## ASX Announcement

Friday, 11 November 2022



### Venture discovers 12.5% REE mineralisation at Golden Grove North

### **HIGHLIGHTS**

Venture has received Very High Grade Rare Earth Element ("REE") surface sample results at the Vulcan prospect within the Golden Grove North project (Refer to Figure 1). Results included several values over 1% Total Rare Earth Oxide ("TREO") ranging up to 12.5% TREO with 5,460 ppm (0.55%) Praseodymium Oxide (Pr<sub>6</sub>O<sub>11</sub>) and 14,575 ppm (1.46%) Neodymium Oxide (Nd<sub>2</sub>O<sub>3</sub>) (Refer to Table 1).

The new REE target is supported by historic soil sampling originally focused on Volcanic Massive Sulfide ("VMS") style mineralisation that was also assayed for two REEs being Lanthanum ("La") and Cerium ("Ce"). Recently completed soil sampling, in which the Total Rare Earth Elements ("TREE") were analysed, confirmed and defined the new discovery (Refer to Figure 2).

▼ The Company has prioritised this Very High Grade REE target for follow up work, focusing on fully defining the nature and scale of this REE opportunity.

**Venture's Managing Director commented** "The discovery of Very High Grade Rare Earth mineralisation at one of our VMS prospects at Golden Grove North, effectively doubles the Company's exposure to the Rare Earth space, as it follows our recent Rare Earth discovery at Mount Lindsay.

Clearly the Company's diverse portfolio of projects affords the unique opportunity for such discoveries, due to Venture's strategic landholdings in areas with the potential to host multiple mineralised systems, consequently leading to a higher probability of exploration success. The Company looks forward to keeping shareholders updated on the testing of these exciting new opportunities."

Venture Minerals Limited **(ASX code: VMS)** ("Venture" or the "Company") is pleased to announce the discovery of Very High Grade REE surface mineralisation at the Vulcan prospect within the Golden Grove North project. Results included several values over 1% TREO ranging up to 12.5% TREO with 5,460 ppm (0.55%) Praseodymium Oxide  $(Pr_6O_{11})$  and 14,575 ppm (1.46%) Neodymium Oxide  $(Nd_2O_3)$ .

The new REE target is supported by historic soil sampling originally focused on VMS style mineralisation that was also assayed for two REEs being La and Ce. Recently completed soil sampling in which the TREE suite was analysed (all 14 Rare Earth elements excluding Promethium plus Yttrium), confirmed and defined the discovery. In addition, Venture's previously drilled diamond core hole VUDD001 targeting VMS style mineralisation adjacent to the new REE target intersected anomalous La and Ce, but the hole was not drilled deep enough to test this new target (*Refer to Figure 2 and Table 2*).

The Company has prioritised this Very High Grade REE target for follow up work, focusing on fully defining the nature and scale of this REE opportunity.





Venture recently completed a ground based, moving, in-loop transient electromagnetic (MLTEM) survey (14.5-line kilometres) over prospective areas to the west of Orcus, as part of a larger EM survey (37.65-line kilometres) completed over other untested areas on E59/1989, including Vulcan North and the ultramafics in the north-western part of the tenement (*Refer to Figure 1*). The only conductors of note delineated by the survey were west of Orcus and deemed to be relatively small and of lower prospectivity, and therefore were unlikely to be followed up with drilling at this stage (*Refer to Figure 3*).

### Highlights at the Golden Grove North Project include:

- 288 km² located less than 10 kilometres from the Golden Grove Mine;
- 25 strike kilometres of a largely untested, prospective geological sequence for VMS style
  mineralisation with early exploration success yielding the Vulcan and Neptune VMS targets;
- EM surveys at Vulcan have discovered four high priority VMS drill targets at and around the Copper-Gold Prospect along strike to the Golden Grove Zinc-Copper-Gold Mine (Refer to ASX Announcement 6 August 2020);
- Historic shallow gold drill intersections including 10 metres @ 1.4g/t gold from 16m, 8 metres @ 2.1g/t gold from 6m, 6 metres @2.3g/t gold from 6 metres and 3 metres @ 3.6g/t gold from 95 metres (Refer to ASX Announcement 30 October 2018);
- Historic surface rock chip sampling has returned assays including 9.4g/t gold, 7.4g/t gold & 6.6% copper, 6.2g/t gold, 5.7g/t gold, 4.0 g/t gold, 3.8g/t gold & 3.1% lead, 7.6% copper & 0.1% zinc, 8.0% copper, 2.0% copper, 1.8% copper & 3g/t silver (Refer to ASX Announcement 30 October 2018).

