

YTTRIA HREE DISCOVERY UPDATE

Fusion Assays and Preliminary Intercept data

Highlights:

Torian Resources reconfirms higher concentrations of Yttrium and associated Critical HREEs at YTTRIA; Western Australia's newest HREE Discovery

- Heavy rare earth (HREE) and Yttrium (Y) rich sample pulps from Yttria, have been analysed at (MinAnalytical - Perth) by ICPMS following digestion using Na peroxide fusion in Ni crucibles
- Significant TREYO intercepts include:
 - **1m @ 1141ppm TREYO**
from 7m (MSAV0804)
 - **3m @ 1293ppm TREYO**
from 9m (MSAV0806); inc
 - **1m @ 1834ppm TREYO**
from 10m
 - **2m @ 1148ppm TREYO**
from 12m (MSAV0854); inc
 - **1m @ 1507ppm TREYO**
from 12m
 - **1m @ 1033ppm TREYO**
from 8m (MSAV0871)
 - **4m @ 969ppm TREYO**
from 3m (MSAV0878); inc
 - **1m @ 1259ppm TREYO**
from 4m
 - **2m @ 821ppm TREYO**
from 3m (MSAV0886); inc
 - **1m @ 1007ppm TREYO**
from 3m
 - **1m @ 1448ppm TREYO**
from 8m (MSAV0938)
- Samples show significant grade increase using Fusion digestion, due to more complete dissolution of refractory HREE and Y bearing minerals
- **The average HREYO:TREYO of samples is 0.65**, indicating that Yttria mineralisation is **significantly enriched in high value HREEs including Dysprosium (Dy) and Terbium (Tb)**

Directors

- Average fusion values calculated for 179 samples and 6 duplicates are:

TREYO = 525 ppm Dy = 23.5 ppm Y = 183 ppm
HREYO = 332 ppm Tb = 3.8 ppm NdPr = 55.6 ppm

- Percentage grade increase using fusion digestions rather than aqua regia leachates are as follows:

TREYO = **27 %** Dy = **22 %** Y = **18 %**
 HREYO = **29 %** Tb = **31%** NdPr = **18%**

- With the ratio of **HREYO**:TREYO of **5% higher** by Fusion
- These yielded Y concentrations up to **616 ppm Y₂O₃** (MSV 1267)
- HREYO (**heavy rare earth oxide + yttrium oxide**) concentrations range from 84 to **990 ppm** (mean 331±138 ppm) (average ± SD)
- HREYO (**heavy rare earth oxide + yttrium oxide**) to TREYO (**total rare earth + yttrium oxide**) ratio of **0.65± 0.10** (average ± SD) **indicating significant enrichment in the high value and rare HREEs**
- QA/QC assessment of the fusion results has shown that HREE and Y concentrations are still under reported for the same samples analysed by microwave/ICPMS data (ASX Announcement Jan 31, 2022)
- Samples have been submitted for reanalysis with appropriate HREE-rich standards
- Previously reported Co, Ni, Cr, Sc, Pt, Pd and Au assay data, along with fusion data confirming elevated Y and REEs, in conjunction with source specific trace element ratios (Nb/Ta, Pt/Pd, Pt/Au) indicates that Yttria regolith anomaly reflects the presence of an underlying mafic to ultramafic **alkaline intrusion**
- **Y/Ho and Zr/Hf systematics show significant ranges in Y/Ho ratio (18 to 61)**
This range is exceptional as most basaltic igneous rocks plot within the field defined by a very restricted range of Y/Ho and Zr/Hf ratios (CHARAC)
- **The range seen in Yttria Y/Ho ratios, far exceeds the variation caused by weathering of basaltic crust (15 to 30) and is interpreted to reflect the role of fluorine (F)**
- **This is highly significant because F plays an important volatile transport role associated with HREE mineralisation**
- Torian holds a 100% interest in the **16km Arktos Fault strike continuity for the Yttria mineral system**

- **In view of the high ratio of HREY/TREY in the REEY-bearing regolith at Yttria the magmatic source of the metals is clearly a target for subsequent exploration**
- **Given the significant ratio of Heavies to Total rare earths content of Yttria mineralisation, Torian is also exploring the deposit scale potential of the entire Yttria regolith as the HREYO content makes it comparable to much higher grade deposits due to the value of critical REEs Dysprosium (Dy), Terbium (Tb), Europium (Eu), Neodymium (Nd) and Yttrium (Y) + Scandium (Sc); allowing for a significant lower cut-off than previously understood REEs systems**

Torian Resources Limited (**ASX: TNR**) (**Torian or the Company**) is pleased to announce that additional assays using techniques more appropriate to the dissolution of refractory REE-bearing minerals have confirmed that “Yttria”, defines a significant **HREE-Y-Co-Sc-Ni-Cr-Pd- Pt** enriched broad **~1km anomaly** at its Mt Stirling Central project area. Yttrium is a key pathfinder indicator of high value Heavy Rare Earth Elements used in Critical Metals exploration.

Rare earth elements are in high demand because they are critical components (the vitamins) to many technologies that drive the modern world. However, as the supply of REEs is dominated by China, there is significant geopolitical risk to the supply chain in the west. This has created urgency to discover alternative sources of supply.

The five most critical REEs are Dysprosium (Dy), Terbium (Tb), Europium (Eu), Neodymium (Nd) and Yttrium (Y). These are all present in Yttria mineralisation.

As part of the Company’s ongoing systematic exploration of the Mt Stirling Gold Project, a total of 151 AV drill holes systematically targeted the Arktos Fault and adjacent structures at the Wishbone Prospect for arsenic and other Au vectoring pathfinders. Reconnaissance field work confirmed the presence of prospective breccias within units mapped as Archaean granites and Proterozoic mafic dykes.

Focus on Yttrium anomalism was initially confirmed by pXRF analysis of soils to guide AV drilling, for gold exploration. Subsequently oxide intervals observed in AV drilling samples revealed a broad (**1km scale**) extent of discrete Y anomalies in the area.

To provide additional analytical support for the discovery, 21 selected AV samples from 1m intervals, contained an average of 573 ± 222 ppm **HREYO**; with HREYO/TREYO ratio of 0.60 ± 0.14 .

Immediate follow-up exploration continues to expand the Yttria footprint through surface detailed pXRF surveys and reconnaissance systematic AV drilling over an interpreted prospective ~4.5km strike zone.

pXRF processing of this data has commenced with a regional update to be provided over the coming weeks.

