



# ASX

## Announcement



**KRUCIBLE METALS LTD**

*Mineral Discovery Company*

ABN:12 118 788 846 ASX Code: **KRB**

**13th November 2012**

### About Krucible

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Listed on Australia's main stock exchange since 2007, Krucible is an Australian-based resources company with an enviable history of discovery in phosphate and rare earths as well as other elements. Krucible is transitioning into a mining company with plans to open its first mine at Korella in the mineral rich Mount Isa area of north western Queensland. The company has a strong industry-based board and management who promote aggressive exploration projects.

### HIGHLIGHTS

- Follow up surface sampling at Coorabulka has returned further-strong anomalous results for Heavy Rare Earth Elements (HREE).
- Values of up to **0.62kg/t dysprosium oxide, 4.49kg/t neodymium oxide, 1.07kg/t praseodymium oxide, and 3.16kg/t yttrium oxide** have been returned from samples over 1km west of the original location.
- Coorabulka EPMA19286 is located 200km south of the Korella Inferred Resources for Yttrium and Rock Phosphate (See previous announcements)

Coorabulka rare earth reconnaissance samples



- REE processing test work is being completed on these nodules presently utilising new hydro metallurgical beneficiation technology.
- Coorabulka is also prospective for roll front style molybdenum/vanadium/uranium style mineralisation in the Toolebuc formation undercover and for Cannington style silver/lead zinc mineralisation in the underlying Proterozoic basement.
- High strontium values up to **9.47% Sr** have been received, these anomalous results are associated with the REE anomalism at Coorabulka. This element has a high market value in aluminium alloys.
- This highly prospective EPM is expected to be granted in early 2013.



## **Further Discoveries of Heavy Rare Earths at Coorabulka, Western Queensland**

The Directors of Krucible Metals Ltd (Krucible) are pleased to announce that further and potentially significant results for HREE have been received from reconnaissance surface sampling near the previously located HREE values in a council 'borrow pit' (see ASX announcement 11<sup>th</sup> January 2012).

Krucible applied for this EPM in July 2011. Subsequent surface sampling around the noted Svanbergite occurrence at Pigeongah Waterhole in the "Geological Explanatory notes for the Springvale 1:250,000 Sheet" (Reynolds M. A., 1965, Bureau of Mineral Resources) returned anomalous values of HREE up to **1.2kg/t yttrium oxide, 4.02kg/t neodymium oxide, 1.08kg/t praseodymium oxide and 0.23kg/t dysprosium oxide** (ASX announcement 11<sup>th</sup> January 2012).

Sampling of prospective HREE samples from within the vicinity of the original 'borrow pit' location has identified further enrichment up to 1km from this site. This sampling has returned up to **0.62kg/t dysprosium oxide, 4.49kg/t neodymium oxide, 1.07kg/t praseodymium oxide, and 3.16kg/t yttrium oxide**. A full list of results is shown in Table 1.



**Photo of REE samples collected from Coorabulka**

Some samples consisted of similar concretionary nodules in a clay dominant matrix. However others comprised a white chalky shale found in sub-outcrop (see photo above). More geological investigations need to be completed on the area to determine the extent of the REE and where they are likely to concentrate. A systematic surface geochemical sampling program over specific areas may be completed to highlight areas with potential for REE enrichment.

Concretionary samples from Coorabulka are being tested through new beneficiation technology. If successful this will provide a more environmentally stable and more efficient process of beneficiating the REE. Results from this process will be announced when received.



Further to the rare earths, up to 1050ppm lead has been received from these samples. This may be associated with Proterozoic fluids permeating up through the sediments along preferential pathways. A strong magnetic complex underlies the relatively shallow sedimentary 'cover' units and this is considered to be an ideal setting for Cannington style Lead – Zinc – Silver mineralisation. No modelling has been completed on this body but Krucible observations suggest an approximate depth of 150-300m.

Up to 17.8%  $P_2O_5$  (Phosphate) from this reconnaissance sampling was received which is considered low to medium grade phosphate enrichment. Phosphate is associated with the barium and strontium in the mineral Svanbergite and is also associated with the mineral Florencite which has been identified from petrological investigations on the concretions (see ASX announcement Krucible Annual Report 30<sup>th</sup> October 2012).

Maximum assay results of up to **9.47% Strontium** have been returned from the most recent sampling and appear to be strongly anomalous in areas of REE enrichment. This metal has a high market value because of its use in aluminium alloys. Recent prices for strontium metal ranges from (USD) \$4800-6800/tonne FOB.

The Cretaceous Toolebuc Formation which is interpreted to be present below surface (approximately 20-30m deep) is also prospective for Uranium/Molybdenum/Vanadium mineralisation (as well as oil shales).

This EPM should be granted in early 2013 from which time Krucible plans to complete more intensive exploration in line with our new exploration strategy.

