

UNIVERSITY AT BUFFALO STATE UNIVERSITY OF NEW YORK

South Campus Instrumentation Center

B1 Squire Hall
Buffalo New York 14214
(716) 829-3561
Fax (716) 829-3006



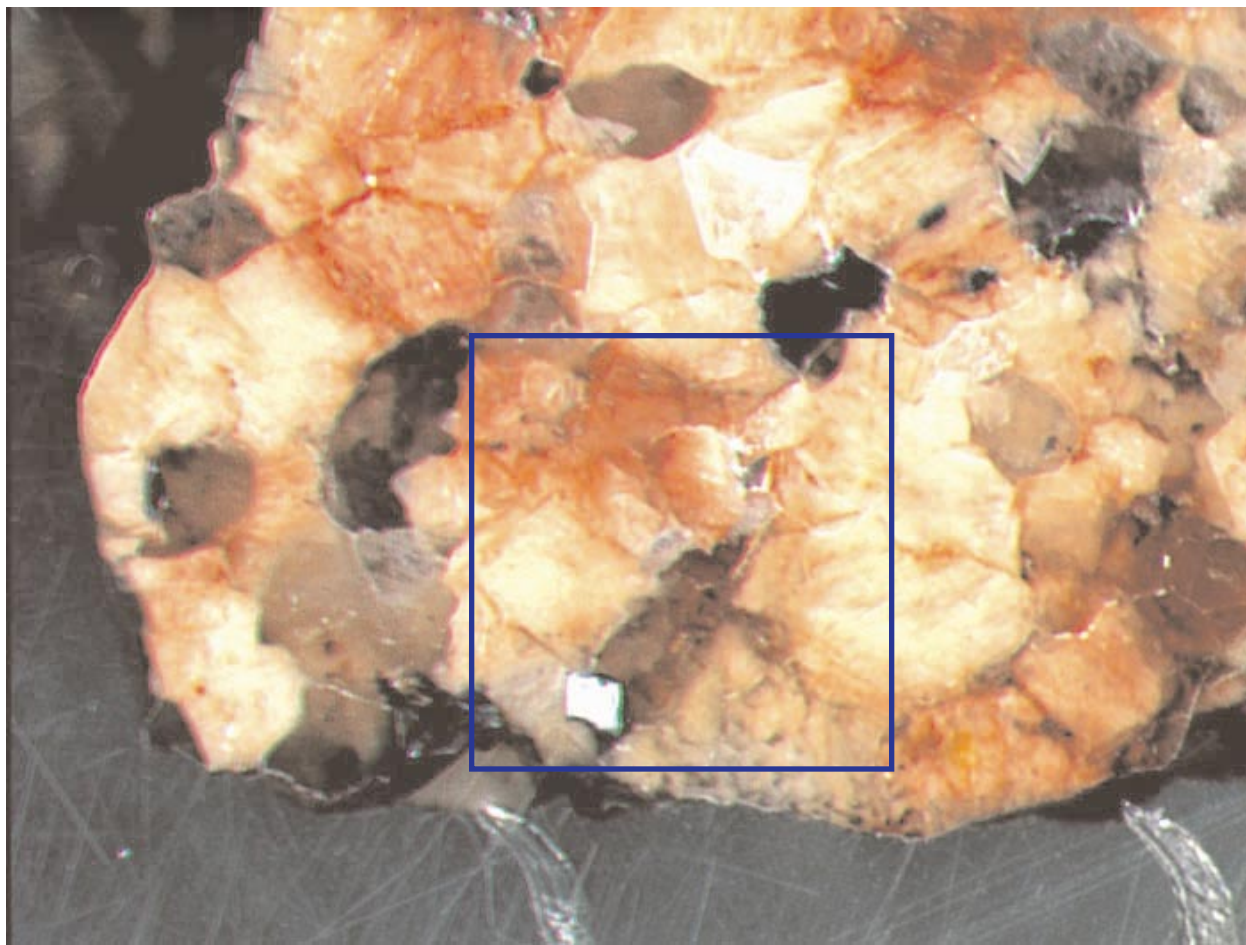
PETROLOGY CLASS

Prepared for
DR. M. SHERIDAN

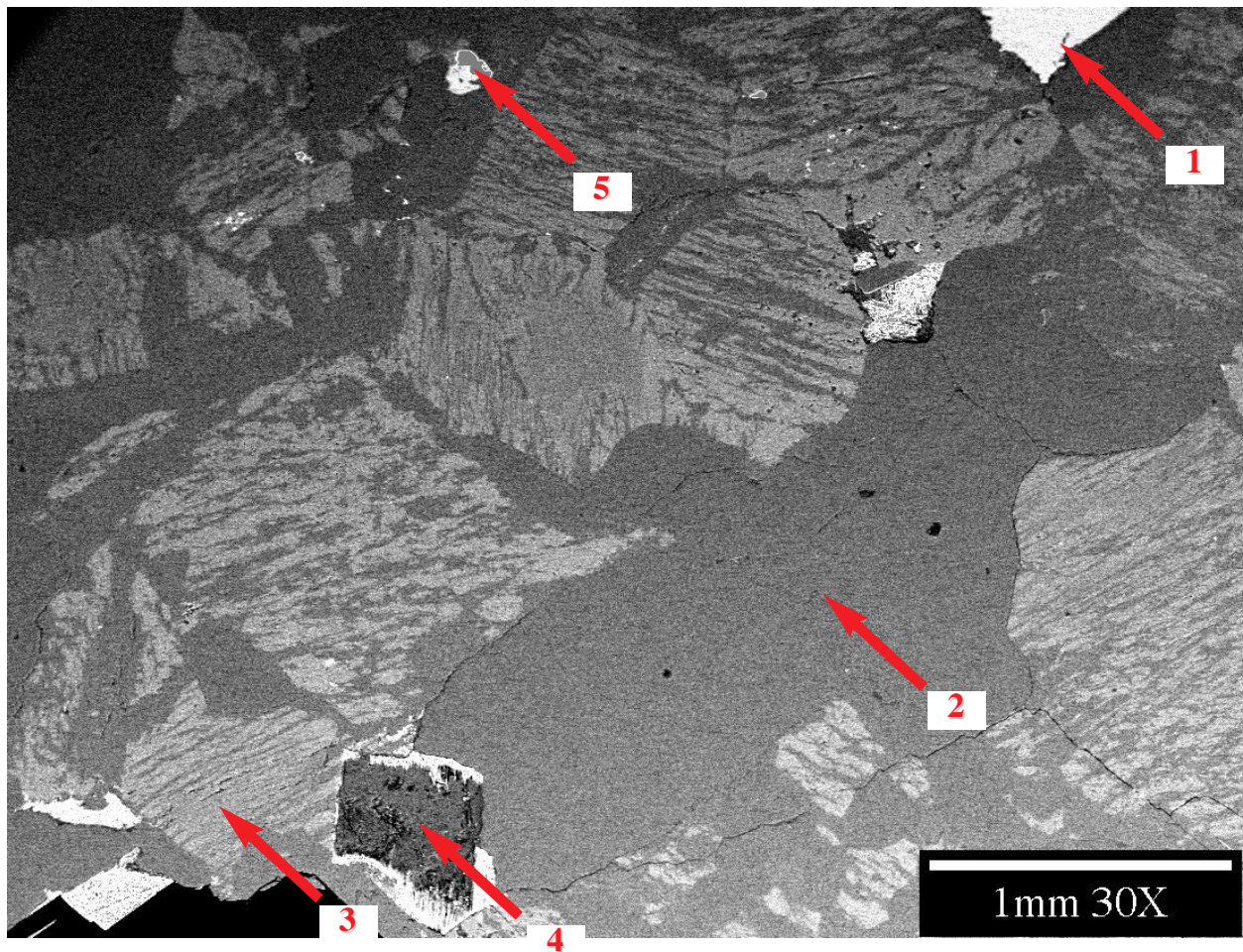
LAB EXERCISE

The object of this exercise is to determine the type of rock by SEM/EDX analysis of the individual mineral phases found in the rock.

Optical images of the sectioned polished rocks are shown. Backscattered electron images from within this area were taken and the areas analyzed by EDX are noted. EDX spectra and semi-quantitative elemental analyses for each location are given.



