31 October 2024

Exceptional high-grade gold intercepts at Christmas Creek

Drilling at the Martin Prospect intersects 10m @ 12.66g/t Au and 10m @ 7.34g/t Au with multi-element analysis identifying two extensive gold trends

Highlights

- **Reverse Circulation (RC) drilling at Trek's flagship Christmas Creek Project in Western Australia has returned exceptional high-grade gold assays from hole 24XCRC097 at the Martin prospect:**
  - **10m @ 12.66g/t Au from 59m, including:**
    - **1m @ 32.6g/t Au; and**
    - **3m @ 29.8g/t Au.**
  - **10m @ 7.34g/t Au from 94m, including:**
    - **2m @ 31.1g/t Au; and**
    - **1m @ 7.85g/t Au.**
- **Results reinforce the outstanding prospectivity at Martin, where historical intercepts from previous owner, Newmont, included[1]:**
  - **7m at 4.9g/t Au from 24m in hole NEWXCAC196, including:**
    - **1m at 29.6g/t Au.**
  - **2m @ 9.65g/t Au from 72m in NEWXCRC012.**
  - **3m @ 2.03g/t Au from 137m, and 4m @ 1.22g/t Au from 8m in NEWXCRC015.**
- **Wide-spaced drilling at Martin has now confirmed strong gold mineralisation over a large footprint measuring ~800m x 500m.**
- **Multi-element analysis identifies two large gold trends extending over ~1km in a north-easterly orientation and ~1.5km in south-easterly orientation. The high-grade hits sit at the intersection of these two trends.**
- **Anomalous gold mineralisation also intersected in drilling at the Zahn and Coogan prospects.**
- **Planning for follow-up exploration at Martin underway, including potential optical and acoustic analysis of the recent holes using a down-hole televiewer, ground IP (if suitable) and petrographic analysis. This will help to refine targeting for follow-up drilling.**

Trek Metals Limited (ASX: **TKM)** ("**Trek**" or the "**Company**") is pleased to advise that it has intersected broad zones of high-grade gold mineralisation in its maiden drilling program at the 100%-owned Christmas Creek Gold and Rare Earth Element Project in the Kimberley region of WA.

The exciting assay results – including **10m at 12.66g/t Au** from 59m and **10m at 7.34g/t Au** from 94m – occur adjacent to a historical intercept of **2m at 9.65g/t Au** drilled by the previous owner, Newmont.

[1] Previously announced significant intercepts and collar tables from historical work at Christmas Creek can be found in Trek's project acquisition announcement via https://investorhub.trekmetals.com.au/announcements/4421568

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In conjunction with other recently obtained information, this has significantly upgraded the potential of the Christmas Creek Project to deliver a greenfields gold discovery.

At least three zones of significant mineralisation have now been intersected at Martin in both Trek and previous Newmont drilling. Recent drilling information and multi-element geochemistry indicates that these three prospects sit within two emerging gold trends which offer outstanding potential for a major new gold discovery (Figure 1).

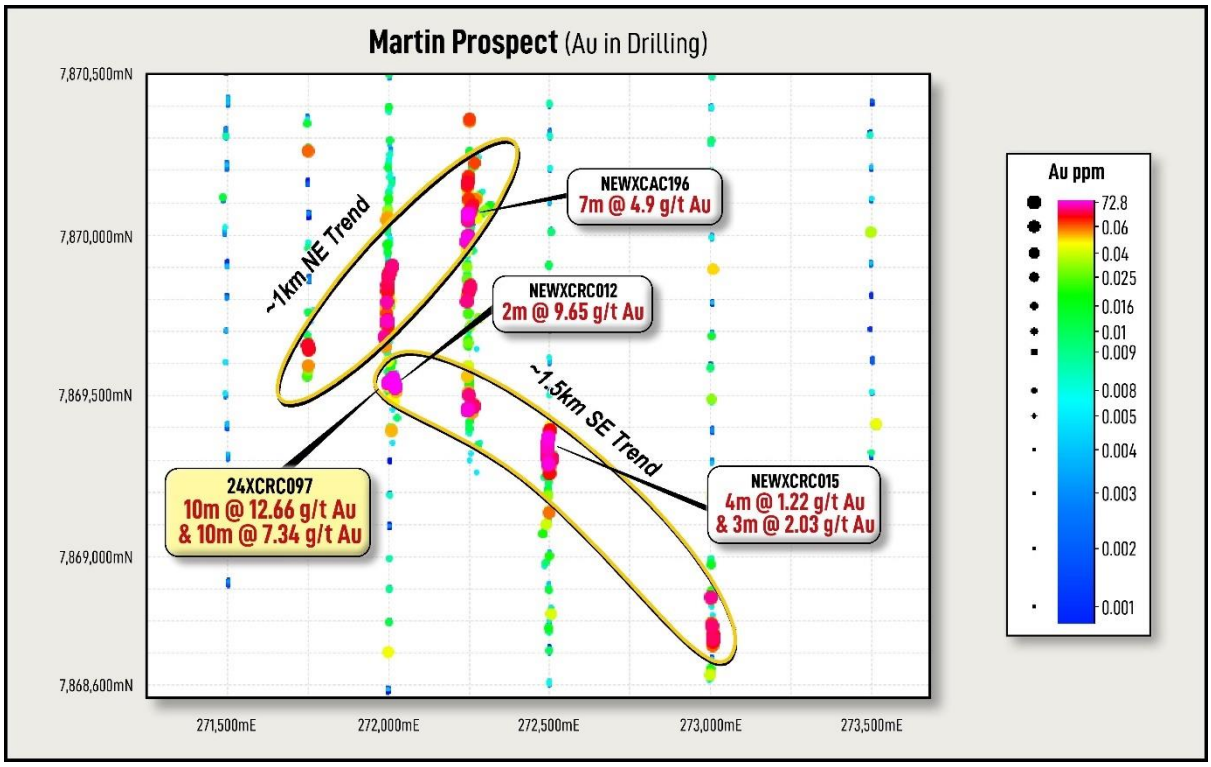

Figure 1 – Martin Prospect gold in drilling results highlighting the two emerging gold trends.

Trek Metals CEO, Derek Marshall, said: *"Given the wide-spaced and reconnaissance nature of our maiden drill program, we are very excited to have delivered such impressive results from Christmas Creek. The broad, high-grade intercepts at Martin confirm the potential for a significant orogenic gold system and, together with previously acquired data, have given us significant momentum towards unlocking what we believe could be a very significant greenfields gold discovery.*

"These results, combined with historical exploration data from Newmont, give us further important insights into the structure of the high-grade mineralisation, with our analysis suggesting a structural regime where the main mineralised trend/s may not have been effectively tested in the drilling completed to date, with significant upside interpreted both along strike and at depth.

"We are now integrating this new drilling data into our structural models to help plan follow-up exploration, which will now likely include a combination of down-hole televiewer surveys and petrographic analysis ahead of drilling.

