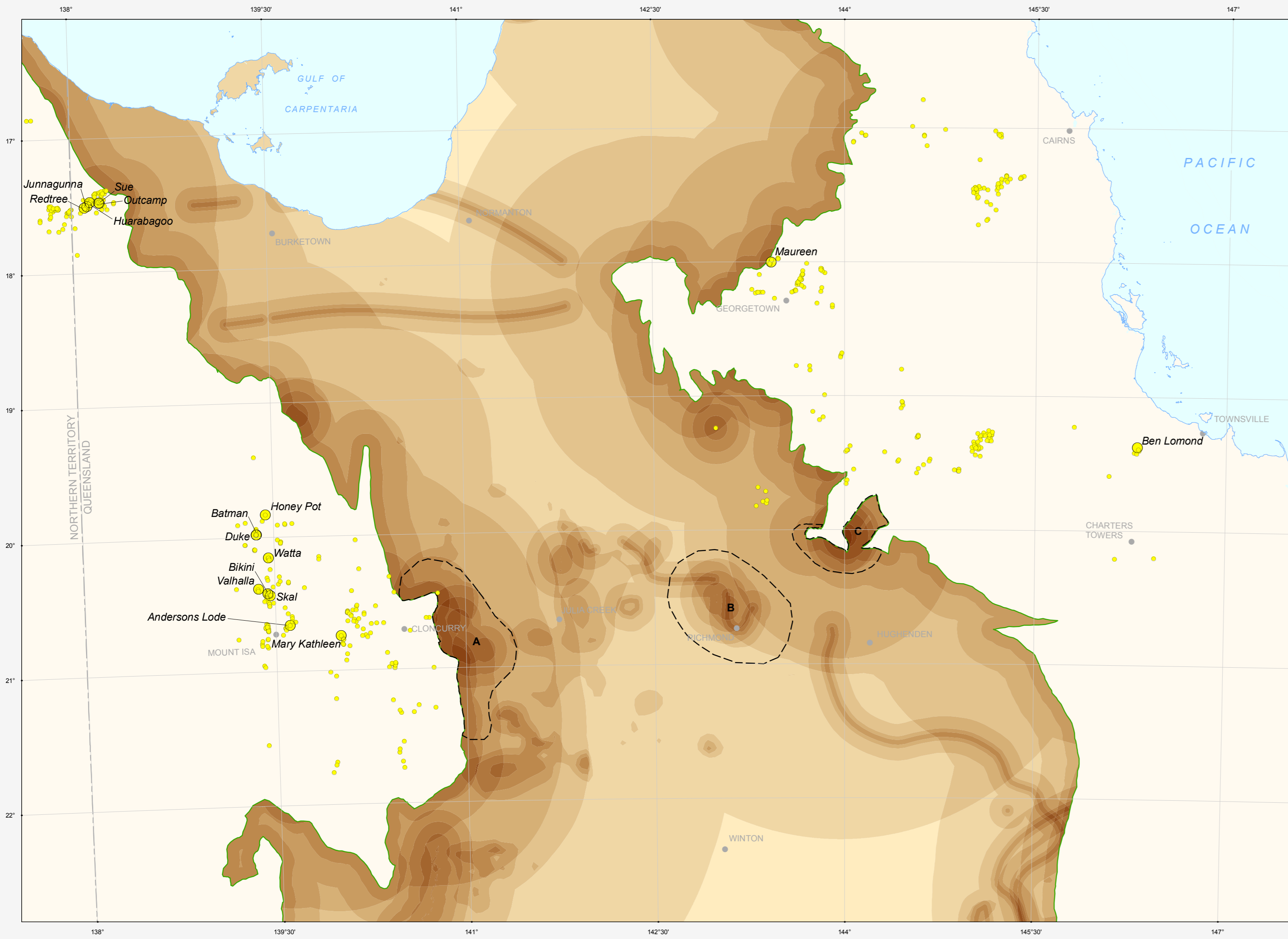


NORTH QUEENSLAND ENERGY SYSTEMS ASSESSMENT SANDSTONE HOSTED URANIUM POTENTIAL



Sandstone Hosted Uranium Potential

