

Joint Session with SPE
Radisson Hotel – Greentree
7 March 2007

Tail-End Production, a Challenge to Sustainable Operating Strategy

presented by

Wolfram Kleinitz
SPE Distinguished Lecturer

**Gaz de France Production Exploration
Deutschland GmbH**

Abstract

During the remaining lifetime of an oil field, the application of economical methods is a prerequisite for ensuring compliance with specifications on the treatment, mainly for the oil and water phases. A new feature in this context is the concept of sustainability, which can be redefined simply as a permanent, robust improvement.

On the basis of more than thirty years' experience two crucial factors have proved to be decisive for the sustainability of operational measures. Firstly, ineffective treatment of the produced fluids is frequently due to technical shortcomings in handling high-water-cut fluids. Secondly, injectivity problems caused by formation damage which is due to the re-injection of water must also be taken into account for sustainable operating strategy.

For the first topic, a total of seven major technical failures have been identified as the cause of decreased effectivity in treatment units during the tail-end

phase. The second supporting column of the sustainability concept is the pH-adjustment of the injection water. The numerous resulting advantages are discussed in detail.

Author Biography

Wolfram Kleinitz is Head of the Production Chemistry Department of Gaz de France Production Exploration Deutschland GmbH. He holds Dipl.-Ing. and Dr.-Ing. degrees in chemical engineering from the Technical University of Clausthal, Germany. He joined Preussag Energie, now Gaz de France, in 1971 and worked as a chemical engineer before becoming responsible for all chemical aspects of oil and gas production and storage in 1978.

In more than 100 publications in various periodicals and books, he has contributed to the knowledge in the field of production chemistry. His consulting services have been requested for years by many companies in Europe, North Africa, and South America. He was elected SPE Distinguished Lecturer in 2000/2001.

For reservations to this informative and entertaining evening, please complete the attached reservation form.

WHAT IS THE PAPG?

PAPG is a non-profit organization founded in 1984 to provide a forum for Petroleum Geologists in the Pittsburgh Area to meet socially and discuss technical topics relative to the exploration and development of reserves in the Northern and Central Appalachian Basin. PAPG is an affiliated association with AAPG (American Association of Petroleum Geologists) and has representation in the House of Delegates. Educational opportunities are provided via field trips, seminars and AAPG Sectional meetings, sponsored solely by PAPG or in conjunction with the PTTC (Petroleum Technology Transfer Council), PGS (Pittsburgh Geologic Society) and SPE (Society of Petroleum Engineers).

Although PAPG is predominately a geologic organization, numerous industry professionals including geophysicists, engineers, lawyers and landmen are among PAPG's members and find the interaction at meetings and educational opportunities beneficial to their professions. PAPG also encourages student membership and participation.

Meetings are typically held monthly from September through May in locations within 50 miles of downtown Pittsburgh. From time to time, meetings are held in conjunction with SPE and PGS.

NEWS AND EVENTS

Mark your calendar now for these upcoming events:

May 1st & 2nd - Hilton Garden Inn, Pittsburgh/Southpointe

The North American Coalbed Methane Forum, Inc. - Spring Session

- For more information please contact:

Ihor Havryluk - (412)445-5803

or

Dr. Kashi Aminian - (304)293-7682 ext 3406

Spring 2007 Field Trip (Dates to be determined)

PAPG

- More Information to come

Have information you want to share with the organization?

Please contact the secretary to add the information to the next newsletter.

PAPG 2006-2007 DUES

PAPG dues for the 2006-2007 season are now DUE!

*The membership form is attached to this newsletter. Please fill the form out **completely** so that we can ensure that we have your latest contact information. We are planning to publish a membership directory this year and your updated information is crucial*

NOTICE OF MARCH 2007 MEETING PITTSBURGH ASSOCIATION OF PETROLEUM GEOLOGISTS

DATE: Wednesday 7, March 2007

PLACE: Radisson Hotel - Greentree
101 Radisson Drive,
Pittsburgh, PA 15220
412-922-8400

TIME: 5:00 PM – Social Hour (w/ Cash Bar)
6:00 PM – Dinner
7:00 PM – Speaker

TOPIC: “Tail-End Production, a Challenge to Sustainable Operating Strategy.”