"We are also excited about the greater potential of the project and have just received preliminary composite soil sampling data. We are now in the process of ranking target areas and choosing primary samples for analysis to generate the next round of greenfield drill targets in this extremely underexplored region of Western Australia."

Summary of Drilling Results

A total of 8,437m of drilling was completed at the Christmas Creek Project in August and September (Table 2). The program focused on four gold prospects – Martin, Coogan, Zahn and Willis – which were identified through the integration and analysis of legacy exploration data, re-processing of geophysical data sets, and the completion of a targeted soil sampling campaign.

Historical drilling at the Martin Prospect initially targeted a very large, 4km diameter gold-in-soil anomaly under thin cover. Exploration at Martin by previous owner, Newmont, was restricted to Air Core (AC) drilling and three Reverse Circulation (RC) sections in the central part of the soil anomaly.

Significant mineralisation was intersected on each RC section, including **7m at 4.9g/t Au** (including 1m at 29.6g/t Au) from 24m in hole NEWXCAC196, **2m @ 9.65g/t Au** from 72m in NEWXCRC012 and **4m @ 1.22g/t** from 8m **and 3m @ 2.03g/t Au** from 137m in NEWXCRC015[1].

Recent assay results from Trek's maiden drilling have returned two significant high-grade intercepts in hole 24XCRC097 comprising:

- **10m @ 12.66g/t Au** from 59m, including:
  - ***1m @ 32.6g/t Au****; and*
  - ***3m @ 29.8g/t Au****.*
- **10m @ 7.34g/t Au** from 94m, including:
  - ***2m @ 31.1g/t Au****; and*
  - ***1m @ 7.85g/t Au****.*

Trek's hole 24XCRC097 was designed to follow up the high-grade intercept of **2m @ 9.65g/t Au** in NEWXCRC012. NEWXCRC012 was the southernmost hole of its drill section and was unconstrained. 24XCRC097 was drilled as a scissor due to the vein orientation identified in NEWXCRC012 by down-hole televiewer data (Figure 2).

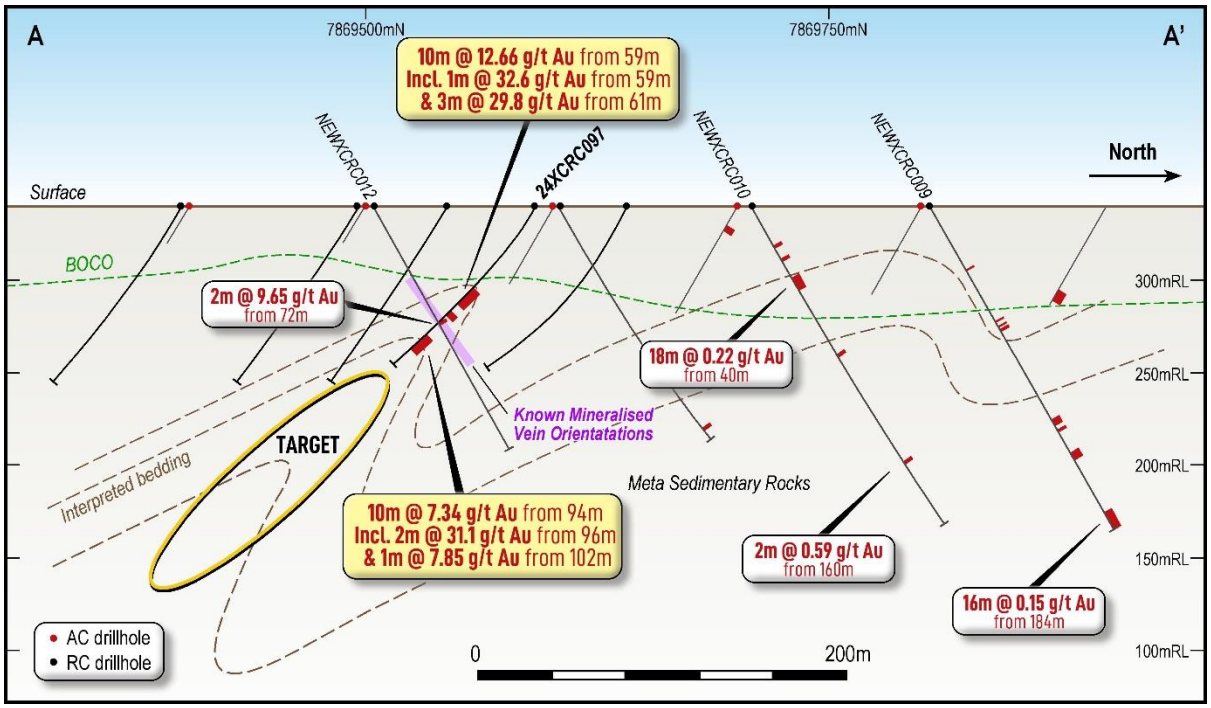

Figure 2 – Cross-section at Martin, highlighting the two significant recent gold intercepts in yellow, the vein orientation in NEWXCRC012, and an interpreted anticline with an untested associated target zone below.

The upper zone of mineralisation in 24XCRC097 aligns well with that seen in NEWXCRC012, with logging of strong silica-sericite alteration, disseminated potassic alteration and millimetre-scale veinlets observed in chips from both holes.

Analysis of the drill chips from 24XCRC097 and NEWXCRC012, together with down-hole televiewer data from hole NEWXCRC012, indicates that a favourable structural position for an orogenic gold target at Martin sits below the extent of the drilling completed to date and has not yet been successfully tested. Follow-up exploration is now being planned at Martin, including down-hole televiewer and petrographic analysis of 24XCRC097 to assist with structural interpretation ahead of follow-up drilling.

The gold in drilling data from the Martin Prospect suggests there are two dominant mineralised trends, with one orientated NE-SW and another SE-NW (Figure 1). This, coupled with the large gold-in-soil anomaly (Figure 3), suggests that there could be a significant orogenic gold system at Martin.

