

## Appendix C1

### ESEM/EDS Data for Test #4 Day-30 Fiberglass in Low-Flow Zones

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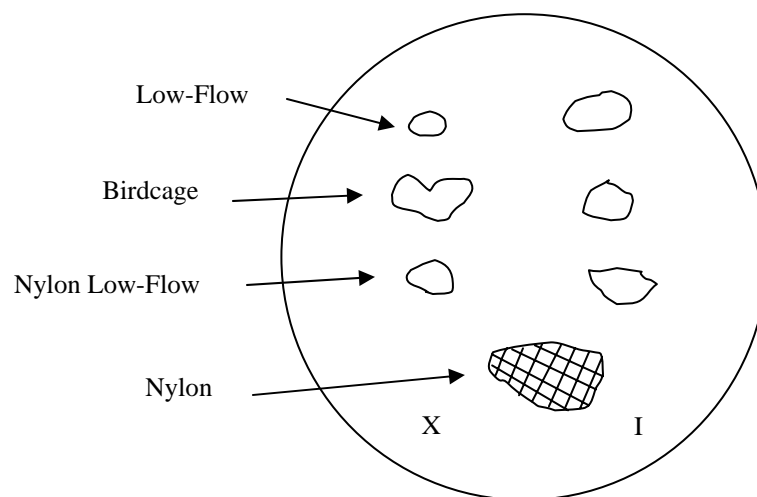
This appendix shows the ESEM/EDS results on fiberglass samples submerged in a low-flow zone in the tank. The fiberglass samples were extracted on the date Test #4 was shut down (June 23, 2005). Both exterior and interior locations of the fiberglass samples were examined. ESEM was employed to analyze 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 low-flow fiberglass samples were obtained on June 24, 2005. EDS results provide a semi-quantitative elemental analysis of the debris attached on fiberglass.

## Transcribed Laboratory Log

Laboratory session from June 24, 2005.

Test #4 Day-30 Low-Flow Fiberglass.

