

International Association of Drilling Contractors 3657 Briarpark Drive, Suite 200 Houston, Texas 77042

www.iadc.org

MINUTES IADC Geothermal Committee meeting, 23 January 2025

Present at the meeting were:

Francisco Porturas, Archer Geo; Gregg Walz, Clear Round Technology, LLC; Peter Kazar, ENOWA; Scott Farmer (Committee Chair), Helmerich & Payne; Steve Nas, Wellspec; Andrew Barry, Wild Well Control; Diana Tronco, Inco Drilling; Shaun Toralde, Weatherford; Andreas Karkossa, KCA-Deutag; Izwan Megat, Parker Wellbore; Marcus Oesterberg, Ignis Energy; Satya Perumalla, Baker Hughes; Alex Vetsak, Eavor; Mitch Dzienkowski, Altiss Technologies; Tamas Csrefko, Nabors; Gabriel Houng, Beyond Energy; Michael Strauss, Ensign; Niels van der Werff, Shell; Thomas Jacobsen, Innargi; Lars Petersen, Innargi; Alex Heger, ÖMV; Bill Krull, IADC; Issa Kalil, Altus, Darren Mourre, Salos Sunesis; Eric Gonzalez, ThermaPrime; KevinJensen, BP; Francois Penwen, Vallourec; Jonathan Lightfoot, Oxy; Lars Nydahl Jørgensen, IADC (minutes).

In total 30.

1. New Members

Scott welcomed the new members. Please refer to the member list in the Sharepoint repository for more information.

The total number of members is now 81, representing 53 companies.

2.Future committee meetings, presentations and abstracts

As agreed in our previous committee meeting, future meetings are quarterly. The meeting dates have been set as follows:

• Q1 – 23rd of January 2025 – Virtual

• Q2 – 27th of March 2025 – Hybrid – Vienna (in association with IADC Geothermal Conf.)

- Q3 26th of June 2025 Virtual
- Q4 TBC Hybrid

The Q4 meeting may be held in conjunction with the IADC Advanced Rig Technology Conference in Reykjavik or Geothermal Rising in Reno – a poll will be sent out to members to vote.

3. Near-term industry meetings

Presentations will be given on behalf of the committee at these meetings:

- 20th of February 2025, Offenburg GeoTHERM 2025 (Scott Farmer)
- 28th of February 2025, Webinar Thinkgeoenergy (Alexander Heger)

In addition, abstracts have been submitted for

- 10 11th of June 2025, Amsterdam IADC World Drilling 2025
- 6 10th of October 2025, Zurich European Geothermal Congress 2025

4. IADC Geothermal Drilling Conference 25-26 March 2025

The program for this conference is now available on our website. We have entered into mutual promotional agreements with EGEC and with Think GeoEnergy.



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On the 27th March, OMV are generously inviting for a site visit at their Hydros Project site in Vienna.

5. Work Group Status, manning and Planning

Scott went through the status of the individual work groups.

The work in the classification group is nearing completion (hopefully publication early March), while the work in the Well Control group is well under way.

For the manning of the work groups, please refer to slide 7 in the presentation appended below. Some groups are well populated and with leaders appointed. However, the "Rig & Equipment", "Safety" and "Drilling Technology" work groups still need a leader. Please consider nominating yourself for one of these roles.

The planning of contents and timing of delivery of the work to take place in these groups has to be agreed upon at the Q2 Committee meeting in March at the latest.

The entire Geothermal Well Drilling Guideline should be finalized before June 2026, enabling presentation at IADC World Drilling 2026 and at WGC 2026.

6. Classification Update

Scott went through the details of the status of the Classification, including timeline, the complexity calculator as well as worked examples.

7. Call for content for the 27 March meeting in Vienna

Please submit proposed topics to be discussed at the 27th March meeting in Vienna to either Scott Farmer (scott.farmer@hpinc.com) or Lars Nydahl (lars.nydahl@iadc.org).

8. AOB

Lars mentioned the IEA's publication in December 2024 of a report on the future of geothermal energy. In contrast to earlier, the IEA is quite optimistic regarding the potential of geothermal.

He further mentioned that the outgoing Hungarian presidency of the EU had made a strong statement in favour of geothermal energy when they handed over the presidency to the Polish government.

