

HISTORICAL DICTIONARY *of the*

**HD**

**PETROLEUM  
INDUSTRY**



MARIUS S. VASSILIOU

SECOND  
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the Petroleum Industry**

*Second Edition*

Marius S. Vassiliou

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*To my wife, Cynthia K. Vassiliou,  
to my mother, Avra S. Vassiliou,  
and  
to the memory of my father, Simos G. Vassiliou.*

## Chronology

**c. 1875 BC** References to an oil trade in ancient Sumeria appear in official records of King Hammurabi's government.

**c. 450 BC** Greek historian Herodotus describes oil and salt production from springs and wells in Persia.

**c. 400 BC** Bamboo pipes wrapped with waxed cloth are used to transport natural gas for lighting in China.

**211 BC** Natural gas is discovered in Chi-lui-ching, Szechuan, China, while drilling for salt and is used for heat and light.

**c. 50 BC** Greek historian Diodorus records roaring gas seeps at Kirkuk and presence of large quantities of asphalt in Babylonia.

**347** Wells are percussion-drilled in China using bamboo poles with attached bits. Depths of almost 800 feet are achieved. Some of these are salt wells with incidental oil discoveries.

**642** Byzantine emperor Heraclitus destroys a number of temples near Baku where locals worship before burning gas wells.

**885–886** Premodern oil industry in Azerbaijan and the North Caucasus. Caliph of Baghdad grants revenues from oil springs to the citizens of Darband (Derbent).

**1132** Wells in China reach 3,000 feet in depth.

**1184** Ibn Jubayr records large oil seeps near Mosul.

**1188** Giraldus Cambrensis describes rocks in Wales that appear to be oil bearing and speculates on the possibility of extracting oil from them somehow.

**1298** Marco Polo observes the exploitation of oil from surface seeps on the Abseron Peninsula. He notes that the oil is used for fuel and medicinal purposes and is transported on camels.

**1460** Francisco Ariosto writes of surface oil springs near Modena, Italy. The oil is used for medicinal purposes.

**1526** G. Fernández de Oviedo y Valdéz uses pitch to caulk his ships near Havana, Cuba.

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**1539** Spanish ship *Santa Cruz* transports a barrel of Venezuelan oil to Spain, reportedly to help treat King Charles I's gout.

**1543** Hernando de Soto describes oil seeps in Mexico.

**1545** Georgius Agricola mentions oil seeps near Hanover, Germany, near the site of the modern oil fields of Reitling and Hänigsen. He describes the use of oil for illumination, lubrication, and waterproofing.

**1594** An inscription inside a 115-foot oil well in Balakhany on the Abseron Peninsula identifies the proprietor as Allah Yar Mammad Nuroghlu.

**1595** Walter Raleigh observes the pitch lake in what is now Trinidad and Tobago.

**1596** Jan Huygen van Linschoten reports oil seeps and a primitive oil industry in Sumatra.

**1625** Johan Volck discusses possible uses of oil in the Pechelbronn district of Alsace, but no commercial development occurs.

**1636** German diplomat Adam Oleari observes 30 oil wells in the Baku area and remarks that some of them are gushers.

**1683** Engelbert Kaempfer, secretary of the Swedish embassy in Persia, visits Baku and observes the extraction, use, transport, and export of Abseron Peninsula oil.

**1702** Russian Tsar Peter I (the Great) orders oil samples to be sent to him from Siberia and orders further exploration of the vast region.

**1717** Tsar Peter I's physician Gottlieb Schober describes oil sources in Russia's Volga-Urals area.

**1732** A small rudimentary refinery is built at Baku. Its products serve the local area.

**1734** Jean-Théophile Hoeffel completes a doctoral thesis in which he describes the results of distilling light fractions from Pechelbronn bitumen and oil sands in Alsace.

**1737** Fifty-two hand-dug wells are producing oil at the site of the present-day giant Balakhany field on the Abseron Peninsula.

**1746** Louis Pierre Ancillon de la Sablonnière and Jean d'Amascène Eyrénis begin mining oil sands in the Pechelbronn area of Alsace. Oil sands are brought to the surface, and the oil is washed out of them. An oil company is formed, with 40 shares issued. Fyodor Pryadunov builds a rudimentary installation to collect oil from the surface of the Ukhta River in Russia's Timan-Pechora area.

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**1748** Peter Kalm of Sweden publishes a map showing oil seeps in Oil Creek, in what is now Pennsylvania.

**1788** Peter Pond reports that natives in the area of the Athabasca oil sands (present-day Alberta) use bitumen to caulk their canoes.

**1795** M. A. Symes visits the Yenangyaung oil field in Burma, a country with a large oil industry that has existed perhaps for centuries by this time. He describes the export of oil via boat.

**1806** David and Joseph Ruffner drill a salt well using a spring pole, drive pipe, casing, and tubing near the Kanawha River in western Virginia (today West Virginia) and strike oil instead.

**1813** Manual research drilling is conducted at the Pechelbronn field in Alsace to depths of 640 feet to guide development of the oil sands mining operation.

**1815** Oil is remarked as an undesirable by-product from Pennsylvania brine wells.

**1821** A natural gas well is drilled in Fredonia, New York, and some local residences are served with gas for lighting.

**1825** An order from Russian finance minister Yegor Kankrin places all oil wells under the control of the state.

**1827** British geologist John Crawford investigates the Yenangyaung oil field in Burma. He describes the hand-dug wells as shafts about four feet square, cribbed with wood. Crawford estimates annual output at the equivalent of 250,000–300,000 barrels. He notes seeing about 200 boats waiting to load oil. Oil is used in the area for many purposes, including illumination, preserving wood, and boat building.

**1830** Johann Lenz investigates the Baku oil industry for the Imperial Academy of St. Petersburg. He reports annual production equivalent to 30,145 barrels from 80 wells or springs.

**1833** Benjamin Silliman (Senior) performs an experimental distillation of crude oil.

**1835** Nikolai Ivanovich Voskoboinikov of the Corps of Mining Engineers in Baku designs and implements a ventilation system to improve the efficiency and safety of hand-dug oil pits.

**1836** Gian Bianconi studies the geology of oil and gas in Italy. Natural gas is used to light the baths at Poretta.

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