**Attached:     FIGURES 1-2  
                     TABLE 1**

Yours Sincerely,

Allan Branch  
Managing Director and CEO



Assay results quoted are from ALS Laboratories in Brisbane and Townsville using method ME-MS81 which uses a lithium borate fusion which is analysed by mass spectrometry. Oxide conversion factors for the REE values are:

<b>Element</b>	<b>Oxide conversion factor</b>
Cerium	1.17
Dysprosium	1.17
Europium	1.16
Gadolinium	1.16
Lanthanum	1.17
Neodymium	1.17
Praseodymium	1.17
Samarium	1.16
Thulium	1.14
Yttrium	1.27
Ytterbium	1.17

This is preliminary data and no commercial decision should be based on these results.

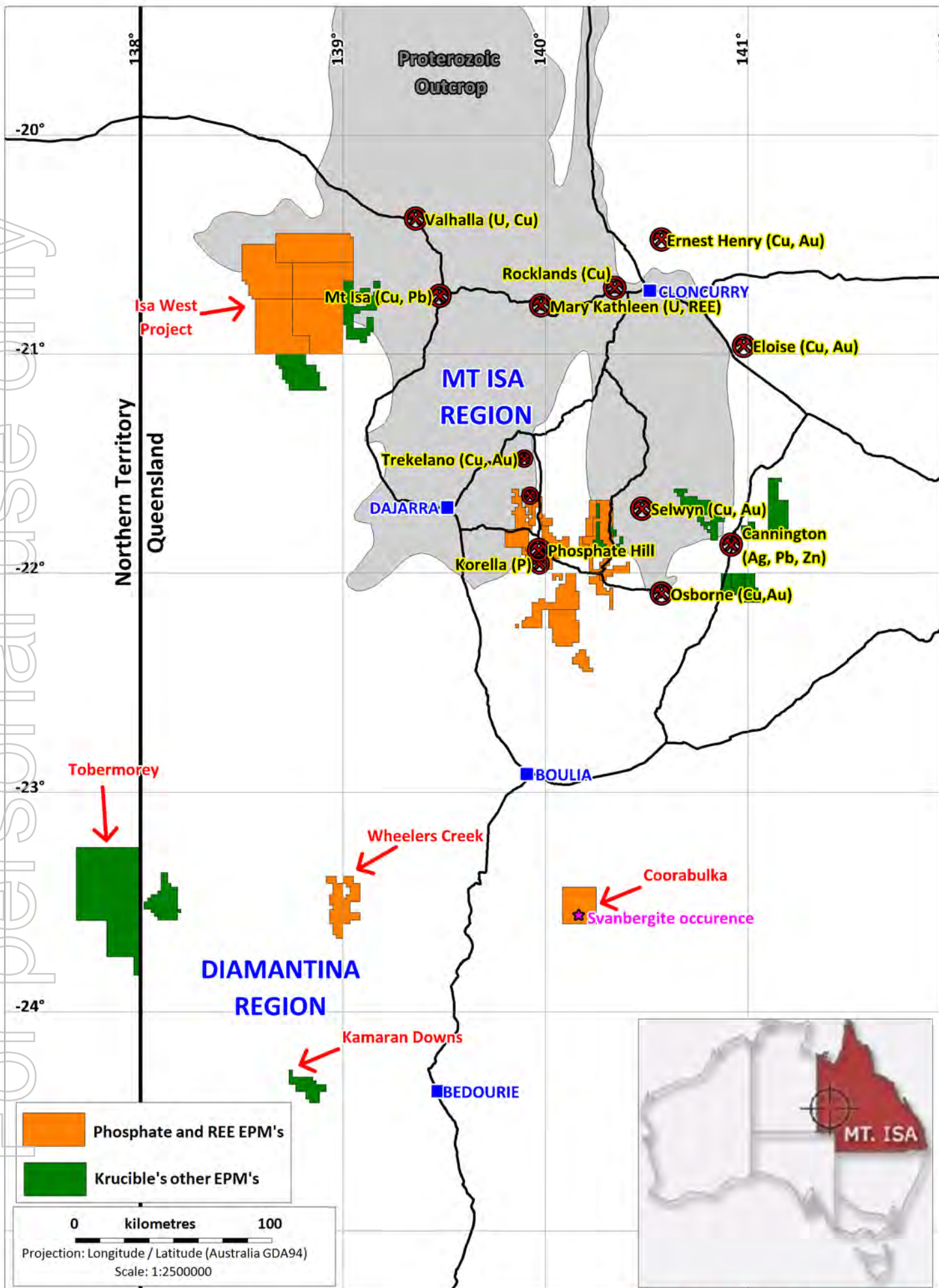
TABLE 1

## COORABULKA EPMA19286 - Surface Sampling Assay Values

Sample No	Easting (AGD66)	Northing (AGD66)	Description	Ce2O3	Dy2O3	Eu2O3	Gd2O3	La2O3	Nd2O3	Pr2O3	Sm2O3	Sr	Th	Tm2O3	U	Y2O3	Yb2O3	Ca	Pb	P2O5
				kg/t	kg/t	kg/t	kg/t	kg/t	kg/t	kg/t	kg/t	%	ppm	kg/t	ppm	kg/t	kg/t	%	ppm	%
COOR 32	425027	7392680	Scree/SOC, Wh shale/SSL fine grained	6.27	0.11	0.07	0.18	2.34	2.98	0.83	0.39	7.94	9.76	0.01	2.3	0.39	0.03	1.47	354	15.12
