DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
82-837

MONTEREY BAY

N

-121°56.00′ -121°54.00′ -121°52.00′ -121°50.00′ -121°48.00′ -121°46.00′

36°48.00′ 36°46.00′ 36°44.00′ 36°42.00′ 36°40.00′

100m

LINE 1a LINE 1b LINE 1c LINE 2 LINE 3a LINE 3b LINE 4 LINE 5 LINE 6 LINE 7 LINE 8 LINE 9 LINE 10 LINE 11 LINE 12 LINE 13 LINE 14 LINE 15 LINE 16 LINE 17 LINE 18 LINE 19 LINE 20 LINE 21 LINE 22 LINE 23 LINE 24 LINE 25 LINE 26 LINE 27 LINE 28 LINE 29 LINE 30 LINE 31 LINE 32

LINE 34 LINE 36 LINE 38 LINE 40

SOL EOL

ELKHORN SLOUGH
MOSS LANDING
MORO COJO SLOUGH
SALINAS RIVER

MARINA
FORT ORD

Map Showing Geophysical Tracklines South-Central Monterey Bay, California (Summer 1981)

By

G.W. Hill and J.L. Chin

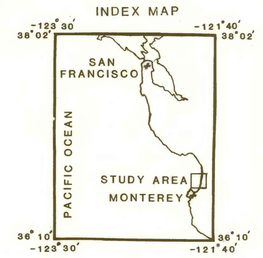
The U.S. Geological Survey (Menlo Park, Calif.) initiated a multidisciplinary study of south-central Monterey Bay in July 1981. The first year baseline study involved shipboard research using the R.V. *David Johnston*, from which various types of data were collected, including deep-penetration seismic reflection profiles, fathometer profiles, underwater video transects, gravity cores and surface grab samples.

Geophysical tracklines were run using Uniboom and minisparker seismic systems. Trackline locations were determined by a shipboard mounted Motorola Mini-Ranger III precision navigation system. Navigation fixes were taken at 5-minute intervals and notated on both navigation logs and geophysical records.

Uniboom and minisparker systems were both run at a 0.25 - second sweep rate. Uniboom frequencies were filtered at 650-1400 Hz, while minisparker frequencies were filtered at 400-1200 Hz. Seismic records were also recorded on magnetic tape for post-laboratory processing.

Approximately 275 km of seismic reflection trackline was run during the first year baseline study. Laboratory processing and interpretation of these records is currently in progress.

INDEX MAP




***LEGEND***

| | |
|---|---|
| → | LINE DIRECTION and 5-MINUTE NAVIGATION FIX |
| SOL | START OF LINE |
| EOL | END OF LINE |
| --- | BREAK IN LINE (no data) |

0 1 NAUTICAL MILE
0 2 KILOMETERS

MAP SCALE
1:24000

MAP SHOWING GEOPHYSICAL TRACKLINES
SOUTH-CENTRAL MONTEREY BAY, CALIFORNIA
(SUMMER 1981)
BY
G.W.HILL and J.L.CHIN
1982