### ESEM

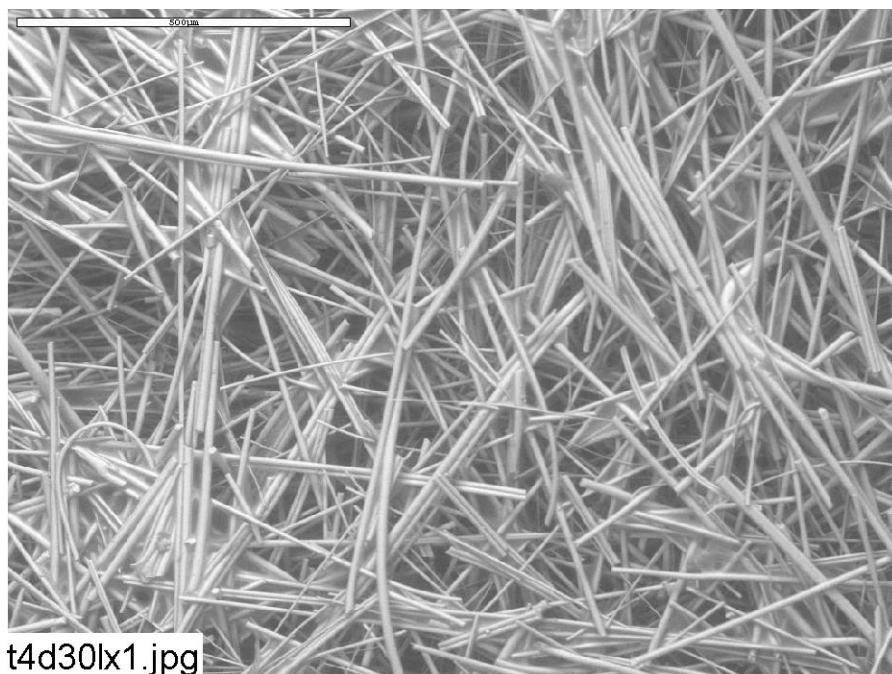


### Low-Flow Exterior

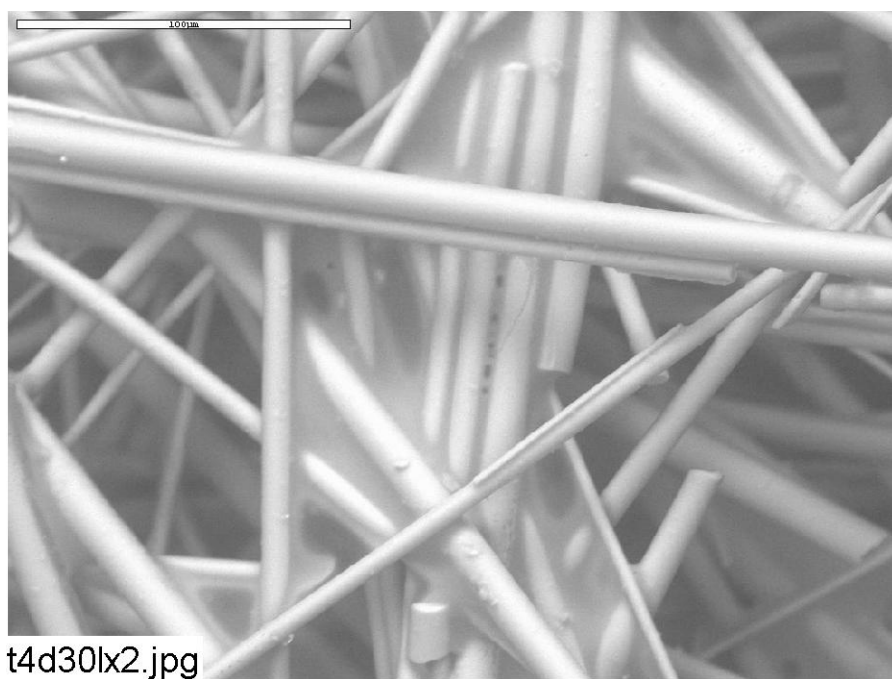
Image:	t4d30lx1	100 ×	ESEM image	Figure C1-1
	t4d30lx2	500 ×	ESEM image higher magnification	Figure C1-2
	t4d30lx5	1000 ×	ESEM annotated image	Figure C1-3
EDS:	t4d30lx4		Spot of coating substance for t4d30lx5	Figure C1-4

### Low-Flow Interior

Image:	T4D30LI6	100 ×	ESEM image of fiberglass	Figure C1-5
	t4d30li9	500 ×	ESEM annotated image	Figure C1-6
EDS:	t4d30li8		Film on fiberglass for t4d30li9	Figure C1-7



**Figure C1-1: Environmental SEM image magnified 100 times for a Test #4 Day-30 exterior low-flow fiberglass sample. (t4d30lx1.jpg)**



**Figure C1-2: Environmental SEM image magnified 500 times for a Test #4 Day-30 exterior low-flow fiberglass sample. (t4d30lx2.jpg)**

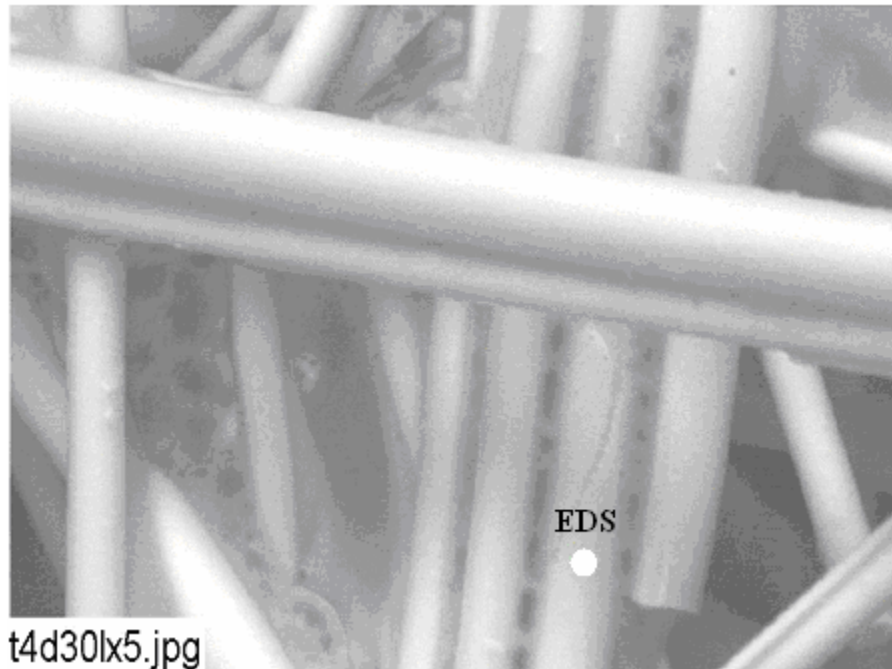


Figure C1-3: Annotated environmental SEM image magnified 1000 times for a Test #4 Day-30 exterior low-flow fiberglass sample. (t4d30lx5.jpg)

