

VITAL COMMENCES RESOURCE DEFINITION DRILLING AT TARDIFF ZONE 1

Growth strategy for large-scale, long-life light and heavy rare earths production

HIGHLIGHTS

- Drilling program commences to define initial reserve for Vital's ongoing Tardiff operation within its 94MT @ 1.4% REO resource (1.3 MT contained TREO)
- Tardiff to be developed in a modular fashion, commencing at Tardiff Zone 1, before expansion to Zone 3, with further expansion along open boundaries
- The current resource for the three modules (without consideration of recent drilling programs) is 16.3mt @ 1.85% TREO (or 303kt contained TREO). At the completion of these three modules further expansion may be considered throughout the remainder of the 1.3MT contained TREO resource
- The first operational module will be focused on the Tardiff Zone 1 resource area (4.0mt @ 1.95% TREO or 79,000kt contained TREO) with expansion into the Tardiff Zone 3 resource area to occur after an initial 5-10 years production, with plant capacity and expansion to be determined based on customer demands
- Modular development plan will enable Vital to apply flexibility to its operations to meet the requirements of customers and increase production as required.
- Drilling at Tardiff Zone 1 aims to define a reserve for Module 1 mining operations
- Drilling program to include sterilization drilling for infrastructure planning
- Tardiff contains elevated heavy rare earths mineralisation to complement North T's xenotime deposit, part of Vital's strategy to be world's first light and heavy REO producer

Canada's first rare earths producer **Vital Metals Limited** (ASX: **VML**) ("**Vital Metals**" or "**the Company**") is pleased to announce it has commenced resource definition drilling at the Tardiff deposit, part of its 100%-owned Nechalacho Rare Earth Project in Northwest Territories, Canada.

Vital has planned 48 holes to follow up on results from its 2021 program at Tardiff Zone 1¹, aiming to extend known high-grade REO mineralisation along the trends.

Vital plans to mine at Tardiff as part of its Stage 2 growth plan as it builds a large-scale, long-life rare earths operation at Nechalacho, executing its three-stage development strategy – Foundation (targeting customer acceptance of product – mining North T); Growth (expansion into 1 million contained tonne Tardiff resource, plus potential for Wigu Hill, Tanzania); and Heavy Rare Earths. It will use results from 2022 drilling to update a Mineral Resource Estimate for the high-grade Tardiff

¹ ASX announcement 26 May 2021: Vital intersects broad high grade REO in near surface drilling at Tardiff Zone



Zone 1 area, aiming to convert existing Inferred resources to Measured and Indicated resources, with the potential to be converted into reserves, with previous drilling identifying high grade zones opening the possibility for the contained tonnage to increase.

Vital Metals' Managing Director Geoff Atkins said successful drilling could define a reserve to support the first 5-10 years of operation at Tardiff, dependent on customer demand. With this forming a small percentage of our total resource, along with clearly defined resources to support ongoing operations and further expansion, the future at Nechalacho is exciting.

"We aim to develop the Tardiff deposit in a modular fashion as part of our Stage 2 growth phase. This offers the opportunity for a much larger scale, longer life rare earths project at Nechalacho now that we have proven our ability to develop, mine and produce rare earths from the Stage 1 North T pit," he said.

"We plan to develop the Tardiff Deposit in modules, commencing at Tardiff Zone 1 before expanding into Tardiff Zone 3 with further expansion possible along open resource boundaries, including to Tardiff Zone 2 which currently sits outside of our defined resources. The region identified as the target for modular operations at Tardiff has a defined resource of 16.3mt @ 1.85% TREO. With this resource containing over 300,000t of rare earth oxides the potential is enormous. Following our previous drilling program the initial focus of our first operations module will be the Tardiff Zone 1 resource area, which contains 4Mt @ 1.95% TREO (or 79,000t of contained rare earths). However, with our drilling campaign at Tardiff last year exceeding our expectations, achieving grades up to 13.78% TREO and consistently returning results above 2% TREO, with all our holes at Tardiff Zone 1 intersecting mineralisation, we see significant opportunities for improvement.

