



Key achievements

- 6 cranes mobilized to accelerate the work program
- Turnkey design, construction and monitoring package delivered to client

• The project

The Singapore Lubepark development comprises of a Lube Oil Blending Plant (LOBP) and Lube Park Shared Facilities (LPSF) by three companies, Shell Eastern Petroleum Pte Ltd, Sinopec Lubricant (Singapore) Pte Ltd and Total Oil Asia Pacific Pte Ltd. The Lube Park concept is the first of its kind in the lubricant industries. Keller was appointed to perform ground improvement for the LOBP's and LPSF's structures.

• The challenge

The structures to be built consisted of more than 95 storage tanks, 3 utility tanks, pipe racks, substation building and office building. and manpower management were the main challenges.

• The solution

Vibro compaction works were carried out in these areas to satisfy a bearing capacity requirement of 250 kPa and allowable settlement of 50 mm for tanks and 25 mm for buildings. Approximately 80,000 square meters of the area was treated, in addition to the ground improvement earthworks were incorporated into the Keller scope in order to deliver the whole site to following contractors. Earthworks consisted of importing and compacting engineered fill 1.6 m to 2.5 m thick.

Application

Ground improvement/
Bearing Capacity &
Settlement control

Technique

Vibro Compaction

Market

Industrial/ Oil, Gas &
Chemical

Client

Total Oil Asia Pacific, Shell
Eastern Petroleum, Sinopec
Lubricant Singapore

Main contractor

Rotary Engineering Limited

Contract Value

S\$2m to S\$5m

Keller business unit (s)

Keller ASEAN