



## DRILLING AT MT MANSBRIDGE, EAST KIMBERLEY

TARGETING HEAVY RARE EARTHS



TARGETING NICKEL-COPPER-COBALT-PGE



November, 2021

Company Presentation ASX: RMX



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## Competent Persons Statement

The information in this announcement that relates to Exploration Results and other technical information complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**) and has been compiled and assessed under the supervision of Mr Oliver Judd. Mr Judd is a Member of the Australasian Institute of Mining and Metallurgy and the Australasian Institute of Geoscientists. He 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 JORC Code. Mr Judd consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

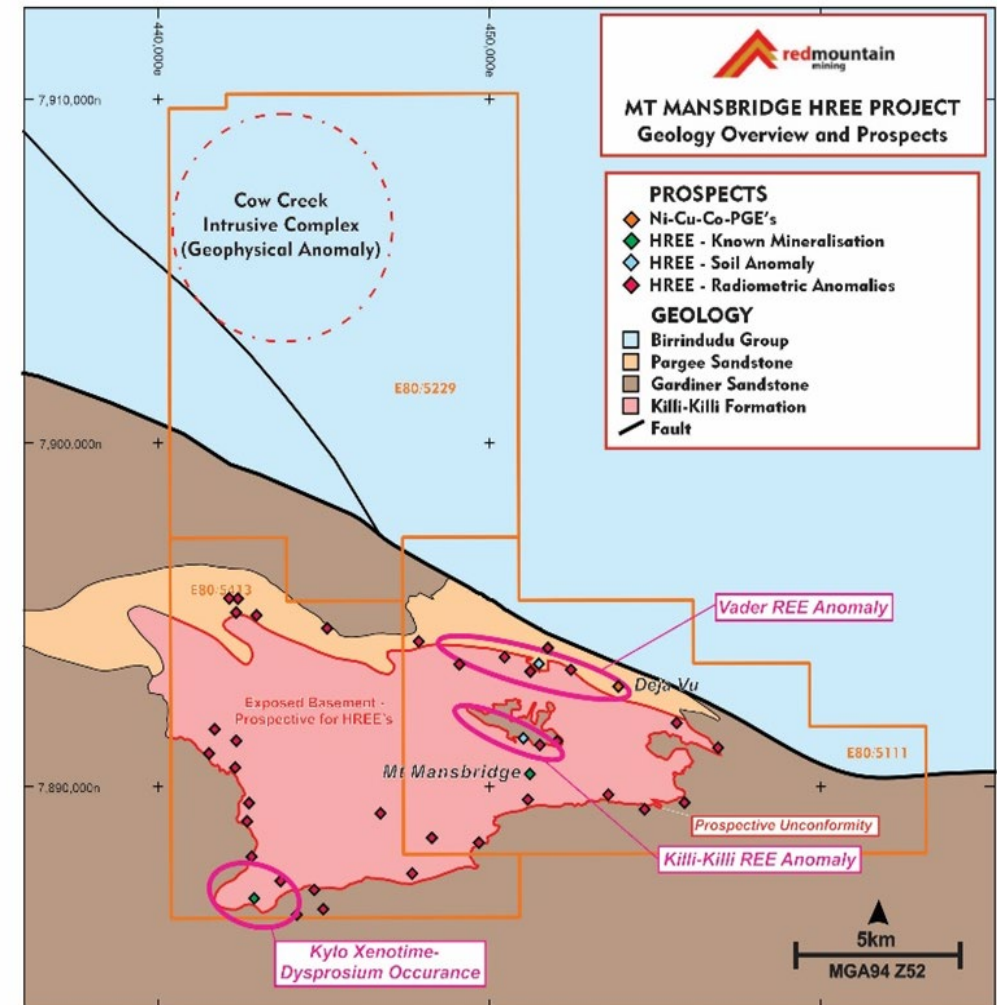
The Company is not aware of any new information or data that materially affects the information included in the relevant market announcements.

# MT MANSBRIDGE HREE & NI-CU-CO-PGE PROJECT (WA)



- ✓ Structural analysis, recent soil sampling and rock chipping, together with historic rock chipping noting presence of xenotime veins identifies **heavy rare earth** prospectivity at **Mansbridge, Killi-Killi, Vader, and Kylo**
- ✓ Potential for major ultramafic intrusive complex (**Ni-Cu-Co-PGE**) at **Cow Creek** – desktop study by the Company in conjunction with Dr Jon Hronsky (AO)
- ✓ **Cobalt** prospectivity highlighted from historic drilling by CRA and technical study at **Déjà Vu**
- ✓ EIS Co-funded grant of up to \$150,000 awarded, heritage clearance and earthworks completed – September 2021
- ✓ +1200m RC maiden Mt Mansbridge drill programme commenced – *late October 2021*

