

Cometary Cell C2009

Images

Aerogel Cell: [C2009-02.jpg](#)
[C009_T1_20x.jpg](#)

Cell History: Cell C2009 was removed from the cometary grid in March 2006.

Track Information: This cell had several notable tracks. The cell was transferred to the University of California at Berkeley where keystone were generated resulting in tracks 56 - 63, 70 - 72, & 77.

Feature Images

Allocation History

Results

Log Entries

Note: All track / features (e.g., T1) numbers assigned during the Level 3 scanning are to be considered “**Temporary**” and in do not relate to the “Official” track number that is assigned when a given features is extracted (e.g., Keystoned) from a tile. Abbreviations: EH – Entrance Hole, TP – Terminal Particle, MTW – Maximum Track / Bulb Width, TL – Track Length.

03-17-06 T.H. See & J Warren

Level 3 of the third extraction should proceed in the following order: C009, C038, C092, & C086.

C009 J. Warren mounted tile C009 in the Level 3 fixture without incident. System configured as outlined at the top of this document.

C009 Depth Profiles began at 9:45 am.

Found two (2) track for sure and possible a third small track. One is on the very front edge of the tile while the other is on the back edge. Thus I may rotate the tile to get a good image of this known second feature. System was zeroed with X on the right side of the slide that is touching the aerogel on the left end of the tile and the Y-cross hair level with the bottom of the aerogel tile.

C009-T1 – Appears to have entered the top of the tile on the very front edge and not at the exact top surface of the tile (see images). Nice terminal particle and several other particle scattered down the main track as well as several bifurcated tracks associated with this feature. Feature located ~14.8 mm from left end and ~1.6 mm in from the front surface. Track is ~ 3.1 mm long. Smallest portion of entry-hole measures ~ 52 μm across while the MTW ~ 400 μm in diameter. Terminal particle at the bottom of the track is on the order of 10 to 15 μm across or in diameter. Image taken of at least five nice particles associated with this track, all at least 10 μm in diameter.

C009-T2 – Not visible from side view but found during a look at the top surface. Entry hole on the order of ~100 μm in diameter. I will try to image with white light or after I flip the tile. Located ~23 mm from left end and 10.3 mm from the front surface.

C009-T3 – Small track nearly obscured by mottled texture on the tile surface. Entry hole on the order of 50 μm across. Track is $\sim 800 \mu\text{m}$ in length. Located $\sim 32 \text{ mm}$ from left end and 7 mm from front surface.

C009-T4 Located $\sim 27.5 \text{ mm}$ from left end and 16.7 mm from front surface. Track measures $\sim 1.8 \text{ mm}$ in length. Several terminal particles visible at the end of the track both $\sim 10 \mu\text{m}$ in diameter.

C009-T5-7 – Extremely small tracks, a cluster of three (3) just to the left of T3 and closer to the front surface by a mm or so, possibly less. Hard to judge from angle of view. Lengths appear to be 230, 250, & $\sim 380 \mu\text{m}$ in length.

C009-T8 – Small track on the order of 670 μm in size.

C009-T9 – Another smallish track on the order of 1058 μm in length. Terminal particle does appear to be present. MTW on the order of 33 μm .

C009-T10 – Small track near the right end of the tile. Appears to have small terminal particle present, but hard to verify for sure. Track is on the order of 850 μm in length. MTW of $\sim 40 \mu\text{m}$

The tile was view from 15 degrees below the top surface looking upward into the tile, and numerous very, very, very small tracks could be seen scattered about the tile. Most appeared to be on the order of 100 to 300 μm in length and with the tiles mottled surface, these entry holes will be extremely hard to find when viewed from the top.