

Well Logs

Interpretation and Analysis

Reliability of the geologic and geophysical models of hydrocarbon reservoirs depend on the quality of the geophysical borehole logging data processing and preparation process. The experts at RAMTeCH are quite efficient in solving the following tasks of the geophysical borehole logging data processing service:

- Convert the available archival analog logging data into digital formats (LAS-formats).
- Create geologic, geophysical, and production databases and support them by follow-up services.
- Control the quality and make adjustments when necessary to the logging data curves affected by the borehole factors.
- Work out the data correlation analyses for productive formations based on the logs.
- Correlate and jointly process core study data and borehole logging data; work out petrophysical core-to-core, core-to-log, log-to-log, and log-to-seismology model types and develop the relevant data interpretation models.
- Process the well logging data on a bed-by-bed basis to identify the potential reservoirs and assess their filtering and emission capacities (including the porosity/saturation/efficient thickness indices, etc.).
- Make a geologic/economic assessment of the prospective hydrocarbon reserves.
- Make the point-wise and point-to-bed-wise processing and interpretation of the available logging data.
- Make processing and interpretation of the available data produced by special borehole survey methods, including inclination metering, sonic waveform logging, impulse neutron-neutron logging methods, etc.
- Make parametric setting provisions for the seismic data interpretation exercises using the logging data (work out linear geo-acoustic models of the well cross-sections, identify their filtration and emission properties and convert the resultant data into the depth-time scale) and the borehole seismic survey data.

At RAMTeCH, we use a “hands-on” approach to basic open-hole well log analysis and interpretation, where common sets of logs are used in ongoing exercises and final problems to illustrate complete and coherent interpretations.