### **Golden Grove Camp (Mine)**

The Golden Grove Camp, 370 kilometres north-northeast of Perth, is the prime VMS occurrence in the Archean Yilgarn Craton of Western Australia with over twelve deposits discovered over 13 kilometres of strike. The first significant deposit, Gossan Hill (15.9Mt @ 2.6% Cu, 1.5% Zn, 0.2% Pb, 21 g/t Ag & 0.6 g/t Au¹) was discovered in 1971, then in 1979 the second substantial find was identified at Scuddles (10.5Mt @ 1.2% Cu, 11.7% Zn, 0.8% Pb, 89 g/t Ag & 1.1 g/t Au¹) (Refer to Figure 1). At the end of 2002, Golden Grove had an endowment (resources and production) of 40.2Mt @ 1.8% Cu, 0.9% Pb, 7.6% Zn, 103 g/t Ag & 0.8 g/t Au¹.

In February 2017, EMR Capital purchased Golden Grove for \$US210 million, since then EMR has invested more than A\$230 million in Golden Grove<sup>2</sup> and in June 2021 EMR included Golden Grove as the flagship asset of the ASX listing for 29 Metals where the Prospectus for the Initial Public Offer was to raise A\$528 million which was listed on 2 July 2021. The 29 Metals Prospectus states that after 30 years of continuous production there is over 10 years of mine life in reserves for the 1.8Mt per annum operation<sup>2</sup>.

The Prospectus also stated that Golden Grove has a number of in-mine and near-mine growth opportunities including Cervantes<sup>2</sup> (Mineral Resource: 2.3 Mt @ 1.1% Cu, 6.9% Zn, 0.5g/t Au, 34g/t Ag), Xantho Extended and Europa<sup>2</sup> (Mineral Resource: 9.0 Mt @ 8.1% Zn, 1.9% Cu, 34g/t Ag, 0.9g/t Au), Oizon<sup>2</sup> (Mineral Resource: 3.4 Mt @ 2.3% Cu, 2.1% Zn, 26g/t Ag, 0.5g/t Au; open at depth), Gossan Valley<sup>2</sup> (Mineral Resource: 6.1 Mt @ 0.9% Cu, 6.7% Zn, 0.5g/t Au, 16g/t Ag) and Xantho Extended North<sup>2</sup> (Priority target for exploration at Golden Grove). As of 30 June 2020, the Golden Grove Mineral Resources was 58Mt @ 1.6% Cu, 0.7 g/t Au, 4.5% Zn, 30 g/t Ag & 0.3% Pb.

- 1. Department of Mines and Petroleum Report 165, VMS Mineralization in the Yilgarn Craton, Western Australia: A review of known deposits and prospectivity analysis of felsic volcanic rocks by SP Hollis, CJ Yeats, S Wyche, SJ Barnes and TJ Ivanic 2017.
- 2. 29 Metals Replacement Prospectus 2<sup>nd</sup> July 2021.



Figure 1 | Golden Grove North Project - Geological setting with historic rock chip surface sample results, Vulcan geochemical copper anomaly, Gossan Hill historic geochemical copper anomaly and Venture's priority VMS targets

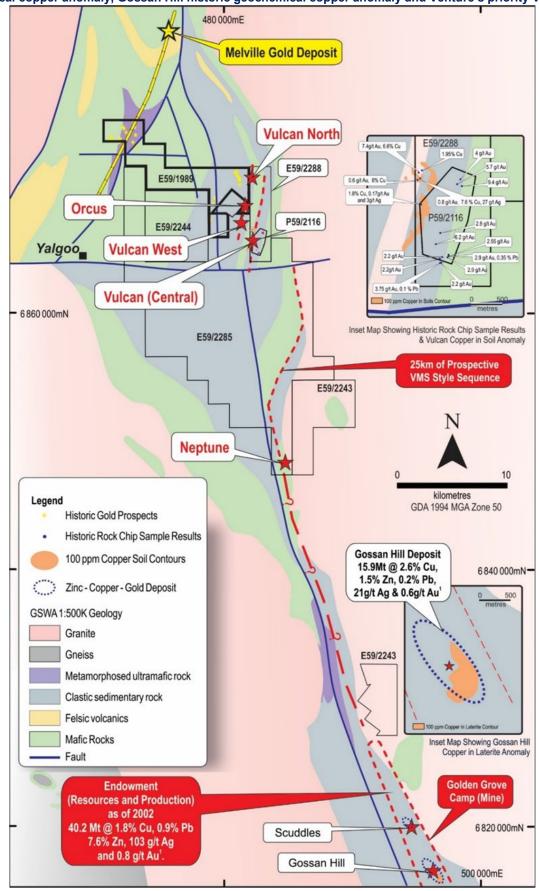




Figure 2 | Golden Grove North Project - Vulcan prospect: Geology Map showing REE Surface Sampling Results

