

WELL INTEGRITY FOR GAS STORAGE FIELDS

April 11, 2017
Hilton Baltimore
Baltimore, MD



EUCI is authorized
by IACET to offer
0.8 CEUs for the
course

OVERVIEW

Gas storage wells are a critical part of our nation's infrastructure. Proper construction and maintenance of wells used for this purpose are necessary for the protection of the environment and nearby residents. This course is intended for individuals who are involved with ensuring that gas storage wells are properly designed, maintained, and monitored, and any other persons who will benefit from learning more about well integrity for gas storage wells.

The instructor, who has decades of "boots on the ground" experience, will begin with a brief overview to lay the groundwork to understand the importance of well integrity for gas storage wells. The detailed process of well design, maintenance and monitoring will then be covered. Attendees will learn the basics of API RP 1171, and about the process of maintaining an accurate well database, selecting well diagnostic tools, interpreting log data, formulating a well monitoring plan, and outlining well remedial procedures to ensure proper primary and secondary barriers. Attendees will leave the course with a complete understanding of the factors to consider to ensure well integrity of gas storage wells.

LEARNING OUTCOMES

Attendees to this course will:

- Incorporate AP RP 1171 into well integrity plans
- Properly document and update wellbore diagrams
- Identify primary and secondary well barriers
- Evaluate cement barrier behind pipe
- Select proper cased hole logging tools to ensure well integrity
- Interpret cased hole logs and take remedial action where necessary
- Formulate field monitoring plans for well integrity assurance

INSTRUCTOR



M.K. (Val) Lerma

Engineering Manager, InterAct

Ms. Lerma has worked in the oil industry for over 30 years. Her experience includes drilling, reservoir, and production engineering, as well as management. She has worked for both major and independent operators, both on and offshore. She has a BS and MS in Petroleum Engineering from the University of Southern California, and an MBA from California Lutheran University. She served as the Engineering Manager, Business Development Manager, and President of Orchard Petroleum Inc., and Orchard E&P, LLC. Ms. Lerma taught the drilling engineering undergraduate and graduate course at USC for 7 years, and currently teaches various oil and gas classes for both the PTTC and EUCI. She's on the Curriculum Advisory Board for the University of North Dakota's petroleum engineering department, and is a member of the local API Board. Val has authored and co-authored several SPE papers and is a licensed professional petroleum engineer in the State of California. Val is currently the Engineering Manager for InterAct, an Acteon Company.

COURSE TIMING

TUESDAY, APRIL 11, 2017

7:00 – 7:30 am	Registration and Continental Breakfast
7:30 am – 3:30 pm	Course Timing
12:00 – 12:30 pm	Group Luncheon

PROGRAM AGENDA

Laying the Groundwork

- Definition of well integrity
- Review of API RP 1171
- Wellbore drilling and workover history
- Well documentation-including leaks, anomalies
- Geologic review and subsurface study

Well Barriers

- Primary vs. secondary barriers
- Internal and external barriers
- Mechanical barriers
- Hydrostatic barriers
- Formation barriers (Cap Rock)

Cased Hole Tools

- Cement evaluation
- Casing evaluation
- Movement of fluid behind pipe and between pipe and annulus
- Formation fluids

Well Remediation

- Completion options
- Casing repair
- Cement repair
- Well re-designation or abandonment

Field Monitoring

- Frequency of monitoring
- Well annuli pressures and/or flow
- Reservoir pressure vs. inventory
- Downhole diagnostics with cased hole logs
- Visual monitoring

Aliso Canyon Incident

- What happened: Problem detection and response
- What caused the problem: Theories, root cause analysis in progress
- How to prevent recurrence: New regulations

Changing Regulations

- Well assessments
- Well monitoring
- Well remediation or abandonment

Summary & Conclusion

REQUIREMENTS FOR SUCCESSFUL COMPLETION OF PROGRAM

Participants must sign in/out each day and be in attendance for the entirety of the course to be eligible for continuing education credit.

INSTRUCTIONAL METHODS

Case studies and PowerPoint presentations will be used in this program.

EVENT LOCATION

A room block has been reserved at the Hilton Baltimore, 401 W Pratt St, Baltimore, MD 2120, for the nights of April 9-10, 2017. Room rates are \$189 plus applicable tax. Call **1-443-573-8700** for reservations and mention the EUCI event to get the group rate. The cutoff date to receive the group rate is March 9, 2017 but as there are a limited number of rooms available at this rate, the room block may close sooner. **Please make your reservations early.**

IACET CREDITS



EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

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REGISTRATION
to register [CLICK HERE](#) or

Call: 201 871 0474
fax: 253 663 7224
email: [register@pmaconference.com/](mailto:register@pmaconference.com)
web: <http://pmaconference.com/>
Mail: POB 2303 Falls Church Va 22042



Please make checks payable to: "PMA"

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PLEASE REGISTER

BOTH DRILLING 101 AND WELL INTEGRITY FOR GAS STORAGE FIELDS COURSES:
 APRIL 10-11, 2017: US \$1895,
 Early bird on or before March 24, 2017: US \$1695

WELL INTEGRITY FOR GAS STORAGE FIELDS COURSE ONLY:
 APRIL 11, 2017: US \$995,
 Early bird on or before March 24, 2017: US \$895

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name

Job Title

Company

What name do you prefer on your name badge?

Address

City

State/Province

Zip/Postal Code

Country

Phone

Email

List any dietary or accessibility needs here

CREDIT CARD INFORMATION

Name on Card

Account Number

Billing Address

Billing City

Billing State

Billing Zip Code/Postal Code

Exp. Date

Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)

OR Enclosed is a check for \$ _____ to cover _____ registrations.

Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before March 10, 2017 in order to be refunded and will be subject to a US \$195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at (201) 871-0474.