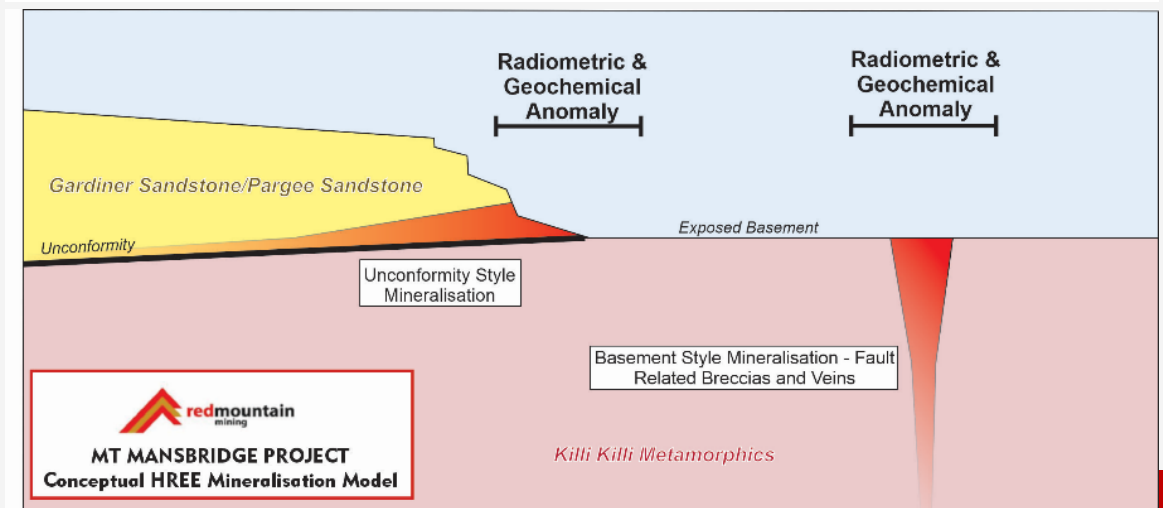
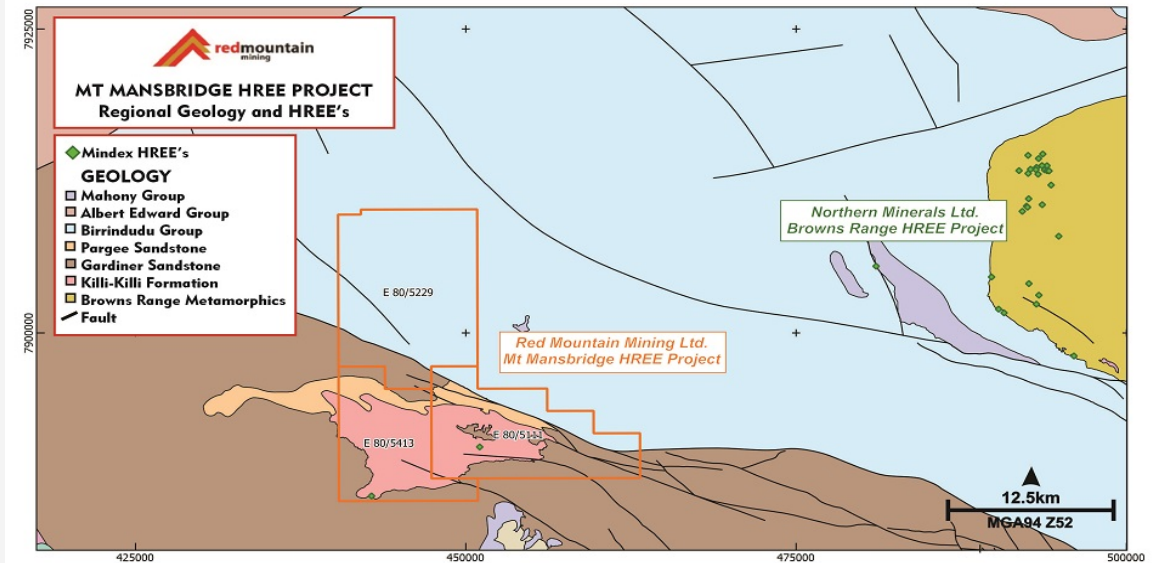
**\*\*RC drilling underway at multiple targets\*\***



# MT MANSBRIDGE – HEAVY RARE EARTH ELEMENTS (HREE)



- ✓ Mt Mansbridge is located ~40km from Northern Minerals Ltd. (ASX: NTU) Browns Range HREE Operation
- ✓ Comparable geological setting to Browns Range - exposed Killi Killi Formation – highly prospective for HREE's.
- ✓ Project contains known Xenotime/Dysprosium occurrences originally discovered by BHP in the 1980's
- ✓ Mt Mansbridge is prospective for two styles of HREE mineralisation:
  - Basement Style – associated with fault breccias and veins
  - Unconformity Style – associated with the contact between the basement Killi-Killi Formation and the overlying Gardiner/Pargée Sandstones
- ✓ Several priority prospects identified within historical exploration data sets:
  - Mt Mansbridge HREE Occurrence
  - Kylo
  - Killi-Killi
  - Vader

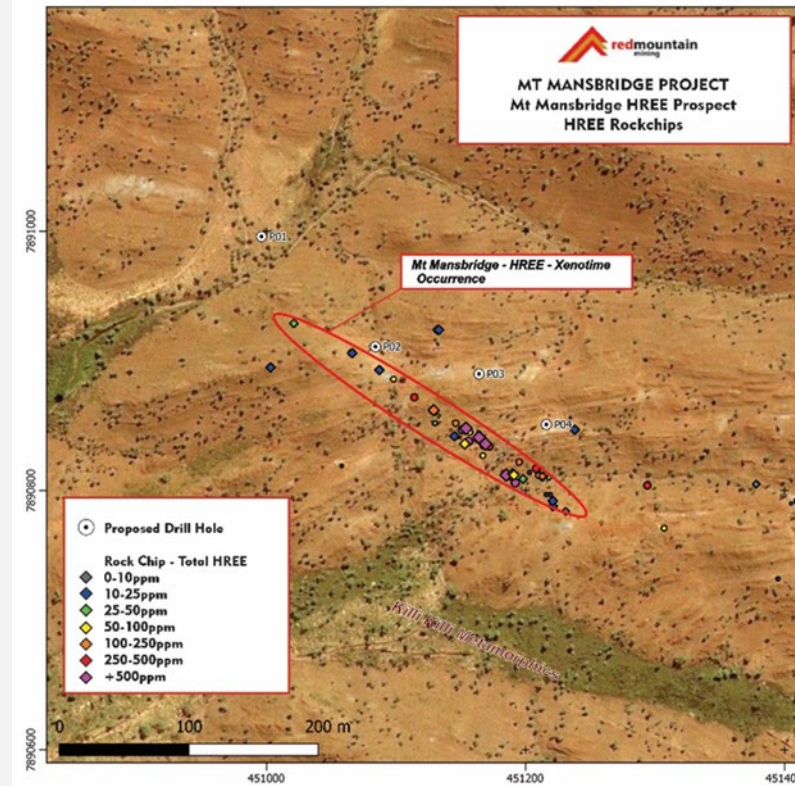




# MT MANSBRIDGE – KILLI KILLI PROSPECT (HREE)



- ✓ Xenotime-Dysprosium Occurrence discovered by BHP in 1980's
- ✓ +200m mapped strike with confirmed HREE mineralisation
- ✓ Mineralised zone is a broad zone of deformation within the prospective Killi-Killi Formation consisting of veining and alteration
- ✓ Rock Chips values up to 2,060ppm Y and 384ppm Dy



