

The Program Committee has the important task of reviewing all paper proposal submissions and rating them based on several factors in order to select quality content for the conference.

In an effort to assist you with the rating process, here are the guidelines for assigning a rating to a proposal. Before you begin rating proposals, we ask that you review the guidelines provided below.

Factors to be considered:

- ◆ Relevance of subject matter to industry
- ◆ Importance of subject matter to industry
- ◆ Solid technical information provided
- ◆ Well thought out and organized
- ◆ Novel/New/Additive information provided
- ◆ Non-commercial

Score Key

Ratings are indicative of the Reviewer's opinion of the proposal's overall quality. Scores accepted by the system are one (1 - Inferior) through six (6 - Exceptional) and are listed in the pull-down menu within the score field.

If you have a conflict of interest or are not qualified to score the proposal, select the appropriate *Conflict of Interest* or *Not Qualified* scoring option.

-1 – Conflict of Interest

Select this to recuse yourself from reviewing the submission if you are directly or indirectly involved.

-2 – Not Qualified to Score

Select this to recuse yourself from reviewing the submission if you believe you are not qualified to give it a fair assessment.

Conflict of Interest

Reviewers are not to review and rate any proposal they are directly or indirectly involved with. Reviewers should also refrain from rating any proposal submitted by someone within their company as this poses a conflict of interest and should be noted as such by selecting the *Conflict of Interest* option in the drop-down menu. While selecting this option places a -1 as your assigned rating, it will NOT be included in the overall average of the proposal.

Case Histories

Case histories are a welcome addition to a technical program. While a case history does not usually focus on new or novel information, it should provide a new/original practical use of existing technology.

*NOTE: Ratings are indicative of the Reviewer's opinion of the Paper Proposal's overall quality. Ratings should be selected from the list of options ranging from 1.0 (lowest) to 6.0 (highest). The **Conflict of Interest** and **Not Qualified to Score** rating WILL NOT be included in the overall average of an proposal.*

