



PBS-SEPM FEBRUARY LUNCHEON

Tuesday, February 20, 2024 – 11:30AM

Bush Convention Center - 105 N Main St, Midland, TX 79701

\$25 Early Bird Rate | \$35 Walk-In/Late RSVP | \$10 Student | \$5 Virtual

Register by 3PM on 02/16: www.pbs-sepm.org/events | info@pbs-sepm.org | (432) 279-1360



Deep Sea Fan System and use of Borehole Images

Elia Haddad – Geology Domain Champion at SLB

ABSTRACT

Submarine fans constitute one of the largest accumulations of genetically related sediments on Earth. Fan sediment includes the deposits of sediment gravity flows and other submarine mass movements. Gravity flow sediment deposition is the main process governing the wide variety of depositional facies, Thus fans are also referred to as turbidite systems (Bouma et al. 1985). Fans and related turbidite systems are present on the seafloor, and their deposits have been recognized in the subsurface and in outcrops. Submarine fans deposition cycles can provide a relatively complete and readily dated record of tectonic deformation, climate change, and erosion, compared to onshore records.

Understanding and mapping the different types of depositional facies across the fan deposits is crucial to identify correlation markers, and a better static depositional model as well. Borehole micro-resistivity tools bring a high-resolution image of the wellbore, enabling geologists to interpret a core-like image, and create a facies description similar to full-bore cores interpretation.

We will discuss several depositional units from the seep fan system, and how we can use borehole images to create such detailed depositional primary structures and input to reservoir static modeling.

BIOGRAPHY:

Elia Haddad is the Geology Domain Champion for America Land under the Reservoir Performance Division. He is based out of Houston, Texas. Elia oversees all the western globe as the geology champion, helping different operators across US Land, Canada and South America to tackle and solve different geological complexities to assess their reservoirs accurately and efficiently. Elia has 23 years of experience in the upstream oil and gas industry in borehole geology, structural geology, and sedimentology. He studied special geology and Graduated from Helwan University in Egypt. He started his professional career within the oil and gas industry as a borehole geologist with SLB Egypt. He did contribute to numerous field exploration development plans within significant petroleum provinces in the Middle East (offshore Nile Delta) and the unconventional petroleum systems in North America within Canada and United States. He published many papers about the sedimentological aspects of different reservoir types and how it can help with the reservoir delineation and how to apply new technology imaging techniques for lateral wells in North America unconventional.

