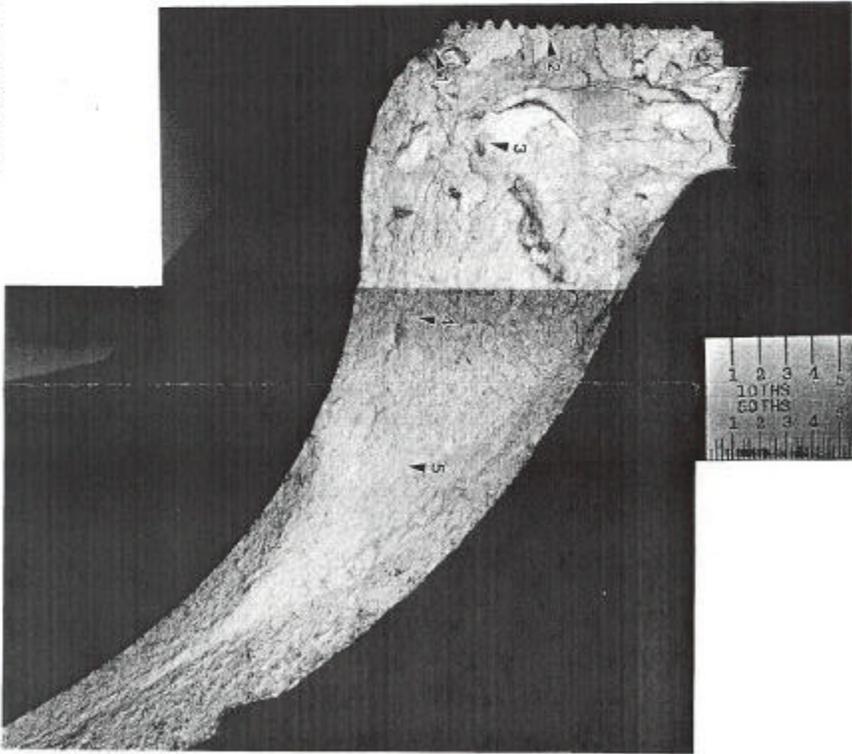




Figure 6: Photo montage of the fracture surface at the neck from fragment 2A, photo id DC18128-R3E1.2,3,4
Regions 1 through 5 represent areas for further study.



