## Congressman Scott Tipton Testimony before the Science, Space and Technology Committee May 17, 2019

Since the 1960's, the U.S. has dominated space exploration and excelled in aeronautical innovation. Colorado has played a critical role in this success, serving as home to one of the largest aerospace industries in the country. In my office, we consistently meet with stakeholders who have engaged us on the newer issue of space resource utilization.

In the past decade there has been a lot of interest in In-Situ Research Utilization (known as ISRU), which is the practice of using materials found on the lunar surface and asteroids to replace materials that have been brought from Earth to make space travel more affordable and flexible. Federal agencies, academia, and the private sector have agreed across the board that more space exploration will be supported by the extraction of materials in space, which can decrease the cost of human spaceflight to the Moon and Mars.

In 2019 alone, this committee has held hearings on topics related to NASA's deep space exploration programs, America's role in space, and keeping our sights on a manned mission to Mars – all of which are deeply interacted with ISRU. ISRU has also been discussed in this committee. Dr. Peggy Whitson, a former NASA astronaut, testified during a committee hearing about how the future of America's presence in space will be in part related to America's ability to conduct ISRU on the lunar surface, for resources like water and minerals.

American scientists and engineers have diligently worked to advance research into the field, but there is no central hub to support such efforts. This is why I have come to testify today to advocate for consideration of legislation I have introduced within the jurisdiction of this committee related to this issue.

This past February, I introduced H.R. 1029, the Space Resources Institute Act. If signed into law, H.R. 1029 would direct the Administrator of NASA to submit a report to Congress on the merits of, and options for, establishing an institute relating to space resources to advance the objectives of NASA in maintaining U.S. preeminence in space. Those objectives include:

- Identifying and distributing space resources through the encouragement of developing foundational science and technology;
- Reducing the technological risks associated with identifying and distributing space resources; and
- Developing options for using space resources to support current and future space programs and to enable ones that wouldn't otherwise be possible.

I was proud to introduce this bill with my colleague from Colorado, Congressman Ed Perlmutter. Since its introduction, the bill has gained additional bipartisan support. It is my hope that with the passage of H.R. 1029, we can build upon the accomplishments of the U.S. Commercial Space Launch Competitiveness Act (CSLCA) which was introduced by Minority Leader Kevin McCarthy in 2015 and was signed into law by President Obama. The CSLCA made it legal to facilitate and participate in commercial exploration and recovery of and for space resources.

As academia, the private sector, and federal agencies engage in ISRU research, all parties will benefit from a central institution where research can be shared, expanded upon, and put into action. Given the support on both sides of the aisle for future manned missions to the Moon and Mars, I am very hopeful and confident that H.R. 1029 will advance U.S. interests in space. At a time when Russia, China, and other foreign actors are attempting to grow and invest in their space programs to surpass us, we must act swiftly to maintain our position in the global space arena. America has always excelled in space, and we must continue to do so through legislative measures like H.R. 1029. I respectfully request that H.R. 1029 be considered in a full committee hearing and markup as soon as possible.