Written Statement of

Christine A. Resler General Manager - Alaska On behalf of Schlumberger Technology Corporation

Oversight Hearing on "Arctic Resources and American Competitiveness"

Before the U. S. House of Representatives Committee on Natural Resources Subcommittee on Energy and Mineral Resources

> June 16, 2015 Washington, D.C.

Mr. Chairman, Mr. Ranking Member, and members of the Subcommittee, thank you for inviting me to share my thoughts on Arctic drilling as it relates to the NPC study and the recent Arctic Regulations. Three areas I would like to cover are: length of drilling season, lease terms, and prescriptive versus performance based legislation for the Arctic I am currently the Alaska General Manager of Schlumberger Technology Corporation ("STC"), a subsidiary of Schlumberger Ltd. I have been with the company nine years in multiple roles including, Director of Mergers and Acquisitions, Vice President of Advanced Technologies and Manager of Schlumberger's Katy Technology Center. Before joining Schlumberger I was and continue to be an Executive Professor of Finance at the University of Houston.

Schlumberger is the world's leading supplier of technology, integrated project management and information solutions to customers working in the oil and gas industry worldwide Schlumberger provides the industry's widest range of products and services from exploration through production. Schlumberger works with many of the potential developers of Arctic energy resources.

Schlumberger participated in the National Petroleum Council's study entitled Arctic Potential: Realizing the Promise of U.S. Arctic Oil and Gas Resources.

Schlumberger provides onshore and offshore drilling and intervention services to both large integrated, and smaller independent oil companies in the Alaskan Arctic. Schlumberger also works with operators in Arctic environments drilling offshore Norway, the UK, Eastern Canada, Alaska, and Russia. In Alaska, the company provides services for land-based operations on the North Slope, Cook Inlet, and is also a key service provider for the extended-reach drilling operations from man-made islands on the North Slope. We have also been a service provider to operators in the Chukchi and Beaufort Seas.

As outlined in the NPC study, the Alaskan Arctic OCS offers the greatest potential for new resources in the United States and is key to energy security and independence. There are an estimated 48 BBOE of undiscovered oil and gas resource potential in the U.S. Arctic. These resources, if prudently developed, will enhance national economic and energy security in the U.S.

Industry, government, and local communities will have to work collectively to safely and economically discover and develop these resources.

Alaska is now my family's home. We love and appreciate our beautiful, unique environment. I spend significant time on the North Slope of Alaska and have an appreciation for the harsh conditions there, as well as for the critical importance the environment has for the local indigenous populations and their dependence on it for their subsistence. I see first-hand how the oil and gas industry co-exists with the indigenous populations and the considerations and benefits it provides. Preservation of the environment must be a top priority as we consider any permits and regulations to drill in the Arctic. We need the Arctic to enhance national economic

and energy security in the United States, but these resources must be developed responsibly, keeping in mind that safety and the environment must remain critical considerations.

The Alaska oil and gas industry has a strong safety culture with a foundation in risk identification and management. This culture is reflected by extensive training and robust management systems. Tighter environmental reporting requirements in Alaska have enabled an industry workforce to focus on the environment and to mitigate potential impact from oil and gas operations.

The oil and gas industry has a long history of success operating in Arctic conditions enabled by continued technology advances. To date, 35 wells have been drilled in the Arctic offshore continental shelf. Most of the U.S. Arctic resources can be developed using existing technology, as was outlined in the NPC study. In addition, over the past five years there has been a focus on new technology and a greater understanding of well control, particularly in remote locations.

As previously mentioned I will be focusing on three key topics as relates to the findings of the NPC study. Firstly, increasing the length of the drilling season is critical to viable economic development of our Arctic energy resources. In addition, weather and other conditions can challenge effective resource development whenever there is a prescribed drilling timeframe that does not take these into account. For these reasons, such conditions along with technical considerations, should dictate the length of the drilling season.

Secondly it is fundamentally important that the industry and regulators focus on the primary barriers, BOPs, Casing & Cementing, and effective well designs so we mitigate, to the greatest extent possible, the escape of hydrocarbons into the environment. Schlumberger provides technologies and expertise in well design, well integrity and subsurface completions. These technologies are evolving with advances in primary barriers technology and well control methodologies. Current and future regulation must be flexible enough to incorporate these evolving advances. The absence of flexibility in the current regulations does not allow for technological advances and best practices to be incorporated to improve operational performance in a timely manner.

The greatest potential for reducing environmental risk lies in the pursuit of superior well control and well integrity. This is achieved through adherence to established codes/standards and operations integrity management systems, combined with a culture of safety and risk management.

My third and final point refers to lease terms, specifically the length of the lease. Current regulations impose a 10 year lease term with no extensions allowed regardless of the length of the drilling season. This restriction could undermine the economic competitiveness of U.S.

Arctic exploration versus other oil producing nations in the Arctic. Collaboration between the operators, service providers and the regulators is critical to the safe and economically viable exploration of the U.S. Arctic. The preset 10 year lease term may potentially hamper this essential collaboration – affecting jobs, safety and the country's economic and energy security.

Furthermore, collaboration between operators, service providers and the regulators will help to instill the public's confidence in the industry's ability to operate in a way that is safe for the environment.

Thank you, Mr. Chairman and Members for your invitation and your time this morning. I would be happy to answer any questions.