Appendix C5

ESEM/EDS Data for Test #4 Day-30 Fiberglass Inserted in Front of Header in a High-Flow Zone

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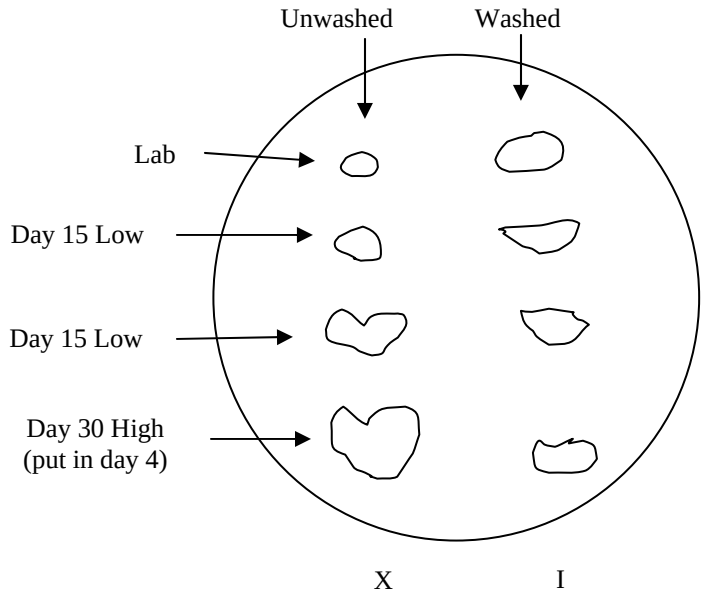
The high-flow fiberglass samples inserted in front of a header were extracted on June 23, 2005, the date Test #4 was shut down. Both exterior and interior locations of the fiberglass samples were examined. Environmental SEM (ESEM) was employed to analyze the hydrated fiberglass samples without any coating under a low vacuum condition (i.e., 80 Pa), to minimize the modification of the fiberglass samples through drying process. The results of Test #4 Day-30 high-flow fiberglass samples were obtained on June 23, 2005. EDS results provide a semi-quantitative elemental analysis of the debris attached on fiberglass.

Transcribed Laboratory Log

Laboratory session from June 23, 2005.
Test #4 Day-30 High-Flow Fiberglass inserted in front of header

ESEM



High-Flow Exterior (put in on day 4)

Image:	t4d30hx1	100 ×	ESEM image	Figure C5-1
	t4d30hx2	500 ×	ESEM image	Figure C5-2
	t4d30hx5	1000 ×	ESEM annotated image	Figure C5-3
EDS:	t4d30hx4		EDS on coating of fiberglass shown in t4d30hx5	Figure C5-4

High-Flow Interior (put in on day 4)

Image:	t4d30hI6	100 ×	ESEM image of fiberglass	Figure C5-5
	t4d30hI9	500 ×	ESEM annotated image	Figure C5-6
EDS	t4d30hI8		EDS on web in t4d30hI9	Figure C5-7
Image	t4d30hi	1000 ×	ESEM annotated image	Figure C5-8
EDS	t4d30hI0		EDS on spot in t4d30hi	Figure C5-9