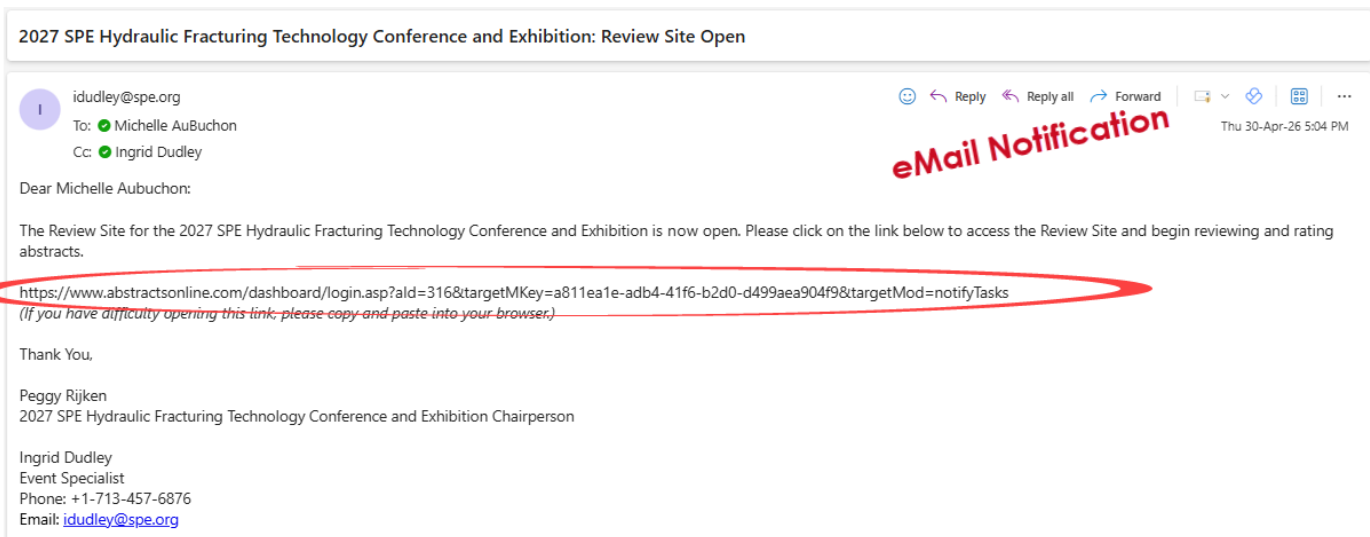


Paper Proposal Review & Rating Guidelines

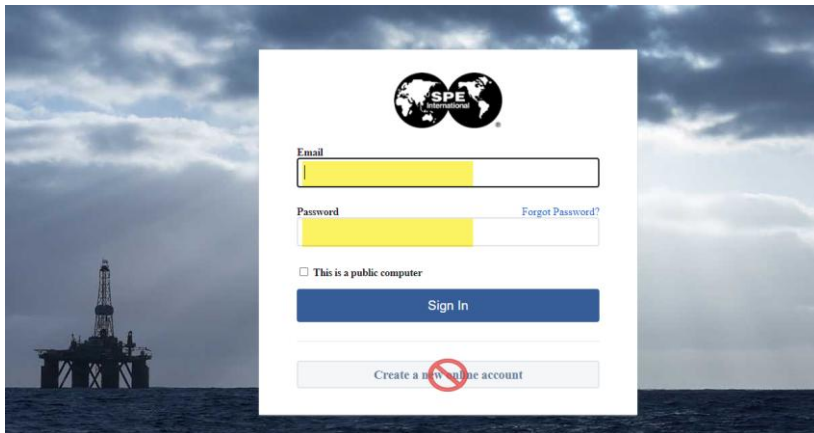
6 EXCEPTIONAL	5 VERY GOOD	4 GOOD	3 AVERAGE	2 BELOW AVERAGE	1 INFERIOR
Subject is very closely aligned with the conference/track topic	Subject is aligned with the conference/track topic	Subject is aligned with the conference/track topic	Subject is marginally aligned with the conference/track topic	Subject is not closely aligned with the conference/track topic	Subject is not aligned with the conference/track topic
Objectives are clearly stated	Objectives are stated	Objectives are stated	Objectives are not clearly stated	Objectives are not stated	Objectives are not stated
Technical approach is sound overall (includes brief explanation of methods, procedures and process)	Technical approach is sound overall (includes brief explanation of methods, procedures and process)	Technical approach includes adequate explanation of methods, procedures and process	Technical approach may have some concerns, (includes explanation of methods, procedures and process)	Technical approach does not include adequate explanation of methods, procedures and process	Technical approach does not include any explanation of methods, procedures and process
Expected conclusions are sound and supported by material presented	Expected conclusions are sound and supported by the technical approach	Expected conclusions are stated and supported by the technical approach	Expected conclusions are stated, but are not clearly supported by the technical approach	Expected conclusions are not stated	Expected conclusions are not stated
Subject matter is novel or will potentially add new information to the existing body of literature	Subject matter will potentially add new information to the existing body of literature	Subject matter, while not new, will potentially add new information to the existing body of literature	Subject matter, while not new, will potentially add new information to the existing body of literature	Subject matter is not new, nor will it add to the existing body of literature	Subject matter is not new, nor will it add to the existing body of literature
The overall proposal is well written and easy to understand	The overall proposal is well written and easy to understand	The overall proposal is written with moderate language flaws, but technical knowledge is clearly conveyed	The overall proposal is written with significant language flaws	The overall proposal is poorly written with significant language flaws	The overall proposal is poorly written with significant language flaws
Subject is non-commercial in nature	Subject is not overtly commercial in nature	Subject is not overtly commercial in nature	Some concerns about the commercial nature of the subject	Significant concerns about the commercial nature of the subject	Significant concerns about the commercial nature of the subject
The work/research this paper will be based on is more than 75% complete	The work/research this paper will be based on is 50-75% complete	The work/research this paper will be based on is 25-50% complete	The work/research this paper will be based on is 25-50% complete	The work/research this paper will be based on is less than 25% complete	The work/research this paper will be based on is less than 25% complete
<i>A must for inclusion in the program</i>	<i>Highly desirable for inclusion in the program</i>	<i>Should be considered for inclusion in the program</i>	<i>Caution should be used in selection process and the final paper should be reviewed by session chair prior to final submission.</i>	<i>Not a desirable candidate for inclusion in the program</i>	<i>Not acceptable for inclusion in the program</i>

Logging into the cOasis Review Site

Reviewers access the User Portal and Review Site via email notification.



1. The link in the email takes you to the login screen where you will need to login with your SPE.org log in information.



2. Log in to the system using your SPE.org Email and Password.
3. Click on **Sign In** to access the User Portal.

Note: if you are a SPE member or are a registered user on the SPE website, please use your SPE login credentials.

If you do not remember your password, please click “forgot password?” link on the login screen, or contact SPE Customer service department at service@spe.org for assistance.

Please DO NOT create a new online account. The resulting profile will not have been allocated the necessary user-rights.

The User Portal

The User Portal is a one stop shop for access to all tasks and events associated with your account/profile.

When logging in from the link in the *Review Site Open* notification, you should be on the TASKS tab.

The screenshot shows the top navigation bar with the SPE logo and event information: "SPE Hydraulic Fracturing Technology Conference and Exhibition" (2-4 February 2017). The user profile "Michelle Aubuchon" is in the top right. The main navigation bar includes "Meeting Information", "Paper Proposals", "Review", "Tasks" (circled in red with a '1' notification), and "Messages".

Below the navigation bar, a message states: "The messages below have been sent to you by email. They will be stored here for you to reference until after the meeting. Click a message below to access the corresponding landing page to complete the associated tasks. If tasks have not been completed and the email has EXPIRED, you will no longer have access to complete the task." A "Tasks status" box shows "1 incomplete" and "0 of 1 complete".

A task notification for "015-Review Site Open" is highlighted with a red box. It lists "#80 Committee Chair" with the role "Committee Chair" and status "Incomplete". A red arrow points to the notification with the text "Click on the notification to get the link to the Review".

