



(a)



(b)

Figure 5. Sectioning of fragment 1.

(a) Cut separating neck region. Photo ID: DC18344-R8E6.

(b) Sectioning of the neck region. Photo ID: DC18344-R10E4.

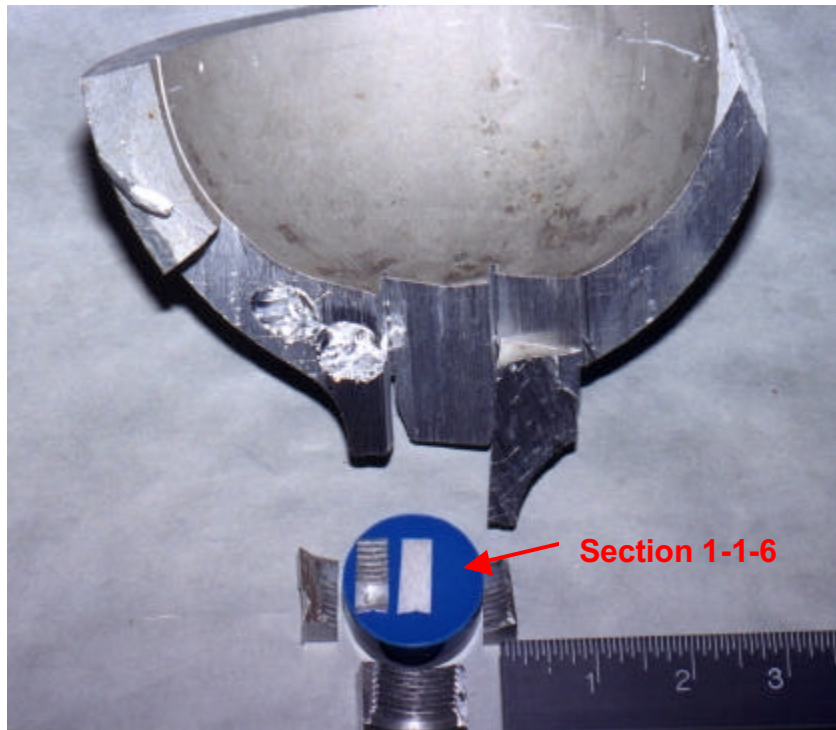
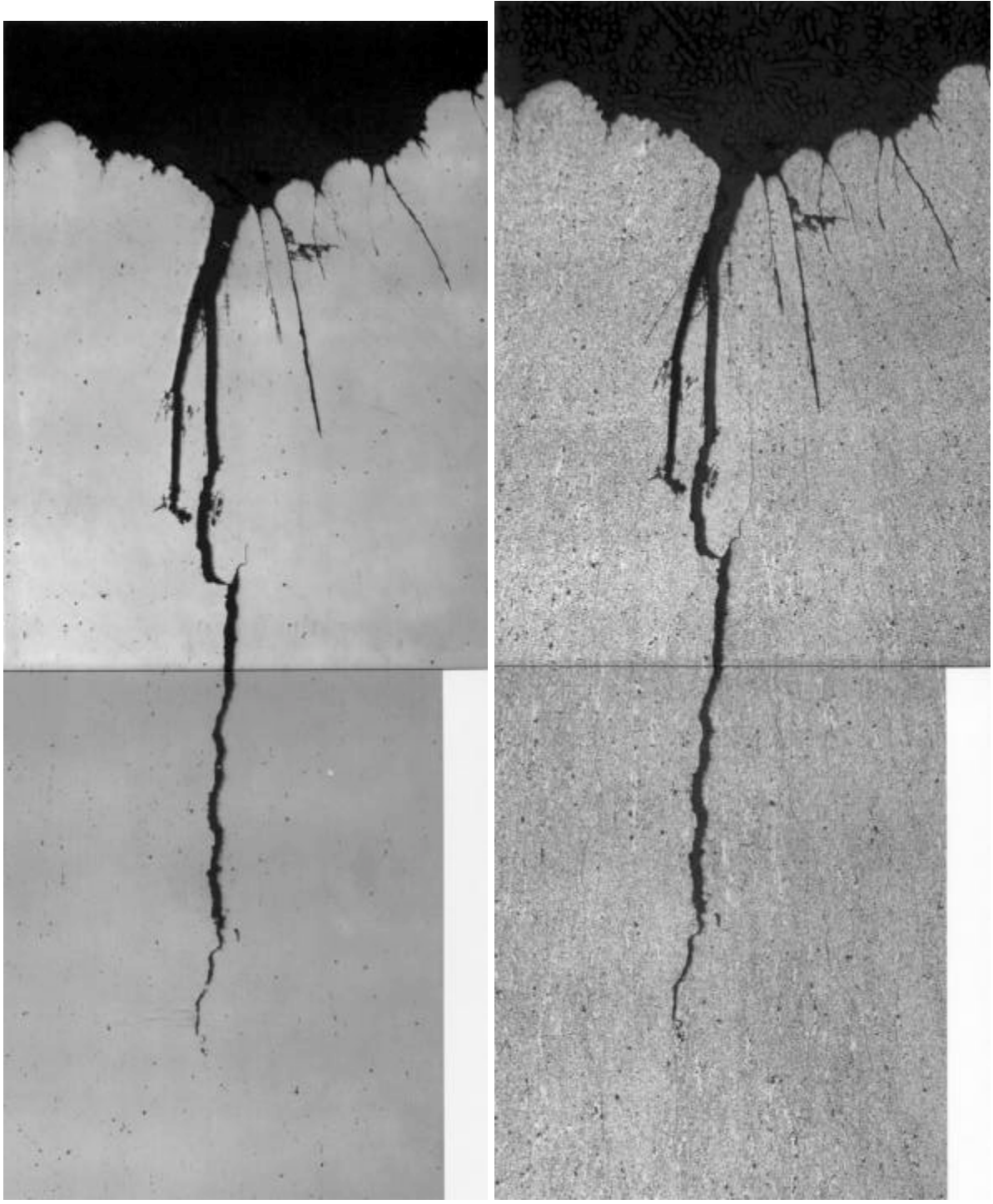