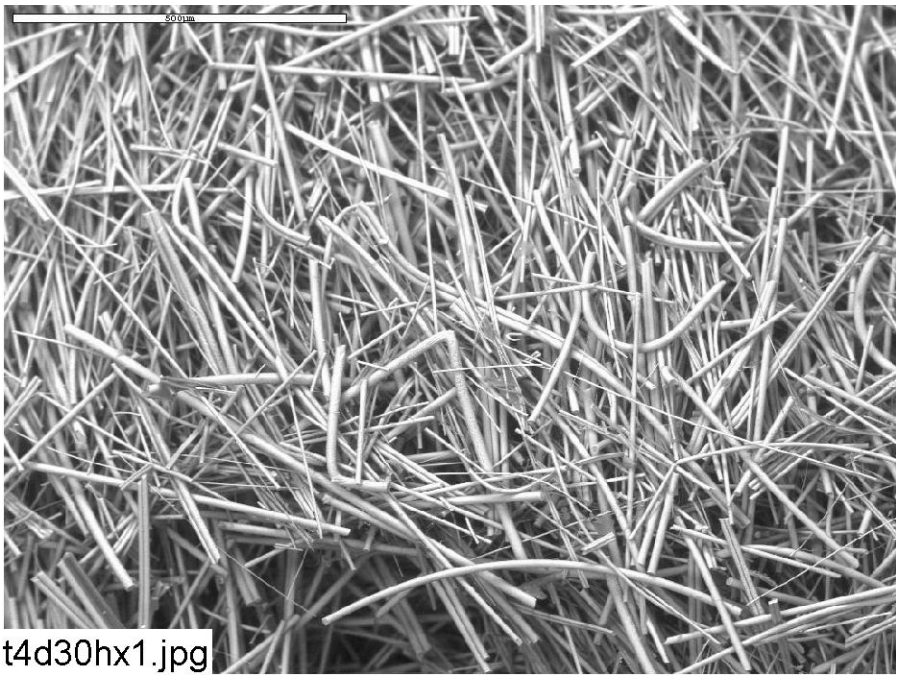


Figure C5-1: Environmental SEM image magnified 100 times for a Test #4 Day-30 exterior high-flow fiberglass sample in front of the header (inserted on Day 4). (t4d30hx1.jpg)

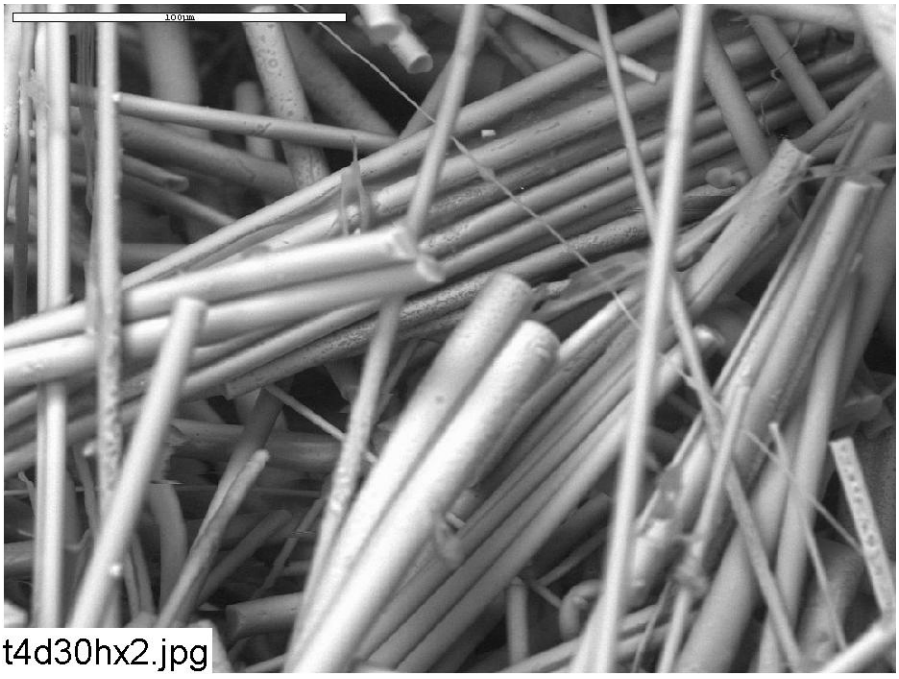


Figure C5-2: Environmental SEM image magnified 500 times for a Test #4 Day-30 exterior high-flow fiberglass sample in front of the header (inserted on Day 4). (t4d30hx2.jpg)

