

From: Cherry, Brian K  
Sent: 6/22/2012 9:22:00 AM  
To: Clanon, Paul (paul.clanon@cpuc.ca.gov)  
Cc: Cooke, Michelle (michelle.cooke@cpuc.ca.gov); Halligan, Julie (julie.halligan@cpuc.ca.gov); ejh@cpuc.ca.gov (ejh@cpuc.ca.gov)  
Bcc:  
Subject: RE: San Bruno OII Testimony Heads-Up

Not sure. I suspect sometime before or after it was put in. I don't have his final testimony yet.

**From:** Clanon, Paul [mailto:paul.clanon@cpuc.ca.gov]  
**Sent:** Friday, June 22, 2012 9:16 AM  
**To:** Cherry, Brian K  
**Cc:** Halligan, Julie; Cooke, Michelle; ejh@cpuc.ca.gov  
**Subject:** Re: San Bruno OII Testimony Heads-Up

Surprising. Pressure-tested when?

On Jun 22, 2012, at 8:58 AM, "Cherry, Brian K" <BKC7@pge.com> wrote:

Paul/Julie/Michelle/Jack - Later today, PG&E will be filing testimony in the San Bruno OII that includes a number of witnesses. One witness, Robert Caligiuri, Pd.D., is an expert metallurgist. Mr. Caligiuri concludes in his testimony that the root cause of failure in pipe Segment 180 was: 1) a missing interior weld; 2) a ductile tear likely caused by a hydro test to about 500 psig; 3) fatigue cracking that grew from the ductile tear slowly over time, reducing the pressure that could trigger a failure at that location to about 386 psig – below the 400 psig MAOP of Line 132.

It is the second item I wanted to alert you to. In Mr. Caligiuri's testimony and in that of Jane Yura, PG&E will also note that the test protocol we are using for our current hydro tests would have revealed the missing interior seam on Line 132. We will also state that we are hydro testing pipelines like Line 132 at a pressure 1.7 times MAOP, with a spike test to 10% above this pressure test. In the case of Segment 180, PG&E's current test protocol would subject the pipe to a spike test of 748 psig and a test pressure of 680 psig – both well above the pressure that

would have burst the defective pipe.