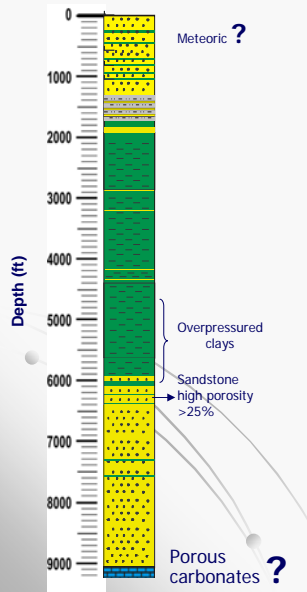


Origin of water



- **Salinity** 39% **lower** than seawater
- **Enriched** in B, Ca, Li, Na, Sr, Br
- **Depleted** in K, Mg and SO₄
- **Enriched** in 18O and depleted in 2H
- LUSI fluids formed by **diagenetic modifications** and **dilution of seawater**
- Possible input of **meteoric water**
- Strong influence of fluids from **dehydration of clays**
- Possible input of fluids from **upper porous sandstone unit** (6360-6385 ft)
- No real evidence of fluids from **Kujung**
- Large amount of water from depth **>5700 ft** (i.e. T>100 °C)

After Mazzini 2007

Principal scheme of smectite-illite transformation with water expulsion during the burial history (after V.N. Kholodov)