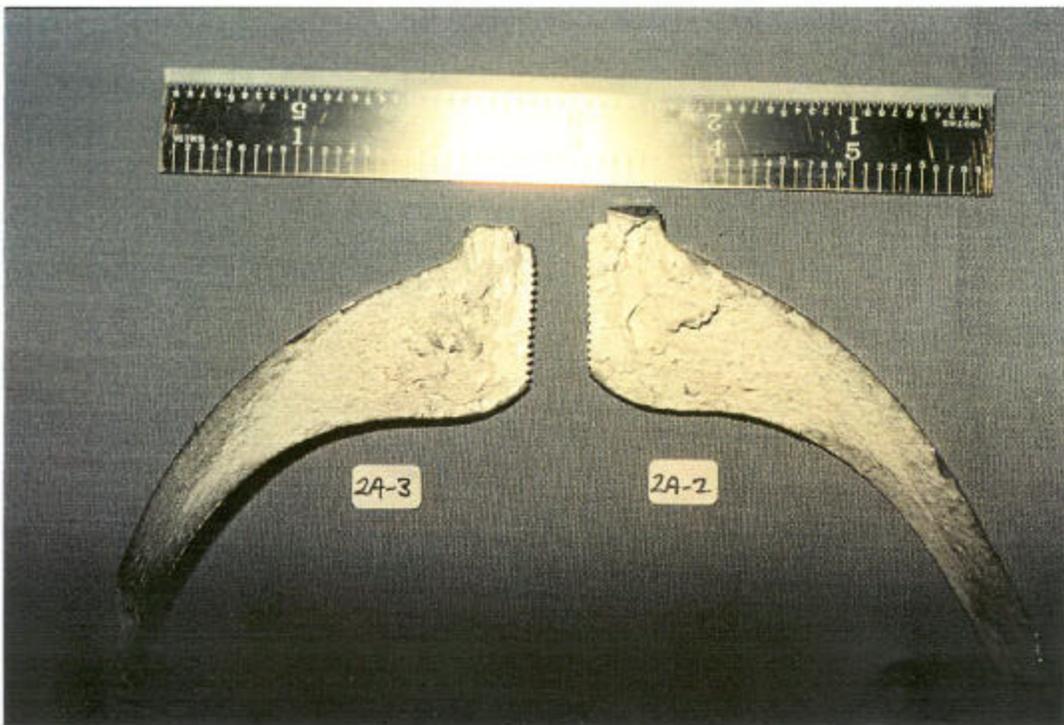
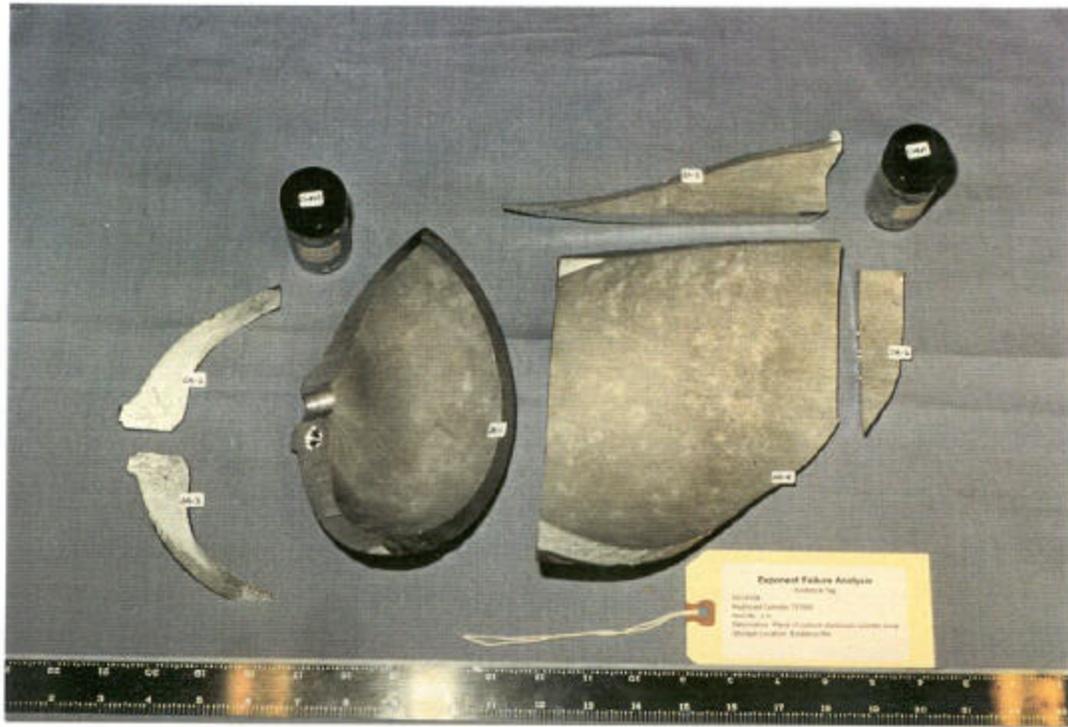


Figure 7: Sectioning of fragment 2A

(a) Overall view. Photo ID: DC18128-R3E2

(b) Close up of neck region. Photo ID: DC18128-R3E11

Note: the fracture surface portions that were removed and the drilling taken to determine chemical composition.