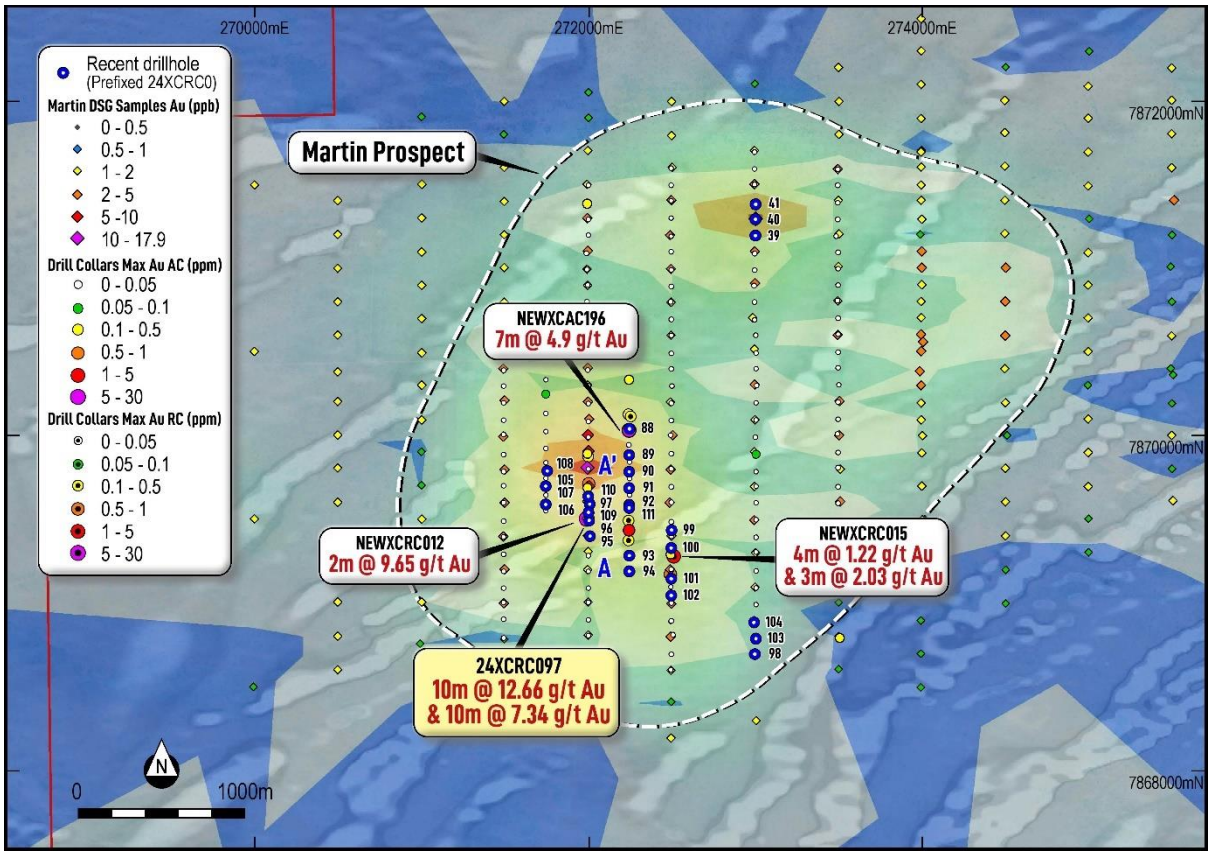

Figure 3. Martin Prospect with coloured contoured surface geochemistry over magnetics, showing recent and legacy drilling highlights. Section markers A & A' relating to Figure 2 are also shown.

Zahn

Zahn is a large (>2km across) surface DSG Au anomaly in an area of thin cover. It has the strongest amplitude of any DSG gold anomaly in the project area but remains unexplained by limited broad-spaced drill testing.

Assay results from recent drilling at Zahn returned broad intercepts of anomalous gold mineralisation, with four-metre composite assays including 20m @ 0.21g/t Au from 24m (24XCRC074) and 8m @ 0.13g/t Au from 52m (24XCRC067). One-metre individual samples will now be submitted for assay, with representative drill chips from the recent drilling to be sent for petrographic analysis.

This newly identified zone of gold mineralisation at Zahn will be a key target for the Company's next round of drilling.

Coogan

Coogan is a gold-rich mineral system with the central drill target for 2024 defined over >1 km of strike. Unlike other prospects within the Project, Coogan is in an area of exposed Paleoproterozoic rocks. Coogan has both a surface geochemical anomaly and locally outcropping quartz veining where rock chip sampling returned values of up to 3.46g/t Au[1].

RC drilling at Coogan intercepted a fertile shear zone with evidence of a hydrothermal gold system. The interpreted extension of this large shear zone has also recently been tested with soil sampling, with assay results being interpreted. The shear zone that hosts Coogan, and its extensions, is clearly a very large and fertile structure. Trek plans to continue targeting along this structure.

Other Prospects

Willis was defined as a large coherent gold geochemical anomaly in an area of thin cover of a monotonous sand plain. In-fill DSG sampling completed in 2022 confirmed a large 3 x 1.5km anomaly, with a central coherent core of 1.5km length. A line of drilling at Willis through the strongest part of the anomaly did not return any significant results.

A coherent anomaly of a limited REE assay suite has been identified to the south of the Zahn gold target, 13km west of RareX's (ASX: REE) Cummins Range REE deposit. Comprising elevated Ce + La + Y, the Zahn South target is a large (2.7km x 900m) elongate ENE trending geochemical anomaly. A single line of drilling across the Zahn South REE target did not return any significant results.

Next Steps

The focus is now to determine the controls on the distribution of high-grade gold mineralisation at Martin and generate/refine robust drill targets across the Christmas Creek Project. Of immediate importance is:

- Down-hole televiewer and structural interpretation.
- Geochemical analysis of 1m split samples from anomalous 4m composite samples.
- Petrology on mineralised samples and host rocks.
- Full geochemical review and interpretation.
- Petrophysical/geochemical back calculations to determine whether Induced Polarisation could be an effective technique for detecting significant quantities of gold mineralisation.
- Finalise interpretation of the recently received composite soil sampling data, including submitting primary samples for assay based on highly anomalous composite samples.

This next round of work is designed to further enhance the Company's understanding of the structure and controls over the mineralisation at the Christmas Creek Project, with this information to support planning for a Phase 2 drilling program targeting a major discovery.

Christmas Creek Project (Kimberley, Western Australia)

Located south-west of Halls Creek, the Christmas Creek Project (Figure 4) comprises a largely concealed district-scale gold and rare earths exploration opportunity in the Kimberley region of WA associated with major continental-scale tectonic lineament intersections.

The Christmas Creek Project was previously part of Newmont Exploration Pty Ltd's (Newmont) global exploration portfolio with Trek acquiring the project in the December 2023 quarter. The Company also secured additional tenement applications, adding to this district-scale greenfields gold and rare earths exploration project.

