



Canet, C., R.M. Prol-Ledesma, P.R. Dando, V. Vázquez-Figueroa, **E. Shumilin**, E. Birosta, **A. Sánchez González**, C.J. Robinson, A. Camprubí & E. Tauler (2010). Discovery of massive sea floor gas seepage along the Wagner Fault, northern Gulf of California. *Sedimentary Geology*, 228(3-4): 292-303. DOI: 10.1016/j.sedgeo.2010.05.004

Discovery of massive sea floor gas seepage along the Wagner Fault, northern Gulf of California

Carles Canet, Rosa María Prol-Ledesma, Paul R. Dando, Viridiana Vázquez-Figueroa, Evgueni Shumilin, Elisabet Birosta, Alberto Sánchez González, Carlos J. Robinson, Antoni Camprubí & Esperança Tauler

Large-scale gas seepage and fluid ejection features are described from the edges of the active pull-apart Wagner and Consag basins (northern Gulf of California, Mexico), at water depths between 65 and 150 m. Gas vents, pockmarks, possible mud volcanoes, pyrite- and barite-rich sediments, slabs of lithified shell debris, and chemosynthetic fauna were found. Gas venting occurs mainly through N-S synsedimentary small-scale faults and fault-propagation folds that are believed to derive from the Wagner Fault. The presumed mud volcanoes are sub-rounded, domed bathymetric features, several hundreds of metres across, underlain by gas-charged sediments and surrounded by gas vents. Upward gas migration throughout the thick sedimentary sequence produces the fluid expulsion features on the sea floor.

Palabras clave: Bubble seep, hydroacoustic flare, rifting, mud volcano, barite, chemosynthetic

Para obtener copia del documento contacta con el autor (alsanchezg@ipn.mx) o con el personal de la biblioteca (bibliocicimar@ipn.mx).