



ASX Announcement | 20 June 2024

## DRILLING CONFIRMS DISCOVERY OF LARGE PLATREEF-STYLE COPPER-PGE SULPHIDE REEFS AT DANTE

### Highlights

- Results from a further 14 drillholes **confirm the discovery of multiple Platreef-style copper-platinum group element (PGE) reefs** from surface at the Dante Reefs; only 15km from BHP's \$1.7 billion Nebo-Babel mine development (390Mt @ 0.30% Cu, 0.33% Ni, 0.23g/t PGE3)<sup>1</sup>.
- Drilling results to-date confirm that the Dante Reefs have the **potential to host a large sulphide deposit containing copper, gold, PGEs, vanadium and titanium; the first of its kind in Australia.**
  - The Dante Reefs are a series of gentle dipping, laterally extensive, mineralised layers (similar to a coal seam) which **outcrop from surface and in total run for 42km.**
  - Approximately 10m thick** with a higher-grade basal layer of approximately 5m.
  - Mineralisation **defined over 3km in length** from surface at Reef 1\*, while first assays at Reef 2\* confirm a **further 1.5km of strike.**
  - Other globally significant reefs include those of the **Bushveld Province** in South Africa which **average 1-2m in thickness.**
- Highlights from further wide-spaced, first-pass drilling at the Dante Reefs include:
  - 6m @ 0.40% Cu, 0.79g/t PGE3, 0.66% V<sub>2</sub>O<sub>5</sub>, & 19.9% TiO<sub>2</sub>** from 4m (HRC004), including:
    - 2m @ 0.62% Cu, 0.85g/t PGE3, 0.71% V<sub>2</sub>O<sub>5</sub> & 22.3% TiO<sub>2</sub>** from 6m
  - 5m @ 0.34% Cu, 0.84g/t PGE3, 0.81% V<sub>2</sub>O<sub>5</sub>, & 21.2% TiO<sub>2</sub>** from 21m (URC005), including:
    - 3m @ 0.43% Cu, 0.94g/t PGE3, 0.88% V<sub>2</sub>O<sub>5</sub> & 24.1% TiO<sub>2</sub>** from 23m
  - 7m @ 0.31% Cu, 0.61 g/t PGE3, 0.71% V<sub>2</sub>O<sub>5</sub>, & 20.7% TiO<sub>2</sub>** from 17m (URC011)
  - 10m @ 0.82g/t PGE3, 0.11% Cu, 0.44% V<sub>2</sub>O<sub>5</sub> & 10.5% TiO<sub>2</sub>** from 66m (HRC002), including:
    - 3m @ 2.22g/t PGE3, 0.20% Cu, 1.08% V<sub>2</sub>O<sub>5</sub>, & 23.5% TiO<sub>2</sub>** from 68m
  - 5m @ 0.30% Cu, 0.81g/t PGE3, 0.70% V<sub>2</sub>O<sub>5</sub>, & 19.1% TiO<sub>2</sub>** from 71m (URC006), including:
    - 2m @ 1.57g/t PGE3, 0.31% Cu, 0.99% V<sub>2</sub>O<sub>5</sub>, & 23.2% TiO<sub>2</sub>** from 74m
  - 3m @ 1.40 g/t PGE3, 1.00% V<sub>2</sub>O<sub>5</sub>, & 21.0% TiO<sub>2</sub>** from 9m (URC008)
- The copper-PGE mineralisation includes high-grade vanadium and titanium, critical for renewable batteries and specialty steel. Conventional metallurgical tests have commenced.
- Assays from 16 drill holes still outstanding from a further 4.5km of strike at Reef 2.
- The Company anticipates publishing an **initial exploration target for Reef 1** in the near future.

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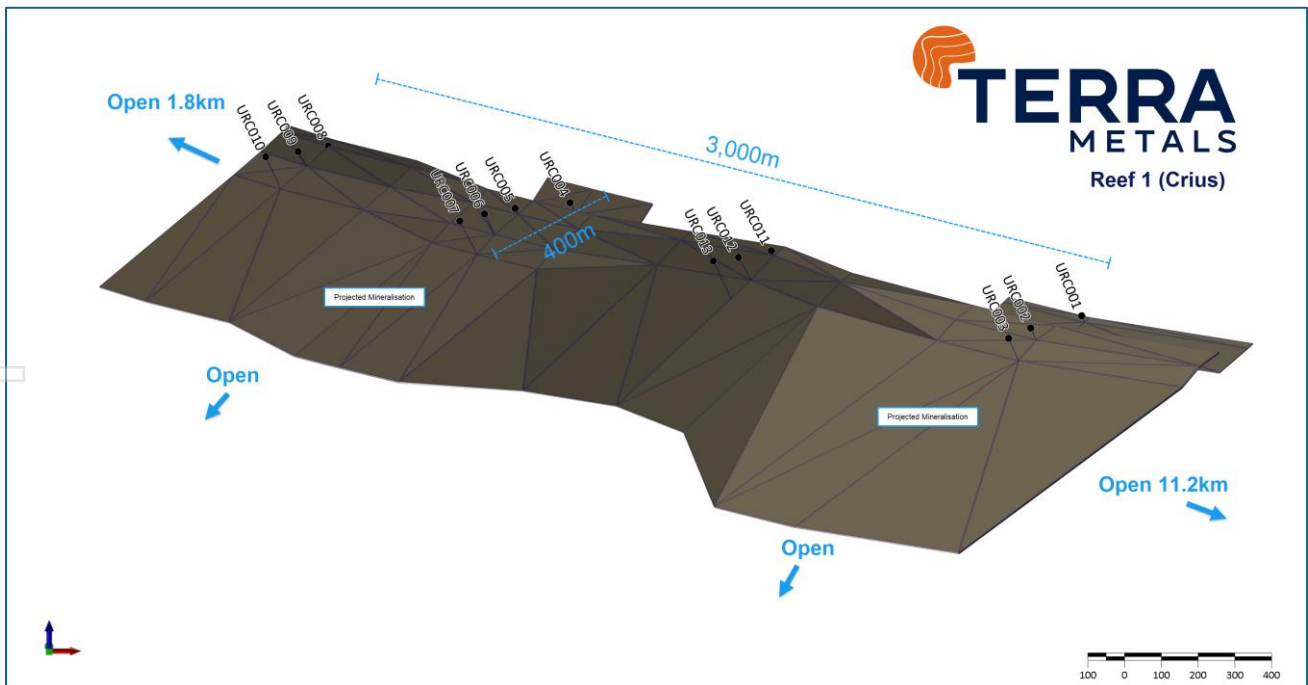
**Managing Director and CEO, Thomas Line, commented:** "We are excited to have discovered multiple Platreef-style copper-PGE sulphide reefs from a first pass-reconnaissance drilling program at the Dante Project; the first of its kind in Australia. Our next step is to continue to replicate these results over the extensive strike at the Dante Reefs, ensuring we are well positioned for success.

"It's clear that there is a concentration and combination of high value metals within the same layers in the Dante Reefs. Chalcocite and bornite appear to be the dominant copper-sulphides. Our highly experienced metallurgical team, led by Dr. Evan Kirby, have already commenced initial metallurgical test work, focusing on the application of conventional flowsheets.

"The discovery of similar style reefs in the Bushveld Province of South Africa has resulted in some of the world's largest, longest running and most profitable PGE, copper, nickel, gold, vanadium and titanium mining operations with over 100 years of ongoing production. The stratiform reefs of the Bushveld average 1 to 2 metres in thickness and require complex underground mining operations; however, their centennial mine life exemplifies how successful these types of deposits can be. The 120 million tonne Platreef Deposit, which is thicker than the other reefs in the Bushveld, sits 600m beneath the surface requiring immense infrastructure including one of the world's largest hoist-shaft to extract the ore to the surface.

"The Dante Reefs, however, outcrop from surface over more than 40km of strike, with a gentle dip and an average thickness of approximately 10 metres with a higher-grade basal reef layer, and a second, upper reef layer of lower grade but similar thickness.

"This is just the beginning of the discovery story at the Dante Project, where the vast majority of targets and strike remain undrilled. New insights at the Cronus Prospect are highlighting possible vectors for higher-grade magmatic sulphides. We look forward to presenting these along with further assays in the coming weeks."