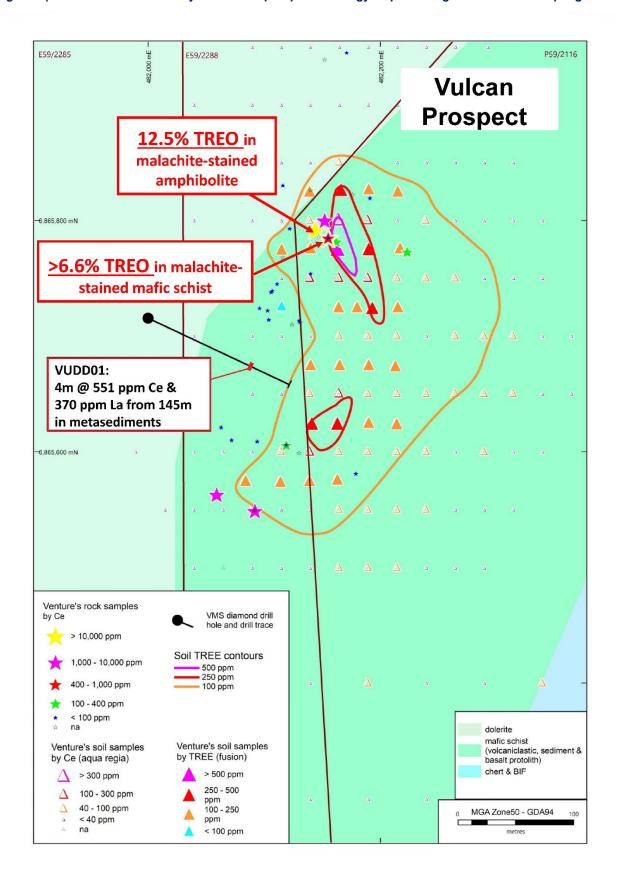
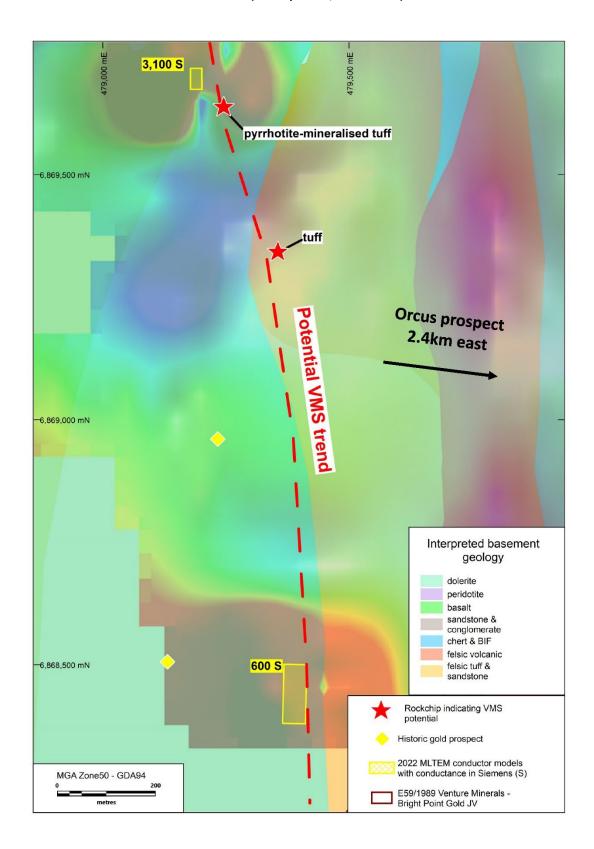




Figure 3 | Golden Grove North Project - west of Orcus prospect: Geology Map with MLTEM survey imagery (Z component, Channel 20)





### Table One | Vulcan Rock Chip Surface Sampling REE assays. See Appendix One for information on sampling and analytical methods used.

