

Marine Seismic Acquisition in the Arctic

Steve D. Whidden¹ and Troy Nelson¹

¹CSEG, Calgary, AB, Canada

Abstract

Acquiring seismic data offshore in a very special place, offshore Alaska, needs significant and in-depth preparation and planning, mistake free and exemplary execution. The permitting roadmap is intensive and unforgiving. An exceptionally long lead time is needed if a reasonable chance of success is expected. Incidental Take Authorization (IHA), Plan of Cooperation (POC), Letter of Authorization (LOA), and the G&G submission are the principal components of the regulatory and permitting roadmap. Development and execution of the acquisition plan requires extraordinary forethought and detail orientation along with extreme flexibility. The 2013 season offshore Alaska in the Chukchi Sea illustrated this. Challenges which were inclusive of ice coverage that was much higher than the forecasted median and ice in the survey area that created much closer interaction with mating mammals and walrus than was forecasted. The last shot point is not the conclusion of the program, continuous engagement with the stakeholders and regulators is required as a part of a commitment to the area.