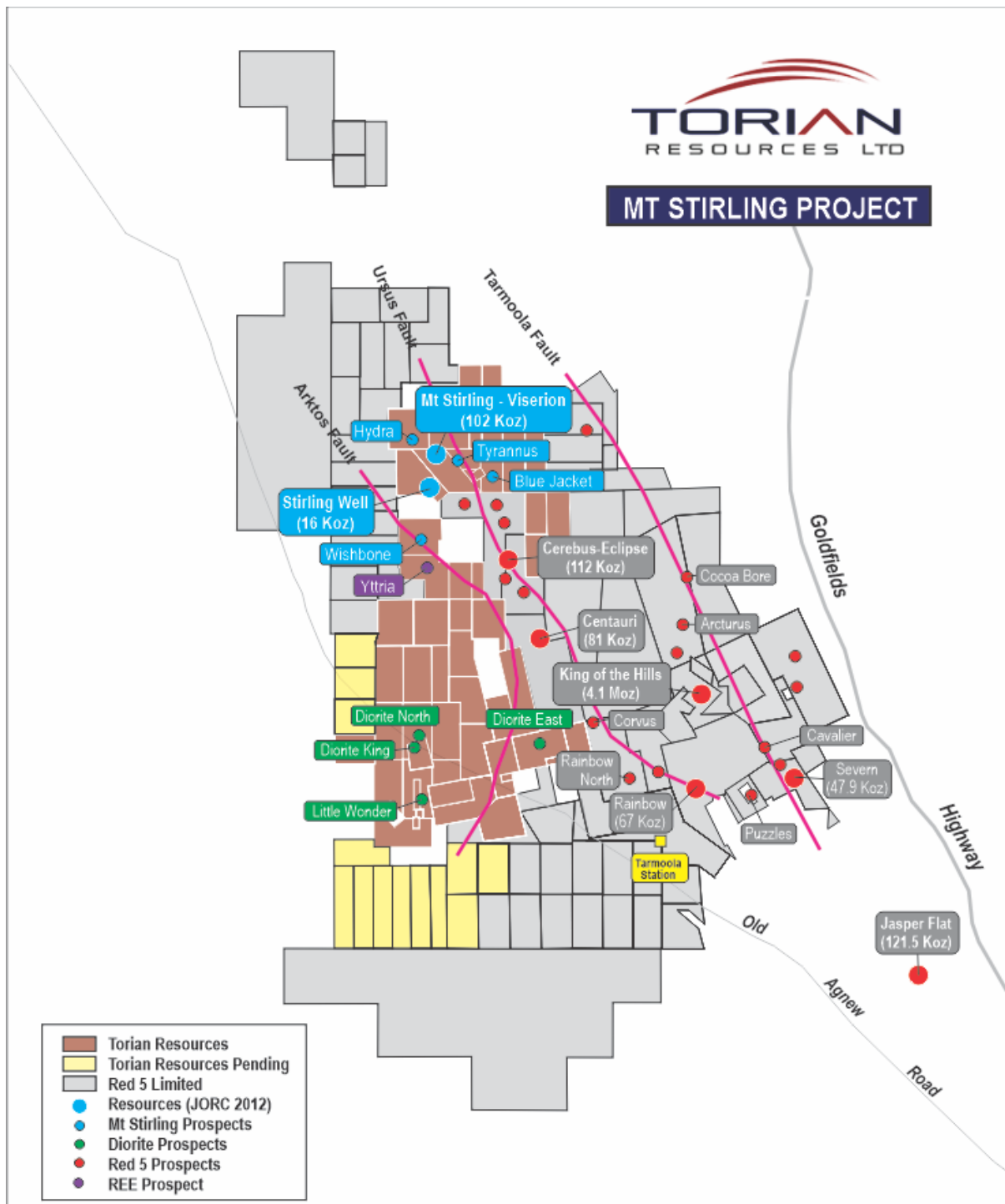


Figure 1: Mt Stirling Project tenements Regional Map

Torian's Executive Chairman Mr Paul Summers said:

"Our structural understanding of the gold systems are starting to pay dividends to the expansion of gold resources at the Stirling Project.

This understanding guided our team to explore the Arktos Fault mineralisation prospectivity. Having further confirmation of a genuinely unique regolith hosted Heavy Rare Earths (HREE) mineralised system has excited our entire team. In addition, with a potential primary hard rock target, which appears to be exceptional, we eagerly await upcoming permitting of RC drilling to define the magnitude of the Yttria discovery further.

The pursuit of an REE resource is relatively inexpensive and expeditious compared to gold exploration, and the Company is well funded.

We anticipate continuous and exciting news for our shareholders."

According to Torian's REE consultant Prof. Ken Collerson; who has provided an expert review of the data:

*"The system is quite unique given the **high proportion of HREEYO** in the regolith."*

"Yttria might be related to the same igneous event responsible for the Mt Weld carbonatite, thus the northern Yilgarn could represent an extensive and untested region for critical metal and REEY exploration."

*"Yttria appears to be sitting not far above a **very significant ultramafic alkaline intrusion.**"*

*"**This discovery by Torian Resources is potentially of considerable geopolitical significance for Critical Metals security**".*

"As far as I'm aware it is one of the most exciting HREYO discoveries of the last decade. Importantly it has considerable scale potential and contains Dy and Tb in easy to extract mineral form."

The five most critical REEs are Dysprosium (Dy), Terbium (Tb), Europium (Eu), Neodymium (Nd) and Yttrium (Y).

These are all present throughout Yttria mineralisation, with a HREYO (heavy rare earth + yttrium oxide) to TREYO (total rare earth + yttrium oxide) ratio of **0.60 ± 0.14** (average ± SD) indicating significant enrichment in the high value and rare HREEs.

Distribution of Rare Earths - Yttria

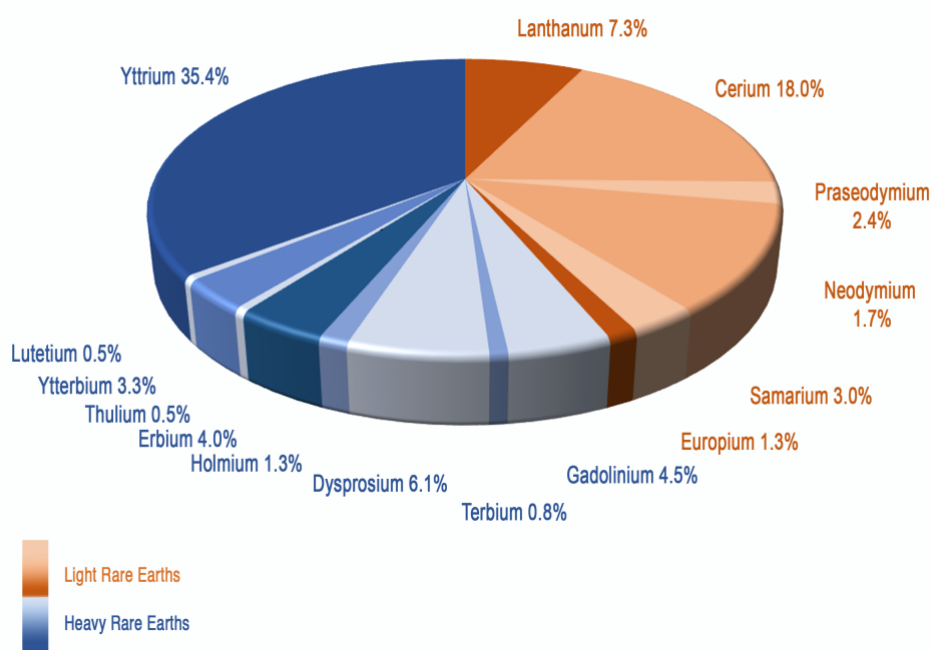


Figure 2: Distribution of Yttria REEs

As part of the Company's ongoing systematic exploration of the Mt Stirling Gold Project, a total of 151 AV drill holes systematically targeted the Arktos Fault and adjacent structures at the Wishbone Prospect for arsenic and other Au vectoring pathfinders. Reconnaissance field work confirmed the presence of prospective breccias within units mapped as Archaean granites and Proterozoic mafic dykes.

Focus on Yttrium anomalism was initially confirmed by pXRF analysis of soils to guide AV drilling, for gold exploration. Subsequently oxide intervals observed in AV drilling samples revealed a broad (**1km scale**) extent of discrete Y anomalies in the area.

To provide additional analytical support for the discovery, 21 selected AV samples from 1m intervals, are reported to contain an average of 573 ± 222 ppm **HREYO**; with HREYO/TREYO ratio of 0.60 ± 0.14 .

Immediate follow-up exploration continues to expand the Yttria footprint through surface detailed pXRF surveys and reconnaissance AV drilling.

A second batch of mineralised intercepts will be reported on imminently, with all horizon zones of interest now submitted for fusion and ICPMS, with assays expected within two weeks.