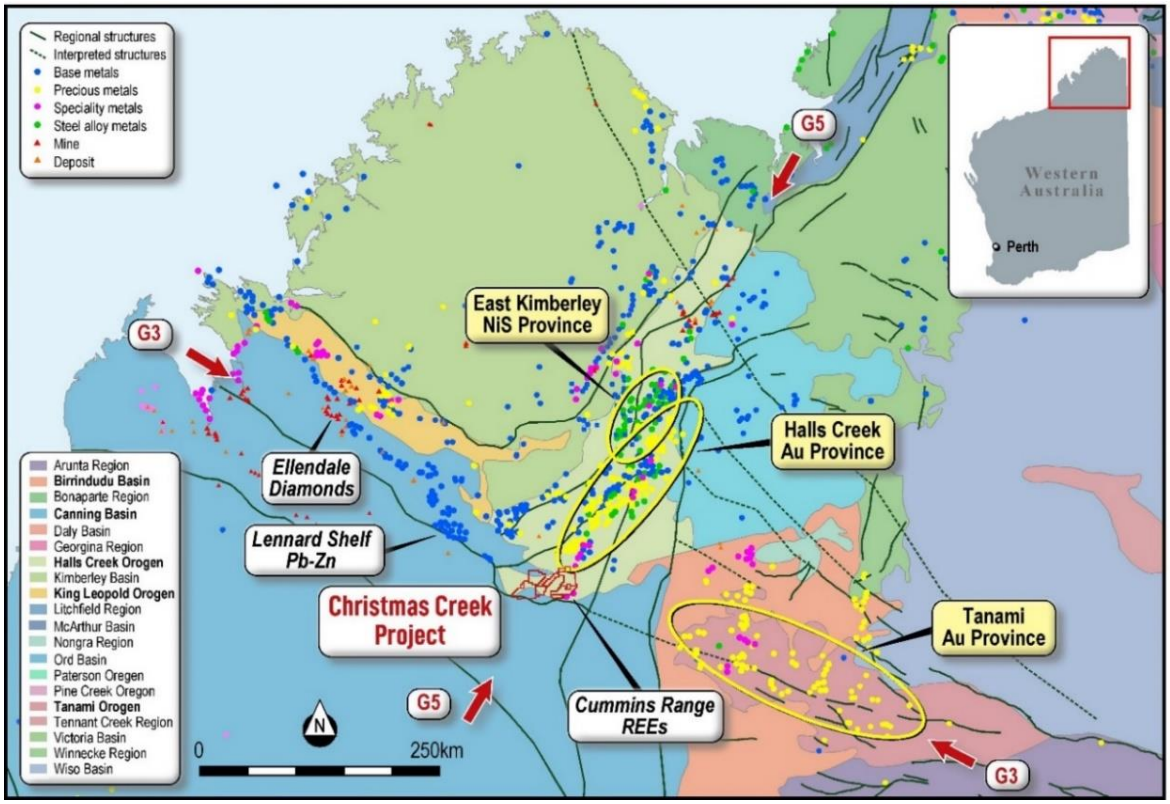

Figure 4: Continental scale context and location map for the Christmas Creek Project, located at the intersection of G3 and G5 metallogenic lineament corridors, potentially representing the intersection of the Granites-Tanami Orogen & the Halls Creek Orogen.

Four main prospects – Coogan, Martin, Zahn and Willis – were identified via fine fraction soil sampling (Figure 5). Significant gold intercepts have been returned from Martin, with encouraging anomalism identified at both Coogan and Zahn, indicating that gold-rich fluids have passed through the structures at these locations. Trek is focused on identifying traps sites with significant accumulations of mineralisation.

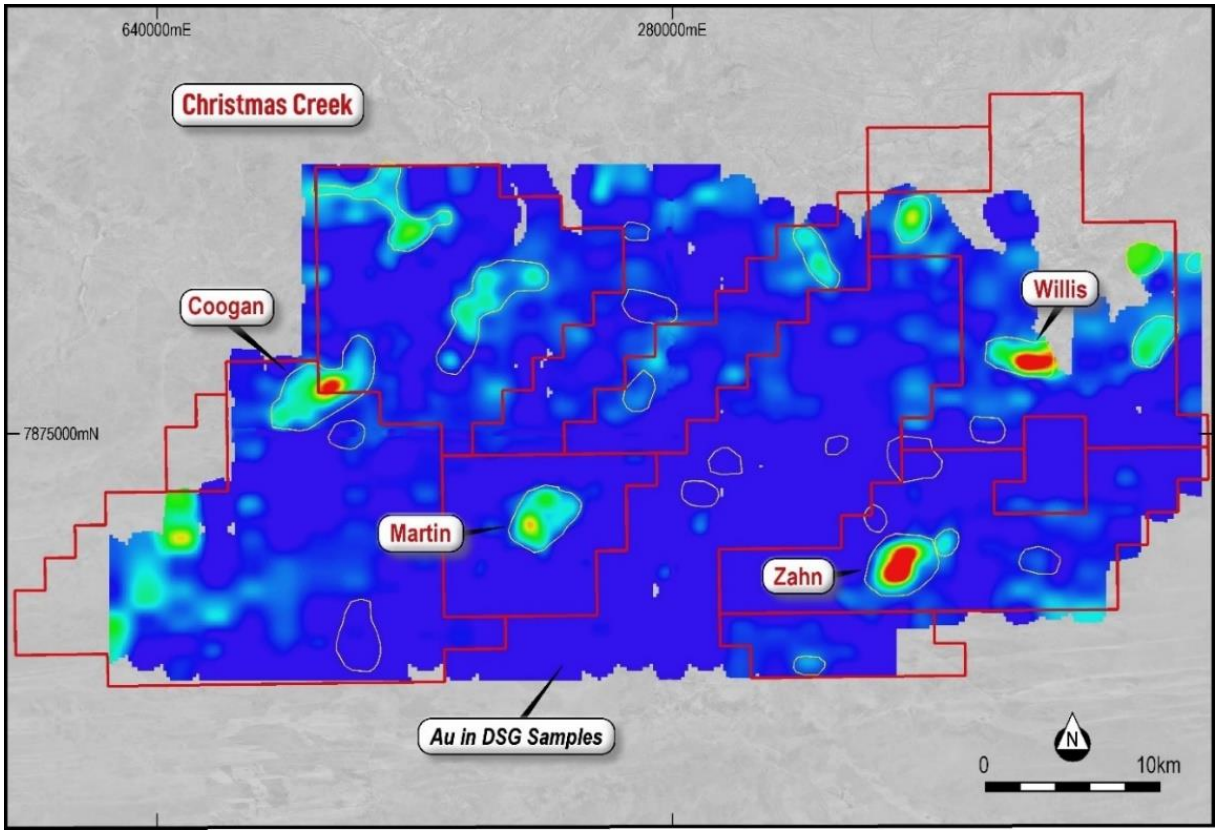

Figure 5: Gold heatmap as defined by Deep Sensing Geochemistry (DSG) surface geochemistry across the project area, highlighting the four main prospect areas; Coogan, Martin, Zahn & Willis. Red colours outline results above 6ppb Au.

[1] Previously announced significant intercepts and collar tables from historical work at Christmas Creek can be found in Trek's project acquisition announcement via https://investorhub.trekmetals.com.au/announcements/4421568

Authorised by the Board of Directors

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COMPETENT PERSONS STATEMENT

The information in this report relating to Exploration Results is based on information compiled by the Company's Chief Executive Officer, Mr Derek Marshall, a Competent Person, and Member of the Australian Institute of Geoscientists (AIG). Mr Marshall has sufficient experience relevant to the style of mineralisation and to the type of activity described 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 Marshall has disclosed that he holds fully paid Ordinary Shares and Performance Rights in the Company. Mr Marshall consents to the inclusion in this announcement of the matters based on his information in the form and content in which it appears.