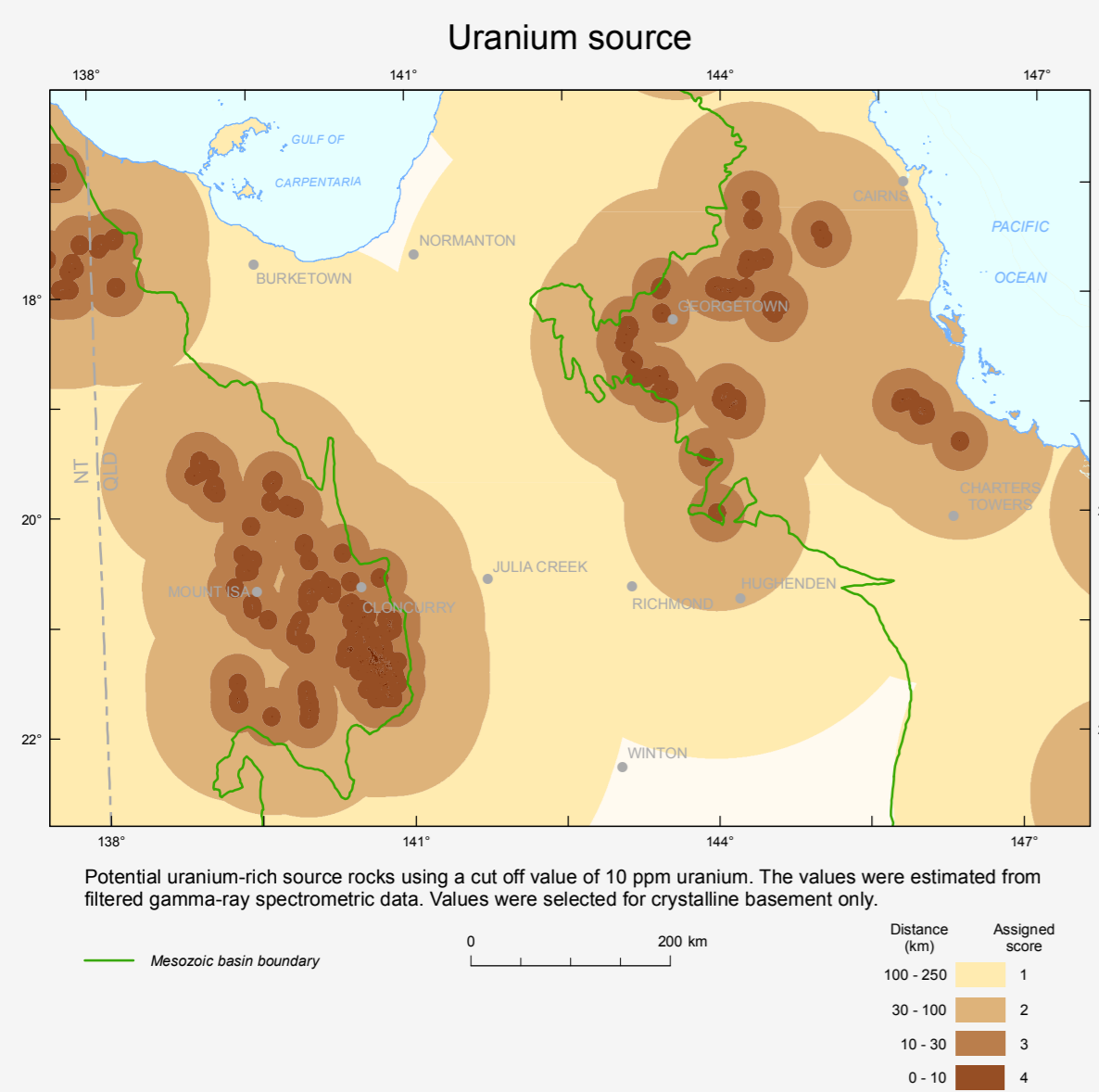
Low High

0 250 kilometres

Transverse Mercator Projection; Central Meridian 144° E; Geocentric Datum of Australia (GDA94)