**\*\*Drilling underway/completed during current RC program (3 holes for ~450m)\*\***

Sample ID	Y_ppm	Dy_ppm	Er_ppm	Eu_ppm	Gd_ppm	Ho_ppm	Lu_ppm	Tb_ppm	Tm_ppm	Yb_ppm	Total HREE_ppm
MMR012	1260	259	148	27.8	204	49.9	19.55	40.2	23.1	140.5	2172
MMR019	827	167.5	100.5	17.6	133.5	33.3	16.35	26.6	16.75	94	1433
MMR020	2060	384	201	53.4	367	71.1	25.3	68.2	30.1	188.5	3449

Selected Assay Values from RMX rock-chipping (ASX Announcement – Mt Mansbridge Update – 20<sup>th</sup> September 2021)

## MT MANSBRIDGE – KYLO PROSPECT (HREE)



- ✓ Xenotime Mineral Occurrence
- ✓ Occurrence validated by Northern Minerals Ltd in 2011 via single rock-chip and no follow up exploration
- ✓ Highly Anomalous Yttrium and Dysprosium within 'siliceous cherty unit'
- ✓ Located proximal to prospective unconformity
- ✓ Radiometric anomalism

**\*\*Drill testing scheduled for current RC program\*\***

Element	Dy	Er	Gd	P	Th	U	Y	Yb
ppm	222.32	138.29	61.09	576	6.12	9.7	1551.8	92.47

Selected Assay Values for rock chip GTRK000002 (MGA94Z52 443275e, 7886581n) (From Northern Minerals Ltd. Combined Annual Technical Report 2011 – WAMEX Report# A92909)



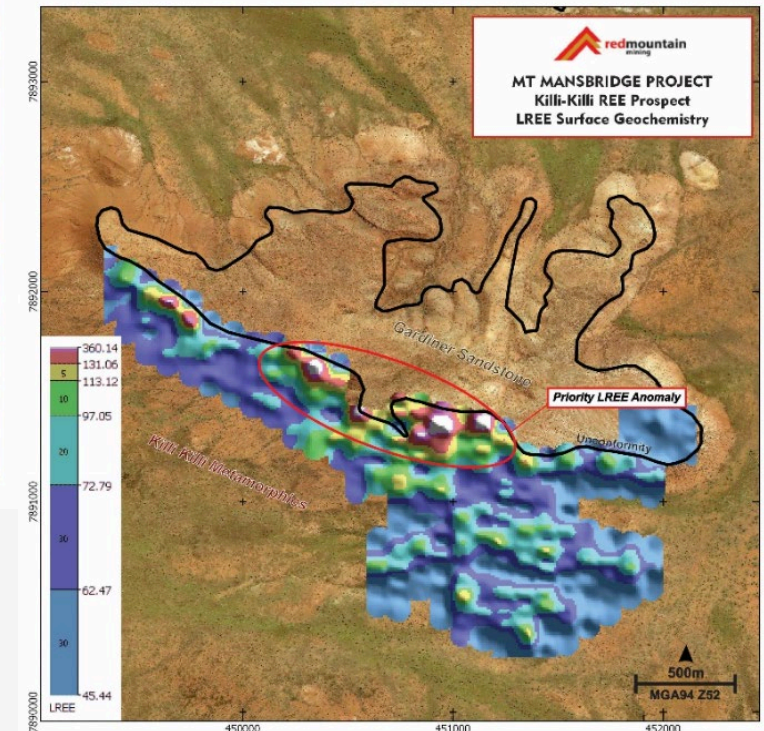
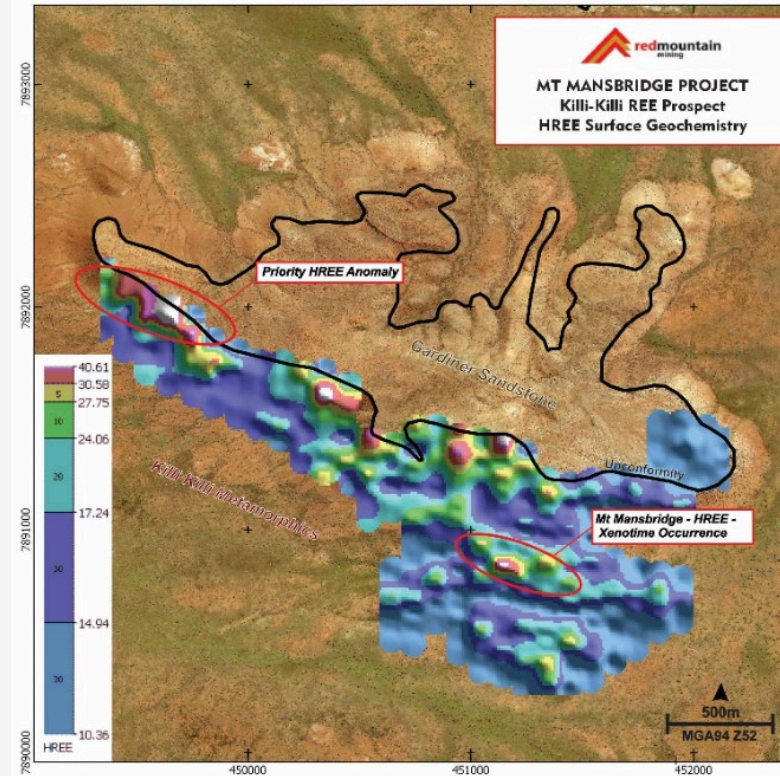
Photograph of GTRK000002 HREE Mineralized 'siliceous cherty' Outcrop (From Northern Minerals Ltd. Combined Annual Technical Report 2011 – WAMEX Report# A92909)



