

PREVIEWS

Basin scale fluid transport	<i>Mineralogic and isotopic compositions of core-derived calcite veins and their organic-rich host rocks are compared in order to determine to what extent subseismic-scale fractures play a role in basin-scale fluid transport. Filling minerals are supplied by dissolution and reprecipitation of host-rock components.</i>	<i>1203</i>
Salinity variations	<i>Water salinity in the San Joaquin Valley is a function of depth, location, and stratigraphy. This study shows that this region is generally less saline than other typical petroleum-producing basins. Depth to the base of underground source of drinking water increases from northwest to southeast.</i>	<i>1239</i>
A novel gas isotope interpretation tool	<i>A gas isotope interpretation tool is developed based on the evolution of methane carbon isotope ratios due to different gas releasing processes during production. In a producing well, this method provided an important constraint on future well production and expected ultimate recoverable reserves.</i>	<i>1263</i>
Thermal maturity and gas composition	<i>Gas composition in the Eagle Ford Shale is controlled mainly by thermal maturity. Stages of gas generation correspond to kerogen and bitumen thermal cracking to crude oil, bitumen and heavy crude oil thermal cracking to light oil, and light oil cracking to gas.</i>	<i>1277</i>
Understanding seep carbonates	<i>In the Panoche Hills, California, seep carbonates that developed at the tip of sand dykes intrude into the Moreno Formation from deeper sandbodies. They can be viewed as a record of methane production from a biogenic source rock by multiphase hydraulic fracturing.</i>	<i>1309</i>
Modeling Holocene analogs	<i>The authors model facies heterogeneity across Holocene oolitic sand shoals using quantitative integration of vertical, lateral, and azimuthal facies heterogeneities into geocellular models. These models provide insight into variable production rates and poor sweep efficiency.</i>	<i>1341</i>

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