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This announcement contains forward looking statements. Forward looking statements are often, but not always, identified A words such as "seek", "target", "anticipate", "forecast", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions.

The forward-looking statements in this announcement are based on current expectations, estimates, forecasts and projections about Trek and the industry in which it operates. They do, however, relate to future matters and are subject to various inherent risks and uncertainties. Actual events or results may differ materially from the events or results expressed or implied by any forward-looking statements. The past performance of Trek is no guarantee of future performance.

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Table 1. Significant intercepts from RC/AC drilling at the Martin and Zahn Prospects using a >0.1g/t Au cut-off.

Hole ID	From (m)	To (m)	Interval (m)	g/t Au	Gram Metres	Significant Intercept	Prospect
24XCRC041	20	24	4	0.10	0.4		Martin
24XCRC046	72	76	4	0.30	1.2		Coogan
24XCRC047	52	56	4	0.12	0.48		Coogan
24XCRC048	140	144	4	0.13	0.52		Coogan
24XCRC054	16	24	8	0.25	1.96		Coogan
24XCRC056	12	16	4	0.22	0.88		Zahn
24XCRC067	12	16	4	0.11	0.44		Zahn
24XCRC067	52	60	8	0.13	1.04		Zahn
24XCRC074	24	44	20	0.21	4.16		Zahn
24XCRC074	52	56	4	0.10	0.4		Zahn
24XCRC090	12	16	4	0.40	1.6		Martin
24XCRC090	80	84	4	0.19	0.76		Martin
24XCRC090	92	96	4	0.27	1.08		Martin
24XCRC090	108	112	4	0.25	1		Martin
24XCRC097	**59**	**69**	**10**	**12.66**	**126.61**	**10m @ 12.66g/t Au from 59m**	Martin
incl.	***59***	***60***	***1***	***32.60***	***32.6***	***1m @ 32.6g/t Au from 59m***	Martin
	61	***64***	***3***	***29.80***	***89.4***	***3m @ 29.8g/t Au from 61m***	Martin
24XCRC097	76	78	2	0.41	0.81		Martin
24XCRC097	83	84	1	0.11	0.11		Martin
24XCRC097	**94**	**104**	**10**	**7.34**	**73.43**	**10m @ 7.34g/t Au from 94m**	Martin
incl.	***96***	***98***	***2***	***31.10***	***62.2***	***2m @ 31.1g/t Au from 96m***	Martin
	102	***103***	***1***	***7.85***	***7.85***	***1m @ 7.85g/t Au from 102m***	Martin
24XCRC103	48	56	8	0.19	1.48		Martin
24XCRC103	72	76	4	0.26	1.04		Martin
24XCRC103	84	88	4	0.17	0.68		Martin
24XCRC104	24	28	4	0.44	1.76		Martin
24XCRC107	80	84	4	0.19	0.76		Martin
24XCRC107	104	108	4	0.18	0.72		Martin

Table 2. Collar Table for 2024 RC/AC drilling at the Christmas Creek Project

HoleID	Type	Depth	Grid	East	North	RL	Dip	Azi	Surv	LeaseID	Prospect
24XCRC039	RC	120	MGA2020_52	273002	7871197	379	-60	180	GPS	E80/5083	Martin
24XCRC040	RC	120	MGA2020_52	273001	7871302	376	-60	180	GPS	E80/5083	Martin
24XCRC041	RC	120	MGA2020_52	273006	7871395	377	-60	180	GPS	E80/5083	Martin
24XCRC042	RC	150	MGA2020_52	260731	7877280	339	-60	145	GPS	E80/5427	Coogan
24XCRC043	RC	150	MGA2020_52	260677	7877364	339	-60	145	GPS	E80/4975	Coogan
24XCRC044	RC	150	MGA2020_52	260616	7877445	340	-60	145	GPS	E80/4975	Coogan
24XCRC045	RC	136	MGA2020_52	260554	7877526	341	-60	145	GPS	E80/4975	Coogan
24XCRC046	RC	150	MGA2020_52	260502	7877605	342	-60	145	GPS	E80/4975	Coogan
24XCRC047	RC	150	MGA2020_52	260437	7877697	342	-60	145	GPS	E80/4975	Coogan
24XCRC048	RC	150	MGA2020_52	260389	7877773	339	-60	145	GPS	E80/4975	Coogan
24XCRC049	RC	150	MGA2020_52	260323	7877855	339	-60	145	GPS	E80/4975	Coogan

