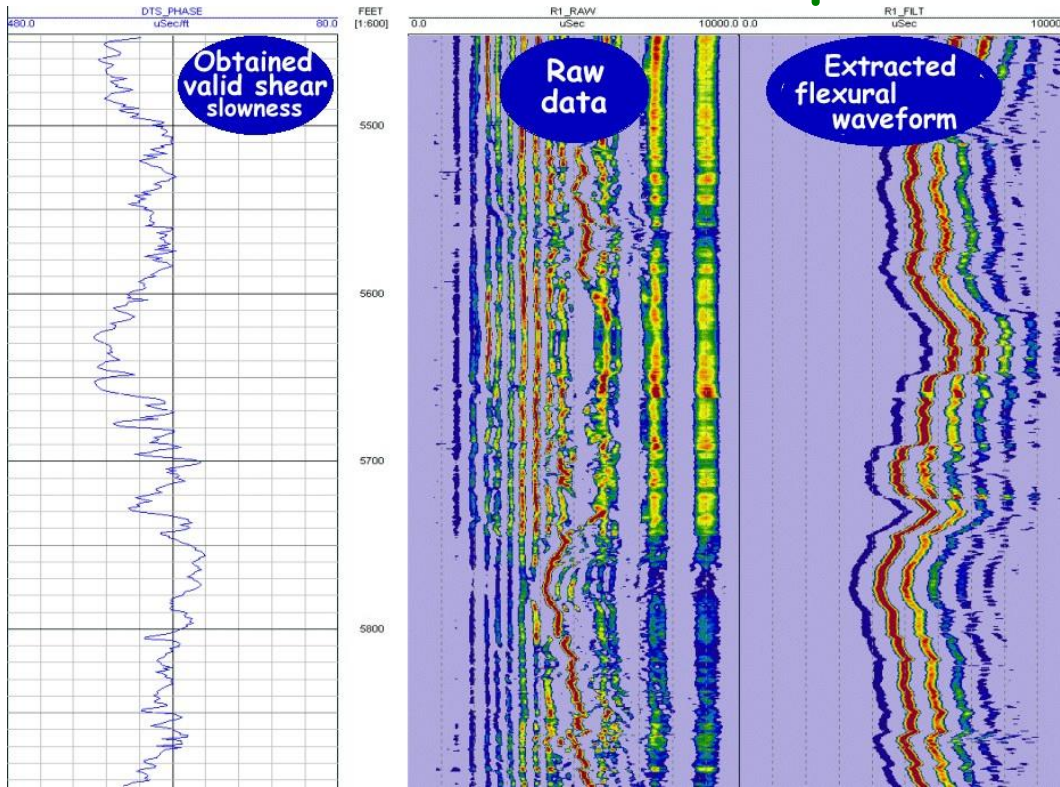


SuperSonic Geophysical

Full Wave Acoustic Expertise



Difficult full wave acoustic data processed by SuperSonic
Data acquired in a 9 5/8" casing, through slow formation, in highly deviated well, with pipe conveyed, decentralized logging tool.

At **SuperSonic Geophysical**, we process all commercially available full wave acoustic logs; both wireline and LWD. We make full use of an extensive suite of analytic tools including modeling code to simulate tool and borehole conditions and our extensive experience dealing with difficult logs. We also design and implement the software we use, and are constantly upgrading it as we encounter new challenges in the data. Call or email if you have full wave acoustic logs in need of processing.

Processing Philosophy and Techniques

SuperSonic Geophysical uses *SonicWare*, an interactive processing program authored and owned by the company. The interactivity provides tremendous advantages when the waveforms are difficult to process as can occur with data acquired in large holes, in holes with severe washouts, in formations which are either very fast, very slow, or very attenuative, in cased holes, and where tool acquisition/calibration problems are present.

Available velocity picking algorithms include Semblance, First Break Analysis, and IFS (Instantaneous Frequency Slowness) Analysis. In the majority of cases, we prefer to use IFS Analysis. When data quality is severely degraded (e.g. on some LWD logs and poorer quality wireline logs), we use Semblance Analysis.

The key to the superior quality of SuperSonic's processing lies in the fact that we deeply investigate the underlying physics of the propagating borehole modes on every log we process. By examining the physics of propagation, we are able, in most cases, to avoid providing slownesses that are biased by impure propagation modes. In addition, SuperSonic makes an effort to de-mystify the logs we process, providing clients with multi-page reports for every log. The reports typically discuss processing methodology, contaminating modes and remediation, and the accuracy of the results. Quality control plots are produced with the intention of giving clients a sophisticated understanding of the accuracy of the results in the various intervals in a well.

All clients receive complimentary advice in both alerting the service companies to tool problems that show up in the waveforms and in helping clients design logging programs that have a high probability of success. On numerous occasions, recommendations made by SuperSonic have significantly improved the quality of acquisition in a field.

The Company

SuperSonic Geophysical was formed to provide the oil industry with independent expertise in the challenging field of full wave acoustic logs. We provide a superior independent alternative to service company processing. The Principal partners within SuperSonic Geophysical have extensive experience in Full Wave Acoustic Logging technology having previously worked in Design, Logging, Maintenance, and Processing. The principals have consulted with most of the service companies and the quality of work provided by SuperSonic is endorsed by Acoustic Logging Experts and working practitioners all over the world. The two principal partners have processed over 1000 logs. Many of these were difficult logs where the original service company processing was problematic.

Services Provided:

- Compressional & Shear slownesses.
- Shear Wave Anisotropy analysis
- Open Fracture Identification
- Density Log Editing
- 1000 ft. Minimum Charge
- We accept all commercially available wireline and LWD tools; including many vintage logs.
- Dispersion corrections where warranted and/or requested are provided as part of the service.

Additional Services:

- Forward modeling of tool response available as a consulting service.
- Seminars and Instruction in Borehole Acoustics
- Special projects on request
- All paying clients receive free advice on optimizing acquisition of full wave data.

For more information contact :



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