

# Fundamentals of Seismic Reflection Data

**WHO SHOULD ATTEND:** Geologists (or early career geophysicists) who have no or limited experience analyzing and interpreting seismic data.

**COURSE DESCRIPTION:** The course is intended as an introduction to the application of 2D and 3D seismic data as a complimentary tool and dataset to improve the understanding of hydrocarbon reservoirs, seals, and source rocks as well the accuracy of resulting geologic models. Seismic data is often crucial for structural interpretation outside of well data, significantly enhancing spatial coverage. The course will include both lectures and hands-on exercises.

- What are the fundamental principles of reflection seismology, and what happens to seismic data before it ends up on your workstation for interpretation?
- How is seismic data acquired in the field and processed following acquisition?
- How do these decisions in data acquisition and processing impact the final processed seismic data?
- Are there artifacts in the data we should be on the look-out for?
- Do you believe everything contained in the data?
- How is seismic data converted from seismic travel time to depth?

These are just a handful of questions that you should be able to answer after completing this course.

**WHEN:** Wednesday, June 21 and June 28 (you should plan to attend both ½ day sessions). Both sessions will run from 1 pm - 4:30 pm

**WHERE:** Aera Oaks (CC training center) 10,000 Ming Ave., Bakersfield CA

**INSTRUCTORS:** Gary Myers and Lisa Alpert

**TO ENROLL:** Contact Blas Arzabal at Aera Energy ([bvarzabal@aeraenergy.com](mailto:bvarzabal@aeraenergy.com)) 661-487-8508

**COST:** Free

## Topics Covered

Fundamentals of Reflection Seismology (Wave Propagation, Reflection Geometries, etc..)

Data Acquisition (Equipment, Design, and Practical Issues)

Data Processing and Imaging (Processing Flows and Migration)

Seismic Data Interpretation (Well Ties and Depth Conversion, Structure Mapping, and Seismic Attributes)