Figure 6. Further sectioning of fragment 1. Photo ID: DC18344-RE.



Figure 7. Microstructure of the neck region. Photo ID: DC18344-PAL-4,5,6-8/30/00.



(a)

(b)

Figure 8. Micrographs of crack C1 in the neck region. 100X.

(a) Unetched. Photo ID: DC18344-PAL-2,3-9/11/00.

(b) Etched 1% HF (aqueous). Photo ID: DC18344-PAL-4,5-9/11/00.

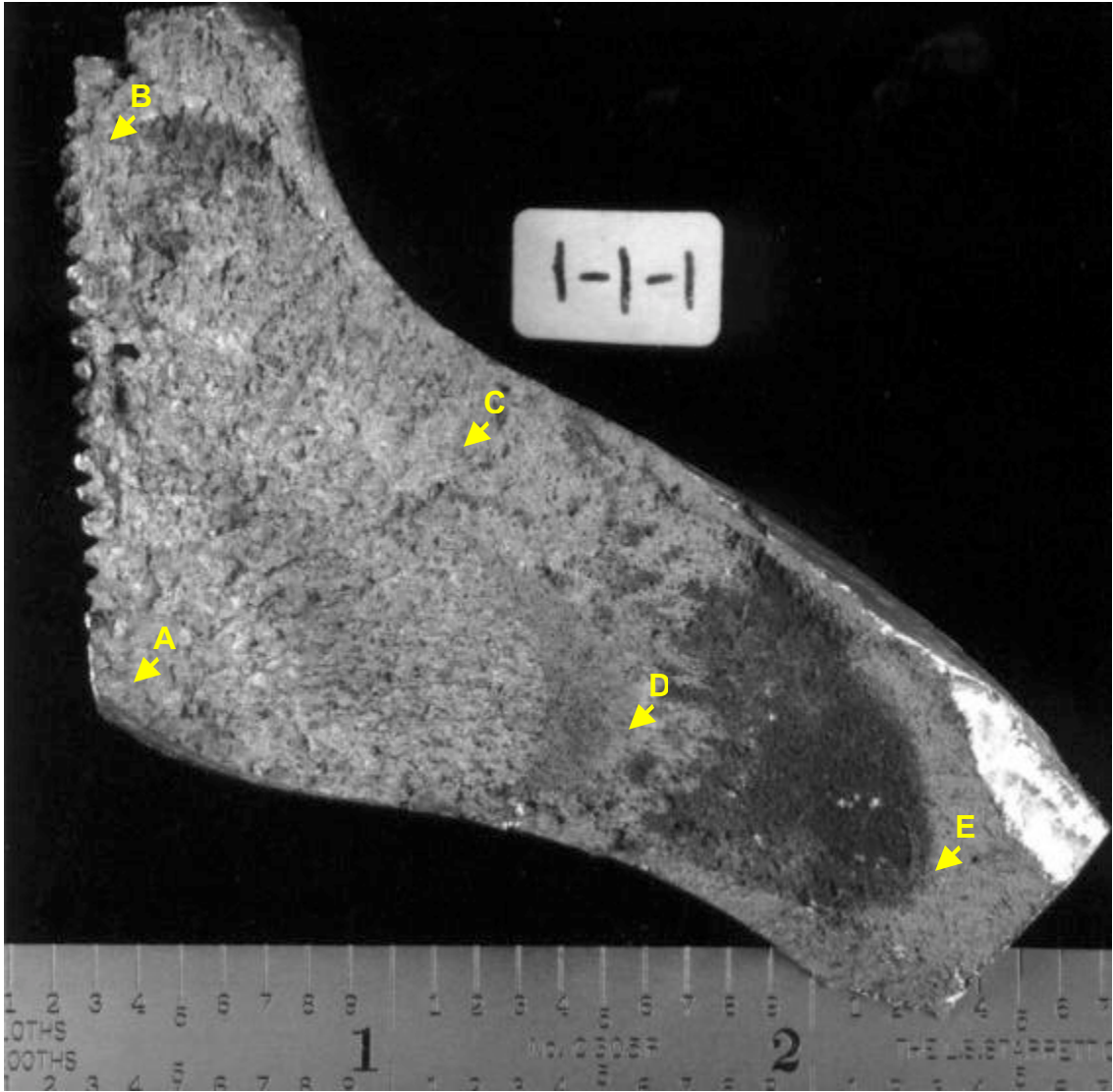
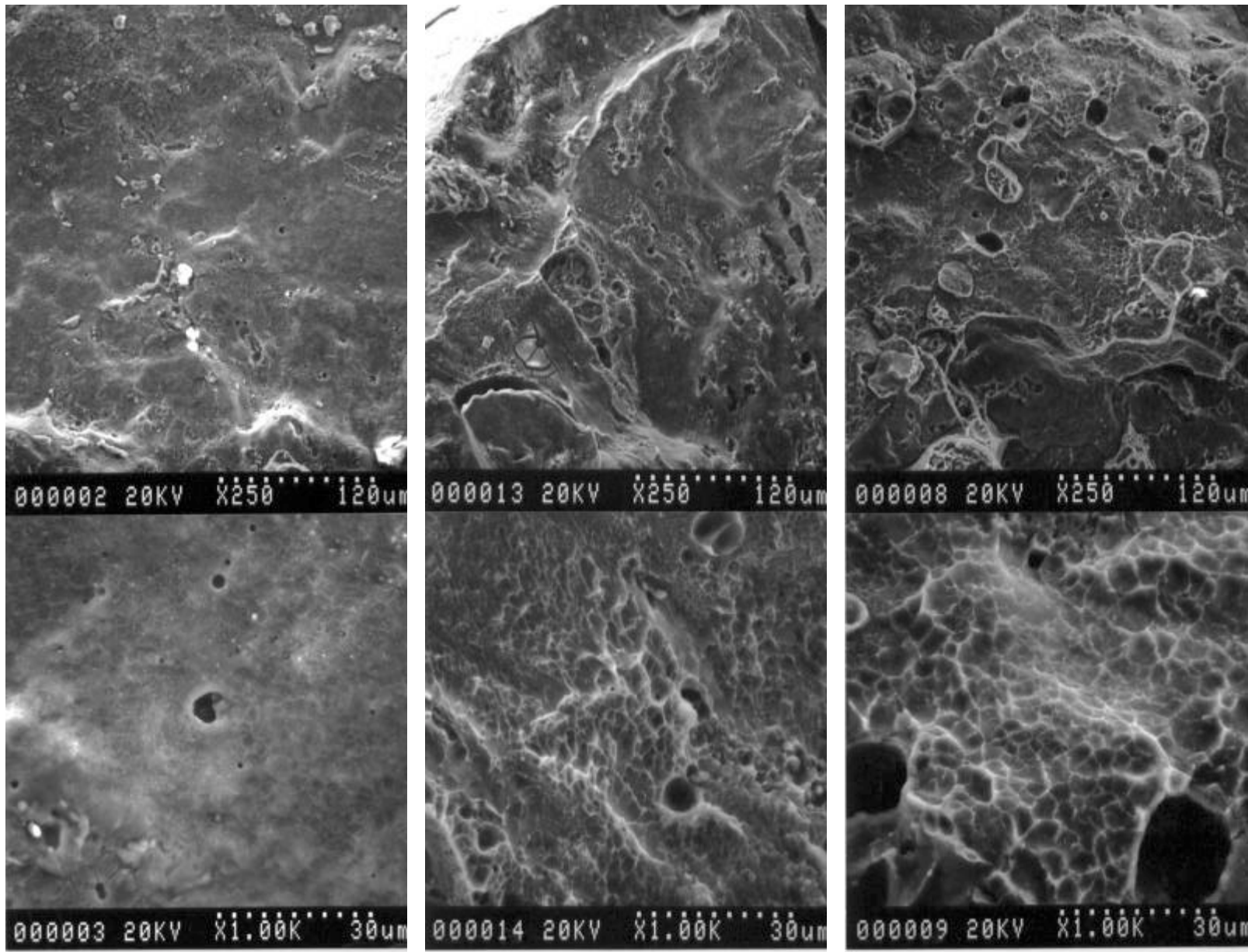