On the right, there are sections for "Author Resources" (Submission Instructions, Author Kit, Publication Policies, Author Resources) and "Committee Resources" (Reviewer Instructions, Roles and Responsibilities). A red arrow points from the "Reviewer Instructions Document" text to the "Reviewer Instructions" link in the Committee Resources section.

At the bottom left of the notification area, text says "When tasks are completed the gold side bar will turn green." A red arrow points from this text down to the "Link to Review Site" text in the lower section of the page.



The 2017 SPE Hydraulic Fracturing Technology Conference and Exhibition Online Abstract Review site is now open at:

27HFTC - [Review Site](#) **Link to Review Site**

Note: If you are an SPE member or are a registered user on the SPE website, please use your SPE.org login and password.

If you do not remember your password, please try the "Password Assistance" link on the login screen, or contact our Customer Service Department at service@spe.org for assistance.

Please DO NOT register as a new user. The resulting profile will not have been allocated the necessary user-rights.

Review Deadline: 7 July 2016

If you have any questions concerning the online review system, please contact SPE:

Peggy Rijken
2017 SPE Hydraulic Fracturing Technology Conference and Exhibition Chairperson

Ingrid Dudley
Event Specialist
Phone: +1-713-457-6876
Email: igdudley@spe.org

[Form 015]



The Society of Petroleum Engineers
222 Palisades Creek Dr. | Richardson, TX 75080-2040 USA

On the REVIEW tab, click on any proposal in the list to go into the Review Site and begin reviewing proposals.

REVIEW tab

SPE International
Society of Petroleum Engineers

SPE Hydraulic Fracturing Technology Conference and Exhibition
2-4 February 2027 | The Woodlands Waterway Marriott and Convention Center
The Woodlands, Texas, USA

27HFTC

Michelle Aubuchon

Meeting Information Paper Proposals **Review 4** Tasks Messages

The Review Site is now open!

Review Deadline → Review Deadline **7 July 2026 at 11:59 PM CT.**

To begin review, click on any record below **Assigned to me**. All items with a green sidebar are complete and all items with a gold sidebar need to be reviewed.

4 Your Review Progress
incomplete

Review status
0 of 4
complete

Proposals to Review

Assigned to me

#70 Surfactant Concentration Optimization In Eor Treatments. The Effects Of Organic Scale And Inorganic Depositions On Ift And Contact Angle Performance
Type: Proposal
Score: Not yet scored

#81 Field Case Studies Of Retrofitted Autonomous Inflow Control Devices For Water Control In Mature Vertical Wells
Type: Proposal
Score: Not yet scored

#83 Integrated Field Diagnostics And 3d Numerical Modeling Of Horizontal Hydraulic Fracture Propagation In Shale Reservoirs
Type: Proposal
Score: Not yet scored

Reviewer Resources

Reviewer Instructions

Click on any title to begin reviewing proposals.
Items with a gold sidebar need to be reviewed

Link to Reviewer Instructions document

Navigation Tools

There is a Navigation Pane on the left side of the screen with the options you will use to Review and Score proposals.



Welcome to the Review Module for the SPE Improved Oil Recovery Conference - [Powered by cOASIS](#)

Reviewer: M.AuBuchon
Abstracts Scored: 0 / 202 (0%)

Category Filter:
ALL

Links:
[Score Key](#)
[Export Score Sheet](#)
[Import Score Sheet](#)

Standard Options:
[Instructions](#)
[Review Abstracts](#)
[Edit/View Scores](#)

Offline Options:
[BulkView/Print Abstracts](#)
[QuickScore Abstracts](#)
[Back to Dashboard/Portal](#)

Control Number:
Title:
Category:
Keyword1:
Keyword2:
Keyword3:
Keyword4:
Keyword5:
Authors:
Abstract:

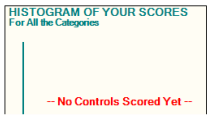
22IOR-P-9-SPE
Subsurface Visualization And Quantitative Mapping Service To Manage Production Steering And Reserve Assessment Of Dynamic Remaining Oil
8a Reservoir Performance Management: Field or Pilot Case Studies
Visualization and Quantitative Mapping Service
Production steering
Dynamic remaining oil
Reserve assessment

B. Chang, Schlumberger

Review: M.AuBuchon
Abstracts Scored: 0 / 202 (0%)

Objective/Scope: In LF oilfield of Offshore South China, homogeneous reservoir E was deeply developed with 97.2% water-cut and 67.2% oil recovery. Initial infill wells mainly aimed to marginal regions with predicted high remaining oil reserve, which accurate prediction is critical for optimal planning and further well pattern design. However, current modelling technology only simulated uncertain remaining reserve due to limited trap profile, oil saturation distribution and dynamic oil-water-contact (OWC). Furthermore, conventional near-borehole completion could not effectively address above uncertainties, causing current inefficient production steering and performance in this puzzling reservoir. **Methods, Process:** Remaining oil production management can be enhanced through a game-changing remote mapping service. Without manual intervention, this high-definition deep mapping (HDDM) inversion service fully automatically analyzes hundreds of formation models using a novel Markov-chain Monte-Carlo method to identify subsurface layers' numbers, resistivity and anisotropy distribution, thickness and dip. The resulting trap profile could be quantitatively delineated up to 5m from the borehole, including reservoir top, dynamic OWC and intrinsic layering resistivity, which corresponds to different oil saturation. These visualization and quantitative products could instruct productive drilling and completion, create dynamic OWC and optimize corresponding water-controlled completion configurations. Furthermore, updated trap profile and oil production could reassess remaining oil reserve for further well pattern optimization. **Observations, Conclusions:** Along the anticline at eastern margin, Well A 550m plan horizontal section targeted for the 21m remaining oil reserve. HDDM service revealed the only 3m remaining oil column with actual reservoir top 7.5m and dynamic OWC. Anticline dipping-down wing was identified earlier to reduce actual oil trap volume, causing actual trajectory close to reservoir top until

