



ADVANCED ENERGY FUELS

New tenements granted including the high-grade Pearana prospect and extensions to the existing Contact resource, South Woodie Woodie Manganese Project, Pilbara, WA

Highlights

Tenement E46/1521 Granted (98.53km²)

- E46/1521 (“Pearana”) is a >4km long NW-SE trending ridge capped by the Pinjian Chert Breccia, the main host of the high-grade Woodie Woodie Manganese Mine approx. 30kms to the north.
- High-grade manganese mineralization, with multiple assays >30% Mn was observed and sampled over a 3.5km strike length.
- Next steps include drill targeting and geophysical surveys: gravity, magnetics, and electromagnetics to refine high-priority targets for upcoming drill programs.

Tenement E46/1542 Granted (19.03km²)

- E46/1542 lies adjacent to the existing Contact-Contact North JORC resource.
- Several high priority extensional targets have been identified providing high priority drill areas.

Perth, Western Australia, 15th April 2025: Advanced Energy Fuels (Aust) Pty Ltd (“AEF” or the “Company”) is pleased to announce the granting of E46/1521 and E46/1542, two important additions to the extensive tenement package, located south of the Woodie Woodie manganese mine in the Pilbara region of Western Australia (see Figure 1).

E46/1521 encompasses 98.53 kms² of highly prospective ground covering the Pearana prospect, which was the subject of a recent geological mapping and surface rock chip sampling program, with a total of 302 rock chip samples collected. This exploration campaign successfully identified highly prospective, high-grade manganese mineralisation in proximity to favourable geology¹.

Pearana is a >4 km long NW-SE trending ridge capped by the Pinjian Chert Breccia (Main host of the Woodie Woodie mine Manganese). High-grade manganese mineralisation, with multiple assays exceeding 30% Mn, was observed and sampled over a 3.5 km strike length. Twenty-four of the highest-grade samples from Pearana returned assays as shown in Table 1.

¹ For further details please see announcement released by Trek Metals Limited (ASX: TKM) 10 February 2025.

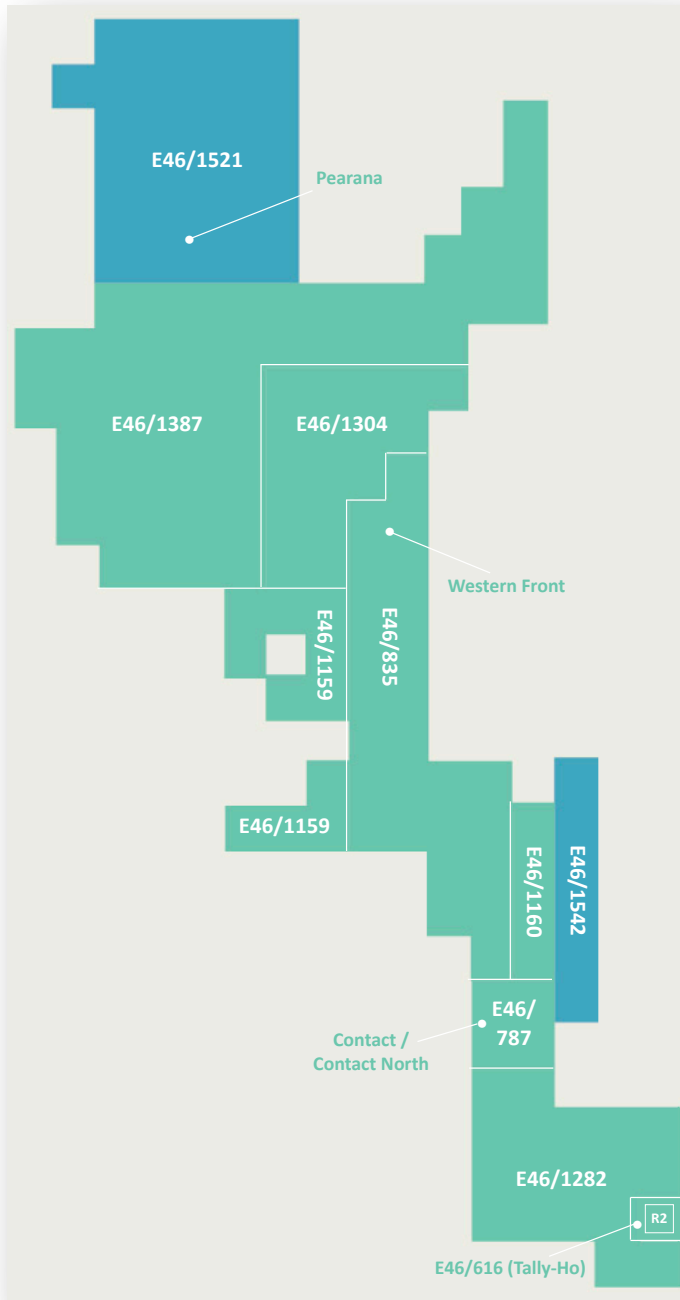


Figure 1: AEF tenements covering 577.84km²

Sample Number	Mn%
PRK0097	51.8
PRK0191	49.1
PRK0012	47.7
PRK0096	47.4
PRK0125	46.7
PRK0092	46.6
PRK0213	46.2
PRK0167	45.8
PRK0095	45.4
PRK0030	43.9
PRK0123	43.5
PRK0011	42.9
PRK0165	42.7
PRK0172	42.7
PRK0007	41.7
PRK0169	41.4
PRK0300	41.2
PRK0085	41.0
PRK0164	41.0
PRK0181	40.8
PRK0148	40.3
PRK0122	40.2
PRK0114	40.2
PRK0212	40.1

Table 1: Pearana top sample assays

Executive Director, Gary Lewis commented: “We are pleased to have had two important tenements granted at the South Woodie Woodie Manganese Project, allowing the Company to plan further on-ground exploration, including a drill campaign at the exciting Pearana prospect. With the work recently completed at Pearana, we believe this area holds considerable potential for a significant discovery, allowing AEF to fast track the development of drill targets and delineate a maiden mineral resource”.

“While Pearana has emerged as a primary target for future exploration and drilling, the Contact deposit remains the Company’s top priority, hence the strategic importance of the granting of the adjacent tenement, E46/1542. AEF continues to advance flowsheet development and optimization and battery precursor testwork on manganese concentrates produced from the Contact resource drill-core and will keep shareholders updated on future developments”.

Competent Person (for JORC)

The information in this report that relates to Exploration Results, Mineral Resources, or Ore Reserves is based on, and fairly represents, information and supporting documentation compiled by John Levings, BSc, FAusIMM. Mr. Levings is a Fellow of The Australasian Institute of Mining and Metallurgy (FAusIMM) and 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 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr. Levings consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

About Advanced Energy Fuels

Advanced Energy Fuels (AEF) is a battery materials company focused on the extraction and purification of minerals critical for the batteries that power electrification and energy storage. AEF has a multi-asset portfolio strategically located in tier one jurisdictions with manganese operations in the Pilbara Region of Western Australia and fluorspar projects in the United States. The company is focused on addressing critical mineral shortages in US supply chains. Manganese and fluorspar are essential raw materials to multiple high-growth industries and are designated critical minerals in Australia, US and EU. The US is 100% dependent on imports from ‘foreign entities of concern’.

For further Information please contact:

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