

SIRIUS RESOURCES NL

ASX: SIR

ABN: 46 009 150 083

Level 1, 10 Ord Street,
West Perth 6005,
Western Australia

PO Box 682
West Perth 6872,
Western Australia

Telephone +61 8 6311 5554
Facsimile +61 8 6311 5556
admin@siriusresources.com.au
www.siriusresources.com.au

Contact

Mark Bennett, Managing Director
+61(0)407 470 648

Projects

Collurabbbie:

Nickel, copper, PGM's

Fraser Range:

Nickel, copper, PGM's

Polar Bear:

Nickel, PGM's

Lawlers:

Nickel

Youanmi:

PGM's, copper, zinc, gold

Lake Wells:

Uranium, iron, gold


LAKE WELLS RADIOMETRIC SURVEY CONFIRMS URANIUM ANOMALIES

Sirius Resources (ASX:SIR) advises that the detailed radiometric survey recently flown at its Lake Wells project has confirmed the presence of the three uranium anomalies announced in the ASX release of 26th November 2009.

The northern anomaly is 6km long and 2km wide, the central anomaly is 2km in diameter and the southern anomaly is 5km long and 1km wide. Each anomaly also contains a smaller zone of more intense anomalism. The figures show the three anomalies in terms of uranium, uranium squared over thorium, and potassium-thorium-uranium ratios (Figures 1-3). Figure 4 shows the location of these anomalies with respect to the drainage system which hosts them.

The anomalies are associated with calcrete outcrops in a drainage system adjacent to Lake Wells. This system drains a large area of granite and is partly covered by sand dunes, but where exposed, is anomalous in comparison to the general background level of uranium in the area and that in the main part of the lake. This setting is prospective for the calcrete-hosted carnotite style of uranium deposits, which can form extensive near-surface blankets of mineralisation. The channel containing these anomalies is part of a broader system that also hosts the Thatcher Soak uranium deposit, on which Uranex has a published resource of 17 million tonnes @ 290ppm for 11 million lbs U₃O₈ using a 150ppm lower cutoff and Eleckra has a published resource of 10 million tonnes @ 204ppm for 4.5 million lbs U₃O₈ using a 150ppm lower cutoff.

Radiometric surveys are not a definitive and absolute measure of uranium concentration. Accordingly, the next phase of exploration will comprise selective reconnaissance aircore drilling and subsequent downhole gamma logging to determine absolute concentrations of uranium.

The Lake Wells tenements cover 2,678 square kilometres of relatively unexplored greenstones and granites on the north-eastern margin of the Yilgarn craton. The project contains major shear zones and banded iron formations and is very sparsely explored. It forms part of the Collurabbbie Joint Venture in which Sirius has a 70% interest.



Mark Bennett
Managing Director and CEO
Sirius Resources NL

Figure 1. Uranium image showing the three anomalies at Lake Wells.

