Proceedings of the Eighteenth (2008) International Offshore and Polar Engineering Conference
Vancouver, BC, Canada, July 6-11, 2008

ISBN 978-1-880653-70-8 (Set); ISBN 1-880653-68-0 (Set)

White Rose:
Overview of Current Development and Plans for Future Growth

Penny Norman, Glen Lochte
Husky Energy (East Coast Operations)
St. John's, Newfoundland, Canada

Shawn Hurley
Petro-Canada (International & Offshore)
St. John's, Newfoundland, Canada

ABSTRACT

The White Rose development is a current example of a highly efficient and successful hydrocarbon development in the harsh marine environment of the Grand Banks, offshore Newfoundland & Labrador. White Rose, which attained First Oil in November 2005, has been developed using a Floating Production, Storage and Offloading (FPSO) concept. It is the second FPSO to operate in North America in a harsh North Atlantic environment frequented by sea ice and icebergs.

This paper will describe the main attributes of the White Rose development and will cover the following areas:

- Environmental Overview
- Reservoir / depletion strategy
- Facilities Overview including the design of the *SeaRose FPSO*
- General overview of performance & reliability to date
- Future Growth Opportunities
- Project Delivery

The success of the initial development, sustained strong global demand for hydrocarbons and strong performance of the *SeaRose FPSO* have enabled the White Rose Partners to focus on further development of the field. These growth opportunities are being developed through the *SeaRose FPSO* Tieback Project.

The *SeaRose FPSO* Tieback Project is currently being progressed through the Husky Energy Project Delivery Model with First Oil from the Tieback Project scheduled for late 2009, early 2010. The project scope covers the development of three additional growth opportunities that will be tied back to the *SeaRose FPSO* through a series of subsea flowlines. The project represents the first ever satellite tieback development for Newfoundland and Labrador offshore. The paper will present a high-level overview of each of these growth opportunities; describe some of the development options that were considered, and the current status of the Project. KEY WORDS: White Rose, harsh environment, *SeaRose, FPSO*, tieback, growth.

INTRODUCTION

The White Rose field is located in the Jeanne d'Arc Basin in the North Atlantic Ocean approximately 350 kilometers East of St. John's, Newfoundland and Labrador in approximately 120 meters of water. Husky is Operator of the development and has a 72.5 percent working interest in the initial White Rose development, which focuses on the South Avalon oil pool. Its co-venturer, Petro-Canada, has the remaining 27.5 percent working interest. First oil from the South Avalon oil pool was achieved on budget and ahead of schedule on November 12, 2005. In 2007, annual production was approximately 43 million barrels at an average annual rate of approximately 117,000 barrels of oil per day. Development drilling of the base field, approximately 18 wells, was completed in 2007.

This paper describes some of the unique environmental characteristics offshore Eastern Canada, the White Rose development and an overview of plans to further expand White Rose and tieback satellite pools to the existing facilities. Figure 1 shows the field location offshore Eastern Canada.