# MT MANSBRIDGE – KILLI KILLI PROSPECT (HREE)



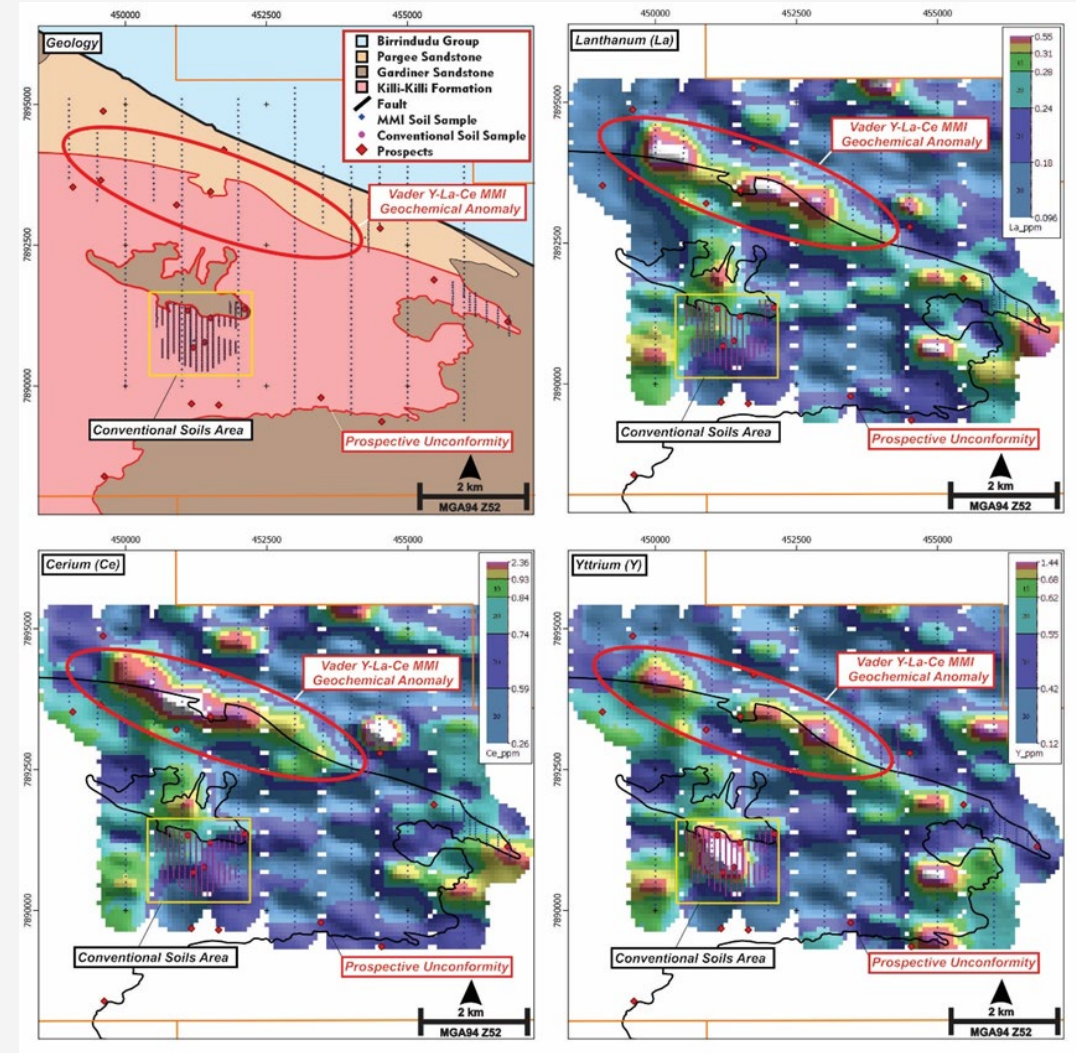
- ✓ 952 soil sample survey received from laboratory
- ✓ 2 significant anomalies defined by consulting geochemist
- ✓ First soil anomaly is HREE anomaly located on western end of Mt Mansbridge inlier
- ✓ Second soil anomaly is LREE anomaly now defined at a length of 1km
- ✓ Soil anomaly is associated with the prospective unconformity between the overlying Gardiner Sandstone and underlying Killi-Killi Formation
- ✓ Further target definition work planned for 2022 with consultation with TO's



# MT MANSBRIDGE – VADER PROSPECT (HREE)



- ✓ ~5km long, coincident Y-La-Ce soil anomaly identified by previous explorer (Quantum Resources)
- ✓ Soil anomaly is associated with the prospective unconformity between the overlying Pargee Sandstone and underlying Killi-Killi Formation
- ✓ Radiometric anomalism
- ✓ Further target definition work planned for 2022 exploration season