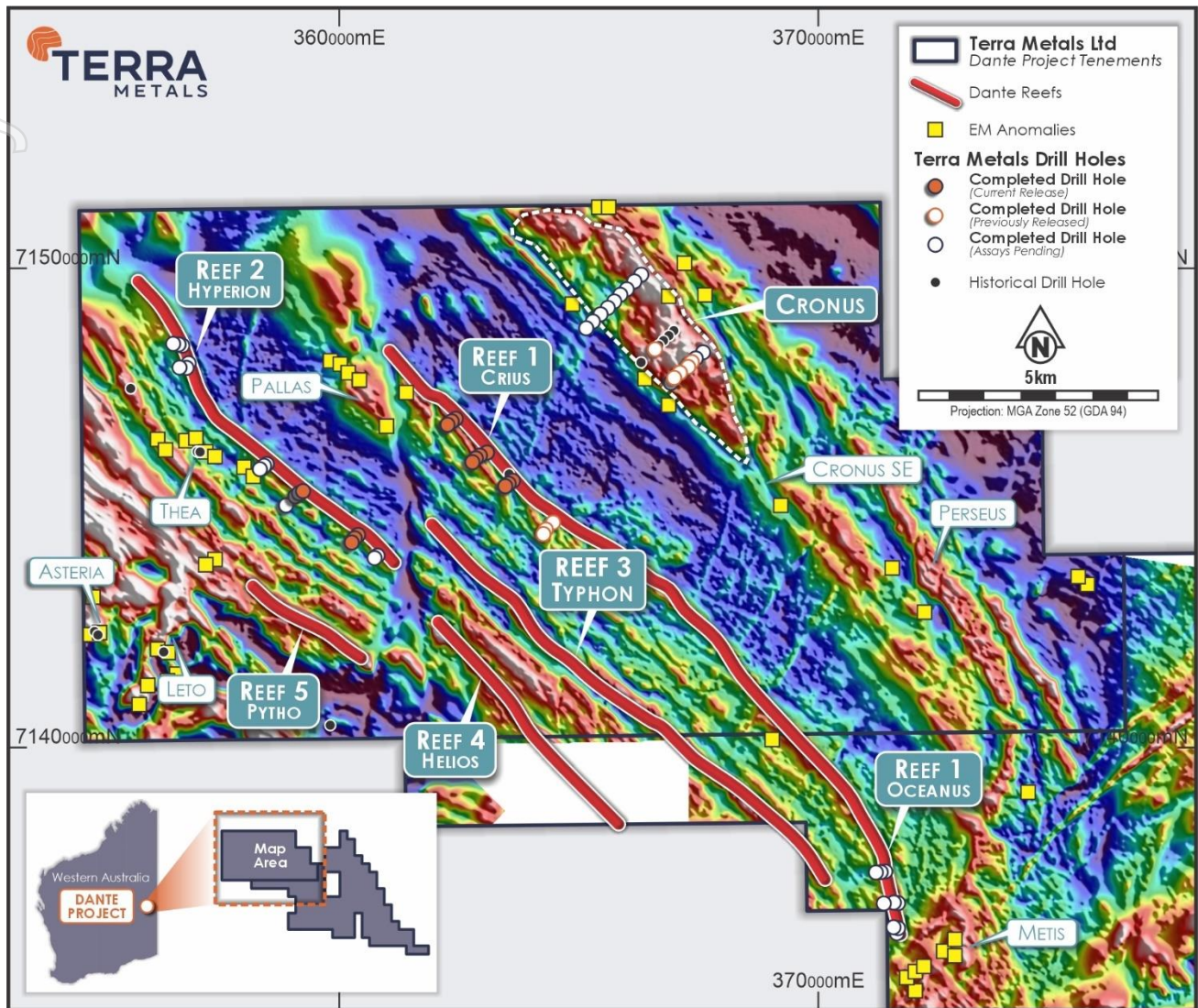
**Figure 1.** Preliminary wireframe model of the Reef 1, including projected down-dip shallow target extensions, and mapped strike to the North.

\* The Dante Reefs currently comprise 5 reefs: Reef 1 (Crius/Oceanus), Reef 2 (Hyperion), Reef 3 (Typhon), Reef 4 (Helios), and Reef 5 (Pytho) (refer Figure 2).

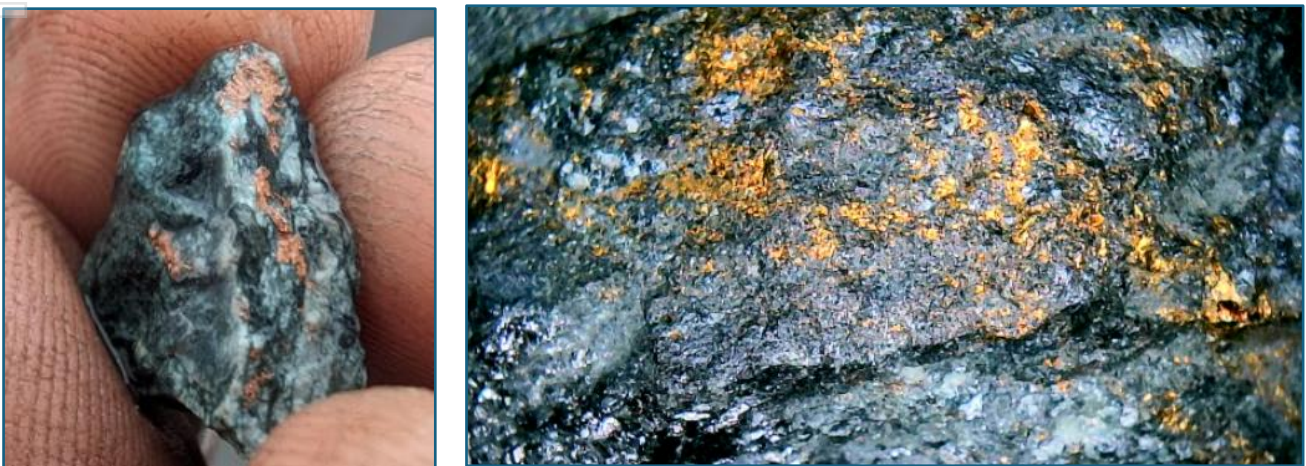
<sup>1</sup> Source: BHP 2023 Annual Report announced to ASX on 22 August 2023.

<sup>2</sup> PGE3 is the sum of platinum (Pt), palladium (Pd), and gold (Au).





**Figure 2:** Plot showing the Dante Reefs, which outcrop for at least 42km of strike: overlaid by completed Phase 1 drilling at the Dante Project, showing Reef 1 (Crius Reef) and Reef 2 (Hyperion Reef) where a large magmatic sulphide discovery has been made and is expected to grow.



**Figure 3.** Examples of (left) Native Copper development (scale 2cm) in upper gabbro-norite hanging wall; and (right) copper-sulphides (scale 1cm) in the basal Crius Reef (URC005).

## Summary

**Terra Metals Limited (ASX:TM1) ("Terra" or "Company")** is pleased to announce that results from a further 14 wide-spaced, first-pass reconnaissance drill holes at the Dante Reefs has confirmed the **discovery of multiple Platreef-style copper-PGE sulphide reefs**. Defined over 4.5km thus far across Reef 1 and Reef 2, mineralisation remains open along strike and downdip, with assays pending from a further 16 drillholes covering an additional 4.5km of strike at Reef 2.

The wide spaced phase-1 reconnaissance drilling was aimed at testing PGE mineralisation associated with extensive outcropping "reefs". 16 out of the first 17 drillholes drilled over 3km of Strike at Reef 1 (Crius) and 1.5km of strike at Reef 2 (Hyperion) have intersected Platreef-style stratiform magmatic copper-PGE sulphides, which are accompanied by high-grade vanadium and titanium in the same layer.

The Dante Reefs have now been mapped to extend for at least 42km in the western portion of the project as a series of northwest-southeast stacked layers in parallel to one another (Figure 2). Mapping is soon to commence in the east of the Dante Project, where further reefs are interpreted.

The mineralised basal layer in the Dante Reefs averages around 10-15m in thickness, with a high-grade basal reef averaging around 6m, containing a combination of copper, gold, platinum group elements, vanadium, titanium, and cobalt and iron within the same layer. Above the basal layer is a lower grade upper reef, which averages around 10-15m in thickness and contains a combination of copper, vanadium, titanium, nickel, cobalt and iron in the same layer.

Drilling results to-date confirm that, collectively, the Dante Reefs have the potential to host a large sulphide deposit containing copper, gold, PGEs, vanadium and titanium.

New assay results from **Reef 1** and **Reef 2** include:

