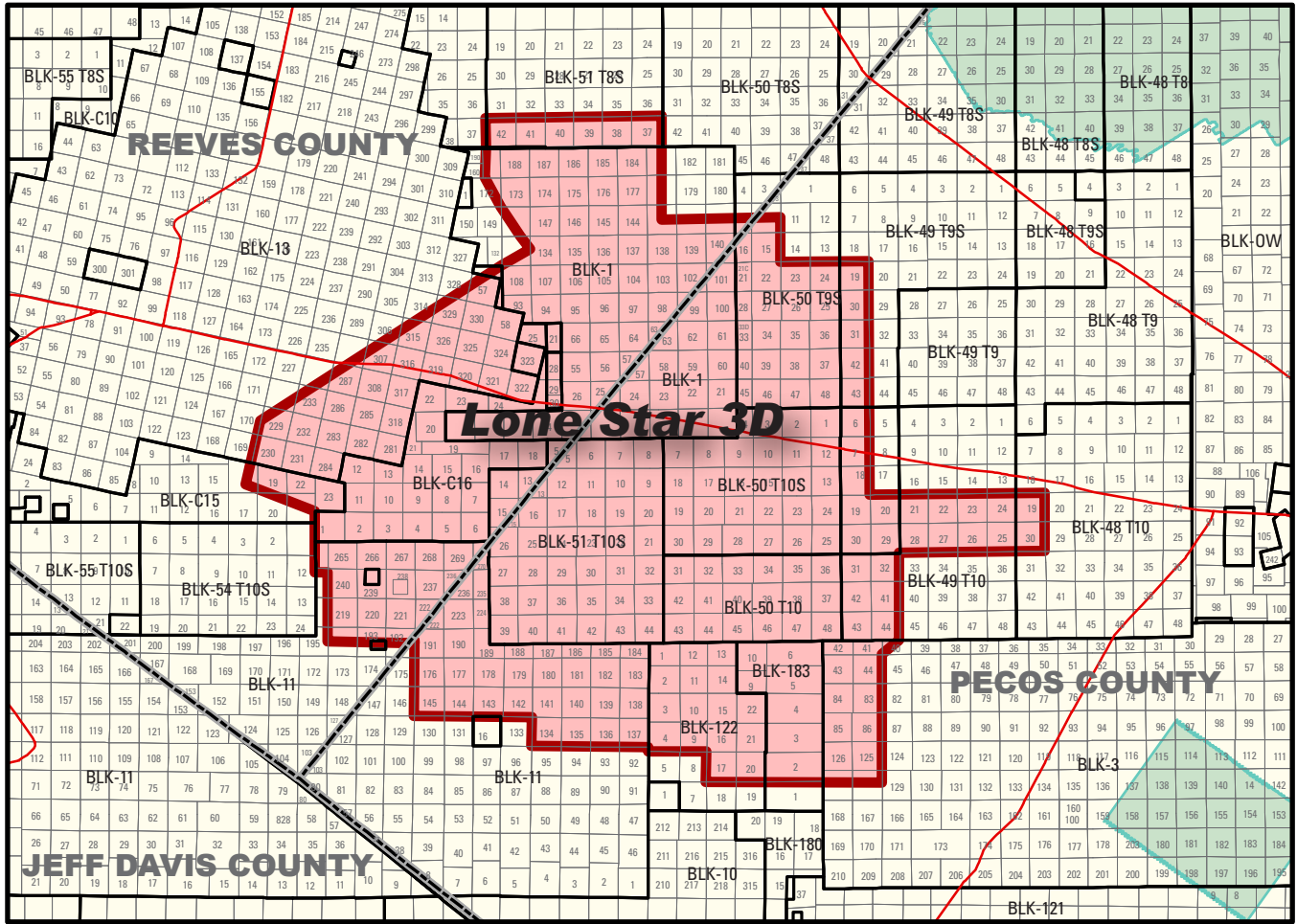


# Lone Star 3D

Texas Permian Basin Land 3D  
Pecos County, Reeves County



## Key Highlights

Wide-azimuth and long-offset recording geometry to ensure precision in the statics and velocity fields

Broadband processing with relative amplitude preservation

Vector High Fidelity (VHF) - Frequency enhancement for additional random noise attenuation and improved illumination of thin-bed stratigraphy

Anisotropic Kirchhoff pre-stack migration



## Lone Star 3D

### Acquisition Parameters

Energy source	Vibroseis
Source interval	165 ft
Source line spacing	990 ft
Source density	170.6 VP/mi <sup>2</sup>
Receiver interval	165 ft
Receiver line spacing	1,320 ft
Receiver density	128 stations/mi <sup>2</sup>
Recording patch	24 lines × 252 traces = 6,048 channels
Patch size	30,360 × 40,415 ft
Max long offset	22,459 ft
Subsurface bins	82.5 × 82.5 ft
Record length	5.0 sec @ 2 ms
Sample rate	2 ms
Nominal fold – all offsets	252
Survey size	Approximately 350 mi <sup>2</sup>

### Pre-Stack Time Processing (PreSTM)

Loading/Reformat/Geometry/QC
Trace editing/Noise attenuation
3-D refraction modeling
SC deconvolution
SC residual statics - multiple iterations
SC amplitude corrections - multiple iterations
Velocity analysis - multiple iterations
PreSTM
Residual velocity analysis
Filters/Noise suppression
Vector High Fidelity (VHF)