

#7902

## CRUISE REPORT

Whitehall, Inc. -- USGS Contract No. 14-08-0001-16328

1. Ship: M/V SEISMIC EXPLORER  
Seismic Explorations International, S.A.  
3410 Mercer, #201  
Houston, Texas 77027
2. Cruise No.: n/a
3. Area of Operation: Gulf of Mexico, West Florida Margin  
(MAFLA OCS)
4. Dates of Operation: 8/6/79 - 8/21/79
5. Personnel: Mahlon Ball - USGS, Co-Chief Scientist/Technical Monitor  
Ray Martin - USGS, Co-Chief Scientist/Technical Monitor  
  
Tom Horsfield - SEI, Captain/Party Manager  
Carl Hutchins - SEI, Chief Observer
6. Purpose:

The objective of this cruise was to collect state-of-the-art multifold seismic reflection data across the West Florida Margin and on the Destin Dome for structural and stratigraphic framework studies and resources assessment of the northern MAFLA OCS.

7. Equipment: Geosource DFS-V Field Recording System  
with Galvo-Camera.  
SEI streamer; 3,200m in 50m groups; 64 channels.  
SEI Seahawk Sentry streamer birds - 12 ea.  
Air-gun Array; 21 Bolt Associates guns ranging  
from 10 in<sup>3</sup> to 463 in<sup>3</sup> for a total of 2,183 in<sup>3</sup>.  
Raytheon 12 kHz hull-mounted fathometer with digital  
tape and analog output.  
Magnavox integrated navigation system (Satellite, Sonar  
bottom-track, and Loran C).
8. Navigation: Precision navigation was obtained via the Magnavox  
integrated system supported by a Hewlett-Packard  
mini-computer. Even before the antenna was vaporized  
by a bolt of lightning, the Loran C was useless due  
to poor signals in the northeastern Gulf area.  
Navigation based on distance along line (50 m pops)  
relative to shot point number and GMT(Z).

9. Data Acquired: 1,284.6 km (25,692 shot-points) of 64-channel (32-fold) CDP seismic reflection data.

10. Narrative and Comments:

Data quality is assumed excellent on the basis of near-trace monitor records, galvo-camera records, and observations of reflection returns and noise as displayed on the streamer monitor. Major problems causing delays and breaks-in-line involved mainly mechanical malfunctions such as compressor breakdowns, air-gun malfunctions, problems with ship's generators, traffic, and acceptable satellite passes.

11. Tabulated Information:

- a) Days at sea -- 16
- b) Working days at sea -- 13.5
- c) Total ship's trace -- 2,750 (est.)
- d) Kilometers of continuous data:
  - 1) 64-channel CDP seismic -- 1,284.6
  - 2) 12 kHz fathometer -- 1,284.6
- e) Total number of stations: n/a
- f) Numbers of each type of sample taken: n/a

12. Track Chart: attached.