[Click here for a print-friendly version of the abstract](#)

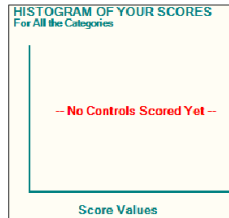


Category Filter:
ALL

Links:
[Score Key](#)
[Export Score Sheet](#)
[Import Score Sheet](#)

Standard Options:
[Instructions](#)
[Review Abstracts](#)
[Edit/View Scores](#)

Offline Options:
[BulkView/Print Abstracts](#)
[QuickScore Abstracts](#)
[Back to Dashboard/Portal](#)



- Filter by Submission Category
- Reviewer Instructions
- Review Abstracts (one at a time on-line)
- Edit and View your entered scores

Category Filter

The category filter allows you to filter the proposals available for review by Submission Category. You can either select all (default setting) or choose ONE category to review at a time.

Review Options

Standard Options

Read proposals ONLINE and score them as you go.

- **Instructions** – Provides you with the Reviewer Instructions for working in the Review Web site.
- **Review Proposals** – Provides you with online access to the proposals to be reviewed.
- **Edit/Review Scores** – Provides you with access to YOUR submitted scores.

Offline Options

Read proposals OFFLINE and record scores later.

- **Bulk View/Print Proposals** – Allows you to print proposals for review offline. Limits printing of proposals to groups of 50.
- **Quick Scores Proposals** – Allows you to enter scores for proposals reviewed offline. Limits scoring to groups of 50.

Links

- **Score Key** – Provides you with a printable copy of the Score Key and the description of each score.
- **Export Score Sheet**- Allows you to export a score sheet to score and add comments for the proposals offline.
- **Import Score Sheet** – Allows you to import the exported Score Sheet.

Standard Options - Reviewing and Scoring Proposals Online

1. In the Navigation Tools area, you can click on the **Category Filter** drop down arrow to select the desired category code for review. To view all categories, leave on ALL.
2. Click on the **Review Proposals** link.

Reviewer: M.AuBuchon
Abstracts Scored: 0 / 202 (0%)

Current Category: 1a Gas Injection: Field or Pilot Case Studies, *Abstracts Scored:* 0 / 3 (--%)

Category Filter:

1a Gas Injection: Field or Pilot Case Studies ▾

- ALL
- 1a Gas Injection: Field or Pilot Case Studies
- 1b Gas Injection: Immiscible Displacement
- 1c Gas Injection: Foam Thickeners
- 1e Gas Injection: Well Technologies
- 1f Gas Injection: Tight Fractures
- 2a Waterflooding and Miscible Displacement
- 2b Waterflooding and Miscible Displacement**
- 2c Waterflooding and Miscible Displacement
- 2e Waterflooding and Miscible Displacement
- 2f Waterflooding and Miscible Displacement
- 3a Chemical Flooding: Miscible Displacement
- 3b Chemical Flooding: Miscible Displacement
- 3c Chemical Flooding: Miscible Displacement
- 3e Chemical Flooding: Miscible Displacement
- 3f Chemical Flooding: Miscible Displacement
- 3g Chemical Flooding: Miscible Displacement
- 3h Chemical Flooding: Miscible Displacement
- 3i Chemical Flooding: Miscible Displacement
- 4a Viscous (Heavy) Oil Miscible Displacement
- 4b Viscous (Heavy) Oil Miscible Displacement



Reviewer: M.AuBuchon
Abstracts Scored: 0 / 202 (0%)

Current Category: 1a Gas Injection: Field or Pilot Case Studies, *Abstracts Scored:* 0 / 3 (--%)

Category Filter:

1a Gas Injection: Field or Pilot Case Studies ▾

Links:

[Score Key](#)
[Export Score Sheet](#)
[Import Score Sheet](#)

Standard Options:

[Instructions](#)
[Review Abstracts](#)
[Edit/View Scores](#)

Offline Options:

[BulkView/Print Abstracts](#)
[QuickScore Abstracts](#)
[Back to Dashboard/Portal](#)

3. Read and review proposal on screen.

Category Filter:
[ALL]

Links:
[Score Key](#)
[Export Score Sheet](#)
[Import Score Sheet](#)

Standard Options:
[Instructions](#)
[Review Abstracts](#)
[Edit/View Scores](#)

