

## First morning of the Conference

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Topic: Miscellaneous

Tags: iea, peak oil, saudi arabia [list all tags]

The closing remarks tonight were made by a previous Governor of the State, who quoted Shakespeare's Henry V speech before Agincourt. And went on to say that we were seeing a part of a classic world-changing event. I counted 42 tables of 10 with standing folk at the back and in the balconies.

As I mentioned earlier, Tom Petrie gave the first talk, covering the situation in overview. While he looked at three levels of depletion 2.5%, 5% and 8% he largely concentrated on the first two, but pointed out that, on a global scale, this level of depletion, compounded over 5 years gives relative losses of 10, 19 and 29 mbd over current production. New projects he looked at gave the promise of between 13 and 22 mbd, and so you can see the range of permutations available. His pragmatic conclusion seemed to be that we would end up with a net gain of 3 mbd, but that any demand above that would likely be killed by the rise in prices.

Chris Skrebowski took over from this by pointing out that one of the large differences between his numbers and those of CERA related to depletion and project slippage, of which he gave examples. Pointing out that Total, Schlumberger and Exxon Mobil all used 5%, he wondered why CERA did not. By using his project numbers and 5% he concluded that we would be in trouble by 2008, and perhaps earlier now that we have had the losses in the GOMEX. Because of those losses, and the slippage that they have induced, he thinks we may already have seen the peaking of conventional oil. Bear in mind, that oil companies are not in business to spend money, but to earn it, and spending \$8 billion to find \$4 billion of oil is not in their interests (perhaps a dig at the IEA stated need for \$17 trillion to find the rest of the world oil resource). And with the large company production declining faster than small, the overall news was not that good. And just to rub this in, he ended by suggesting that depletion worldwide may now be approaching 7%, which gives current field productions of 79; 73; 68; 63 and 59 mbd of oil over the next 5 years.

In discussion it was pointed out that the production from different companies will operate under the rules of their best interests, not ours, and in Russia's case a slower rate from now on may be thus justified (along the lines of Brunei's argument). The point that was made is that in may cases we are trying to climb an escalator that has started to go down. And thus even standing still is a negative, and trying to remain in place also requires significant effort.

Chris had a nice response when asked about the IEA Outlook report and the opinion that it's conclusions were absurd. "You may say that, I can't possibly comment!"

The final thought on this part of the discussion was that at \$70 oil, in Europe it became more lucrative for farmers to grow crops for biodiesel than it would be to grow food. Which would perhaps lead to a certain degree of societal change!

Jeremy Gilbert, ex chief BP petroleum engineer, pointed out that there is a considerable difference in how different companies view Russia's capabilities, with only two (perhaps IHS and WM though he did not say) having any degree of optimism about the future of their exports. At present he felt that a 45% recovery ratio was the upper limit, though in very limited circumstances it could be higher).

And while he thought Matt Simmons was pessimistic the big decline in world production is no more than 8 years away.

Henry Groppe felt that the greater flow of natural gas liquids and the demand constraint imposed by higher prices will allow the world to get through a few more years of precarious balance. And as that price rises just over 25% of current demand, that is currently being used for power and heating, could be switched to alternate fuel to stretch the supply. He doubts that Saudi Aramco will ever produce much beyond 12.5 mbd since it would not be in their long term interests (given the need to provide a legacy for the future). Thus while peak conventional oil is about now, with NGL considered we may be able to stretch to 2010. In that time frame some demand displacement to other fuels will occur (China to coal for example), and so similar changes, and improvements in efficiency must be imposed if we are not to see a crisis.

The conference then heard a talk by a directional driller (of whom out of 1400 operating rigs in the country there are only 200 such). Charlie Brister is drilling in the Williston Basin, where production requires they drill a long horizontal hole in a layer of oil-bearing rock that is some 3 ft thick, and this some 17,500 ft below the surface. He used PDC bits at \$30k each and down-hole mud motors and MWD (of which I need to write more). There are no more MWD non-magnetic collars currently available and these are vital tools for horizontal drilling so, unless he wants to wait two years, he has to take really good care of the ones that he has; not to mention the tool pusher (who is 71, and the geologist who is 75). The current rig cost translates to \$21 a minute, so minor details like a blizzard that stops folk climbing the derrick, doesn't stop them continuing to drill, even if it lasts 3 days and no relief crew arrives. Did we mention that it is hard to find good new help?

He was followed by John Barnes who is one of 5,000 independent drilling operators who drill some 90% of the wells in the US. 68% of the oil and 82% of the gas wells. He reminded us that we are having significant problems maintaining a natural gas supply (Matt Simmons later pointed out that we are way past Peak Natural Gas). His average well has gone from 8,000 ft deep to 15,000 ft deep and he drills one mile out. As with some of our other correspondents he bewailed a 48% rise in drill day rates, a 243% rise in steel casings; 64% fuel cost increments and 25% increase in the cost of mud.

Matt Simmons spoke at lunch, and began by noting that Saudi Aramco was sitting on about 200 billion barrels of oil in reserve, that they were about to discover. (One number you might want to store away a 1 billion barrel field can produce around 250,000 bd as a rough rule of thumb). He drew attention to today's news that Kuwait's major field was being reported as exhausted. And he mentioned that Schlumberger are moving to a world depletion number that is getting closer to 8 - 10%.

At which point I had to quietly slip away and so I would hope that one of the others there (Stuart and Dave were able to be there and Stuart proved that he takes much better photos than I). I would point out that I shared an elevator with Melody Chase of "The Oil Storm" and she, and the cast of that movie, were apparently much changed in their attitudes as they made it, and then saw the consequent reality.

More will follow tomorrow (and my question didn't make it high enough up the pile). But I was left with a good quote "we are not going to find a silver bullet, but we can survive with a lot of silver BB's that will do the same job."

I can only apologise that space and the wealth of the material available did not allow me to do full justice to any of these talks, and to suggest that you visit the ASPO America website to download the presentations.

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