Figure 9. Fractograph of section 1-1-1. Photo ID: DC18344-CEM-3-8/28/00.



(a) Region A

(b) Region B

(c) Region C

Figure 10. SEM fractographs from regions shown in Figure 9.

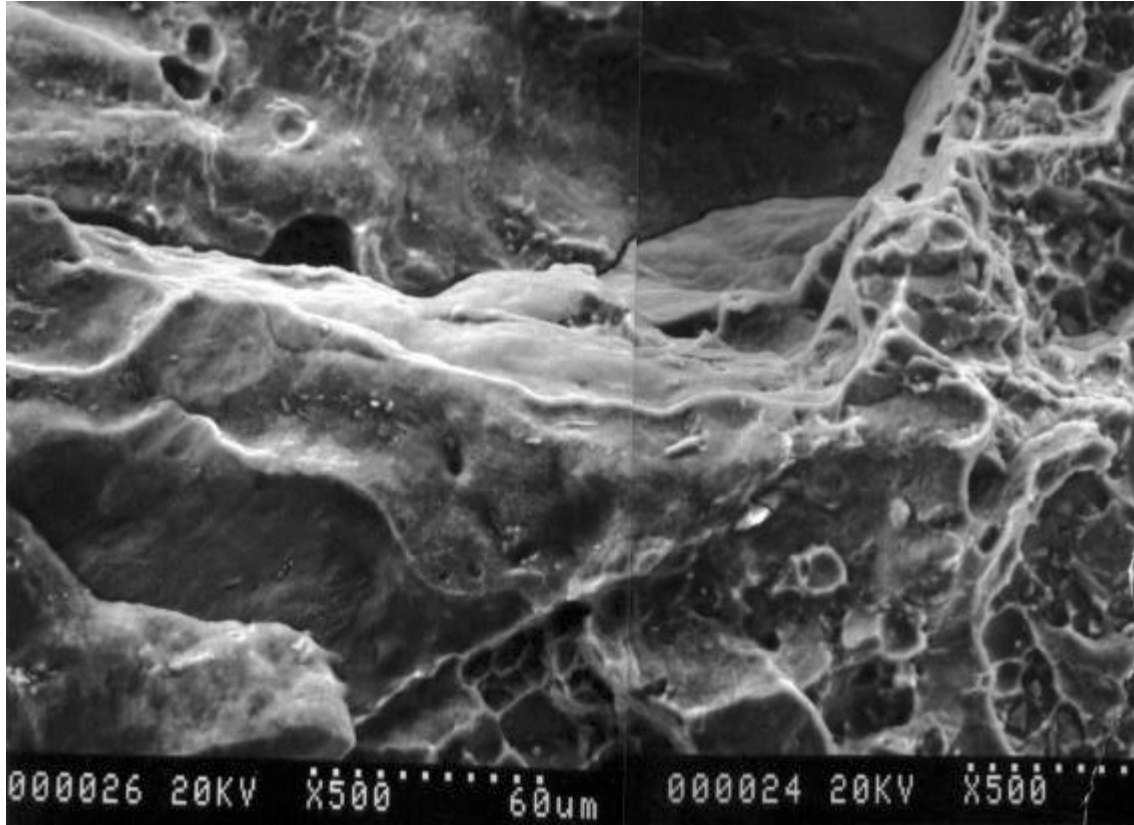


Figure 11. SEM montage from Region D of figure 9. Note the abrupt transition from intergranular fracture with poorly-formed dimples (left) to ductile dimples (right). The fracture progressed from left to right.

