

Mark Basile Progress Report, August 2014

I presently have seven samples of World Trade Center dust and am going through the material screening for particles of interest. Five samples have been screened completely. Two are still ongoing and expected to be completed in about a month.

A number of the samples have red/gray chips of various size and composition using EDX (energy dispersive x-ray) for analytical comparison. Some images are attached as Figures 1a through 1d which show chips from a few of the samples with scale bars to show the size range of the chips being found. The samples all contain materials that were melted including iron based microspheres and/or spheres and droplets of silicate based materials such as glass and asbestos fibers.

Once visual screening and sorting is completed the red/gray chips will be evaluated for the presence of reactivity with production of molten iron. A video of one chip reacting and producing molten iron products is available on the web. Iron droplets from that chip are shown as Figure 2a and 2b. A number of chips have been screened, but more need to be evaluated. The goal here is to find the best candidates for outside facility work.

The thermal screen test has been changed from my early system which was a stainless steel resistive heater strip that could heat the particles being screened, to a small tube furnace where the chips in a container are heated to 450 degrees C in air or nitrogen. This change was made due to the loss of several chips in the heating process with the early system. The lost chips "flew" off the heater in less than a frame interval while being videoed. Frame capture rate was 15 per second with particle there in one frame and gone the next.

Once the best candidates are found, work will move to the phase where funds will be expended using independent facilities. Once funds begin to be spent monthly accountings will be made, no funds have been spent and all will be accounted for publicly.

I understand some of you are frustrated at the apparent lack of progress, but please patient I am trying to be methodical and careful with the work and not waste any of the much appreciated donations.

I am interested in obtaining as many samples as possible. Anyone interested in donating a sample can contact dust4evidence@gmail.com to discuss your sample. If after the discussion phase your sample is to be accepted for work then shipping information will be provided.