Hole	East MGA 55 GDA94	North MGA 55 GDA94	Description	TREO ppm	La₂O₃ ppm	CeO <sub>2</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Nd₂O₃ ppm	Sm <sub>2</sub> O <sub>3</sub>	Eu₂O₃ ppm	Gd₂O₃ ppm	Tb <sub>4</sub> O <sub>7</sub>	Dy₂O₃ ppm	Ho <sub>2</sub> O <sub>3</sub>	Er₂O₃ ppm	Tm <sub>2</sub> O <sub>3</sub>	Yb₂O₃ ppm	Lu <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub> ppm
AJYE018	482144	6865792	laminated monazite? -bearing amphibolite with malachite.	125,165	43,166	57,716	5,460	14,575	1,537	127	832	74	318	47	98	11	56	6	1,140
AMGG009	482162	6865782	Schistosed mafic schist, malachite + azurite staining.	1,046	339	430	54	149	16	2	10	1	6	1	3	<1	3	<1	33
AMGG010A	482155	6865785	Mafic schist, malachite stained.	>66,207	21,407	32,665	>1,208*	8,045	877	69	464	44	224	39	91	10	48	6	1,010
AMGG010B	482155	6865785	quartz vein boulders, malachite veinlets.	291	61	99	12	38	7	1	7	1	7	2	5	1	4	1	46
AMGG010C	482155	6865785	andalusite in black schist.	433	130	158	15	50	8	1	8	1	7	2	5	1	4	1	45
AMGG010D	482155	6865785	Siliceous ferricrete, chalcedony, common malachite.	1,947	584	987	81	208	23	4	12	1	8	1	3	<1	2	<1	32
AMGG011A	482152	6865800	Gypsum vein, rare malachite.	17,876	7,542	8,117	561	1,335	125	10	55	5	23	4	8	1	5	1	85
AMGG011B	482152	6865800	malachite +/- azurite stained mafic schist & saprolite.	10,718	3,237	5,170	477	1,353	156	15	87	8	37	6	14	2	9	1	146
AMGG011C	482152	6865800	Tremolite? in altered rock, mafic protolith	1,554	382	786	79	233	26	2	12	1	5	1	2	<1	2	<1	23
AMGG011D	482152	6865800	Mafic schist, vuggy, no alteration.	173	34	67	6	21	4	1	4	1	4	1	2	<1	2	<1	26
AMGG011E	482152	6865800	Mafic schist with malachite + azurite.	16,700	4,962	8,178	774	2,163	224	20	113	9	47	7	15	2	10	1	174
AMGG010E	482155	6865785	Hematitic chert, garnet, fresh chalcopyrite.	na	35	62	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG149	482171	6865945	Serpentine altered ultramafic.	na	<12	6	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG153	482116	6865830	Epidote altered dolerite.	na	<12	16	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG159	482122	6865793	Epidote altered dolerite.	na	<12	11	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG164B	481998	6865767	Amphibole altered gabbro.	na	12	59	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG166A	482191	6865819	Dolerite.	na	12	18	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG166B	482191	6865819	Dolerite with epidote +/- pyrite veinlet.	na	<12	19	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG168A	482223	6865773	Cherty metasandstone, amphibole alteration.	na	12	14	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG168B	482223	6865773	Cherty metasandstone, sericite alteration.	na	<12	11	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG168C	482223	6865773	Basalt.	na	176	287	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG170	482140	6865754	Mafic schist with amphibole alteration.	na	59	99	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG171A	482106	6865738	Siltstone, magnetite alteration.	na	12	7	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG171C	482106	6865738	Malachite stained regolith.	na	12	11	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG172	482111	6865745	Basalt.	na	23	40	na	na	na	na	na	na	na	na	na	na	na	na	na



Hole	East MGA 55 GDA94	North MGA 55 GDA94	Description	TREO ppm	La₂O₃ ppm	CeO <sub>2</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Nd₂O₃ ppm	Sm <sub>2</sub> O <sub>3</sub>	Eu <sub>2</sub> O <sub>3</sub>	Gd₂O₃ ppm	Tb <sub>4</sub> O <sub>7</sub>	Dy₂O₃ ppm	Ho <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Tm <sub>2</sub> O <sub>3</sub>	Yb₂O₃ ppm	Lu <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub> ppm
AMGG173	482107	6865739	Dolerite, no alteration.	na	<12	13	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG174	482131	6865712	Quartz-amphibole gneiss.	na	12	28	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG175	482130	6865713	Gneiss with magnetite and amphibole alteration.	na	12	20	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG177B	482104	6865714	Gneiss with magnetite and amphibole alteration.	na	12	21	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG178	482096	6865724	Strongly epidote altered dolerite.	na	12	14	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG179A	482103	6865722	Cherty gneiss, light green stain.	na	12	21	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG187A	482179	6865581	Basalt, sericite alteration.	na	59	112	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG187B	482179	6865581	Metachert.	na	23	28	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG190A	482119	6865606	Basalt.	na	12	13	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG190B	482119	6865606	Meta-sediment? totally overprinted by amphibole alteration.	na	129	375	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG190D	482119	6865606	Tremolite schist.	na	47	55	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG192B	482094	6865609	Regolith.	na	12	12	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG193A	482072	6865610	Hematitic chert, relicts of tremolite alteration, malachite staining.	na	12	8	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG193B	482072	6865610	Basalt.	na	12	29	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG194B	482063	6865621	Amphibolite.	na	12	14	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG196A	482059	6865563	Biotite altered basalt, malachite.	na	3,026	5,170	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG196B	482059	6865563	Siliceous basalt, >30% malachite + azurite staining.	na	1,724	2,579	na	na	na	na	na	na	na	na	na	na	na	na	na
AMGG197	482092	6865549	Ferricrete with malachite stain + purple chalcedony.	na	1,009	1,566	na	na	na	na	na	na	na	na	na	na	na	na	na

TREO represents the sum of 14 Rare Earth elements excluding Promethium plus Yttrium expressed as oxides. na = not assayed.