Table 1: MS Central Yttria fusion Significant Intercepts

Hole ID	from	to	Sample ID	TREYO ppm	HREYO ppm	HREYO/TREYO	Intercept (TREYO 500 ppm cut-off)		
MSAV0804	7	8	MSV1255	1141.21	812.88	0.71	1m @	1141	from 7m
MSAV0805	2	3	MSV1257	702.43	263.28	0.37	1m @	702	from 2m
MSAV0805	6	7	MSV1261	553.03	363.66	0.66	1m @	553	from 6m
MSAV0806	9	10	MSV1266	1109.53	621.95	0.56	3m @	1293	from 9m
MSAV0806	10	11	MSV1267	1833.89	990.16	0.54	inc 1m @	1834	from 10m
MSAV0806	11	12	MSV1268	936.93	560.38	0.60			
MSAV0807	7	8	MSV1269	507.73	355.46	0.70	4m @	588	from 7m
MSAV0807	8	9	MSV1270	489.73	337.61	0.69	inc 1m @	802	from 9m
MSAV0807	9	10	MSV1271	802.02	527.31	0.66			
MSAV0807	10	11	MSV1272	554.04	406.91	0.73			
MSAV0808	8	9	MSV1276	736.29	506.26	0.69	5m @	674	from 8m
MSAV0808	9	10	MSV1277	672.58	459.24	0.68	inc 1m @	921	from 11m
MSAV0808	10	11	MSV1278	449.96	326.83	0.73			
MSAV0808	11	12	MSV1279	921.28	601.03	0.65			
MSAV0808	12	13	MSV1280	587.99	398.29	0.68			
MSAV0817	11	12	MSV1286	548.38	330.91	0.60	1m @	548	from 11m
MSAV0828	7	8	MSV1308	771.81	414.29	0.54	1m @	772	from 7m
MSAV0835	7	8	MSV1321	836.20	318.21	0.38	1m @	836	from 7m
MSAV0854	12	13	MSV1333	1507.14	224.41	0.15	2m @	1148	from 12m
MSAV0854	13	14	MSV1334	789.55	211.93	0.27	inc 1m @	1507	from 12m
MSAV0841	14	15	MSV1343	623.22	294.12	0.47	1m @	623	from 14m
MSAV0837	3	4	MSV1347	697.90	332.09	0.48	1m @	698	from 3m
MSAV0837	9	10	MSV1350	625.60	427.34	0.68	1m @	626	from 9m
MSAV0868	7	8	MSV1358	617.40	395.55	0.64	2m @	581	from 7m
MSAV0868	8	9	MSV1359	545.52	349.79	0.64	inc 1m @	617	from 7m
MSAV0869	6	7	MSV1365	517.56	355.34	0.69	1m @	518	from 6m
MSAV0870	8	9	MSV1368	644.24	350.76	0.54	1m @	644	from 8m
MSAV0871	8	9	MSV1373	1033.16	667.90	0.65	1m @	1033	from 8m
MSAV0872	10	11	MSV1377	628.76	475.00	0.76	4m @	571	from 10m
MSAV0872	11	12	MSV1378	521.30	358.59	0.69	inc 1m @	629	from 10m
MSAV0872	12	13	MSV1379	585.99	401.03	0.68			
MSAV0872	13	14	MSV1380	548.67	398.39	0.73			
MSAV0878	3	4	MSV1381	1153.80	413.96	0.36	4m @	969	from 3m
MSAV0878	4	5	MSV1382	1258.93	806.48	0.64	inc 2m @	1206	from 3m
MSAV0878	5	6	MSV1383	756.64	503.97	0.67	and 1m @	1259	from 4m
MSAV0878	6	7	MSV1384	705.85	572.26	0.81			
MSAV0878	10	11	MSV1388	551.03	430.96	0.78	1m @	551	from 10m
MSAV0886	3	4	MSV1394	1006.66	392.55	0.39	2m @	821	from 3m
MSAV0886	4	5	MSV1395	636.00	404.87	0.64	inc 1m @	1007	from 3m
MSAV0913	8	9	MSV1402	510.20	279.90	0.55	3m @	505	from 8m
MSAV0913	9	10	MSV1403	480.71	259.66	0.54	inc 1m @	524	from 10m
MSAV0913	10	11	MSV1404	523.88	364.14	0.70			
MSAV0915	9	10	MSV1409	773.05	509.38	0.66	1m @	773	from 9m
MSAV0919	7	8	MSV1417	734.11	356.95	0.49	2m @	656	from 7m
MSAV0919	8	9	MSV1418	577.79	408.19	0.71	inc 1m @	734	from 7m
MSAV0920	11	12	MSV1420	545.23	334.82	0.61	1m @	545	from 11m
MSAV0938	8	9	MSV1426	1448.16	797.66	0.55	1m @	1448	from 8m
MSAV0940	11	12	MSV1427	827.21	461.84	0.56	1m @	827	from 11m

