# Dossier: CISLUNAR INDUSTRIES USA INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,699,867.00

**Award Date:** 2023-03-06

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Cislunar Industries USA, Inc. focuses on developing technologies and infrastructure to enable a sustainable and economically viable cislunar economy. Their primary business revolves around in-situ resource utilization (ISRU) on the Moon, specifically extracting and processing lunar regolith to produce water, propellant (liquid oxygen and liquid hydrogen), and metals. Their core mission is to reduce the cost and risk associated with space exploration and development by providing on-orbit resources, thereby minimizing reliance on Earth-based launches for fuel and materials. Cislunar aims to solve the logistical challenges associated with deep space missions by becoming a space-based propellant provider. Their unique value proposition lies in their focus on creating a commercially viable, end-to-end ISRU ecosystem, offering a sustainable and cost-effective solution for future lunar and deep space operations.

**Technology Focus:**

* Development of advanced regolith processing systems, including robotic mining equipment and chemical processing plants, designed to operate autonomously on the lunar surface. Their "Lunar Outpost" concept envisions a self-sufficient facility for extracting and refining lunar resources.
* Production of lunar-derived propellant (liquid oxygen and liquid hydrogen) at a commercially competitive price. Cislunar claims to be able to produce propellant at approximately $500/kg compared to the cost of launching it from Earth.

**Recent Developments & Traction:**

* In January 2022, Cislunar Industries was awarded a NASA Phase II Small Business Innovation Research (SBIR) contract to develop a robust and scalable lunar resource extraction and processing system.
* In 2023, Cislunar Industries completed an oversubscribed seed funding round, securing an undisclosed amount of investment to accelerate the development of its lunar resource processing technologies. Public filings indicated participation by SpaceFund.
* In November 2023, announced successful closed-loop testing of their end-to-end lunar ISRU process, demonstrating the extraction and refinement of water and propellant from simulated lunar regolith.

**Leadership & Team:**

* Gary Calnan (CEO): Experienced entrepreneur and investor with a background in engineering and finance. Prior experience includes leadership roles in technology startups and venture capital firms.
* Artem Aslanov (CTO): PhD in aerospace engineering with expertise in ISRU technologies, chemical processing, and space systems engineering.

**Competitive Landscape:**

* Masten Space Systems: While Masten has faced challenges, they had also been pursuing lunar ISRU, particularly with their Xogdor rocket technology designed to operate using lunar-derived propellant. Cislunar's differentiator is a greater emphasis on building a complete, commercially viable ISRU ecosystem from mining to propellant production.
* Astrobotic Technology: Primarily focused on lunar landers and delivery services, Astrobotic could be considered a competitor in the sense that they also aim to facilitate lunar missions. However, Cislunar's core focus is on in-situ resource utilization, providing the resources to fuel those missions rather than transporting them.

**Sources:**

* [https://cislunarindustries.com/](https://cislunarindustries.com/)
* [https://www.spacefund.com/portfolio/cislunar-industries](https://www.spacefund.com/portfolio/cislunar-industries)
* [https://www.nasa.gov/directorates/spacetech/small\_business/sbir/success\_stories/cislunar-industries-usa-inc](https://www.nasa.gov/directorates/spacetech/small\_business/sbir/success\_stories/cislunar-industries-usa-inc)
* [https://spacenews.com/](https://spacenews.com/) (Keyword Search: Cislunar Industries - used to corroborate information and recent activity)