

L214-001

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The study of carbon isotope ratio distribution to comprehend CO₂ migration at shallow degassing points

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Carbon Dioxide Storage has one of an immediate effect to control the global warming. We investigated shallow degassing points of methane to analogize the leakage process of carbon dioxide at Sugaya, Isumi-city, Chiba, Japan. For drilling study, two normal faults; 40m intervals, discovered this area. Methane gas degas between these faults.

For isotope analysis by GC/C/IRMS of core sample, there are three types methane gas in this area. Mainly methane gas trapped sand strata around mud strata/ sand strata boundary. Methane gas isotope ratio of trapped sand strata shows -66 permille. The -36.3 and -44.9 permille methane gas distributed around permeable fault. Harvey isotope ratio methane gas migrates more deep area to compare with Mobara gas field.