"We are currently completing follow up drilling to define an initial reserve at Tardiff Zone 1. This will form the basis for a pit to service Module 1. During development and operation of Module 1, Vital will continue to expand our reserve drilling throughout the defined 16.3mt @ 1.85% TREO (or 303kt contained TREO) resource to service continued and expanded operations.

"This is part of our three-stage strategy of development, in which we initially build the foundations at North T, then grow through expanded operations at Tardiff in Stage 2 and commence production of heavy rare earths in Stage 3, which would make us the only rare earths producer to achieve that."

2022 Drill Plan Details

Tardiff is part of the Upper Zone at Nechalacho, which boasts an impressive light rare earth oxides (LREO) resource of 94.7 million tonnes at 1.46% TREO² in the measured (2.9 million tonnes at 1.47%), indicated (14.7 million tonnes at 1.51%) and inferred (77.1 million tonnes at 1.46%) JORC 2012 categories. Tardiff Zone 1 is a higher-grade bastnasite-rich area.

Vital designed the drill plan to extend the north-northwest-south-southwest trending zone from the known 75m of strike to 250m of strike length with three rows of holes to the north and three rows south of the zone. This aims to intersect a zone of +2% REO on the west side of the 2021 drilling pattern that remains open. Drill spacing will be sufficient for this resource to be classified as a reserve when accompanied by appropriate engineering studies.

² ASX Announcement 13 December 2019: Nechalacho Rare Earth Deposit - JORC 2012 Resources

