

# Development Zone: Krafft Titanium and Iron

**Name: Krafft / Kraft**

**Number: 1036**

Date: Tuesday, 25<sup>th</sup> January 2023

Filename: 220110-LRR-DevZone-Kraft-Titanium-v1\_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 Krafft Titanium Development Zone is established in the proximity of such lunar mare craters as Krafft U, Gallilei W, V, T and S, which are located on the near side of the Moon, in the Oceanus Procellarum.

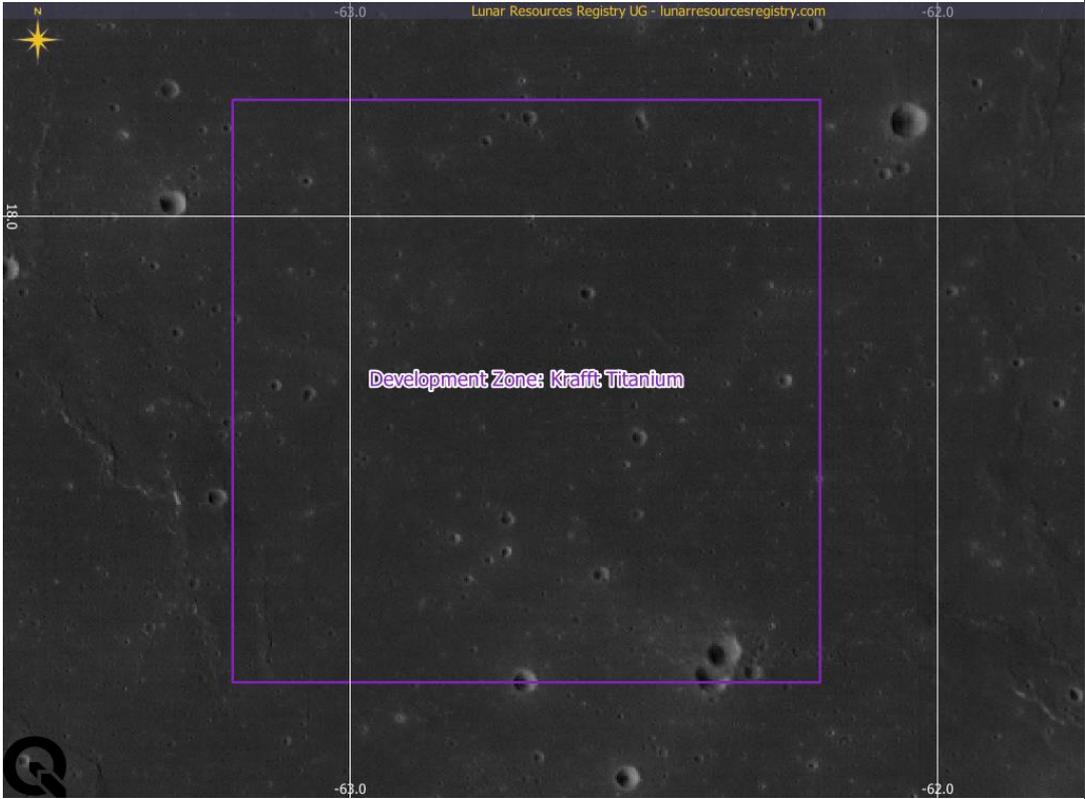
The Krafft DZ is formed by mare basalt, whose structure is made of minerals such as plagioclase, pyroxene, olivine and iron-titanium oxides like ilmenite.

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 Lunar Reconnaissance Orbiter Camera (LROC) Wide Angle Camera (WAC) images indicate that the concentration of the TiO<sub>2</sub> is between 8 - 10 wt %.

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
2. "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\\_\(crater\)](https://en.wikipedia.org/wiki/Jansen_(crater))

<b>Krafft with Base Map. Source: LRR</b>	
 <p>Development Zone: Krafft Titanium</p>	
Source: LRR Resources Moon Map	