

An Interpreter's Guide to Successful Prestack Depth Imaging

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Abstract/Excerpt

Prestack depth migration often gives a readily observable improvement in imaging and a significant reduction in drilling risk compared to time imaging. However, running a successful depth imaging project is significantly more challenging than running a time imaging project, and because of this, the occasional project does not achieve the imaging objectives. The risk of a project failing can be minimized by careful selection of a service provider, who can demonstrate a track record of depth imaging success and can deploy experienced depth imaging professionals, and by embarking on a project without undue constraints that may compromise the imaging. Once the project has started, key factors are good communication, timely sharing of information, a suitable velocity and anisotropy strategy, and proactive QC. The success of the project can be evaluated by QC of final migrated gathers, the quality of the final stack image, and by the accuracy of the well ties.