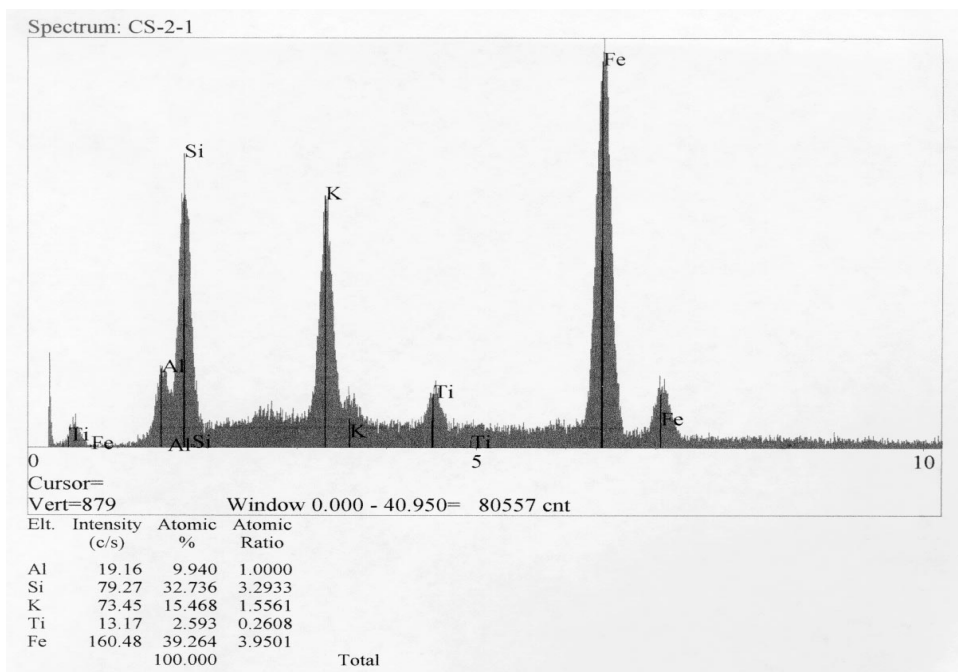
CS-2 Box shows area covered by the backscattered image.



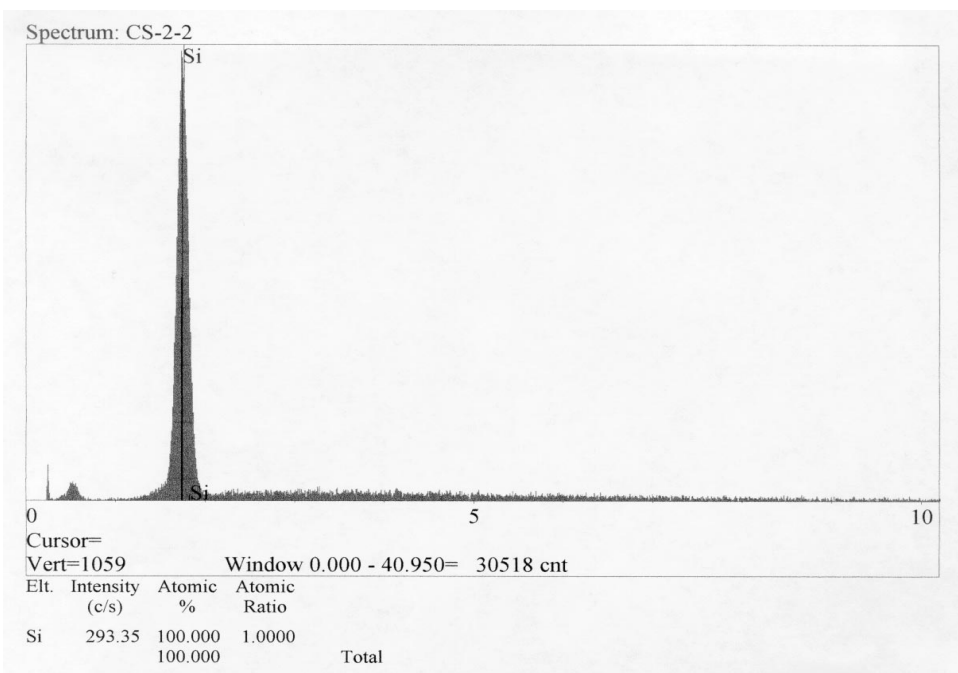
CS-2 Backscattered image.

Note: area 4 is an artifact produced by pullout during polishing - the EDX spectrum is thus meaningless.

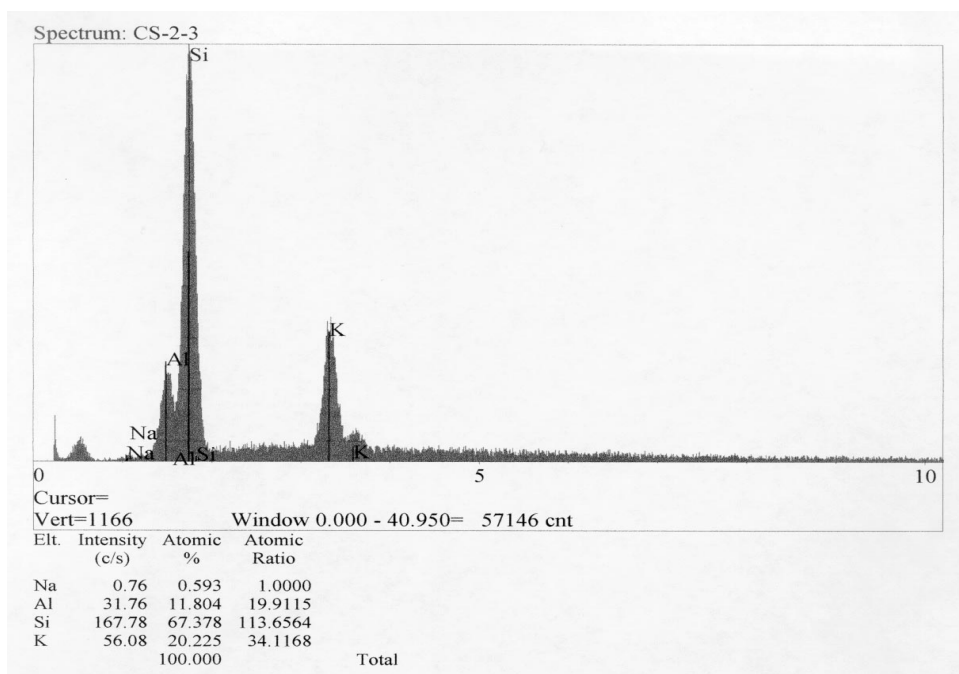
Also, location number 5 is very bright and contains zirconium. This mineral is rarely seen in this rock and may not be diagnostic.