Offline Options:
[BulkView/Print Abstracts](#)
[QuickScore Abstracts](#)
[Back to Dashboard/Portal](#)

HISTOGRAM OF YOUR SCORES
For All the Categories

-- No Controls Scored Yet --

Score Values

Control Number: 22IOR-P-9-SPE

Title: Subsurface Visualization And Quantitative Mapping Service To Manage Production Steering And Reserve Assessment Of Dynamic Remaining Oil 8a Reservoir Performance Management: Field or Pilot Case Studies

Category: Visualization and Quantitative Mapping Service

Keyword1: Production steering

Keyword2: Dynamic remaining oil

Keyword3: Reserve assessment

Authors: B. Chang, Schlumberger

Abstract:
Objectives/Scope: In LF oilfield of Offshore South China, homogeneous reservoir E was deeply developed with 97.2% water-cut and 67.2% oil recovery. Current horizontal infill wells mainly aimed to marginal regions with predicted high remaining oil reserve, which accurate prediction is critical for optimal production steering and further well pattern design. However, current modelling technology only simulated uncertain remaining reserve due to uncertainties of oil trap profile, oil saturation distribution and dynamic oil-water-contact (OWC). Furthermore, conventional near-borehole measurements could not effectively address above uncertainties, causing current inefficient production steering and performance in this puzzling reservoir.
Methods, Procedures, Process: Remaining oil production management can be enhanced through a game-changing remote mapping service. Without any artificial assumption, this high-definition deep mapping (HDDM) inversion service fully automatically analyzes hundreds of formation models using Metropolis-coupled Markov-chain Monte-Carlo method to identify subsurface layers' numbers, resistivity and anisotropy distribution, thickness and dip. Subsurface reservoir profile could be quantitatively delineated up to 5m from the borehole, including reservoir top, dynamic OWC and intrinsic layering of contrasting resistivity which corresponds to different oil saturation. These visualization and quantitative products could instruct productive drilling away from delineated dynamic OWC and optimize corresponding water-controlled completion configurations. Furthermore, updated trap profile and oil saturation distribution could reassess remaining oil reserve for further well pattern optimization.
Results, Observations, Conclusions: Along the anticline at eastern margin, Well A 550m plan horizontal section targeted for the 21m remaining oil column with 20% simulated saturation. HDDM service revealed the only 3m remaining oil column with actual reservoir top 7.5m and dynamic OWC 25.5m shallower. Anticline dipping-down wing was identified earlier to reduce actual oil trap volume, causing actual trajectory close to reservoir top until 1m above OWC for total 120m sweet interval. Even with shorter production interval and less oil column, water-controlled completion technology including continuous packer and autonomous inflow control device (AICD) optimized well performance approaching prognosis with stable 460 BOPD and 83% water cut. Actual oil saturation was calculated 60-80% above OWC. Then remaining oil reserve around this area was reassessed ~83% lower than prediction. At western margin, expansion of structural crest was mapped to double Well B horizontal section. Drilling close to top and AICD completion induced the efficient production steering for stable 800BOPD and 88% water cut, better than prognosis. Furthermore, increasing of oil trap column and oil saturation induced remaining oil reserve ~43.3% higher than prediction. Consequently, infill campaign was directed to western margin.
Novel/Additive Information: HDDM service demonstrated its unique visualization capability to remotely reveal reservoir quantitative details, which could effectively manage the production steering efficiency, dynamic remaining oil reserve assessment and further well pattern design. Accordingly, exploiting potentialities of dynamic remaining oil could be gradually pushed to limit.

4. In the **Score** field, use the drop down arrow to select the desired score.

Novel/Additive Information: HDDM service demonstrated its unique visualization capability to remotely reveal reservoir quantitative details, which could effectively manage the production steering efficiency, dynamic remaining oil reserve assessment and further well pattern design. Accordingly, exploiting potentialities of dynamic remaining oil could be gradually pushed to limit.

Score:

Please Select

Too Commercial

Previously Published/Presented

Comments

SAVE AND CONTINUE

Please Select

Please Select

6 (EXCEPTIONAL)

5.5 (VERY GOOD-to-EXCEPTIONAL)

5 (VERY GOOD)

4.5 (GOOD-to-VERY GOOD)

4 (GOOD)

3.5 (AVERAGE-to-GOOD)

3 (AVERAGE)

2.5 (AVERAGE-to-BELOW AVERAGE)

2 (BELOW AVERAGE)

1.5 (BELOW AVERAGE-to-INFERIOR)

1 (INFERIOR)

(Conflict of Interest)

(Not Qualified to Score)

5. Place a check mark in the appropriate box, if necessary, for *Too Commercial* or *Previously Published/Presented*.
6. Enter any comments you feel are needed to support your score. **We ask that if you are scoring a proposal at 2.5 or lower, you provide some feedback as to the reason for the low score.** This allows the committee to respond to authors who inquire about their declined status. The comments you enter **will** be included on the Score Report and View Score Sheet.
7. Click **Save and Continue** to move to the next proposal to review and score online. You must click **Save and Continue** to enter and save all of your scores within the system.

Offline Options - Reviewing and Scoring Proposals – Bulk Download

This option allows the reviewer to print the proposals and review them offline. You will then need to log in to enter the individual scores.

