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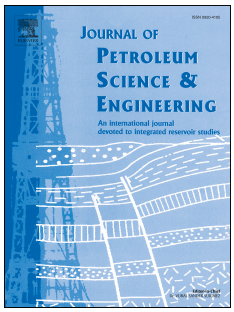

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An Empirical Evaluation of Economic Limits in the Shallow Water Gulf of Mexico, 1990-2017

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Abstract. Net revenue during the last year of an offshore structure's life serves as a proxy for the economic limit of production and encapsulate relevant cost information at a specific point in time of a structures life. By reviewing a large group of structures, economic limits can be quantified and compared using structure attributes to obtain insight into operating cost thresholds and business practices. The purpose of this paper is to evaluate the gross revenue statistics the last year of production for oil and gas structures in the shallow water Gulf of Mexico. Summary statistics are tabulated by primary production, structure type, manned status and water depth for 3054 decommissioned structures in water depth less than 400 ft from 1990 to 2017. The P50 adjusted gross revenue the last year of production was $1.2 million for gas structures and $627,000 for oil structures. For gas structures, P20 and P80 economic limits are $282,000 and $3.97 million; for oil structures, $135,000 and $2.01 million. Factor models show that being a major increases the economic limit on average $820,000 across all structure classes.

Keywords: Cost characteristics, economic limit distribution, factor models, empirical modeling, operational decision-making

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