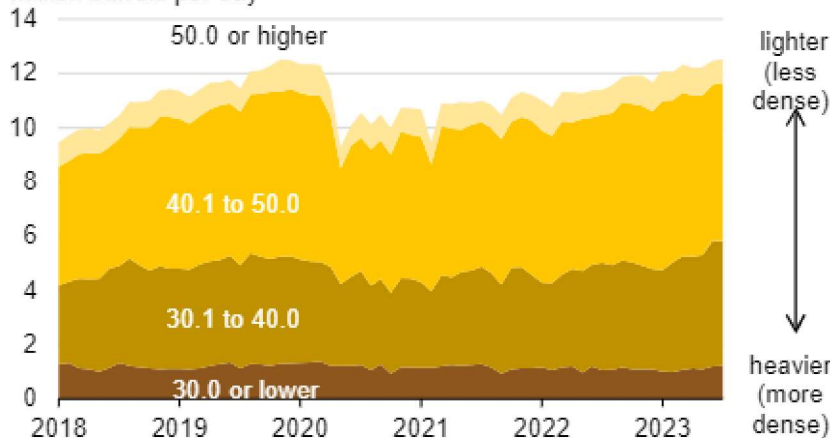


JANUARY 23, 2024

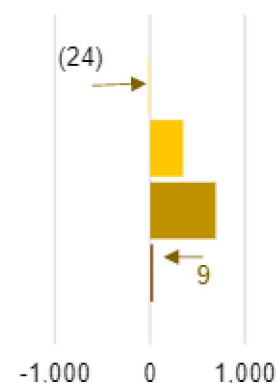
Rise in relatively denser crude oil production drives U.S. growth

Monthly Lower 48 states crude oil production by API gravity (Jan 2018–Aug 2023)

million barrels per day



crude oil production difference 2022 vs 2023
thousand barrels per day



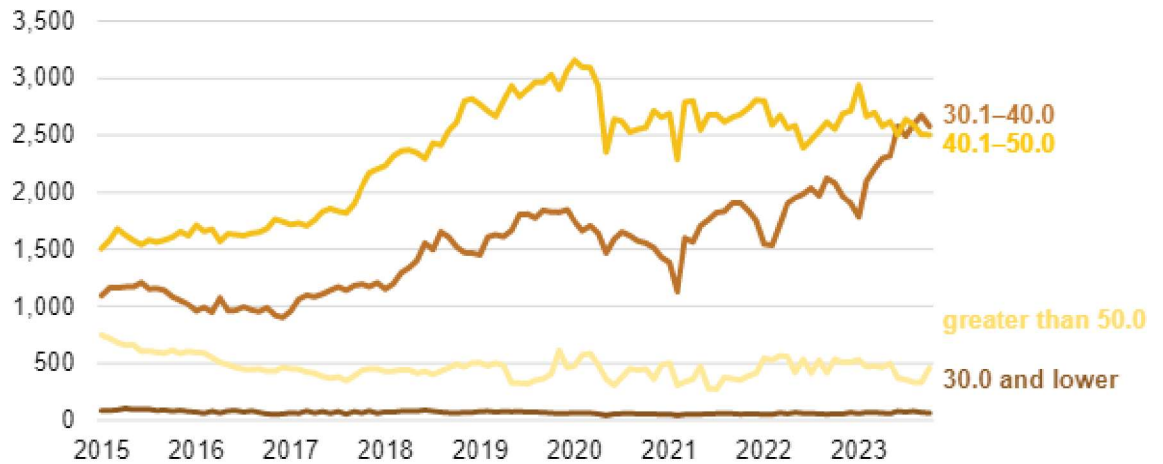
Data source: U.S. Energy Information Administration, [Monthly Crude Oil and Natural Gas Production](#)

Crude oil production in the United States reached a record high in August 2023, led primarily by more production in Texas. In 2023, most of the crude oil produced in Texas was relatively dense for the state.

API gravity measures the density of crude oil and other [petroleum products](#) relative to water. Crude oil with a higher API gravity is lighter, or less dense. Crude oil production in the Lower 48 states—a region that does not include Alaska—is primarily light crude oil, and heavy crude oil is primarily [imported to meet U.S. refining demand](#). Alaska production, which is about 3% of U.S. production, tends to be [medium density](#).