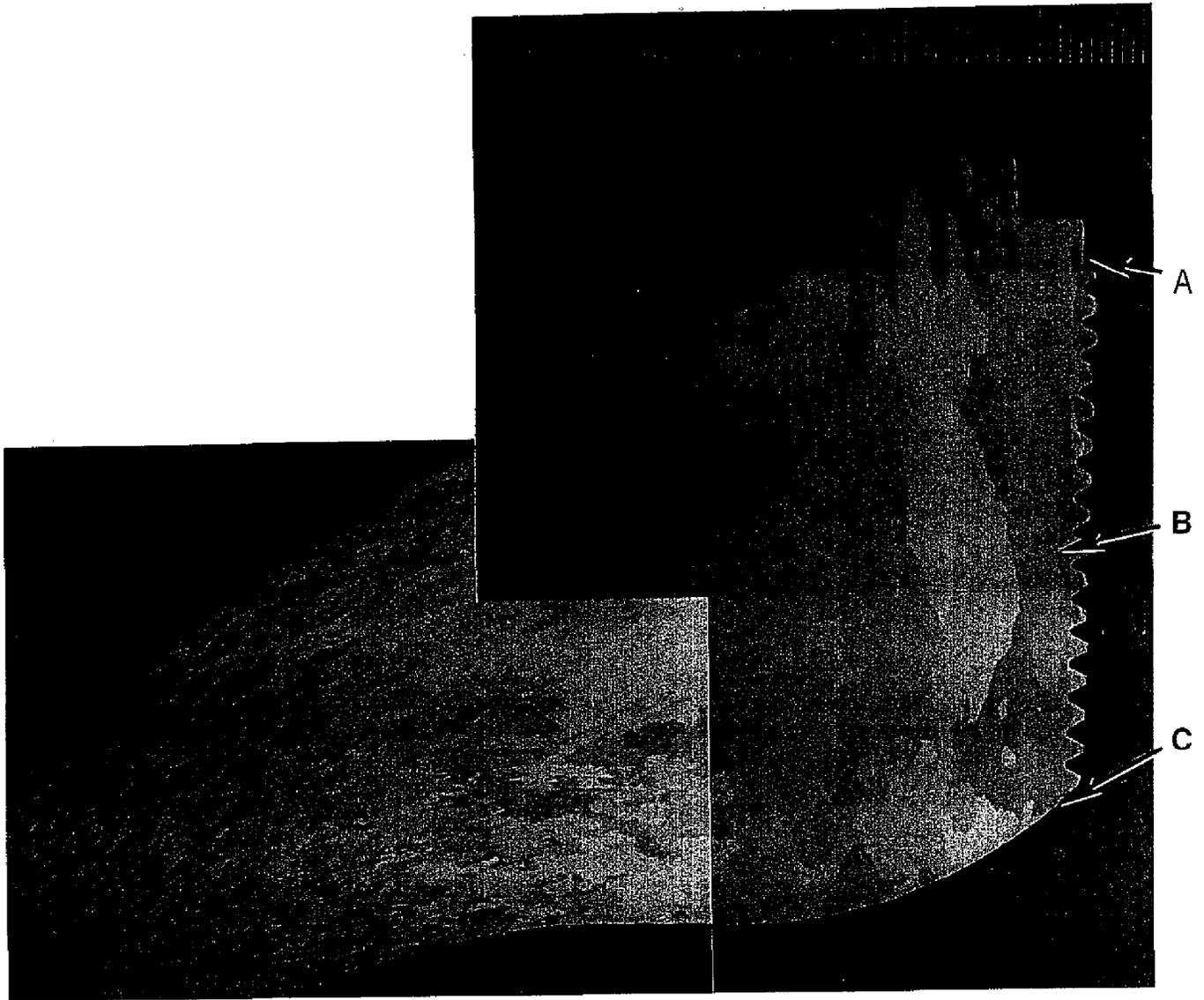


Figure 8: Section 2A-1A showing the microstructure in the neck region. Note the scale is in 0.05 inch increments. HF-H₂SO₄-H₂O etch. Photo ID: DC18128-PAL-1,2,3 8/5/98. Regions A, B, and C are investigated further in figures 9, 10, and 11.



Figure 9: Section 2A-1A region A, photo montage. Photo ID: DC18128-Pa12, 3, 4 8/7/98.



Figure 10: Section 2A-1A region B, photo montage. Photo ID:
DC18128-Pal10, 11 8/7/98.