<sup>\*</sup>AMGG010A returned above upper limit of detection for Pr (ULD: 1,000 ppm) but was not re-assayed.



Table Two | VUDD001 REE assays. See Appendix One for information on sampling and analytical methods used.

Hole	From m	To m	Interval m	Rocktype	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm
VUDD001	110	112	2	metasediment	<23	<25
VUDD001	112	114	2	metasediment	<23	<25
VUDD001	114	116	2	metasediment	<23	<25
VUDD001	116	118	2	metasediment, amphibole & magnetite alteration	<23	31
VUDD001	118	120	2	metasediment, amphibole & magnetite alteration	<23	41
VUDD001	120	122	2	metasediment, amphibole & magnetite alteration	<23	32
VUDD001	122	124	2	metasediment, amphibole & magnetite alteration	29	48
VUDD001	124	125	1	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	125	126	1	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	126	127	1	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	127	128	1	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	128	129	1	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	129	130	1	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	130	131	1	meta-BIF*	<23	<25
VUDD001	131	132	1	meta-BIF*	<23	<25
VUDD001	132	133	1	metasediment	<23	<25
VUDD001	133	133.5	0.5	metasediment	<23	<25
VUDD001	133.5	134	0.5	metasediment	<23	<25
VUDD001	134	134.5	0.5	metasediment	<23	<25
VUDD001	134.5	135	0.5	meta-BIF*	25	47
VUDD001	135	135.5	0.5	meta-BIF*	<23	<25
VUDD001	135.5	136	0.5	meta-BIF*	<23	<25
VUDD001	136	136.5	0.5	meta-BIF*	29	55
VUDD001	136.5	137	0.5	meta-BIF*	<23	41
VUDD001	137	137.5	0.5	metasediment	<23	38
VUDD001	137.5	138	0.5	metasediment	<23	31
VUDD001	138	138.5	0.5	metasediment	<23	<25
VUDD001	138.5	139	0.5	metasediment	<23	<25
VUDD001	139	139.5	0.5	metasediment, amphibole & magnetite alteration	33	56
VUDD001	139.5	140	0.5	metasediment, amphibole & magnetite alteration	<23	26
VUDD001	140	140.5	0.5	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	140.5	141	0.5	metasediment, amphibole & magnetite alteration	45	75
VUDD001	141	141.5	0.5	metasediment, amphibole & magnetite alteration	<23	29
VUDD001	141.5	142	0.5	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	142	142.5	0.5	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	142.5	143	0.5	metasediment, amphibole & magnetite alteration	<23	26
VUDD001	143	144	1	metasediment, amphibole & magnetite alteration	<23	44
VUDD001	144	145	1	metasediment, amphibole & magnetite alteration	28	52
VUDD001	145	146	1	metasediment, amphibole & magnetite alteration	691	1,073
VUDD001	146	147	1	metasediment, amphibole & magnetite alteration	185	287
VUDD001	147	148	1	metasediment, amphibole & magnetite alteration	317	486
VUDD001	148	149	1	metasediment, amphibole & magnetite alteration	542	858
VUDD001	149	151	2	microdolerite	5	14



Hole	From m	To m	Interval m	Rocktype	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm
VUDD001	151	153	2	microdolerite	5	12
VUDD001	153	155	2	microdolerite	7	16
VUDD001	155	157	2	microdolerite	6	14
VUDD001	157	159	2	microdolerite	5	12
VUDD001	159	161	2	quartz vein	4	11
VUDD001	161	163	2	metasediment, amphibole & magnetite alteration	5	11
VUDD001	163	165	2	metasediment, amphibole & magnetite alteration	4	10
VUDD001	165	167	2	dolerite	6	14
VUDD001	167	169	2	dolerite	6	16
VUDD001	169	171	2	dolerite	12	24
VUDD001	171	173	2	dolerite	<23	<25
VUDD001	173	175	2	dolerite	<23	<25
VUDD001	175	177	2	dolerite	<23	<25
VUDD001	177	179	2	dolerite	<23	<25
VUDD001	179	181	2	dolerite	<23	<25
VUDD001	186.3	187.4	1.1	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	191	192	1	metasediment, amphibole & magnetite alteration	93	139
VUDD001	192	194	2	metasediment, amphibole & magnetite alteration	<23	<25
VUDD001	194	196	2	metasediment, amphibole & magnetite alteration	<23	<25

Non-shaded intervals indicate samples assayed via fusion.

Shaded intervals indicate samples assayed via 4-acid digest.

\*BIF : banded iron formation



Authorised by the Managing Director on behalf of the Board of Venture Minerals Limited.