COOR 33	421320	7396240	large gravel pit, clay/chalky shale white	0.07	0.01	0.00	0.01	0.04	0.03	0.01	0.01	0.04	10.5	0.00	3.1	0.08	0.01	0.11	4	0.03
COOR 34	409368	7399343	silica rich float + Shale SOC	3.90	0.56	0.15	0.54	1.08	3.98	0.79	0.68	7.19	2.88	0.04	6.8	3.28	0.26	0.41	255	4.38
COOR 35	413656	7394786	small pit circular float - heavy + clay	5.72	0.08	0.09	0.19	1.85	3.63	0.90	0.51	9.47	1.23	0.00	1.8	0.09	0.00	0.99	947	17.82
COOR 36	413553	7394745	Chalky shale sub/OC near shallow trench	6.53	0.62	0.18	0.64	2.05	4.49	1.07	0.80	7.81	2.19	0.04	9.9	3.16	0.26	0.84	1050	16.61



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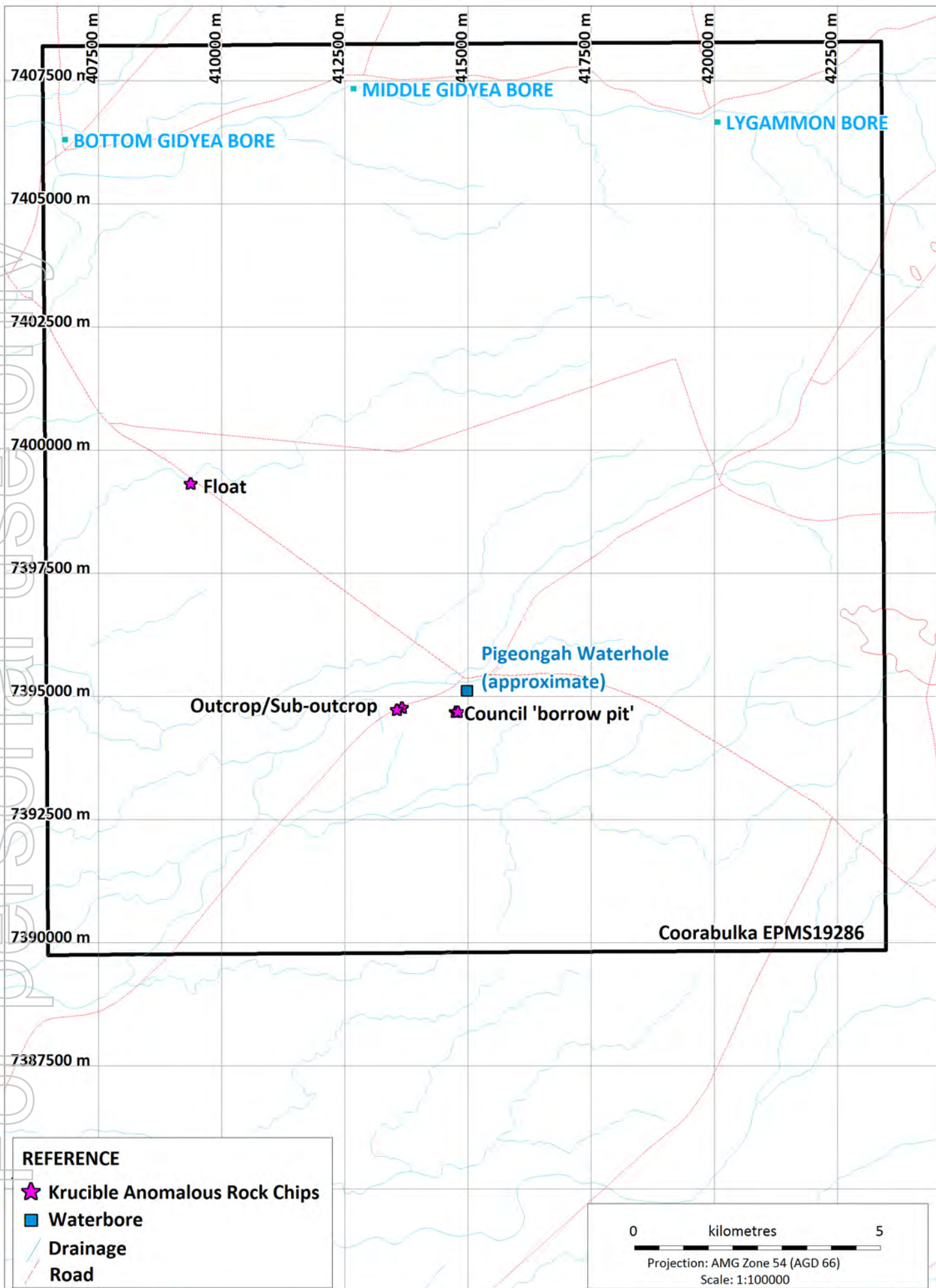


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# Krucible Metals Tenements - Coorabulka EPMA19286 Location Plan

FIGURE 1

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**COORABULKA EPMA19286 - Surface Sampling Locations**

**FIGURE 2**

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