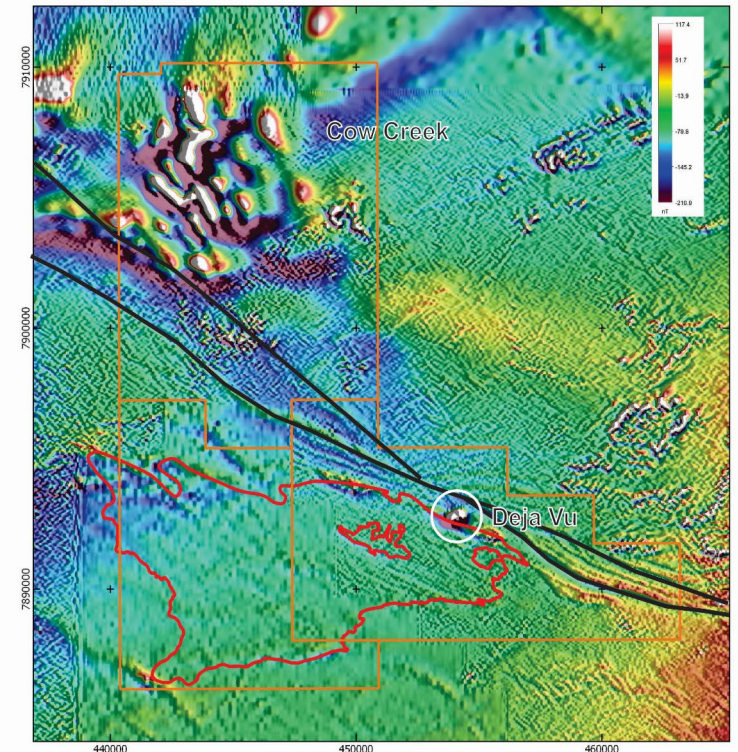
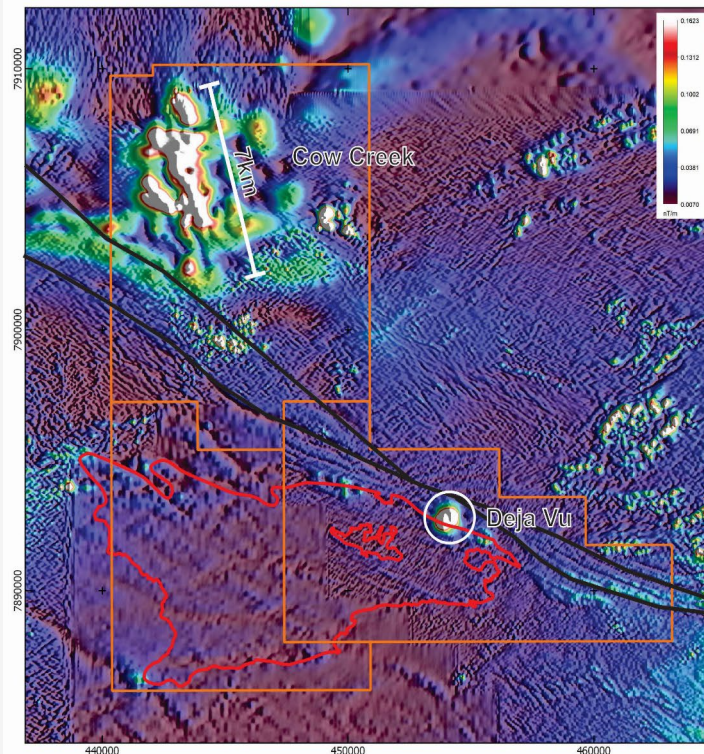




# MT MANSBRIDGE – COW CREEK PROSPECT (NI-CU-CO-PGE)



- ✓ Interpreted as a mafic-ultramafic intrusive complex, prospective for Nickel-Copper-Cobalt-PGE's
- ✓ ~7km long untested geophysical anomaly, concealed below relatively thin cover sequences
- ✓ Located on the same structure as the Déjà Vu intrusion
- ✓ 3D inversion of aero-magnetic data recently completed to aid with interpretation and targeting for drill testing
- ✓ Scale of geophysical anomaly similar to Nova-Bollinger and Sally Mallay Intrusive complexes



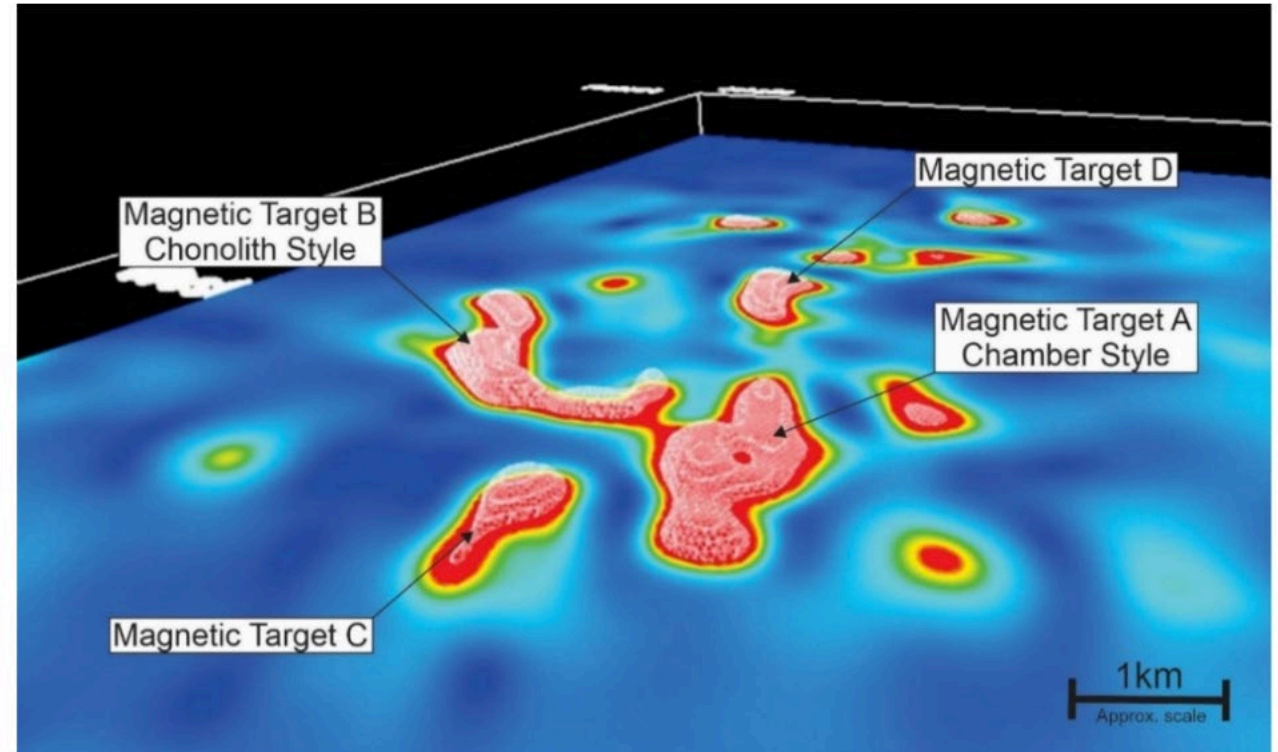
*Mt Mansbridge – Cow Creek - Magnetics (TMI - left, Analytical Signal - right)*

