

## Appendix B1

### ESEM/EDS and SEM/EDS Data for Test #3, Day-15 Fiberglass in High-Flow Zones

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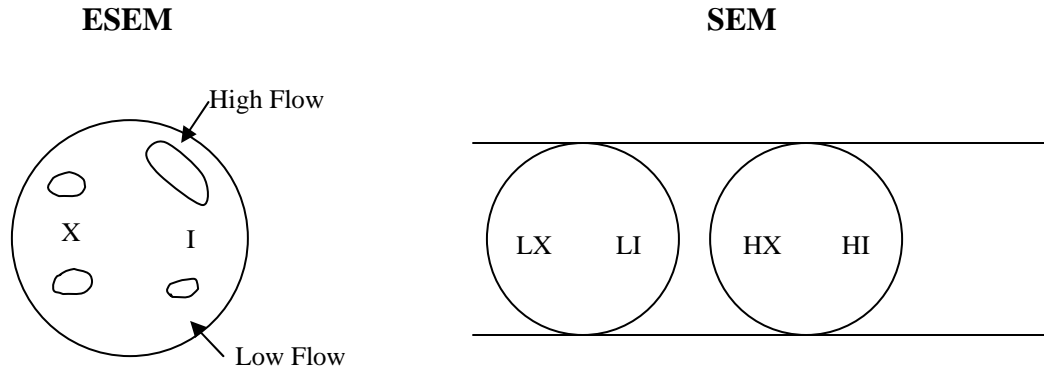
This appendix shows the ESEM/probe SEM/EDS results for ICET Test #3, Day-15 high-flow zone fiberglass samples. Both exterior and interior locations of the fiberglass samples were examined. These fiberglass samples were obtained on April 20, 2005 (15th day of Test #3). For probe SEM examination, the fiberglass samples were air dried at room temperature and then were coated with Au/Pd. Available logbook entries for this laboratory session are included in this appendix as transcribed notes.

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## Transcribed Laboratory Log

Laboratory session from April 22, 2005.

Test #3, Day-15 fiberglass in high-flow zones



Instrument Conditions: ESEM, Pressure = 80 Pa  
SEM, Electron beam of  $1 \times 10^{-9}$  (A)

### ESEM Fiberglass High-Flow Interior

Image:	T3D15HI1	100 ×	Figure B1-1
	T3D15HI2	1000 ×	Figure B1-2
	T3D15HI3	2000 ×	Figure B1-3
EDS:	T3D15HIA	EDS on particles shown in T3D15HI3	Figure B1-4

### ESEM Fiberglass High-Flow Exterior

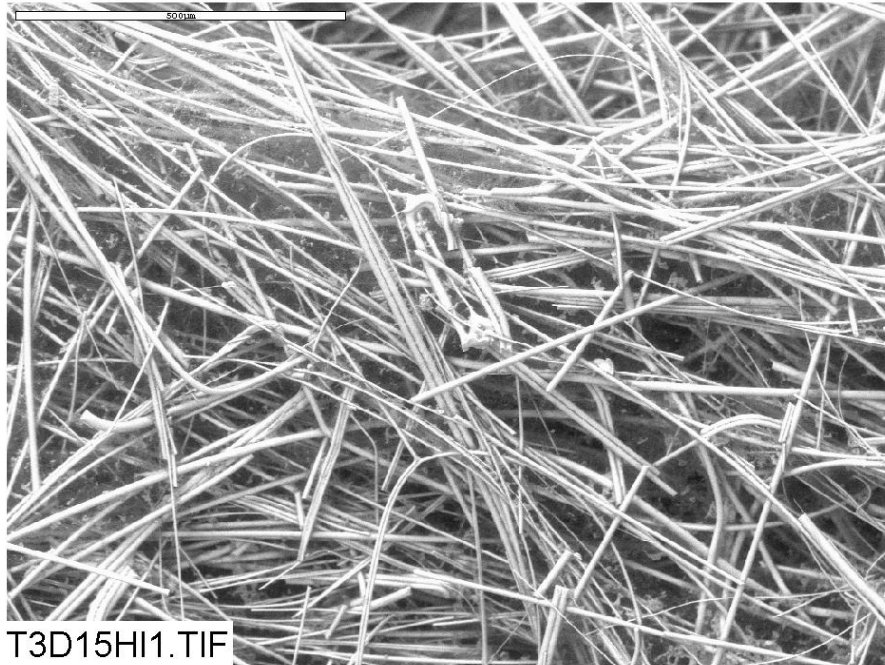
Image:	T3D15HX4	110 ×	Figure B1-5
	T3D15HX5	1000 ×	Figure B1-6
EDS:	T3D15HXB	EDS on particles shown in T3D15HX5	Figure B1-7