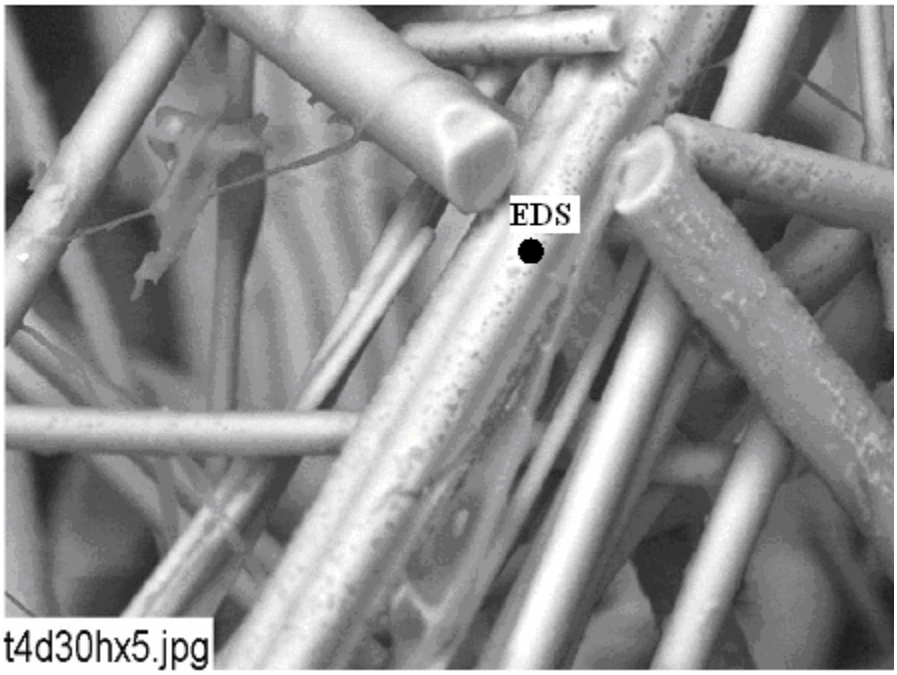


Figure C5-3: Annotated environmental SEM image magnified 1000 times for a Test #4 Day-30 exterior high-flow fiberglass sample in front of the header (inserted on Day 4). The EDS spot is shown in the picture. (t4d30hx5.jpg)

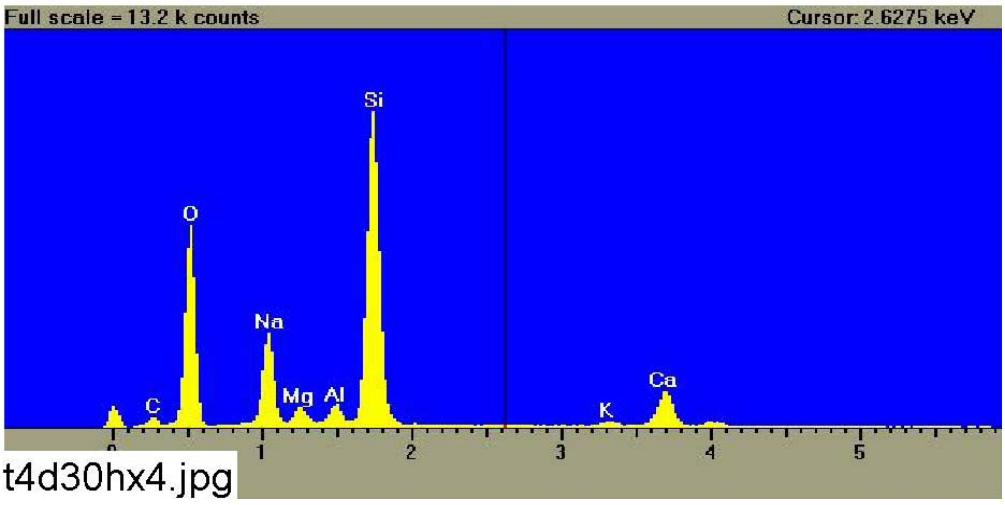


Figure C5-4: EDS counting spectrum for the spot of coating substance on fiberglass shown in Figure C5-3. (t4d30hx4.jpg)

