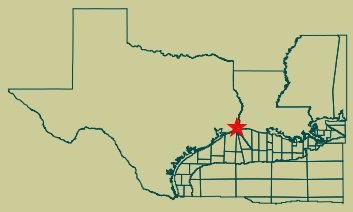
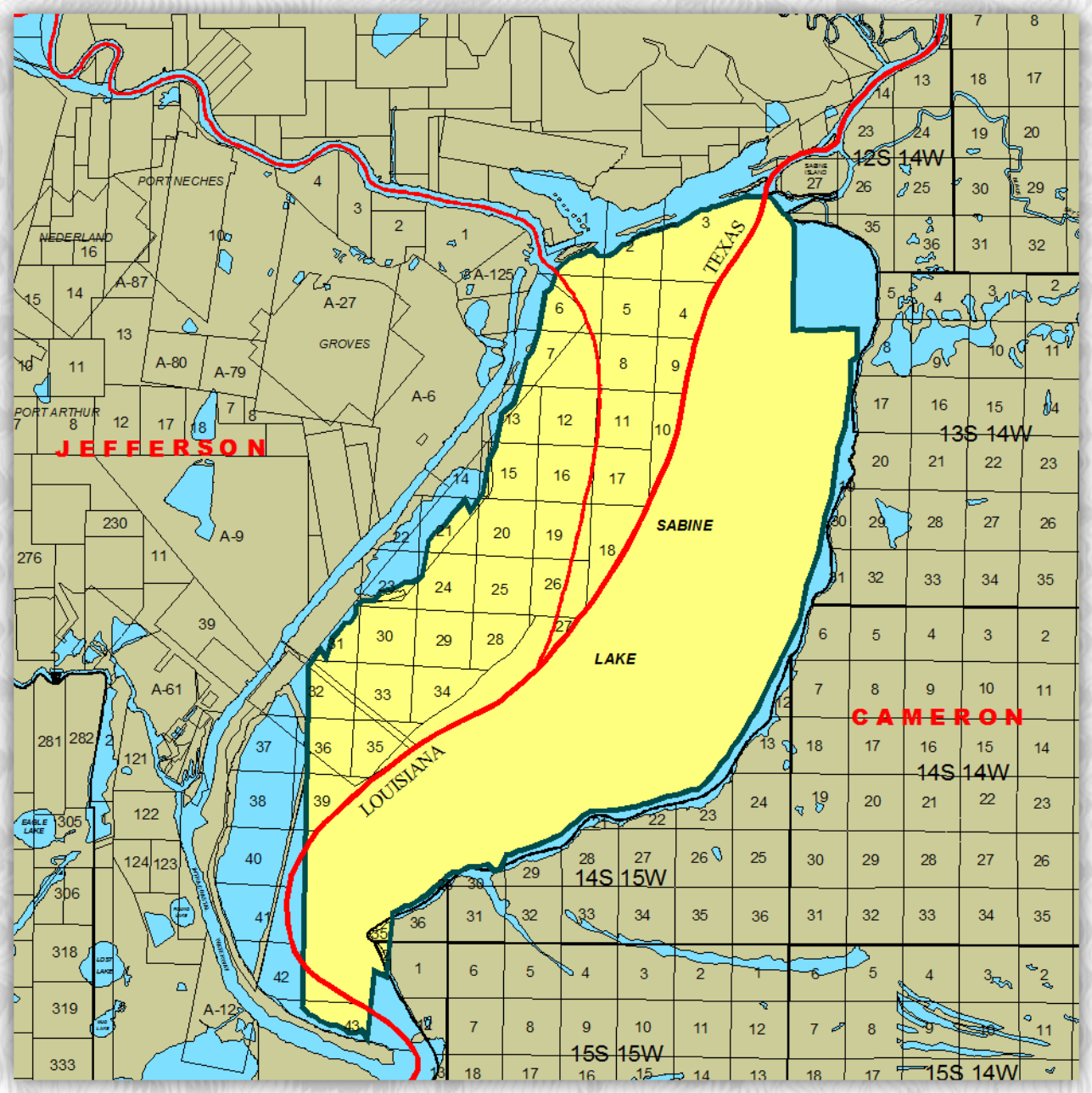
# Sabine Lake

*Texas/Louisiana Gulf Coast*

75.0942 $mi^2$






Geophysical Pursuit 3-D Surveys


GEOPHYSICAL PURSUIT, INC.