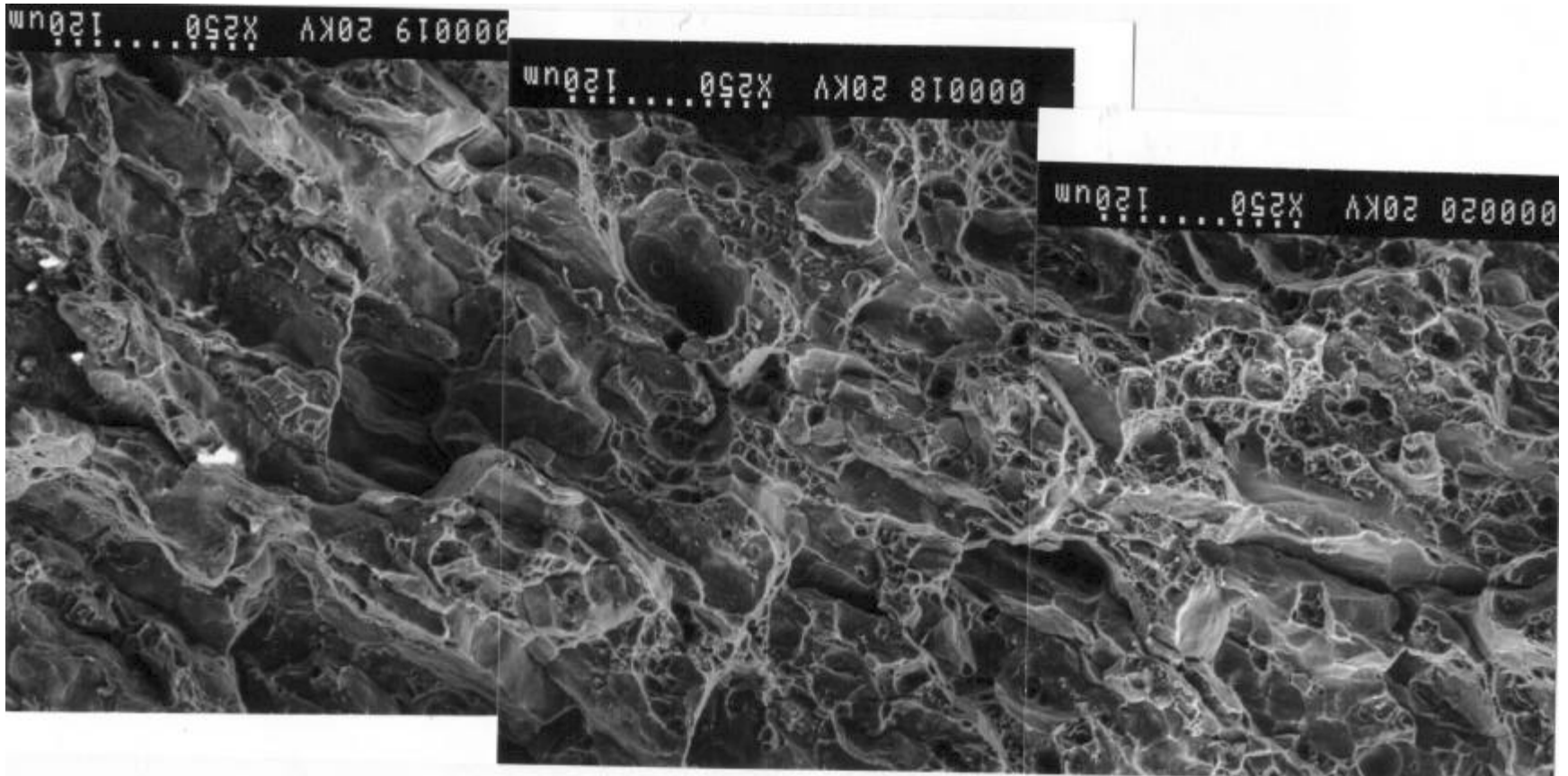


Figure 12. SEM montage from Region E of Figure 9. The fracture progressed from left to right and transitioned in mode from predominantly intergranular fracture with poorly-formed dimples to predominantly ductile rupture.