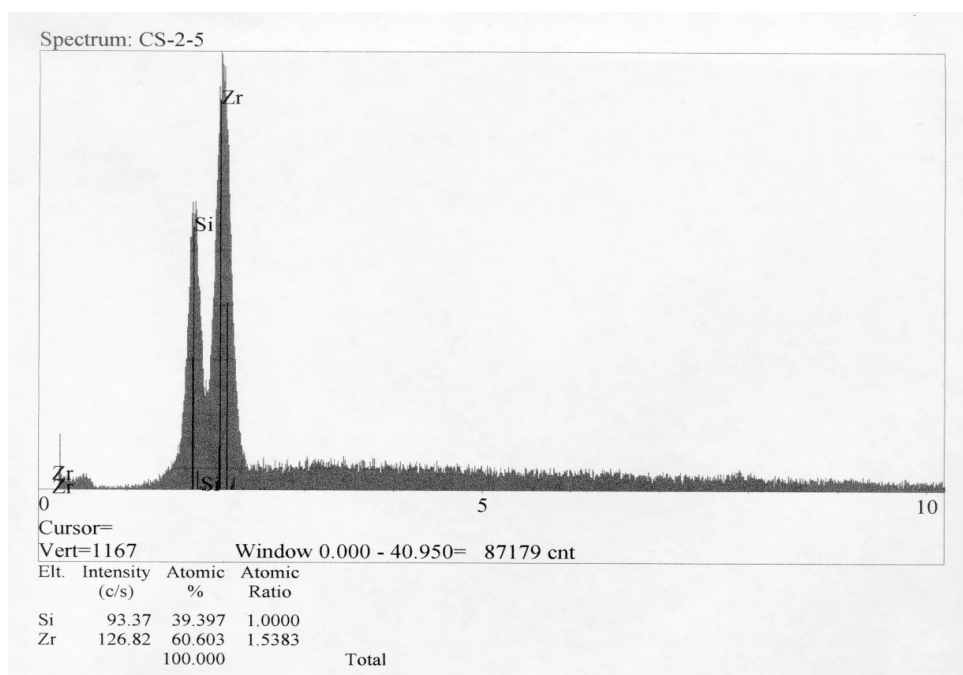
CS - 2 -1



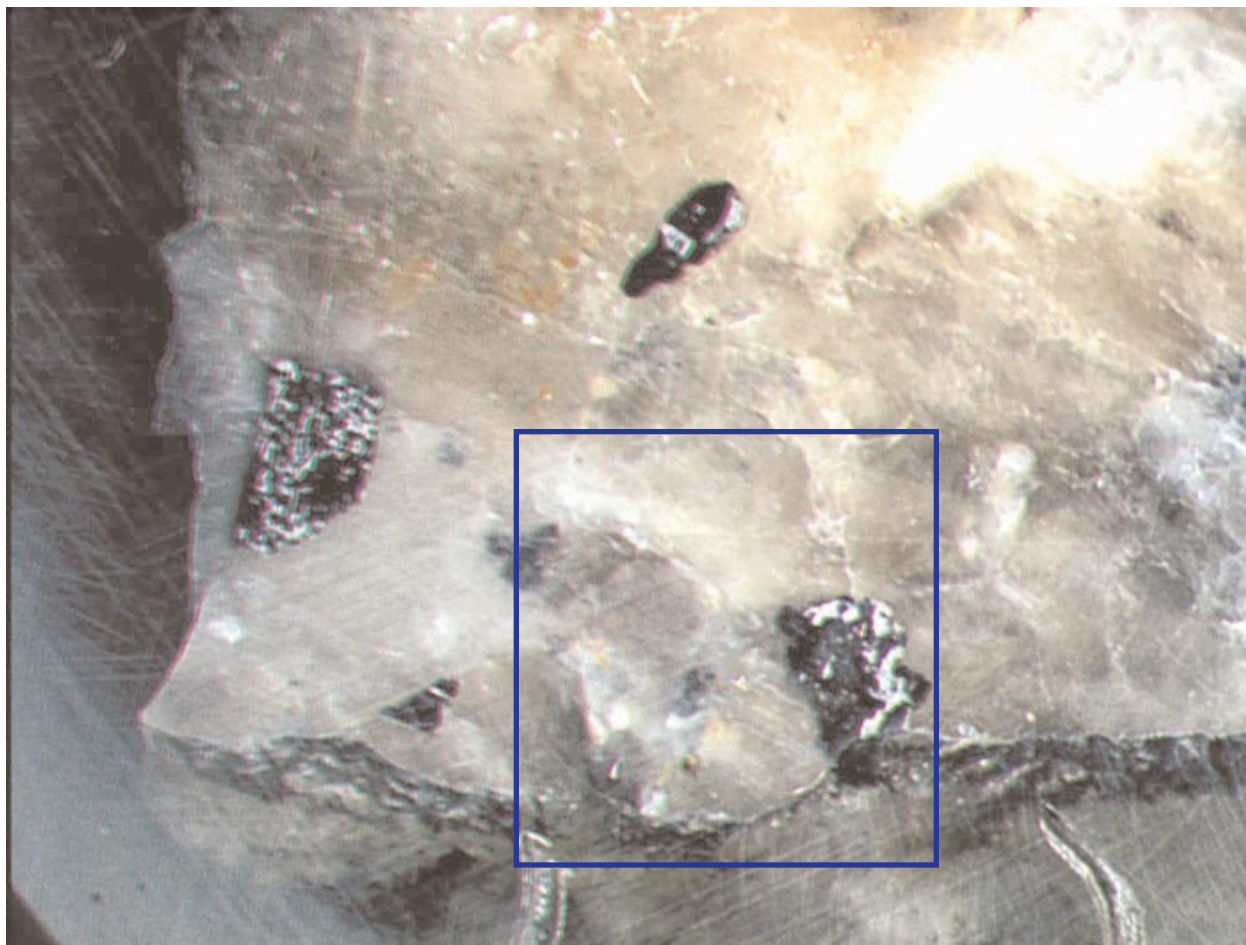
CS -2 - 2



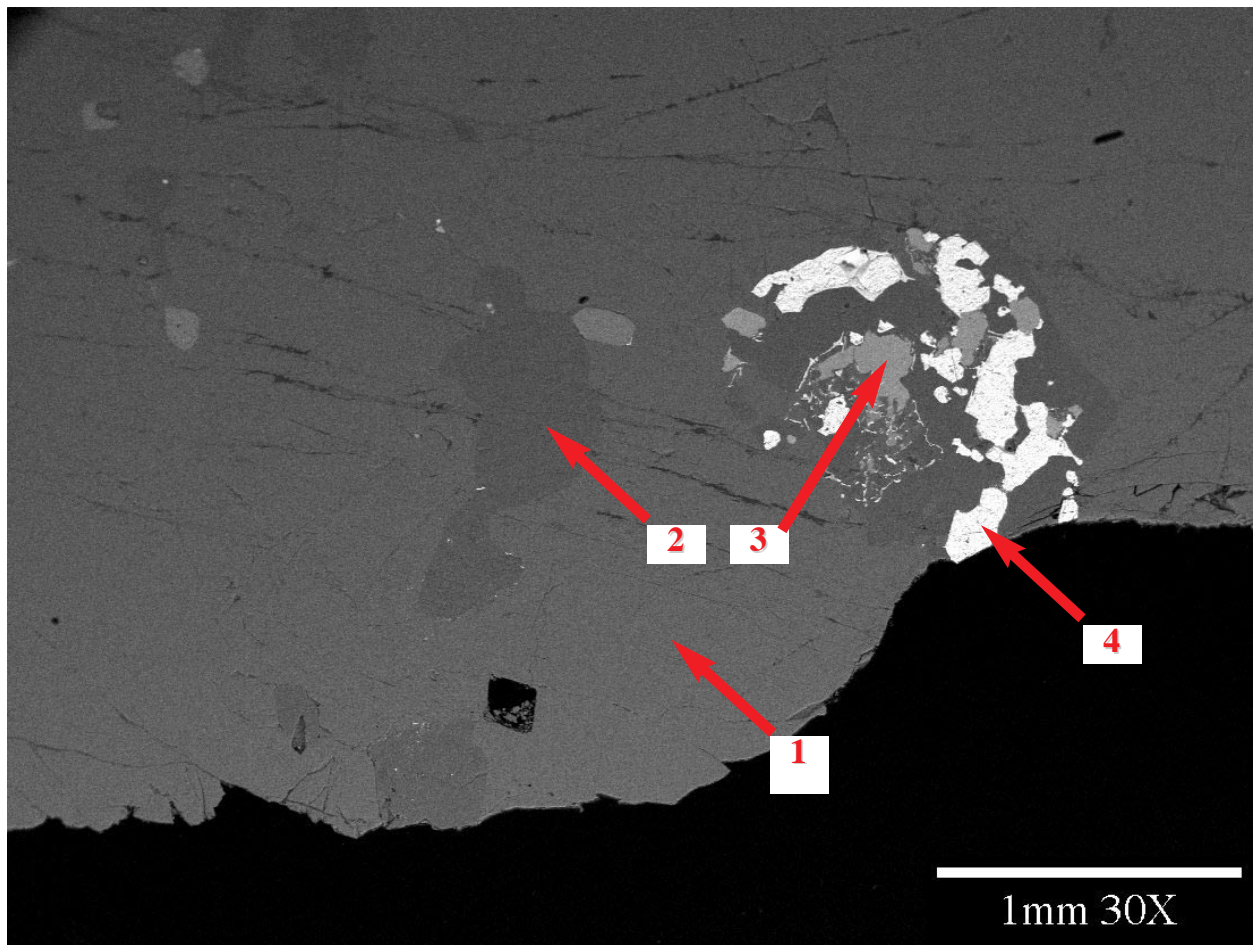
CS -2 -3



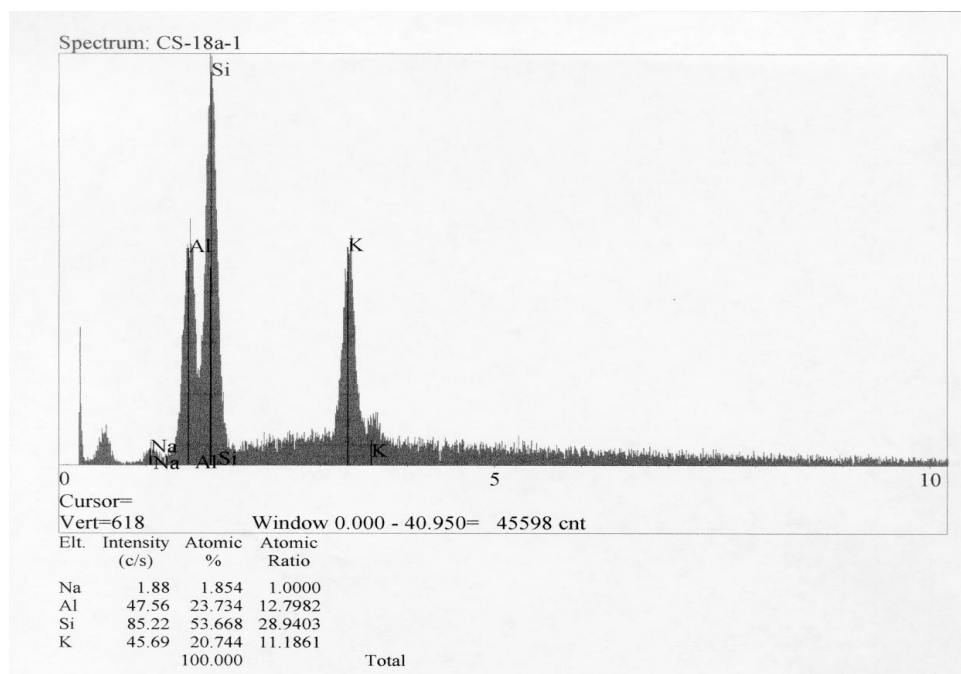