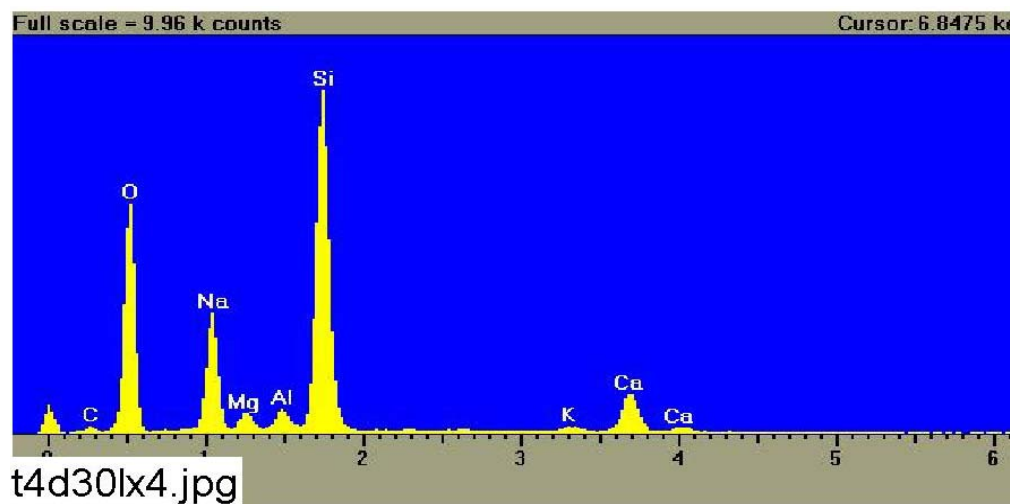
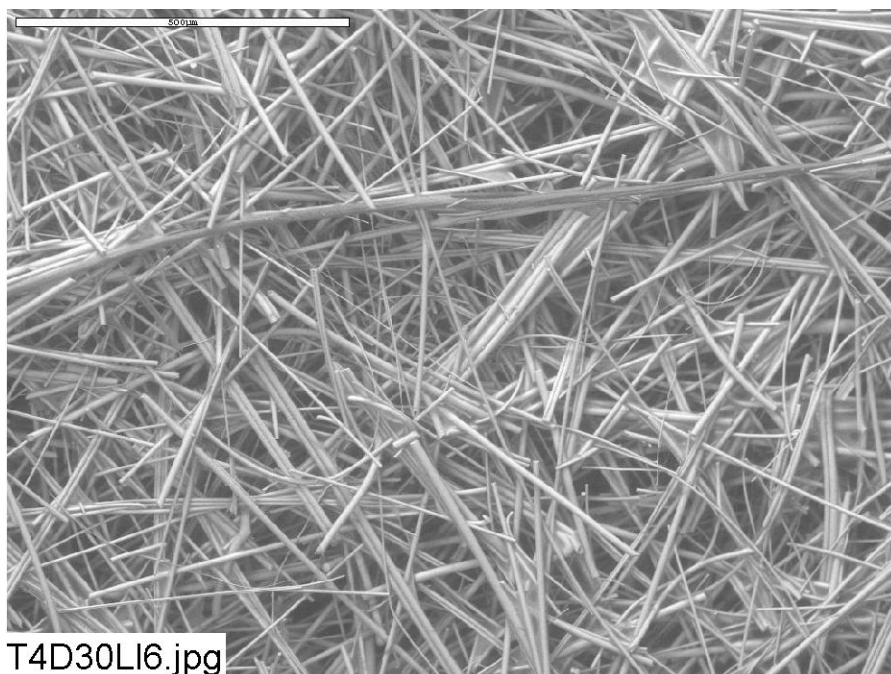
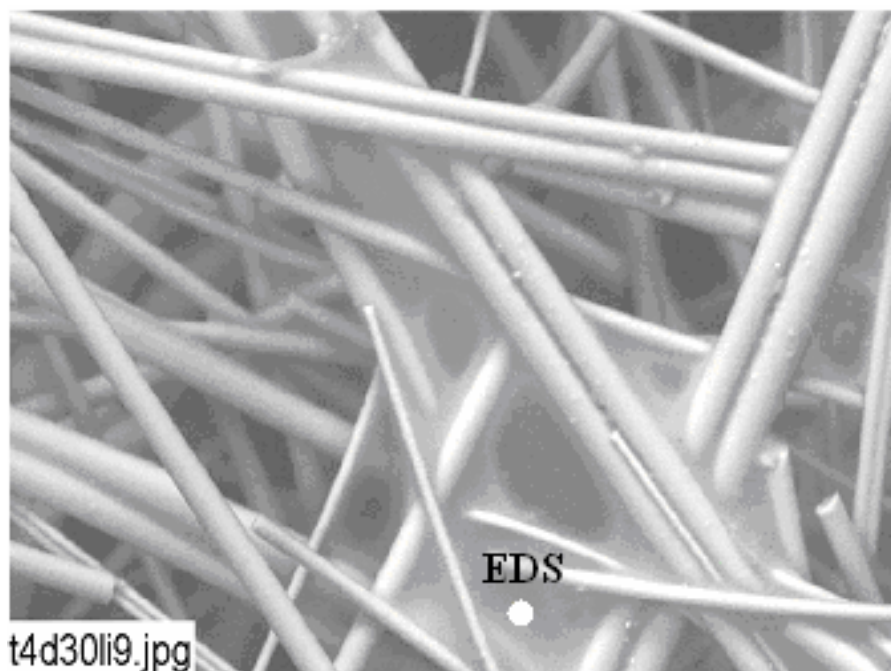


