

Supplementary Data

Evaluation of the rock mechanical properties of shale oil reservoirs in Permian Lucaogou Formation of Junggar Basin

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Figures:

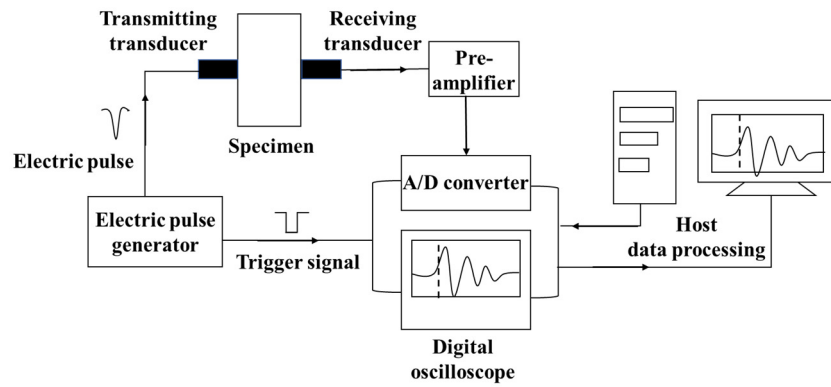


Figure S1 Schematic diagram of ultrasonic pulse test.

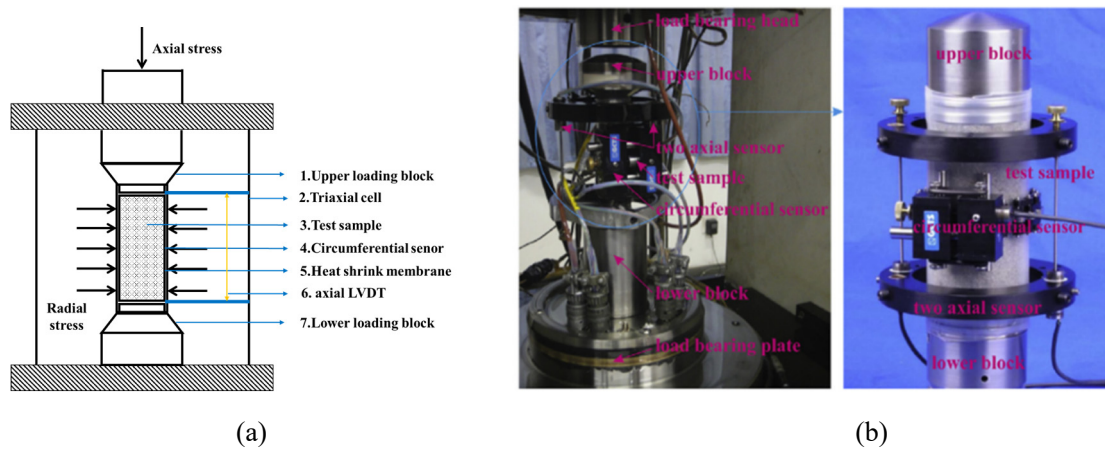


Figure S2 The experimental setup. (a) Schematic diagram of the sample in the triaxial cell; (b) RTR-1000 rock triaxial testing system (revised from Ma et al., 2016).

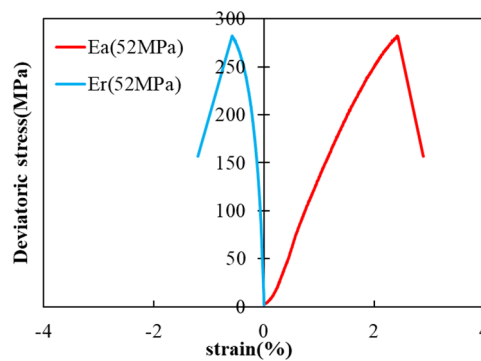


Figure S3 Deviatoric stress vs. strain curves under triaxial compression test (confining pressure of 52MPa) (Ea represents the axial strain, Er represents the radial strain.)