CS - 2 -5



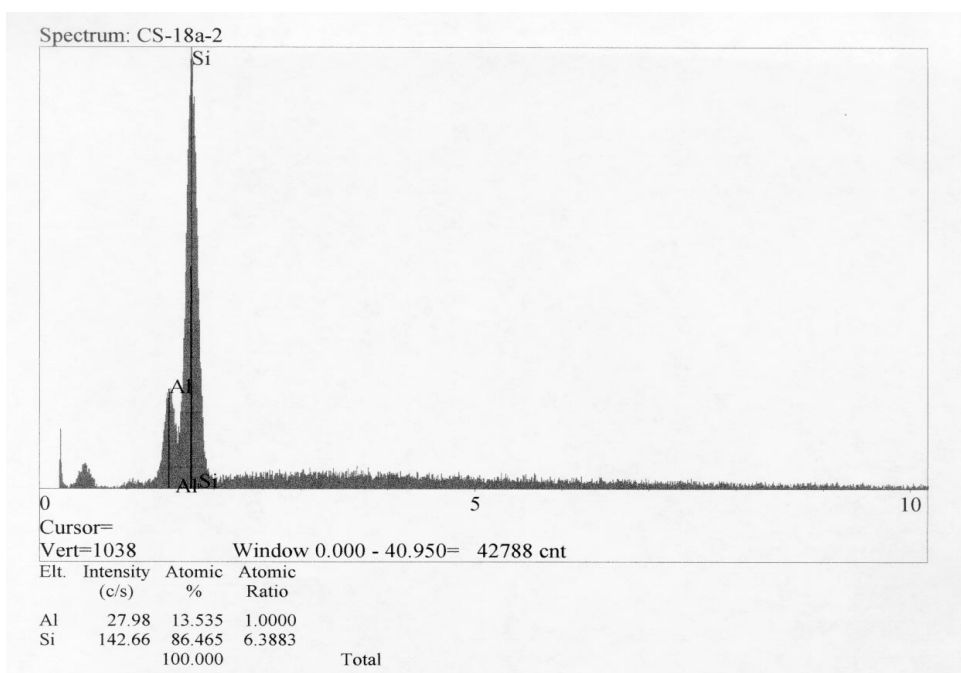
CS - 18a



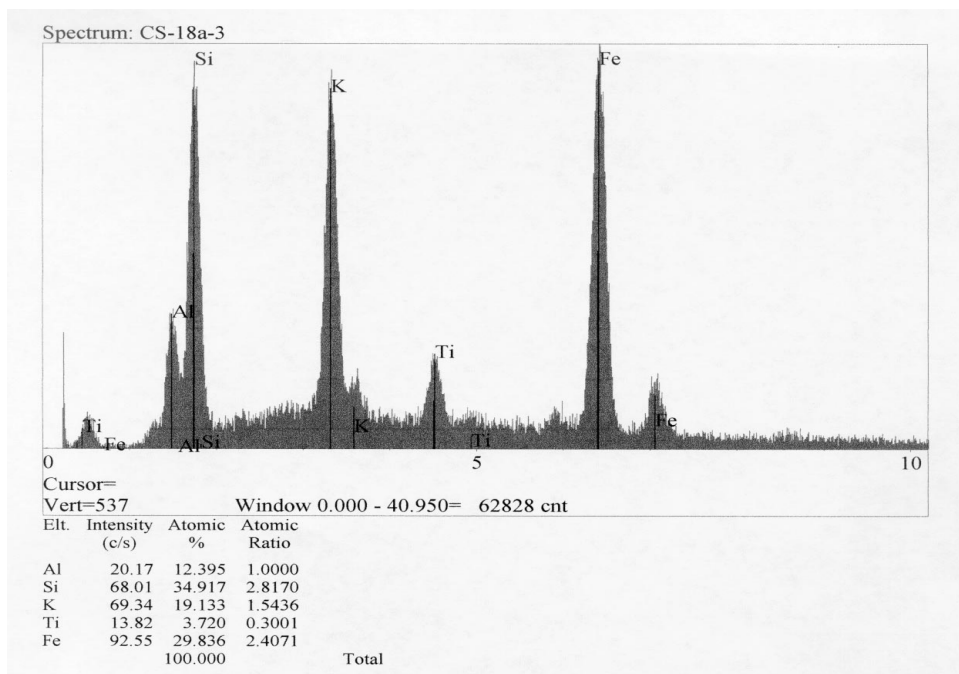
CS - 18a Backscattered image. Area 2 is slightly darker than area 1.



