Selected Publications of James Boles

GENERAL GEOL OGY


ZEOLITE DIAGENESIS


CLASTIC DIAGENESIS- GEOCHEMISTRY - GENERAL


Documents formation water composition in San Joaquin oilfields including presence of organic acids and effects of plagioclase alteration on sodium-calcium content of water.


CARBONATE CEMENT IN SANDSTONE


**CONCRETION PAPERS**


FAULT DIAGENESIS-FLUID MOVEMENT


**LANDSLIDES--SPONTANEOUS COMBUSTION**


FELDSPAR DIAGENESIS


the earliest documentations of $\text{NH}_4$ feldspar forming from ammonium released by early organic diagenesis.


HYDROCARBON SEEPAGE


500,000 years. Indicates breaking of overpressured basin seals occurred at about this time


PRESSURE SOLUTION-ELECTROCHEMICAL


Kristiansen, K., Valtiner, M., Greene, G.W., Boles, J.R. and Israelachvili, J.N. (2011) Pressure solution – The importance of the electrochemical surface potentials : Geochim Cosmochem Acta, 75, 6882-6892. *Seminal paper showing the effect of electrochemical potential resulting from overlapping double layers and its effect on quartz dissolution. Fundamental experimental and petrographic evidence showing that electrical chemical potential is the driving force for “pressure solution”.*

**CONCRETION PAPERS**
