



In-Progress Data Creation

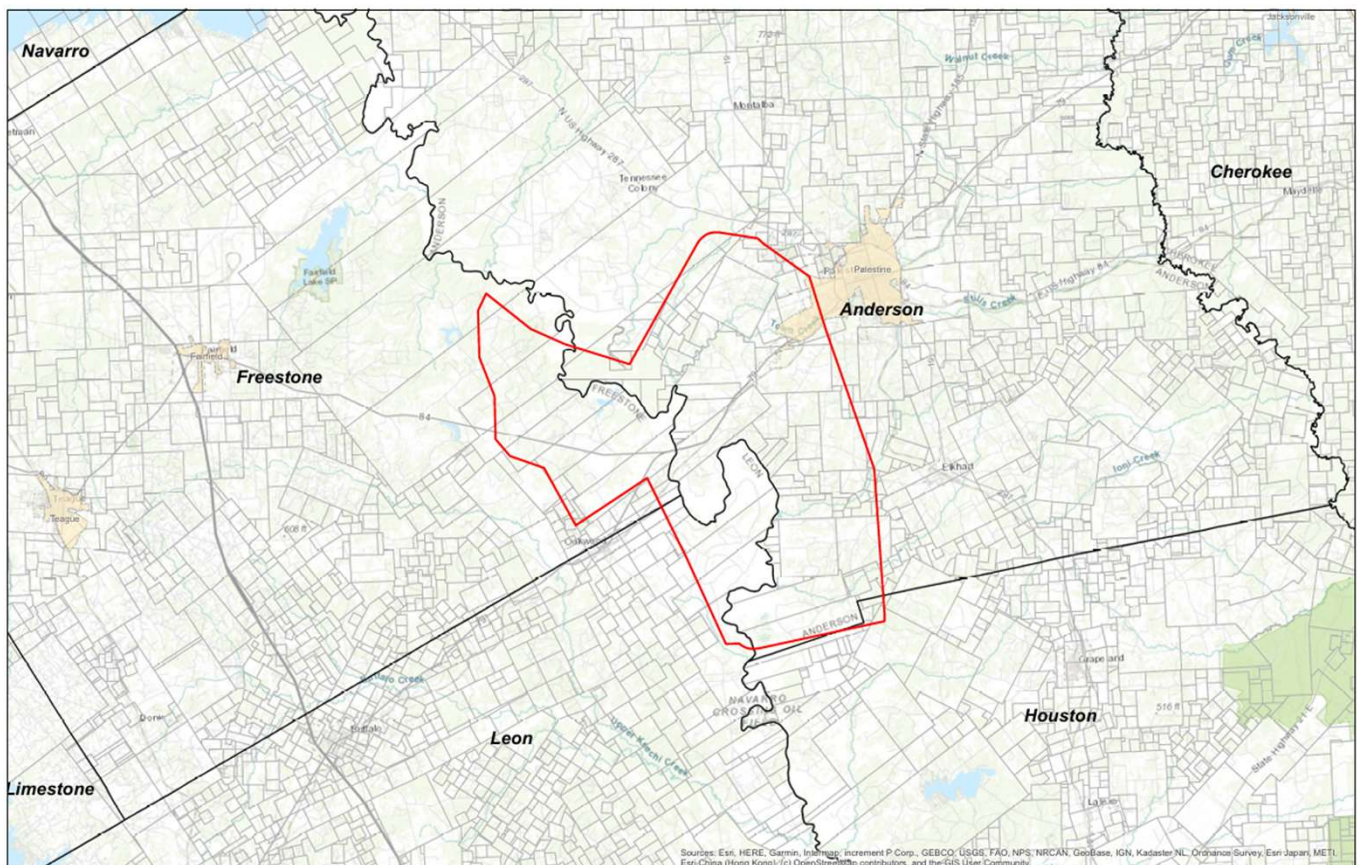
Elkhart West 3D Survey

Anderson, Freestone, Houston & Leon Counties, TX

Seitel, in a joint venture with SEI Marketing, LLC, is in the process of acquiring a new 210.36 square mile 3D survey in the Deep Bossier/Haynesville trend in northeast Texas. This project is designed to provide new subsurface insight across a key area of the Haynesville trend.