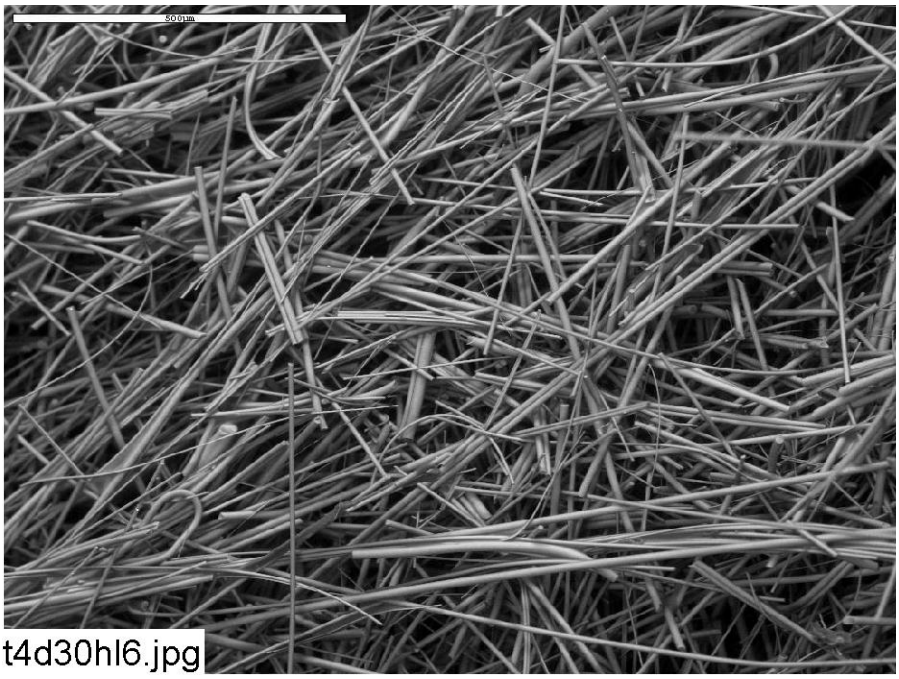


Figure C5-5: Environmental SEM image magnified 100 times for a Test #4 Day-30 interior high-flow fiberglass sample in front of the header (inserted on Day 4). (t4d30hI6.jpg)

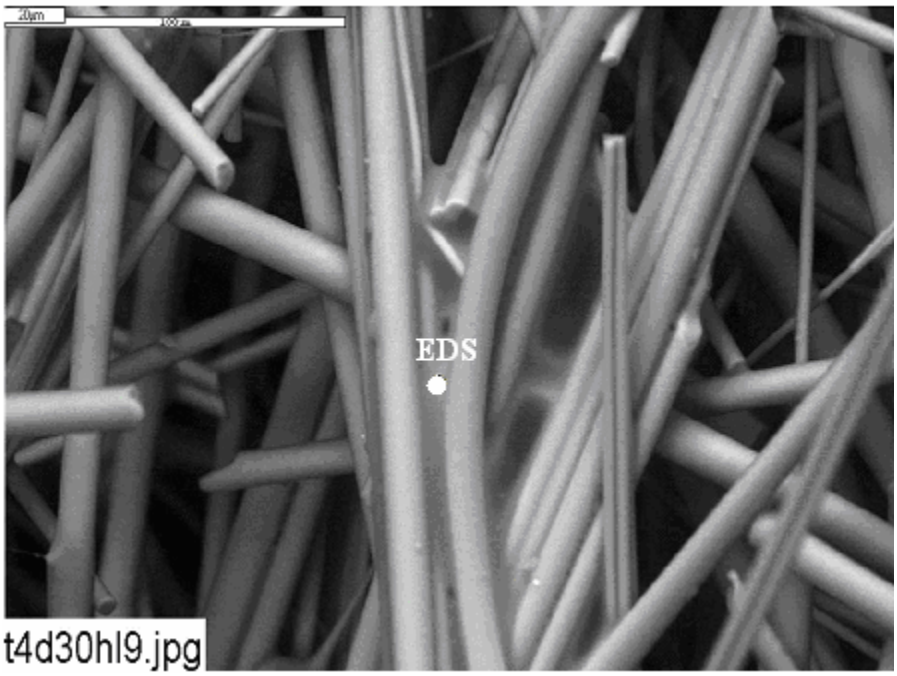


Figure C5-6: Annotated environmental SEM image magnified 500 times for a Test #4 Day-30 interior high-flow fiberglass sample in front of the header (inserted on Day 4). The EDS spot is shown in the picture. (t4d30hI9.jpg)

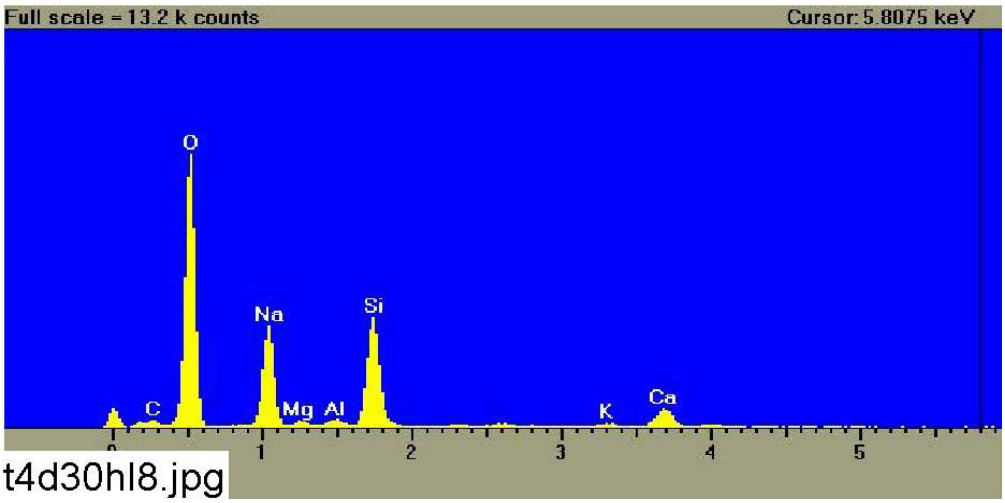


Figure C5-7: EDS counting spectrum for the spot of substance attached on fiberglass shown in Figure C5-6. (t4d30hI8.jpg)