Sincerely,

Mark Basile

Figure 1a, A Red Gray Chip, Side View Showing Red and Gray Layers



Figure 1b, A Few Red Gray Chips from a Single Sample

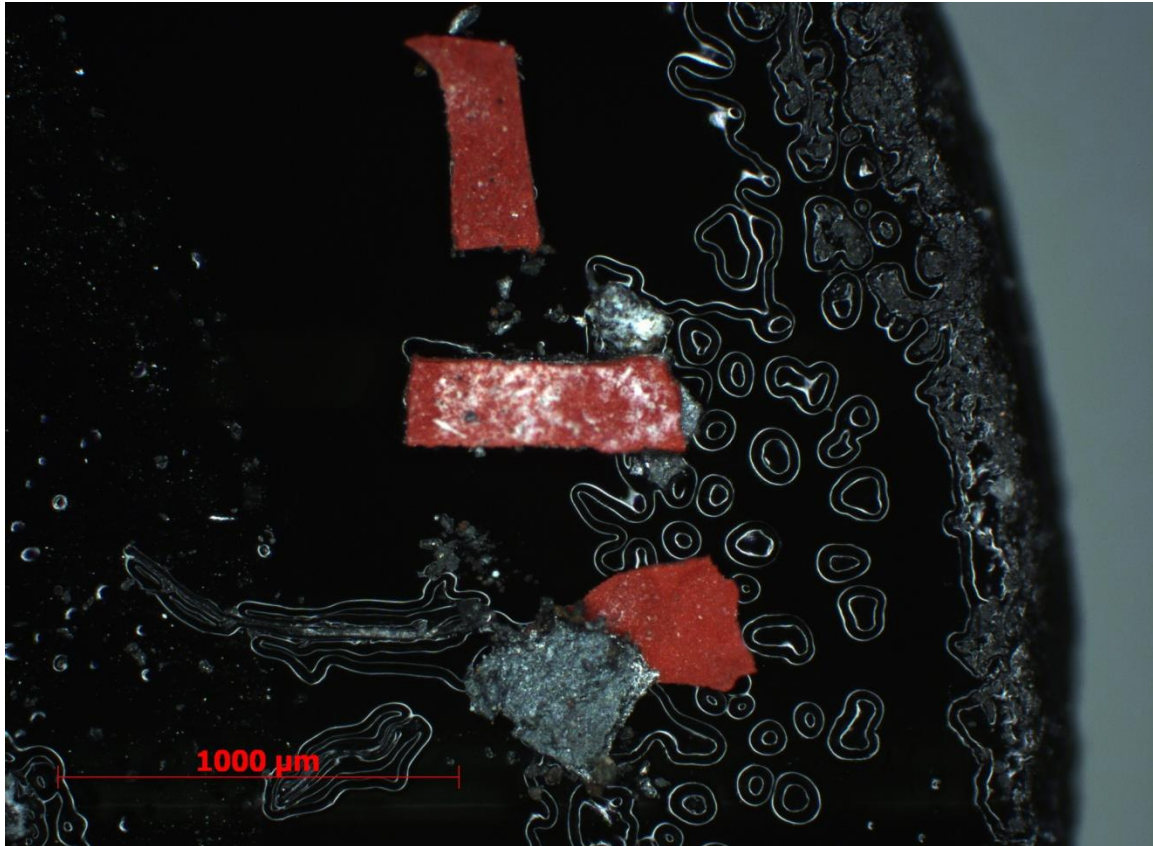


Figure 1c, A Red Gray Chip, with Freshly Cleaved Red Layer Surface

