



OWSG GENERAL MEETING

December 01, 2022

8:00 am CDT Start Time

Jonathan Lightfoot
Sub-Committee Chair



AGENDA

- OWSG Mission & Anti-Trust
- API RP-78 Update
- IADC Technical Publications Committee
 - Membership – Authors & Peer Reviewer
 - Complex Well Design and Execution
- Upcoming Events
- Open Discussion Session



OWSG Mission

To promote practices that provide confidence that reported wellbore positions are within their stated uncertainty.



OWSG Anti-Trust

We are meeting to help develop and promote good practices in wellbore surveying necessary to support wellbore construction which enhance safety and competition.

The meeting will be conducted in compliance with all laws including the antitrust laws, both state and federal. We will not discuss prices paid to suppliers or charged to customers nor will we endorse or disparage vendors or goods or services, divide markets, or discuss with whom we will or will not do business, nor other specific commercial terms, because these are matters for each company or individual to independently evaluate and determine. We are meeting to help develop and promote good practices in wellbore surveying necessary to support wellbore construction operations which enhance safety and competition.

Introductions

- Name
- Company Affiliation
- Favorite Bird



GENERALIST



INSECT CATCHING



GRAIN EATING



CONIFEROUS-SEED EATING



SCYTHING



FRUIT EATING



CHISELING



DIP NETTING



SURFACE SKIMMING



NECTAR FEEDING



RAPTORIAL



FILTER FEEDING



AERIAL FISHING



PURSUIT FISHING



SCAVENGING

- **10,824 Species**
- **50 Billion Total**
- **Sparrows, Starlings, Swallows and Ring-Billed Gulls are in the 1-billion bird category**



Wellbore Positioning Technical Section



The Industry Steering Committee on
Wellbore Survey Accuracy (ISCWSA)

Attendees – Dec 1, 2022

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API RP78

SPE-204027-MS

Some Technical and Economic Consequences of Directional Drilling and Surveying Progress and Success

Steven J. Sawaryn; Ross Lowdon; John L. Thorogood

Paper presented at the SPE/IADC International Drilling Conference and Exhibition, Virtual, March 2021.

Paper Number: SPE-204027-MS

<https://doi.org/10.2118/204027-MS>

Published: March 08 2021

The Operator Wellbore Survey Group (OWSG) was established as a sub-committee in 2012 to table and prioritize operator needs. One of the early deliverables was a larger set of generic error models covering a wider range of tools. The set is now under the control of the Error Model sub-committee and is documented, together with implementation notes and test cases on the website (McGregor 2020). The latest sub-committee to be formed is the Survey QA/QC in 2019, recognizing the need for QA/QC and survey data standards, including nomenclature, service records and data transfer formats. This sub-committee is building on the ideas of a WPTS working group which was established in 2005 and then disbanded after publishing its findings (Ekseth et al. 2009). The sub-committee's aim is to publish a survey QA/QC e-book, adding further to the technical section's maintenance commitment. This maintenance burden increases in proportion to the number of sub-committees and the constantly evolving technical content.



API RP-78

- 182 pages with markup & 154 without
- Status (65 pages of 182) Reviewed / Edited

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Should the SPE WPTS Set Standards?

Although the word “standards” appears in the ISCWSA mission statement, unlike established standards bodies, the SPE WPTS lacks the authority and infrastructure to manage and mediate such technical content. So logically, the answer to the question as to whether the WPTS should engage in setting standards is, “No” (Appendix C). However, the WPTS membership represents a unique assembly of expertise with its depth of qualifications and experience and the WPTS has employer backing to develop and maintain the knowledge base which underpins industry activities. Therefore, the WPTS members, through their employers and as members of other industry committees, have a vital role to play in ensuring that the knowledge base is appropriately incorporated into formal standards as well as ensuring that these are faithfully implemented in the real world.