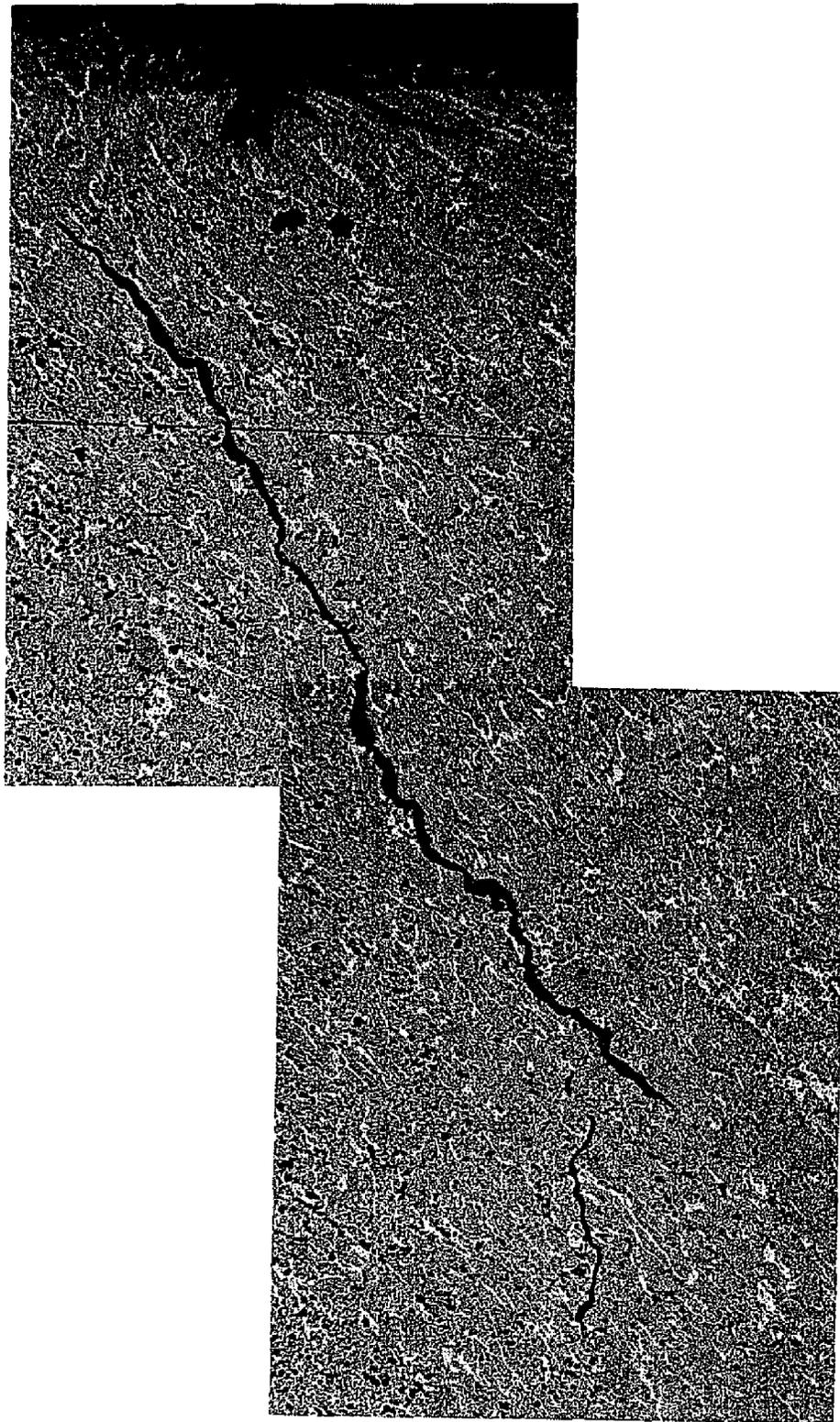


Figure 11: Section 2A-1A region C, photo montage. Photo ID: DC18128-Pal6, 7 8/7/98. Note the discontinuities in the crack.