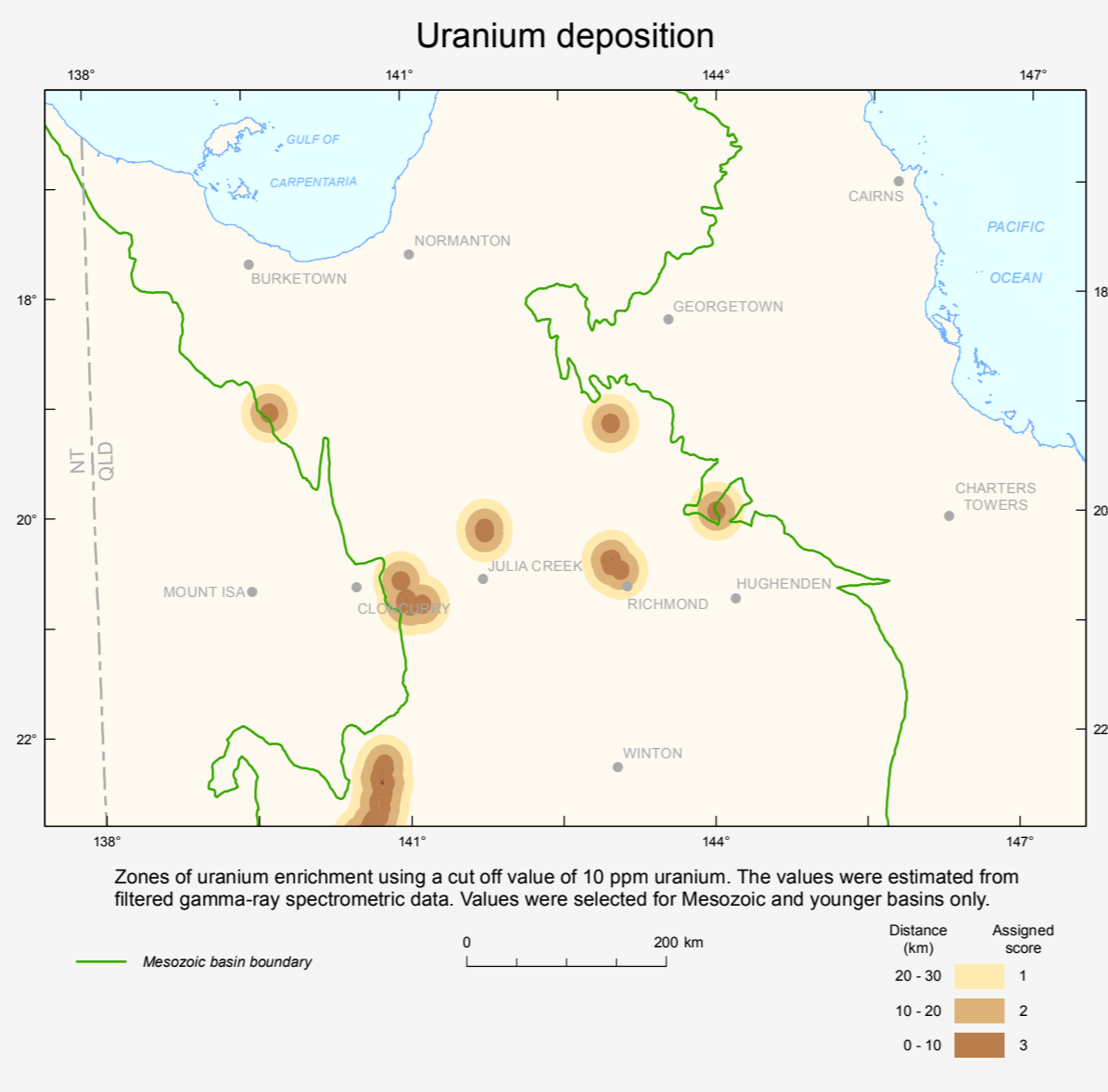
- Uranium deposits
- Uranium occurrences
- Mesozoic basin boundary
- - - High potential boundary

A Area east of Cloncurry
B Area 90 km north of Hughenden
C Area around the township of Richmond