Figure 3: MS Central Yttria REYO contours – Planned AV extensions

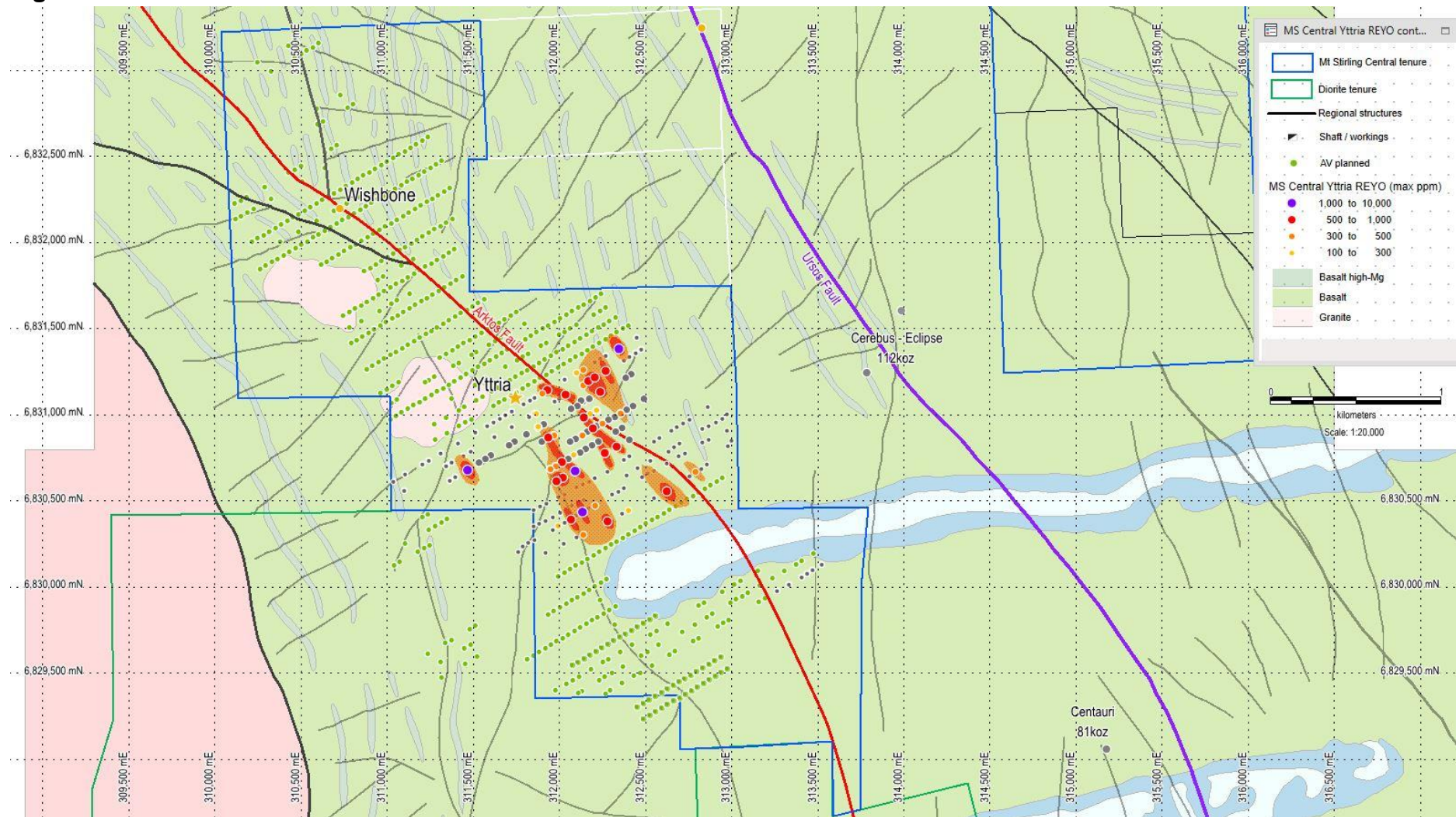


Figure 4: MS Central Yttria – Planned RC and significant regolith intercepts

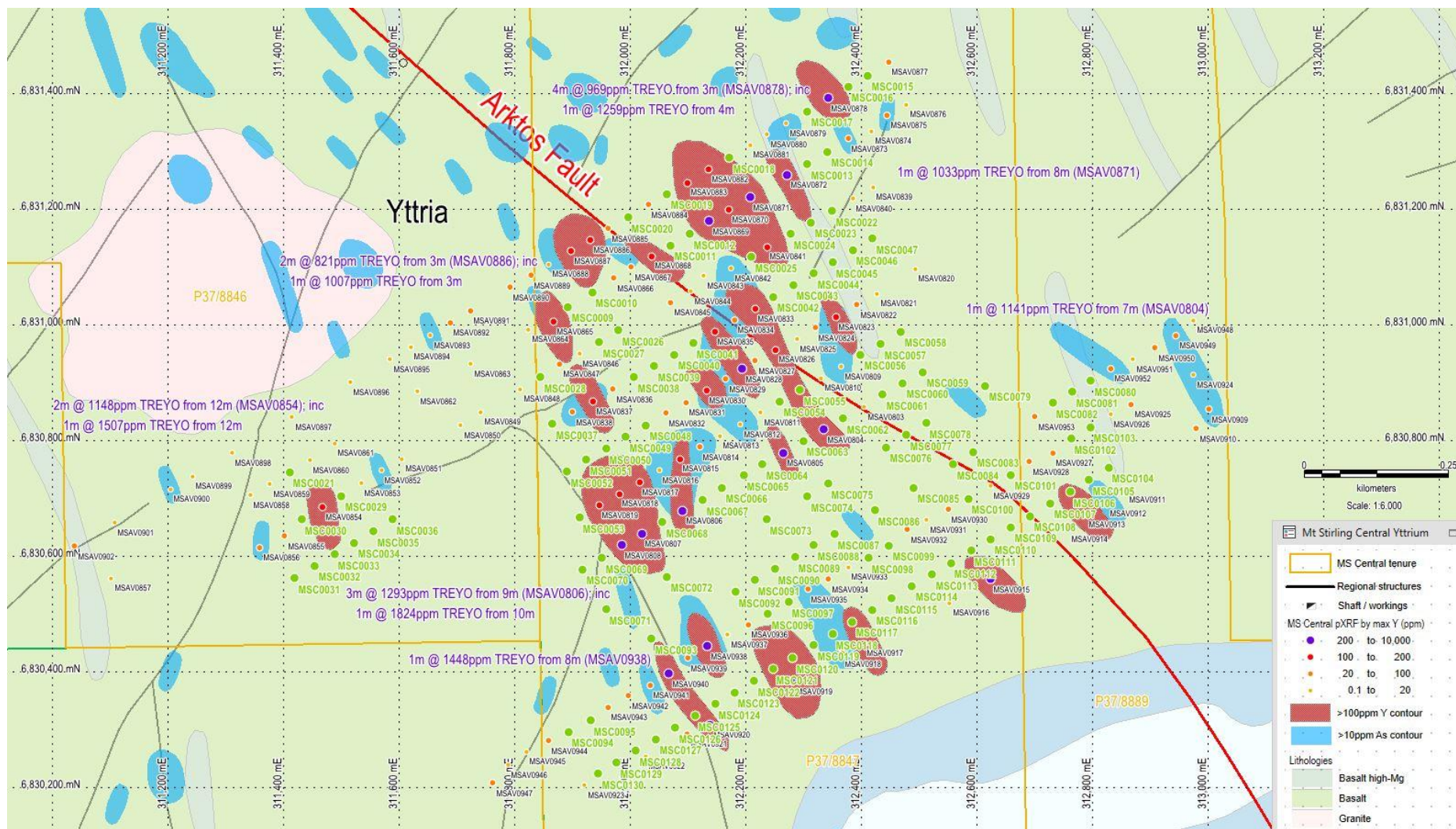
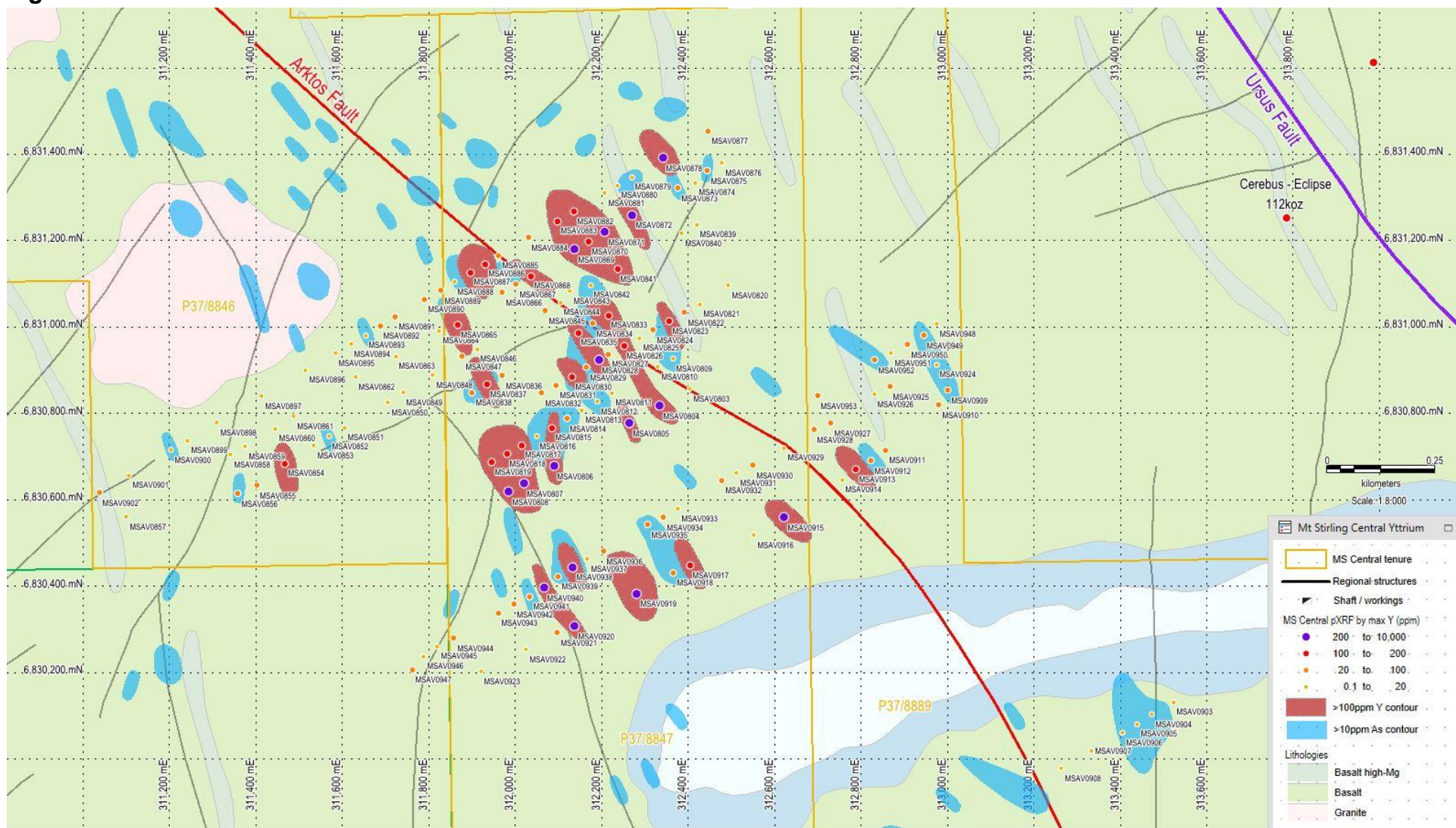


Figure 5: MS Central Yttrium MSAV DHs



Rare Earth Elements

The group of elements from lanthanum to lutetium (atomic number from 57 to 71) are known as the lanthanides. They are divided according to atomic number into two groups (Figure 6): the light rare-earth elements (LREEs) and the heavy rare-earth elements (HREEs). According to the IUPAC (International Union of Pure and Applied Chemistry) classification, the elements from La to Eu are termed the LREEs, and the elements from Gd to Lu and Y are the HREEs.