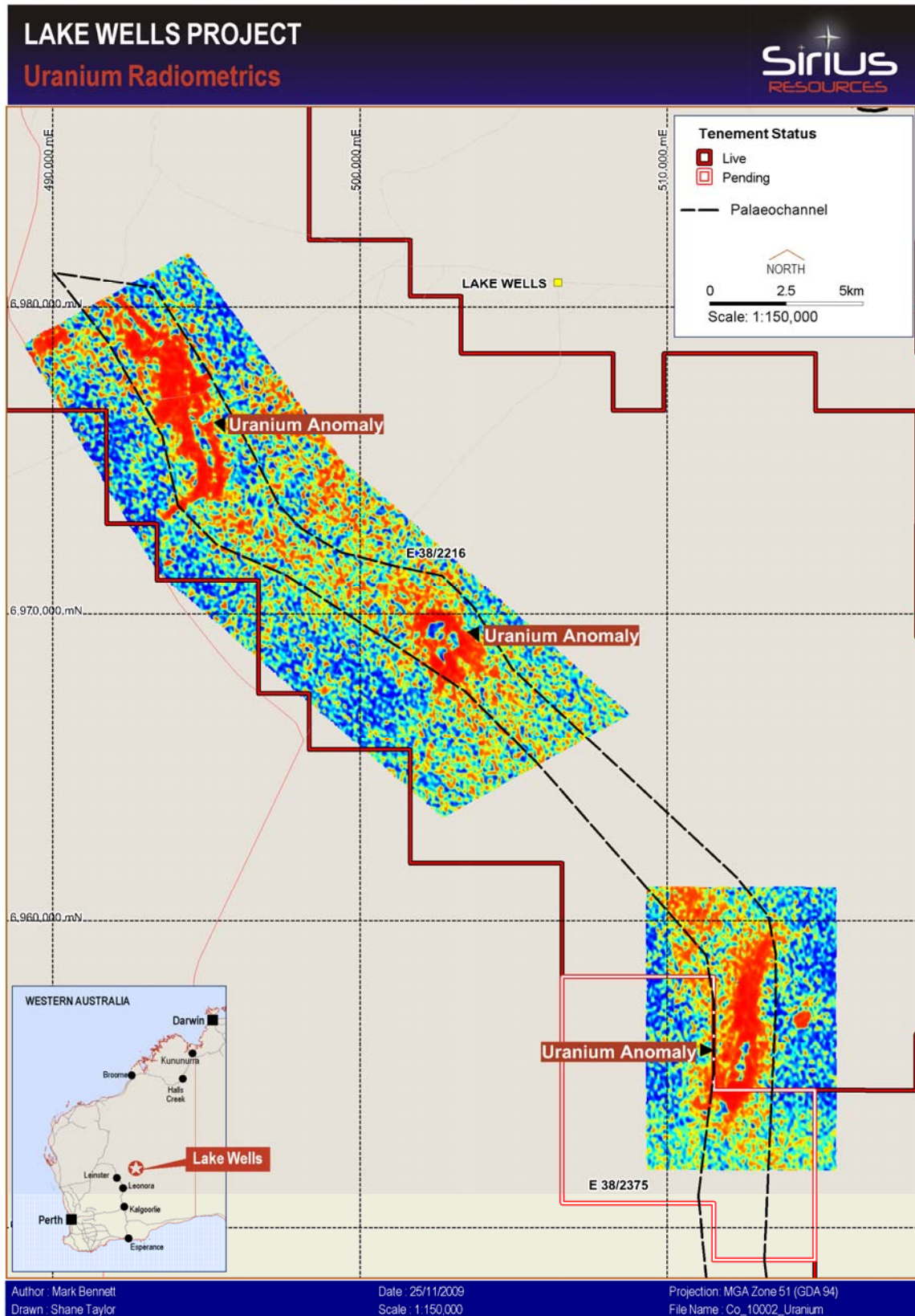


Figure 2. Uranium squared over thorium image showing the three anomalies at Lake Wells.