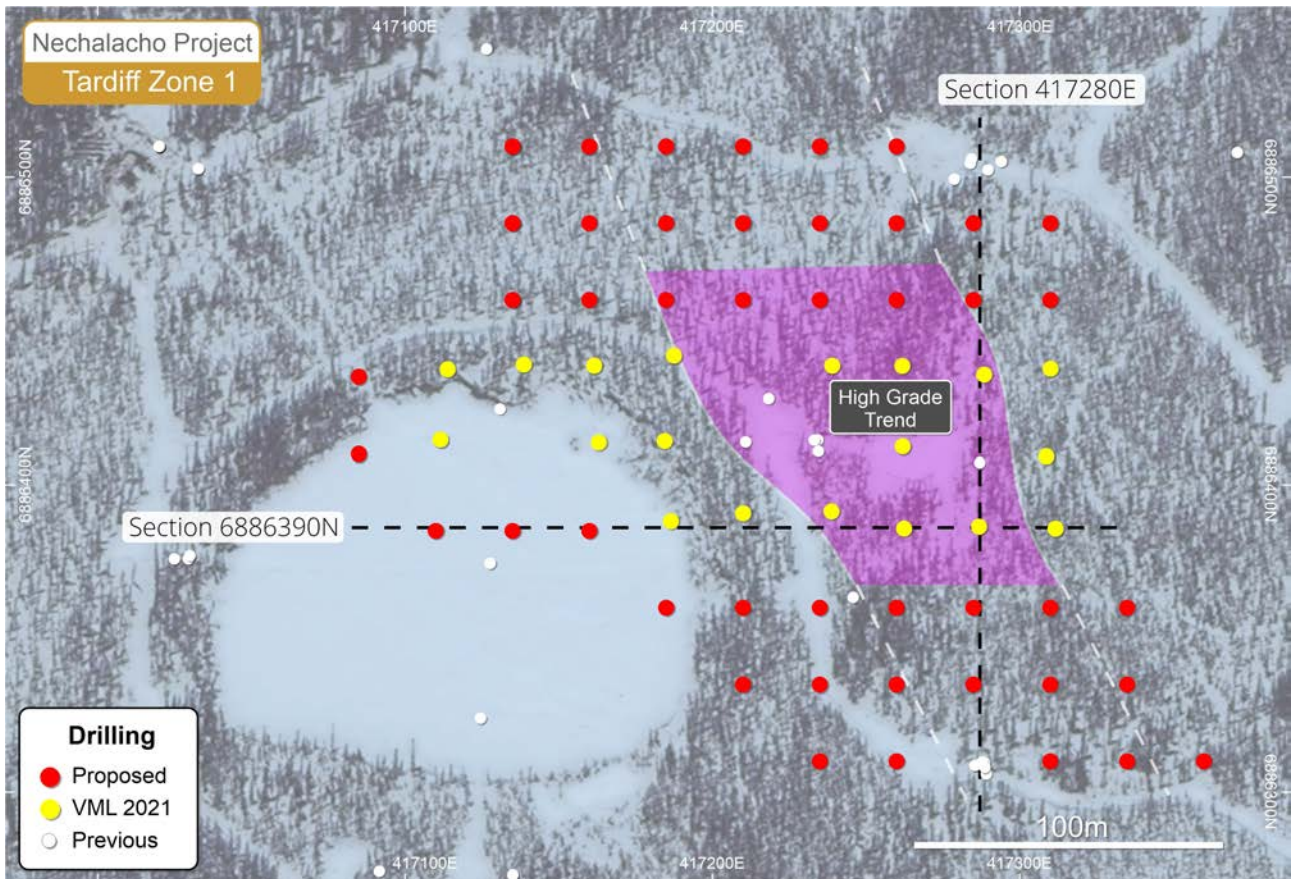


Figure 1 – 2022 proposed drill plan targeting the extension of the high grade north-south trend

Background

Vital completed its first mining campaign at Nechalacho as part of Stage 1 operations, using rare earth materials from the high-grade North T pit to produce a rare earth carbonate at its Saskatoon extraction facility, which will commence production in mid-2022.

Vital is developing the much larger Tardiff deposit in Stage 2 as it executes its growth strategy, and resource definition drilling at Tardiff Zone 1 is a step in its development plans for the deposit.

Vital’s drilling at Tardiff in 2021 targeted three high-grade REO zones previously identified in wide-spaced historic drilling by Avalon Materials Inc, known as Tardiff Zones 1, 2 and 3., which are contained within the larger overall resource.