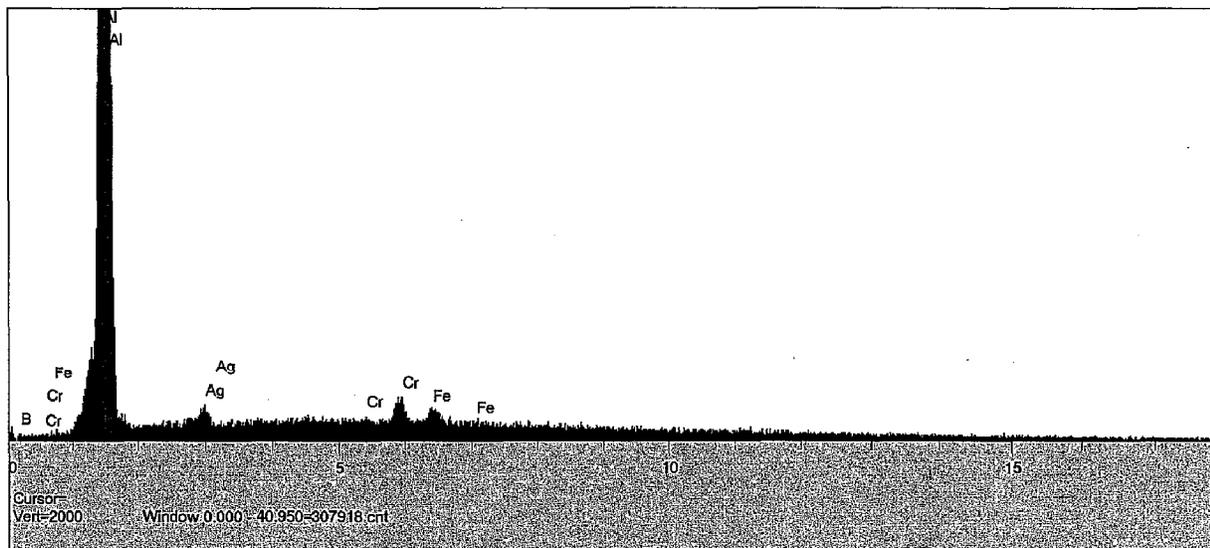
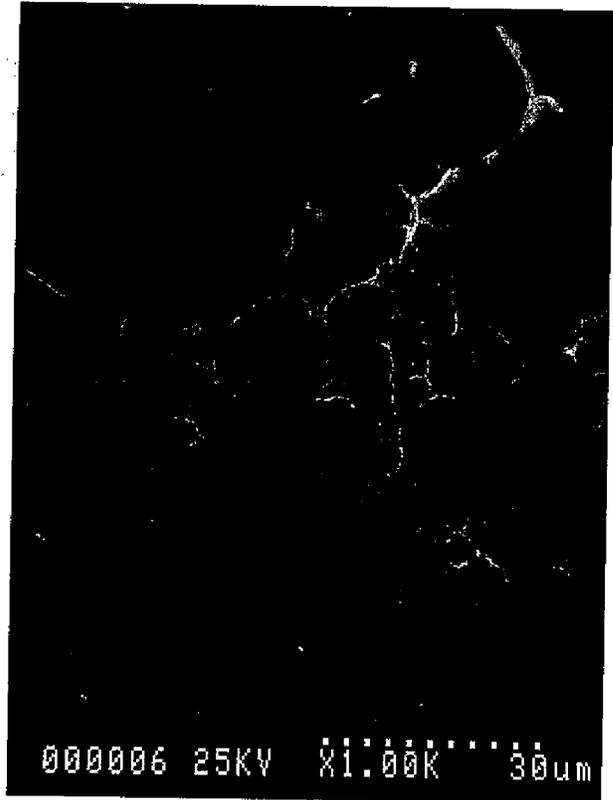
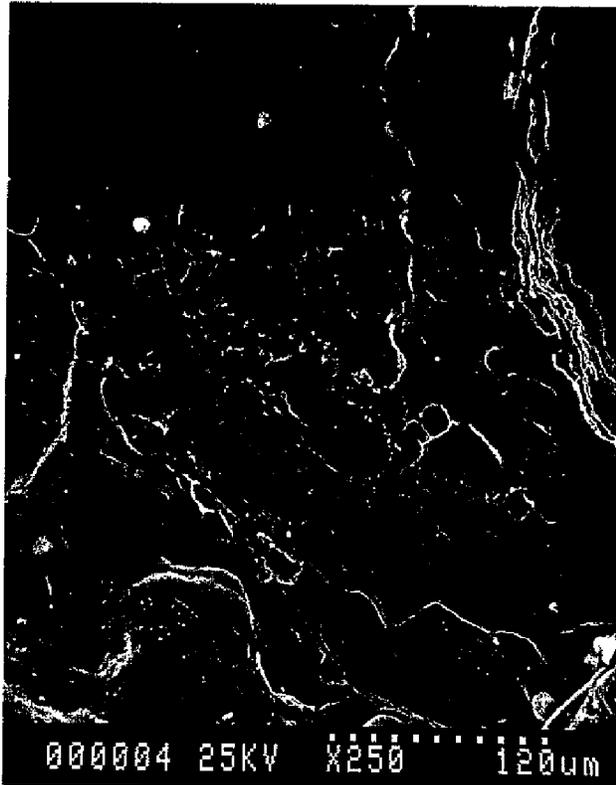


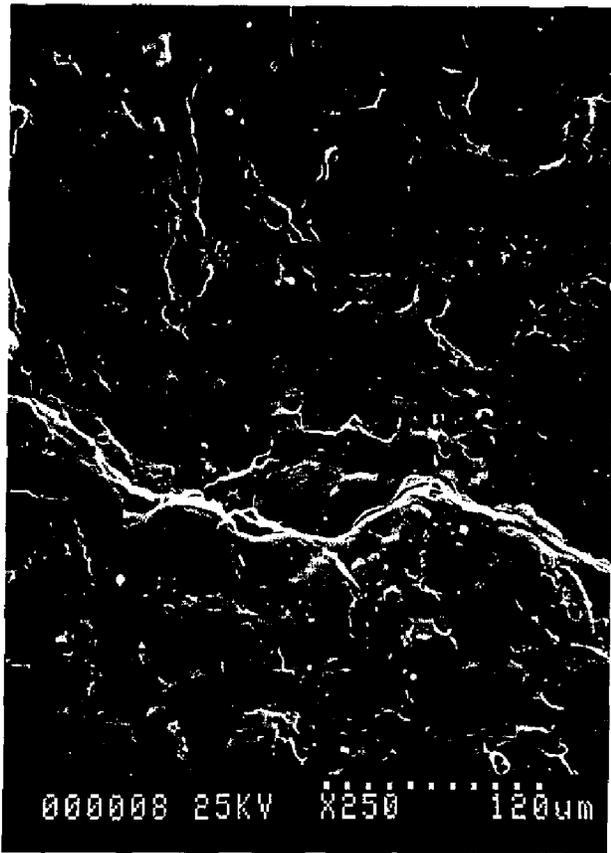
Figure 12: Energy Dispersive Spectrum taken near the corrosion product in the thread region.
Photo ID: DC18128 10/6/98 2:19:43 PM



