

Timorese riverbed throws up manganese cobbles for Estrella

Andrew Duffy in The West Australian Sponsored 31 May 2024

Estrella Resources' hunt for manganese in Timor-Leste is heating up, with recent grab samples from riverbeds going as high as 58.4 per cent manganese at the company's newly-coined Dasidara prospect.

Management says geological reconnaissance across its 503.7 square kilometres of ground has defined mineralisation through 30km of strike length as proposals to kick off trenching and drilling are maturing.

The riverbed at Dasidara also threw up a grab sample going 53.7 per cent manganese from an area described by Estrella as "high-grade manganese cobbles". The prospect is in virgin ground away from the company's three other Timorese deposits – the Sauro, Lalena and Japanese Port prospects.

Sauro sits within a granted exploration and evaluation lease and contains two areas in which the prospective Noni formation has been mapped. Portable X-ray fluorescence (pXRF) analysis suggests the rocks at Sauro contain as much as 27.9 per cent manganese.

Lalena also sits within the same exploration and evaluation lease and has thrown out rock chips taken from the Noni Formation assaying at a massive 60.8 per cent manganese. Notably, the Lalena prospect sits along strike from the newly-identified Dasidara prospect.

The most recent batch of samples from Lalena came back with a high of 48.9 per cent manganese from a weathered manganese nodule.

Estrella's work at its Japanese Port prospect is laced with intrigue as it has been sampling a 15m-by-10m stockpile of manganese collected at the WWII port location. Management says two grab samples from that stockpile went 57.6 per cent and 58.1 per cent manganese.

It begs the question – where did it come from? While finding a pile of transported rocks means little to subsurface de-risking, Estrella notes that the stockpile is on the coast, 10km downstream of its Dasidara prospect.

At the very least, the pile suggests the riverbed may be cutting away at manganese somewhere below the present-day surface – possibly in layers of mobilised laterite enriched in manganese that have been dragged from somewhere upslope and redeposited.

Estrella says weathering, lateritisation and erosion has moved manganese oxides from where they formed near the top of the soil profile, to thickened layers within local creeks where the manganese cobbles get concentrated over time.

"In just a very short period of time, our exploration team has made several promising manganese discoveries within our tenements in Timor-Leste. Indications are the manganese is very high grade, low in deleterious elements and has excellent Fe to Mn ratio, which is highly sort after material by world markets."

-- Estrella Resources managing director Chris Daws

The company believes those factors make the rocks valuable feedstock for smelters. Interestingly, manganese mines in neighbouring Java provide smelter feedstock straight from the ground in some cases, with little to no processing required.

Estrella says it has successfully mobilised crushing and other laboratory equipment to Timor-Leste to give it the ability to test and report multi-element pXRF results from within the country, including the use of the portable parts per billion gold detection system. Management says select samples will be double checked in Australia as a QAQC (quality assurance/quality control) method.

The Timor-Leste manganese story is fast developing into one of frontier exploration success for Estrella as the company's geologists continue to explore the hills south of the town of Lautem on the north coast.

With manganese demand modelled to grow on the back of the closure of the Groote Eylandt manganese mine in the Northern Territory – a situation expected to extend until mid-next year – and with a backdrop of rising prices, it probably isn't a bad time to be finding prospects like Estrella's.