

STUDY TITLE: Deepwater Program: The Technology and Economics of Deepwater Production Projects

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CONTRACT NUMBER(S): 1435-01-99 CT 31019

SPONSORING OCS REGION: Gulf of Mexico OCS Region

APPLICABLE PLANNING AREA(S): Western, Central, and Eastern Gulf of Mexico

FISCAL YEAR(S) OF PROJECT FUNDING: FY 1999 to FY 2004

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COST(S): \$157,050

PROJECT MANAGER(S): Noble/John Stiff

AFFILIATION: ABS Group, Inc.

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BACKGROUND: Deepwater development activity in the Gulf of Mexico has been increasing over the last several years. As exploration expands beyond the limits of 1000 feet, technology is changing to meet the challenges of developing fields in deepwater. Developing these fields must be done safely, efficiently, and economically while protecting the marine environment. Deepwater development is achieved through the use of countless vendors, contractors and subcontractors.

The original intent of this report was to trace back to major vendors. However, due to complications which continually arose it became impossible to do for the scope of this report. Information readily available for one project was not readily available from the next, which made data sets incomplete and not comparable. While some companies were willing to provide information, it became difficult to get as one descended the management chain. Demanding job responsibilities in the industry made it difficult for personnel to commit the necessary time for data gathering.

The report fell short of unearthing the desired level of national involvement in deepwater developments and instead had to focus on working with the data and information obtained from various sources.

OBJECTIVES: The purpose of this project was to study five specific deepwater Gulf of Mexico developments and show how their fabrication, installation, and operation has had an economic impact around the United States and, to a lesser extent, the world.

DESCRIPTION: The report is made up of five major sections. The “Summary and Overview” briefly discusses the projects that were studied, an overview of each project, a summary of the findings, and possible strategies that could be taken by future studies to gather information. The “Summary of Information Gathered” presents information that was obtained on the different deepwater projects which includes where the structure was fabricated, the major sub-contractors, and any other additional information discovered during the course of the study. The “Economic Analysis” section was only able to obtain one suitable data set from one fabrication yard. Other data gathered were not in sufficient detail to warrant analysis. The “Chronology of Field Development” discusses the process of developing a deepwater prospect from pre-lease acquisition to abandonment. The last section, “Shallow Water vs. Deepwater”, discusses some of the major differences between developing a deepwater and shallow water field.

SIGNIFICANT CONCLUSIONS: Most of the fabrication is around the Gulf Coast and most of the equipment vendors are local to the fabrication. The biggest economic impact is to Louisiana and Texas because they have the infrastructure to support the industry. Caveats to these statements are discussed in the background section.

STUDY RESULTS: There is no doubt that deepwater development in the Gulf of Mexico is supported from companies all across the United States. The task of tracking vendors and their charges to a specific deepwater development becomes extremely complicated. This is a highly competitive industry and many vendors could not see the advantage of sharing information for this report.

Only one deepwater project provided enough data to do an economic analysis. It was determined that the labor demand for the Morpeth fabrication project had a substantial impact on occupations that are required for the fabrication of platforms within the Houma Metropolitan Statistical Area (Lafourche and Terrebonne parishes). When compared to the Louisiana Regional Labor Market Area which includes Assumption parish, there was very little change in demand for labor.

STUDY PRODUCT: Stiff, J. and J. Singelmann. 2003. Deepwater program: The technology and economics of deepwater production projects. U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2004-041. 179 pp.