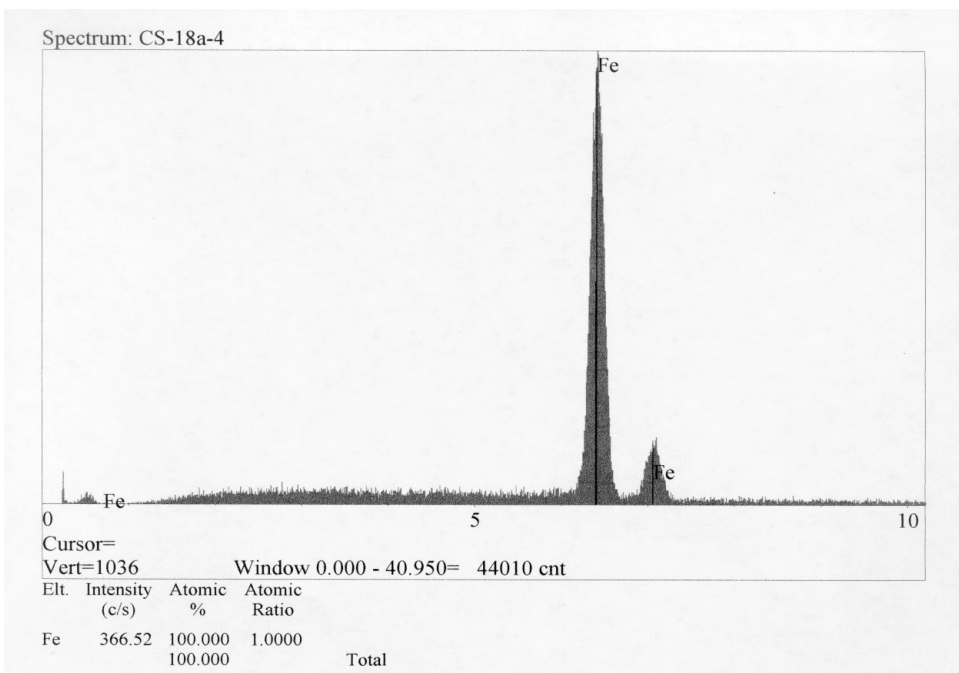
CS - 18a - 1



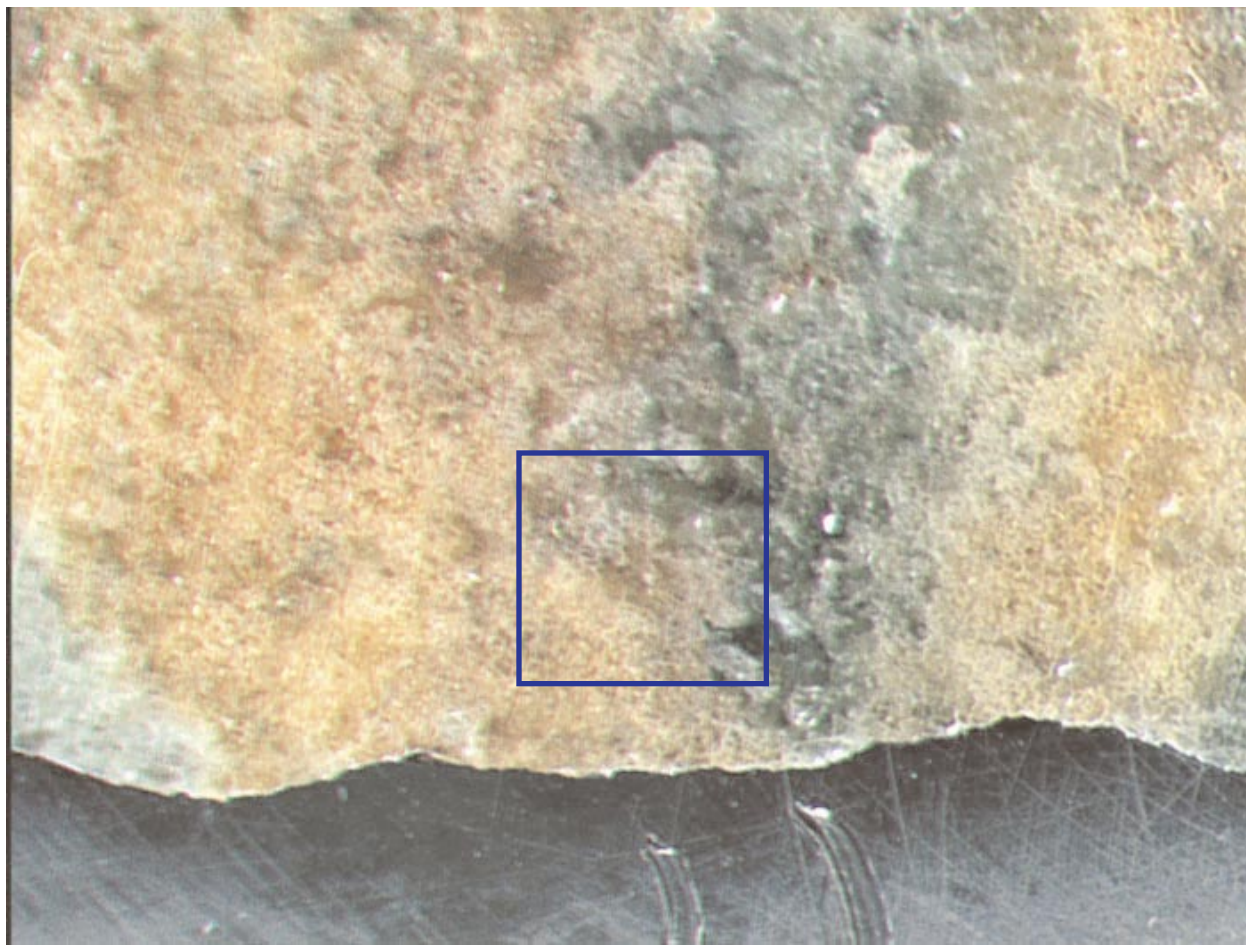
CS - 18a - 2



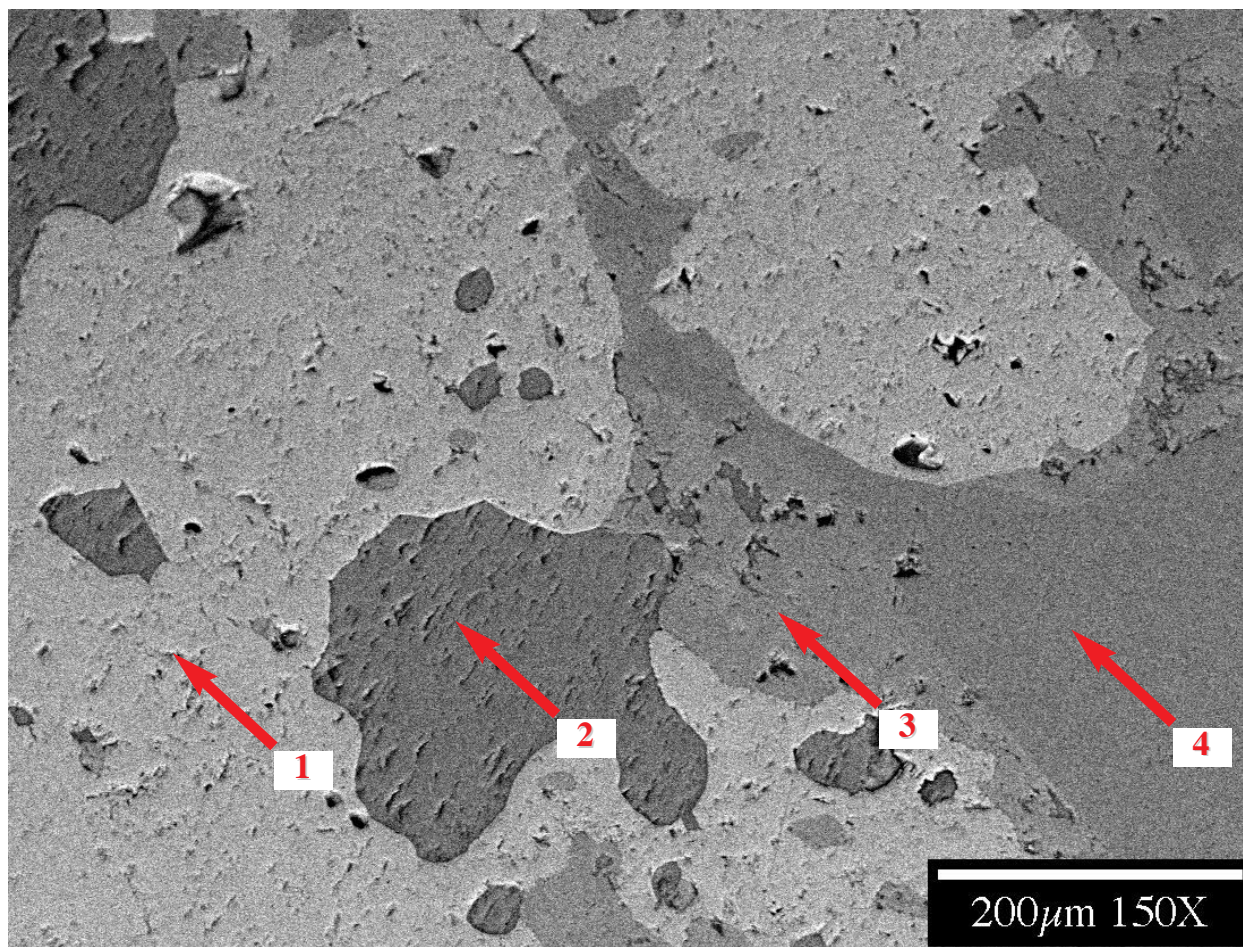
CS - 18a -3



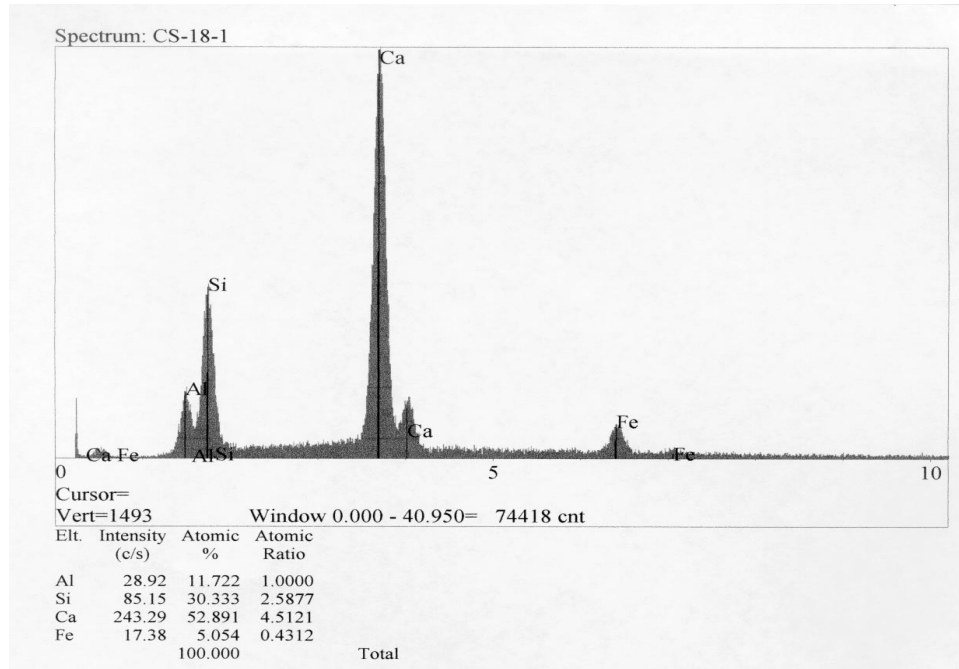
