

Fig. No. 222

View from the open sea of the damaged breakwater



Amount of loss

CHF 41 000 000 property damage
CHF 24 000 000 loss of profit

Cause

Storm tide

Project

Oil tanker unloading facility belonging to an oil refinery.

Damaged installations

Wavebreaker and harbour installations.

Description

Storm tides lasting for two days, accompanied by force 8-9 winds and heavy rain caused the breakwater to be breached, damaging the loading and unloading pipelines which it was protecting. Parts of the harbour installations were hurled up to 100m into the sea.

Fig. No. 223
Cross-section of breakwater
with wavebreaker

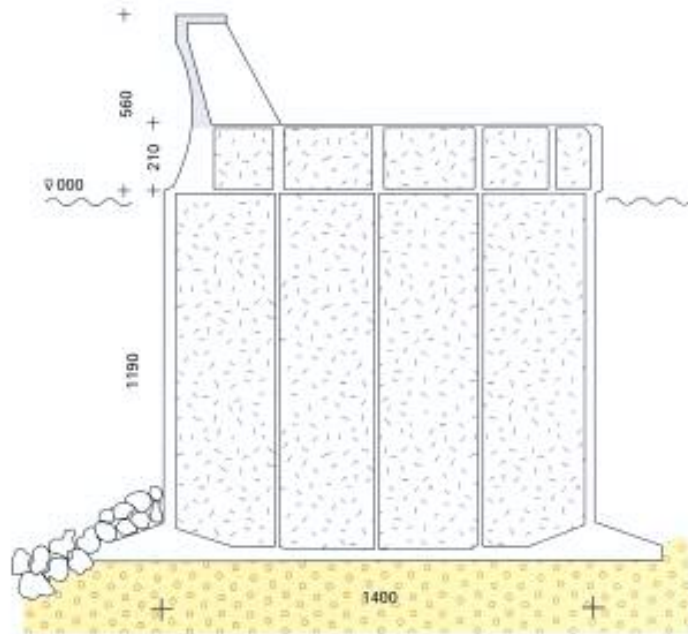


Fig. No. 224
The top of the breakwater and
the damaged wavebreaker can
be seen to the left, with
destroyed equipment in the
background



Fig. No. 225
Loading and unloading
pipelines damaged beyond
repair



Fig. No. 226
Damage to pipelines and
supports. One vessel sank
to the seabed

