

**JPI** Journal of the Japan Petroleum Institute  
The Japan Petroleum Institute

[Available Issues](#) | [Instructions to Authors](#) | [Japanese](#) >> [Publisher Site](#)

Author:  [ADVANCED](#) | Volume  Page   
Keyword:



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1349-273X

PRINT ISSN : 1346-8804

**Journal of the Japan Petroleum Institute**

Vol. 46 (2003) , No. 3 pp.203-209

[\[PDF \(288K\)\]](#) [\[References\]](#)

## **A Systematic Approach to Enhance the Quality of PVT Experimental Data for Gas Condensate Reservoir Evaluation**

[R. A. ALMEHAIDEB](#)<sup>1)</sup>, [A. S. AL-KHANBASHI](#)<sup>1)</sup>, [I. ASHOUR](#)<sup>1)</sup> and [M. A. ALI](#)<sup>2)</sup>

1) College of Engineering, United Arab Emirates University

2) ZADCO Oil Co.

(Received: July 2, 2002)

Increased demand for gas supply by industry in recent years has promoted the search for optimum strategies to evaluate the performance of dry gas and gas condensate reservoirs. Equations of state (EOS) have become a standard tool to predict the performance of these reservoirs. These EOS models are, however, highly dependent on accurate experimental data both to tune the EOS and to check their validity. The principal test of these is the constant volume depletion (CVD) experiment. Due to the design of PVT cells used, errors in CVD test data have continued to be noticed in some PVT reports. Therefore, better techniques are needed to improve the accuracy of these experimental tests, to support decision-making for gas and gas-condensate reservoirs.

In this report, a new technique is proposed to correct the “most-suspicious” experimental data from CVD tests by using the results obtained from a partially tuned EOS package. This technique is applied to three CVD test data for gas-condensate samples collected from the gas cap of a major reservoir in the UAE.

**Keywords:** [Equation of state](#), [Condensate](#), [Natural gas](#), [Reservoir](#), [Constant volume depletion](#), [PVT](#)

[\[PDF \(288K\)\]](#) [\[References\]](#)

Download Meta of Article [\[Help\]](#)

[RIS](#)

[BibTeX](#)

To cite this article:

R. A. ALMEHAIDEB, A. S. AL-KHANBASHI, I. ASHOUR and M. A. ALI, *Journal of the Japan Petroleum Institute*, Vol. **46**, No. 3, p.203 (2003) .

---

doi:10.1627/jpi.46.203

JOI JST.JSTAGE/jpi/46.203

Copyright (c) 2004 by The Japan Petroleum Institute

---



---

[Japan Science and Technology Information Aggregator, Electronic](#)

