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Five Years of the Oil Production Operation in the Russian Arctic Offshore: Challenges and Achievements—The Way Forward

O.V. Karpushin, Sakhalin Energy Investment Co.

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Abstract

The posters are based on production data, business plans and integrity and reliability data of the Vityaz production complex. Presentation covers the period of time from 1999 until the end of 2004 and depicts plans for further development.

APPLICATIONS:

This paper describes problems, milestones and accomplishments of the first Russian offshore oil production operation. Valuable experience shared by this paper can help potential operators of the Russian arctic offshore oil and gas fields to shorten their learning curve through better understanding of the local conditions and challenges and applying similar solutions as those developed by Sakhalin II project for its Vityaz production complex operation.

RESULTS, OBSERVATIONS, AND CONCLUSIONS:

Russia boasts its vast hydrocarbon reserves of Arctic and Far East continental shelf basins. Yet the development of these oil & gas riches is impeded by a lack of operational experience in adverse conditions where marine activities are constrained by heavy ice 6 months in a year, temperatures go down to 35 deg. C, logistics are complicated, available industrial infrastructure is scarce, labor recourses are limited and statutory requirements are often complex. The Sakhalin II development represents the largest single foreign direct investment project in Russia. Phase 1 of the project has been successfully producing oil from the Vityaz Complex since July 1999 while at the same time conducting active drilling operations, construction and upgrade of facilities.

TECHNICAL CONTRIBUTIONS:

- Business Environment, External factors & Local Conditions
- Project KPIs
- Specific Requirements & Operations Management Systems
- Major risks and mitigation plans