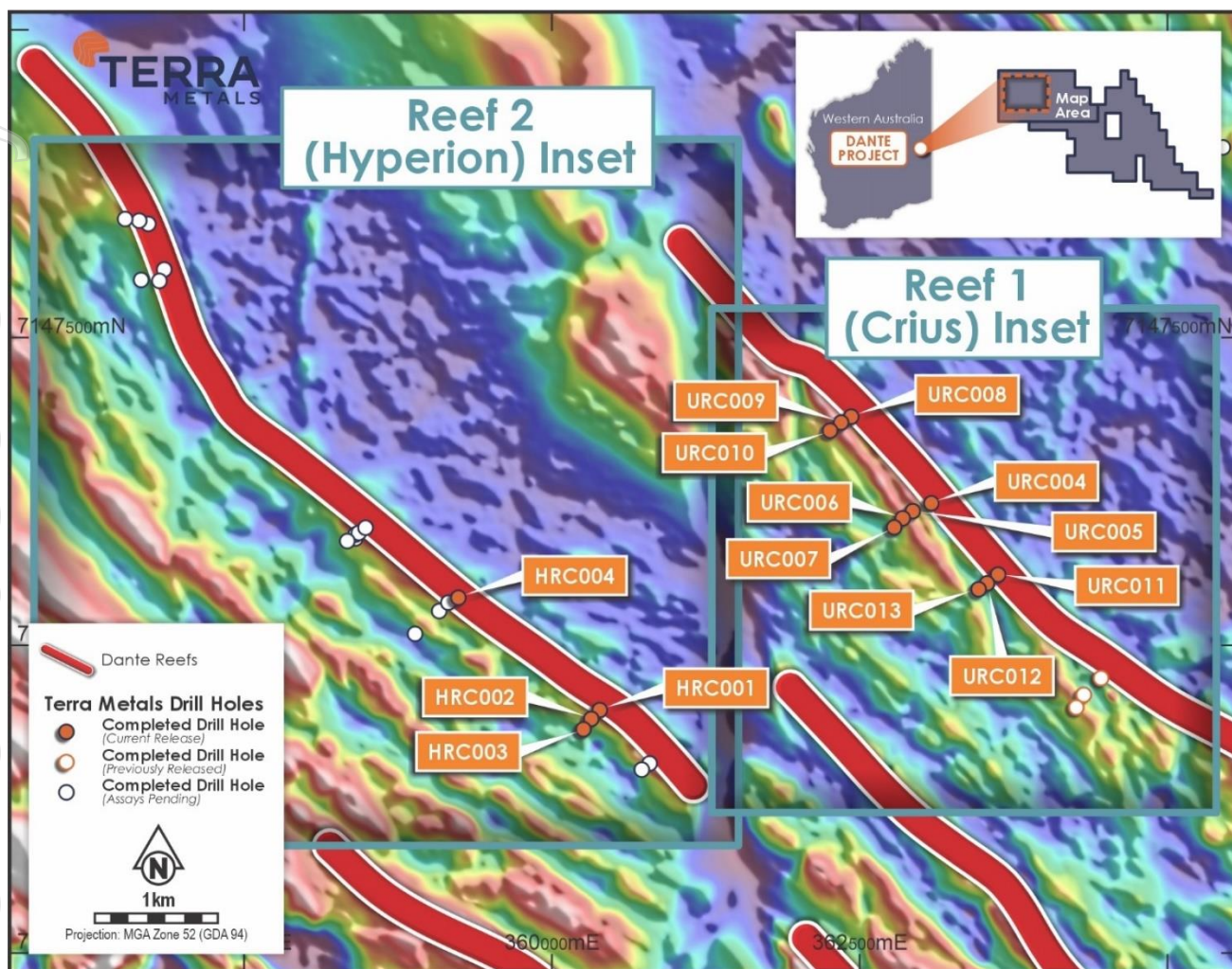
- **6m @ 0.40% Cu, 0.79 g/t PGE3, 0.66% V<sub>2</sub>O<sub>5</sub>, & 19.9% TiO<sub>2</sub>** from 4m (HRC004), including:
  - **2m @ 0.62% Cu, 0.85 g/t PGE3, 0.71% V<sub>2</sub>O<sub>5</sub> & 22.3% TiO<sub>2</sub>** from 6m
- **13m @ 0.20% Cu, 0.36g/t PGE3, 0.44% V<sub>2</sub>O<sub>5</sub>, 13.3% TiO<sub>2</sub>** from 14m (URC005), including:
  - **5m @ 0.34% Cu, 0.84g/t PGE3, 0.81% V<sub>2</sub>O<sub>5</sub> & 21.2% TiO<sub>2</sub>** from 21m, including:
  - **3m @ 0.43% Cu, 0.94 g/t PGE3, 0.88% V<sub>2</sub>O<sub>5</sub> & 24.1% TiO<sub>2</sub>** from 23m
- **15m @ 0.20% Cu, 0.30g/t PGE3, 0.41% V<sub>2</sub>O<sub>5</sub>, & 13.8% TiO<sub>2</sub>** from 10m (URC011), including:
  - **3m @ 0.40% Cu** from 20m and **1m @ 1.46g/t PGE3 & 1.10% V<sub>2</sub>O<sub>5</sub>** from 23m
- **5m @ 0.30% Cu, 0.81g/t PGE3, 0.70% V<sub>2</sub>O<sub>5</sub>, & 19.1% TiO<sub>2</sub>** from 71m (URC006), including:
  - **2m @ 0.31% Cu, 1.57g/t PGE3, 0.99% V<sub>2</sub>O<sub>5</sub>, & 23.2% TiO<sub>2</sub>** from 74m
- **5m @ 0.27% Cu, 0.83g/t PGE3, 0.81% V<sub>2</sub>O<sub>5</sub>, & 20.2% TiO<sub>2</sub>** from 44m (URC004), including:
  - **2m @ 1.34 g/t PGE3, 0.19% Cu 1.09% V<sub>2</sub>O<sub>5</sub>, & 22.1% TiO<sub>2</sub>** from 47m
- **10m @ 0.11% Cu, 0.82g/t PGE3, 0.44% V<sub>2</sub>O<sub>5</sub> & 10.5% TiO<sub>2</sub>** from 66m (HRC002), including:
  - **5m @ 1.50g/t PGE3, 0.21% Cu, 0.81% V<sub>2</sub>O<sub>5</sub> & 19.6% TiO<sub>2</sub>** from 66m, including:
  - **3m @ 2.22g/t PGE3, 0.20% Cu, 1.08% V<sub>2</sub>O<sub>5</sub>, & 23.5% TiO<sub>2</sub>** from 68m



- **4m @ 0.27% Cu, 0.52g/t PGE3, 0.56% V<sub>2</sub>O<sub>5</sub>, & 17.1% TiO<sub>2</sub>** from 80m (URC012), including:
  - **2m @ 0.33% Cu, 0.86 g/t PGE3, 0.78% V<sub>2</sub>O<sub>5</sub>, & 22.7% TiO<sub>2</sub>** from 82m
- **6m @ 0.21% Cu, 0.66g/t PGE3, 0.75% V<sub>2</sub>O<sub>5</sub>, & 18.3% TiO<sub>2</sub>** from 108m (URC010), including:
  - **4m @ 0.30% Cu, 0.53% V<sub>2</sub>O<sub>5</sub> & 17.4% TiO<sub>2</sub>** from 108m
- **5m @ 0.26% Cu, 0.51g/t PGE3, 0.66% V<sub>2</sub>O<sub>5</sub>, & 18.2% TiO<sub>2</sub>** from 52m (URC009), including:
  - **3m @ 0.35% Cu, 0.58 g/t PGE3, 0.68% V<sub>2</sub>O<sub>5</sub>, & 22.2% TiO<sub>2</sub>** from 53m
- **6m @ 0.41g/t PGE3, 0.17% Cu, 0.70% V<sub>2</sub>O<sub>5</sub>, & 17.4% TiO<sub>2</sub>** from 119m (URC007), including:
  - **1m @ 1.06g/t PGE3** from 122, and **2m @ 0.97% V<sub>2</sub>O<sub>5</sub>** from 123m
- **11m @ 0.13% Cu, 0.50g/t PGE3, 0.54% V<sub>2</sub>O<sub>5</sub>, & 15.0% TiO<sub>2</sub>** from 1m (URC008), including:
  - **3m @ 1.40 g/t PGE3, 1.00% V<sub>2</sub>O<sub>5</sub>, & 21.0% TiO<sub>2</sub>** from 9m
- **4m @ 0.11% Ni, 0.13% Cu, 0.32% V<sub>2</sub>O<sub>5</sub>, & 10.2% TiO<sub>2</sub>** from 2m (HRC001)
- **7m @ 0.44g/t PGE3** from 17m (HRC001), including:
  - **1m @ 0.93g/t PGE3, 0.73% V<sub>2</sub>O<sub>5</sub>, & 14.8% TiO<sub>2</sub>** from 17m
- **5m @ 0.13% Cu, 0.35% V<sub>2</sub>O<sub>5</sub>, & 11.2% TiO<sub>2</sub>** from 45m (HRC002)
- **3m @ 0.28% Cu, 0.49 g/t PGE3, 0.55% V<sub>2</sub>O<sub>5</sub> & 16.6% TiO<sub>2</sub>** from 143m (HRC003)