Figure C1-4: EDS counting spectrum for the spot of coating substance on fiberglass shown in Figure C1-3. (t4d30lx4.jpg)



**Figure C1-5: Environmental SEM image magnified 100 times for a Test #4 Day-30 interior low-flow fiberglass sample. (T4D30LI6.jpg)**



**Figure C1-6: Annotated environmental SEM image magnified 500 times for a Test #4 Day-30 interior low-flow fiberglass sample. EDS spot is shown in the picture (t4d30li9.jpg)**

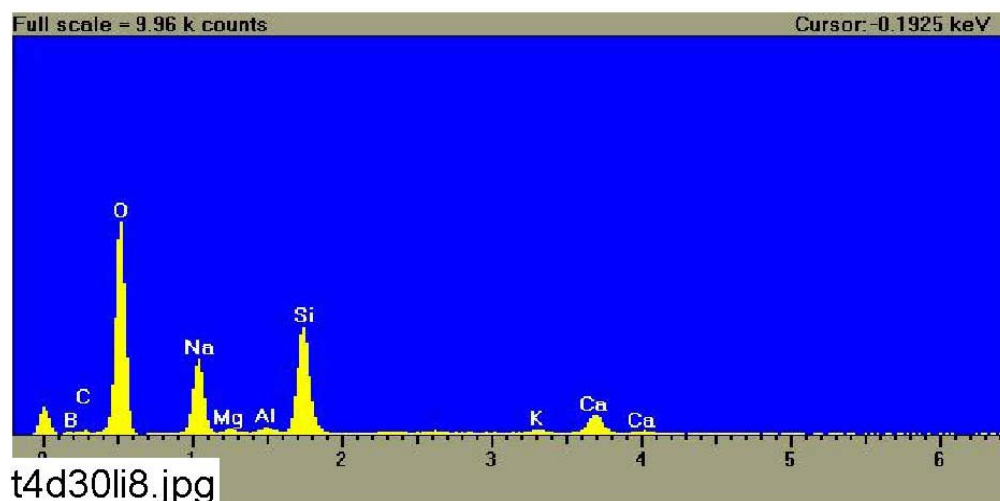


Figure C1-7: EDS counting spectrum for the film between fibers shown in Figure C1-6.  
(t4d30li8.jpg)