**\*\*2 holes for 480m scheduled for current RC drilling program\*\***

## MT MANSBRIDGE – COW CREEK PROSPECT (NI-CU-CO-PGE)



- ✓ Inversion of magnetic data was undertaken recently to assist in visualising the geological feature in 3D
- ✓ The top of the magnetic features are approximately 150m below surface and therefore within testable range via RC drilling
- ✓ 4 prominent magnetic targets observed
  - ✓ Target A – 2km long 'chamber style'
  - ✓ Target B – 3km long 'chonolith style'
  - ✓ Target C – 1km long magnetic feature
  - ✓ Target D – 1km long magnetic feature



*Cow Creek Magnetic Inversion (Looking NW) +127 depth slice, 0.003 iso surface*

**\*\*2 holes for 480m scheduled for current RC drilling program\*\***

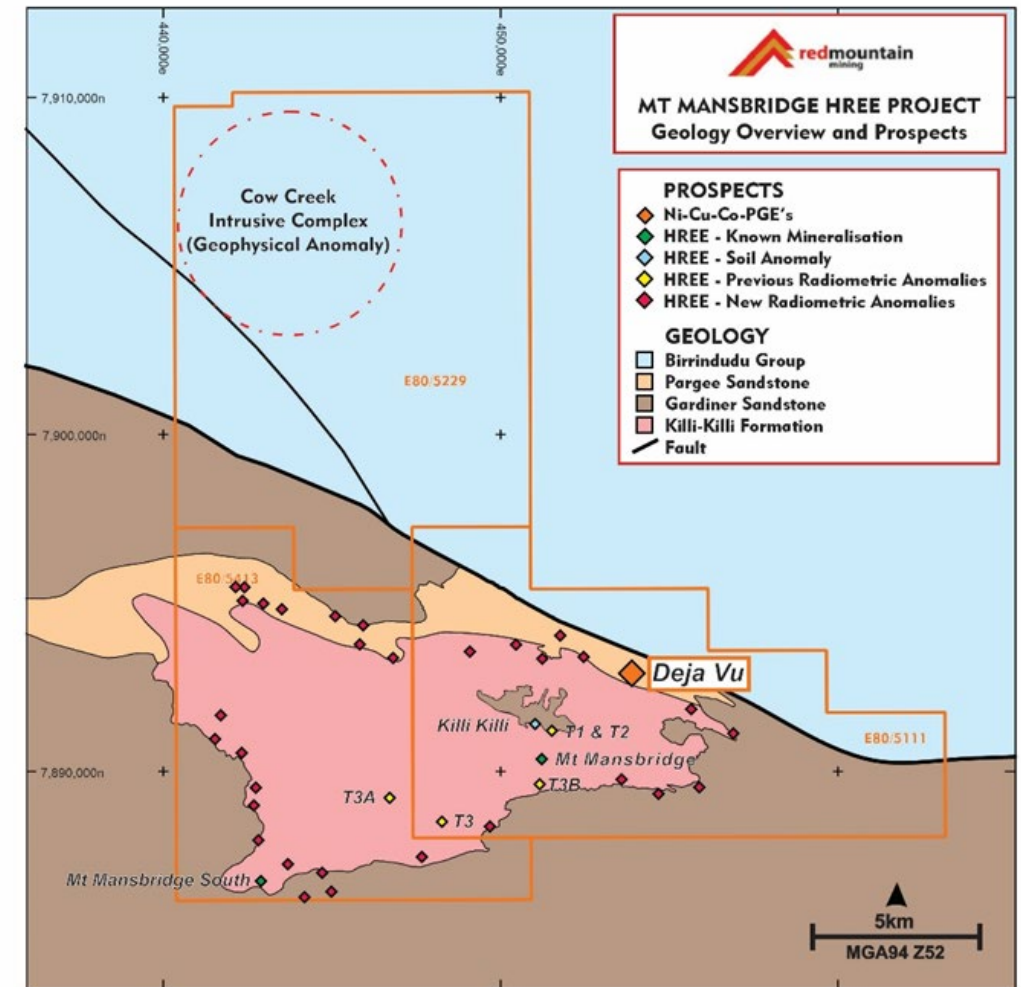


# MT MANSBRIDGE – DEJA VU PROSPECT (NI-CU-CO-PGE)



- ✓ An altered ultramafic intrusion prospective for cobalt mineralisation.
- ✓ Magnetic 'bulls-eye' identified by CRA between 1991 -1993 - thought to be a kimberlite, prospective for diamonds
- ✓ A single 100m RC hole into the centre of the magnetic anomaly encountered altered peridotite (an ultramafic intrusive)
- ✓ Sporadic assaying returned encouraging results up to **0.34% cobalt** and 0.129% nickel