**Figure 4:** Typical black-coloured, heavy magmatic sulphide mineralisation at the Dante Reefs (HRC004).



**Figure 5:** Plan view drilling at Reef 1 and Reef 2, showing drillholes with results returned reported herein.



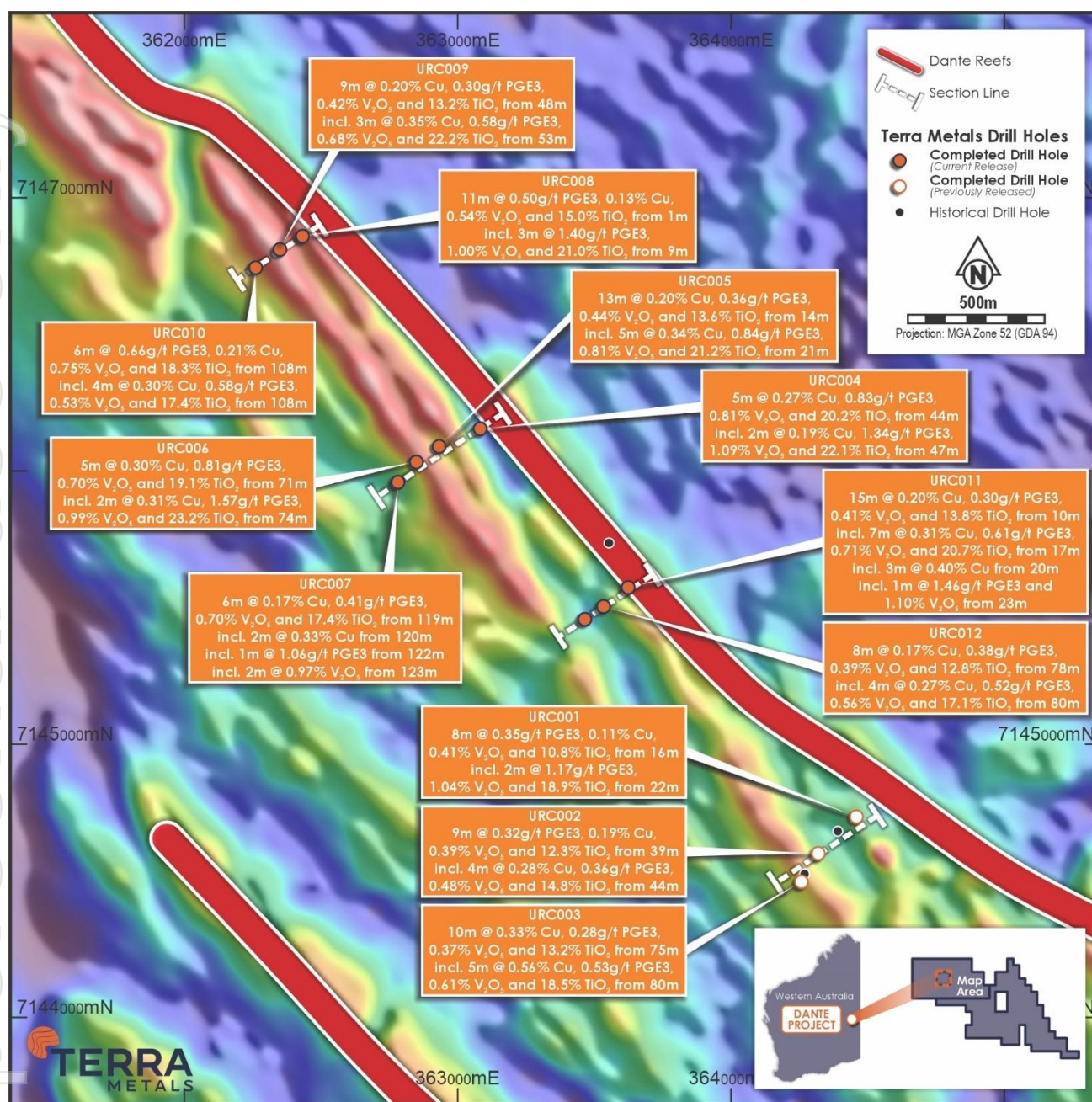
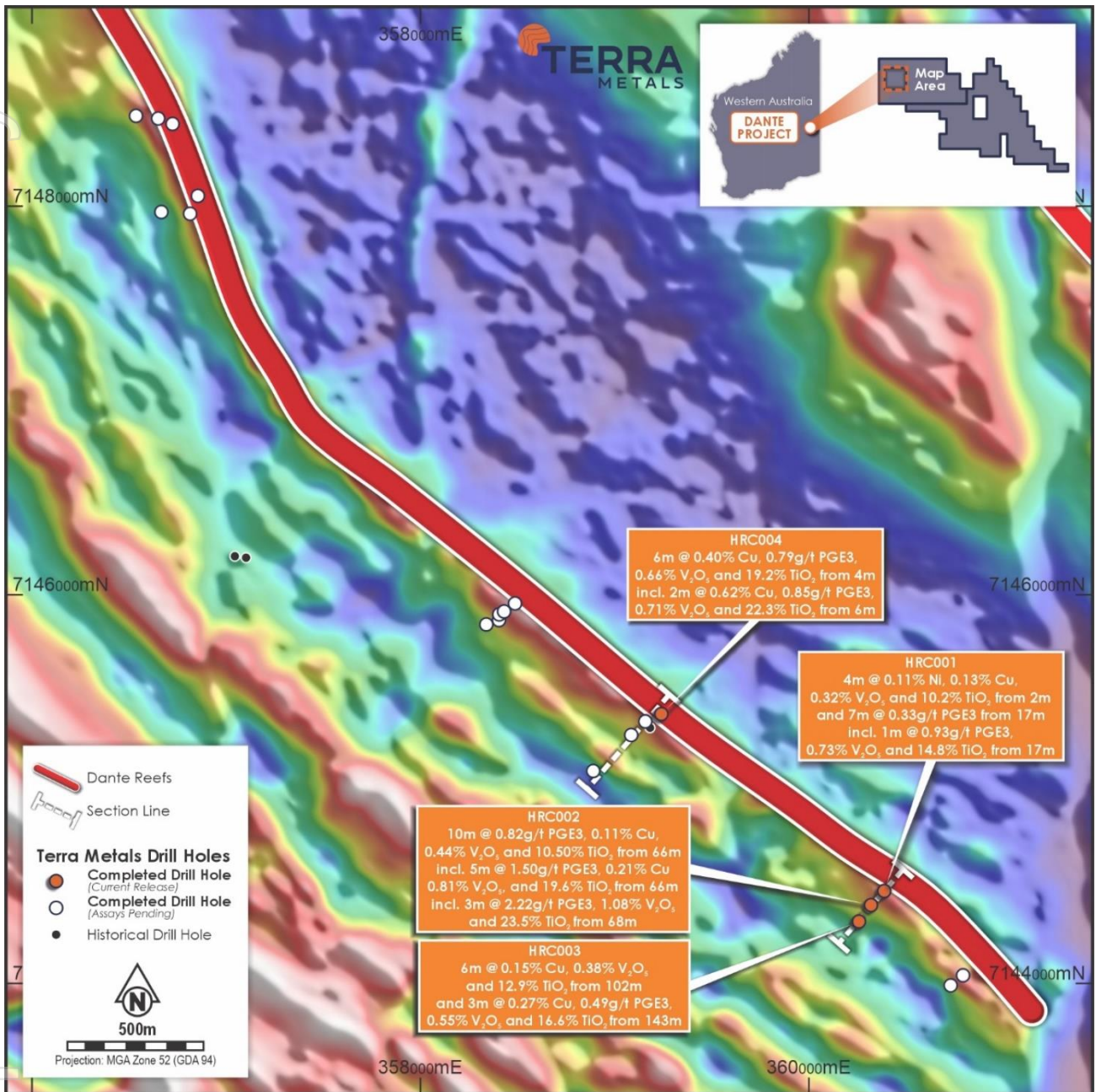


Figure 6: Plan view of broad intercepts, outcropping reef at Reef 1, over TM1 magnetics image.





**Figure 7:** Plan view of broad intercepts, outcropping reef at Reef 2, over TM1 magnetics image.



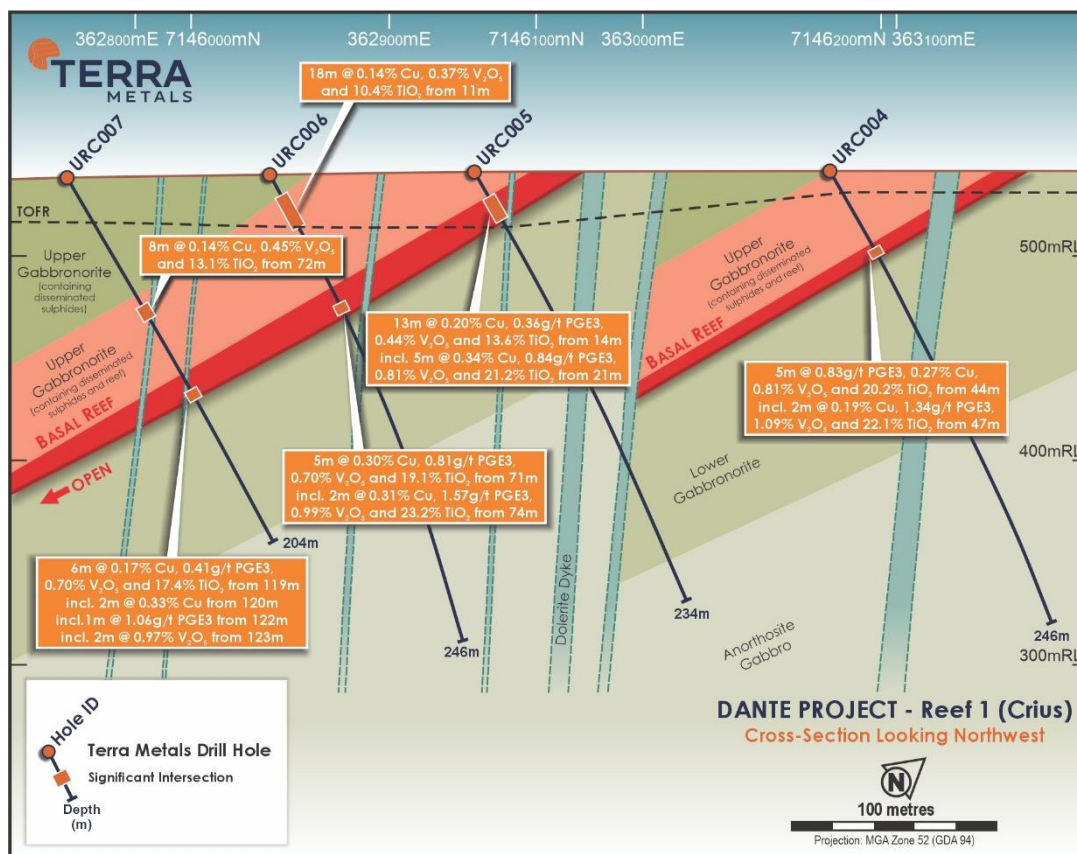


Figure 8: Drill Section URC004-URC007 from the Crius Reef discovery.

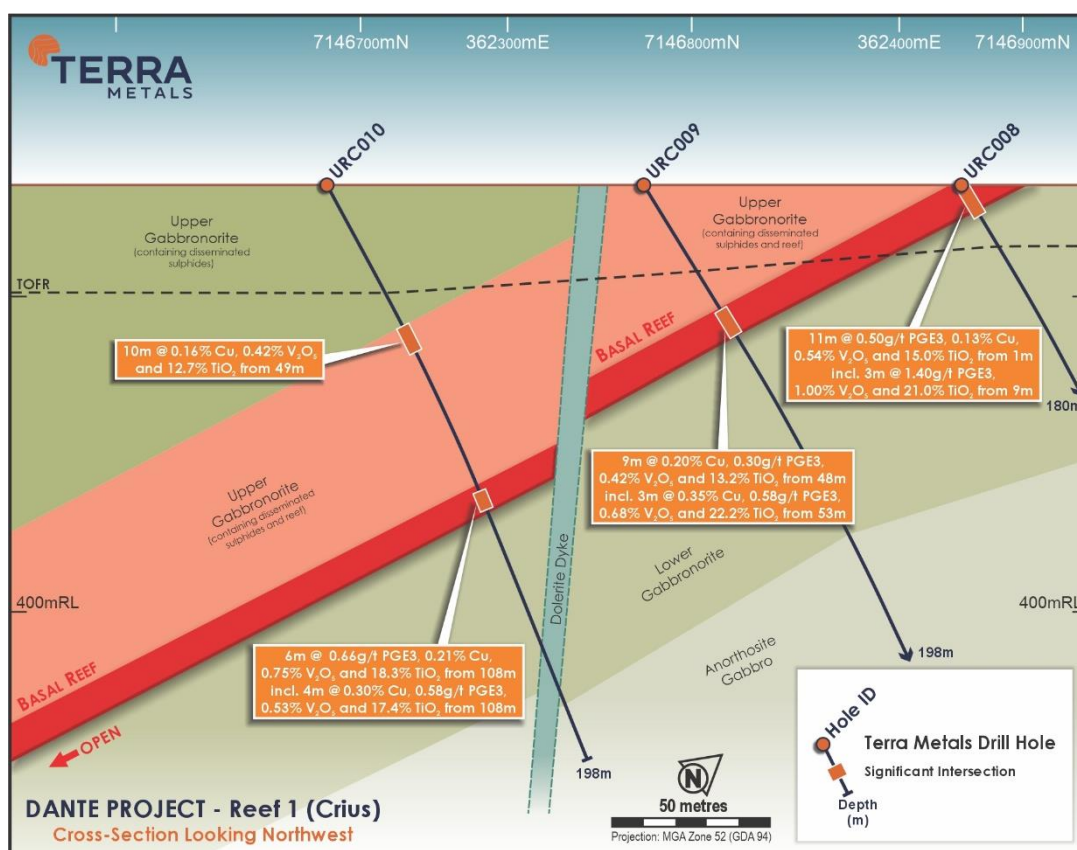


Figure 9: Drill Section URC008-URC010 from the Crius Reef discovery.

