OWSG Minutes, ConocoPhillips, 1/24/18

Attendees

Paul Strohmeier, ConocoPhillips

- Avinash Ramjit, ConocoPhillips
- Son Pham, ConocoPhillips
- Nestor Sanchez, ConocoPhillips
- Jeffrey Mohammed, ConocoPhillips
- Dalas Deliu, ConocoPhillips
- Craig Dunagan, ConocoPhillips
- Pete Clark, Chevron
- Roger Goobie, BP
- Will Tank, Anadarko
- Michael Donohue, Devon
- Maarten Rodriguez, Oxy
- Paul Gupta, ExxonMobil (Phone)

Agenda

- 1. OWGP PU model update
 - a. Update on progress Steve Grindrod has made in incorporating the XCL terms into the OWSG PU model set
 - b. CVX outline their use of expanded set of OWSG models to standardize PU modelling
 - c. Open discussion
- 2. Potential for standardization on ISCWSA Collision Avoidance Rule & Practices
 - a. Need of standardized Collision Avoidance Rule & Practices
 - b. Outline ISCWSA Collision Avoidance Rule & Practices
 - c. Relationship between ISCWSA Collision Avoidance Rule & Practices and API RP78
 - d. Open discussion
- 3. API RP78 Update
 - a. Need of standardized wellbore positioning practices
 - b. Progress, Changes & Targets
 - c. Open Discussion
- 4. AOB

Anti-Trust Statement

- Read and acknowledged

OWSG mission

- Read and acknowledged

OWSG Set of Positional Uncertainty Models - Update

With partial funding from Chevron, Steve Grindrod has revised the set of OWSG models to incorporate the XCL terms that were agreed at the last ISCWSA meeting (#46) in San Antonio. These models are now available for use and adoption

Specification spreadsheets for sets A & B are available at http://copsegrove.sharepoint.com/Pages/OWSGSurveyToolErrorModels.aspx

Diagnostic files for both seat A and B are available at http://copsegrove.sharepoint.com/Pages/OWSGSetB.aspx

The following models do not incorporate the XCL terms; Blind, Zero Error, Blind + Trend, FINDS & Assumed Vertical

The following models do not incorporate the XCL terms due to the terms not being design for use with these models but may need to be adapted to in the future; Inc Only

Discussion followed on operator adoption, model testing, model distribution, maintenance & funding.

Outcomes

- Model testing remains an issue in the path of greater adoption. PC to take this to the Error Model Maintenance sub-committee for discussion
- Several of the operators' present have either adopted these models or are progressing with a transition / migration to greater adoption. No substantial issues were reported with their adoption other than the time institutional change can take to work through
- Discussion centered on making these models available through the OWSG section site within the ISCWSA website. PC to take this to the next ISCWSA meeting for discussion
- Suggestion that funding for maintenance might best be done by grant from the ISCWSA with the potential for voluntary contributions made by operators. PC to take this to the next ISCWSA meeting for discussion

Potential for standardization on ISCWSA Collision Avoidance Rule & Practices

Following publication of SPE 184730 & SPE 187073 sponsored by the ISCWSA the discussion concerned how best to progress the SPE papers into common practice. As API RP78 promotes proven practice it cannot standardize on something that would not be acceptable at ballot.

Outcomes

- Acceptance amongst those present that there was value in a unified approach to CA within the industry
- For wide adoption amongst operators' concerns were raised over two issues.
 - Survey interval as described in SPE 184730

- Testing of SF formula laid out in SPE 187073 as increase in confidence level is likely to make the calculations even more conservative from the calculations that many operators are currently using
- At least two of the operators' present plan to adopt the ISCWSA CA rule in the near future.
- Action PC to bring concerns to CA sub-committee at next ISCWSA meeting
- Request that operators test the ISCWSA CA rule to see what effect it's adoption would have on operations

API RP78 Update

- Section Lead changes
 - o Mary Malihpour taking over from Jordon Meyer on Database,
 - Michael Donahue taking over from Pete Clark on Planning & Engineering
 - Benny Poedjono taking over from Ed Dew on Operations.
- Steering committee
 - Section Leads plus
 - Ed Dew
 - Jordan Meyer
 - Paul Gupta
 - Maria French
- PC with work with Tim French, Will Tank and Mike Nero to frame and create content covering measurements & calculations
- Steering committee to help re-frame sections 4.4 and 6.1
- Roger Goobie to work with Ben Coco & Harold Bolt to reduce the content of the Depth QA/QC section
- Aprameya Murali Dhara kindly offered to do an initial reconciliation between section.
- Ben Coco & Pete Clark to document how to clean up the SharePoint site
- Steering committee to tidy up content posted to SharePoint
- Ben Coco & Pete Clark to have a biweekly call to keep updated on progress
- Steering committee monthly meeting / conference call

General Meeting (1/11/18) presentation is available on API SharePoint site.

- Proposed API RP78 timelines
 - End June '18 for 1st draft
 - End Dec '18 for document out to ballot
 - End Dec '19 for publication

<u>AOB</u>

- ISCWSA #47, Inverness, UK 3/10-11/18
- ISCWSA Well-Intercept sub-committee eBook now available
 - https://Inkd.in/gXpJSvT
- PU model interval depths

 An issue was identified by comparison of results from different directional software vendors that there was not a standard for application of a positional uncertainty model across an interval. Some software appears to assign the entire interval to the deeper PU model while another appears to assign half of the interval to each of the shallow and deep PU models. This can have a significant effect if the interval is large. PC to raise at the next Error Model Maintenance sub-committee meeting