

**From:** Ratzel, Arthur C  
**Sent:** Monday, October 18, 2010 9:36:45 AM  
**To:** Dykhuizen, Ronald C  
**CC:** Tatro, Marjorie; Ratzel, Arthur C  
**Subject:** Ratzel hopefully final draft of flow report

**Attachments:** flowrpt\_10-17-10 draft.docx



flowrpt\_10-17-10  
draft.docx (3  
MB)

Ron – I would appreciate if you would make the final internal review pass and then it goes out for full review.

I need you to also redo some of your analyses in the report, working with an upper bound of 53K bopd rather than 51K. Why? – everyone else is quoting our 53K as the shut-in flow rate based on the July 30-31 meetings and Government press release and I think to be consistent, we should stay there as well. I thought hard on working to 51K and decided we should use 53K calling it our **upper bound estimate** (which is true if I believe the pipe flow results for choke line). I frankly do not want any backpedalling on numbers, and as you and I are both aware, 53 or 51 are equally suspect – if we were to continually refine our work, as example, we would be using 1600psi, not 1800 psi based on the continuing refinements by Hseih right around July 30-31.

One other place I would appreciate your careful critique is the Conclusions section – I added 2 paragraphs to close and want to see if you agree.

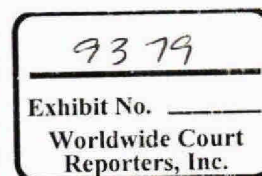
I know you are busy – I certainly have been – what you have here is Sunday night's last (hopefully) major review by me to assure consistency and to add in missing references and results. If you can push this out today (**PLEASE TURN ON Mark-up OPTION**) and back to me (do include Charlie's other comments as well that you have been holding), then I will get it out tonight for final review by the principals at LANL and LLNL.

Art Ratzel

Margie – Don't review just yet – let's get a review document finalized with Ron's edits first. Just wanted you to know I have filled in the blanks.

THERE ARE A FEW THINGS I NEED YOUR HELP ON – (1) SOMEONE TO MAKE THIS INTO A SAND REPORT OR A P/T THAT I CAN GIVE TO THE FMOC TECH WRITERS and (2) I THINK YOU SHOULD VISIT WITH MARK SOGGE TO APPRECIATE WHETHER WE NEED TO VET THIS WITH BOEMRE OR DOE LEGAL, ETC, ETC, ETC. MARK HAS BEEN VERY CAUTIOUS IN HOW/WHAT THEY WILL RELEASE

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