CS - 18a - 4



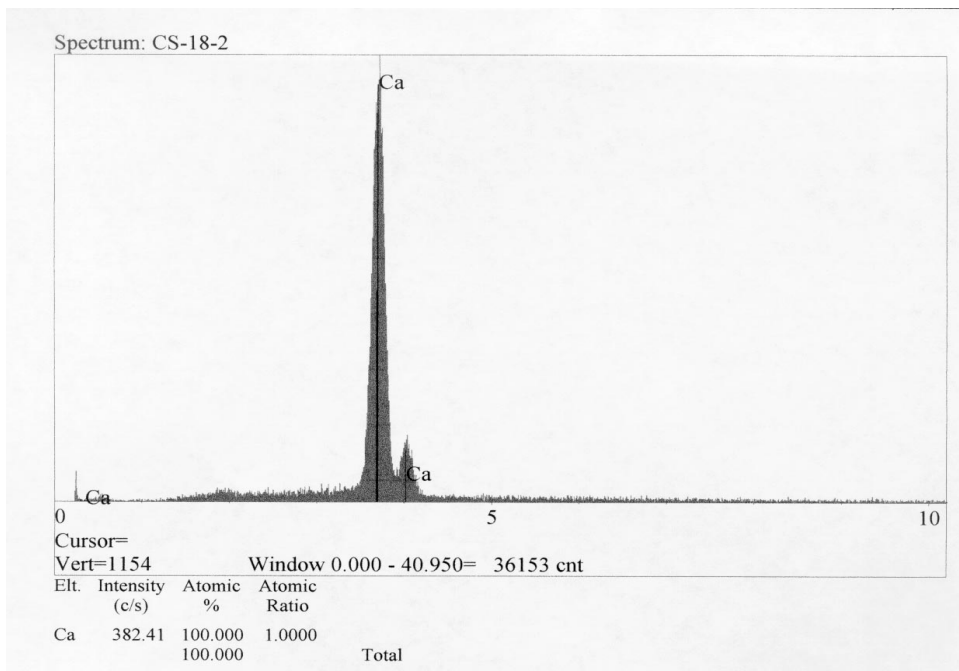
CS - 18



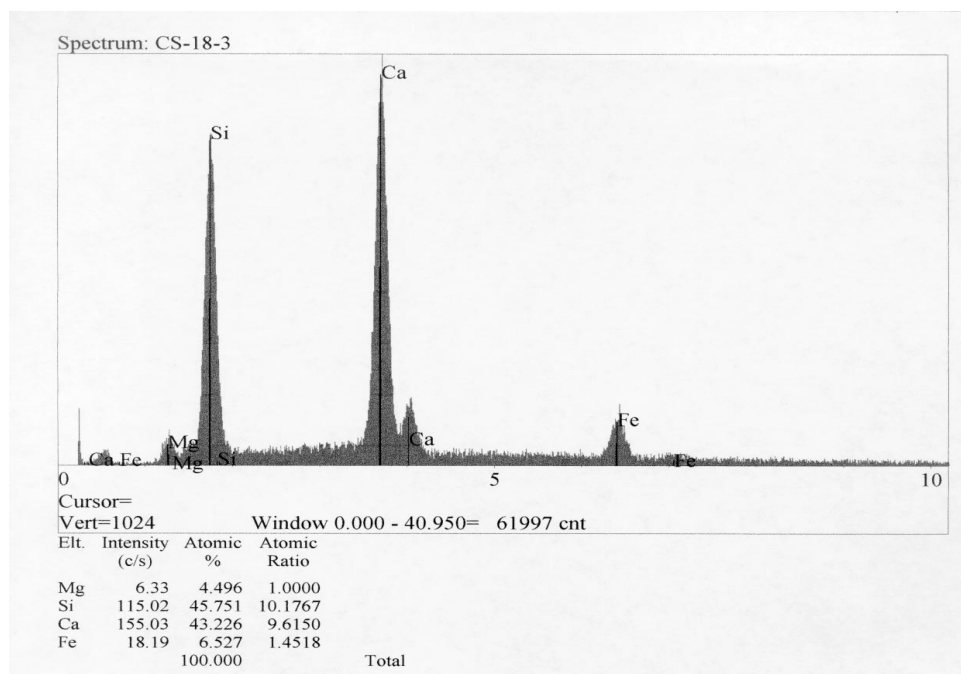
CS - 18 Backscattered image. Area 4 is slightly lighter than area 3.



