Subject: NR-1
From: Zachary Conway <zac22@cornell.edu>
Date: Mon, 30 Mar 2009 09:32:53 -0400
To: Genfa Wu <genfa@fnal.gov>

Genfa,

There is good news and bad news.

First the good. NR-1 still has a good low field Q. The cavity quenched on the equator weld and did not quench on the niobium oxide.

The bad news... I measured the quench field to be 22MV/m at 1.75K and 21MV/m at 1.95K.

If you still want me too I will look inside the cavity later today.

The q-curve is attached. After quenching the cavity at 21MV/m the Q decreased and I did not remeasure the q-curve. All data points expect the last one correspond to the first power rise in the cavity. The last data point is after ~20 quenches and it was measured at a much lower temperature.

Prior to testing the cavity received:

1hour ultrasonic cleaning at 105F and 25kHz.
10 rinses
1hour ultrasonic cleaning at 75F and 25kHz.
4 hour HPR.

Best Regards,
Zack