Yours sincerely

ary -

# Andrew Radonjic Managing Director

The information in this report that relates to Exploration Results, Exploration Targets and Minerals Resources is based on information compiled by Mr Andrew Radonjic, a fulltime employee of the company and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Andrew Radonjic has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Andrew Radonjic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **About Venture**

Venture Minerals Ltd (ASX: VMS) has refocused its approach to developing the Mount Lindsay Tin-Tungsten Project in northwest Tasmania, already one of the world's largest undeveloped Tin-Tungsten deposits. With the recognition of Tin as a fundamental metal to the battery revolution and Tungsten being a critical mineral, Venture has commenced an Underground Feasibility Study on Mount Lindsay that will leverage off the previously completed open-pit feasibility work. At the neighbouring Riley Iron Ore Mine, the mine is prepared for a quick restart should the market conditions become favourable. In Western Australia, Chalice Mining (ASX: CHN) recently committed to the second stage of the JV which requires a further \$2.5 million of expenditure over the next two years to earn a further 19% interest (for a total of 70%) in Venture's South West Project. At the Company's Golden Grove North Project, downhole EM has delineated a large conductor under High Grade Zinc-Copper-Gold drill intersections within the 5km long Volcanogenic Massive Sulfide Target Zone, along strike to the world class Golden Grove Zinc-Copper-Gold Mine. Venture has a significant Nickel-Copper-PGE landholding at Kulin with two highly prospective 20-kilometre long Ni-Cu-PGE targets within the Kulin Project.

### **COVID-19 Business Update**

Venture is responding to the COVID-19 pandemic to ensure impacts are mitigated across all aspects of Company operations. Venture continues to assess developments and update the Company's response with the highest priority on the safety and wellbeing of employees, contractors and local communities. Venture will utilise a local workforce and contractors where possible.

### **Authorised by:**

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### **Appendix One**

### JORC Code, 2012 Edition | 'Table 1' Report

### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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.</li> </ul>	<ul> <li>The Vulcan Prospect as shown in Figure 2 has been defined by geological mapping, surface sampling and drilling. Previously non-assayed intervals of VUDD001 were sampled and submitted to commercial assay laboratory for assays of REEs. Refer to ASX Announcement 29 October 2021 for Venture's VUDD001 drilling.</li> <li>Vortex Geophysics Pty Ltd (Vortex) was contracted to conduct a Moving Loop Transient Electromagnetic (MLTEM) survey over selected parts of Venture's Golden Grove North Project using an 73A transmitter, 200 m x 200 m loops, a SMART Fluxgate sensor and SMARTem24 receiver. Infill parts of the survey were conducted using 100 m x 100 m loops. A total of 14.5 line-km of MLTEM data were acquired over an area west of the Orcus prospect. Receiver line spacing was 50-100 m approximately perpendicular to the known stratigraphy (090 degrees UTM), tie lines were not designed. Data quality control was carried out on a daily basis by Vortex on site. Supervision, data processing and target modelling was conducted by Core Geophysics Pty Ltd.</li> <li>The area west of the Orcus prospect as shown in Figure 3 has been defined by geological mapping, surface sampling and by Vortex's MLTEM survey as organised by Venture Minerals Ltd ("Venture").</li> </ul>
Drilling techniques	Drill type (e.g.: core, reverse circulation, openhole 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).	Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.     Measures taken to maximise sample recovery and ensure representative nature of the samples.     Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.      Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.      The total length and percentage of the relevant intersections logged.	Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling.     Mineral Resources have not been estimated.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling original sampling details.</li> <li>For subsequent 2022 VUDD001 sampling:         <ul> <li>The cutting and sampling of core samples was conducted by a Venture Minerals field technician using a diamond core saw under supervision of a suitably qualified Venture Minerals geologist.</li> <li>Potentially mineralised zones were ½ core sampled in 2.00 m long geological intervals.</li> <li>Core samples were collected into calico bags and submitted to ALS Geochemistry Perth ("ALS") where they were dried, crushed, and entirely pulverised to nominally 85% passing 75 microns for assay.</li> <li>Core sampling was continuous leaving continuous remnant half core (minimum) in the trays for future reference.</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Core sample weights for assay ranged from 2.45 kg to 3.01 kg each (mean 2.66 kg).</li> <li>The assay results match observed mineralisation well and the ½ core sample sizes are considered adequate for the observed mineralisation.</li> <li>Duplicates were not used.</li> <li>Rock chip samples were collected by a suitably qualified geologist.</li> <li>Venture soil samples were sieved in the field to - 1.6mm then submitted to ALS where they were dried and pulverised to nominally 85% passing 75 microns for assay.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling original sampling details.</li> <li>Assaying of drill samples was conducted by ALS using a lithium borate fusion at 1025 deg C followed by nitric + hydrochloric + hydrofluoric acid digestion of the melt and ICP-MS finish (ALS method ME-MS81) or by Intertek Genalysis, Perth ("Intertek") using an industry standard 4 acid (perchloric, nitric, hydrochloric and hydrofluoric) digestion with ICP-OES finish. Commercial reference materials were included in drill sample submission for fusion to ALS at a minimum rate of one standard per 12 samples in fusion submissions and results are within 5% of the reference values for Ce, Dy, Er, Lu, Nd, Sm, Tm and Yb, within 10% of the reference value for Gd, La and Tb. No adequate commercial reference value for Gd, La and Tb. No adequate commercial reference REE material was included in drill sample submissions for 4-acid digest assays to Intertek but internal commercial laboratory standards reported within the target ranges.</li> <li>Assaying of 2020 VMS soil samples was conducted by ALS for a broad suite of elements including Ce and La by 25g aqua-regia gold digestion with ICP-AES finish. Commercial reference materials were included in Venture's soil samples submission to ALS at a minimum rate of one standard per 65 samples and results are within 34% of the reference values for Ce and La.</li> <li>Assaying of 2022 soil samples was conducted by ALS for a broad suite of elements including all REE but not Promethium plus Yttrium using a lithium borate fusion at 1025 deg C followed by nitric + hydrochloric + hydrofluoric acid digestion of the melt and ICP-MS finish (ALS method ME-MS81h). Commercial reference materials were included in Venture's soil sample submission to ALS at a minimum rate of one standard per 20 samples and results are within 5% of the reference value for Ge, La and Tb.</li> <li>Assaying of rock chip samples was conducted by ALS using a lithium borate fusion at 1025 deg C followed by n</li></ul>
Verification of sampling and assaying	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.	Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling.     The assay results are compatible with observed mineralogy.     Primary data is stored and documented in industry standard ways.     Twinned holes were not used and not considered necessary at this early stage of exploration.     Venture Minerals assay data is as reported by Intertek and has not been adjusted in any way.