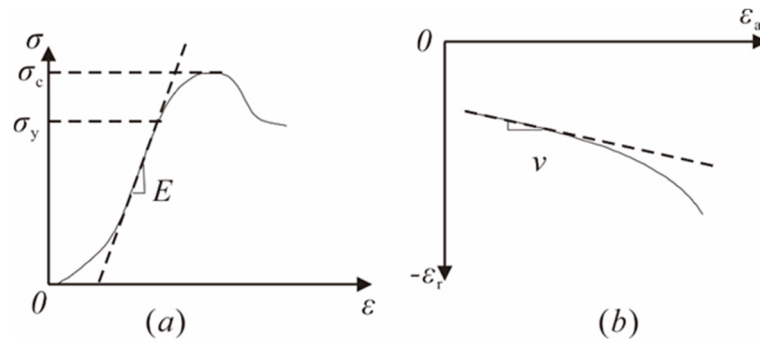


Figure S4 The calculation of the Young's modulus (a) and Poisson's ratio (b) based on the elastic deformation stage of the stress–strain curve

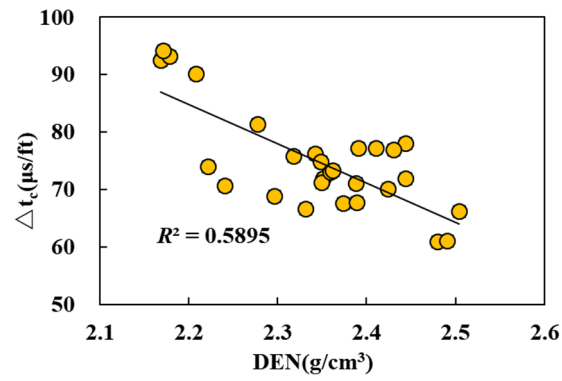


Figure S5 Relationship between DEN and Δt_c

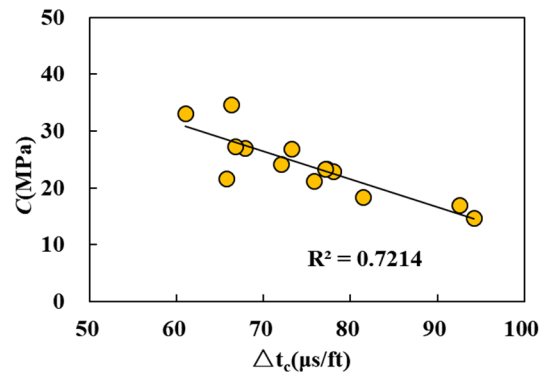


Figure S6 Relationship between C and Δt_c

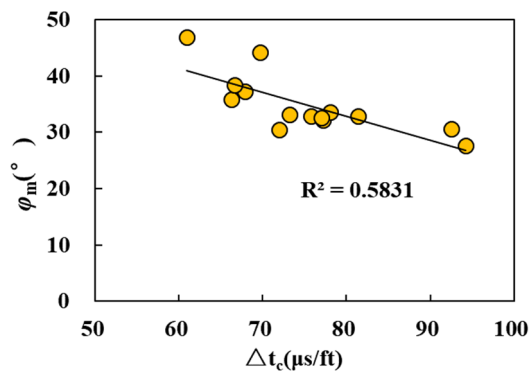


Figure S7 Relationship between ϕ and Δt_c

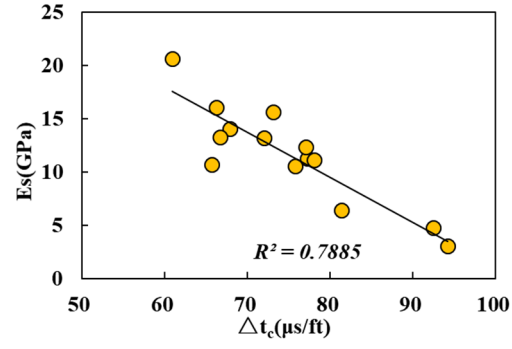


Figure S8 Relationship between E_s and Δt_c

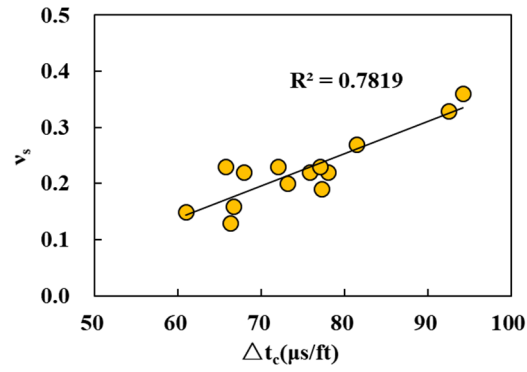


Figure S9 Relationship between ν_s and Δt_c

References

Ma T., Yang C., Chen P., Wang X., Guo Y., 2016. On the damage constitutive model for hydrated shale using CT scanning technology. Journal of Natural Gas Science and Engineering, 28, 204-214.