Scandium and Yttrium are not REEs but they have similar properties

H ¹																	He ²
Li ³	Be ⁴											B ⁵	C ⁶	N ⁷	O ⁸	F ⁹	Ne ¹⁰
Na ¹¹	Mg ¹²											Al ¹³	Si ¹⁴	P ¹⁵	S ¹⁶	Cl ¹⁷	Ar ¹⁸
K ¹⁹	Ca ²⁰	Sc ²¹	Ti ²²	V ²³	Cr ²⁴	Mn ²⁵	Fe ²⁶	Co ²⁷	Ni ²⁸	Cu ²⁹	Zn ³⁰	Ga ³¹	Ge ³²	As ³³	Se ³⁴	Br ³⁵	Kr ³⁶
Rb ³⁷	Sr ³⁸	Y ³⁹	Zr ⁴⁰	Nb ⁴¹	Mo ⁴²	Tc ⁴³	Ru ⁴⁴	Rh ⁴⁵	Pd ⁴⁶	Ag ⁴⁷	Cd ⁴⁸	In ⁴⁹	Sn ⁵⁰	Sb ⁵¹	Te ⁵²	I ⁵³	Xe ⁵⁴
Cs ⁵⁵	Ba ⁵⁶	*	Hf ⁷²	Ta ⁷³	W ⁷⁴	Re ⁷⁵	Os ⁷⁶	Ir ⁷⁷	Pt ⁷⁸	Au ⁷⁹	Hg ⁸⁰	Tl ⁸¹	Pb ⁸²	Bi ⁸³	Po ⁸⁴	At ⁸⁵	Rn ⁸⁶
Fr ⁸⁷	Ra ⁸⁸	**	Rf ¹⁰⁴	Db ¹⁰⁵	Sg ¹⁰⁶	Bh ¹⁰⁷	Hs ¹⁰⁸	Mt ¹⁰⁹	Ds ¹¹⁰	Rg ¹¹¹	Cn ¹¹²			Fl ¹¹⁴			Lv ¹¹⁶

High Field Strength Elements (HSFEs)

← Light REEs →							← Heavy REEs →						
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	La ⁵⁷ *	Ce ⁵⁸	Pr ⁵⁹	Nd ⁶⁰	Pm ⁶¹	Sm ⁶²	Eu ⁶³	Gd ⁶⁴	Tb ⁶⁵	Dy ⁶⁶	Ho ⁶⁷	Er ⁶⁸	Tm ⁶⁹	Yb ⁷⁰	Lu ⁷¹
Rare Earth Elements	Ac ⁸⁹ **	Th ⁹⁰	Pa ⁹¹	U ⁹²	Np ⁹³	Pu ⁹⁴	Am ⁹⁵	Cm ⁹⁶	Bk ⁹⁷	Cf ⁹⁸	Es ⁹⁹	Fm ¹⁰⁰	Md ¹⁰¹	No ¹⁰²	Lr ¹⁰³

- Figure 6: Periodic Table of the Elements showing the Light and Heavy Rare Earth Elements as well as the Scandium and Yttrium (from USGS Mineral Commodity Summaries, Rare Earths www.resourcesandenergy.nsw.gov.au)

The LREEs are generally more abundant, and except for **Praseodymium** (Pr) and **Neodymium** (Nd) – Nd-Pr, are less valuable than the HREEs.

Yttrium (n = 39) and Scandium (n = 21), despite having lower atomic numbers are included with the HREE lanthanides because their ionic radii. Their behavioural properties are closer to the HREEs than to the LREEs.

Yttrium is an excellent pathfinder for the presence of HREEs in rock samples. In exploration Ce, La, Nd and Y can all be determined in the field by handheld x-ray fluorescence spectroscopy (p-XRF). This provides a real time opportunity to locate LREE-rich and HREE-rich in rock chips and soils during field work, or when examining cores. This technique formed the basis for the Yttria discovery.

Although scandium is classified as a REE, it behaves very differently from the rest of the lanthanides. This is because Sc has an ionic radius similar to iron and magnesium, and thus it substitutes in major Fe and Mg bearing rock-forming minerals e.g., clinopyroxene. As **Sc** is quite a rare element, with a crustal abundance of 14 ppm the presence of a population of Yttria AV samples containing 35 ± 6 ppm, with some values **>50 ppm** is quite significant.

Table 2: REE Assays showing grade Increase using peroxide fusions compared to aqua regia digest

Digestion Method for Yttria VA samples		TREYO ppm	¹ HREYO ppm	HREYO/TREYO	NdPr ppm	Y ppm	Dy ppm	Tb ppm
Aqua Regia Digest (AR)	Average	383	234	0.62	45.4	126.1	18.4	2.57
179 samples plus 6 duplicates	SD	281	165	0.14	38.8	86.3	14.4	2.04
Initially Reported ASX:TNR Jan 31, 2022	CVR	0.73	0.70	0.22	0.85	0.68	0.78	0.79
Fusion Digest (FD)	Average	525	332	0.65	55.6	183.4	23.5	3.79
179 samples plus 6 duplicates	SD	252	138	0.10	27.0	74.2	11.3	1.78
	CVR	0.48	0.41	0.15	0.49	0.40	0.48	0.47
% difference between FD and AR		27	29	5	18	31	22	32
¹ International Union of Pure and Applied Chemistry (IUPAC) Classification of HREEs: Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu								

Constraints on the Source of the Yttria HREY Anomaly

Y/Ho and Zr/Hf data for Yttria regolith samples are shown in Figure 7. These "CHARAC ratios" Y/Ho and Zr/Hf are useful ratios to distinguish systems that preserve magmatic source characteristics, from those affected by hydrothermal processes (Bau, 1996). If a geochemical system is characterized by CHARGE and-RADIUS-CONTROLLED (CHARAC) trace element behavior, elements with similar charge and ionic radius such as the twin pairs Y-Ho and Zr-Hf should display coherent behavior during crystallization and retain their respective chondritic ratios.

Mantle-derived igneous rocks, for example, have Y/Ho and Zr/Hf ratios close to the ratios recorded by chondritic meteorites, viz. 28 and 38. Carbonatites and associated alkaline intrusions display this characteristic (de Andrade et al., 2002). These ratios are within error of values exhibited by mantle plume generated ocean island basalts (OIBs) viz., Y/Ho = 27.7 ± 2.7 and Zr/Hf = 36.6 ± 2.9 (Bau, 1996).

However, Y/Ho ratios can be fractionated by medium-temperature F-rich aqueous fluids (Buhn, 2008) that causes fluoride complexation to yield non-chondritic Y/Ho ratios (Bau and Dulski, 1995).

Although some of the Yttria regolith samples chondritic Y/Ho ratios and lie within the CHARAC field, the majority have supra-chondritic Y/Ho. This reflects the influence of F-rich fluids, which have the ability to fractionate Y from Ho (Buhn, 2008). They show limited variation in Zr/Hf ratio indicating the absence of carbonatite compositions at Yttria (cf., de Andrade *et al.*, 2002).

