • Preliminary analysis of limited field duplicate splits indicates a relative precision of 33%, indicating sampling of drill material presents the greatest uncertainty in the sampling procedure. • QEMSCAN analysis of the Heavy Mineral Concentrate (HMC) averages 11.5% quartz.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>Seven low grade samples showed elevated quartz with values ranging from 18 to 51% of the HMC. The remaining samples produced an average of 8.09% quartz.
• QEMSCAN (Qualitative Evaluation of Minerals by Scanning Electron Microscopy) is the state of the art, top of the range automated mineral analyser. It is an analytical tool that produces efficient and accurate information on minerals. This tool has been custom developed for the mining industry.
• QEMSCAN Ti percentage classification:
<table><tr><th>Mineral ID</th><th>Ti%</th></tr><tr><td>Rutile</td><td>59.9</td></tr><tr><td>Leucoxene</td><td>42.0</td></tr><tr><td>Pseudorutile</td><td>37.7</td></tr><tr><td>Ilmenite</td><td>34.5</td></tr></table>
• The Valuable Heavy Mineral(VHM) is calculated from the QEMSCAN data using the percent of rutile+leucoxene+pseudorutile+ilmenite+zirconium+REE in the sink fraction of the sample.</td></tr>
<tr><td>Verification of sampling and assaying</td><td>• 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.</td><td>• The assay data are independently visually validated and cross-checked against the geology. This is done as the results are received and prior to geological modeling and resource estimation.
• Twinned holes have not been used. Analysis of twin data for other similar deposits indicate that they are of limited value due to the inherent variably over small distances for this style of mineralization and it is the assessment of the Competent Person that the absence of twin data is not material to the accuracy of the Exploration Results and Resource Estimate. Twinned holes will be used if there is a change in drilling methods during the project to assess whether any bias exists with the different methods and how this bias may impact the integrity of the Exploration Results or Mineral Resource Estimate.
• Data are collected in the field using both a field computer and a field notebook. Data are transferred weekly to the company network and verified against the field log book if questions arise. The data are checked and verified by the geologist completing the resource estimation to ensure there are no errors. Lab data are added as they become</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		available and verified against the field geologist's visual HM grade and SL estimates. Any data in question that is not able to be rectified are removed from the database and not used in the reporting of Exploration Results or the estimation of the Mineral Resource. • The data appear to be in good order with no significant quality issues identified that will be material to the Exploration Results and Mineral Resource Estimate.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All drillholes are surveyed after drilling with a hand-held GPS unit and the X and Y coordinates recorded in the project's database by the field geologist. Elevation data for each collar has been determined using publicly available topographic data. • The coordinate system used for the project is UTM (Zone16N).
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.*	• Drillhole spacing varies at this early point in the project. Drill samples are collected at regular intervals (5 foot). • Compositing of samples downhole and across/along strike based on geological/mineralized units may be utilized for assemblage and quality parameters.
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 drilling and sampling have been orientated such to test the thickness and grade of the deposit(s). Holes are drilled vertically to give true thickness of the gently dipping mineralized units.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• Samples remain in the custody of the field geologist from time of collection until time of delivery to the project's temporary storage location which is a secure third-party storage unit. • Samples are placed in rice bags and a red security tag secure the top. These tags are verified by the lab to guarantee all sample bags are intact.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No third-party review of the sampling techniques employed have been conducted. Only internal reviews by the Competent Person who is considered to have expertise in the drilling/sampling methods has been utilized.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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.*	• All areas reported are held under mining lease option agreements with mineral rights to owner. Negotiations are ongoing to secure additional parcels within the deposits. • No known impediments to obtaining a license to operate. License to operate is based on obtaining land access through mining leases with individual landowners as well acquiring local, state, and federal permits.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Several Heavy Mineral Sand (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.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Camden and Little Benton deposits are Cretaceous mineral sands deposits located in the Mississippi Embayment region of the U.S. These deposits consist of reworked deltaic sediments hosting HM mineralization. The deposits overly other deeper marine

Criteria	JORC Code explanation	Commentary
		sediments and are overlain by more recent fluvial sediments.
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 drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole 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.*	• A total of 15 drill holes for 298 HM assay samples (heavy liquid) and 70 HM mineralogy (QEMSCAN) have been completed to-date. A summary of representative HM intersections from the drilling is presented in tables in the main text and on the accompanying cross section(s). Refer to table in main text.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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*	• No lower cut-offs have been applied. • Sample interval lengths are typically 5 feet. • No metal equivalent values are used in this report.

Criteria	JORC Code explanation	Commentary
	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 drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Drillholes are vertical and drilled from ground surface through the entire mineralized thickness typically terminating in the Coon Creek Formation. The geological units in this area are near flat lying (slight westward dip) so mineralized thicknesses are close to true.
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 drill hole collar locations and appropriate sectional views.*	• Figures in text.
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.*	• Representative reporting of low and high grades has been employed within this report.
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,*	• None at this time material to the reporting of exploration results. •

Criteria	JORC Code explanation	Commentary
	groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	• *The nature and scale of planned further work (eg 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.*	• Additional drilling within the deposits as agreements are negotiated on new properties is required to better define lateral extents of mineralization and to increase the geological confidence. • A phase 2 drilling campaign has been completed and samples received by SGS in Canada.