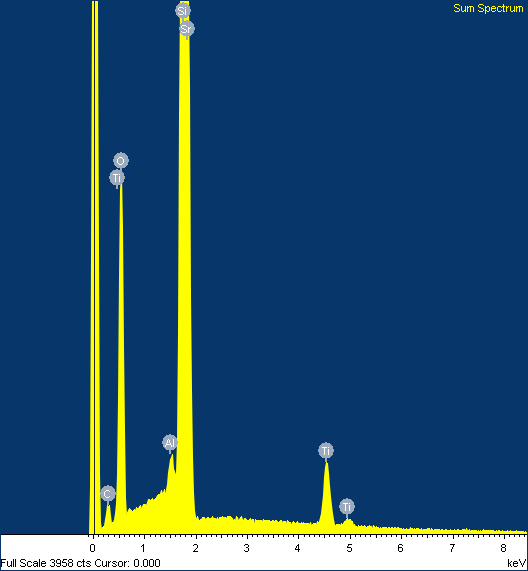


Comment: Reasonably confirms unetched MAX phase existing in sediment..

7/30/2019 3:08:34 PM

Project 1



Label : Sum Spectrum

Collected : 30-Jul-2019 03:07 PM

Livetime (s) : 933.89

Real time (s) : 0.00

Detector : Silicon

Window : SATW

Tilt (deg) : 0.0

Elevation (deg) : 35.0

Azimuth (deg) : 0.0

Magnification : 2610 X

Accelerating voltage ( kV ) : 15.00

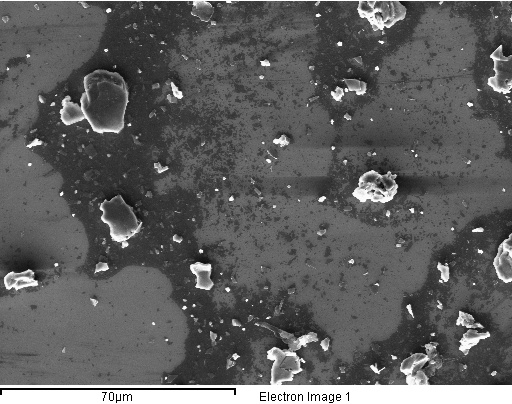
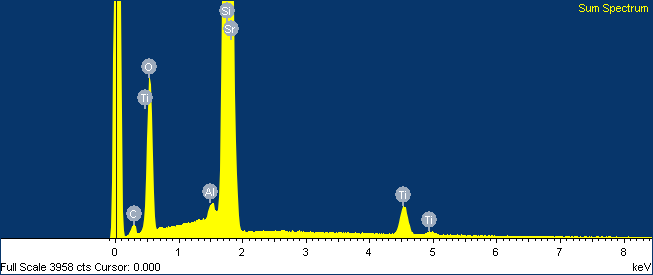
Process time : 6

Comment: Sr peak should be integrated with Si.

Variable Vacuum SEM Options:

7/30/2019 3:09:41 PM

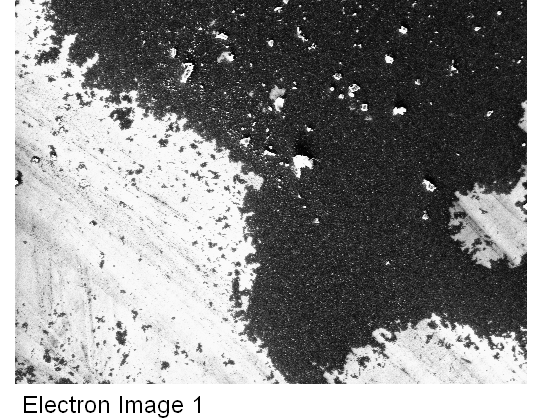
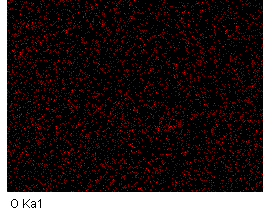
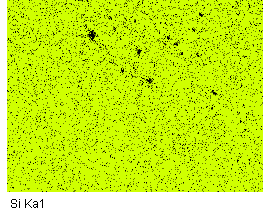
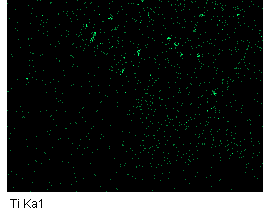
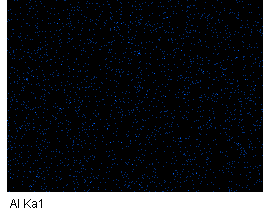
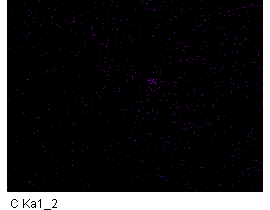
Project 1



Comment: Same as above with larger micrograph.

