

G125-007

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Geochemistry of pore waters from methane hydrate-bearing sediment cores retrieved off-shore Sakhalin, Russia

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Chemical analyses (ion concentration analyses and stable isotopic analyses) of pore waters from methane hydrate-bearing and -free sediment cores retrieved at the Derugin Basin, NE Sakhalin Island, Russia were conducted to describe (i) differences in seepage activity among three gas-seepage structures including methane hydrate-bearing sites and (ii) complicated geochemical seepage environments involving a flux of free-gas and gas-saturated water. The traces of ascending fluid were not observed in the methane hydrate-containing Hieroglyph seep, but were suggested in the deep parts of sediment cores from the Kitami and CHAOS seeps based on the presence of abnormally heavy deuterium.