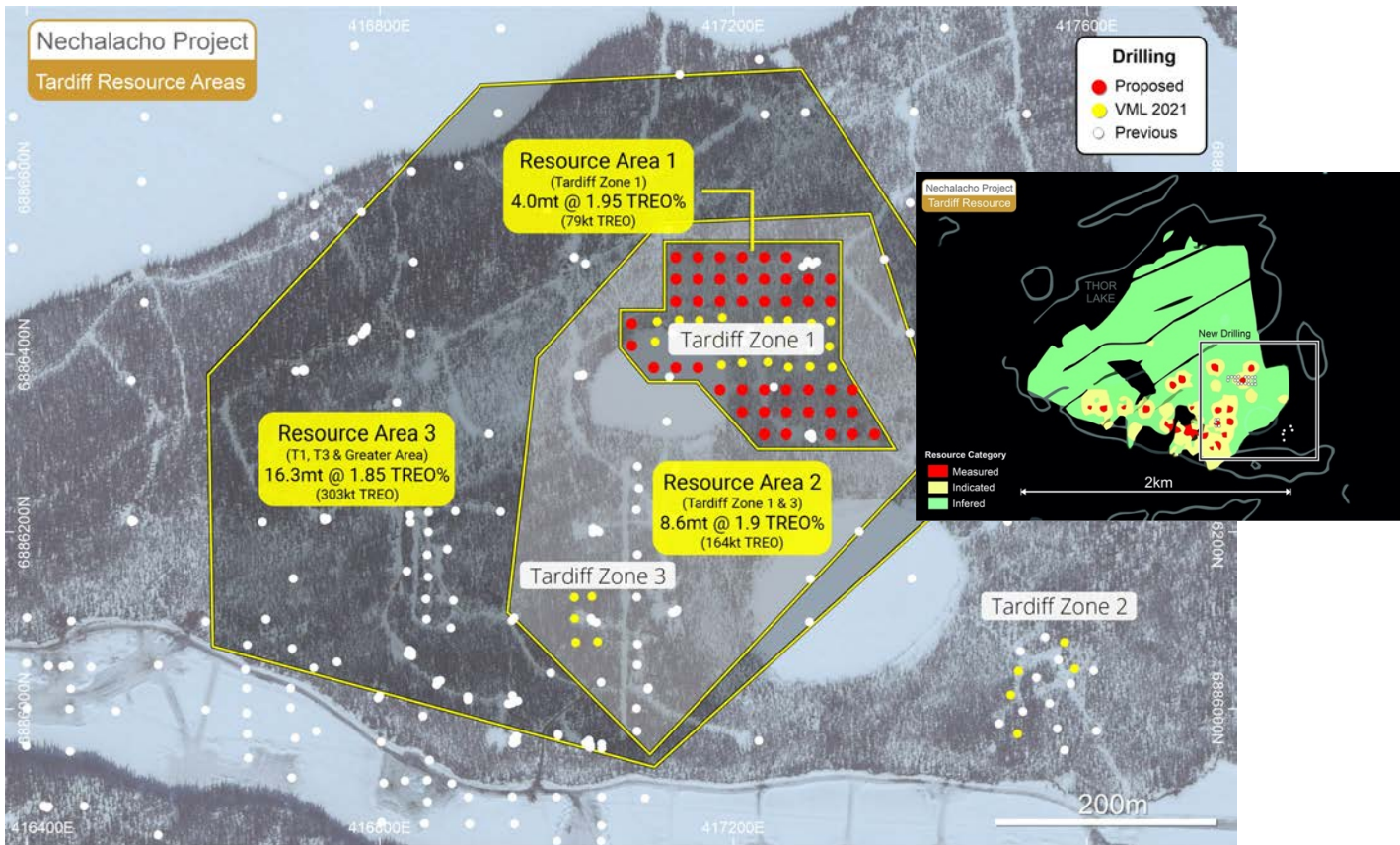


Figure 2 – 2021 drill plan showing the Tardiff Zones 1, 2 & 3. Operations are planned to commence at Tardiff Zone 1 before extending along the high grade trend to Tardiff Zones 2 and 3

Vital completed close spaced drilling (25m x 25m) at Tardiff Zone 1, which defined a strong zone of higher grade REO mineralisation with wide intersections greater than 2% TREO. The higher grade mineralisation in Zone 1 was drilled on a 25m grid over 300m x 100m is open in all directions. More importantly, Vital intersected the highest grades on the most northern and southern sections.