### **SEM Fiberglass High-Flow Interior**

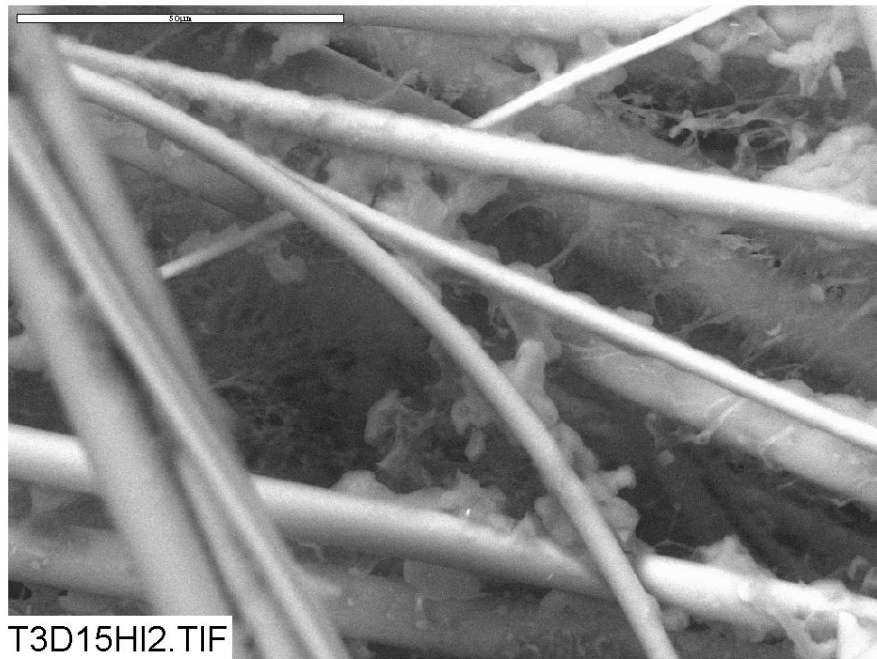
Image:	T3D15HIFlowInt002	100 ×	Figure B1-8
	T3D15HIFlowInt003	1000 ×	Figure B1-9
	T3D15HIFlowInt004	1000 ×	Figure B1-10
EDS:	T3D15HIFlowIntEDS1	EDS on particles shown in Int004	Figure B1-11

### **SEM Fiberglass High-Flow Exterior**

Image:	T3D15HIFlowExt005	100 ×	Figure B1-12
	T3D15HIFlowExt006	1000 ×	Figure B1-13
	T3D15HIFlowExt007	500 ×	Figure B1-14
EDS:	T3D15HIFlowExtEDS2	EDS on particles shown in Ext007	Figure B1-15



**Figure B1-1.** Environmental SEM image magnified 100 times for a Test #3, Day-15 high-flow interior fiberglass sample. (T3D15HI1)



**Figure B1-2.** Environmental SEM image magnified 1000 times for a Test #3, Day-15 high-flow interior fiberglass sample. (T3D15HI2)