Importantly, the range seen in Yttria Y/Ho ratios, far exceeds the variation recorded in weathered basaltic crust (15 to 30), Babechuk et al., (2015). This is interpreted to reflect the role of fluorine (F) in the primary igneous source of the metals reported at Yttria. The activity of fluorine therefore explains the extremely high ratio of HREYO:TREYO ratio at Yttria.

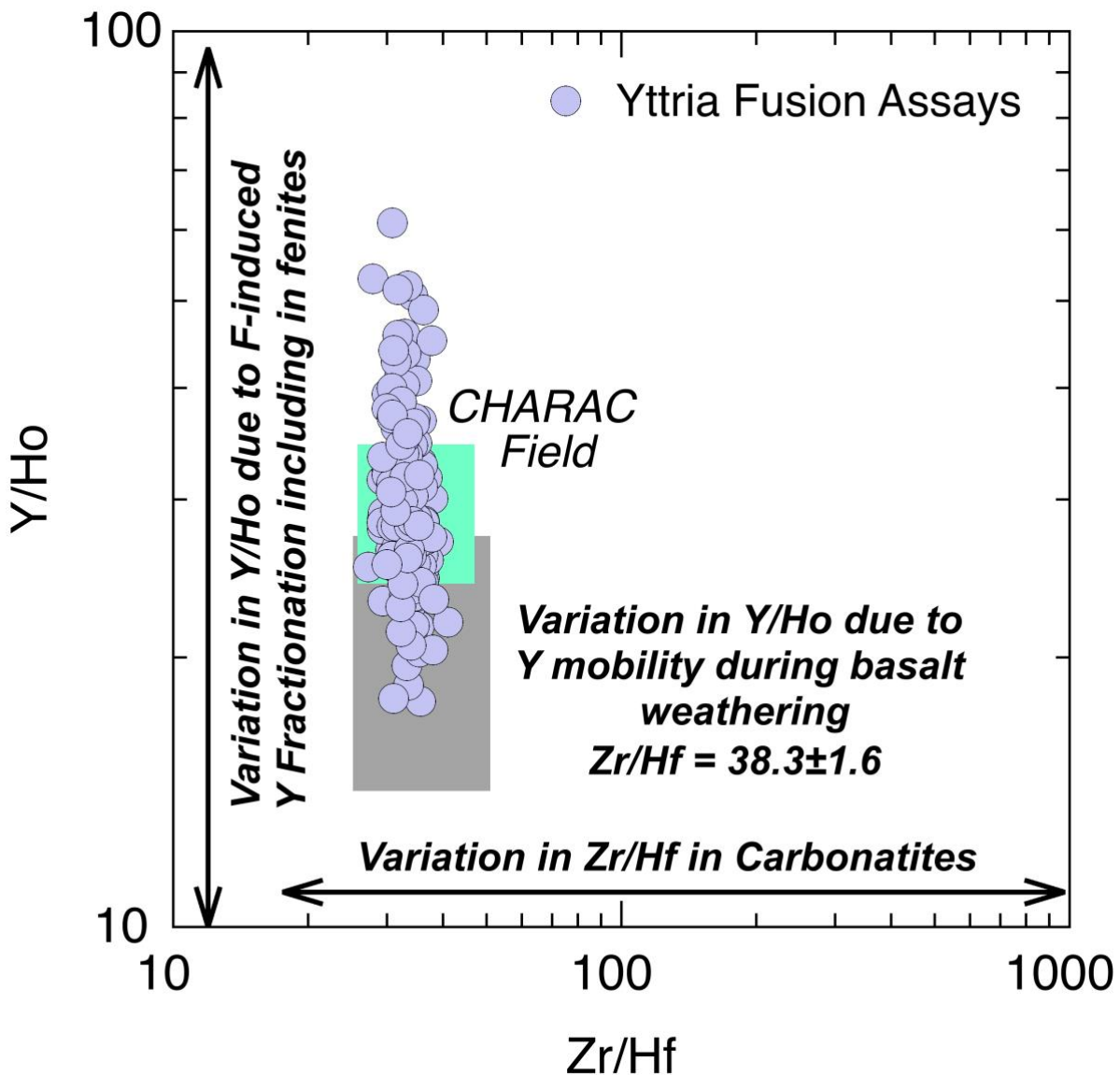


Figure 7: Plot of Y/Ho versus Zr/Hf showing Yttria fusion data, Also shown is the field in Y/Ho space caused by weathering of basaltic crust from Babechuk et al., (2015), The range in Y/Ho ratios lying outside the CHARAC field (from sub-chondritic to supra-chondritic) is interpreted to mainly reflect the influence of fluorine in the intrusion that is interpreted to underly Yttria.

The Yttria regolith samples have Y/Ho ratios between 18 to 61 and Zr/Hf ratios between 27 and 42. The Zr/Hf ratios plot in the CHARAC field indicating that they preserve magmatic signatures.

The variation in Y/Ho is exceptional, as most basaltic igneous rocks plot within the field defined by a very restricted range of Y/Ho and Zr/Hf ratios (CHARAC). The range seen in Yttria Y/Ho ratios, far exceeds the variation caused by weathering of basaltic crust (15 to 30) and is interpreted to reflect the role of fluorine (F). This is highly significant because F plays an important volatile transport role associated with HREE mineralisation.

This announcement has been authorised for release by the Board.

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About Torian:

Torian Resources Ltd (ASX: TNR) is a highly active gold and rare earths exploration and development company with an extensive and strategic land holding comprising six projects and over 400km² of tenure in the Goldfields Region of Western Australia. All projects are nearby to excellent infrastructure and lie within 50km of major mining towns.

Torian's flagship Mt Stirling Project is situated approximately 40km NW of Leonora, and neighbours Red 5's Kind of the Hills mine. The region has recently produced approximately 14M oz of gold from mines such as Tower Hills, Sons of Gwalia, Thunderbox, Harbour Lights and Gwalia.

Rare Earths with an extremely high ratio of the significant critical and valuable Heavy Rare Earths (HREEs) to Total Rare Earths (TREEs) have been discovered throughout clays and regolith horizons @ Yttria in Mt Stirling Central. Although regional proximity to the World Class Mt Weld high grade Rare Earth oxide deposit, preliminary results indicate a likeness more fitting to Northern Minerals Browns Range Heavy Rare Earths Deposits, due to Yttria's high ratio of HREOs to TREOs and the presence of all five most critical REEs; Dysprosium / Terbium / Europium / Neodymium and Yttrium, with significant anomalous concentrations of Scandium.

The Mt Stirling Project consists of 2 blocks:

1. The Stirling Block to the north which contains two JORC compliant resources at a 0.5g/t Au cut-off: (refer ASX release 27/5/21 for further information)
 - a. Mt Stirling – 355,000t at 1.7 g/t Au for 20,000oz (Indicated)
 - 1,695,000 at 1.5 g/t Au for 82,000oz (Inferred)
 - b. Stirling Well – 253,500t at 2.01 g/t Au for 16,384oz (Inferred)
2. The Diorite Block to the south, home of the historic 73 g/t Au Diorite King Mine.

Another project in the Kalgoorlie region is the Zuleika project in which the Company is involved in a 75/25% JV with Zuleika Gold Ltd (ASX: ZAG). The Zuleika project is located along the world-class Zuleika Shear, which is the fourth largest gold producing region in Australia and consistently produces some of the country's highest grade and lowest cost gold mines. This project lies north and partly along strike of several major gold deposits including Northern Star's (ASX: NST) 7.0Moz East Kundana Joint Venture and Evolution's (ASX: EVN) 1.8Moz Frogs Legs and White Foil deposits.

Torian's other projects within the Kalgoorlie region include the 50/50% Credo Well JV with Zuleika Gold Ltd (ASX: ZAG), host of a JORC Inferred resource of 86,419t at 4.41 g/t Au for 12,259 oz.