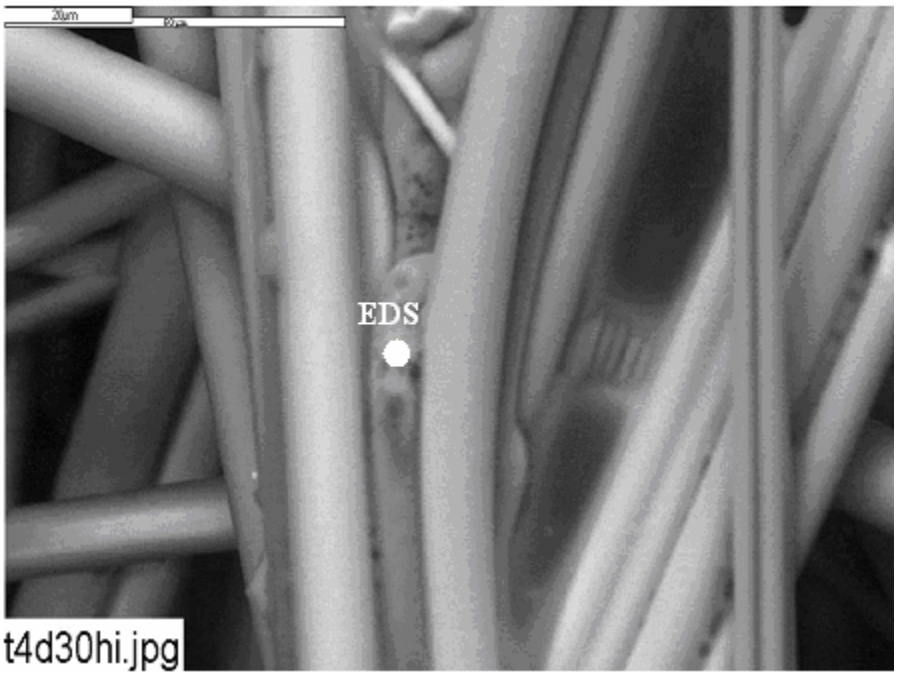


Figure C5-8: Annotated environmental SEM image magnified 1000 times for a Test #4 Day-30 interior high-flow fiberglass sample in front of the header (inserted on Day 4). The EDS spot is shown in the picture. (t4d30hi.jpg)

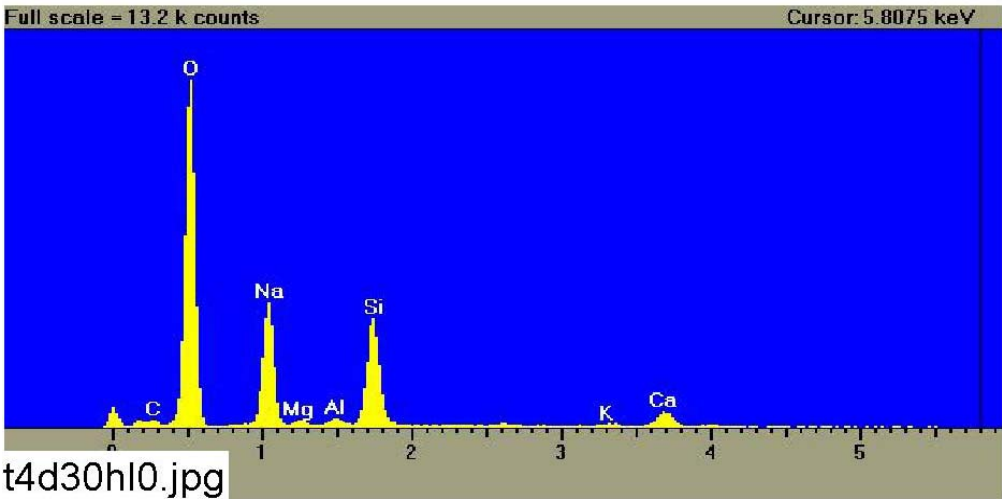


Figure C5-9: EDS counting spectrum for the spot of substance attached on fiberglass shown in Figure C5-8. (t4d30hI0.jpg)