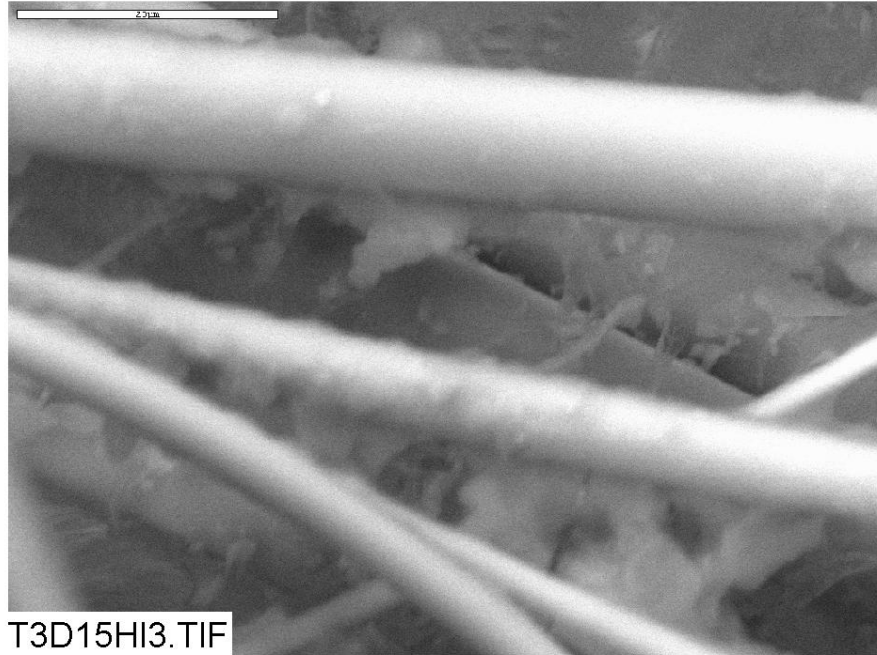


Figure B1-3. Environmental SEM image magnified 2000 times for a Test #3, Day-15 high-flow interior fiberglass sample. (T3D15HI3)

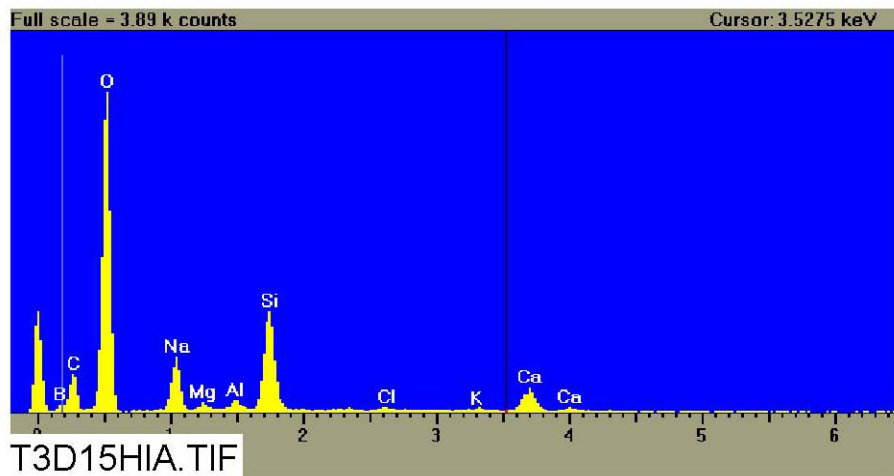
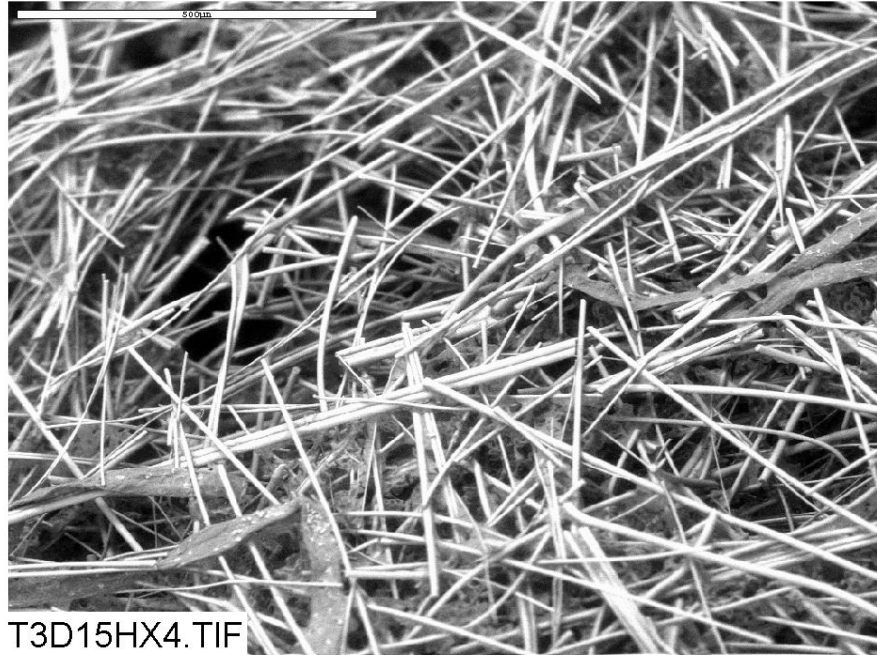
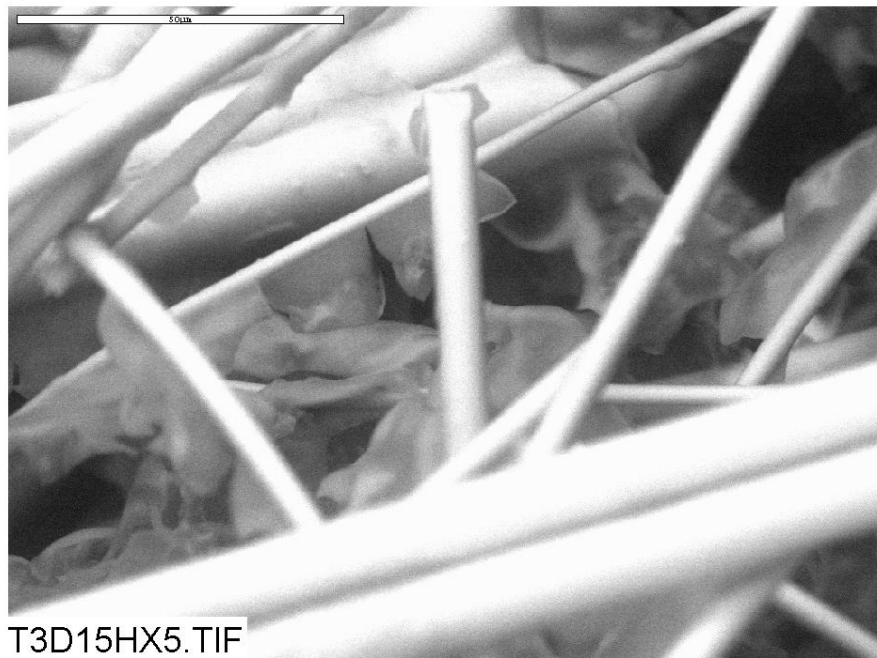