/ Lars Nydahl Jørgensen



Geothermal Committee Quarterly Meeting – Q1 2025 – 23/01/25



Agenda

- New Members
- Future committee meetings, presentations and abstracts 2025
- Near Term Industry Meetings
- IADC Geothermal Drilling Conference, March 2025
- Work Group Status & Planning
- Classification Update
- Call for Content for 27th March Committee meeting
- AOB



With new member additions, the totals in the IADC Geothermal Committee come to:

81 members, representing53 companies



Proposed Planning – 2025

- <u>Quarterly Committee Meetings</u> but more frequent work group meetings
 - 2 x in-person and 2 x virtual with longer format
 - Work Group leaders can dictate the frequency of meetings
- Committee Meetings for 2025:
 - Q1 23rd of January 2025 Virtual
 - <u>Q2 27th of March 2025 In-person (hybrid) Vienna</u>
 - <u>Q3 26th of June 2025 Virtual</u>
 - Q4 TBC In-person (hybrid)



Presentations & Abstracts

- Presentations:
 - 20th of February 2025, Offenburg GeoTHERM 2025 (Scott Farmer) CONFIRMED
 - 28th of February 2025, Webinar <u>Thinkgeoenergy</u> (Alexander Heger) CONFIRMED
- Abstracts Submitted:
 - 10 11th of June 2025, Amsterdam IADC World Drilling 2025 PENDING
 - 6 10th of October 2025, Zurich European Geothermal Congress 2025 PENDING
 - Others?



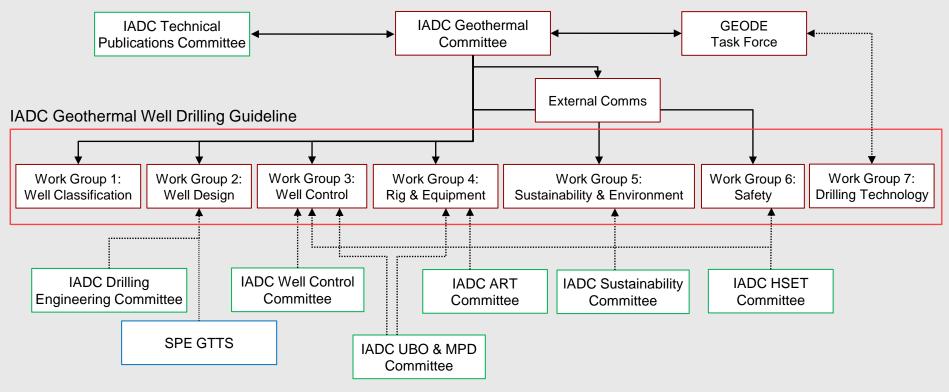
IADC Geothermal Drilling Conference

- 25th and 26th of March 2025
- Program Available on the website
- 27th of March 2025
 - Hydros Project Site Visit
 - Quarterly Geothermal Committee Meeting





Committee Organization





Work Group Status

Roll into related sections?

Classification	Well Design	Well Control	Rig & Equipment		Sustainability & Environment	Safety	Drilling Technology
Scott FARMER	Scott FARMER	Toney DEER	Alexa GONZALEZ			Bill KRULL	Alex VETSAK
Alexander HEGER	Alexander HEGER	Alexa GONZALEZ	Andreas KARKOSSA			Bruce GATHERER	Tony PINK (GEODE)
Bruce GATHERER	Dennis BREG	Bruce GATHERER	Bruce GATHERER			Paul NIEMANN	Diana TRONCO
Daria IVAKHNENKO	Diana TRONCO	Elliot HOWARD	Idris BEN-FAYED			others?	Gregory WALZ
Elliot HOWARD	Elliot HOWARD	Gregory WALZ	Scott FARMER				Marcus OESTERBERG
Kevin GRAY	Eric GONZALEZ	Haas MALIK	Tamas CSREFKO				Mitch DZIEKONSKI
Lars NYDAHL	Erwin BOERING	Idris BEN-FAYED	others?				Tamas CREFKO
Rafael WAGNER	François PENVEN	Izwan MEGAT		External (Comms		others?
Régis STUDER	Haas MALIK	Joshua GOSSANYI		Lars NYD			
Shaun TORALDE	Issa KALIL	Péter KAZAR					
Steve NAS	Joshua GOSSANYI	Steve NAS		Scott FARMER Shaun TORALDE Steve NAS Bill KRULL Kevin GRAY Alexander HEGER		Une de la control de la contro	
	Niels van der WERFF						
	Oumer TAHIR						
	Péter KAZAR						
	Robert RITSCHEL						
	Steve NAS						
	Suri SURYANARAYANA			. nontaind of		sustaina	



Work Group Planning

- To be launched following the publication of the classification (see next slides)
 - Well Control Work Group well underway
- First deliverable: <u>Section Planning</u> by Q2 meeting?
 - What areas of the classification are concerned by the section?
 - Section headings and rough contents
 - What it is and what it is not
 - · Other related standards or documents to consider
- Aim to have sections and guideline complete by WGC 2026? (June 2026)



Work Group Update – Classification

- Working Session held on 9th of January
 - Definition of each category discussed and agreed Well Control
- Status of document

Introduction	50%
Definitions	95%
 Complexity Calculator Introduction 	0%
Case Studies	25%
Complexity Calculator – Technical Appendix	0%

• Target publication in mid-February before GeoTherm





- Call for content for Q2 meeting
 - <u>scott.farmer@hpinc.com</u> or <u>lars.Nydahl@iadc.com</u>