**\*\*Drilling underway/completed during current RC program (3 holes for ~300m)\*\***

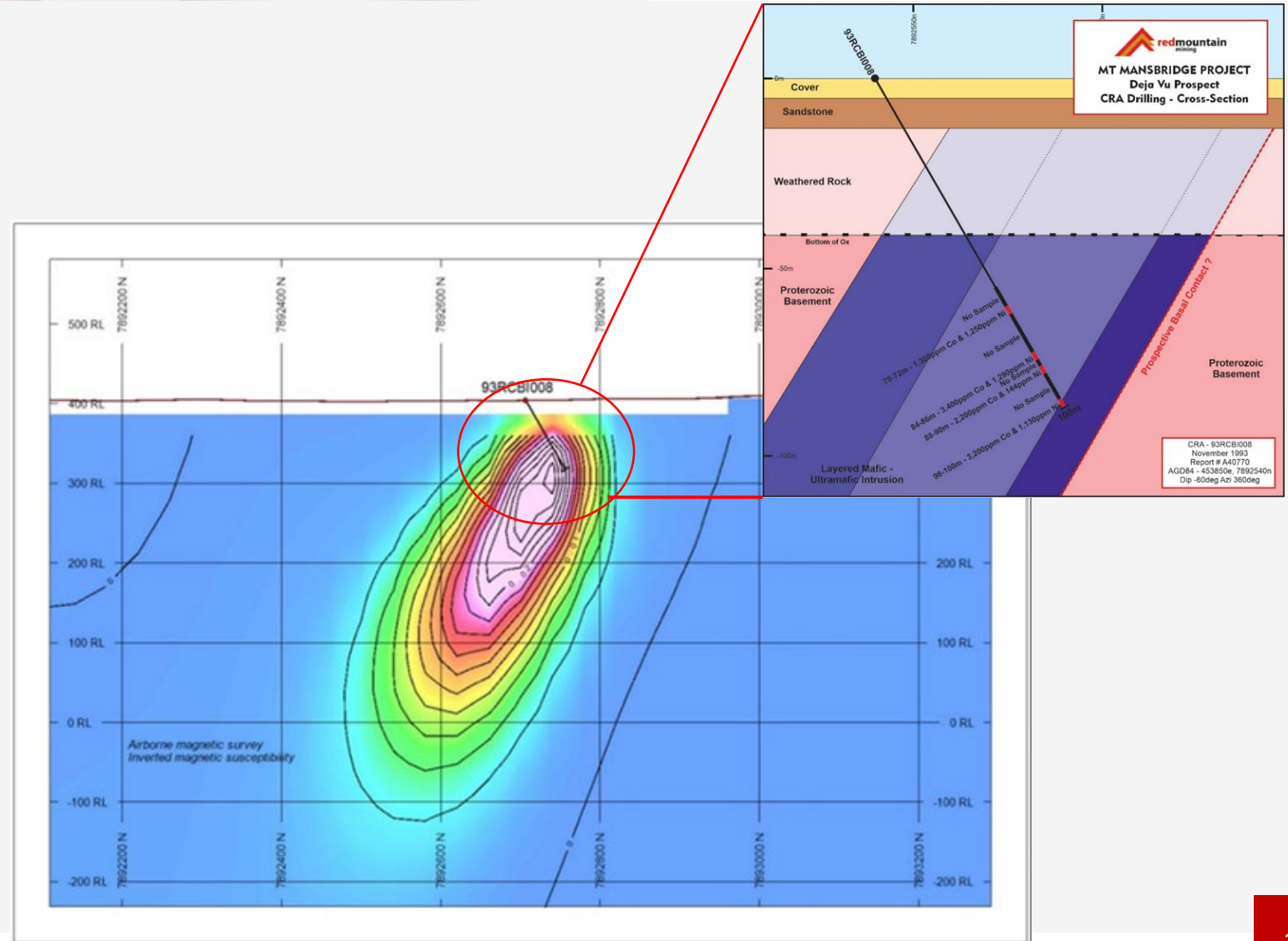


# MT MANSBRIDGE – DEJA VU PROSPECT (NI-CU-CO-PGE)



- ✓ A recent litho-geochemical review of the historical CRA drill hole has highlighted the cobalt mineralisation as probably primary magmatic, i.e. not related to weathering enrichment and cannot be explained by typical background Co associated with the mineralogy of a peridotite.
- ✓ Drilling program designed to twin the original CRA drill hole with further holes testing the contacts of the intrusion 'up dip' and 'down dip' testing for Co enrichment on contacts.
- ✓ Comprehensive set of samples for litho-geochemical evaluation by company consultants post drilling.

