

## HLWYM HEmails

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**From:** Jude McMurry  
**Sent:** Tuesday, December 11, 2007 12:22 PM  
**To:** John Bradbury  
**Subject:** RE: Ping?-2

True. The Saturated Zone Flow and Transport Model Abstraction cites a "geometric mean flowing interval spacing of approximately 21 m".

As far as zippingly fast goes--yes, sounds like "true" again... In Arnold and Kuzio (2002), DOE presents an SZ matrix diffusion sensitivity case that uses the geometric mean (~21 m) value in the base case -- and it produces a breakthrough curve that is nearly identical to the no-matrix-diffusion case. In other sensitivity analyses, in the SZ Flow and Transport Model Abstraction AMR, DOE uses the 95th percentile value for flowing interval spacing ( = 79.4 m) to show--no surprise there--that it also produces a breakthrough curve very close to their no-matrix-diffusion SZ case. (They also report, but don't show the example, that the 95th percentile value for fracture porosity gives a similar curve compared to no-matrix-diffusion.)

-- Jude

-----Original Message-----

**From:** John Bradbury [mailto:JWB@nrc.gov]  
**Sent:** Tuesday, December 11, 2007 10:12 AM  
**To:** Jude McMurry  
**Subject:** Re: Ping?

Yes, I'm working on it now. BTW, I remember that the fracture spacing in the volcanic aquifer was large, I think, 22m. What do you remember? Couple that with the fracture porosity estimate and you could get minimal surface interface and significant aperture, resulting in zippingly fast transport.

>>> Jude McMurry <[jmcmurry@cnwra.swri.edu](mailto:jmcmurry@cnwra.swri.edu)> 12/11/2007 10:46 AM >>>  
Hi, John,

Gentle ping, at that, but we are hoping to have at least rough copy by mid-December (i.e., end of this week) from everyone who is writing something up for the Matrix Diffusion workshop report. Will you have a chance to summarize your presentation about KTI items and caveats by then? Depending on your schedule, hope you can help!

Jude

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**From:** Jude Mcurry

**Created By:** jmcmurry@cnwra.swri.edu

**Recipients:**  
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