

CRUDE OIL

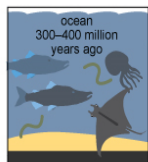
Federal Law Requires that Virtually Every Gallon of Fuel Sold to Passenger Vehicles in the U.S. Must Contain a Minimum of 85% Petroleum. That is not a free market. That is Big Oil's best kept secret: the Federal Petroleum Mandate.

What is crude oil and what are petroleum products?

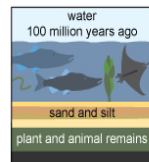
We call crude oil and petroleum fossil fuels because they are mixtures of hydrocarbons that formed from the remains of animals and plants (diatoms) that lived millions of years ago in a marine environment before dinosaurs existed. Over millions of years, the remains of these animals and plants were covered by layers of sand, silt, and rock. Heat and pressure from these layers turned the remains into what we now call crude oil or petroleum. The word petroleum means rock oil or oil from the earth.

Petroleum and natural gas formation

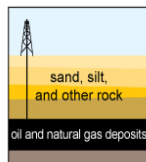
Tiny marine plants and animals died and were buried on the ocean floor. Over time, the marine plants and animals were covered by layers of silt and sand.



Over millions of years, the remains were buried deeper and deeper. The enormous heat and pressure turned the remains into oil and natural gas.



Today, we drill down through layers of sand, silt, and rock to reach the rock formations that contain oil and natural gas deposits.



Source: Adapted from National Energy Education Development Project (public domain)



Diatoms magnified under a microscope.

Source: Image used by permission from [Micrographia](#)

Crude oil and other hydrocarbons exist in liquid or gaseous form in underground pools, or reservoirs, in tiny spaces within sedimentary rocks and near the earth's surface in tar (or oil) sands. Petroleum products are fuels made from crude oil and the hydrocarbons contained in natural gas. Petroleum products can also be made from coal, natural gas, and biomass.

What petroleum products are made from crude oil?

After crude oil is removed from the ground, it is sent to a refinery where different parts of the crude oil are separated into useable petroleum products.

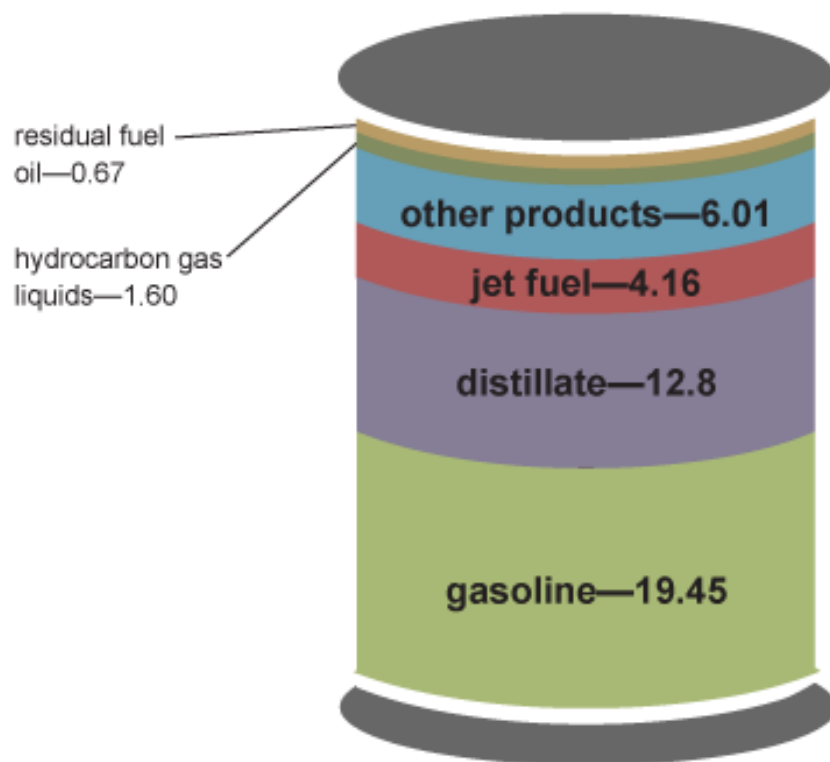
A U.S. 42-gallon barrel of crude oil yields about 45 gallons of petroleum products in U.S. refineries because of refinery processing gain. This increase in volume is similar to what happens to popcorn when it is popped. A corn kernel is smaller and more dense than a popped kernel. The amount of individual products produced varies from month-to-month and year-to-year as refineries adjust production to meet market demand and to maximize profitability.

Types of Crude Oil

- Class A: Light, Volatile Oils. These oils are:
- Class B: Non-Sticky Oils. These oils have a waxy or oily feel. ...
- Class C: Heavy, Sticky Oils. Class C oils are characteristically:
- Class D: Non-fluid Oils.

Petroleum products made from a barrel of crude oil, 2022

gallons



Data source: U.S. Energy Information Administration, *Petroleum Supply Monthly*, March 2023, preliminary data

Note: A 42-gallon (U.S.) barrel of crude oil yields about 45 gallons of petroleum products because of refinery processing gain. The sum of the product amounts in the image may not equal 45 because of independent rounding.