

Amalia Greenstone Belt — Regional Overview

Radebe Technical Projects | Regional Exploration Programme

Belt Summary

The Amalia Greenstone Belt is an Archaean greenstone belt preserved within the Kaapvaal Craton, North West province, South Africa. The belt forms a narrow, steeply dipping corridor roughly **4 km wide and 55 km long**, comprising metavolcanic and metasedimentary sequences. Gold was first discovered in the district in **1903** and has been worked intermittently since, largely by small-scale operations following surface expressions of mineralisation.

Host Lithology & Mineralisation

Gold mineralisation is hosted primarily in siliceous banded iron formation (BIF) and associated quartz-carbonate vein systems, with magnetite enrichment marking favourable horizons. Mineralisation is strongly structurally controlled: shear zones, local bends and fold hinges act as fluid conduits, concentrating gold where deformation intensity is highest.

Structural Setting

Scarce outcrop across the belt has made an accepted regional stratigraphy difficult to establish, leaving substantial ground under-explored by modern geophysical and geochemical methods. The regional programme applies belt-scale magnetic, gravity and electrical surveys, soil and rock chip geochemistry on regional grids, and 3D structural modelling to convert the strongest targets into rights applications and standalone project studies.

Key Facts

Belt strike length	55 km
Average belt width	4 km
Gold first discovered	1903
Craton	Kaapvaal (Archaean)
Host lithology	Banded iron formation, quartz-carbonate veins
Structural control	Shear zones, fold hinges, local bends
Commodities	Gold, iron ore (magnetite BIF)

This public summary is provided for informational purposes. Detailed interpretation plates, survey data and the target pipeline register are released under confidentiality terms on request.