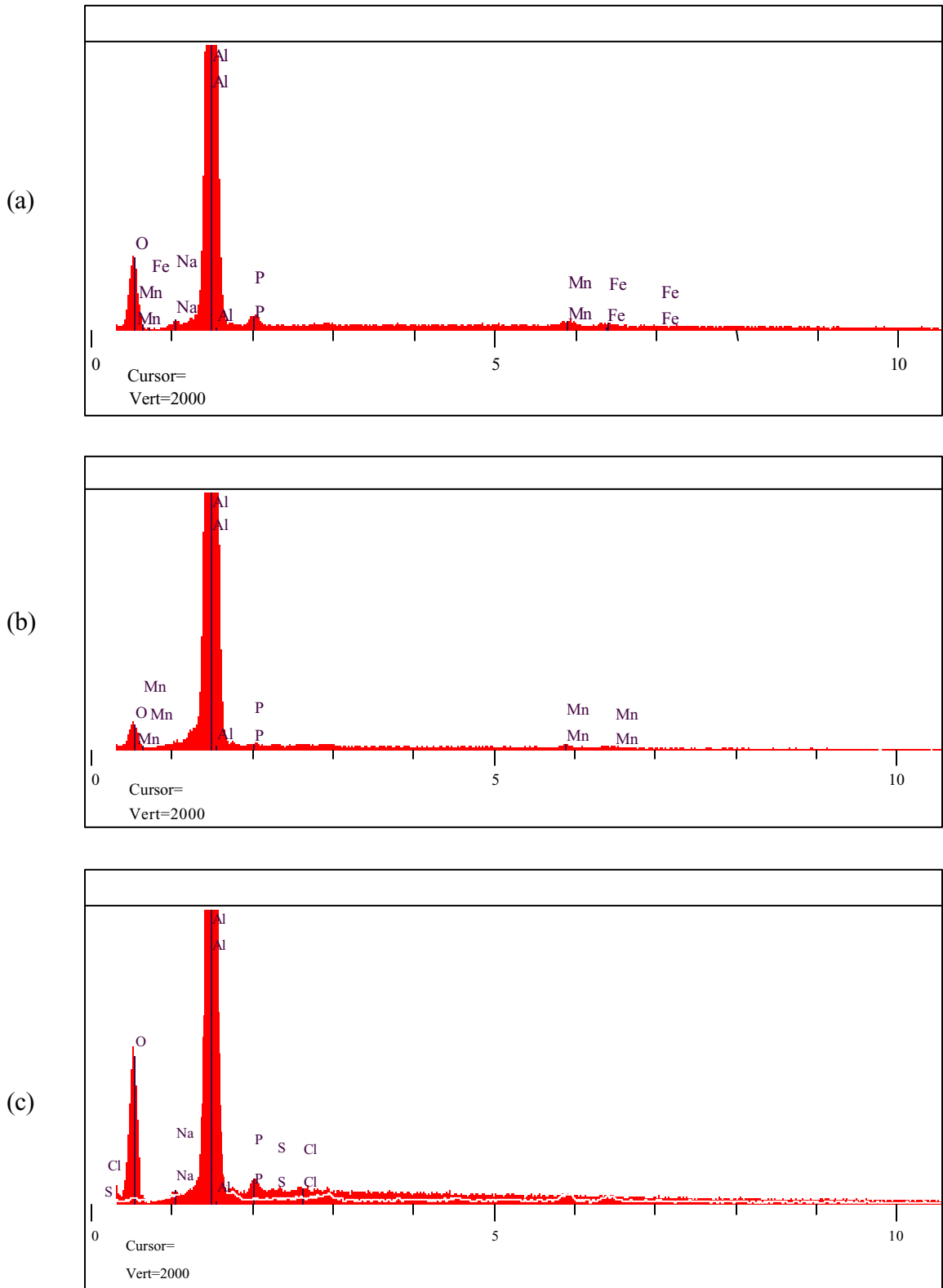


Figure 13. EDS results from 1-1-1 fracture surface.
 (a) Region A (b) Region B (c) Region E
 Plots show the spectra from the dark area (Figure 9) with the spectrum from the area beyond the beach mark superimposed in white. Note the lack of S, O, Na, Cl and P peaks in the superimposed spectrum.