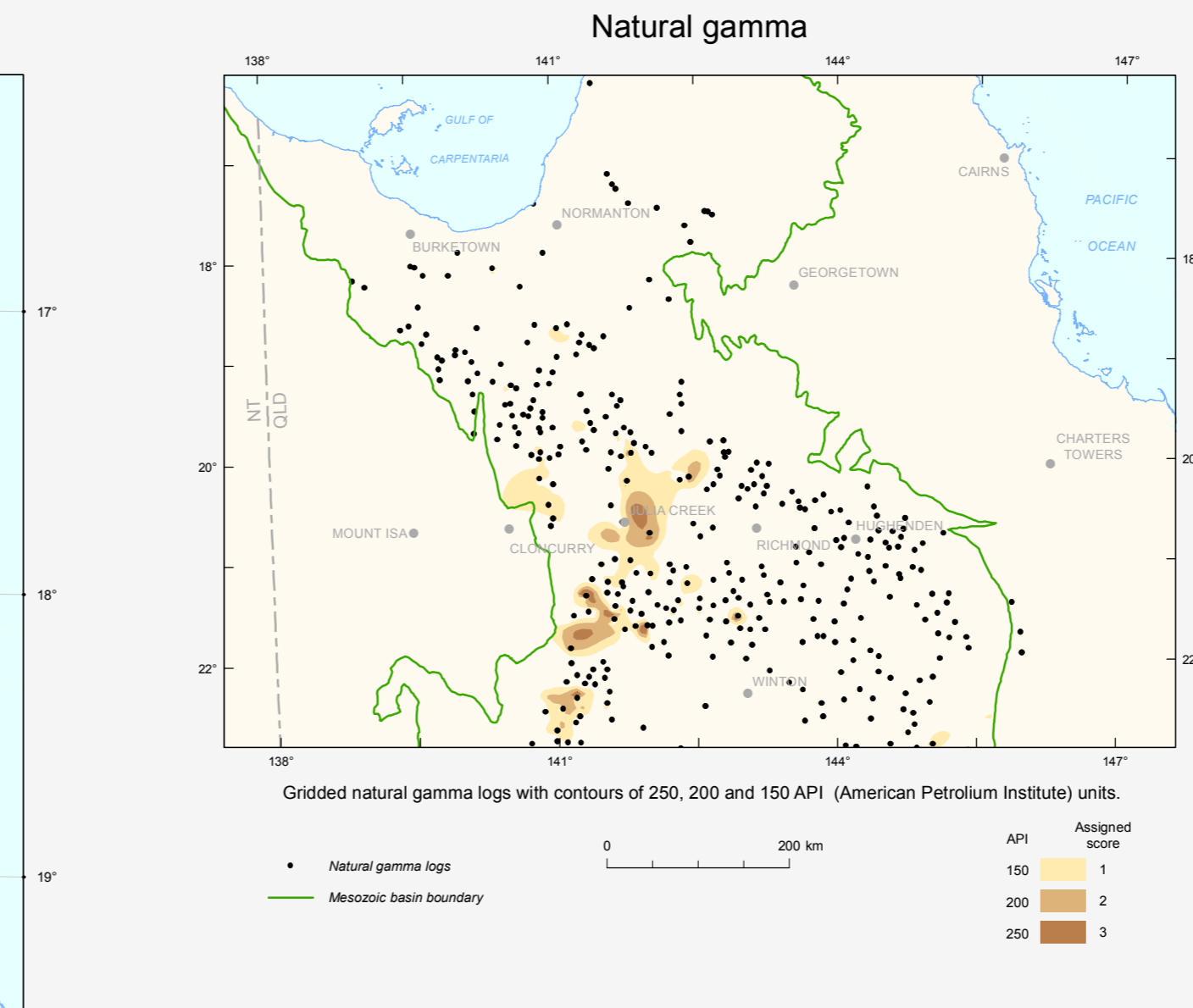
Potential uranium-rich source rocks using a cut off value of 10 ppm uranium. The values were estimated from filtered gamma-ray spectrometric data. Values were selected for crystalline basement only.