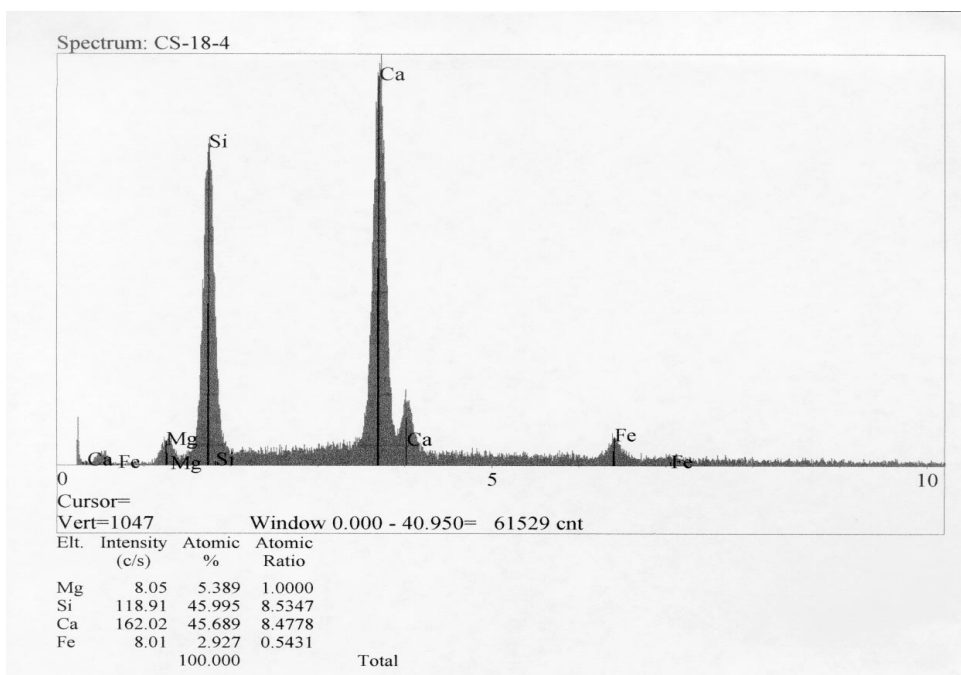
CS - 18 - 1



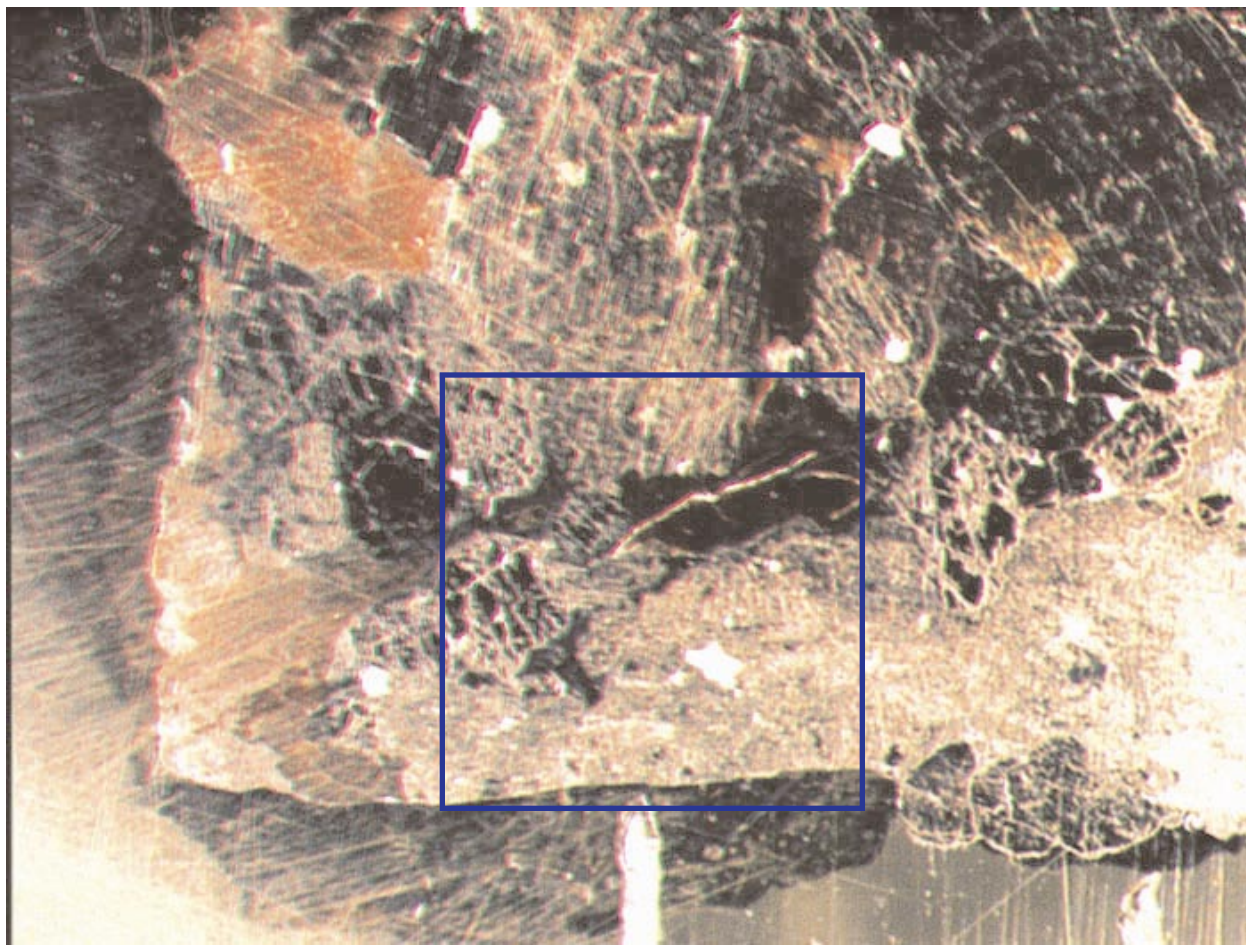
CS - 18 - 2



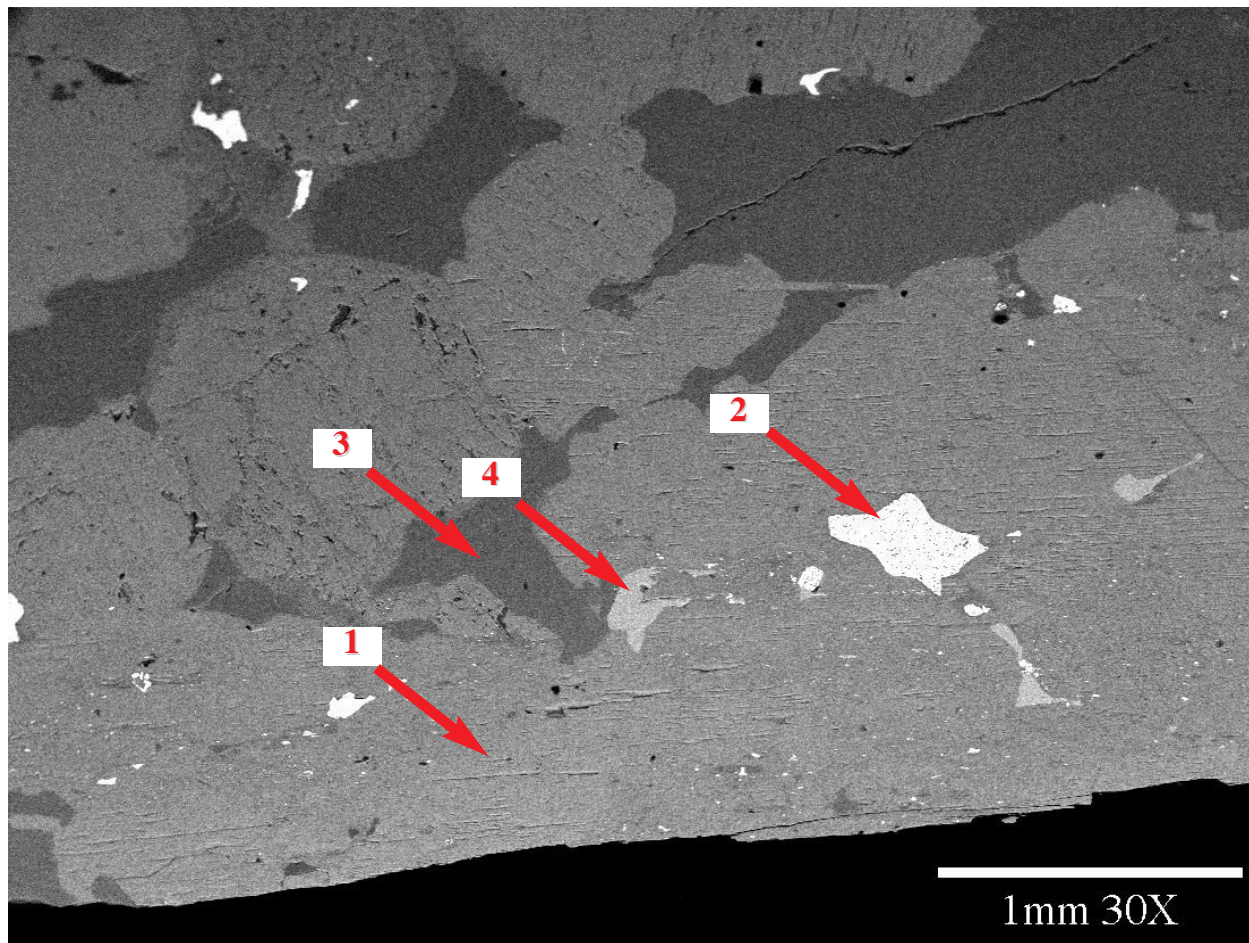
CS - 18 - 3



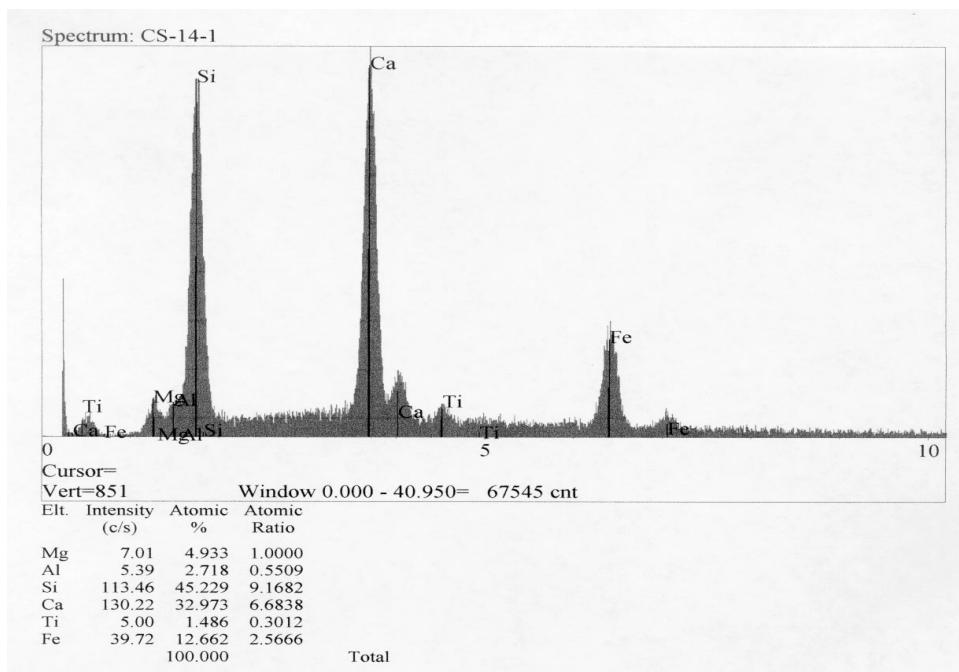
CS - 18 - 4