7/30/2019 3:10:22 PM

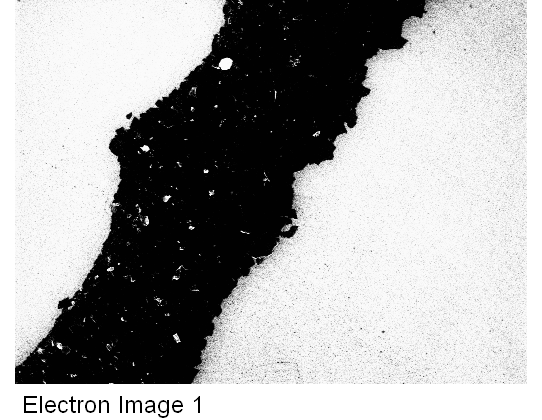
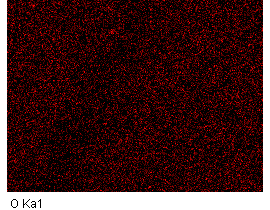
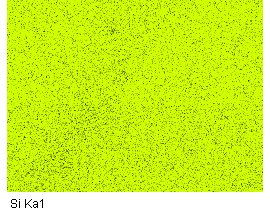
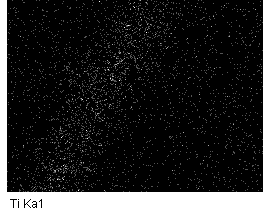
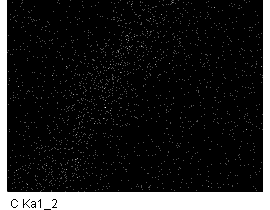
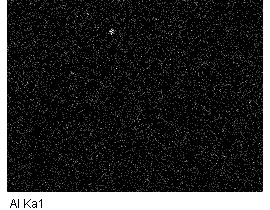
Project 1



Comment: Magnification perhaps too low. Will seek smaller area with more visually distinct MX / Si boundary. As done so below. This is the ‘High Quality’ sample that appears to still contain MAX phase.

7/30/2019 4:09:21 PM

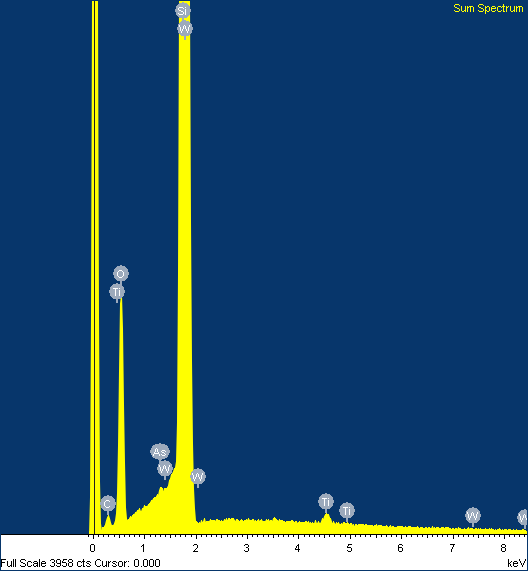
Project 1



Comment: If allowed more scan time this may have been convincing. Reduce the electron beam energy as the interaction volume is too large. Possibly picking up sub-surface O and C. Omnipresent Al is from the background (see sum spectrum)

7/30/2019 4:36:26 PM

Project 1



Label : Sum Spectrum

Collected : 30-Jul-2019 04:35 PM

Livetime (s) : 737.28

Real time (s) : 0.00

Detector : Silicon

Window : SATW

Tilt (deg) : 0.0

Elevation (deg) : 35.0

Azimuth (deg) : 0.0

Magnification : 7243 X

Accelerating voltage ( kV ) : 20.00

Process time : 6

Comment:

No W or As present.

Variable Vacuum SEM Options:

7/30/2019 4:42:12 PM

Project 1