Distance (km)	Assigned score
100 - 250	1
30 - 100	2
10 - 30	3
0 - 10	4



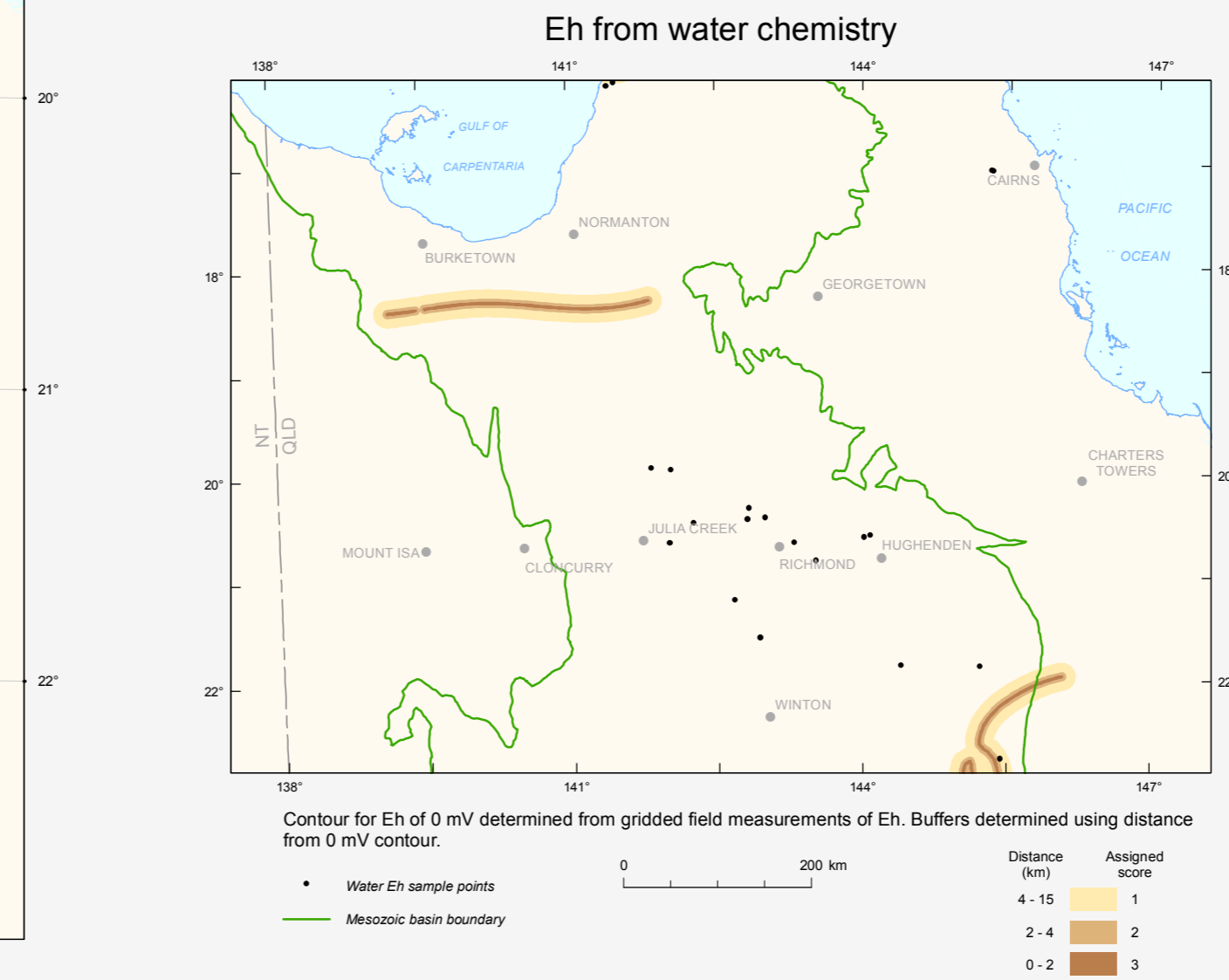
Zones of uranium enrichment using a cut off value of 10 ppm uranium. The values were estimated from filtered gamma-ray spectrometric data. Values were selected for Mesozoic and younger basins only.