HoleID	Type	Depth	Grid	East	North	RL	Dip	Azi	Surv	LeaseID	Prospect
24XCRC050	RC	150	MGA2020_52	260269	7877942	338	-60	145	GPS	E80/4975	Coogan
24XCRC051	RC	150	MGA2020_52	260204	7878023	336	-60	145	GPS	E80/4975	Coogan
24XCRC052	RC	150	MGA2020_52	260147	7878111	337	-60	145	GPS	E80/4975	Coogan
24XCRC053	RC	162	MGA2020_52	260086	7878187	333	-60	145	GPS	E80/4975	Coogan
24XCRC054	RC	72	MGA2020_52	260472	7877669	341	-60	110	GPS	E80/4975	Coogan
24XCRC055	RC	105	MGA2020_52	292500	7867390	424	-60	180	GPS	E80/5083	Zahn
24XCRC056	RC	111	MGA2020_52	292501	7867497	424	-60	180	GPS	E80/5083	Zahn
24XCRC057	RC	99	MGA2020_52	292503	7867598	424	-60	180	GPS	E80/5083	Zahn
24XCRC058	RC	102	MGA2020_52	292504	7867698	424	-60	180	GPS	E80/5083	Zahn
24XCRC059	RC	105	MGA2020_52	292502	7867798	423	-60	180	GPS	E80/5083	Zahn
24XCRC060	RC	102	MGA2020_52	292504	7867895	424	-60	180	GPS	E80/5083	Zahn
24XCRC061	RC	105	MGA2020_52	292503	7868003	425	-60	180	GPS	E80/5083	Zahn
24XCRC062	RC	111	MGA2020_52	292506	7868098	426	-60	180	GPS	E80/5083	Zahn
24XCRC063	RC	105	MGA2020_52	292504	7868200	425	-60	180	GPS	E80/5083	Zahn
24XCRC064	RC	105	MGA2020_52	293003	7868001	428	-60	180	GPS	E80/5083	Zahn
24XCRC065	RC	90	MGA2020_52	293003	7868094	427	-60	180	GPS	E80/5083	Zahn
24XCRC066	RC	99	MGA2020_52	293008	7868198	426	-60	180	GPS	E80/5083	Zahn
24XCRC067	RC	102	MGA2020_52	293004	7868300	428	-60	180	GPS	E80/5083	Zahn
24XCRC068	RC	102	MGA2020_52	293005	7868401	427	-60	180	GPS	E80/5083	Zahn
24XCRC069	RC	102	MGA2020_52	293507	7868094	429	-60	180	GPS	E80/5083	Zahn
24XCRC070	RC	102	MGA2020_52	293505	7868197	429	-60	180	GPS	E80/5083	Zahn
24XCRC071	RC	99	MGA2020_52	293506	7868294	430	-60	180	GPS	E80/5083	Zahn
24XCRC072	RC	99	MGA2020_52	293504	7868393	430	-60	180	GPS	E80/5083	Zahn
24XCRC073	RC	99	MGA2020_52	294004	7867993	423	-60	180	GPS	E80/5083	Zahn
24XCRC074	RC	102	MGA2020_52	294004	7868089	422	-60	180	GPS	E80/5083	Zahn
24XCRC075	RC	99	MGA2020_52	294005	7868192	423	-60	180	GPS	E80/5083	Zahn
24XCRC076	RC	102	MGA2020_52	294005	7868296	423	-60	180	GPS	E80/5083	Zahn
24XCRC077	RC	93	MGA2020_52	294004	7868394	425	-60	180	GPS	E80/5083	Zahn
24XCRC078	RC	102	MGA2020_52	294001	7868495	425	-60	180	GPS	E80/5083	Zahn
24XCRC079	RC	108	MGA2020_52	300254	7878651	373	-60	180	GPS	E80/5082	Willis
24XCRC080	RC	60	MGA2020_52	300251	7878758	378	-60	180	GPS	E80/5082	Willis
24XCRC081	RC	60	MGA2020_52	300251	7878854	376	-60	180	GPS	E80/5082	Willis
24XCRC082	RC	60	MGA2020_52	300252	7878955	378	-60	180	GPS	E80/5082	Willis
24XCRC083	RC	60	MGA2020_52	300252	7879055	397	-60	180	GPS	E80/5082	Willis
24XCRC084	RC	60	MGA2020_52	300251	7879156	398	-60	180	GPS	E80/5082	Willis
24XCRC085	RC	120	MGA2020_52	300251	7879256	382	-60	180	GPS	E80/5082	Willis
24XCRC086	RC	60	MGA2020_52	300251	7879361	383	-60	180	GPS	E80/5082	Willis
24XCRC087	RC	60	MGA2020_52	300255	7879456	384	-60	180	GPS	E80/5082	Willis
24XCRC088	RC	60	MGA2020_52	272246	7870046	387	-60	0	GPS	E80/5083	Martin
24XCRC089	RC	120	MGA2020_52	272243	7869888	337	-60	0	GPS	E80/5083	Martin
24XCRC090	RC	120	MGA2020_52	272243	7869787	336	-60	0	GPS	E80/5083	Martin
24XCRC091	RC	120	MGA2020_52	272247	7869692	331	-60	0	GPS	E80/5083	Martin
24XCRC092	RC	120	MGA2020_52	272247	7869586	365	-60	0	GPS	E80/5083	Martin
24XCRC093	RC	120	MGA2020_52	272249	7869287	358	-60	0	GPS	E80/5083	Martin
24XCRC094	RC	120	MGA2020_52	272247	7869189	357	-60	0	GPS	E80/5083	Martin
24XCRC095	RC	120	MGA2020_52	272010	7869401	357	-60	180	GPS	E80/5083	Martin

HoleID	Type	Depth	Grid	East	North	RL	Dip	Azi	Surv	LeaseID	Prospect
24XCRC096	RC	120	MGA2020_52	272007	7869497	359	-60	180	GPS	E80/5083	Martin
24XCRC097	RC	120	MGA2020_52	272010	7869593	358	-60	180	GPS	E80/5083	Martin
24XCRC098	RC	120	MGA2020_52	273002	7868693	379	-60	180	GPS	E80/5083	Martin
24XCRC099	RC	120	MGA2020_52	272501	7869438	347	-60	180	GPS	E80/5083	Martin
24XCRC100	RC	120	MGA2020_52	272499	7869331	373	-60	180	GPS	E80/5083	Martin
24XCRC101	RC	134	MGA2020_52	272499	7869146	367	-60	180	GPS	E80/5083	Martin
24XCRC102	RC	120	MGA2020_52	272500	7869046	343	-60	180	GPS	E80/5083	Martin
24XCRC103	RC	120	MGA2020_52	273008	7868785	340	-60	180	GPS	E80/5083	Martin
24XCRC104	RC	120	MGA2020_52	273001	7868888	369	-60	180	GPS	E80/5083	Martin
24XCRC105	RC	132	MGA2020_52	271744	7869703	336	-60	0	GPS	E80/5083	Martin
24XCRC106	RC	120	MGA2020_52	271750	7869598	338	-60	0	GPS	E80/5083	Martin
24XCRC107	RC	120	MGA2020_52	271746	7869701	341	-60	0	GPS	E80/5083	Martin
24XCRC108	RC	120	MGA2020_52	271754	7869794	342	-60	0	GPS	E80/5083	Martin
24XCRC109	RC	115	MGA2020_52	272003	7869544	339	-60	0	GPS	E80/5083	Martin
24XCRC110	RC	120	MGA2020_52	272001	7869642	339	-60	0	GPS	E80/5083	Martin
24XCRC111	RC	69	MGA2020_52	272248	7869575	338	-60	0	GPS	E80/5083	Martin
24XCAC001	AC	45	MGA2020_52	293996	7865223	401	-90	0	GPS	E80/5083	Zahn Sth
24XCAC002	AC	53	MGA2020_52	293931	7865294	402	-90	0	GPS	E80/5083	Zahn Sth
24XCAC003	AC	65	MGA2020_52	293874	7865350	407	-90	0	GPS	E80/5083	Zahn Sth
24XCAC004	AC	56	MGA2020_52	293819	7865419	415	-90	0	GPS	E80/5083	Zahn Sth
24XCAC005	AC	38	MGA2020_52	293768	7865474	415	-90	0	GPS	E80/5083	Zahn Sth
24XCAC006	AC	70	MGA2020_52	293713	7865528	415	-90	0	GPS	E80/5083	Zahn Sth

JORC Table Section 1: Sampling Techniques and Data:

