

Focused Technology Workshop Report
“Paraffin, Asphaltene & Scale in Crude Oils: Theory, Problems and Solutions”
June 3, 2003; Holiday Inn-Meadowlands, Washington, PA

Assessment of the Workshop

This one was very difficult to assess. During the morning session, I personally was quite impressed at how well Dr. Alcocer involved the audience in the technical discussion and how he explained the theory of paraffin deposition. He divided the group into teams, and held a day long competition, assigning points for each question that was answered correctly. The students and faculty members especially seemed to warm to this approach, but the operators seemed a little reluctant, at first, to compete. However, once their team answered the first question correctly and their score was posted on the board, they became more involved.

I continued to be impressed throughout the morning with the quality of the technical presentation and the understanding that I was beginning to acquire concerning paraffin problems. This feeling continued until early in the afternoon, but then I began to realize that he would not be able to finish his course outline before the end of the day. This meant that he would not discuss scale problems, which are big in this basin, nor did it look like he would get to practical solutions for paraffin problems, and certainly not to solutions for scale problems.

This was particularly disturbing, because prior to the workshop he and I had discussed the focus that I wanted for this workshop. I told him that in this basin, paraffin and scale were big problems, so I wanted him to emphasize them, and suggest practical, cost-effective measures that could be taken to eliminate or reduce the problems. I also asked him to discuss what the operator should be looking for - early warning signs that a problem was beginning to occur before the well was totally shut down.

In his defense, he never totally agreed to do what I asked. He is convinced that to solve paraffin problems, one needs to understand the chemistry of paraffin deposition so that you can take preventive measures. He also believes that asphaltene, which I asked him to discuss only after he had discussed scale, is a bigger problem than most of us realize, and is so closely tied to paraffin that the two need to be discussed together. I yielded on this point, but still wanted him to discuss scale problems and solutions in detail.

Near the end of the day I began to be convince that we would not hit the mark on this one, and I could feel my early enthusiasm waning. I began to look at the faces of the operators who were in attendance, which is not a good thing, especially when they, also, began to look disappointed, even disgusted.

I found Dr. Alcocer to be a good lecturer, with a presentation style that affords constant reinforcement of basic principles he wants everyone to learn. However, I now believe that he needs at least a day and a half, maybe two days, to present this workshop in enough detail to cover early warning signs and practical field solutions to make it useful to operators.

Attendee List

Twenty three people pre-registered for the workshop, and only one failed to show, a Penn State student who overslept and was left behind by his classmates. Three producers showed up without pre-registering, so we had 25, plus two PTTC staff. Two faculty members and three students from Penn State did make the workshop, along with one professor and five students from West Virginia University. Three other registrants were from the West Virginia Geological Survey, so only 11 producers and service company representatives were among the 25 who were present, or 44% of attendees.

The list of pre-registrants/attendees is attached.

Evaluation Forms

Ten of the 11 producer/service company representatives submitted evaluation forms, along with 10 of the 14 registrants from the two universities and the geological survey. The industry registrants appeared to learned of the workshop through our mailings; the students heard of it in class. Two of the students indicated that they are consultants as well as students.

The “scores” awarded to the workshop were typically high, whereas several of the comments were quite negative. Two registrants in particular gave scores of one and two out of five for all three questions regarding the program, speaker and their expectations. The most negative comment was “The next one (workshop) this bad will be my last.” This person had attended 5 of our workshops and was pre-registered for the produced water workshop on June 18. However, he did not show up for the produced water workshop.

The comment that I agreed with the most was one that said “hoped to see more local paraffin solutions.”

Suggestions for future workshops included coal bed methane, gas storage, produced water problems, analysis of production data, Upper Devonian completion technology, latest technology developments in petroleum engineering. We already had announced our produced water workshop for June 18, and were in the process of organizing a coal bed methane workshop for October 29 and a workshop on collecting and organizing data, also in October.

The original evaluation forms are attached.