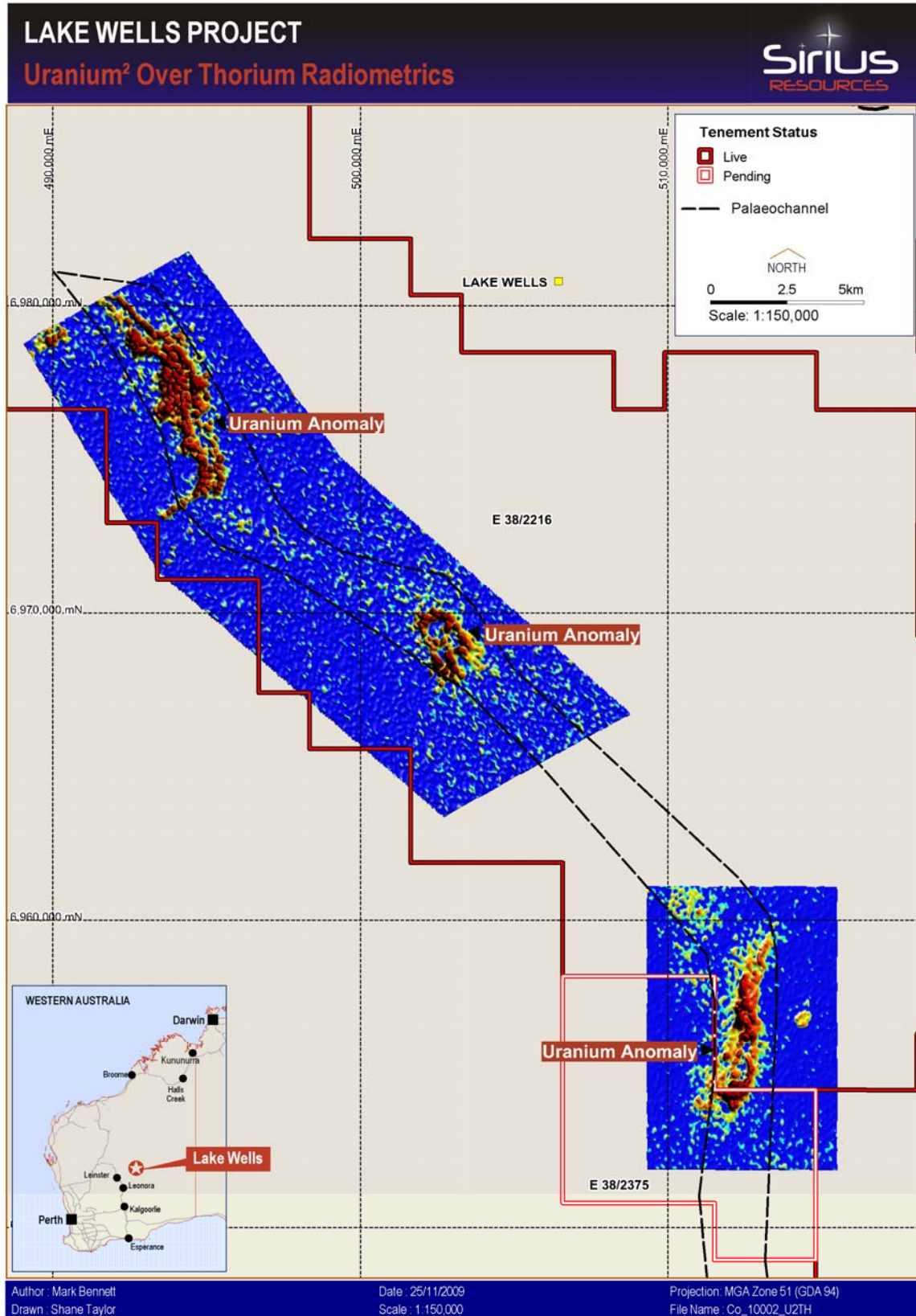


Figure 3. Potassium-thorium-uranium image showing the three uranium anomalies (blue) at Lake Wells.