API gravity can [differ significantly by production area](#). Oil produced in Texas—the top crude oil-producing state for more than a decade—has a relatively broad distribution of API gravities. In June 2023, production of crude oil with an API gravity between [30.1–40.0 degrees](#) reached 2.58 million barrels per day (b/d), surpassing the production of crude oil with a gravity between 40.1–50 degrees for the first time. Texas accounted for 57% of the total production of crude oil with an API gravity between 30.1 and 40.0 degrees in the Lower 48 states.

Texas monthly crude oil by API gravity (Jan 2015–Oct 2023)
million barrels per day

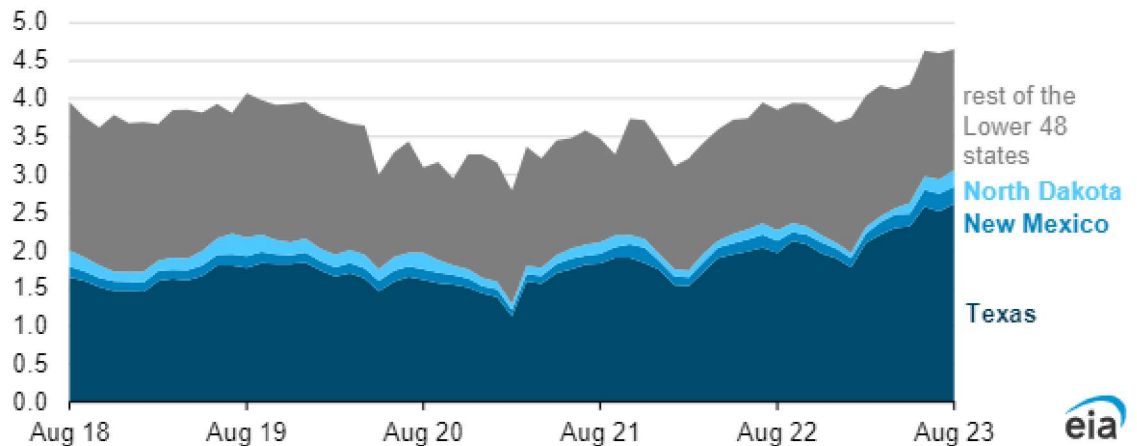


Data source: U.S. Energy Information Administration, [Monthly Crude Oil and Natural Gas Production](#)

New Mexico and North Dakota—the second- and third-highest crude oil-producing states—also recorded large increases in crude oil production with an API gravity between 30.1 and 40.0 degrees in the first 10 months of 2023, albeit from a smaller base than Texas. Still, the crude oil produced in North Dakota’s Bakken formation tends to be relatively light; about 82% of North Dakota oil production has an API gravity between 40.1 and 50.0 degrees. The crude oil produced in California and in the Federal Offshore Gulf of Mexico tends to be heavier, with a lower API gravity.

Overall in the Lower 48 states, **19% more** crude oil with an API gravity between 30.1 and 40.0 degrees was produced in the first 10 months of 2023 than during the same period in 2022. In September 2023, Lower 48 crude oil production in this API gravity range established a new record of 4.75 million b/d.

Monthly crude oil with an API gravity of 30.1–40.0 from select states (Jan 2015–Aug 2023)
million barrels per day



Data source: U.S. Energy Information Administration, [Monthly Crude Oil and Natural Gas](#)

Data source: U.S. Energy Information Administration, [Monthly Crude Oil and Natural Gas Production](#)

Lower 48 crude oil production with an API gravity from 40.1 to 50.0 degrees grew 6.3% in the first 10 months of 2023 compared with the same period in 2022, rising to 5.9 million b/d. Crude oil in this API gravity range accounted for the largest share of Lower 48 production. The increase in crude oil production with an API gravity between 30.1 and 50.0 degrees in these parts of the United States is the result of several factors, including higher crude oil sale prices, improved drilling technology, and increased access to refineries and consumer markets because of increased availability of [transportation via pipelines](#) .