Criteria	JORC Code explanation	Commentary
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.     Specification of the grid system used.     Quality and adequacy of topographic control.	<ul> <li>Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling.</li> <li>Refer to ASX Announcement 15 September 2020 regarding Venture 2020 soil sampling.</li> <li>Vulcan 2022 soil sample locations were determined by handheld Garmin GPSMAP65 considered accurate to ±3 m, all co-ordinates were recorded in MGA Zone 50 datum GDA94.</li> <li>Rock samples locations were determined by handheld GPS considered accurate to ±5 m, all co-ordinates were recorded in MGA Zone 50 datum GDA94.</li> <li>Topographic control provided by government 250,000 topographic map sheets and a Digital Terrain Model based on the 30 m Shuttle Radar Topographic Mission data.</li> </ul>
Data spacing and distribution	Data spacing for reporting of Exploration Results.     Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.     Whether sample compositing has been applied.	<ul> <li>Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling.</li> <li>Refer to ASX Announcement 15 September 2020 for Venture 2020 soil sampling.</li> <li>Soil sample locations and spacing over the Vulcan Prospect ranged from c. 50 x 100 m to 25 x 25 m as shown in Figure 2.</li> <li>The reported drill results are not sufficient to establish mineral resources.</li> <li>Sample compositing has not been applied.</li> </ul>
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.      If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling.</li> <li>Refer to ASX Announcement 15 September 2020 for Venture 2020 soil sampling.</li> <li>2022 Vulcan soil sampling was orientated approximately perpendicular to the dominant stratigraphic and structural fabrics and observed mineralisation trends.</li> <li>Rock chip sampling was of reconnaissance nature and aimed at studying Vulcan mineralisation, alteration and country rocks.</li> <li>The MLTEM survey lines were perpendicular to stratigraphy and the target mineralisation orientation.</li> </ul>
Sample security	The measures taken to ensure sample security.	Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling. Refer to ASX Announcement 15 September 2020 for Venture 2020 soil sampling. The chain of custody for Venture soil and rock chip samples from collection to dispatch to assay laboratory was managed by Venture personnel. Sample numbers were unique and did not include any locational information useful to non-Venture personnel. The level of security is considered appropriate.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling. Refer to ASX Announcement 15 September 2020 for Venture 2020 soil sampling. Reported 2022 rock chip and soil sampling of the Vulcan Prospect confirm Vulcan 2020 REE Target. The assay results agree well with the observed materials.