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Reverse circulation (RC) and Aircore (AC) drilling was used to obtain subsurface samples. • Drill cuttings were collected at 1m intervals down the length of each hole. Sampling was completed from a gated cyclone over a static cone splitter into a calico bag with a median sample weight of 2.37 kg per 1m sample. The remainder of the drill cuttings were collected in a bucket and laid out in rows of 20 on a sample pad beside the drill rig. • Individual samples were then composited from the spoil piles as described in a subsequent section. • The sampling protocol is common practice for RC and AC drilling and considered appropriate for the stage of exploration. • Representivity was calculated by the collection and weighing of the entire drill cuttings from one hole, including the subsample, and comparing against the calculated volume of rock for the specific hole diameter (107mm). Estimates for the SG of the rock mass were made based on the logged rock type and known ranges for such rocks.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Drill testing was undertaken by Reverse Circulation (RC) and Aircore (AC) with face sampling drill bit, drill cuttings are returned to surface via inner tubes in the drill string. • Drill bit diameter ranged from 115mm to 105mm depending on wear
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.*	• Reverse Circulation drilling recoveries were good. 13% of 1m drill samples have been weighed and one hole had the entire drill sample collected in green plastic bags and weighed. Single metre primary samples returned a median weight of 2.37kg. Total sample return for the measured hole returned a median weight of 16.5kg per metre or a range of 70% to 76% of the calculated sample depending on the SG used for the rock mass. • Duplicate samples were collected from the rig every 50m, with duplicate pairs being weighed to monitor the performance of the cyclone and cone splitter. • Sample recovery was consistent across the program with a single driller operating the drill rig and maintaining constant drilling conditions with the equipment, including monitoring bit wear, air return, and cyclone performance. • A cone splitter was used on the drill rig which theoretically gives an even and impartial split of the sample when operated correctly. Adjustable control gates allow the sample size to be calibrated to suit the ground conditions and target sample size. These measures are best practice in producing representative samples. • There is no observed relationship between sample recovery and grade.
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*	• Chip trays of 2m composite samples have been collected for the entire length of each hole, logged, and photographed. • Logging has been completed on all drill chips and is qualitative. • Logging covers the entire drilled length of each hole.

Criteria	JORC Code explanation	Commentary
	relevant intersections logged.	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• AC and RC cuttings were collected during drilling as described above with the primary bulk sample captured by bucket and placed in rows of 20 on the ground immediately adjacent the drill rig. • All holes were sampled as 4m composites by the method described below. • From each primary sample pile, material for assay was collected with a 'Fiskers nyglass potting scoop' by rotary sampling, that is, starting at the outside base of each pile, pushing toward the centre, then drawing up to the peak, this ensures a representative sample is collected. • Field duplicates have been collected at each 50th sample interval to monitor sample size and provide duplicate material for assay analysis and representivity analysis. • The sample size and subsampling method is considered appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All drill samples were analysed by Australian Laboratory Services Pty Ltd (ALS) in Malaga, Western Australia for gold and multi-element analysis (ME-MS61, & Au-AA25) except those samples selected for REE or pegmatite hosted mineralisation potential. • ME-MS61 is a 4 acid, near total digest, reporting a suite of 48 elements. • Au-AA25 is a fire assay on 30g sample with a range of 0.05 – 100ppm Au. • Samples that targeted REE mineralisation were assayed by ALS via method ME-MS61R, a 4 acid, near total digest, and reporting the full REE suite. • Samples of logged pegmatite were assayed by ALS via method ME-MS89L, a sodium peroxide fusion that results in total digestion of all minerals. • These techniques are considered appropriate for the elements of interest. • Appropriate standards were inserted at a frequency of one per 50 samples. • Duplicate samples were provided from either rig or field sampling at a rate of every 50th sample. • ALS laboratory also inserted standards as internal checks. • All QAQC analyses of gold results are all within two standard deviations of the CRM standard, and therefore acceptable limits.
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.*	• Significant intercepts have been verified via internal review from three Trek geologists. • High grade intercepts reported for hole 24XCRC097 have been visually confirmed through identification of visible gold in drill cuttings panned on site. • Further verification of the gold grade has been obtained by the use on an onsite Portable PPB DetectOre laboratory, where the results received closely matched to those reported by ALS laboratory from fire assay. • There have been no twinned holes. • Field data is collected and logged into ruggedised Toughbook laptop by the supervising geologist. Field data is routinely checked for accuracy and completeness by the geologist, with further checks once the data is forwarded to the database manager. Any errors or omissions reported by the database manager are verified and corrected by the geologist with the corrected data returned to the database manager for import and safe storage. • Data management consultants compile the data into a relational SQL database, hosted in a secure data centre, which enforces data integrity and ensures that the data meets the required validation protocols. Assay certificates are loaded directly from the laboratory supplied files to the SQL database, to prevent data transcription errors, with routine quality control monitoring to ensure the accurate performance of the assay data.

Criteria	JORC Code explanation	Commentary
		• No adjustments have been made to any assay data.
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.*	• Location of drill collars were recorded using a handheld GPS which is considered appropriate at this stage of exploration. • Grid projection system has been standardised in the database to GDA2020 MGA zone 52 • Surface RL data is collected using GPS, which is then projected to an SRTM DTM to improve accuracy. This is considered appropriate for this stage of exploration.

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.*
		• Exploration drilling and sampling targeted surface geochemical anomalism, with:
		  ○ AC drill spacing at Zahn South along a single line with hole spacing of 100m.
		  ○ RC drill spacing at Martin being drill lines spaced 250m apart with along line spacing of 100m.
		  ○ RC drill spacing at Zahn was four lines 500m apart and holes spaced 100m along line.
		  ○ RC drill spacing at Coogan being one drill line with holes spaced 100m along the line.
		  ○ RC drilling at Willis along a single line with holes spaced 100m along the line.
		• Drillhole spacing is considered appropriate for the stage of exploration, though not of sufficient density to establish grade continuity. Further drilling is required to establish continuity that may lead to the estimation of a Mineral Resource.
		• Sample compositing has been applied at the sampling stage as described above.
		• Sample results have been composited as reported in the intercepts

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.*	• At this early stage of exploration, the exact influence of geological structure is unknown. Downhole televiewer data from previous exploration has been used to assist with structural interpretation. Additional televiewer surveying is planned for a selection of the recently drilled holes to aid in structural interpretation / determining the relationship between observed mineralisation and geology / structure.
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody is managed by the Company. Samples are freighted directly to the laboratory with the appropriate documentation.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• A review of all available information regarding the sampling techniques, data and analytical methods has been undertaken by Trek and it is considered that industry best practice methods have been employed at all stages of exploration to date. • Reviews of legacy results have been completed in house by the previous operator and by Trek prior to, and further upon acquisition of the project. • Recent data has been submitted to both internal review and discussions around best practice with external consultants.

