

## Half-Day Seminar - Houston

### Migration Happens and Utilizing Geochemistry and PVT

- WHEN:** Tuesday, February 21, 2017, 8:30am – 11:45am
- WHERE:** Wyndham Houston West Energy Corridor  
14703 Park Row Boulevard, Houston, TX 77079
- INSTRUCTORS:** Dr. John Curtis – GeoMark Research / CSM  
Dr. Kevin Ferworn – GeoMark Research
- COST:** Free Limited Seating (previous seminars have filled)

#### AGENDA

- 8:30 – 9:00 AM:** Continental Breakfast
- 9:00 – 9:15 AM:** Introduction
- 9:15 – 10:45 AM:** **Migration Happens** (Presented by John Curtis)

Movement of generated hydrocarbons from a thermally maturing source rock along carrier beds to more porous and permeable reservoir facies has been observed for decades. More recently, the nature of fluid movement within and external to source-rock reservoirs has been investigated by GeoMark and other colleagues through advances in organic geochemical laboratory and interpretation methods and the availability of rock, oil and gas samples from laterals drilled within the reservoirs. Examples of fluid movement within and into more “pure” source-rock reservoirs and within hybrid source-rock reservoir systems are illustrated along with applications of biomarkers, C1-C3 carbon isotopes and the proprietary GeoMark QQQ technique to determine thermal maturity. The following formations will be reviewed: Bakken, Three Forks, Niobrara, Codell, Sharon Springs, Wolfcamp, Spraberry, Woodford, and Eagle Ford.

- 10:45 – 11:00 AM:** Break
- 11:00 – 11:45 PM:** **Utilizing Geochemistry and PVT for Understanding Unconventional Play Success – Case Studies** (Presented by Kevin Ferworn)

Oil and gas production from North American shale oil basins has shown fairly wide variations. In addition to differences in rock properties and completion strategies, these variations can be better understood through the integration of geochemical and PVT data. Geochemical characterizations of source rocks, gases and oils are integrated with PVT properties like GOR, viscosity and bubble point pressures to understand, and often predict, fluid flow in these plays. Case studies, with interpretative plots and maps, will be presented comparing similar basins with dissimilar production behavior.

**TARGET AUDIENCE:** **Geologists/Geochemists/Engineers** who want to better understand the basics of movement of hydrocarbon fluids within source-rock reservoir systems and application of geochemistry combined with PVT for understanding unconventional.

#### REGISTER OR QUESTIONS

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