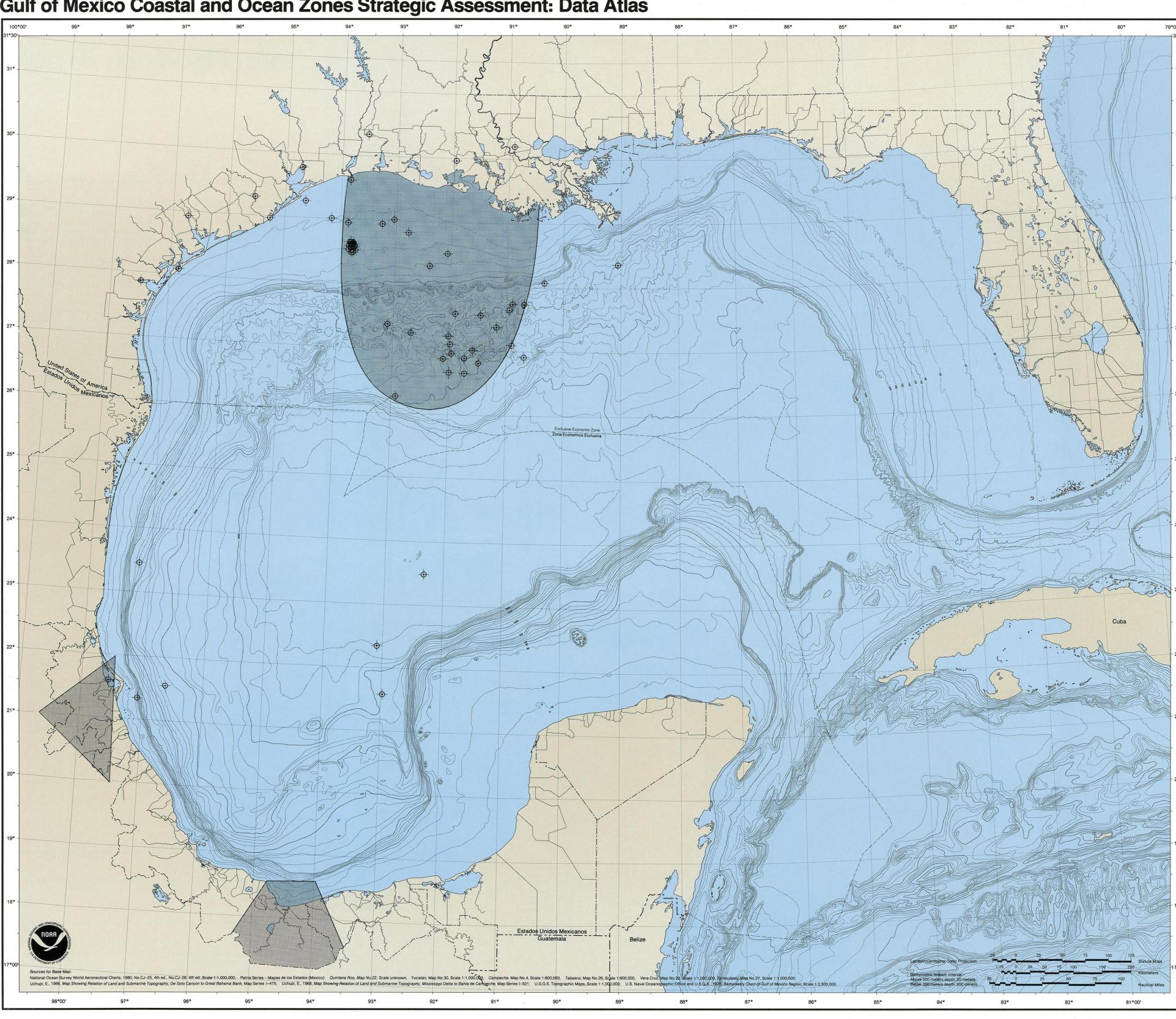
Gulf of Mexico Coastal and Ocean Zones Strategic Assessment: Data Atlas



Petroleum Hydrocarbon Seeps

Description

Hydrocarbon seeps occur frequently in the Gulf of Mexico and may be a significant source of hydrocarbons in Gulf waters. These seeps are natural emissions of hydrocarbon compounds that enter Gulf waters both through fissures in the ocean bottom as well as directly through bottom sediments resulting from hydraulic pressures. Such seeps are generally indicative of vast oil and gas deposits.

Petroleum hydrocarbon (oil) seeps are numerous in three of the areas shown on this map: 1) along the Gulf Coast south of Tampico; 2) in the Coatzacoalcos area; and 3) offshore of Texas and Louisiana. No evidence of hydrocarbon seeps in the eastern Gulf of Mexico currently exists. Available information on hydrocarbon seeps is fragmentary because of the difficulties associated with surveying the ocean bottom, especially off the continental shelf in deep waters. Petroleum hydrocarbon seeps are much more difficult to locate than natural gas seeps, even where water samples indicate that hydrocarbons are present in the water column. Gas seeps have been detected with standard sonar equipment and subbottom seismic profile recorders. However, electronic depth recorders have located few oil seeps in the Gulf to date (Geyer, and Giammona, 1980).

The data shown are crude approximations of suspected and known oil seeps. Most experts indicate that the precise location of a seep cannot always be determined and that many of the areas indentified should probably be considered only areas of "suspected seeps."



Known or Suspected Seep Site



General Zones of Known Seeps

De Golyer, E., 1932; Geyer, R.A. ed., 1977; Geyer, R.A., 1979; Geyer, R.A., and C.P. Giammona, 1980; Jeffrey, L.M., 1980; Johnson, T.C., 1971; Lynch, S.A., 1954; Nelson-Smith, A., 1973; Powers, S., and F.C. Clapp, 1932; Wilson, R.D., 1973.

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