1. On the Navigation Bar, under **Offline Options**, click to select *Bulk View/Print Proposals*.

Standard Options:

[Instructions](#)
[Review Abstracts](#)
[Edit/View Scores](#)

Offline Options:

[BulkView/Print Abstracts](#)
[QuickScore Abstracts](#)
[Back to Dashboard/Portal](#)

2. In the **Bulk View Preference window**, set your criteria:

Sort Options – by Control Number, Score, Topic (Ascending or Descending).

Proposal in groups – Range form 10 – 50 (Maximum at one time is 50).

Proposal Range – allows you to select specific proposals only.

Include: All, Already Scored or Only Unscored. (You should select All or Only Unscored)

3. Click **Compose Proposals**.

Bulk View Preferences Use the controls below to customize the bulk view of abstracts.

Sort Options **Set your Bulk Print criteria**

Use these to specify how the abstracts will be arranged.

Please Select Ascending
Please Select Ascending
Please Select Ascending

Abstracts in groups

Use this to group abstracts in certain number per page.
10

Abstract Range

Use this to show only certain abstracts. You can combine ranges with individual abstracts (e.g., "1, 2-10, 15, 40-100").

Control Number:

Include

All Abstracts
 Only Scored Abstracts
 Only Unscored Abstracts

COMPOSE ABSTRACTS

CTI Meeting Technology
10th LaSalle Street, Suite 200

Annotations: Red arrows point from text labels to the 'Sort Options' dropdowns, the 'Control Number' input field, and the 'COMPOSE ABSTRACTS' button. Red ovals highlight the 'Include' radio buttons.

- Click on each link provided to view a set of proposals to print for reviewing offline.

Welcome to the Review Module for the SPE

Reviewer: M.AuBuchon
Abstracts Scored: 0 / 202 (0%)

Category Filter:

ALL

Links:

[Score Key](#)
[Export Score Sheet](#)
[Import Score Sheet](#)

Standard Options:

[Instructions](#)
[Review Abstracts](#)
[Edit/View Scores](#)

Offline Options:

Bulk View Preferences

Click each link to view a set of abstracts to print:

[Display 1 to 50](#)
[Display 51 to 100](#)
[Display 101 to 150](#)
[Display 151 to 200](#)
[Display 201 to 202](#)

- A printable report will open in a new window. Click the [Print this Page](#) link to print and take with you to review and score offline.



Print this Page

Close W

Control Number: 22IOR-P-380-SPE
Title: Pore-scale Of Gas Recovery And Trapping In Water-invaded Zones In Gas Reservoirs
Category: 7b Water and Gas Conformance Control: Diagnostic and Evaluation Methods
Keyword1: Pore-scale
Keyword2: Gas recovery
Keyword3: Gas Trapping
Keyword4: Water-invaded zone
Keywords:

A. Abedini, A. Pettigrew, Z. Qi, Interface Fluidics Limited

Abstract: **Objectives/Scope:** In this study, we designed and developed a microfluidic platform to replicate the displacement efficiency of water influx in gas reservoirs and the associated gas trapping mechanisms. The outcome gives a better understanding of the aquifer behavior, water influx, water drive process, recovered gas vs. trapped gas volume, and the amount of gas reserve which ultimately impacts the long-term production strategies and decision making.

Methods, Procedures, Process: Three distinct micro-porous media relevant to sandstone with porosity of 20, 30, and 40% were designed and fabricated. For each case, water was injected at three different in-situ flow velocities of 1, 10, and 100 cm/hr to determine the role of viscous forces in gas displacement. Nitrogen was used as a gas phase, and prior to microfluidic displacement experiments, the brine phase was saturated with nitrogen to avoid the mass transfer during the experiment. Time-lapse images were taken to record the displacement process in the entire porous media, and then analyzed using an in-house image processing algorithm to obtain the pore-scale data.

Results, Observations, Conclusions: In this work, a microfluidic platform was designed and calibrated to conduct series of water injection into a gas reservoir to replicate the water influx inside gas reservoirs. The effect of porosity and in situ flow velocity were examined and the associated gas recovery and trapping phenomena were obtained. The gas recovery factor increases with the increased porosity of the porous medium. The gas by-passing effects was found to be more dominant in higher porosity values. However, the snap-off trapping mechanism became major by lowering the porosity of the media results in lower sweep efficiency and higher gas trapping. Increasing the flow velocity and consequently the viscous force resulted in higher gas recovery and lower gas residual inside the porous media. Higher velocity produces larger capillary number, that improves the sweep efficiency of the water injection process. The effect of extended pore volume injection was also investigated, however, no noticeable change in gas recovery and trapping was observed.

Novel/Additive Information: The microfluidic device and test methodology developed in this work provides a unique opportunity to resolve the displacement and trapping mechanism associated with water invasion in gas reservoirs with active aquifers, providing critical-process data to inform operators. Leveraging the inherent speed and small sample volume associated with microfluidic technology, the impact of several operating parameters can be investigated in a short period of time; not obtainable using conventional approaches.