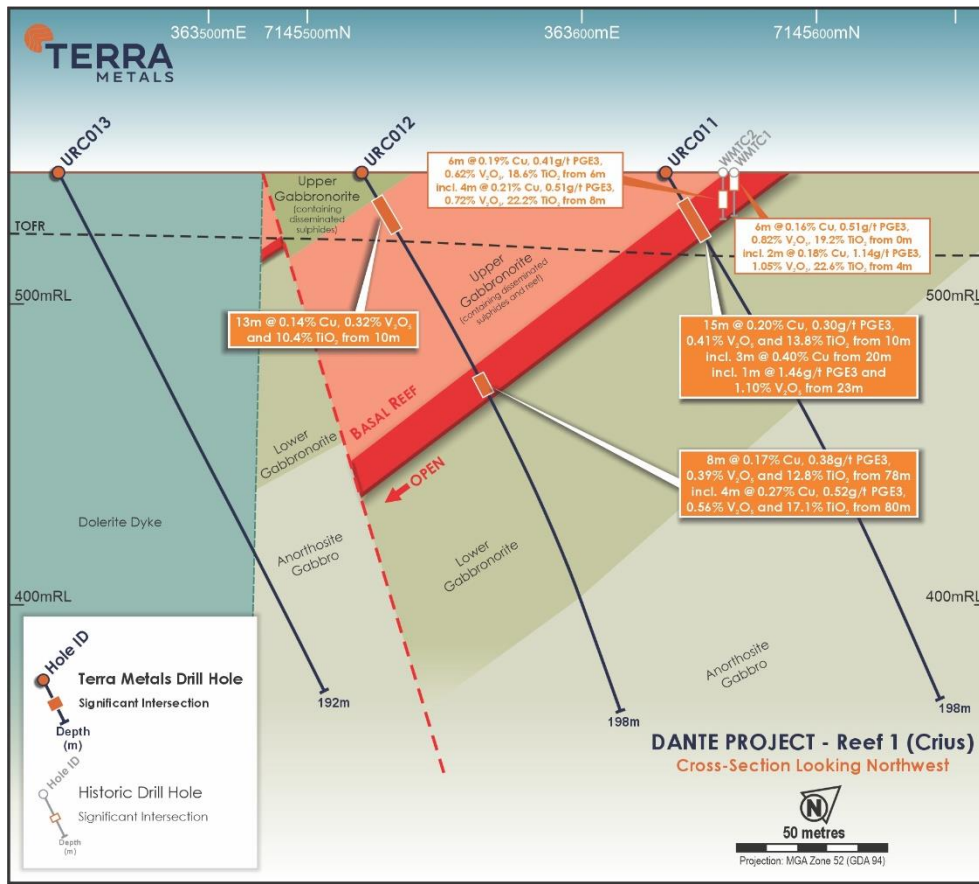


Figure 10: Drill Section URC011-URC013 from the Crius Reef discovery.

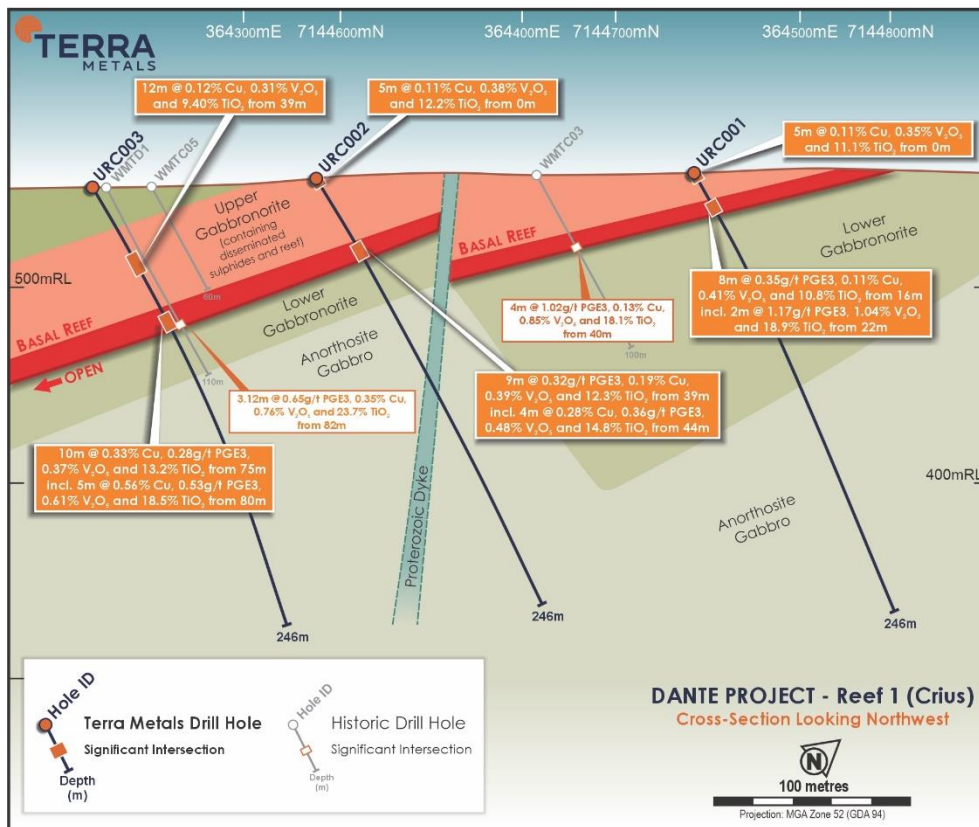


Figure 11. Cross Section from the first drill fence at the Crius Reef (previously reported)



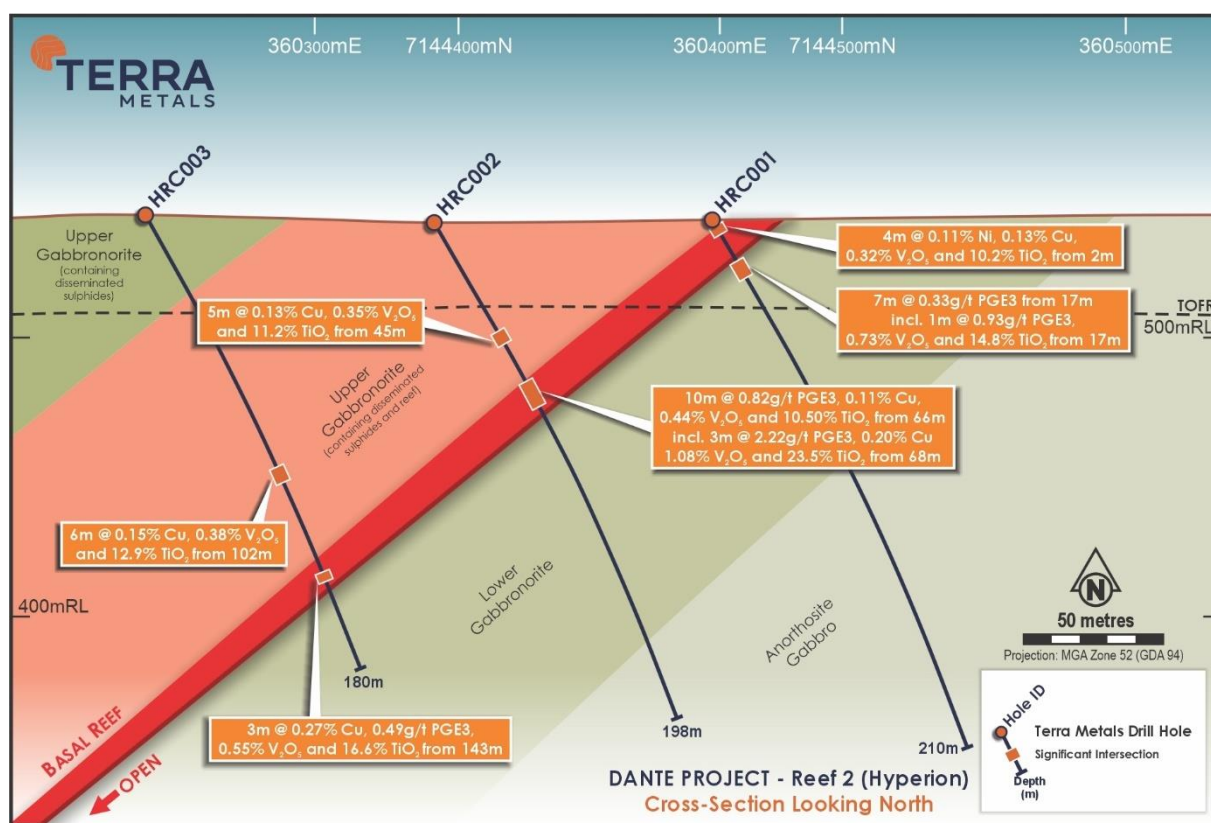


Figure 12. Cross Section HRC001-HRC003 from the Hyperion Reef.

