A message from Don Potts:

WSDA-Grain Inspection has outfitted all of our offices with the latest machines and peripheral equipment in order to take out the human error factor, including new grinders for each office. The Eastern Washington offices are running three machines in Pasco, two in Spokane, and two in Colfax.

We weigh up our 25 ml of distilled water each morning to ensure that the water dispenser is correctly measuring out 25 ml. We have an automatic shaker in each office that shakes the sample 20 times in order to take out the variability of different employees shaking the sample. We have found that the Directive 9180.38 for falling numbers describes scraping the slurry down the sides of the test tube but doesn't say how to do it or how many times so as a group, including FGIS, we settled on scraping the tube six times as you turn the test tube. We found that if you don't scrape at all you will get a lower falling number and there was a difference at two versus six so we also removed that variability.

Each office also puts the flour in the test tube first followed by the water even though the Directive states that you can do it either way, again, we standardized the process. Now what we have left is just the machine running the test and dropping the viscometer tubes through the slurry of paste created by the flour, water, and boiling water after being stirred 110 times. According to the Directive, if you are a delegated or designated agency by FGIS, and you have a Falling Number apparatus that holds two viscometer tubes, you must perform duplicate tests at the same time and average the results. If the results differ by more than 5% plus or minus, we have to run the sample again. Unofficial inspection offices are not bound by this Directive.

We have found that standardizing the FN procedure has helped with the repeatability when a retest is requested. A retest is when the original office that ran the falling number runs another test from the sample that has been saved in our file bottle. Legally, we keep the sample for three days after the certification date on the grain certificate so a retest needs to be requested very quickly after looking at the results. This is different than a backup sample that is sent from the grain elevator because we may not still have the grain in the file bottle. Those are considered a new original inspection and may or may not be close to the original result, it depends upon how the sample was handled and whether or not a boerner divider was used to split the sample to ensure sample integrity.