--E03--

Control Number: 22IOR-P-379-SPE
Title: An Investigation On The Feasibility Of CO₂Wave Huff-n-puff For Improving Oil Recovery In Tight Reservoirs
Category: 1f Gas Injection: Tight Oil Technologies
Keyword1: tight oil

Scoring Proposals Using the *QuickScore Proposals* Option

After reviewing the proposals in bulk, the scores will need to be entered into the system.

1. Log in to the Review site.
2. On the Navigation Pane, under **Offline Options**, click to select **QuickScore Proposals**.

3. In the Quick Score preferences window, make your selections:

Sort Options – by Control Number (Ascending or Descending).

Proposal Range – allows you to select specific proposal or a range of up to 50 proposals.

Include: All, Already Scored or Only Unscored.

NOTE: Selections should match the selections used when conducting the bulk print.

Reviewer: M.AuBuchon
Abstracts Scored: 0 / 202 (0%)

Current Category: 1a Gas Injection: Field or Pilot Case Studies, *Abstracts Scored:* 0 / 3 (0%)

Category Filter:

1a Gas Injection: Field or Pilot Case Studies ▼

Links:

[Score Key](#)
[Export Score Sheet](#)
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Standard Options:

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[BulkView/Print Abstracts](#)
[QuickScore Abstracts](#)

[Back to Dashboard/Portal](#)

4. Click the **Search** button to go to the score sheet.

Quick Score Preferences

Use any or all of the controls below to customize your score sheet.

Sort Options

Use these to specify how the abstracts will be arranged.

Control Number ▼	Descending ▼
Please Select ▼	Ascending ▼
Please Select ▼	Ascending ▼

Abstract Range

Use this to show only certain abstracts. Maximum 50 abstracts can be searched at one time. You can combine ranges with individual abstracts (e.g., "1, 2-10, 15, 40-100").

Control Number:

Include

- All Abstracts
 Only Scored Abstracts
 Only Unscored Abstracts

SEARCH

5. In the score sheet, use the down arrow under the **Score** column to select the assigned score for each proposal reviewed.

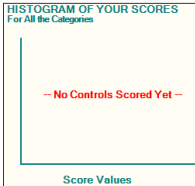
Welcome to the Review Module for the SPE Improved Oil Recovery Conference - Powered by cOASIS

Reviewer: M.AuBuchon
 Abstracts Scored: 0 / 202 (0%)
 Category Filter: ALL

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Control	Score	Abstract Information
22IOR-P-380-SPE	Please Select	Pore-scale Of Gas Recovery And Trapping In Water-invaded Zones In Gas Reservoirs A. Abedini, A. Pettigrew, Z. Qi, Interface Fluidics Limited Category: 7b Water and Gas Conformance Control: Diagnostic and Evaluation Methods Keywords: Pore-scale, Gas recovery, Gas Trapping, Water-invaded zone
22IOR-P-379-SPE	Please Select	An Investigation On The Feasibility Of CO ₂ Wave Huff-n-puff For Improving Oil Recovery In Tight Reservoirs M. Yang, S. Huang, China University of Petroleum (Beijing) Category: 1f Gas Injection: Tight Oil Technologies Keywords: tight oil, CO ₂ , mass transfer, wave huff-n-puff, improve oil recovery
22IOR-P-378-SPE	Please Select	Surface Complexation Modeling Of Engineered Water Injection With Addition Of Copper L.F. Lamas, Universidade do Estado de Santa Catarina; L.G. Duarte, Universidade Estadual De Campinas; J.S. Fernandes, D. Sebrao, Universidade do Estado de Santa Catarina; R.V. de Almeida, Respos Sinopec Brasil Category: 5f Novel EOR/IOR Technologies: Waterflooding Enhancements and New Concepts Keywords: Engineered Water Injection, Enhanced Oil Recovery, Reservoir Engineering, Wettability, Carbonate Reservoirs
22IOR-P-377-SPE	Please Select	Numerical Simulation Of Cyclic Steam Stimulation With Horizontal Well In Heavy Oil Reservoir X. H. Zhao, China University of Petroleum (Beijing); Y. Xiong, No.1 Drilling Company of Southwest Petroleum Engineering Co. of Sinopec Group; Z. Liu, The Second Oil

6. Place a check mark in the appropriate box if necessary for *Too Commercial* or *Previously Published/Presented*.

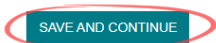
7. Enter any comments you feel are needed to support your score. **We ask that if you are scoring an proposal at 2.5 or lower, you provide some feedback as to the reason for the low score.** This allows the committee to respond to authors who inquire about their declined status. The comments you enter will be included on the Score Report and View Score Sheet.

Control	Score	Abstract Information
13RSS-P-6-SPE	5.5 (VERY GOOD-to-EXCEPTIONAL) <input type="checkbox"/> Too Commercial <input type="checkbox"/> Previously Published/Presented Comments Too go to not use!	This is Bob's First Test! R. Eltzholtz, A. K, CTT; A. K, Macro; B. Dorsch, CTT; B. Dorsch, ctttt Category: No topics were selected Keywords: test

8. Repeat for each proposal that needs to be rated.

9. Click **Save and Continue** to save all scores and comments entered. You will then move to another screen with the next set of proposals to score.

