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8.6. CONCLUSIONS

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The use of pattern recognition has become more and more important in seismic oil exploration. Interpreting a large volume of seismic data is a challenging problem. Seismic reflection data in the one-shot seismogram and stacked seismogram may contain some structural information from the response of the subsurface. Syntactic/structural pattern recognition techniques can recognize the structural seismic patterns and improve seismic interpretations. The syntactic analysis methods include: (1) the error-correcting finite-state parsing, (2) the modified error-correcting Earley's parsing, (3) the p