**\*\*Drilling underway/completed during current RC program (3 holes for ~300m)\*\***



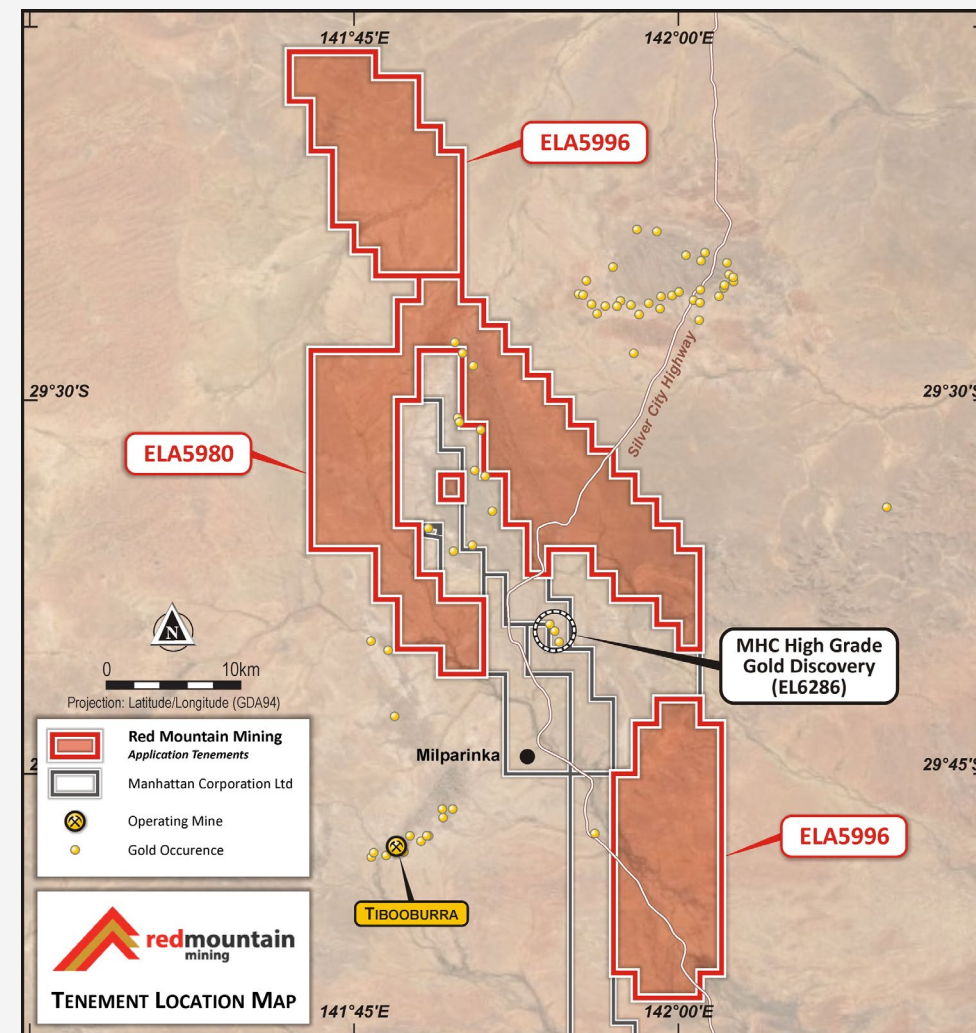


## **Appendix – OTHER PORTFOLIO ASSETS**

## Appendix: KOONENBERRY (NSW) – GOLD AND BASE METALS – 100%



- ✓ RMX has secured a significant footprint in an emerging gold and base metals region (circa 650km<sup>2</sup>)
- ✓ Little modern exploration has been carried out over historic gold field
- ✓ Land access agreements have been executed and reconnaissance exploration has been carried out
- ✓ Regional activity gathering pace:
  - ✓ IPO of Koonenberr Gold (ASX: KNB)
  - ✓ Tenure acquisition by S2 Resources (ASX:S2R)
  - ✓ Ongoing large drill programme by Manhattan Resources (ASX: MHC)
  - ✓ Base metals drill programme by Odin Metals (ASX: ODM)

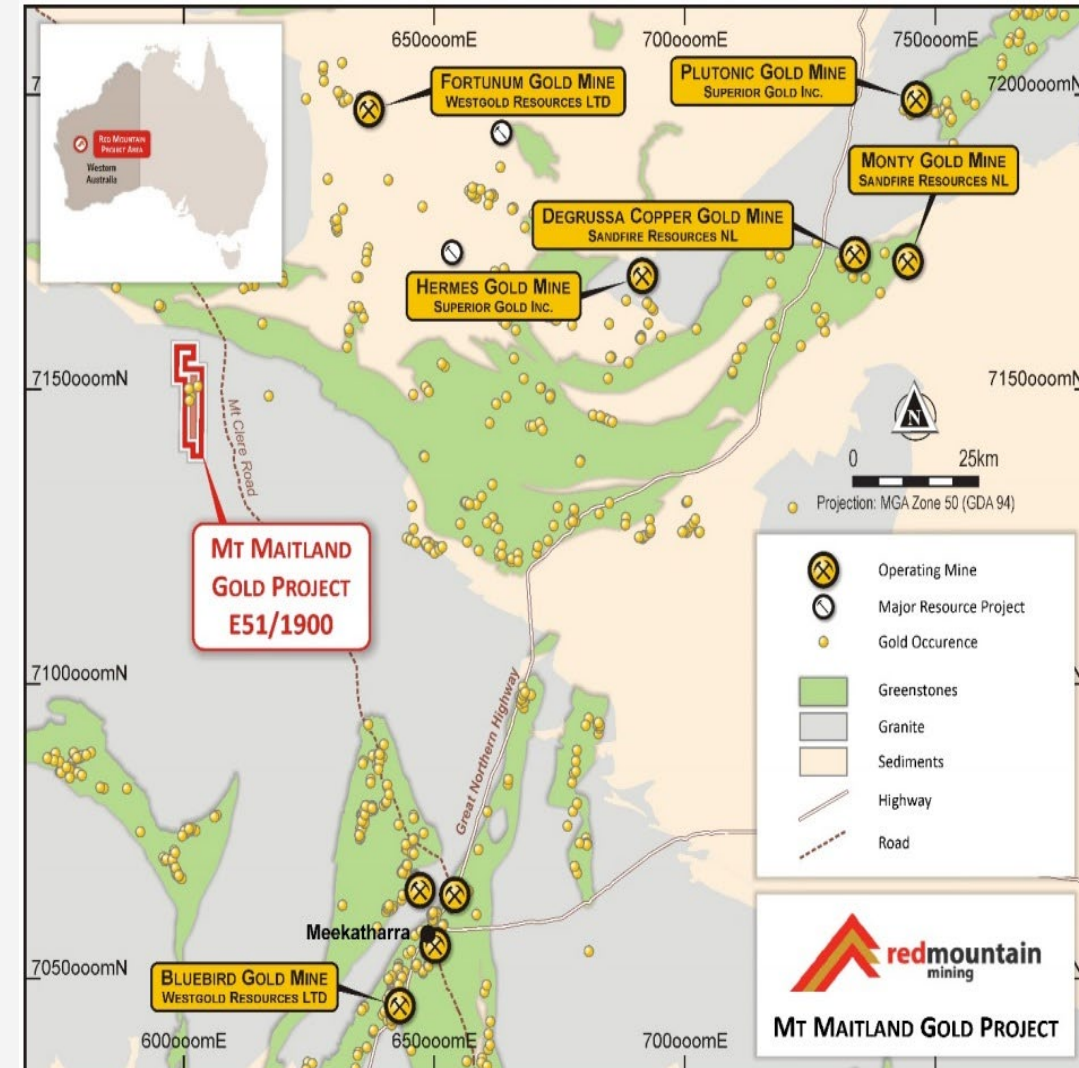




## Appendix: MT MAITLAND (WA) – GOLD AND BASE METALS– 100%



- ✓ 19km of highly prospective Archean greenstone belt with potential to host high-grade shear hosted gold deposits
- ✓ Located within 50km of major gold operations
- ✓ Prioritised Targets:
  - Maitland South (Gold)
  - Jacia (Gold & Base Metals)
- ✓ Several prospects drill tested in November, 2020 with the Maitland South Prospect returning significant intercepts:
  - MMC001 – 7m @ 3.3g/t (fm 34m) inc. 1m @ 12.7g/t, and;
  - MMC002 – 8m @ 1.7g/t (fm 107m)
- ✓ Follow-up geophysical work in early 2021 identified IP anomalies which were drilled March/April 2021
- ✓ Recent transaction by Kingston Resources (ASX: KSN) for Livingstone Project highlights interest in the area





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