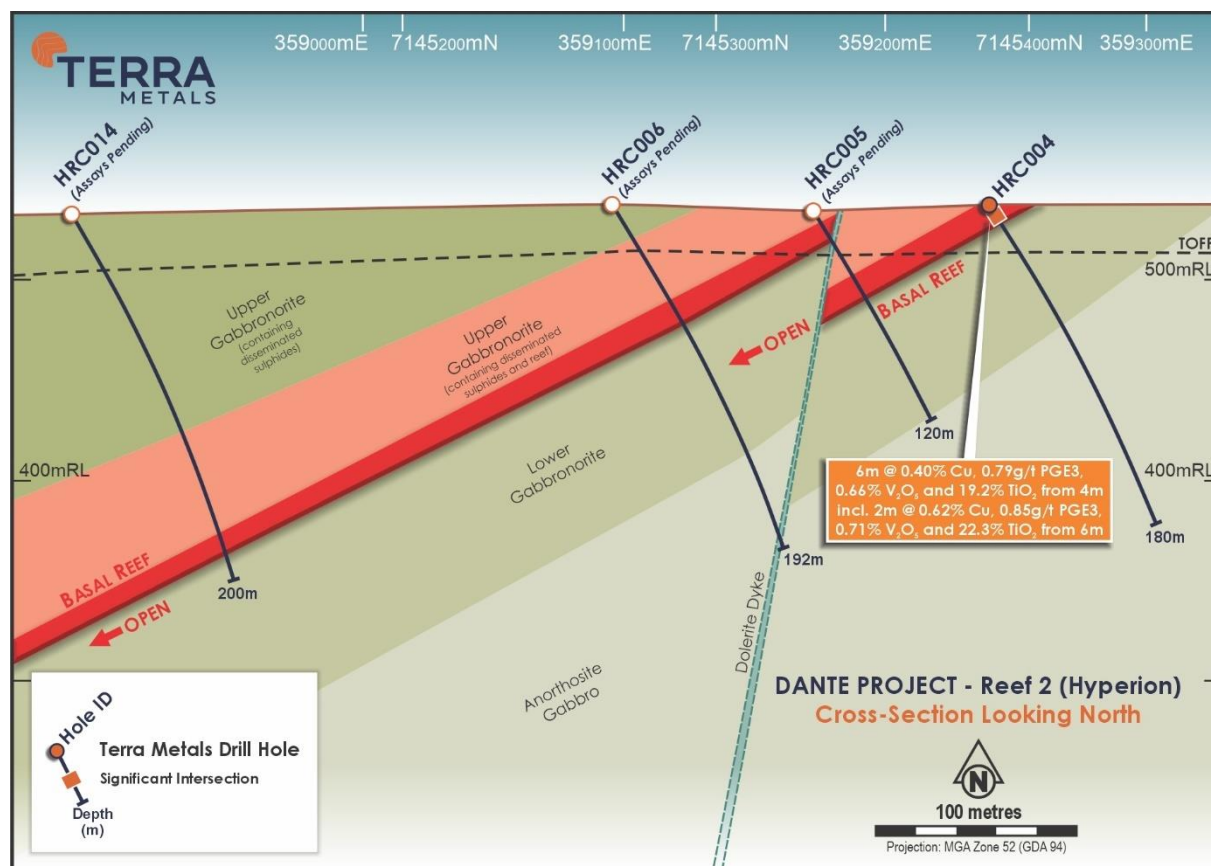


Figure 13. Cross Section HRC004-HRC007 from the Hyperion Reef.

## About the Dante Project

The Dante Project, located in the West Musgrave region of Western Australia, contains large-scale magmatic copper ("Cu"), gold ("Au"), platinum group elements ("PGE") and nickel ("Ni") targets, as well as extensive outcropping Cu-PGE-Au reefs and is situated in the same geological complex and in close proximity to one of the world's largest mining development projects, BHP's Nebo-Babel deposit.

The Giles Complex is hosted in the broader Musgrave block (140,000km<sup>2</sup>) in central Australia, located at the junction of three major crustal elements: the West Australian, North Australian, and South Australian cratons. The discovery of the Nebo-Babel Ni-Cu-PGE sulphide deposit in the western portion of the Musgrave block was considered to be the world's largest Ni-Cu-PGE sulphide discovery since Voisey's Bay, prior to the discovery of the Julimar-Gonneville deposit in 2018.

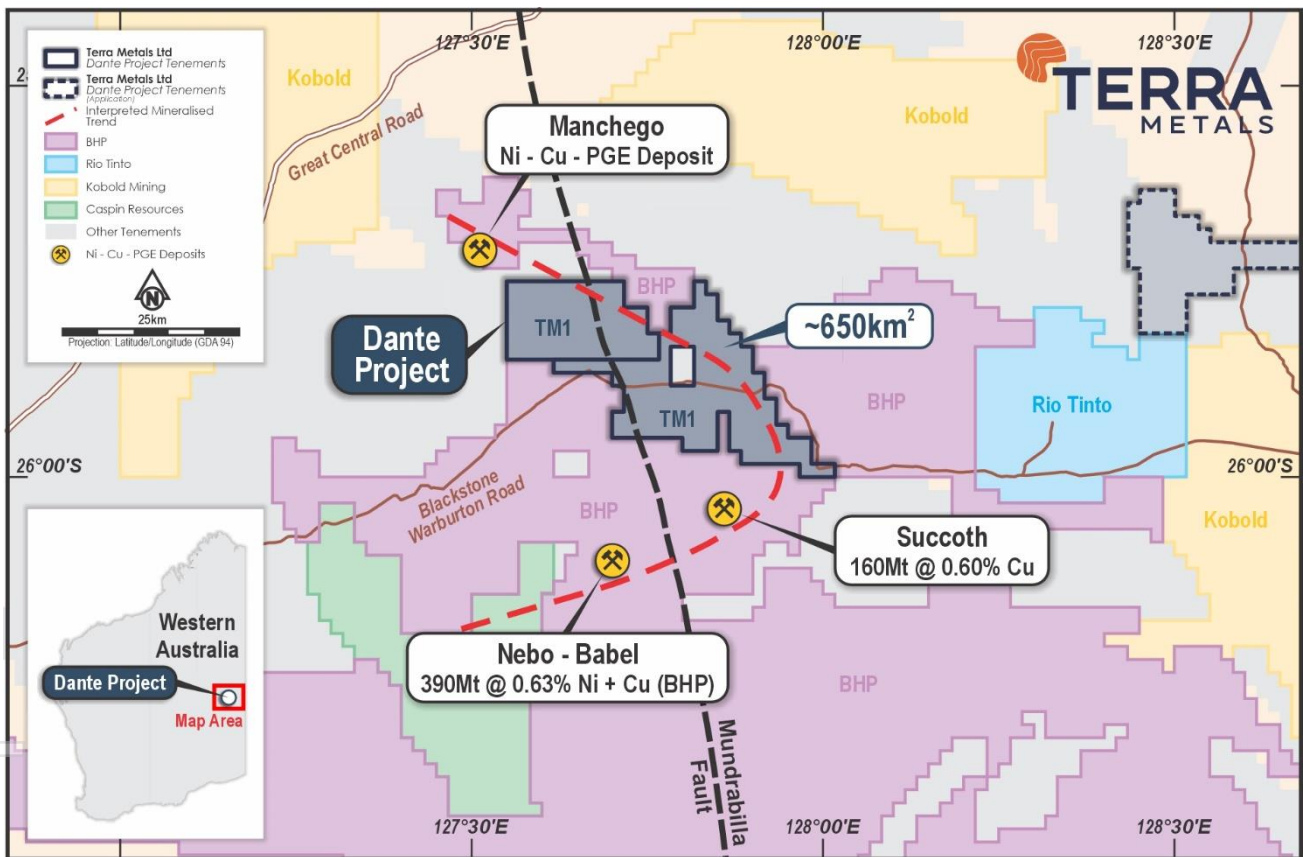


Figure 14. Dante Project location map displaying surrounding companies' tenure and major deposits

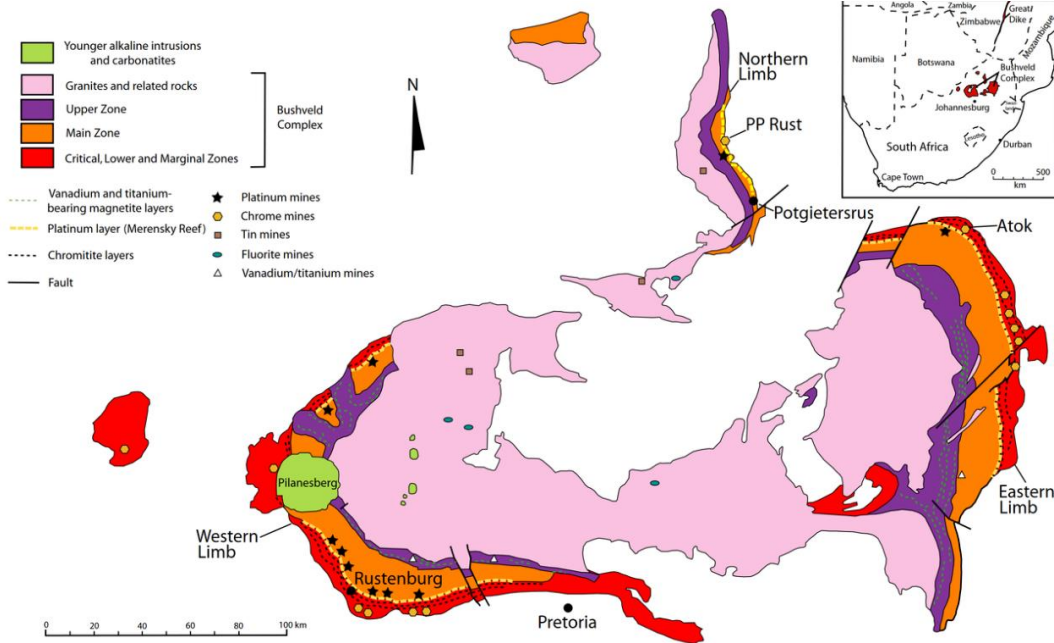
## Layered intrusions

The Dante project is dominated by the Jameson Layered Intrusion. Layered intrusions host the majority of the world's platinum group elements, which include platinum (Pt), palladium (Pd), rhodium (Rh), iridium (Ir), osmium (Os), and ruthenium (Ru), with the elements of most commercial significance being platinum, palladium and gold. In all cases, the PGE bearing reefs consist of laterally extensive layers of ultramafic or mafic rocks.