SPEAKER: Wolfram Kleinitz

COST: \$25.00
\$10.00 students
(Checks payable to SPE)

DINNER OPTIONS: Almond Encrusted Orange Roughy
or
Sliced Roast Sirloin of Beef

RESERVATIONS: Call, email, fax, or mail this reservation form to:

Barbara A. Purks
412-787-5403 (phone)
412-787-2906 (fax)
bpurks@pittsburgh.oilfield.slb.com

NAME(S) _____

COMPANY

DINNER CHOICE(S)

CONTACT THE PAPG

PAPG Officers:

- President:** **Pat Imbrogno** -- Wind City Management LLC.
Phone: 412-269-1419
Email: pimbrogno@comcast.net
- Vice President:** **Roy Lynch** -- Dominion Exploration&Prod., Inc.
Email: roy_w_lynch@dom.com
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- Treasurer:** **Eric Ober** -- Texas Keystone, Inc.
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- AAPG Delegate:** **Doug Patchen** – Petroleum Technology Transfer Council
Phone: 304-293-2867 ext 5443
Email: doug.patchen@mail.wvu.edu

SPONSORS

PAPG wishes to thank those companies and individuals who have contributed to the PAPG 2006-2007 season:

- ABARTA Oil & Gas Co., Inc. -
- ARK Resources -
- DC Energy Consultants -
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- Natural Energy Development Corp. -
- Superior Well Services, Ltd. –
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- Vista Resources, Inc. -

Sponsor Information

If you or your company would like to sponsor the PAPG and help support the continuation of our Meetings, Field Trips, and other events, we ask that you send a donation to the PAPG. Any contribution of \$100.00 or more by any group or individual will be recognized in the monthly newsletter, and at scheduled monthly meetings.

We ask that you show your support for the PAPG by a contribution and your continuing attendance at the monthly meetings.

We appreciate your continued support.

Contributions may be sent to:

PAPG
PO BOX 16352
GREENTREE PA 15242-0352

APPLICATION FOR MEMBERSHIP AND MEMBERSHIP RENEWAL

PLEASE INDICATE YOUR MEMBERSHIP STATUS BY CHECKING THE APPROPRIATE BOX:

PROFESSIONAL - RENEWAL

STUDENT - RENEWAL

PROFESSIONAL – NEW MEMBERSHIP

STUDENT - NEW MEMBERSHIP

The **PITTSBURGH ASSOCIATION OF PETROLEUM GEOLOGISTS** membership year runs from JUNE 1 through MAY 31. Monthly meetings are usually held the second Thursday of the month from September through November and January through May.

Professional Dues are \$25.00 per year

Student Dues are \$10.00 per year

NEW APPLICATION: If you have never been a member of PAPG, please fill out the remainder of the form, obtain the signatures of two members to sponsor you, and mail check, payable to PAPG, to the address below.

RENEWAL: Please fill out the mailing address/directory information below if your contact information has changed and submit dues, payable to PAPG, to the address below.

Mail completed form and dues payment (checks only) to:

Dave Boyer
Texas Keystone, Inc.
560 Epsilon Drive
Pittsburgh, PA 15238

MAILING ADDRESS / DIRECTORY INFORMATION – PLEASE COMPLETE ALL INFORMATION

NAME _____ DATE _____

COMPANY / UNIVERSITY _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

JOB TITLE: _____

EMAIL: _____ **Please fill this in – help us save those mailing costs!**

PHONE: () _____ - _____

FAX: () _____ - _____

WOULD YOU BE INTERESTED IN PAPG PARTICIPATION?: Officer Speaker

**WOULD YOU LIKE YOUR CONTACT INFORMATION PLACED
IN THE MEMBERSHIP DIRECTORY (available to members only?)** Yes No

TWO SPONSORS REQUIRED for NEW MEMBERS

Name _____ Date _____

Name _____ Date _____