3501 Allen Parkway
Houston, Texas 77019
(713) 529-3000

2895 Highway 190
Suite 227
Mandeville, LA 70471
(985) 727-6720

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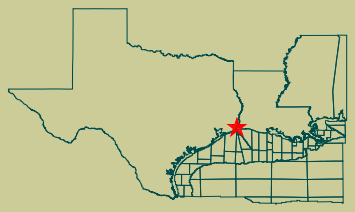

## Acquisition Parameters

*Contractor*: Western Geophysical (#321, 374 & 375) – Sep-Dec 1997
*Acquisition Patch*: 2 Rx line x 180ch Inline swath
*Receiver Lines*: N/S @ 2640ft
*Receiver Interval*: 220ft
*Source Lines*: N/S @ 220ft
*Source Interval*: 110ft
*Energy Source*: air gun; 1500$in^3$ & 640$in^3$
*Bin Size*: 55 x 110 ft
*Nominal Fold*: 96
*Average Far Offset*: 19,800ft
*Recording System*: Sercel 368 / OpSeis Eagle
*Record Length*: 8 seconds @ 2ms/4ms
*Available*: May 1998

## Processing: 1998 PoSTM by Western Geophysical

1. Convert, demultiplex & resample to 4ms
2. Geometry verification & trace edits
3. Spherical divergence compensation
4. Instrument response removal
5. Surface consistent deconvolution
6. Zero phase deconvolution
7. Preliminary velocity analysis @ 1 mile
8. Surface consistent residual reflection statics – 1st pass
9. Zone anomaly processor
10. Post statics velocity analysis @ ½ mile
11. Surface consistent residual reflection statics – 2nd pass
12. Surface Consistent Amplitude Compensation (SCAC)
13. Residual Amplitude Analysis Compensation (RAAC)
14. Noise attenuation (CMP ZAP)
15. DMO velocity analysis @ ½ mile
16. 3D Kirchhoff DMO stack
17. Deconvolution
18. 3D Random Noise Attenuation (FXY decon RNA)
19. 3D FXY cross line interpolation to 55 x 55 ft bins
20. RAAC
21. Modified Residual PostStack Time Migration
22. Time variant filter & scaling

## Available Products:

A. Geometry Gathers
B. PostStack Time Migration Volume

## PreStack Time Migration (Feb 2004 - TriCon)

1. Trace edit of dead or noisy traces
2. Geometry definition and verification
3. Spherical divergence correction
4. Surface consistent spiking deconvolution (240 ms operator)
5. Refraction statics correction
6. Initial velocity analysis (2mi grid)
7. 3D surface consistent residual statics
8. Second velocity analysis (½mi grid)
9. CDP consistent trim statics (max shift of 2 samples)
10. Whole trace balance
11. PreStack migrated velocity analysis (½mi grid)
12. Kirchhoff PreStack curved-ray migration
13. Residual migrated velocity analysis (½mi grid)
14. Normal move out correction
15. Mute
16. Stack

## Available Products:

A. KPrSTM stack volumes
   a. RAW
   b. AGC
   c. RAP
B. KPrSTM gathers – RAW w/ NMO

## PreStack Time Migration (Apr 2004 - GeoCenter)

1. Geometry application/QC
2. Trace edit and QC
3. Spherical divergence correction
4. Surface consistent gain correction
5. Surface consistent deconvolution
6. Surface wave attenuation for low velocity noise
7. Datum static (vel 6000ft/sec)
8. Residual Statics (dual pass)
9. Gain correction offset term
10. Kirchhoff PreStack Time Migration (4th order)
11. Radon multiple attenuation
12. Normal moveout correction
13. Mute
14. Stack

## Available Products:

A. Final KPrSTM stack volume
B. PrSTM NMO corrected gathers + PRT w/o mute

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