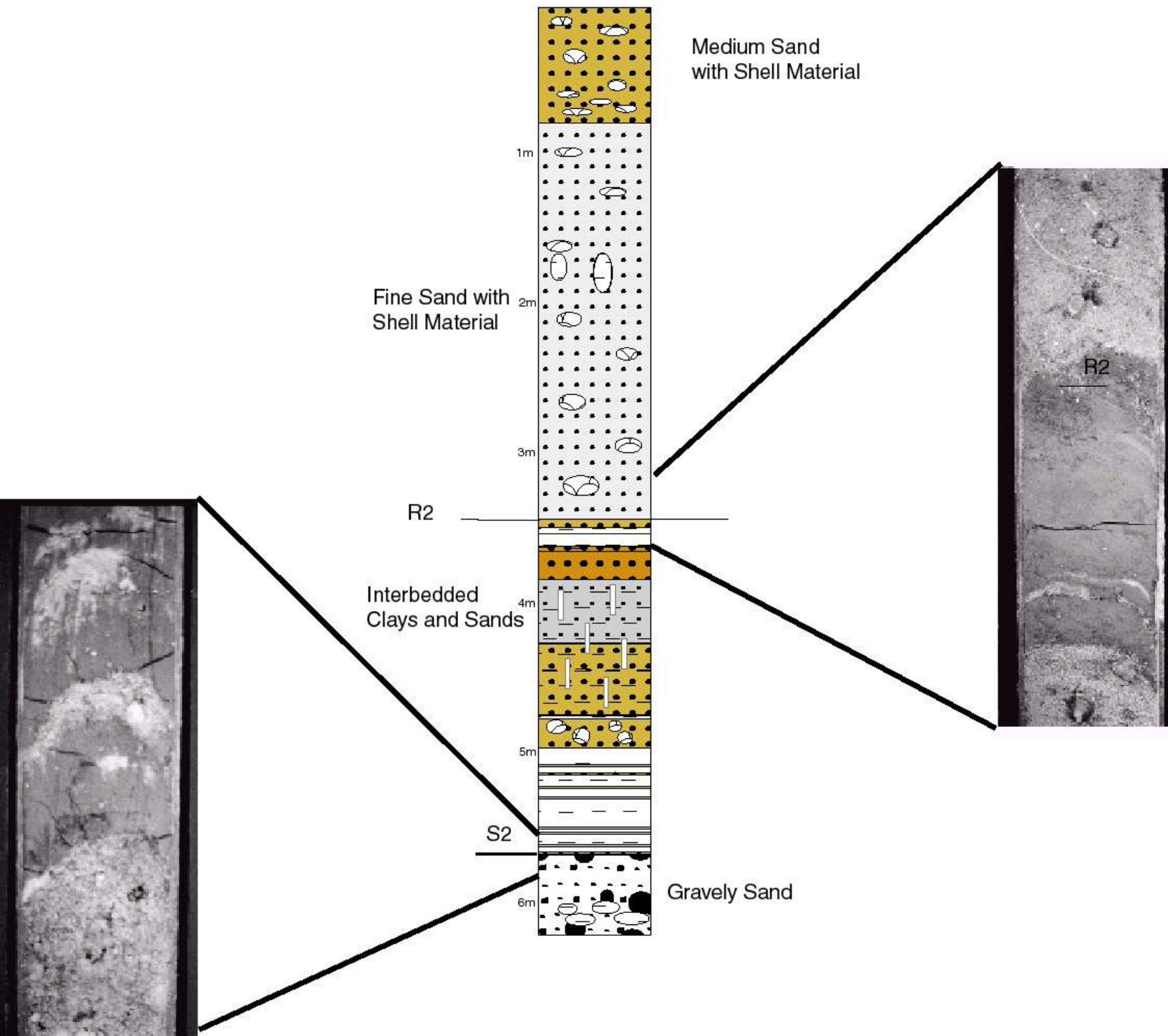


Geologic Framework of the New Jersey Offshore:
Sand Resources in Area G

CORE 5



Conclusions

Distinct depositional environments in the northern and southern offshore regions have a substantial impact on the formation and preservation of sand shoals. The predominantly erosional regime of outcropping Tertiary coastal plain deposits in the northern offshore area contrasts with the mainly depositional regime of Holocene sand shoals associated with shifting inlets in the southern offshore area. This interpretation directs us to look first for sand in the southern offshore.

The Holocene transgressive ravinement surface (R₂) separating estuarine sands, silts, and clays from overlying sands offshore of Brigantine provides a distinguishable surface on the seismic and vibracore data for delimiting sand resources. The contoured surface of from the R₂ to the sediment-water interface in Area G reveals an ebb-tidal delta and remnants of shore-attached and shore-detached ridges.

Future work in the northern coastal area will provide the opportunity to add some insight to the offshore geologic framework. Initial seismic exploration reveals mainly Pleistocene/Holocene channel-fill deposits, outcropping coastal plain units of varying lithologies, and relatively thin and discontinuous Holocene sand veneers.

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