Torian also holds ~10.7% of Monger Gold (ASX:MMG) as well as a 20% free carried JV interest in its projects. Significant High-grade gold was recently intercepted at Providence with 8m @ 16.15 g/t Au from 60m (MNRC004); inc 1m @ 111.40 g/t Au from 61m; and 8m @ 31.84 g/t Au from 66m (MNRC007); inc 1m @ 190.06 g/t Au from 70m.

Torian is the Pastoral Lease holder of the 172,662 hectare Tarmoola Station, which is home to Torian's Mt Stirling Project, in addition to exploration assets and operating mines of numerous other resource companies, including RED5 (ASX:RED) and St Barbara (ASX:SBM).

There are numerous operating businesses on the Tarmoola station including a 20 person accommodation camp with approvals in place to expand to a 50 person camp, a mining services business, and cattle farming. The station is also entitled to approximately \$360,000 (av in each year) worth of carbon credits over a 15 year period.

Torian holds approximately 7% of BullionFX, a gold backed crypto currency company. As a shareholder of 15,000,000 shares Torian is entitled to 15,000,000 BULL tokens. The paper value of Torian's tokens is ~USD\$3.375m (27/01/21).

Competent Person Statement

The information in this report relating to exploration results and Mineral Resource Estimates is based on information compiled, reviewed and relied upon by Professor K.D. Collerson. Professor Collerson a Principal of KDC Consulting, compiled, reviewed and relied upon prior data and ASX releases dated 27 May 2021, 25 February 2019 and 29 January 2020.

Professor Collerson BSc (Hons), PhD., FAusIMM has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Professor Collerson consents to the inclusion in the report of the matters based on information in the form and context in which it appears.

Torian Resources confirms in the subsequent public report that it is not aware of any new information or data that materially affects the information included in the relevant market announcements on the 25 February 2019, 29 January 2020 and 27 May 2021 and, in the case of the exploration results, that all material assumptions and technical parameters underpinning the results in the relevant market announcement reviewed by Mr Dale Schultz continue to apply and have not materially changed.

Cautionary Note Regarding Forward-Looking Statements

This news release contains "forward-looking information" within the meaning of applicable securities laws. Generally, any statements that are not historical facts may contain forward-looking information, and forward looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget" "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or indicates that certain actions, events or results "may", "could", "would", "might" or "will be" taken, "occur" or "be achieved." Forward-looking information is based on certain factors and assumptions management believes to be reasonable at the time such statements are made, including but not limited to, continued exploration activities, Gold and other metal prices, the estimation of initial and sustaining capital requirements, the estimation of labour costs, the estimation of mineral reserves and resources, assumptions with respect to currency fluctuations, the timing and amount of future exploration and development expenditures, receipt of required regulatory approvals, the availability of necessary financing for the Project, permitting and such other assumptions and factors as set out herein.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: risks related to changes in Gold prices; sources and cost of power and water for the Project; the estimation of initial capital requirements; the lack of historical operations; the estimation of labour costs; general global markets and economic conditions; risks associated with exploration of mineral deposits; the estimation of initial targeted mineral resource tonnage and grade for the Project; risks associated with uninsurable risks arising during the course of exploration; risks associated with currency fluctuations; environmental risks; competition faced in securing experienced personnel; access to adequate infrastructure to support exploration activities; risks associated with changes in the mining regulatory regime governing the Company and the Project; completion of the environmental assessment process; risks related to regulatory and permitting delays; risks related to potential conflicts of interest; the reliance on key personnel; financing, capitalisation and liquidity risks including the risk that the financing necessary to fund continued exploration and development activities at the Project may not be available on satisfactory terms, or at all; the risk of potential dilution through the issuance of additional common shares of the Company; the risk of litigation.

Although the Company has attempted to identify important factors that cause results not to be as anticipated, estimated or intended, there can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. Forward looking information is made as of the date of this announcement and the Company does not undertake to update or revise any forward-looking information this is included herein, except in accordance with applicable securities laws.

Mt Stirling Project: JORC Table 1

Section 1 - Sampling Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> • Drilling results reported from previous and current exploration completed by Torian Resources Ltd and historical explorers. • Reverse circulation drilling for Au was used to obtain 1m split samples from which 2-3kg was pulverised to produce a 500g tub for Photon assay; and/or a 50g Fire Assay. Sampling has been carried out to company methodology and QA/QC to industry best practice. Zones of interest were 1m split sampled, and comp spear sampling was carried out on interpreted barren zones. Samples were dispatched to MinAnalytical in Kalgoorlie / Nagrom Laboratory in Kelmscott; were prep included sorting, drying and pulverisation for a 500gm Photon Assay (PAAU02) and/or a 50g Fire Assay (FA50) • REE AV samples have been submitted to LabWest for microwave digestion (MMA) and ICPMS • Auger Vacuum low-impact drilling is utilised to obtain 1m uncontaminated samples to produce a 500g tub for Photon assay; and/or a 50g Fire Assay; and/or 25g AR 4acid ICPMS / or MMA ICPMS assays. • Surface soil sample locations are directly analysed using a Niton XL5portable XRF analyser (pXRF). Drill sample pXRF measurements are obtained from the primary split sample taken off the drilling rig's static cone splitter and/or Auger Vacuum Perspex flask, with a single measurement from each respective meter sample, through a respective green mining bag. • Calibration on the pXRF is carried out daily when used, with the instrument also serviced and calibrated as required. Standards and blank material are also used under Torians QAQC protocols in line with industry standard practice and fit for purpose. • Exploration results reported are pXRF preliminary results which are superceded by laboratory analysis when available.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> • Historical drilling techniques include reverse circulation (RC) drilling. Standard industry techniques have been used where documented. RC drilling was carried out by PXD and Orlando utilising a Schramm truck and track mounted rig respectively. Reddog Drilling and ASX Drilling are currently drilling at the Project. • Auger Vacuum drilling is carried out by Strataprobe Drilling utilising a tractor-mounted auger drill system capable of drilling through the regolith. • The more recent RC drilling utilised a face sampling hammer with holes usually 155mm in diameter.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> • Drill recovery has not been routinely recorded on historical work, and is captured for all recent drilling.
<i>Logging</i>	<ul style="list-style-type: none"> • Geological logs are accessible and have been examined over the priority prospect areas. The majority of the logging is of high quality and has sufficiently captured key geological attributes including lithology, weathering, alteration and veining. • ·Logging is qualitative in nature, to company logging coding. • ·All samples / intersections have been logged. 100% of relevant length intersections have been logged.