Figure B1-4. EDS counting spectrum for the flocculence deposits between the fibers on ESEM image shown in Figure B1-3. (T3D15HIA)





**Figure B1-5. Environmental SEM image magnified 110 times for a Test #3, Day-15 high-flow exterior fiberglass sample. (T3D15HX4)**



**Figure B1-6. Environmental SEM image magnified 1000 times for a Test #3, Day-15 high-flow exterior fiberglass sample. (T3D15HX5)**

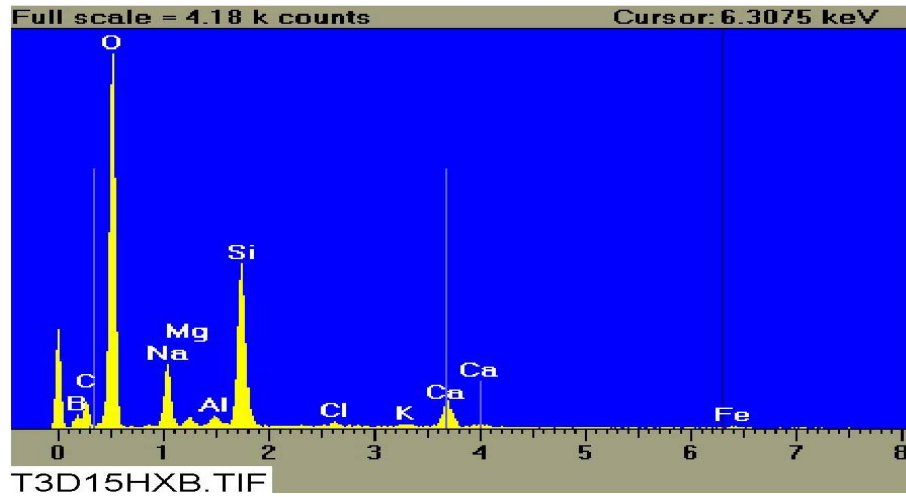


Figure B1-7. EDS counting spectrum for the deposits between the fibers on ESEM image shown in Figure B1-6. (T3D15HXB)

