



27 September 2021

Pensana Plc

("Pensana" or the "Company")

Coola Continues to Deliver Strong Progress

Pensana Plc today provides an exploration update from its Coola project located 16 kilometres north of the Company's state-of-the-art Longonjo rare earth development in Angola.

Having identified highly anomalous technology metals including rare earths, scandium and fluorite in soils surrounding the 7,500 km² Coola project in 2020, field exploration activities resumed in Q3 2021.

Highlights include:

- The Coola carbonatite has an enriched distribution of heavy rare earths compared to the light rare earth elements including neodymium-praseodymium (NdPr) at Pensana's Longonjo project. Work is ongoing to establish the extent of the mineralisation and confirm its distribution. This will help to identify how Coola may complement NdPr production from Longonjo. Heavy rare earths are less abundant and are important in a range of clean energy technological applications including permanent magnets.
- Scandium in Coola's soils is highly anomalous with most values at more than 80 ppm and exceptional values of over 200 ppm. Work is underway to identify the mineral host and the extent of mineralisation. Scandium is used in alloys, particularly with aluminium, for light-weighting applications in industries including aerospace manufacturing.
- In 2020, Pensana identified outcropping of fluorite and undertook soil sampling and geological mapping over the 6 km by 2.5 km complex. An outcrop sample of very high-grade material of over 97% calcium fluoride has been highlighted for further investigation. Given that outcropping fluorite is often difficult to identify, this is strong evidence for more similar mineralisation. The area is being mapped in detail and will be soil sampled. Trenching, rock chip sampling and drilling will be considered thereafter. Fluorite is crucial in a growing range of chemical, ceramic and metallurgical processes.

While the global pandemic has interrupted field staff site access, a Phase II programme has commenced and is on track to conclude in Q4 2021. This comprises:

- Detailed geological mapping and rock chip sampling of the Coola carbonatite complex

- Mineralogical studies including XRD, petrography and whole rock geochemistry
- Infill soil geochemistry over the area of fluorite mineralisation
- Infill soil geochemistry over the rare earth/ Scandium enriched carbonatite ring dyke
- Augering the central diatreme.

The Phase II programme is well timed to access upgrades which will enable larger equipment on site at Coola in 2022.

Pensana's CEO, Tim George, said:

"Now that Covid restrictions are being eased we are really pleased to get the team back in the field and restart exploration activities at Coola.

The Coola carbonatite is the first of several targets within the 7,500 km² Exploration Licence area we will be targeting.

The initial focus is to follow up on the heavy rare earths, scandium and fluorite anomalies identified at Coola and we very much look forward to reporting results from these programmes over the coming weeks."

For further information:

Pensana Plc

Website:

www.pensana.co.uk

Paul Atherley, Chairman / Tim George, CEO

contact@pensana.co.uk

About Pensana

The electrification of motive power is the most important part of the energy transition and one of the biggest energy transitions in history. Magnet metals are central to the transition and critical to high value manufacturing applications such as electric vehicles and offshore wind turbines.

Pensana plans to establish Saltend as an independent, sustainable supplier of the key magnet metal oxides to a market which is currently dominated by China. The US\$125 million Saltend facility is being designed to produce circa 12,500 tonnes per annum of rare earth oxides, of which 4,500 tonnes will be neodymium and praseodymium (NdPr), representing around 5% of the world market in 2025.

The Saltend facility is located within the world class Saltend Chemicals Park, a cluster of leading chemicals and renewable energy businesses at the heart of the UK's energy estuary, and host to a range of companies including BP Petrochemicals technology, INEOS, Air Products, Triton Power, Nippon Gohsei and Tricoya.

Pensana's plug and play facility will create over 500 jobs during construction and over 100 direct jobs once in production. It will be the first major separation facility to be established in over a decade and will become one of only three major producers located outside China.

Initial feedstock will be shipped as a clean, high purity mixed rare earth sulphate (MRES) from the Company's Longonjo low impact mine in Angola. The open-cast mine, state-of-the-art concentrator and proprietary MRES processing plant are being designed by Wood to the highest international standards. They will be powered by minimal carbon hydro-electric power and connected to the Port of Lobito by the recently upgraded Benguela railway line.

Pensana is of the view that provenance of critical rare earth materials supply, life cycle analysis and GHG Scope 1, 2 and 3 emissions will all become significant factors in supply chains for major customers. The Company intends to offer customers an independently and sustainably sourced supply of the metal oxides and carbonates of increasing importance to a range of applications central to the energy transition, industrial, medical, military and communications sectors.

For many miners around the world who are looking to access the European and US supply chains, it is becoming increasingly clear that the proposed EU and possible UK carbon border taxation would mean that it is no longer acceptable for manufacturers to source material extracted or processed unsustainably.

Pensana is aiming to establish Saltend as an attractive alternative to mining houses who may otherwise be limited to selling their products to China, having designed the facility to be easily adapted to cater for a range of rare earth feedstocks.