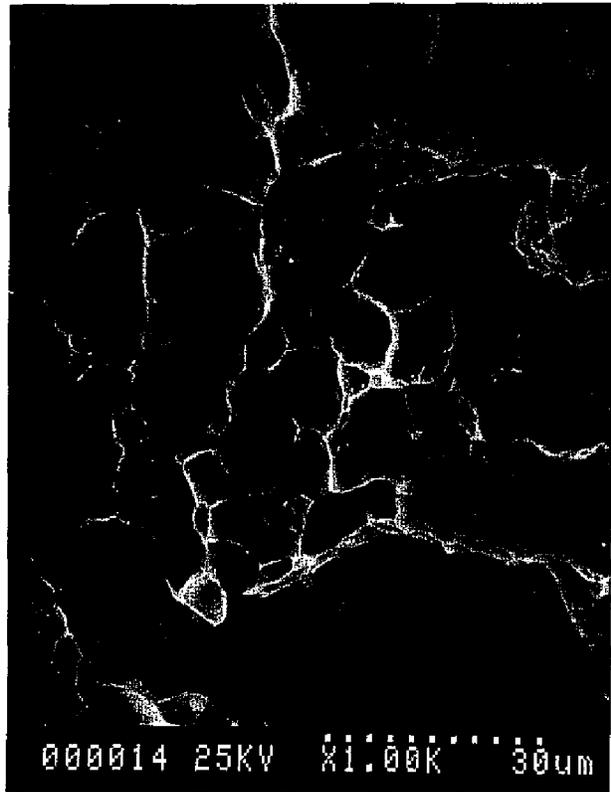
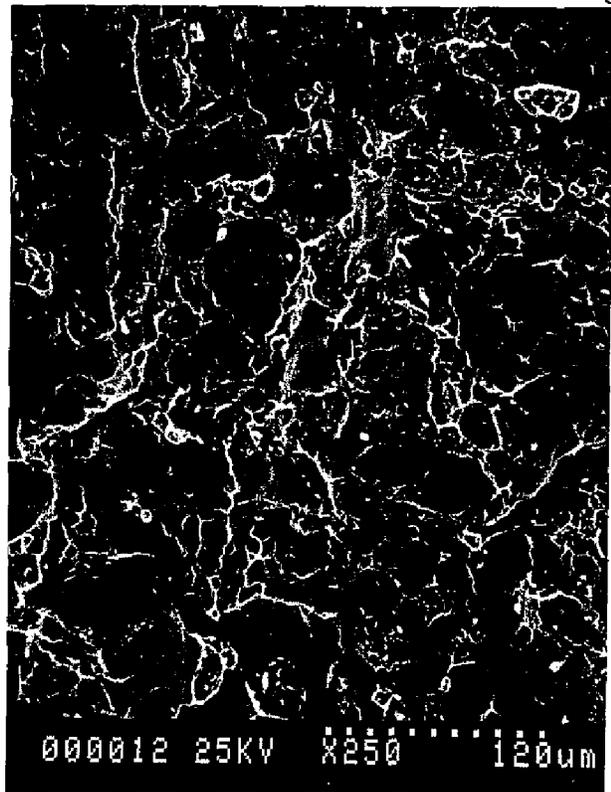
Region 1

Figure 13: Fractography of section 2A-2. Regions 1 through 5 are delineated in figure 6.

