

From: [Mike Carlson](#)
To: [Reservoir Containment](#)
Subject: AER Draft shallow caprock criteria
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Steve,

These are professionally prepared videos on fluid hammer effects. Probably not directly related to a SAGD well, however, they are really well done.

This is for a valve closure and is similar to the CATHENA results shown in my papers:

<http://youtu.be/X9UbzcanuDk>

And this is a classic condensation induced water hammer (CIWH) and presents similar material to what is in ARE's SAGD videos.

<http://youtu.be/-z6W1uiKFSQ>

The clear steam system is really quite impressive.

Mike

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