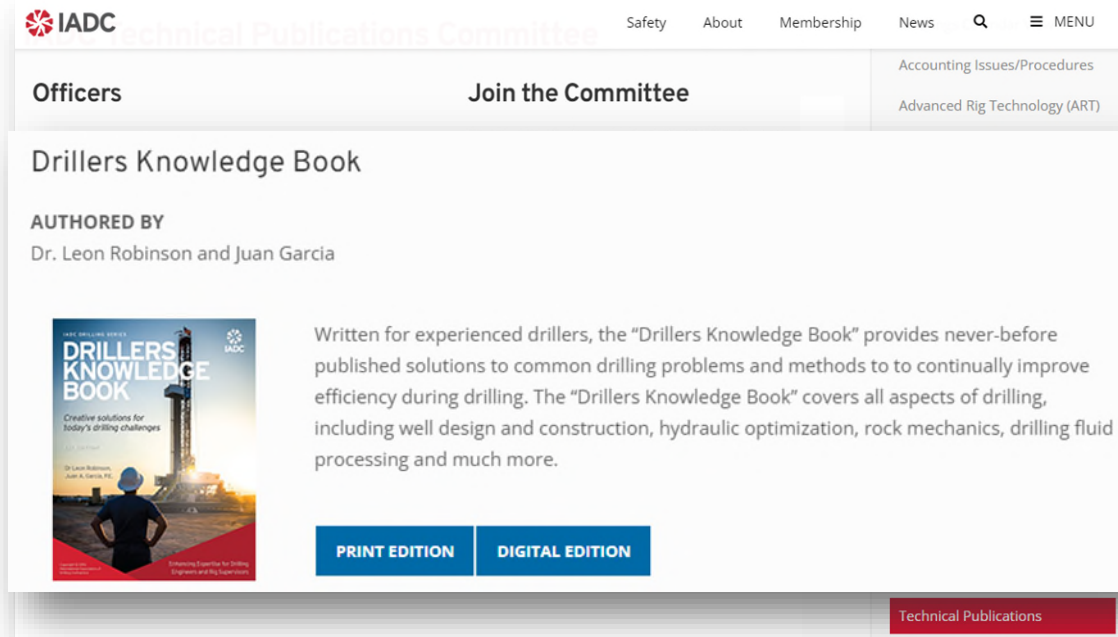


AADE NTCE – RP 78 Abstract

- *A document referred to as Recommended Practice 78 (RP-78) Wellbore Positioning was recently developed in the API (American Petroleum Institute) format. API RP-78 is intended to apply to all wellbore construction applications. This document serves as a modern industry technical wellbore placement technical reference containing proven engineering practices for geothermal, carbon sequestration, coalbed methane (CBM), horizontal directional drilling (HDD) trenchless boring, mineral ventilation and extraction, scientific coring, and all other types of subsurface borehole construction applications. RP-78 was developed by independent consultants, subject-matter experts, and representatives from public and private energy operators. The volunteer work group was initialized by the Operator's Wellbore Survey Group (OWSG); it later became an official sub-committee of the Industry Steering Committee on Wellbore Survey Accuracy (ISCWSA). The OWSG began the project after a poll of operator members indicated the need for a set of minimum industry requirements related to the application of wellbore construction, safe-separation, and wellbore positioning. The ISCWSA is directly affiliated with the Society of Petroleum Engineers (SPE) and is also known as the SPE Wellbore Positioning Technical Section (WPTS). This new standard will be available through API allowing access outside the oil and gas industry.*

IADC TPC

- Create a comprehensive, practical, and readily understandable series of peer-reviewed publications on well construction and integrity in the oil and gas industry to educate and guide personnel at all levels.
- A member appointed by the Chairman of IADC will chair the IADC Technical Publications Committee. The Committee Chairman may at his discretion appoint a reasonable number of Committee Vice-Chairmen to oversee specific disciplines or issues (e.g., onshore/offshore safety issues, environmental practices, specific regulatory issues, etc.)
- General meetings are open to participants from all categories of IADC membership. The Chairman may invite non-members to attend when it furthers the interests of the Committee. At the discretion of the Chairman and IADC staff, the meeting or portions of the meeting may be exclusively reserved for drilling contractor members. Meetings will be held at such times and locations as may be selected by the Chairman with the advice of the Committee.



