

## Why GAO Did This Study

Federal and state regulatory agencies manage and oversee the development of federal and Indian oil and gas resources by issuing rules and guidance, reviewing drilling applications, and inspecting wells to ensure compliance with environmental, safety, and other regulations. In fiscal year 2013, federal and Indian energy production, including oil and gas, generated almost \$15 billion in revenue. Recent advances in drilling technologies have greatly expanded the ability to develop oil and gas resources, particularly from shale and tight sandstone rock formations.

GAO was asked to review oversight of federal and Indian oil and gas resources. This report (1) discusses the changes to federal and selected state agencies' rules over the past 5 years and (2) examines the effectiveness of BLM's management and oversight of federal and Indian resources. GAO reviewed federal and selected state agencies' rules and guidance, data from federal agencies, and other documentation. GAO selected a sample of 14 states based, in part, on their involvement with oil and gas development. This information cannot be generalized to all states.

## What GAO Recommends

GAO recommends that, among other things, BLM ensure that its rules governing oil and gas development are consistent with technological advances, improve coordination of inspections with states, and improve the timeliness of revenue sharing agreement reviews. In commenting on a draft of this report, BLM agreed with GAO's recommendations.

View [GAO-14-238](#). For more information, contact Frank Rusco at (202) 512-3841 or [ruscof@gao.gov](mailto:ruscof@gao.gov).

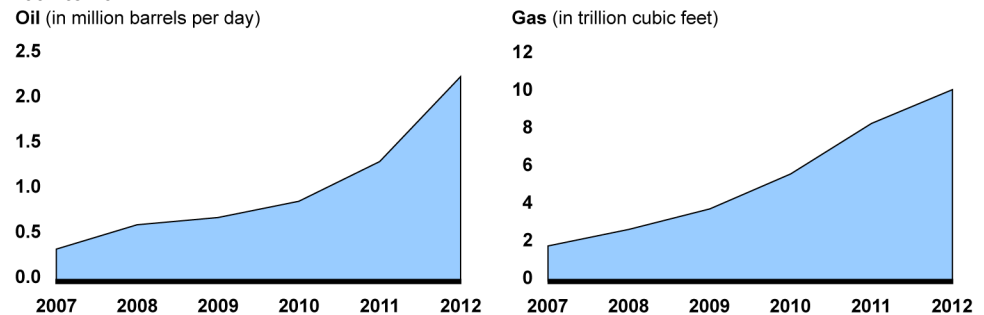
## OIL AND GAS

### Updated Guidance, Increased Coordination, and Comprehensive Data Could Improve BLM's Management and Oversight

## What GAO Found

Federal and state agencies in states that GAO reviewed have taken or initiated some actions to change rules, in part, as a response to certain technological advances that have led to more than a 5-fold increase in annual production of domestic onshore oil and gas from shale and tight sandstone formations from 2007 through 2012 (see figure). For example, the Bureau of Land Management (BLM)—the key agency responsible for managing and overseeing oil and gas development on federal and Indian lands—proposed a new rule in 2012 to regulate hydraulic fracturing. In addition, in 2013, Texas updated its rules for well integrity by establishing new casing and cementing standards.

**Increased Domestic Oil and Gas Production from Shale and Tight Sandstone Formations from 2007 to 2012**



Source: Energy Information Administration.

The effectiveness of BLM's management and oversight of federal and Indian oil and gas resources is hindered by a number of factors, including BLM's reliance on outdated rules and guidance, limited coordination with states, and delayed reviews of revenue sharing agreements. For example, BLM has not followed Interior's guidance to routinely review rules and update them consistently along with technological advances. As a result, some of BLM's rules and guidance governing oil and gas development have not kept pace with technological advancements, such as its guidance on well spacing, which, among other things, determines how to maximize oil and gas production from a formation. Improper spacing guidance could lead to lower levels of oil and gas production and, therefore, less revenue for the federal government and tribes. In addition, BLM has not developed formal agreements to improve coordination with state regulatory agencies, as called for in its internal guidance. As a result, BLM and state agency officials told GAO that agencies conduct duplicative inspections of some wells, while leaving other wells uninspected. Further, based on GAO's review of selected revenue-sharing agreements, BLM does not always review these agreements within the statutorily required time frames. These agreements identify the production allocation based on ownership and must be approved before operators can pay royalties to the resource owner. By statute, BLM is to review agreements within 120 days of receipt, but GAO found instances in which the agency had taken more than a year to review, resulting in delayed royalty payments to resource owners—who may rely on these payments for part or all of their income.