Distance (km)	Assigned score
20 - 30	1
10 - 20	2
0 - 10	3



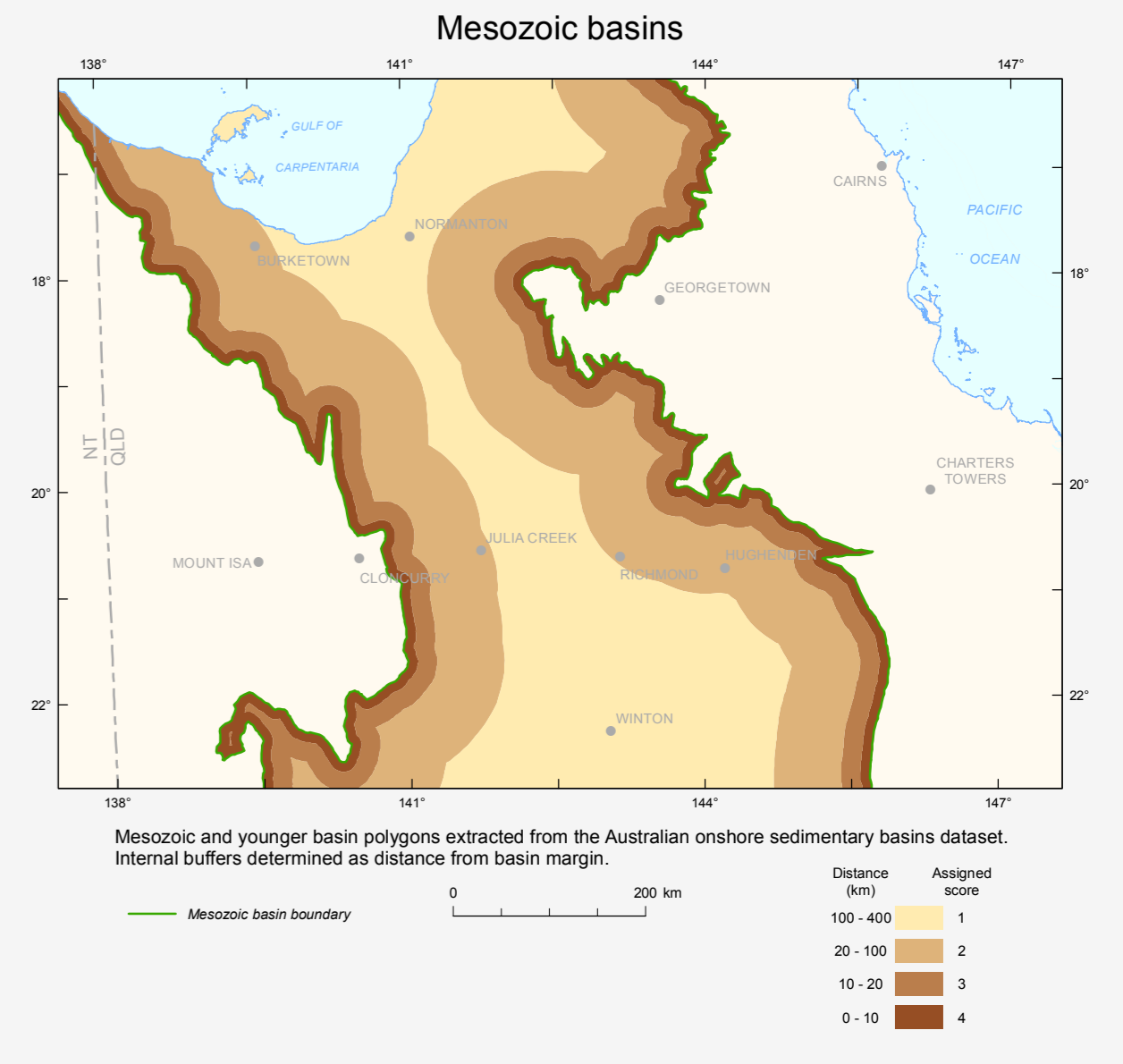
Gridded natural gamma logs with contours of 250, 200 and 150 API (American Petroleum Institute) units.

API	Assigned score
150	1
200	2
250	3



Contour for Eh of 0 mV determined from gridded field measurements of Eh. Buffers determined using distance from 0 mV contour.

Distance (km)	Assigned score
4 - 15	1
2 - 4	2
0 - 2	3



Mesozoic and younger basin polygons extracted from the Australian onshore sedimentary basins dataset. Internal buffers determined as distance from basin margin.

Distance (km)	Assigned score
100 - 400	1
20 - 100	2
10 - 20	3
0 - 10	4



Compiled by S.E. van der Wielen, Geoscience Australia
 Data analysis by S.E. van der Wielen and D.P. Connolly
 Cartography by D.P. Connolly
 Produced by GIS Services Group, Onshore Energy and Minerals Division, Geoscience Australia using ESRI ArcGIS 9.3 software

This map forms part of Geoscience Australia's Onshore Energy Security Program

It is recommended that this map be referred to as:
 van der Wielen S.E., Connolly D.P., 2010
Sandstone hosted Uranium Potential. In: Huston D.L. (editor), 2010. North Queensland, Energy Assessment. Geoscience Australia, Canberra, GA Record, in prep.

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