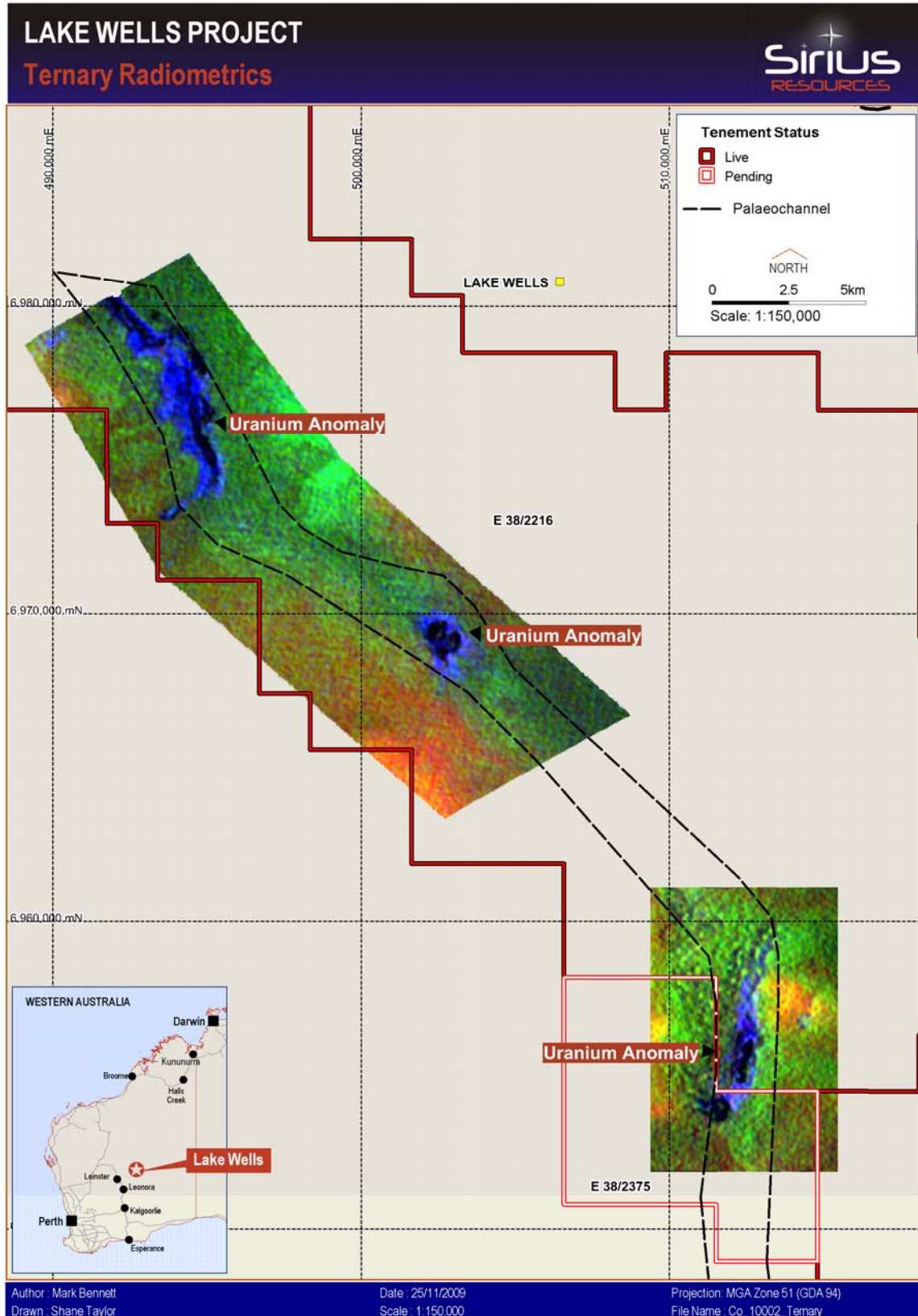
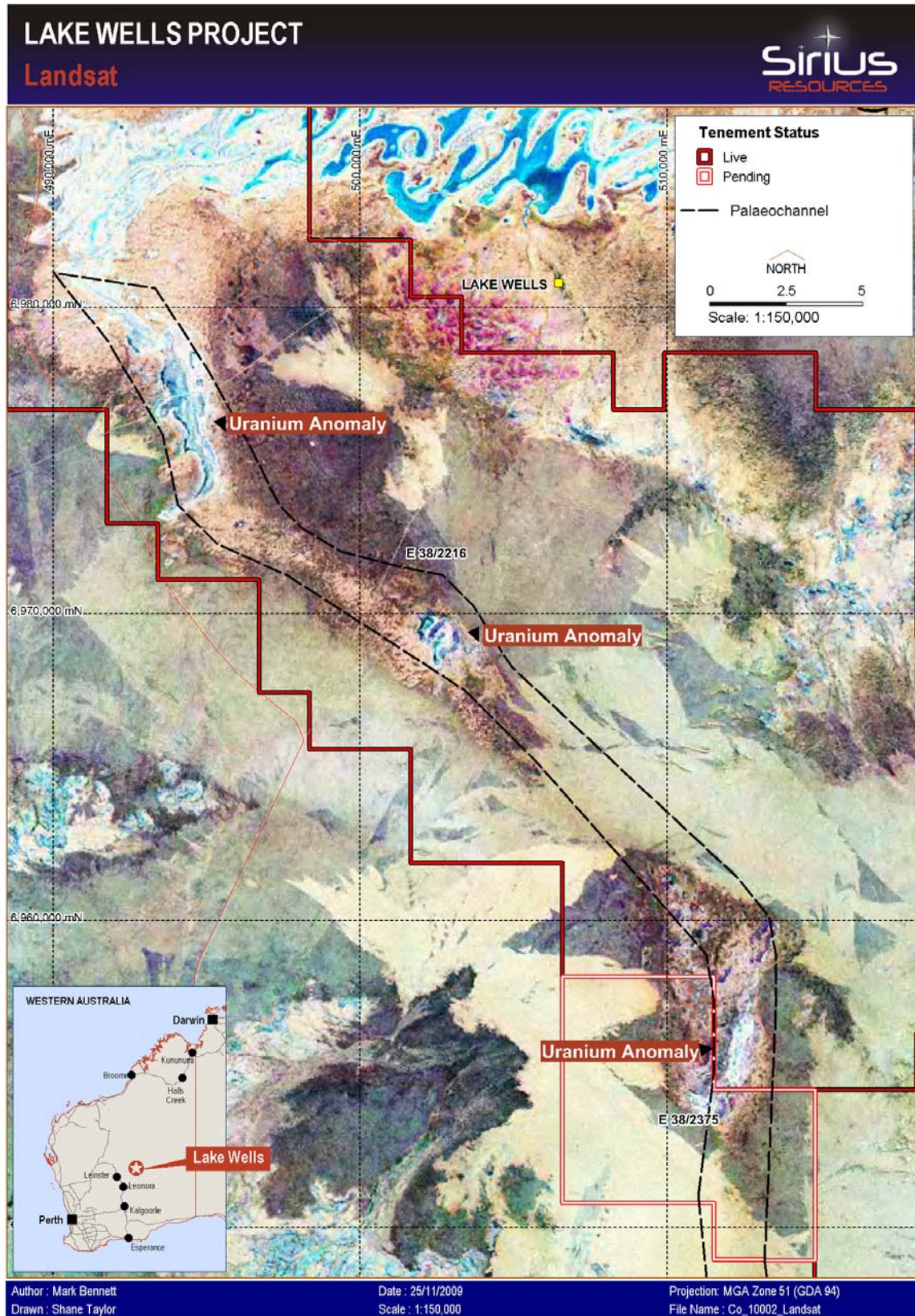


Figure 4. Landsat image showing the location of the three uranium anomalies at Lake Wells.



Important Notice

This press release is not an offer of securities for sale in the United States. No security of Sirius has been registered under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"), and no such security may be offered or sold in the United States absent registration under the U.S. Securities Act and applicable state securities laws or an exemption from registration under the U.S. Securities Act and such laws.

Competent Persons statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Dr. Mark Bennett, who is an employee of the company. Dr Bennett is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Bennett consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Exploration results are based on standard industry practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Reverse circulation (RC), aircore and rotary air blast (RAB) drilling samples are collected as 1 metre samples and composited where stated. Core samples are taken as half core sampled to geological boundaries where appropriate. All samples are prepared using four acid digest, lead collection or nickel sulphide collection fire assay, and assayed using inductively coupled plasma mass spectrometry (ICPMS), inductively coupled optical emission spectrometry (ICPOES) or atomic absorption spectrometry (AAS) at reputable laboratories in Perth, Western Australia. The accuracy and precision of analytical results is monitored by the use of internal laboratory procedures and certified standards and subsequent statistical analysis to ensure that results are representative.