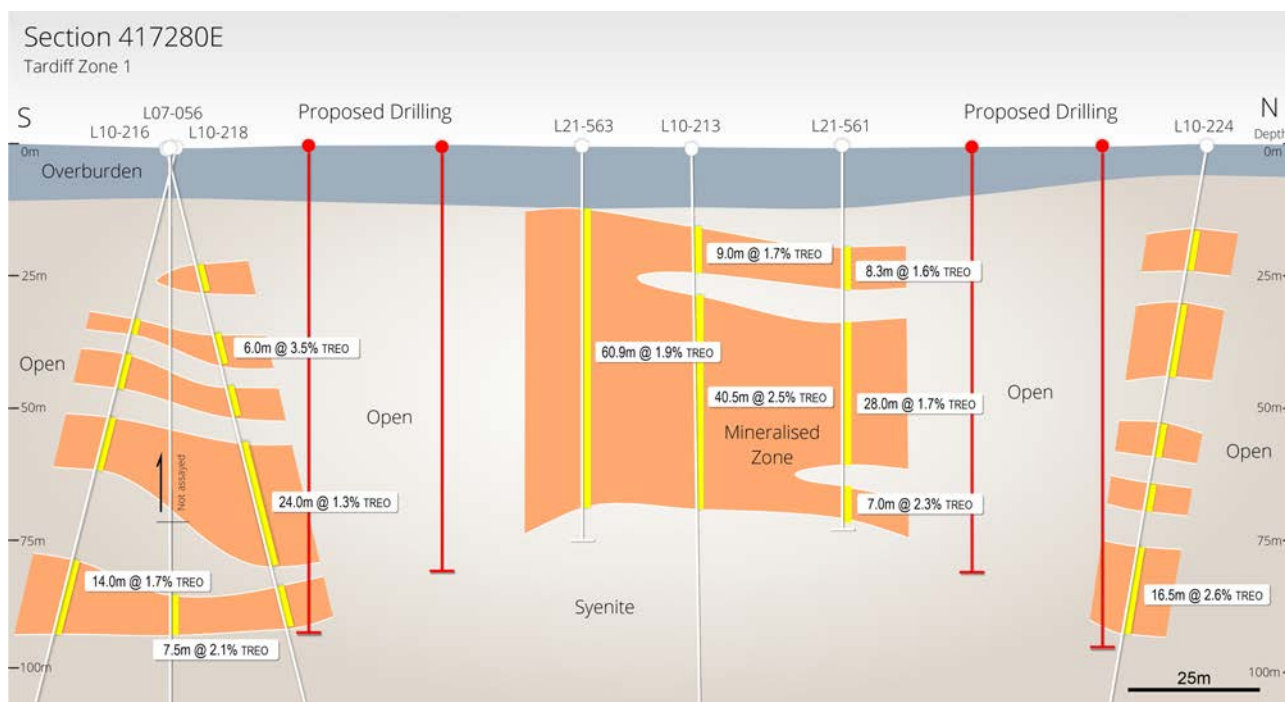


Figure 3 – Section along Eastern boundary at Tardiff 1,

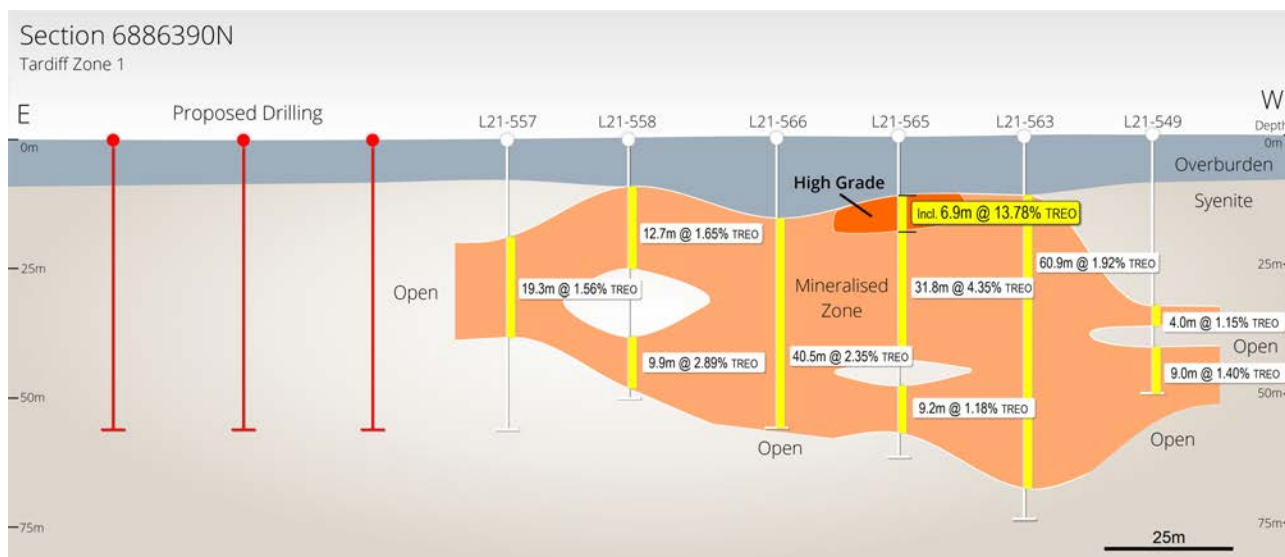


Figure 3 – Section along southern boundary at Tardiff 1, where holes 566 and 549 ended in mineralisation in 2021 drilling

Best results from Vital’s 2021 drilling at Zone 1 included:

- 31.8m at 4.35% TREO from 11.5m including 6.9m at 13.78% TREO
- 60.9m at 1.92% TREO from 11.4m
- 40m at 2.54% TREO from 16m
- 25.8m at 2.56% TREO from 15.3m
- 13m at 3.12% TREO from 36m including 4m at 7.06% TREO.