## Bushveld Igneous Province

**The Bushveld Igneous Complex** (refer Figure 15) is analogous the Jameson Layered Intrusion which dominates the Dante Project. The Bushveld Igneous Complex is the world's largest layered intrusion and is thought to be about 2 billion years old. Located in South Africa, it currently contains the world's largest reserves of platinum group elements, along with other elements such as chromium, titanium and vanadium. It represents about 75% of the world's platinum and about 50% of the world's palladium resource according to some sources.



**Figure 15.** Schematic of the Bushveld Complex, South Africa, showing the various metallogenic provinces within the complex which includes specific layers which are commercial enriched in PGEs, Copper, Nickel, Titanium, Vanadium, and Chromium.

### **Competent Person's Statement**

The information in this report that relates to Exploration Results is based on, and fairly represents information and supporting documentation prepared by Mr Thomas Line, a Competent Person who is a Member of The Australasian Institute of Geoscientists (AIG). Mr Line 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 "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Line consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

### **Forward Looking Statements and Important Notice**

Statements regarding plans with respect to Terra's project are forward-looking statements. There can be no assurance that the Company's plans for development of its projects will proceed as currently expected. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of the Company, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of that announcement.

This ASX announcement has been approved in accordance with the Company's published continuous disclosure policy and authorised for release by the CEO and Managing Director.

#### **For further information, please contact:**

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## Appendix 1 – Significant Intercepts (>0.1% Cu or 0.1g/t PGE3)

Prospect	HoleID	East	North	Dip	Azi	EOH	From	To	Intercept Width	Cu %	Au g/t	Pt g/t	Pd g/t	PGE3 g/t	TiO2 %	Fe2O3 %	V2O5 %	Ag g/t	Co ppm	Ni %
Crius	URC001	364460	7144735	-60	040	246	0	5	5	0.11	0.02	0.01	0.01	0.04	11.08	28.54	0.35	0.22	106.66	0.03
	URC001						16	24	8	0.11	0.04	0.21	0.10	0.35	10.82	31.35	0.41	0.43	120.30	0.03
	including						22	24	2	0.08	0.05	0.78	0.34	1.17	18.89	61.34	1.04	0.25	203.00	0.05
Crius	URC002	364320	7144600	-60	040	246	0	5	5	0.11	0.02	0.01	0.01	0.03	12.16	30.99	0.38	0.28	121.20	0.04
	URC002						39	48	9	0.19	0.11	0.16	0.05	0.32	12.30	30.18	0.39	0.63	115.83	0.03
	including						44	48	4	0.28	0.18	0.16	0.03	0.36	14.78	33.38	0.48	0.90	120.53	0.03
Crius	URC003	364259	7144497	-60	040	246	39	51	12	0.12	0.01	0.02	0.02	0.05	9.37	28.02	0.31	0.43	117.20	0.04
	URC003						75	85	10	0.33	0.09	0.16	0.03	0.28	13.18	29.89	0.37	0.84	120.24	0.03
	including						80	85	5	0.56	0.16	0.31	0.06	0.53	18.51	42.12	0.61	1.30	159.80	0.04
Crius	URC004	363082	7146155	-60	050	246	44	49	5	0.27	0.16	0.51	0.16	0.83	20.19	49.90	0.81	0.92	174.60	0.05
	including						47	49	2	0.19	0.14	0.88	0.32	1.34	22.14	63.41	1.09	0.60	217.00	0.06
Crius	URC005	362932	7146090	-60	050	234	14	27	13	0.20	0.12	0.19	0.06	0.36	13.56	33.17	0.44	0.46	124.08	0.03
	including						21	26	5	0.34	0.24	0.47	0.13	0.84	21.22	51.92	0.81	0.58	179.40	0.05
	including						23	26	3	0.34	0.26	0.70	0.21	1.17	23.15	60.19	0.95	0.67	211.00	0.06
	including						21	27	6	0.30	0.20	0.41	0.12	0.73	19.63	49.37	0.75	0.55	173.50	0.05
Crius	URC006	362848	7146033	-60	050	204	11	29	18	0.14	0.01	0.01	0.01	0.04	10.43	30.67	0.37	0.38	124.96	0.04
	URC006						71	76	5	0.30	0.22	0.45	0.15	0.81	19.12	44.72	0.70	0.96	158.52	0.04
	including						74	76	2	0.31	0.28	0.95	0.35	1.57	23.23	60.62	0.99	1.05	214.00	0.06
Crius	URC007	362780	7145959	-60	050	204	72	80	8	0.14	0.02	0.01	0.01	0.04	13.08	35.36	0.45	0.45	139.38	0.04
	URC007						119	125	6	0.16	0.09	0.20	0.12	0.41	17.43	44.61	0.70	0.52	158.50	0.04
	including						120	122	2	0.33	0.19	0.15	0.01	0.35	20.10	42.72	0.64	1.15	152.50	0.04
	including						122	123	1	0.08	0.05	0.62	0.39	1.06	15.55	43.51	0.69	0.20	157.00	0.04
	including						123	125	2	0.03	0.02	0.14	0.14	0.30	18.16	57.48	0.97	-	203.00	0.06
Crius	URC008	362431	7146859	-60	050	180	1	12	11	0.13	0.11	0.30	0.09	0.50	14.97	36.22	0.54	0.03	128.27	0.03
	including						9	12	3	0.09	0.14	0.98	0.28	1.40	21.00	58.49	1.00	0.10	190.00	0.05

Prospect	HoleID	East	North	Dip	Azi	EOH	From	To	Intercept Width	Cu %	Au g/t	Pt g/t	Pd g/t	PGE3 g/t	TiO2 %	Fe2O3 %	V2O5 %	Ag g/t	Co ppm	Ni %
Crius	URC009	362349	7146811	-60	050	198	48	57	9	0.20	0.12	0.15	0.04	0.30	13.67	31.07	0.42	0.61	114.44	0.03
	including						52	57	5	0.26	0.18	0.26	0.07	0.51	18.17	40.55	0.62	0.80	140.60	0.04
	including						53	56	3	0.35	0.25	0.29	0.04	0.58	21.20	44.89	0.68	1.07	155.67	0.04
Crius	URC010	362260	7146744	-60	050	198	49	59	10	0.16	0.02	0.01	0.01	0.03	12.73	34.75	0.42	0.56	144.60	0.05
	URC010						108	114	6	0.21	0.13	0.37	0.16	0.66	18.33	46.71	0.75	0.65	168.98	0.05
	including						108	112	4	0.30	0.17	0.31	0.10	0.58	18.77	42.57	0.66	0.95	154.23	0.04
Crius	URC011	363624	7145574	-60	050	198	10	25	15	0.20	0.12	0.18	0.04	0.33	13.80	30.65	0.41	0.41	122.92	0.03
	including						17	24	7	0.31	0.21	0.32	0.07	0.61	20.68	44.90	0.71	0.56	168.47	0.05
	including						20	23	3	0.40	0.27	0.35	0.05	0.67	23.58	48.01	0.73	0.73	188.00	0.05
	URC011						23	24	1	0.30	0.21	0.91	0.33	1.46	23.76	62.13	1.10	0.80	223.00	0.06
Crius	URC012	363534	7145504	-60	050	198	78	86	8	0.17	0.14	0.20	0.05	0.38	12.84	29.36	0.39	0.55	117.11	0.03
	including						82	84	2	0.33	0.27	0.47	0.12	0.86	22.72	50.64	0.78	1.05	186.50	0.05
	including						80	84	4	0.27	0.20	0.25	0.06	0.52	17.12	37.65	0.56	0.90	141.68	0.04
Crius	URC013	363465	7145457	-60	050	192	Assays Pending													
Hyperion	HRC001	360389	7144475	-60	040	210	2	6	4	0.13	0.06	0.01	0.01	0.08	10.22	30.75	0.32	0.48	157.75	0.11
	HRC001						17	24	7	0.02	0.03	0.24	0.07	0.34	4.43	13.50	0.19	0.26	50.71	0.01
	including						17	18	1	0.05	0.06	0.69	0.18	0.93	14.76	45.48	0.76	0.90	165.00	0.04
Hyperion	HRC002	360320	7144403	-60	040	198	45	50	5	0.13	0.02	0.01	0.01	0.03	11.17	31.19	0.35	0.42	127.86	0.04
	HRC002						66	76	10	0.11	0.14	0.50	0.19	0.83	10.51	28.58	0.44	0.33	99.89	0.03
	including						66	71	5	0.21	0.26	0.85	0.34	1.45	19.57	51.26	0.81	0.66	179.88	0.05
	including						68	71	3	0.20	0.31	1.36	0.56	2.22	23.53	65.33	1.08	0.60	226.33	0.06
Hyperion	HRC003	360258	7144319	-60	040	180	102	108	6	0.15	0.02	0.01	0.01	0.03	12.93	33.98	0.38	0.47	138.33	0.04
	HRC003						143	146	3	0.28	0.21	0.23	0.04	0.49	16.56	38.46	0.55	0.80	135.23	0.04
Hyperion	HRC004	359240	7145387	-60	050	180	4	10	6	0.40	0.23	0.47	0.09	0.79	19.89	45.25	0.66	0.42	176.33	0.05
	including						6	8	2	0.62	0.23	0.54	0.08	0.85	22.31	47.84	0.71	0.30	210.50	0.06
Hyperion	HRC005	359158	7145348	-60	050	120	Assays Pending													
Hyperion	HRC006	359085	7145279	-60	050	192	Assays Pending													
Hyperion	HRC014	358889	7145093	-60	050	200	Assays Pending													