Field operations are currently in progress and are projected to be completed by Q4'26, with seismic processing to follow.

For more information about this data creation project or any existing dataset in the Seitel Data library, please contact your Seitel Data Marketing Representative or contact Seitel at elkhart.west@seitel.com.



Elkhart West 3D Survey 1980'SLS (1,1,0) No Rec Zitter
Anderson, Freestone, Houston & Leon Counties, TX
Acquisition Paramters

SOURCE INFORMATION	
Line Orientation	NE-SW
Number of Source Points	13435
Source Interval (ft)	165
Source Line Spacing (ft)	1980
Source Line Mileage	420
Source Density (per mi ²)	64
Primary Energy Source	Dynamite (90% of Survey)
Charge Size	5.5
Charge Depth	80
Secondary Energy Source	Vibroseis (10% of Survey)
Vibrator Type	I/O, AHV, or IV
Vibe Sets	2
Vibes Per Set	3
Vibe Size (Pounds)	60000
Vibe Electronics	Pelton Vib Pro or Seismic Source Force
Sweep Length (seconds)	16
Number of Sweeps per V.P.	2
RECEIVER INFORMATION	
Recording System	Geospace Pioneer (5 hz. Elements)
Line Orientation	NW-SE
Number of Receiver Points	26926
Receiver Interval (ft)	165
Receiver Line Interval (ft)	1320
Receiver Line Mileage	841
Receiver Density (per mi ²)	128
PATTERN INFORMATION	
Number of Channels Recorded	8976
Receiver Lines	34
Receiver Stations	264
OTHER	
Inline Bin Size	82.5
Crossline Bin Size	82.5
Record Length	6 seconds
Sample Rate	2 ms.
RECORDING OFFSETS	
Fold Coverage	145 (187 after EPOCS)
Inline	21698
Crossline	21780
Oblique	30743
Roll ON/OFF IN/OUT	
Stations	Yes
Lines	Yes

**Elkhart West 3D Survey
Proposed Processing Sequence**

1. Data loading, reformat and QC
2. Geometry definition & assignment
3. Fast Track sequence:
 - a. Elevation statics
 - b. Noise attenuation
 - c. Spherical divergence and gain correction
 - d. Spiking deconvolution
 - e. AGC (if required)
 - f. Velocity analysis – 4 mile grid
 - g. SC residual statics
 - h. Kirchhoff PSTM
 - i. Velocity analysis – 2 mile grid
 - j. Stack and deliverable generation
4. Initial survey matching
5. First break picking (if necessary)
6. Multi-layer Tomography Statics
7. Raw shot CS reconstruction
8. True Amplitude Recovery
9. Noise attenuation, including ground roll attenuation, coherent noise, and random noise attenuation in multiple passes and domains
10. Surface consistent amplitude correction, multiple passes
11. Surface consistent Deconvolution
12. Residual noise attenuation
13. Final survey matching
14. Velocity analysis
15. Residual Statics I
16. Velocity Analysis
17. Residual Statics II
18. Surface consistent Amplitude Compensation
19. Remove True Amplitude Recovery
20. **SmartMerge™** workflow:
 - a. Processed shot CS reconstruction
 - b. COCA binning
 - c. 4D EPOCS reconstruction
21. Pre-migration MDMA (multi-domain multiple attenuation)
22. Output pre-processed gathers
23. Anisotropic Pre-stack time migration flow (PSTM)
 - a. Pre-stack Time Migration velocity analysis
 - b. Migration velocity analysis (including eta picking)
 - c. Migrate target lines or sub-volume as required for QC
 - d. Well tie analysis, if required
 - e. Pre-stack Time Migration
24. Migration aperture tests
25. VTI Kirchhoff pre-stack time migration
26. Output raw PSTM gathers and stacks
27. QC Snail (or azimuthal) gathers and stack
 - a. Post-PSTM processing
28. Zero phase using well synthetics
29. Radon de-multiple, if required
30. Post-migration, pre-stack MDMA (multi-domain multiple attenuation)
31. High-density RMO correction
32. Stack
33. Footprint & Noise attenuation
34. Post-migration, post-stack MDMA (multi-domain multiple attenuation)
35. Bandwidth enhancement
36. Scaling and filtering
37. Output PSTM Deliverables