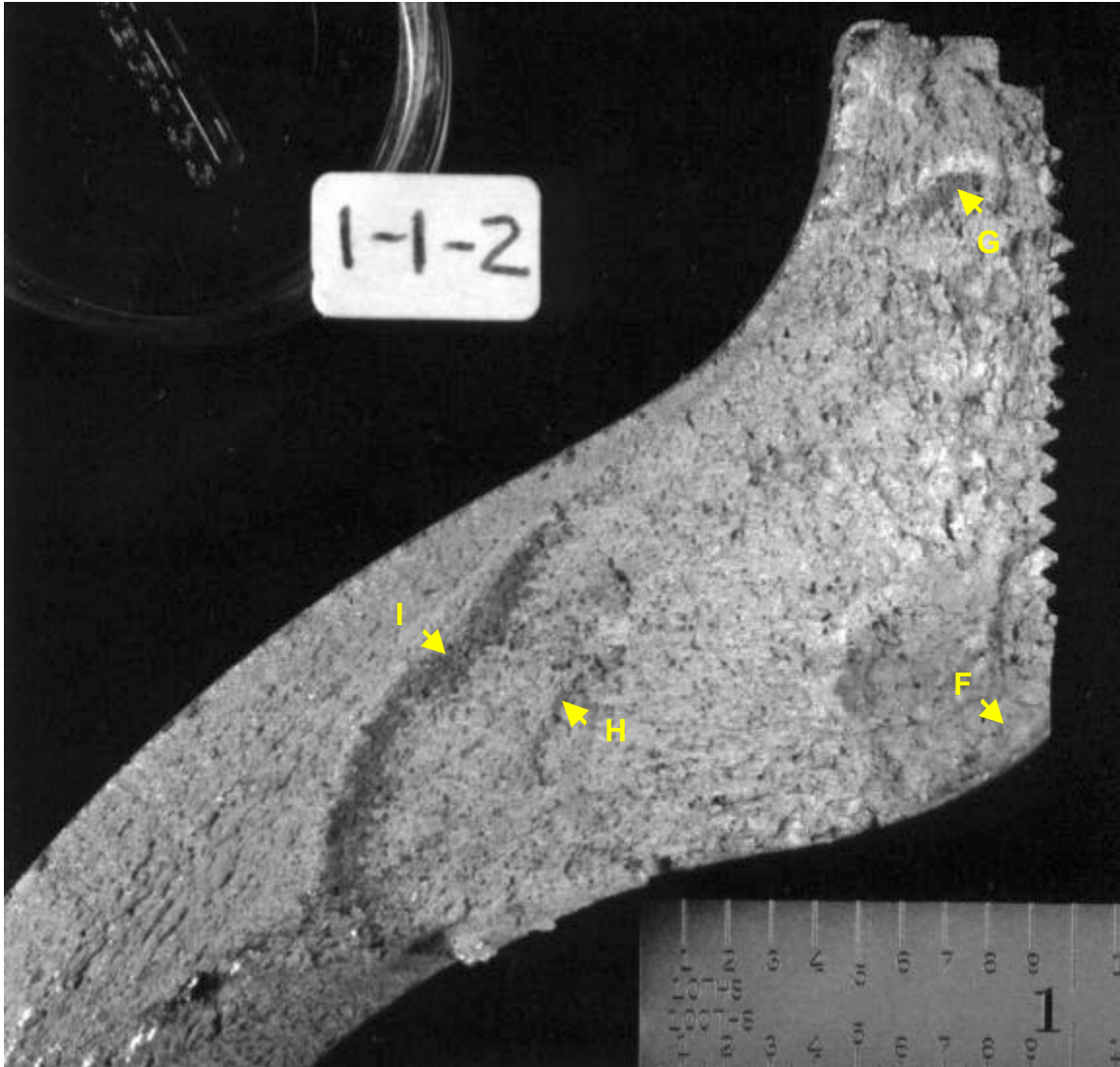


Figure 14. Fractograph of section 1-1-2. Photo ID DC18275-CEM-6-8/28/00

