OFFSHORE INSTALLATIONS
Definition, the history

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Definition

An offshore platform, also referred to as an oil platform or oil rig, is a large structure with facilities to drill wells and extract and process oil and natural gas and export the products to shore.

Depending on the circumstances, the platform may be fixed to the ocean floor, may consist of an artificial island, or may float.

Remote subsea wells may also be connected to a platform by flow lines and by umbilical connections; these subsea solutions may consist of single wells or of a manifold centre for multiple wells.
A typical offshore Oil/Gas platform.

The Arguello Inc. Harvest Oil Platform is located about 10 km off the coast of central California near Point Conception.
History

• Around 1891 the first submerged oil wells were drilled from platforms built on piles in the fresh waters of the Grand Lake St. Marys (a.k.a. Mercer County Reservoir) in Ohio. The wide but shallow reservoir was built from 1837 to 1845 to provide water to the Miami and Erie Canal.

• Around 1896 the first submerged oil wells in salt water were drilled in the portion of the Summerland field extending under the Santa Barbara Channel in California. The wells were drilled from piers extending from land out into the channel.

• Other notable early submerged drilling activities occurred on the Canadian side of Lake Erie in the 1900s and Caddo Lake in Louisiana in the 1910s. Shortly thereafter, wells were drilled in tidal zones along the Gulf Coast of Texas and Louisiana. The Goose Creek field near Baytown, Texas is one such example. In the 1920s drilling was done from concrete platforms in Lake Maracaibo, Venezuela.

• The oldest subsea well recorded in Infield's offshore database is the Bibi Eibat well which came on stream in 1923 in Azerbaijan. Landfill was used to raise shallow portions of the Caspian Sea.

• In the early 1930s the Texas Company developed the first mobile steel barges for drilling in the brackish coastal areas of the gulf.
- In 1937 Pure Oil Company (now part of Chevron Corporation) and its partner Superior Oil Company (now part of ExxonMobil Corporation) used a fixed platform to develop a field in 14 feet of water, one mile offshore of Calcasieu Parish, Louisiana.

- In 1946, Magnolia Petroleum Company (now part of ExxonMobil) erected a drilling platform in 18 ft of water, 18 miles [vague] off the coast of St. Mary Parish, Louisiana.

- In early 1947 Superior Oil erected a drilling/production platform in 20 ft of water some 18 miles [vague] off Vermilion Parish, Louisiana. But it was Kerr-McGee Oil Industries (now Anadarko Petroleum Corporation), as operator for partners Phillips Petroleum (ConocoPhillips) and Stanolind Oil & Gas (BP), that completed its historic Ship Shoal Block 32 well in October 1947, months before Superior actually drilled a discovery from their Vermilion platform farther offshore. In any case, that made Kerr-McGee's well the first oil discovery drilled out of sight of land.

- The Thames Sea Forts of World War II are considered the direct predecessors of modern offshore platforms. Having been pre-constructed in a very short time, they were then floated to their location and placed on the shallow bottom of the Thames estuary.
First ideas of platforms

From The Oil & Gas Journal
June 28, 1947
First ideas of submersible platforms
First ideas of submersible platforms
First ideas of submersible platforms

World’s first submersible drilling rig Breton Rig 20
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Thank you for your attention

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