JORC Table Section 2: Reporting of Exploration Results:

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The Project is located ~140 km south-west of Halls Creek in northern Western Australia and comprises granted licences E80/4975, E80/5082, E80/5083, E80/5427, E80/5914, E80/6010, and E80/6011, and two applications, E80/6007 & E80/6012. All tenements are held by Archer X Pty Ltd. • Key terms for the 100% acquisition of Archer X Pty Ltd by Trek are outlined in the ASX:TKM release dated 11/10/2023. • The Licences are located on Native Title determined land belonging to the Yi-Martuwarra Ngurrara in the West, and the Jaru people in the East. There is no determined Native Title claim over the Zahn prospect in the southeast of the Project. • Native title, heritage protection and mineral exploration agreements have been entered into with the Jaru and Yi-Martuwarra Ngurrara Native Title Holders and Newmont Exploration Pty Ltd and/or Archer X Pty Ltd. All agreements are currently in the process of being assigned to Archer X Pty Ltd. All fieldwork activities have been undertaken in conjunction with approval from Native Title representatives of the Yi-Martuwarra Ngurrara and Jaru people with heritage surveys completed at Martin, Coogan, Willis, and Austin, and cultural monitors were present when requested. An archaeological survey was completed prior to drilling activities at Zahn. • The Project area lies within five cattle stations; Larrawa, Lamboo, Carranya, Yougawalla and Bulka.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Project area is relatively under explored with historical activity centred on the Christmas Creek and Burrtina Pool prospects. A rare earth oxide Resource within a carbonatite dyke (Cummins Range Project, RareX Limited, ASX:REE), exists just outside and to the southeast of the Project area. • Gold nuggets were first discovered in proximity to the Christmas Creek in the 1890's. Barnes (1985) suggests several thousand ounces were produced from the area, mostly in the 1930s and 1950s. No official production records exist. Further prospecting and illegal dozing of the site has occurred. • CRA Exploration Pty Ltd (CRAE) undertook exploration in the area during the mid-1970s, undertaking an airborne magnetic and radiometric survey, where percussion drilling returned isolated bismuth (420ppm) and gold (0.6ppm) anomalism. • G.B. Barnes and Associates for M.H. Ynema in the mid-1980s to early 1990s undertook sampling across stockwork veining produced a peak gold value of 21g/t Au. A 20g/t Au result was returned in 1992 after further sampling. • Billiton Australia explored the southwestern portion of the Project between 1991 and 1994 for Pb-Zn mineralisation. Utilising 2D seismic data collected in 1985 for oil exploration, gravity, and magnetic data Billiton targeted an oil-trap style limestone dome with a single 565m deep diamond core hole. No significant assay results were returned however the model they were targeting has been superseded. • Northern Star Resource Ltd completed Air Core (AC) drilling targeting the CRAE gold-bismuth anomaly and geophysical aeromagnetic and radiometric highs undercover. Forty-six AC holes were drilled for 1,636m over three years. No significant assays were returned.

Criteria	JORC Code explanation	Commentary
		• Newmont entered into a Joint Venture agreement with Archer X Pty Ltd in 2017 and explored the Project until withdrawal in September 2023, with most of the on groundwork undertaken in the period 2018 – 2022. Exploration included significant surface geochemistry followed up by limited Air Core and Reverse Circulation drilling (details outlined in the announcement dated 11th October 2023, and associated Table 1). Three prospects (Coogan, Martin and Zahn) have been drill tested and have all returned positive results. Highlights from Martin include 7m at 4.9g/t Au (including 1m at 29.6g/t Au) from 24m in hole NEWXCAC196, 2m @ 9.65g/t Au from 72m in NEWXCRC012 and 3m @ 2.03g/t Au from 137m in NEWXCRC015. At Zahn, weak polymetallic mineralisation with a maximum intercept of 1m at 1% zinc was seen in association with sulphides along the contact between granodiorite and metasedimentary rocks. Drilling at Coogan returned 34m @ 0.18g/t Au from 58m in hole NEWXCRC021, 38m @ 0.16g/t Au from 14m and 30m @ 0.15g/t Au from 144m in hole NEWXCRC029. Newmont also undertook numerous geophysical surveys, including passive seismic, ground magnetics, wireline televiewer & airborne EM.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Project is centred on the southernmost extension of the Halls Creek Orogen, located within the Kimberley region of Western Australia. Proterozoic sediments of the Project area are broadly correlative with Proterozoic sediments of northwestern Australia, host to the world class Callie-Auron deposit in the Tanami Orogen. • It is hypothesised that this area may represent a triple junction with the Granites-Tanami Orogen, Wunaamin Miliwundi Orogen and the Halls Creek Orogen. Paleoproterozoic rocks of the eastern zone of the Lamboo Province are the oldest rocks mapped. Neoproterozoic rocks of the Wolfe and Louisa Basins are also present. In the Project area, these Palaeo- to Neoproterozoic rocks are largely covered by Phanerozoic sedimentary rocks of the Canning Basin. • The exploration undertaken by Newmont has identified gold mineralisation at Coogan and Martin associated with minor sulphides (pyrite, chalcopyrite) in quartz veins. Mineralisation at Martin has an association with bismuth, tellurium, tungsten and selenium. Mineralisation at Coogan has a strong correlation with bismuth and also an association with tellurium, copper and molybdenum, potentially pointing towards an intrusion-related mineral system. In both cases, the psammitic to pelitic host rocks are interpreted to be part of the Olympio Formation, a correlative of the Killi Killi Formation in the Tanami Region.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• All drill collars are reported in Table 2 and all drill collars at Martin are plotted up in Figure 3 in the body of the announcement.
		• Drill collars are also displayed for each prospect in Figures 4-8 in ASX:TKM announcement September 2024 Quarterly Activities Report from the 24/10/2024 https://investorhub.trekmetals.com.au/announcements/6594286
		• Legacy drill information is reported in detail in the ASX:TKM announcement dated 11/10/2023 https://investorhub.trekmetals.com.au/announcements/4421568
		• A description of spacing is provided in the relevant section of this JORC Table Section 1.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Significant intercepts were calculated as: ○ Current results are reported calculated as weighted averages using Au trigger value >0.1g/t, with no internal waste. ○ Legacy results are re-reported from the announcement dated 11/10/2023, refer to JORC Table for calculation details. • No data truncations were performed. • No metal equivalents values have been reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• The true width of mineralization is not currently known due to the early-stage nature of the exploration. All widths reported are down hole lengths.
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.*	• See relevant maps in the body of this announcement, in the recent ASX:TKM quarterly report dated 24/10/2024 and the ASX:TKM project acquisition announcement dated 11/10/2023.
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.*	• All drill results above 0.1g/t Au from the current drill program are reported within this announcement, with reference to selected results from legacy drill programs. Legacy drill intercepts can be viewed in detail in the announcement dated 11/10/2023 in Tables 1-4.
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.*	• Exploration data for the project continues to be reviewed and assessed and new information will be reported if material.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The composite results from a large soil sampling program from this season are currently being assessed, with primary samples due to be selected for analysis. An announcement will be made as and when appropriate. • Further work is outlined in the body of the announcement and will likely consist of: Down-hole televiewer and structural interpretation. Petrology on mineralised samples and host rocks. Geochemical analysis of 1m split samples from anomalous 4m composite samples. Petrophysical / geochemical back calculations to determine whether Induced Polarisation could be an effective technique for detecting significant quantities of gold mineralisation. Finalise interpretation of the recently received composite soil sampling data, including submitting primary samples for assay based on highly anomalous composite samples.