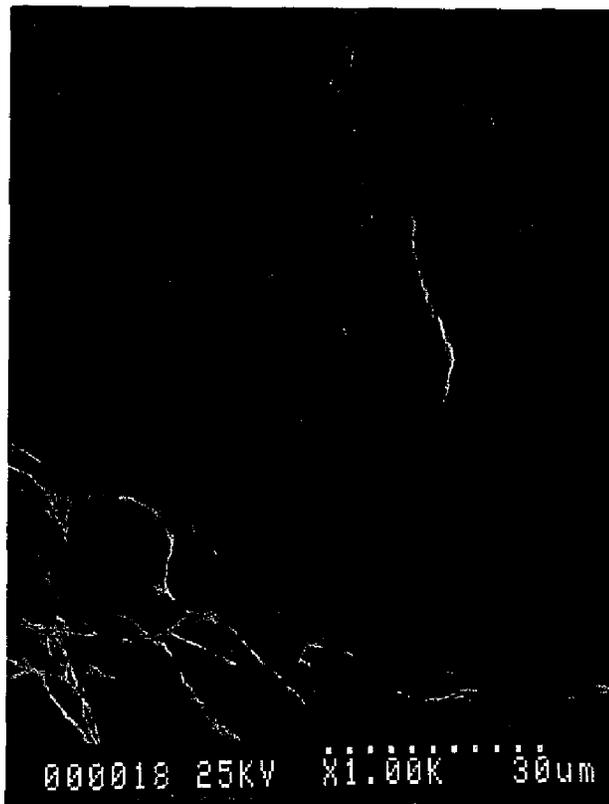
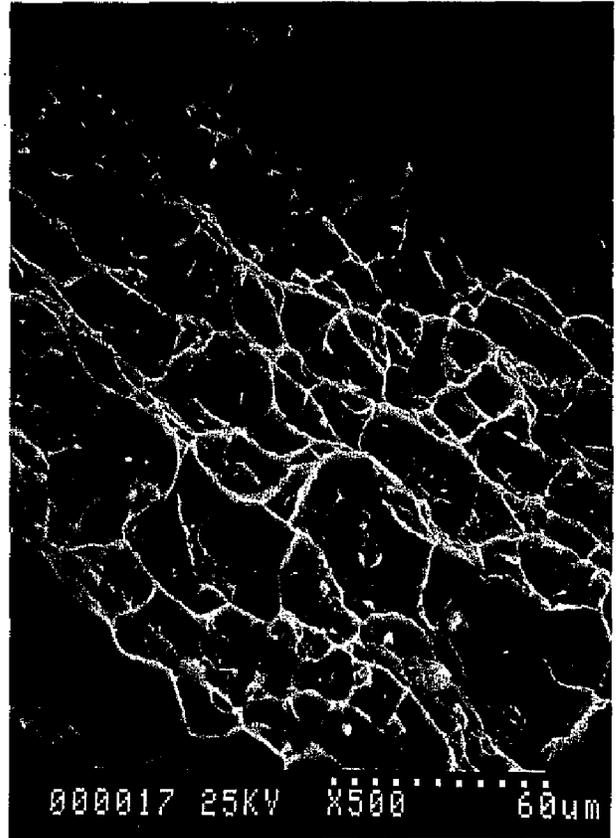
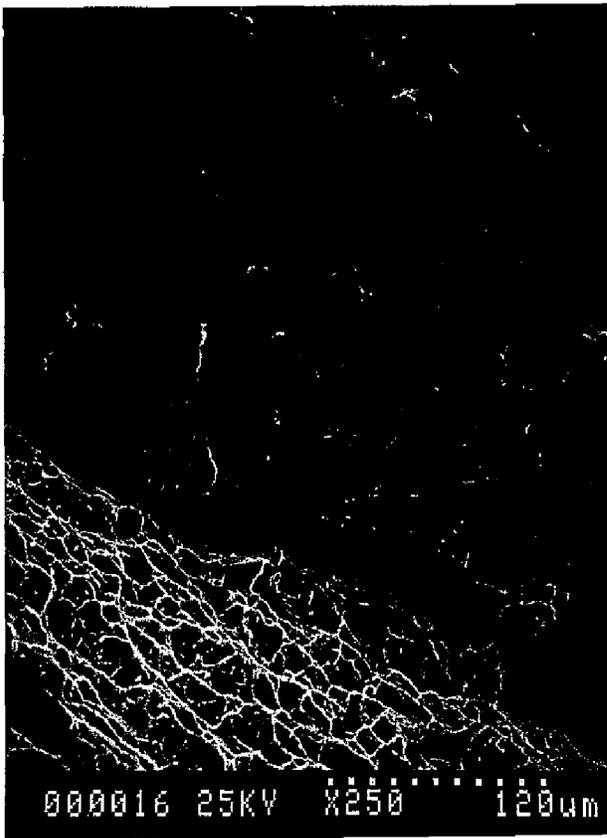
- | | |
|--|--|
| (a) Region 1. 250X. Photo ID: DC18128-PAL4 6/25/98 | (i) Region 4. 1000X. Photo ID: DC18128-PAL18 6/25/98 |
| (b) Region 1. 1000X. Photo ID: DC18128-PAL6 6/25/98 | (j) Region 5. 250X. Photo ID: DC18128-PAL20 6/25/98 |
| (c) Region 2. 250X. Photo ID: DC18128-PAL8 6/25/98 | (k) Region 6. 1000X. Photo ID: DC18128-PAL21 6/25/98 |
| (d) Region 2. 1000X. Photo ID: DC18128-PAL10 6/25/98 | |
| (e) Region 3. 250X. Photo ID: DC18128-PAL12 6/25/98 | |
| (f) Region 3. 1000X. Photo ID: Dc18128-PAL14 6/25/98 | |
| (g) Region 4. 250X. Photo ID: DC18128-PAL16 6/25/98 | |
| (h) Region 4. 500X. Photo ID: DC18128-PAL-17 6/25/98 | |