<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> • Standard industry sampling practices have been undertaken by the historical exploration companies. Appropriate analytical methods have been used considering the style of mineralisation being sought. • Sample sizes are considered appropriate. • QC/QC data is absent in the historical data with the exception of the more recent Torian drilling, where sample standards and blanks are routinely used. • In the more recent Torian drilling duplicate samples (same sample duplicated) were commonly inserted for every 20 samples taken. Certified Reference Materials (CRM's), blanks and duplicates, are included and analysed in each batch of samples. • pXRF sampling is fit for purpose as a preliminary exploration technique, with data being acquired and compiled into an extensive regional database. • pXRF readings have a diminished precision due to grain size effect (homogeneity) when obtained from naturally occurring settings. The Competent Person considers this diminished precision acceptable within the context of reporting exploration results.
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> • The historical drill sample gold assays are a combination of Fire Assay and Aqua Regia. The assay techniques and detection limits are appropriate for the included results. • Various independent laboratories have assayed samples from the historical explorers drilling. In general they were internationally accredited for QAQC in mineral analysis. • The laboratories inserted blank and check samples for each batch of samples analysed and reports these accordingly with all results. • Reference Photon pulps have been submitted to Nagrom Laboratory, in order to verify MinAnalytical mineralised assays accuracy and precision. • Samples were analysed for gold via a 50 gram Lead collection fire assay and Inductively Coupled Plasma optical (Atomic) Emission Spectrometry to a detection limited of 0.005ppm Au. • Intertek Genalysis routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring. • The laboratory QAQC has been assessed in respect of the RC chip sample assays and it has been determined that the levels of accuracy and precision relating to the samples are acceptable. • Where pXRF analysis reported, field analysis only; laboratory assay not yet carried out. Multi-element analysis will be carried out by MinAnalytical. • Rare Earth element (and multi-element) analysis have been obtained utilising an Aqua Reggia 4acid digest preliminary method; along with a Au Fire Assay. Improved methods of analysis are being trialled to improve concentrations of elements of interest by utilising a complete dissolution through fusion and/or 3 acid microwave digestion (MMS) and ICPMS. • A portable Niton XL5 instrument was used to measure preliminary quantitative amounts of associated mineralisation elements. Reading time of 30 seconds, over grid survey grid position, or drill metre interval respective green bags • Daily calibration of pXRF conducted with standards and silica blanks.
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> • The historical and current drill intercepts reported for Au have been calculated using a 0.5g/t cut-off, with a maximum 2m internal waste. • Documentation of primary data is field log sheets (handwritten) or logging to laptop templates. Primary data is entered into application specific data base. The data base is subjected to data verification program, erroneous data is corrected. Data storage is retention of physical log sheet, two electronic backup storage devices and primary electronic database. • pXRF analytical data obtained has been downloaded by digital transfer to working excel sheets inclusive of QAQC data. Data is checked by technical personnel and uploaded to drill hole or grid survey respective files, in preparation for database import.
	<ul style="list-style-type: none"> • Drill hole collars were located using a handheld GPS system. The coordinated are stored in a digital exploration database and are referenced to MGA Zone 51 Datum GDA 94.

<i>Location of data points</i>	<ul style="list-style-type: none"> Location of the majority of the historical drill holes has been using a handheld GPS system, or local grids that have been converted to MGA Zone 51 Datum GDA 94. Survey control used is handheld GPS for historic holes and The more recent Torian drilling has been located utilising a differential GPS and the majority of these holes have been surveyed downhole.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> The historical drill spacing is variable over the project as depicted on map plan diagrams. Sample compositing has been used in areas where mineralisation is not expected to be intersected. If results return indicate mineralisation, 1m split samples were submitted for analysis.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> The orientation of the drilling is not at right angles to the known mineralisation trend and so gives a misrepresentation of the true width of mineralisation intersected. Efforts to counteract to as reasonably as perpendicular to interpreted controlling mineralisation structures and trends has gone into drill planning. No sampling bias is believed to occur due to the orientation of the drilling.
<i>Sample security</i>	<ul style="list-style-type: none"> Drill samples were compiled and collected by Torian employees/contractors. All sample were bagged into calico bags and tied. Samples were transported from site to the MinAnalytical laboratory in Kalgoorlie and Nagrom laboratory in Kelmscott by Torian employees/contractors. A sample submission form containing laboratory instructions was submitted to the laboratory. The sample submission form and sample summary digitised records were compiled and reviewed so as to check for discrepancies.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> A review of historical data over the main Mt Stirling and Stirling Well Prospects has been undertaken. The QA/QC on data over the remainder of the project tenements is ongoing. Alternate laboratories verify through improved analytical techniques, previously generated assay data.

Section 2 - Reporting of Exploration Results

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> Mt Stirling Central tenure is held by Torian Resources Limited. Diorite East is located on P37/8857 held by Torian Resources Limited, and Diorite North on P37/8868 and forms part of the Mt Stirling Joint Venture. This tenement is held by a third party on behalf of the Joint Venture. Torian Resources is the Manager of the Joint Venture and holds executed transfers which will permit this tenement becoming the property of the Joint Venture. The tenements are in good standing.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Previous exploration completed by Torian Resources Ltd and historical explorers including Hill Minerals and Jupiter Mines Ltd.

<p><i>Geology</i></p>	<ul style="list-style-type: none"> • The Mt Stirling Project tenements are located 40 km northwest of Leonora within the Mt Malcolm District of the Mt Margaret Mineral Field. • The project tenements are located within the Norseman-Wiluna Greenstone Belt in the Eastern Goldfields of Western Australia. • The project tenements cover a succession of variolitic, pillowed high Mg basalts that have been intruded by syenogranites/monzogranites. • Historical prospecting and exploration activities have identified areas of gold mineralisation at various prospects. The orogenic style gold mineralisation appears in different manifestations at each of the prospects. • At the Mt Stirling Prospect gold mineralisation is associated with zones of alteration, shearing and quartz veining within massive to variolitic high Mg basalt. The alteration zones comprise quartz-carbonate-sericite-pyrite+/- chlorite. • At the Stirling Well Prospect gold mineralisation is associated with millimetre to centimetre scale quartz veining within the Mt Stirling syenogranite/monzogranite. The gold mineralised quartz veins have narrow sericite/muscovite- epidote-pyrite alteration selvages. • Gold mineralisation at the Diorite King group of mine workings is hosted by dolerite and metabasalts which strike NE-SW predominantly and are associated with sub-vertical stockwork quartz. Other historical gold workings in the Project area occur along quartz veined contact zones between mafic intrusive and mafic schist units. • The characteristic of each prospect adheres to generally accepted features of orogenic gold mineralisation of the Eastern Goldfields of Western Australia.
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> • The location of drill holes is based on historical reports and data originally located on handheld GPS devices. • Northing and easting data for historic drilling is generally within 10m accuracy. • Recent Torian RC drill holes located with differential GPS. • No material information, results or data have been excluded.
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> • Best gold in drill hole was calculated by taking the maximum gold value in an individual down hole interval from each drill hole and plotting at the corresponding drill hole collar position. Individual downhole intervals were mostly 1m, but vary from 1m to 4m in down hole length. • In relation to the reported historical drill hole intersection a weighted average was calculated by a simple weighting of from and to distances down hole. The samples were 2m down hole samples. No top cuts were applied. • The current drill hole intersection is reported using a weighted average calculation by a simple weighting of from and to distances down hole at 1m intervals per sample. • The historical drilling intercept reported has been calculated using a 1g/t Au cut off, no internal waste and with a total intercept of greater than 1 g/t Au. • No metal equivalent values are used • Total Rare Earth and Yttrium oxides are calculated by incorporating all respective lanthanides + Yttrium and presented as an aggregate total.
<p><i>Relationship between</i></p>	<ul style="list-style-type: none"> • The orientation of the drilling is approximately at right angles to the known trend mineralisation.

<p><i>mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> • Down hole lengths are reported, true width not known.
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> • The data has been presented using appropriate scales and using standard aggregating techniques for the display of data at prospect scale. • Geological and mineralisation interpretations based off current understanding and will change with further exploration.
<p><i>Balanced reporting</i></p>	<ul style="list-style-type: none"> • Historical Diorite results have been reported in TNR:ASX announcements dated: 08/10/2020, 06/10/2020, 27/07/2020, 29/01/2020. • Preliminary MS Central pXRF results were reported in ASX announcement dated 14th January 2022.
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> • Geological interpretations are taken from historical and ongoing exploration activities. Historical exploration within the existing Diorite North Prospect has provided a reasonable understanding of the style and distribution of local gold mineralised structures at the prospect. • Other areas outside of the existing Diorite historical workings are at a relatively early stage and further work will enhance the understanding of the gold prospectivity of these areas.
<p><i>Further work</i></p>	<ul style="list-style-type: none"> • A review of the historical exploration data is ongoing with a view to identify and rank additional target areas for further exploration. • The results of this ongoing review will determine the nature and scale of future exploration programs. • Diagrams are presented in this report outlining areas of existing gold mineralisation and the additional gold target areas identified to date. • Selective preliminary pXRF analytical results are confirmed by laboratory analysis as further planning to advance exploration is contingent on confirmatory assays and further targeting analysis.