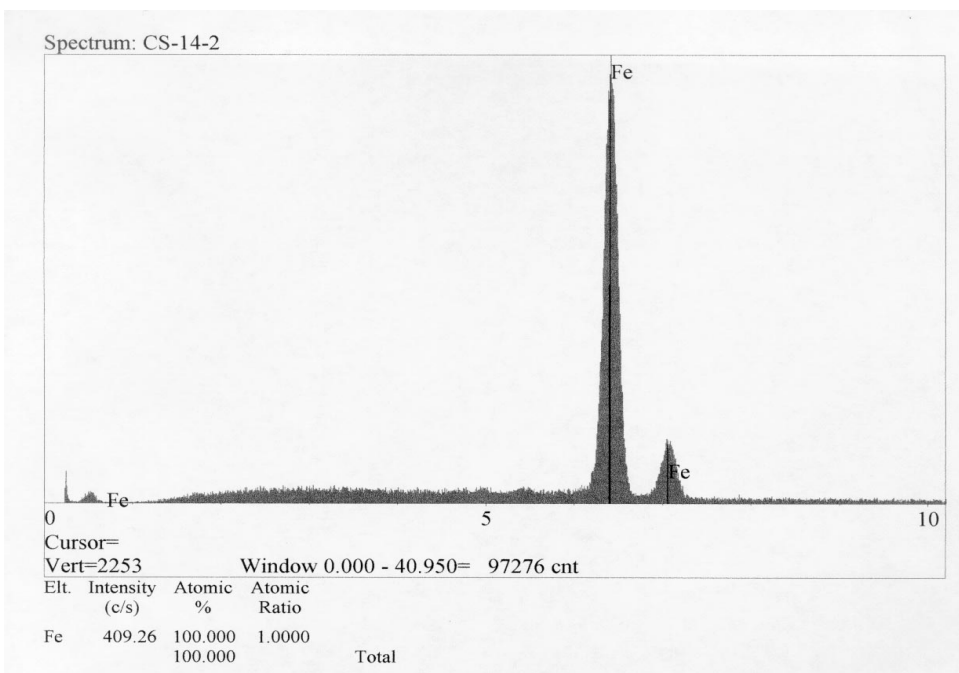
CS- 14



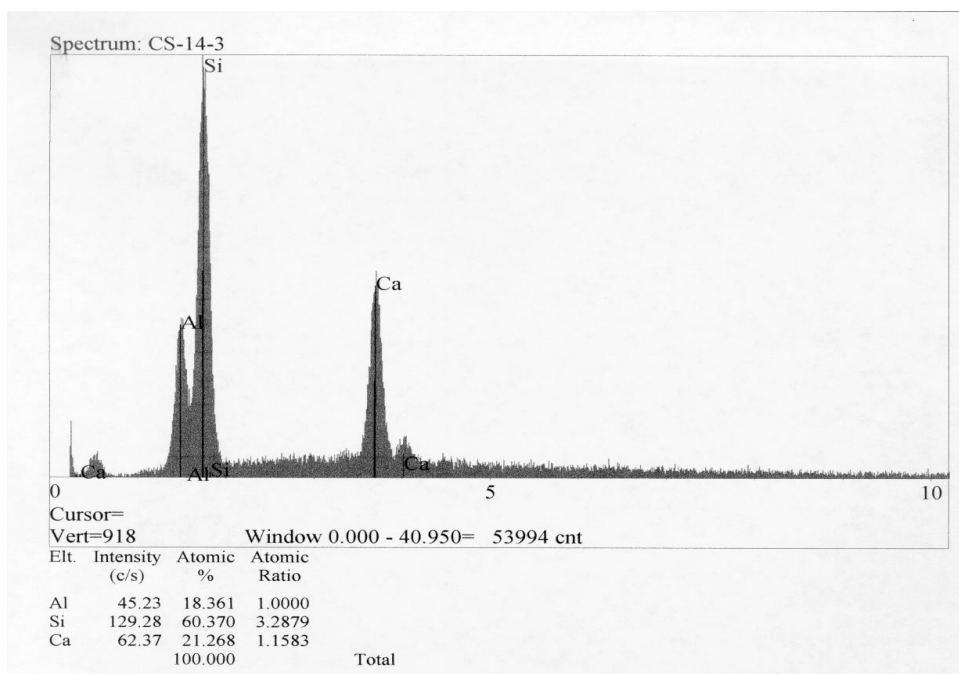
CS - 14 Backscattered image.



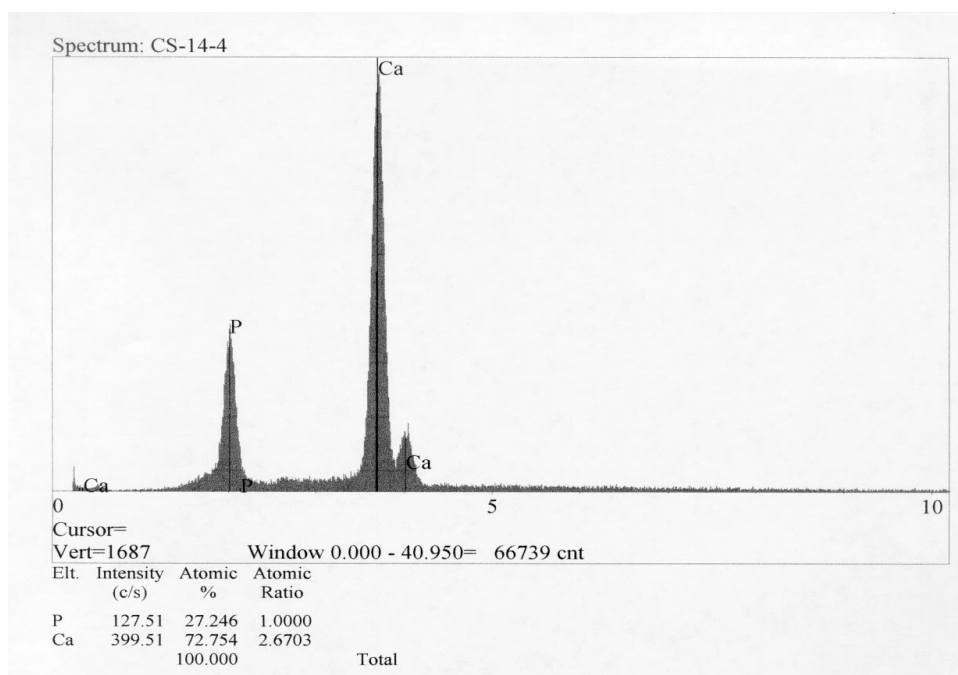
CS -14 - 1



CS -14 - 2



CS -14 - 3



CS -14 - 4