

**SPE 84143**

CURRENT APPLICATIONS OF

“THE STANDARDS PERTAINING TO THE ESTIMATING  
AND AUDITING OF OIL AND GAS  
RESERVES INFORMATION”

TO MEET THE OBJECTIVES  
OF THE SARBANES-OXLEY ACT OF 2002

SPE ATCE OCTOBER 2003 – DENVER COLORADO

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# **SPE Standards approved in 1977, revised in 2001**

Directed toward establishment of *minimum* professional standards  
for petroleum engineers and geologists  
in the preparation of estimates of  
reserves and reserves information

## **Five principal areas to which Standards apply:**

- A. Compliance with relevant reserves definitions  
(US SEC for Sarbanes-Oxley)
- B. Minimum professional qualifications for reserves estimators and reserves auditors (education and experience)
- C. Requirement for independence and objectivity for such persons
- D. Standards for estimating reserves and related reserves information
- E. Standards for auditing reserves and related reserves information

# Reserves and Reserves Information

- A. Estimated quantities as of an effective date, classified by appropriate categories (PV – PB – PS) and production status (Producing, BP etc), plus
- B. All or part of the following: forecast production quantities, prices, costs, revenues and future net income, before and/or after income taxes, both undiscounted and discounted as required, plus
- C. Adequate text to explain all pertinent facts and assumptions leading to a full disclosure of all relevant information

# DISCLAIMER

The following is an engineer's perception and interpretation of the significance of the Sarbanes-Oxley Act of 2002 regarding the estimating and auditing of reserves information -

PLEASE CONTACT YOUR ATTORNEY OR CPA  
FOR THEIR PROFESSIONAL INTERPRETATION OF THE ACT

# Sarbanes-Oxley Act of 2002

Established by the U.S. Congress  
following several business failures  
and the collapse of one of the world's most respected  
public accounting firms.

# **Significant laws governing publicly-owned companies issuing securities in the U.S.**

- A. Securities Act of 1933
- B. Securities Exchange Act of 1934
- C. Sarbanes-Oxley Act of 2002

# Topics (Title nos.) described in Sarbanes-Oxley:

- I Public Company Accounting Oversight Board
- II Auditor Independence
- III Corporate Responsibility
- IV Enhanced Financial Disclosures
- V Analyst Conflicts of Interest
- VI Commission Resources and Authority
- VII Studies and Reports
- VIII Corporate and Criminal Fraud Accountability
- IX White-Collar Crime Penalty Enhancements
- X Corporate Tax Returns
- XI Corporate Fraud and Accountability



## What does Sarbanes-Oxley say about reserves estimates?

- A. In words related to oil and gas reserves, nothing, even though reserves constitute most of the financial value of an E&P Company
- B. Strong words relating to managements responsibility to
  - (i) establish and maintain adequate internal control structure and procedures for financial reporting and
  - (ii) subsequently assessing the effectiveness of the internal controls and procedures (Sec 404 of the Act)
- C. Arguably, reserves estimates could be topic of “whistleblower” complaint

## **Establishing adequate internal controls and procedures for estimating reserves**

- A. Already in place in many, perhaps most, E&P companies
- B. Recommend such controls and procedures include the SPE “Standards” as the minimum qualifications for the reserves estimators and/or auditors (internal or external) to meet the objectives of the Act.

## Assessing the effectiveness of internal controls and procedures

- A. Serious responsibility of management, board and financial auditor
- B. Pre Sarbanes-Oxley, assessment often made by financial auditing firm
- C. Strongly suggest that such assessment should include, in some way, input from qualified reserves evaluator or auditor to render judgment on controls, procedures  
AND RESULTS

## Generalized definitions (proposed)

- A. Reserves review – Analysis of *policies and procedures* established by an entity to estimate and report reserves
- B. Reserves audit - an investigation of a reserves report as a test of the *reasonableness*, in the aggregate, of the reserves estimates in the report
- C. Reserves report - A *grass roots* study incorporating all pertinent data in preparing an estimate of reserves information consistent with the relevant reserves definitions

# Summary

SPE Standards 1977

SPE Standards 2001

Sarbanes-Oxley 2002

# Summary

SPE Standards 2001

Sarbanes-Oxley 2002

(For E&P Companies)