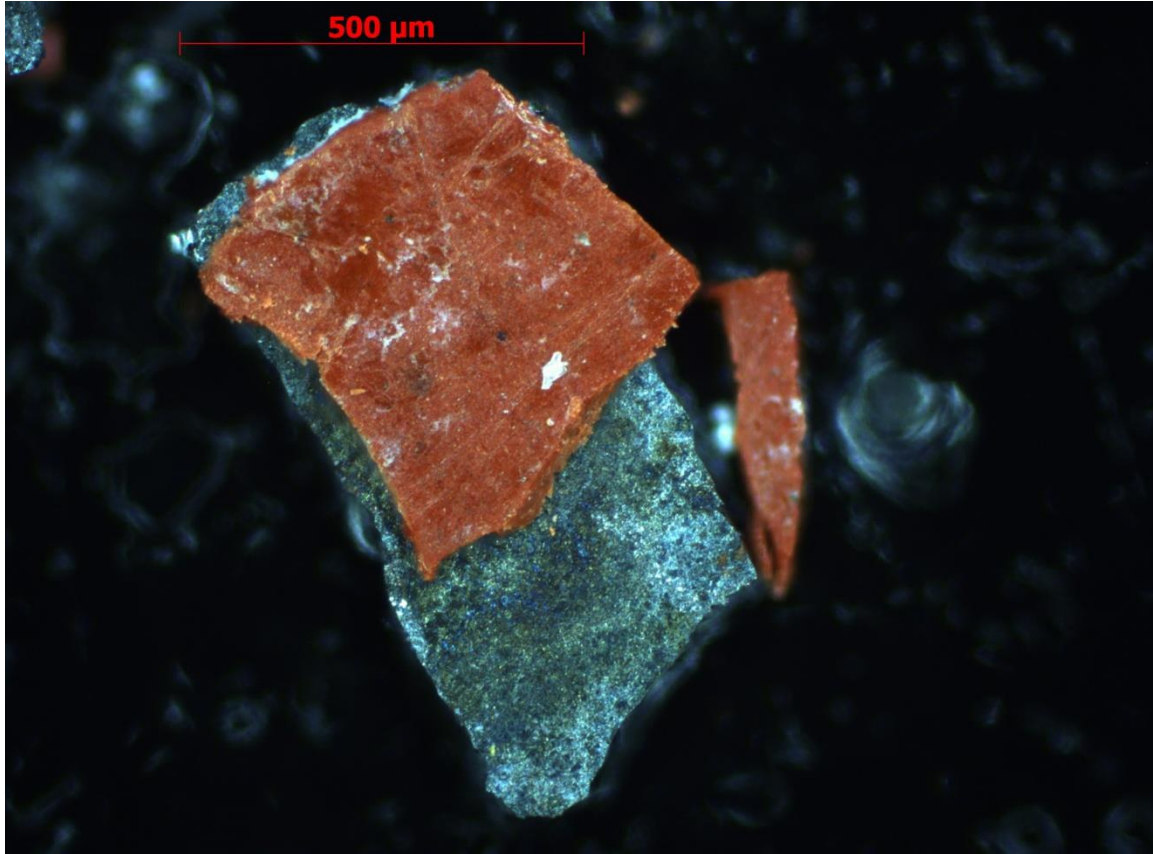


Figure 1d, Red Gray Chip Prior to Reaction, Iron Based Droplet Reaction Products Shown in Figures 2a and 2b

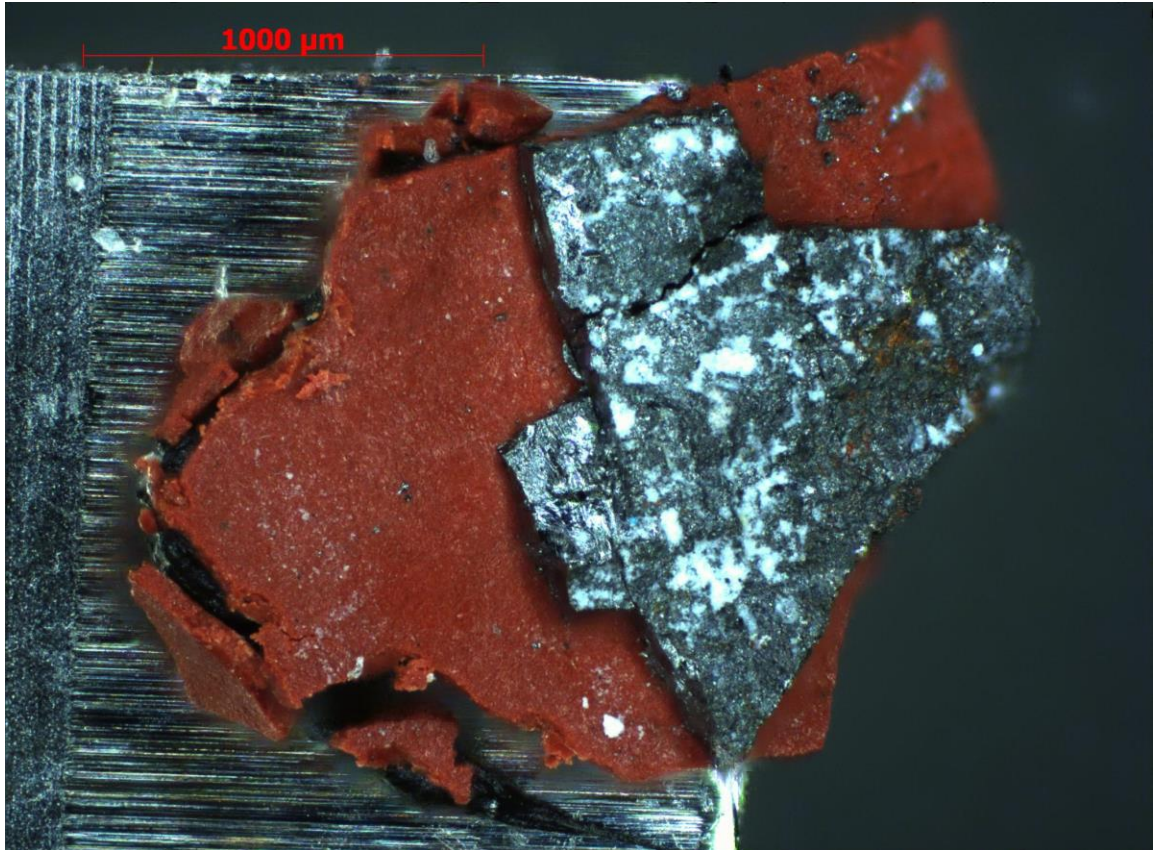


Figure 2a, Iron Based Droplets from Reaction of Red Layer of Chip in Figure 1d
Droplet circled in Red