A full table of results is available in the ASX Announcement dated 26 May 2021.



Figure 4 – Massive bastnaesite in drill hole L21 - 565

- ENDS-

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This announcement has been authorised for release by the Board of Vital Metals.



ABOUT VITAL

Vital Metals Limited (ASX: VML) is Canada's first rare earths producer following commencement of production at its Nechalacho rare earths project in Canada in June 2021. It holds a portfolio of rare earths, technology metals and gold projects located in Canada, Africa and Germany.

Nechalacho Rare Earth Project - Canada

The Nechalacho project is a high grade, light rare earth (bastnaesite) project located at Nechalacho in the Northwest Territories of Canada and has potential for a start-up operation exploiting high-grade, easily accessible near surface mineralisation. The Nechalacho Rare Earth Project hosts within the Upper Zone, a measured, indicated and inferred JORC Resource of **94MT at 1.46% TREO**.

Competent Person Statement

The information in this announcement relating to Avalon Exploration Results at Tardiff at the Nechalacho Rare Earths Project is based on, and fairly represents, information and supporting documentation prepared for Vital Metals Limited by Mr Brendan Shand. Mr Shand is a Competent Person and a member of the Australasian Institute of Mining and Metallurgy and an employee of the Company. Mr Shand 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 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Shand consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Compliance Statements

This announcement contains information relating to exploration results in respect of the Tardiff zone of the Nechalacho Project extracted from an ASX market announcement dated 26 May 2021 and reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("2012 JORC Code"). VML confirms that it is not aware of any new information or data that materially affects the information included in the original ASX market announcement.

This announcement contains information relating to Mineral Resource Estimates in respect of the Tardiff zone of the Nechalacho Project extracted from an ASX market announcement reported previously and published on the ASX platform on 13 December 2019. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed.

Forward Looking Statements

This release includes 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 output.

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 licences and permits and diminishing quantities or grades of resources or 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 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 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 this release are given as at the date of issue only. 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.



Appendix 1. Avalon drilling intersections in the Tardiff Zone 1 Extended drilling pattern previously unreported by Vital Metals

Hole_ID	From	To	Length	Intersection TREO%
L07-056A	84	91.55	7.55	2.1
L08-126	12	20	8	3.0
L08-126	23.7	30	6.3	1.0
L08-126	36	42	6	1.2
L08-126	48	58	10	1.2
L08-126	86	92	6	2.7
L10-215	22	58	36	1.6
incl	50	56	6	2.6
L10-215	80.4	94	13.6	1.9
L10-216	33	35.9	2.9	2.4
L10-216	52	62.5	10.5	1.7
L10-216	80	94	14	1.7
L10-217	19	27	8	3.2
L10-217	35	52	17	1.5
L10-217	82.6	88	5.4	1.5
L10-218	22.75	28	5.25	1.5
L10-218	36	42	6	3.5
L10-218	46	52	6	2.2
L10-218	56.95	81	24.05	1.3
L10-218	85	93	8	1.4
L10-224	16	24	8	1.2
L10-224	30	43.6	13.6	1.6
L10-224	53.1	59.7	6.6	1.2
L10-224	76.55	93	16.45	2.6
L10-225	19	38	19	1.1
L10-225	51	59	8	1.4
L10-225	67	94	27	2.1
incl.	84.4	94	9.6	3.0
L10-226	15	33	18	1.6
L10-226	43	51	8	1.4
L10-226	82.9	95	12.1	2.3
L10-228	9	43	34	1.4
L10-228	80.3	92.7	12.4	2.9
L10-211	14.2	50	35.8	3.3



Appendix 2: List of historic Avalon Drill Holes in the Tardiff Zone 1 extended drilling pattern previously unreported by Vital Metals

