

# Shale Will Keep U.S. Gas Boom Accelerating for Three Decades

By RUSSELL GOLD

U.S. natural-gas production will accelerate over the next three decades, new research indicates, providing the strongest evidence yet that the energy boom remaking America will last for a generation.

The most exhaustive study to date of a key natural-gas field in Texas, combined with related research under way elsewhere, shows that U.S. shale-rock formations will provide a growing source of moderately priced natural gas through 2040, and decline only slowly after that. A report about the Texas field, that was to be released Thursday, was reviewed by The Wall Street Journal.

The research provides substantial evidence that there are large quantities of gas available that can be drilled profitably at a market price of \$4 per million British thermal units, a relatively small increase from the current price of about \$3.43.

The study, funded by the nonpartisan Alfred P. Sloan Foundation and performed by the University of Texas, examined 15,000 wells drilled in the Barnett Shale formation in northern Texas, mostly over the past decade. It is among the first to study the geology and economics of shale drilling, a relatively recent development made possible by hydraulic fracturing, or fracking, in which a mixture of water, sand and chemicals is pumped at high pressure into rocks to release gas.

Looking at data from actual wells rather than relying on estimates and extrapolations, the study broadly confirms conclusions by the energy industry and the U.S. government, which in December forecast rising gas production.

“We are looking at multi, multi



A crew is pictured working on a drilling rig at a well site for shale-based natural

production and heats half of U.S. homes—are likely.

Art Berman, a petroleum geologist and consultant who has been a leading critic of what he says are overly optimistic projections of shale-gas production, said the research “is probably the most comprehensive study of the Barnett shale that will ever be done.” But he said it bolsters his view that only a

on acreage of little value.

Mr. Tinker agrees that the study shows the Barnett is highly variable, with some areas producing enough gas to make the wells profitable and other areas generating duds.

Even so, the study concludes that 1.32 trillion cubic meters of natural gas will be recovered from the Barnett—more than three times what has been produced so far and about