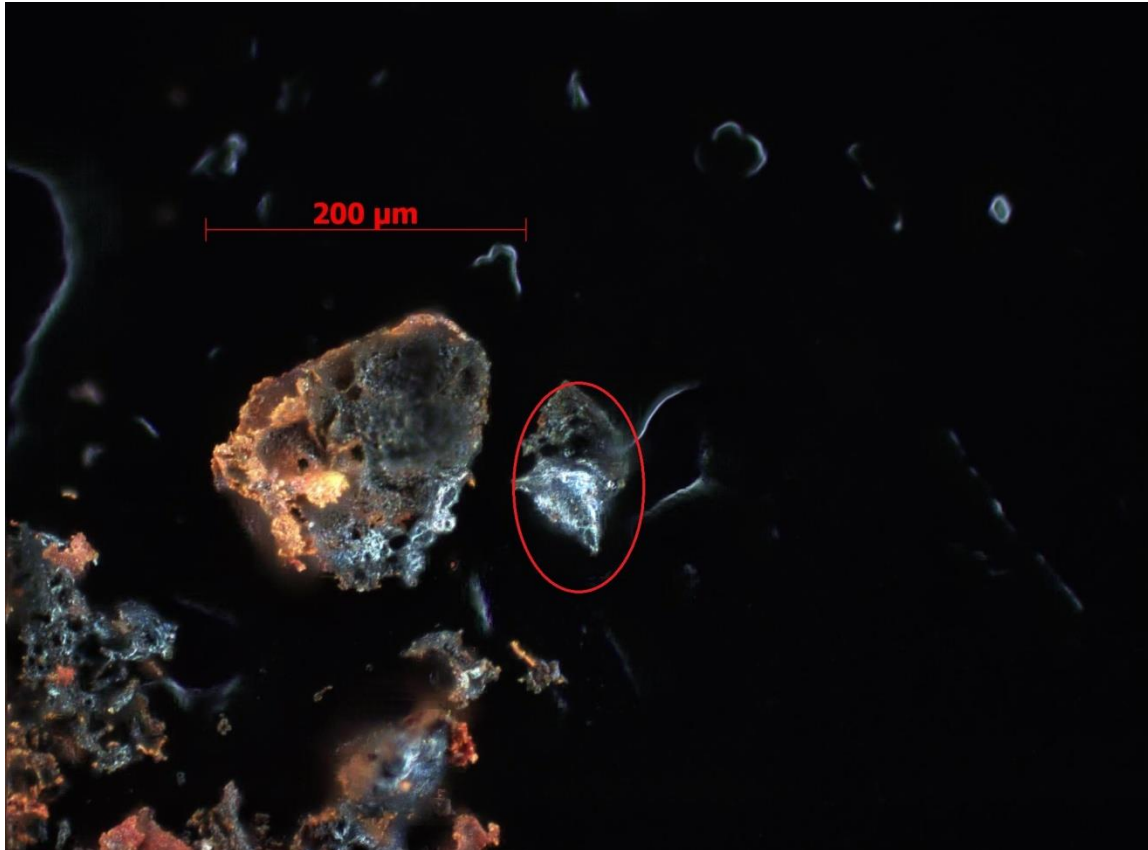


Figure 2b, Iron Based Droplets from Reaction of Red Layer of Chip in Figure 1d
Droplet circled in Red

