



## Houston Fuel Oil Terminal Company

Houston, Texas

**The Geopier GP3® System provided substantial reductions in the project schedule and afforded cost savings of up to \$700,000 compared to alternative foundation systems**

**Description:** Construction of ten 80,000 barrel, above ground cone roof steel tanks used for petroleum storage. The 100 foot diameter tanks were 56 feet tall and exerted pressures of 3,700 psf.

**Subsurface Conditions:** Highly-variable clay and sandy clay fill soils extending to depths ranging from 5 to 12 feet underlain by native clay soil.

**Geopier Solution:** A total of 315 Geopier Rammed Aggregate Pier® (RAP) elements were installed at a spacing of 5.5 feet on center beneath each tank. The RAP elements extended to depths of 14 feet to completely penetrate the fill soils. Using two crews, a total of 3,354 Geopier® elements were installed at the site to support the tanks and ancillary structures in a period of approximately one month. The Geopier GP3® system provided substantial reductions in the project schedule and afforded cost savings of up to \$700,000 compared to alternative foundation systems.



### PROJECT TEAM

**Owner:**

Houston Fuel Oil Terminal Company

**Geotechnical Engineer:**

Fugro South, Inc.

**Geopier Installer:**

Peterson Contractors, Inc.

**Geopier Designer:**

GFC-Houston