

STUDY TITLE: Analysis of the Oil Services Contract Industry in the Gulf of Mexico Region (GOMR)

REPORT TITLE: Analysis of the Oil Services Contract Industry in the Gulf of Mexico Region

CONTRACT NUMBER: M08PC20031

SPONSORING OCS REGION: Gulf of Mexico

APPLICABLE PLANNING AREA: Gulfwide

FISCAL YEARS OF PROJECT FUNDING: FY 2009; FY2010

COMPLETION DATE OF REPORT: June 2011

COSTS: FY2009: \$60,000; FY2010: \$57,728; CUMULATIVE COST: \$117,728

PROJECT MANAGER: Maureen F. Kaplan

AFFILIATION: Eastern Research Group, Inc.

ADDRESS: 110 Hartwell Avenue, Lexington, MA 02421

PRINCIPAL INVESTIGATOR: Maureen F. Kaplan

KEY WORDS: oil services; contract industry; drilling contractors; geophysical prospecting; drilling fluid suppliers; drilling equipment and supplies; mud logging; measurement while drilling (MWD); cementing; formation evaluation; well completion; fishing; wellhead equipment; accommodations; air transport; water transport; workovers; diving; geographic distribution; socioeconomic; MAG-PLAN.

BACKGROUND: The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) plays a key role in America's energy supply by managing the mineral resources on nearly 160 million acres in the Gulf of Mexico (GOM) Outer Continental Shelf (OCS) region. Under the National Environmental Policy Act (NEPA), BOEMRE is required to integrate environmental values into its decision-making processes. BOEMRE does this by preparing Environmental Impact Statements and other analyses that examine the impacts of its proposed actions and reasonable alternatives to those actions. BOEMRE prepares site-specific analyses as well as Gulf-wide analyses to support the five-year schedule of federal oil and gas leasing required by the Outer Continental Shelf Lands Act (43 U.S.C. 1344).

To support these analyses, BOEMRE developed MAG-PLAN, a two-stage input-output model to estimate employment, personal income, and similar economic impacts from OCS activities. MAG-PLAN's Stage 1 starts with BOEMRE's estimates of the level of exploration, development, production, and infrastructure associated with a proposed OCS lease sale or set of sales. The model distributes industry expenditures among

NAICS industry sectors and then allocates the expenditure-by-sector spending to onshore areas.

Nearly 60 percent of all offshore employment resulting from Stage 1 spending in the GOM goes to the oil services contract industry. This sector is distinct from the integrated and independent oil companies.

OBJECTIVES: (1) a better understanding of the wide variety of tasks subsumed under the term “oil services.” (2) examine the company ownership pattern. (3) develop an approach to provide a refined estimate of the onshore allocations. That is, the analysis provides a more complete understanding of the geographical distribution and firm diversity to create a more solid foundation from which to complete a socioeconomic impact assessment. (4) develop a methodology to illustrate how the information collected on oil services contract industries could be better incorporated within a socioeconomic impact model (i.e., MAG-PLAN).

DESCRIPTION: ERG identified 17 oil service industry sectors associated with searching for offshore oil and gas reservoirs, exploratory drilling, development drilling, and annual production. These are: geological and geophysical prospecting (G&G), contract drilling, drilling fluid supplies, drilling tools and supplies, mud logging, measurement while drilling (MWD), cementing, formation evaluation, completion, fishing, wellhead equipment, accommodations, air transport, water transport, catering, workovers, and diving. For each industry sector, ERG identified the companies and locations offering these services and goods to the offshore oil and gas industry in the Outer Continental Shelf region of the Gulf of Mexico. To the extent possible, ERG identified the revenues and number of employees associated with each location and used this information to develop geographic distributions for each sector. Combining this information with public data from the Census Bureau, ERG presented an approach to illustrate how contract industry service sectors could be better incorporated in MAG-PLAN activity function definitions.

SIGNIFICANT CONCLUSIONS: ERG identified about 1,140 locations that supported offshore oil and gas exploration and production on a contract basis in the GOM. These locations represent approximately 63,000 employees and account for an estimated \$19.3 billion in revenues. Some locations provided services for both onshore and offshore efforts, but there was insufficient information to prorate any of the employment or revenues to the offshore region. ERG identified at least one set of data (number of employees or revenues) for 871 of the 1,140 locations for an overall “coverage” rate of 76 percent. The coverage rate varied substantially with the sector. Five sectors had coverage rates of 90 percent or higher (drilling, drilling equipment, mud logging, fishing, and catering). In contrast, the air transportation sector had a coverage rate of 36 percent.

STUDY RESULTS: One result of the study is the realization that, although the oil services contract industry contains giants such as Halliburton and Schlumberger that provide thousands of jobs and earn millions in revenue, it also contains hundreds of small companies. Most of these are privately owned and play an integral part in the

economic life of the communities in which they are located. Companies with a good idea and a handful of employees can and do carve niches in which to operate. A second result is the recognition of the wide diversity of activities that support oil and gas operations in the GOM OCS—from preparing food, sailing vessels, building accommodations, flying helicopters, towing structures to final installation sites, and diving to using sophisticated mathematical algorithms to locate and characterize petroleum reservoirs. Rather than a broad brush stroke of a single color, a multi-colored palette is needed to illustrate the diversity and, in some cases, regionality of the industry subsectors. A third result is the development of a data set for further use by researchers performing socioeconomic analyses for this region.

STUDY PRODUCT: ERG. 2011. Eastern Research Group, Inc. Analysis of the oil services contract industry in the Gulf of Mexico Region. Prepared for the United States Department of the Interior. Bureau of Ocean Energy Management, Regulation and Enforcement. Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEMRE 2011-001. 208 pp.