The screenshot shows the IADC Technical Publications Committee website. At the top, there is a navigation bar with the IADC logo and links for Safety, About, Membership, News, and a search icon. Below the navigation bar, there are two main sections: "Officers" and "Join the Committee". Under "Officers", there is a link for "Accounting Issues/Procedures" and another for "Advanced Rig Technology (ART)". The "Join the Committee" section features a large heading for "Drillers Knowledge Book" and a sub-heading "AUTHORED BY" followed by "Dr. Leon Robinson and Juan Garcia". To the left of the text is a book cover for "DRILLERS KNOWLEDGE BOOK" with the subtitle "Creative solutions for today's drilling challenges" and the authors' names. To the right of the book cover is a paragraph of text describing the book's content. Below the text are two buttons: "PRINT EDITION" and "DIGITAL EDITION". At the bottom right of the page, there is a red button labeled "Technical Publications".

TECHNICAL PUBLICATIONS COMMITTEE



Wellbore Positioning Technical Section



The Industry Steering Committee on
Wellbore Survey Accuracy (ISCWSA)

IADC TPC

- 3rd Edition K&M book on Extended Reach Drilling donated to IADC's Technical Publications Committee. K&M references to be omitted and new modern practices to be added
- Overall, the K&M text contains good information but is two decades old and needs an update.
- The new book will be called Complex Well Design and Execution or similar.

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Geothermal Seminar 2023



- **Webinar hosted by the Aberdeen Section**
 - Wednesday February 22, 2023 at 8:00 am
 - Thursday February 23, 2023 at 5:00 pm
- After the success of the inaugural event in 2022, SPE Aberdeen's Geothermal Seminar will return in February 2023. Building on the content of the last event and the opportunity it provided to explore the role of geothermal in the energy transition, this year's event will delve deeper into realising the ambitions of the sector. The Seminar will feature a combination of case studies, panel sessions, and technologies and will be relevant to a broad range of people from energy professionals, thought leaders, those looking to transition, to those just eager to learn more.



Wellbore Positioning Technical Section



SPE/IADC International Drilling Conference & Exhibition

7-9 March 2023

Stavanger Forum

Stavanger
Norway

CALL FOR ABSTRACTS



IADC/SPE Managed Pressure Drilling & Underbalanced Operations Conference & Exhibition

3-4 October 2023

Grand Hyatt Denver

Denver
United States

CALL FOR ABSTRACTS

- ISCWSA Mtg. # 57
- Stavanger, Norway
- Hosted by Equinor at their Business Center in Stavanger
- March 9th – Sub-Committee Mtgs.
- March 10th – General Meeting

- [IADD Mud Motor Topical Forum](#)
 - [January 25, 2023, Training Opportunity \(Location TBD\)](#)
 - [January 26, 2023, The Woodlands \(Forum Hosted by Oxy, Allison Tower\)](#)
- [AADE National Technical Conference and Exhibition](#)
 - April 4th & 5th – Midland, TX | NTCE





Society of Petroleum Engineers



IADC

IADC/SPE-189697-MS

Real-Time Downhole Data Resolves Lithology Related Drilling Behavior

Christopher Viens and Tyler Clark, Nabors Drilling Solutions; Jonathan Lightfoot and Carlos Mercado, Occidental Oil and Gas Corporation

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Well-Collision-Avoidance Management and Principles

S. J. Sawaryn, Consultant; **H. Wilson**, Baker Hughes, a GE Company; **W. T. Allen**, BP; **P. J. Clark**, Chevron Energy Technology Company; **I. Mitchell** and **J. Codling**, Halliburton; **A. Sentance**, Dynamic Graphics Incorporated; **B. Poedjono** and **R. Lowdon**, Schlumberger; **J. Bang**, Gyrodata Incorporated; and **E. Nyernes**, Equinor ASA

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2018 SPE Drilling & Completion

1



Open Discussion Future Topics? Any other Business?

Questions?



Thank you

Next Meeting: February 7, 2023