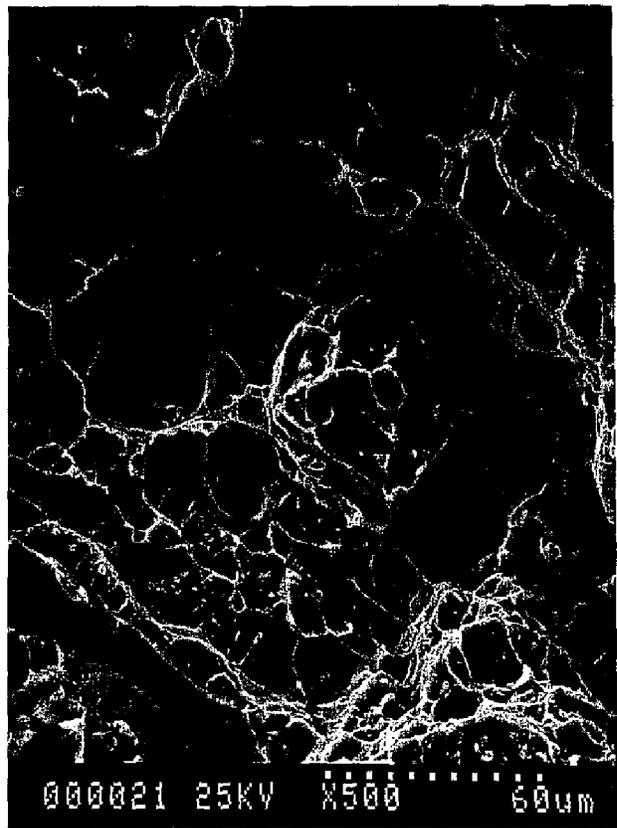
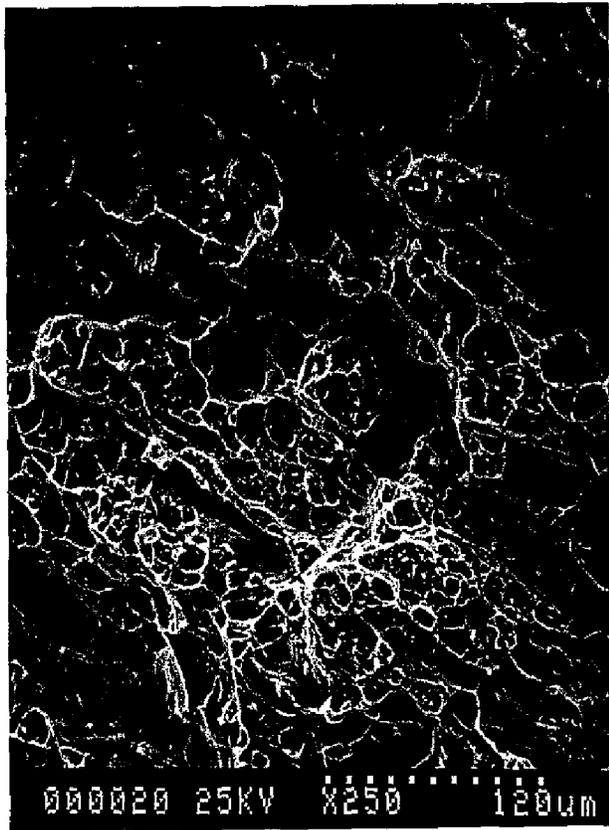
Region 2



Region 3



Region 4



Region 5