

# **Development Zone: Jansen Titanium and Iron**

Name: Jansen

**Number: 1030** 

Date: Tuesday, 19 April 2022

Filename: 211012-LRR-DevZone-Jansen-v3-PUBLIC

### **Disclaimer**

The following research is publicly available, and apart from maps from 3<sup>rd</sup> Parties, shall remain the Copyright of Lunar Resources Registry (LRR) UG.

This research is designed to highlight prospective locations of space resources, that can be registered by select clients via our Lunar Resources Registrations as a Service Platform, and included in our Public Registry.

#### **Resources Profile**

The Jansen Titanium and Iron Development Zone is established in the territory of lunar mare crater Jansen, which is located on the near side of the Moon, in the northern part of Mare Tranquillitatis, with a diameter of 24 km.

The Jansen Titanium and Iron DZ is formed by mare basalt, whose structure is made of minerals such as plagioclase, pyroxene, olivine and iron-titanium oxides like ilmenite.

Lunar plagioclase, being the most abundant mineral in the lunar crust, is depleted in Na. The most commonly occurring pyroxenes are hypersthene, augite and pigeonite. Olivines contain such significant elements as Mn, Ca, Ni, Cr and Al. Ilmenite magma, the higher the ilmenite content of the rock. Ilmenite forms as much as 15-20% by volume (on the example of Apollo 11 and 17 mare basalts).

The 1994 Clementine UV/VIS images show that the wt% FeO on this area is around 19 and that there is a significant Titanium concentration - 8 - 10 %wt TiO2 (blue channel of a color image – 414 nm/750nm).

#### Further reading:

- 1. "The Constitution and Structure on the Lunar Interior", Mark A. Wieczorek et al., Mineralogical Society of America geochemical society, Reviews in Mineralogy & Geochemistry Volume 60, 2006
- "Thermal and Magmatic Evolution of the Moon", Charles K. Shearer et al., Mineralogical Society of America geochemical society, Reviews in Mineralogy & Geochemistry Volume 60, 2006
- 3. https://en.wikipedia.org/wiki/Jansen\_(crater)

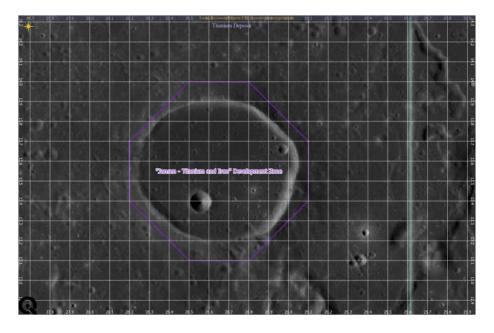
### **Registration Development Status**

Lunar Resources Registry and Lunar Station Corp have signed a Partnership Agreement to provide Registrations to selected clients in relation to this Development Zone.



# Maps

## Jansen with Base Map. Source: LRR



### **Registrations Available**

Registrations plots, 1km<sup>2</sup> Qty: 441

Source: Lunar Station - https://lunarstation.space/