## Appendix 2 – JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p>Nature and quality of sampling (e.g. 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.</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</p>	<p>RC drill holes were sampled as individual, 1 m length samples from the rig split. Individual metre samples were collected as a 12.5% split collected from a static cone splitter attached to the drill rig. Individual RC samples were collected in calico sample bags and grouped into polyweave bags for dispatch in bulka bags (approximately five per plastic bag).</p> <p>4m composite samples were taken outside of the zones of geological interest, or within broad low-grade mineralised zones, by spearing a split of four green bag rejects into one calico bag taking the same size sample from each bag to form a representative composite across the four metre interval. Individual 1m samples were retained for re-assay based on 4m composite assay results.</p> <p>All samples were collected in labelled calico bags.</p>
<b>Drilling techniques</b>	<p>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).</p>	<p>Reverse circulation drilling utilising an 8inch open-hole hammer for first 6m (pre-collar) and a 5.6 inch RC hammer for the remainder of the drill hole.</p>
<b>Drill sample recovery</b>	<p>Method of recording and assessing core and chip sample recoveries and results asses</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	<p>RC sample recoveries of less than approximately 80% are noted in the geological/sampling log with a visual estimate of the actual recovery. No such samples were reported within the significant intercept zones. Moisture categorisation was also recorded.</p>

Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	<p>Washed drill chip samples from Nexgen drilling have been geologically logged to a level to support appropriate mineral resource estimation, mining studies and metallurgical studies. Lithology, oxidation, mineralogy, alteration and veining has been recorded at 1m resolution. Core is logged both qualitatively and quantitatively. RC chip trays have been stored for future reference and chip tray photography is available.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<p>Approximately 3-5kg RC samples were passed through a rig mounted cone splitter on 1m intervals to obtain a 3-5kg representative split sample for assay. In areas not considered high priority by geological logging, a 4m spear composite sample was taken. Each sample is sorted, dried split and pulverised to 85% passing through 75 microns to produce a representative subsample for analysis and considered adequate sample homogenisation for repeatable assay result.</p>
<b>Quality of assay data and laboratory tests</b>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</p>	<p>Samples were analysed at Bureau Veritas, Perth for broad-suite multi-element fused bead Laser Ablation/ICPMS (laboratory code - LA100 and LA101 (full Suite)). Gold, Pt and Pd analysis was by Fire Assay ICP-OES (laboratory code - FA003). Oxides were determined by glass bead/XRF (laboratory code - XRF204 (Partial Silicate Suite)).</p> <p>Sampling QA/QC including standards (7 different CRM to cover low mid and higher-grade material of various elements including but not limited to copper, gold, nickel, PGEs, silver, titanium and vanadium) were included in each sample despatch and reported in the laboratory results. QA/QC samples included Company selected CRM material including blank material. Laboratory QAQC has additional checks including standards, blanks and repeat samples that were conducted regularly on every batch. Company standards are included every 50<sup>th</sup> sample.</p> <p>267 sample assay results have been received with total sampling QAQC (standards) more than 6%. All standards submitted were within acceptable limits for copper, gold, silver, zinc, platinum, palladium, cobalt, iron, vanadium, barium, titanium and scandium.</p>



Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	<p>Drill hole information including lithological, mineral, sample, magnetic susceptibility, downhole survey, etc was collected electronically or entered into an excel sheet directly then merged into a primary database for verification and validation.</p> <p>Assay data was not adjusted.</p>
<b>Location of data points</b>	<p>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.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<p>A handheld GPS with ~5m accuracy was used to collect samples. Samples were also logged in tablet and mobile phone applications as a backup and for the collection of imagery and logging notes. Coordinates unless otherwise labelled with latitude/longitude on images and tables within this document are in datum GDA94 zone 52.</p>
<b>Data spacing and distribution</b>	<p>Data spacing for reporting of Exploration Results.</p> <p>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.</p> <p>Whether sample compositing has been applied.</p>	<p>Drill lines are spaced approximately 800m apart along strike of target geology. Drill holes are spaced 100 or 200m along the drill line angled perpendicular to strike. Spacing is dependant on target geology and coverage.</p> <p>Data is sufficient to confidently establish geological continuity in areas of continuous strike.</p> <p>No JORC-2014 compliant resource calculations have been completed using this data.</p> <p>1m split samples taken in zones of geological interest and 4m composite samples taken for the rest of the hole.</p>
<b>Orientation of data in relation to geological structure</b>	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	<p>Drill orientation perpendicular to mapped strike and dip of shallow dipping units to the SW. Strike orientation determined by geological mapping and 50m line spacing airborne magnetic data interpretation.</p> <p>No sample bias due to drilling orientation is expected.</p>
<b>Sample security</b>	<p>The measures taken to ensure sample security.</p>	<p>Sample control was managed by on site geologists where single metre splits and composite samples were grouped into zip tied polyweave bags and loaded into bulka bags. Samples collected by NATS transport from site and delivered from NATS yard in Perth to Bureau Veritas Labs for sorting and assay.</p> <p>Assay results received by email to the managing director.</p>
<b>Audits or reviews</b>	<p>The results of any audits or reviews of sampling techniques and data.</p>	<p>No audits were undertaken as sample techniques considered sufficient for first pass exploration drilling.</p>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<p>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.</p> <p>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.</p>	<p>The Dante Project is in the West Musgraves of Western Australia. The Project includes 2 exploration licences E69/3401 and E69/3552.</p> <p>The licences E69/3401 and E69/3552 are 100% held by 97992001 Pty Ltd a wholly owned subsidiary of Dante Resources Pty Ltd.</p> <p>A Native Title Agreement is currently in place with the Ngaanyatjarra Land Council.</p> <p>Initial heritage surveys have been completed over key focus areas, and progressive heritage survey work remains ongoing. Flora and Fauna surveys are in progress.</p>
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	<p>Datasets from previous explorers include full coverage airborne electromagnetic and magnetics; auger geochemical drillholes; reverse circulation (RC) and diamond core drillholes; an extensive rock chip database; ground electromagnetics and gravity (extended historical datasets continue to be under further review).</p> <p>The Dante Project has had substantial historical exploration. Historical exploration on the Dante Project has been summarised below with most of the work reported being conducted between 1998 and 2016.</p> <p>Western Mining Corporation (WMC) conducted RC and diamond drilling, rock chip sampling, soils, gravity, airborne magnetics between 1998 – 2000. WMC flew airborne electromagnetics over the Dante Project area.</p> <p>Traka Resources between 2007 and 2015 completed approximately 3,500 auger drillholes, 10 RC drillholes and 2 diamond drillholes and collected rock chips and soil samples. Geophysics included ground-based electromagnetics geophysics over 5 locations. Western Areas Ltd partnered with Traka and completed some RC drilling and ground based EM during this period.</p> <p>Anglo American Exploration between 2012 and 2016 flew airborne EM and collected rock chips in a Joint Venture with Phosphate Australia.</p>

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Musgrave Province comprises an elongate east west trending belt of Neo Proterozoic terrain approximately 800km long by 350km wide. It represents continental crust sandwiched between the Archaean and Palaeo-Proterozoic Western and South Australian Cratons, and the Palaeo-proterozoic Northern Australian Craton. The main structure of the Musgrave Block is the east west trending Mann Fault and Woodroffe Thrust that extends the full 800km length of the Block. The Giles Event led to the emplacement of the Giles Complex, a series of layered mafic-ultramafic intrusives. The Giles Complex layered intrusions and their immediate host rocks are considered to be prospective for platinum-group element (PGE) reefs in the ultramafic-mafic transition zones of layered intrusions, and in magnetite layers of the differentiated portions of the intrusions.</p> <p>The Dante Project within the Giles Complex includes identified PGE-Au reefs and is seen as prospective for magmatic Ni-Cu-PGE deposits.</p>
<b>Drill hole Information</b>	<p><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></p> <p><i>easting and northing of the drill hole collar</i></p> <p><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></p> <p><i>dip and azimuth of the hole</i></p> <p><i>down hole length and interception depth</i></p> <p><i>hole length.</i></p> <p><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 Person should clearly explain why this is the case.</i></p>	See figure Hole Plan, Table Collars and Table Intercepts in body of announcement.



Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<p><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></p> <p><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></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>Length weighted averages were calculated in intercepts of zones where composite samples and 1m splits span the intercept.</p> <p>Samples &gt;0.1g/t PGE3 and &gt;0.1% Cu were considered significant and reported in table Intercepts. No high cut-off was applied. A maximum of 2m internal waste was allowed in each intercept.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></p>	<p>Calculated intervals are based on down hole intersections as true widths are not known.</p> <p>Holes were designed to be perpendicular to mapped dip and strike. Estimated dip of the target lithology is 30 degrees and holes drilled at -60 degrees. However true widths of mineral intersects cannot be accurately determined by drill density at this stage.</p>
<b>Diagrams</b>	<p><i>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.</i></p>	<p>Appropriate maps and diagrams relevant to the data are provided in the document. All relevant data has been displayed on the diagrams which are appropriately geo-referenced.</p>
<b>Balanced reporting</b>	<p><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></p>	<p>All results above 0.1g/t PGE3 have been reported.</p> <p>All intercepts over 0.1% Cu have been reported.</p>
<b>Other substantive exploration data</b>	<p><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></p>	<p>All meaningful and material exploration data has been reported.</p>

Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><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></p>	<p>Infill and extensional RC drilling is planned at the Crius, Hyperion and Oceanus Reefs. Shallow Diamond drilling is planned at the reefs to further assess mineralogy, structure and for metallurgical assessment.</p> <p>A new Programme of Works has been submitted for approval to DMIRS for further infill and extensional drilling planned, with Traditional Owners contacted for further Heritage surveys. Furthermore, flora consultants have been contracted to complete requisite surveys. The Author is of the opinion that these approvals are forthcoming and see's no reason, given the Company has completed these activities previously and to a high standard, that these will be forthcoming.</p>