<p>22IOR-P-368-SPE</p>	<p>Please Select</p> <p><input type="checkbox"/> Too Commercial</p> <p><input type="checkbox"/> Previously Published/Presented</p> <p>Comments</p>	<p>Evaluation Of A Newly Developed Polymer For Polymer Flooding At High Temperature And High Salinity Conditions</p> <p>X. Zhang, Beijing Research Center, Aramco Asia; M. Han, Saudi Aramco PE&D; J. Hou, Beijing Research Center, Aramco Asia; A. Sofi, EXPEC Advanced Research Center, Saudi Aramco</p> <p>Category: 3b Chemical Flooding: Polymer and Mobility Control</p> <p>Keywords: chemical flooding, polymer, high temperature, high salinity, long-term stability</p>
<p>22IOR-P-367-SPE</p>	<p>Please Select</p> <p><input type="checkbox"/> Too Commercial</p> <p><input type="checkbox"/> Previously Published/Presented</p> <p>Comments</p>	<p>Comprehensive Evaluation Of A Novel Recrosslinkable Hyper Branched Preformed Particle Gels For The Conformance Control Of High Temperature Reservoirs</p> <p>T. Song, M. Ahdaya, S. Zhao, Y. Zhao, T. Schuman, B. Bai, Missouri University of Science & Technology</p> <p>Category: 7c Water and Gas Conformance Control: Foams and Gels</p> <p>Keywords: Preformed particle gels, Conformance control, Re-crosslinkable, Thermal stability, Hydrolytic stability</p>



You MUST click on the “Save and Continue” button at the bottom of each page in order for the scores on that page to be recorded.

Keep in mind that the purpose of QuickScore is to rapidly transcribe the handwritten scores into the system. Thus, you will want to keep the handwritten scores in the same order as the QuickScore listing.

As you begin saving scores, notice that a histogram of YOUR scores will appear on the Navigation Pane.

Links:

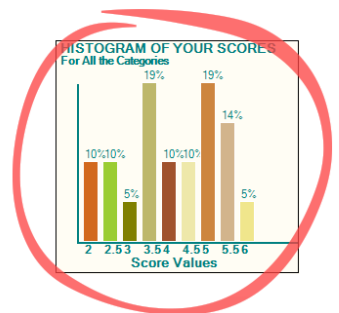
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Links - Exporting a Score Sheet

1. Click on **Export Score Sheet** under Links.

Reviewer: M.AuBuchon
Abstracts Scored: 0 / 202 (0%)

Current Category: 1a Gas Injection: Field or Pilot Case Studies. Abstracts Scored: 0 / 3 (0%)

Category Filter:
1a Gas Injection: Field or Pilot Case Studies

Links:

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Standard Options:

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2. A new window will open. It will contain a link of the successfully created txt file.

NOTE: depending on the number of proposals, this could take a few minutes. Please be patient.

3. Right click on the file link and select **Save Link As** and save the link to the desktop or appropriate folder.



You are now ready to download a text file of your assignments.

Save the file and import into Excel or open in a text editor.

In Excel you can resort the data (make sure you are sorting the entire sheet), rearrange the columns, add your own columns, enter scores, and enter comments. You can also save the file under a different name.

You should NOT rename the default columns in the file and you should NOT edit the control numbers.

File successfully created at: <https://files.abstractsonline.com/Temp/7888d92c-d313-4000-96ed-e0781d635057.txt>

NOTE: You should NOT rename the default columns in the file and you should NOT edit the control numbers.

If you do, you will NOT be able to perform a successful import.

4. Launch Excel and open the saved txt file. DO NOT make any changes to the column structure or names in your exported excel file.
5. Enter scores and comments and save the file as a txt file. Sorting is allowed. Filters are allowed.

Links - Importing a Score Sheet

Once all scores have been added into the exported score sheet, it will need to be imported into the system.

1. Log in to the Review site.
2. On the Navigation Pane, under **Links**, click to select **Import Score Sheet**.

Reviewer: M.AuBuchon
Abstracts Scored: 0 / 202 (0%)

Current Category: 1a Gas Injection: Field or Pilot Case Studies, Abstracts Scored: 0 / 3 (--%)

Category Filter:

Links:

- [Score Key](#)
- [Export Score Sheet](#)
- [Import Score Sheet](#)

Standard Options:

- [Instructions](#)
- [Review Abstracts](#)
- [Edit/View Scores](#)

Offline Options:

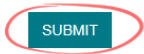
- [BulkView/Print Abstracts](#)
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3. The upload window will open. Use the **Choose File** button to locate and select the appropriate file.



You are now ready to import your scores. The system accepts multiple uploads. Use the Browse Button below to find your .txt file and then click "Submit." Please WAIT for the upload process. When it is finished, you will see a report on this screen.

Please enter the full path name of your file
(e.g., C:\MyFiles\MyFile.txt): No file chosen



4. Click **Submit** to import the score sheet.

Note: You can input your information multiple times. The system will overwrite the existing information with the new information.
