

Atlantic OCS Geology and Resource Potential

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Bureau of Ocean Energy Management, Regulation and Enforcement staff recently completed an inventory of the potential undiscovered, technically recoverable oil and gas resources in the U.S. Atlantic Outer Continental Shelf (OCS).

In addition to evaluating the appropriateness of older analogs and plays, modern exploration concepts and key new learnings from northeast-adjacent offshore Nova Scotia, conjugate northwest Africa and the African Transform Margin were evaluated and incorporated.

Methodology changes involved less subjective risk assessment methods resulting in “risk binning” and better data mining of analogs to provide a series of parameters applicable to U.S. Atlantic OCS plays. The results represent the first systematic petroleum system analysis of the U.S. Atlantic OCS applying industry-standard techniques.

Resources were assessed in nine conceptual plays and one established high-risk play. All play areas are seismically delineated, and their petroleum system elements and processes clearly identified. Five of the plays contain ~75% of the estimated resources.

The similarity in early shelf exploration results for the U.S. Central Atlantic Margin and African conjugate margins may indicate that the best prospectivity exists in deep water areas.