Elastic Properties of Salt: Ultrasonic Lab Measurements and Well Logs in Gulf of Mexico

Research Themes

1. Laboratory measurements of a variety of rock salt samples from different dispositional areas: Mineralogical composition; Density, compressional and shear velocities; Attenuation and dispersion; Anisotropy of different salt samples.

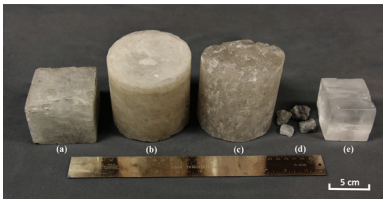
2. Well log data analysis of the Gulf of Mexico salt: Empirical relationship between velocity and depth; Velocity and density relationship.

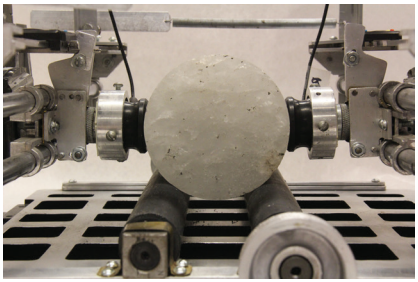
Recent Accomplishments

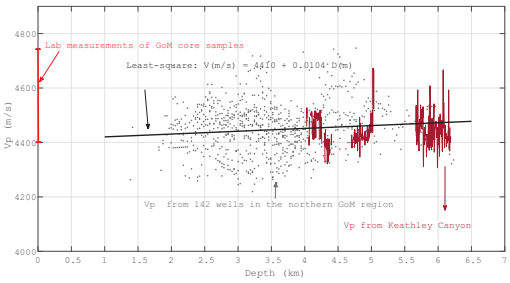
Lab measurements under varying pressure and temperature comparison between the ultrasonic lab measurements and the well log data; BP Scholarship for Outstanding Graduate Work in Geosciences AAPG Sherman A. Wengerd Memorial Grand; Grands-in-aid Program Sheriff Lecture 1st Place of 1st Year Ph.D Student Award Chevron Scholarship for Outstanding Academic Achievement in Geophysics; Total of 5 papers published from this work

Issues

- Field application of the lab-measured elastic values
- Attenuation estimation from the field data
- Velocity dispersion analysis for ultrasonic, sonic and seismic datasets







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