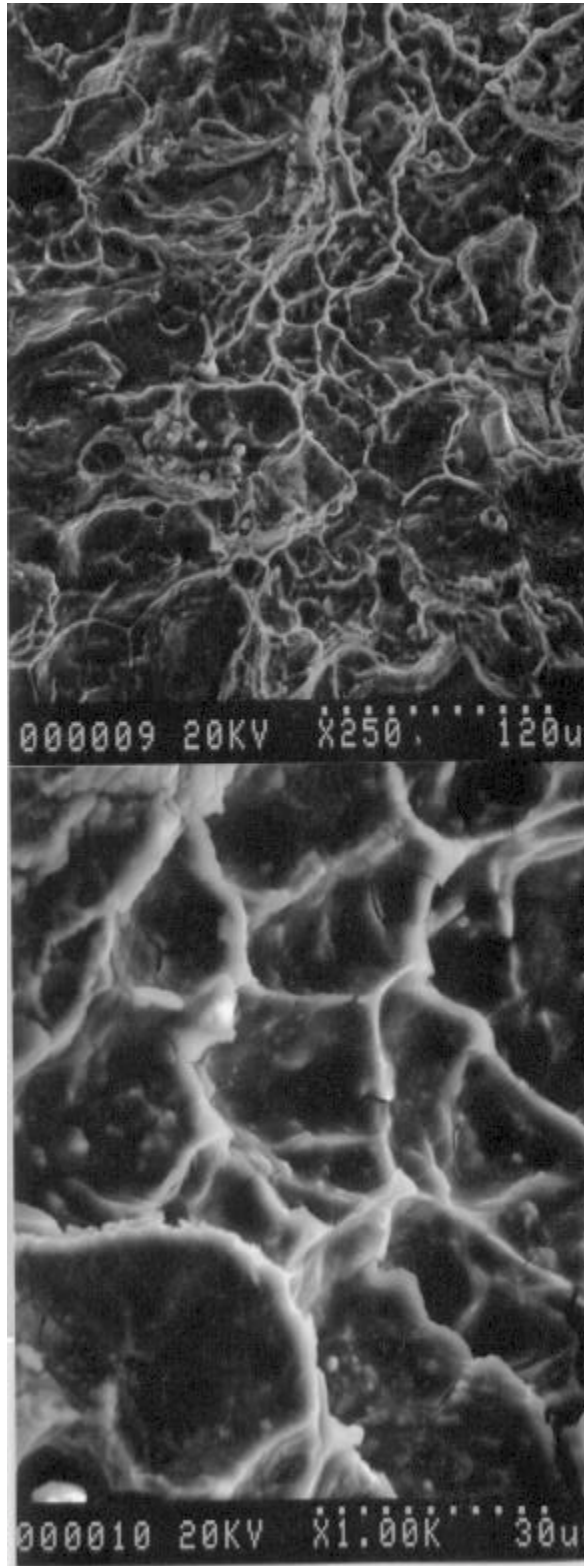


Figure 15. SEM Fractographs from region H on Figure 14.