### **Section 2 Reporting of Exploration Results**

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

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	<ul> <li>The Golden Grove North Project consists of Exploration Licences 59/2243, 59/2244, 59/2285, 59/2288, 59/2506, 59/1989, and Prospecting Licence 59/2116.</li> <li>Exploration Licences 59/2243, 59/2244, 59/2285 and 59/2288 are 100% held by Venture Z Ltd (a wholly owned subsidiary of Venture Minerals Ltd), whilst Prospecting Licence 59/2116 is 100% held by Venture Minerals Ltd.</li> <li>Venture Minerals has entered into a Joint Venture agreement with Bright Point Gold Ltd over E59/1989 as outlined in previous Venture Minerals announcements to the ASX and additionally available from <a href="http://ventureminerals.com.au">http://ventureminerals.com.au</a>.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Documented previous explorers within the area now covered by Golden Grove North most notably include Merritt Mining NL, Prosperity Resources Ltd, Comet Resources Ltd, Ferrowest Limited, Aurox Resources Ltd and Arimco Mining Pty Ltd.     Refer to previous Venture Minerals announcements to the ASX and additionally available from <a href="http://ventureminerals.com.au">http://ventureminerals.com.au</a> for historic drill holes around Vulcan and soil sampling as announced to ASX on 15 September 2020 and 30 October 2018.
Geology	Deposit type, geological setting and style of mineralisation.	The exploration area is within the northern part of the Yalgoo-Warriedar greenstone belt of the Western Australian Archean Yilgarn Craton. This regional greenstone belt consists of supercrustal sediments, felsic vocaniclastics, mafic/ultramafics and basal granitoids, bounded by granitic batholiths. The fold belt is characterised by heterogeneous deformation, with narrow zones of high strain separating weakly deformed zones. The western half of Yalgoo covers mainly greenstones, whereas the eastern half is dominated by granitic rocks. The Yalgoo greenstone belt contains numerous gold, BIF-hosted iron, and base metal deposits. Regional aeromagnetic highlights the distinctive magnetic BIF units present within the western half of Yalgoo.  The southern section of the project is located on the northeastern flank of the Warriedar Fold Belt in the Golden Grove Domain. The Golden Grove Domain has a layered stratigraphy that is laterally continuous over some 30 kms. Within this, the Golden Grove Formation is a layered rhyodacitic volcaniclastic succession that underlies and hosts VMS deposits. Dacitic and rhyodacitic volcanics of the Scuddles Formation are the main rock types of the hanging wall. Bedded tuffaceous volcaniclastic rocks of the Golden Grove Formation are subdivided into six members, based on facies, grain-size variation, abundance of volcanic quartz grains and bedding characteristics.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling. All other historical drill holes are not material and their exclusion does not detract from the understanding of this report as the historical drilling is focussed on iron mineralisation where the report is focussed on REE mineralisation.
Data aggregation methods	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.	Assay results given in Tables 1 & 2 represent respectively the rock chip samples and drill core as sampled and assayed.     Upper cuts have not been applied.     Metal equivalents have not been applied.     Standard element to oxide conversion factors have been used:



Criteria	Explanation	Commentary					
	Where aggregate intercepts incorporate short	La <sub>2</sub> O <sub>3</sub>	1.173	Tb <sub>4</sub> O <sub>7</sub>	1.176		
	lengths of high grade results and longer lengths of low grade results, the procedure used for such	CeO <sub>2</sub>	1.228	Dy <sub>2</sub> O <sub>3</sub>	1.148		
	aggregation should be stated and some typical examples of such aggregations should be shown	Pr <sub>6</sub> O <sub>11</sub>	1.208	Ho <sub>2</sub> O <sub>3</sub>	1.146		
	in detail.	Nd <sub>2</sub> O <sub>3</sub>	1.166	Er <sub>2</sub> O <sub>3</sub>	1.143		
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Sm <sub>2</sub> O <sub>3</sub>	1.16	Tm <sub>2</sub> O <sub>3</sub>	1.142		
		Eu <sub>2</sub> O <sub>3</sub>	1.158	Yb <sub>2</sub> O <sub>3</sub>	1.139		
		Gd <sub>2</sub> O <sub>3</sub>	1.153	Lu <sub>2</sub> O <sub>3</sub>	1.137		
				Y <sub>2</sub> O <sub>3</sub>	1.27		
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>			isation with respe n REE Target was			
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	<ul> <li>An appropriate exploration plan is included in the body of this release.</li> <li>Refer to ASX Announcement 29 October 2021 for Venture's diamond drilling.</li> <li>Coordinates of the rock chip samples are given in Table 1.</li> </ul>					
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>Rock chip assay results are reported in Table 1.</li> <li>Soil assay results are reported on Figure 2 via thematic maps.</li> <li>Drill assay results and intervals as sampled are reported in Table 2.</li> </ul>					
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	The targets shown in the attached plans have been defined by geological mapping, surface sampling, drilling and by the Moving Loop Transient Electromagnetic (MLTEM) surveying referred to in this announcement and previous Venture Minerals announcements to the ASX.  The project is at a reconnaissance exploration stage and bulk density, geotechnical, hydrogeological and metallurgical work has not been done.  An appropriate exploration plan is included in the body of this release.					
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	work, focusir opportunity.	ng on fully definin exploration target	this Vulcan REE to g the nature and s t plans are include			