Hole_ID	Northing	Easting	Elevation	Length (m)	Azimuth	Dip
L07-056A	6886308.66	417285.52	240.91	198.3	0	-90
L08-126	6886505.924	417284.3458	241.1258	204.35	0	-90
L10-215	6886309.56	417288.57	240.98	227.1	270	-75.48999786
L10-216	6886309.81	417287.81	240.97	232.71	180	-76.01999664
L10-217	6886305.85	417289.17	240.94	223.97	90	-74.98000336
L10-218	6886308.04	417288.71	240.88	203.1	0	-75.86000061
L10-224	6886504.5	417283.97	241.62	196.6	180	-80.34999847
L10-225	6886502.35	417289.71	241.52	201.65	90	-75.43000031
L10-226	6886505.08	417294.07	241.62	221.4	0	-74.76999664
L10-228	6886499.33	417278.76	241.59	206	270	-75.23000336
L10-211	6886414.36	417233.16	241.64	199	0	-75.5

JORC Code, 2012 Edition – Table 1 report - North T Zone

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Sampling of historic Avalon diamond drill core are half splits of drill core using a core splitter. • Samples were collected from the bastnaesite mineralisation with lengths ranging 0.5 to 3.5 metres. The typical sample length was between 1.0 and 2.0 metres. The sampling lengths were dictated by the lithology of the core. • All drill core samples were crushed to 90% <2 mm, then 1 kg was riffle split. The 1 kg splits from the samples were then pulverized to 85% <75 µm. • The samples were assayed using ICP-MS for the REE. • The accuracy of the assaying has been validated through a combination of using standards with a known grade and inserting field blanks.
Drilling techniques	<ul style="list-style-type: none"> • <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of</i> 	<ul style="list-style-type: none"> • The Avalon drill holes in the Tardiff Zone area were either PQ, NQ or HQ diameter core. The actual hole diameter for each individual hole was not in the database obtained by Cheetah from Avalon.

Criteria	JORC Code explanation	Commentary
	<i>diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Good core recovery was observed Avalon geologists in the Tardiff Zone 1 area. • The geological nature of the mineralization in the Upper Zone (coarse bastnaesite), in many cases, is such that the risk of biased sampling is somewhat reduced.
<i>Logging</i>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • Geological drill logs completed by an experienced professional geoscientist were produced to a standard to support a mineral resource estimation. • For the historic Avalon drill holes photographs are not available. • The core from the historic drilling is stored on site.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> 	<ul style="list-style-type: none"> • Half core splits were sampled for the historic Avalon drill holes. • For each sampled interval the entire interval was half split to ensure a representative sample of the interval. The sampled core was crushed before assaying to ensure the material from the entire interval was analysed during the assaying process. • Duplicates of both the coarse-crushed (<2 mm) rejects and of the assay pulps were analysed and showed good reproducibility of the REE assays, indicating that both materials are sufficiently homogeneous.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The core sample intervals honour the contacts of the mineralization zones, thus providing adequate sample coverage.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> 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 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. 	<ul style="list-style-type: none"> The assay methods for the REE include lithium borate fusion followed by ICP-MS and are thus considered total. External REE standards supplied by Avalon Advanced Materials Inc. and inserted in the field, and external REE standards inserted by the laboratory (ALS) were analysed with each batch of assays to ensure the assaying procedures gave accurate results. Field blanks were inserted to monitor contamination; results were acceptable.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A review of data received from Avalon for the historic drill holes was carried out by Brendan Shand.
<i>Location of data points</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All historic Avalon drill holes have been surveyed by professional surveyors who used local survey reference points to ensure accuracy. The grid system used is UTM NAD83 Zone 12 N, currently the standard system used in the area.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • The drill hole spacing varied enormously as Avalon drilled fans of drill-holes from 1 drill site. The drill sites varied between 100 and 200 metres apart.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • All the historic Avalon drill holes in the Tardiff Zone 1 area were steeply angled or vertical and intersected the mineralisation at shallow angles resulting in no biased sampling.
<i>Sample security</i>	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • All assay samples were sealed using zip locks, and multiple samples were placed in rice bags sealed with zip locks. Independent lab verified sealed sample integrity upon receipt. • Analyses for elements such as rare earths, niobium and zircon are unlikely to be altered as a result of insecurity of samples such as contamination.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • Cheetah does not know what audits were carried out on the historic Avalon drill-holes.



Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> The Upper Zone is located on Mining Lease NT-3178 registered to Avalon Advanced Materials Inc. and expires 21 May 2027. On June 24, 2019, Avalon Advanced Materials Inc. announced that it has entered into a definitive agreement with Cheetah Resources Pty Ltd. to transfer ownership of the near-surface mineral resources on the Property, which includes the Upper Zone (see Avalon News Release NR 19-04). On October 30, 2019, it was announced that Avalon received the full payment from Cheetah Resources Pty Ltd. for the near-surface resources on the Nechalacho rare earth elements property at Thor Lake (see Avalon News Release NR 19-04). On February 6, 2020, the completion of a co-ownership agreement was announced, under which Cheetah Resources Pty Ltd. acquired ownership of the near-surface resources on the property, including the Upper Zone, and a jointly-owned special purpose vehicle to hold and manage the permits and authorizations to operate at the site was created (see Avalon News Release NR 20-01). Operating licenses in the Northwest Territories are subject to the approvals by provincial and environmental regulators and require consultation with local communities.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by</i> 	<ul style="list-style-type: none"> The historic resource development drilling

Criteria	JORC Code explanation	Commentary
	<p><i>other parties.</i></p>	<p>was carried out by Avalon Materials Inc with the bulk of this drilling carried out between 2007 and 2013.</p> <ul style="list-style-type: none"> The geologist who supervised the majority of the historic work, J.C. Pedersen, P. Geo, is an experienced geologist in the rare earths field and is well known as a reliable geoscientist to the present parties. He also supervised the 2021 drilling program.
<p><i>Geology</i></p>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The Upper Zone is a polymetallic (REE, Nb, Zr) deposit hosted by the Thor Lake Syenite. It is a large layered magmatic deposit. REO mineralization in the Lake Zone is layered in separate zones of light rare earths at the top of the deposit (Upper Zone) and a mixture of light and heavy REO mineralisation in the lower part of the deposit (Basal Zone).
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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</i> 	<ul style="list-style-type: none"> The historic data set for the Lake Zone includes 582 diamond drill holes with many of them in fans from the surface utilising a small number of drill pads to target the basal zone which begins approximately 80 metres below the surface. The historic drill hole data gave poor representation of the Upper Zone as the fans resulted in many holes close together in clusters and wide spaces between the clusters. The historic drill holes ranged from 1.5 to 1070 m in length with the bulk of the drill holes between 150 and 300 m long for a total length of 120,062 m. See appendix 1 and 2 for the details of the

Criteria	JORC Code explanation	Commentary
	<p><i>Person should clearly explain why this is the case.</i></p>	<p>historic Avalon drill holes in the Tardiff Zone 1 area extended drilling pattern that has previously been unreported by Vital Metals.</p>
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>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 be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> Where there was more than 1 assay for an interval a weighted average was used for the grade of the interval. The weighted average was calculated by using the following formula. Interval grade= (Sum of (Assay length X assay grade))/(total interval length) No capping was applied as no outliers were observed.
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> For the historic Avalon drill holes were either steeply angled or vertical and intersected the mineralisation at shallow angles to the dip of the mineralisation. So the true width for these holes is slightly shorter for the angled holes and the same for the vertical holes compared to the down hole intervals. The sample intervals are suitable for the mineralisation. The drill holes intersect the deposit at approximately right angles to the orientation of the orebody which is the ideal orientation. The orientation of the holes to the mineralization is well established.
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for</i> 	<ul style="list-style-type: none"> See figures in this ASX release for maps and section.

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	<p><i>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.</i></p>	
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • All intervals for the Avalon drill holes in the Tardiff Zone 1 area that have not previously been reported by Vital greater than 2 metres in length and 1% TREO are reported in the table in the above announcement.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • <i>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, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> • Not applicable. • Deleterious and contaminating materials are not present except for some thorium as is commonly present in rare earth deposits and well established with respect to levels.
<i>Further work</i>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • This announcement is outlining the planned future work for the Tardiff areas of the Upper Zone Resource.