



Highlights of [GAO-10-313](#), a report to congressional requesters

Why GAO Did This Study

Oil and natural gas produced from federal leases generated over \$6.5 billion in royalties in 2009. To verify that royalties are paid on the correct volumes of oil and gas, the Department of the Interior (Interior) verifies the quantity and quality of oil and gas, both onshore, through the Bureau of Land Management, and offshore, through the Offshore Energy and Minerals Management Service. This report assesses (1) the extent to which Interior's production verification regulations and policies provide reasonable assurance that oil and gas are accurately measured; (2) the extent to which Interior's offshore and onshore production accountability inspection programs consistently set and meet program goals and address key factors affecting measurement accuracy; and (3) Interior's management of its production verification programs. To address these questions, GAO analyzed Interior data on oil and gas inspections and human capital, as well as interviewed officials from Interior, states, oil and gas companies, and other countries.

What GAO Recommends

GAO is recommending Interior improve the consistency and timely updating of measurement regulations and policies, clarify jurisdictional authority over gas plants and pipelines, and provide appropriate and timely training for key measurement staff. In commenting on a draft of this report, Interior generally agreed with our findings and recommendations.

View [GAO-10-313](#) or [key components](#). For more information, contact Frank Rusco at (202) 512-3841 or ruscof@gao.gov.

OIL AND GAS MANAGEMENT

Interior's Oil and Gas Production Verification Efforts Do Not Provide Reasonable Assurance of Accurate Measurement of Production Volumes

What GAO Found

Interior's measurement regulations and policies do not provide reasonable assurance that oil and gas are accurately measured. Interior's varied approaches for developing and revising its measurement regulations are both ineffective and inefficient—Interior's onshore measurement regulations have not been updated in 20 years and do not address current measurement technologies. Onshore and offshore staff have infrequently coordinated on measurement issues, although each addresses similar issues. Additionally, Interior's decentralized process for granting waivers from current regulations and approval of alternative measurement technologies allows officials to make key decisions affecting measurement with little oversight, increasing the risk of approvals of inaccurate measurement technologies. Further, Interior has failed to determine the extent of its jurisdictional authority over key elements of oil and gas infrastructure, including gas plants and pipelines, limiting its ability to inspect these elements to assess the accuracy of their measurement. Finally, Interior's onshore and offshore policies for tracking and approving where and how oil and gas are measured are inconsistent, with Interior tracking offshore measurement points offshore, but not for onshore, creating challenges for onshore inspection staff to verify measurement accuracy.

Interior's offshore and onshore production accountability inspection programs are not consistently setting or meeting program goals for inspecting oil and gas leases and do not sufficiently address key factors affecting measurement accuracy. Interior's offshore and onshore inspection program goals differ in key areas, with only the offshore program establishing goals for witnessing meter calibrations, a key control for accurate measurement. Additionally, while the onshore inspection program includes an activity to independently verify gas volume calculations, the offshore program does not. Moreover, Interior has not consistently met its inspection goals; offshore inspectors met program goals once between fiscal years 2004 and 2008, and onshore inspectors met program goals about one-third of the time over the past 12 years. Finally, neither program sufficiently addresses key areas affecting measurement accuracy, including how gas samples are collected.

Limited oversight, gaps in staff skills, and incomplete tools hinder Interior's ability to manage its production verification programs. In particular, we identified several instances where production measurement staff work with limited oversight. For example, onshore engineers generally make decisions autonomously in the absence of central guidance and oversight. Further, despite years of critical reviews by GAO and others, Interior recently lowered its own estimation of the risks of the oil and gas program from medium to low, exempting it from more rigorous internal oversight. In addition, some key production verification staff lack critical skills, in part, because Interior has not provided training. For example, Interior has provided training only once in the past 10 years for its onshore engineers, despite significant changes in technology used by industry. Interior's efforts to provide its inspection staff with tools to obtain real-time gas production data directly from producers and the ability to electronically document production inspection results in the field have shown few results.