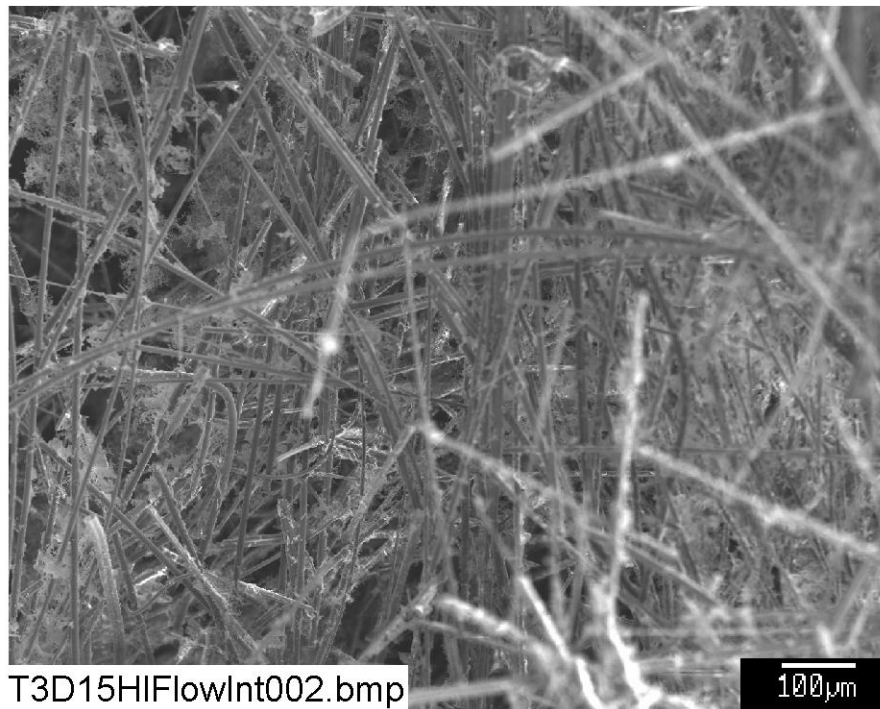
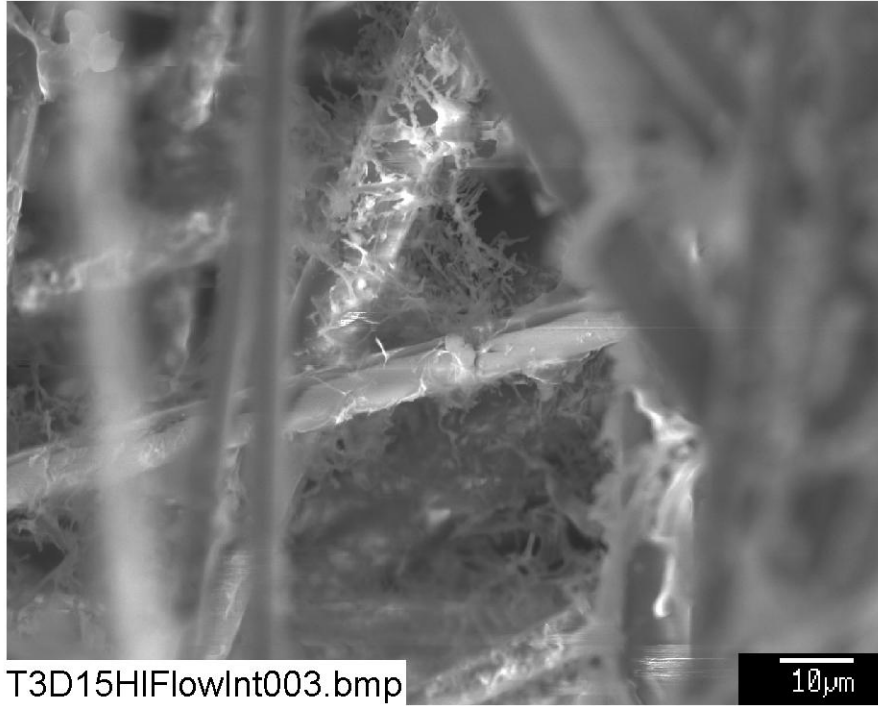
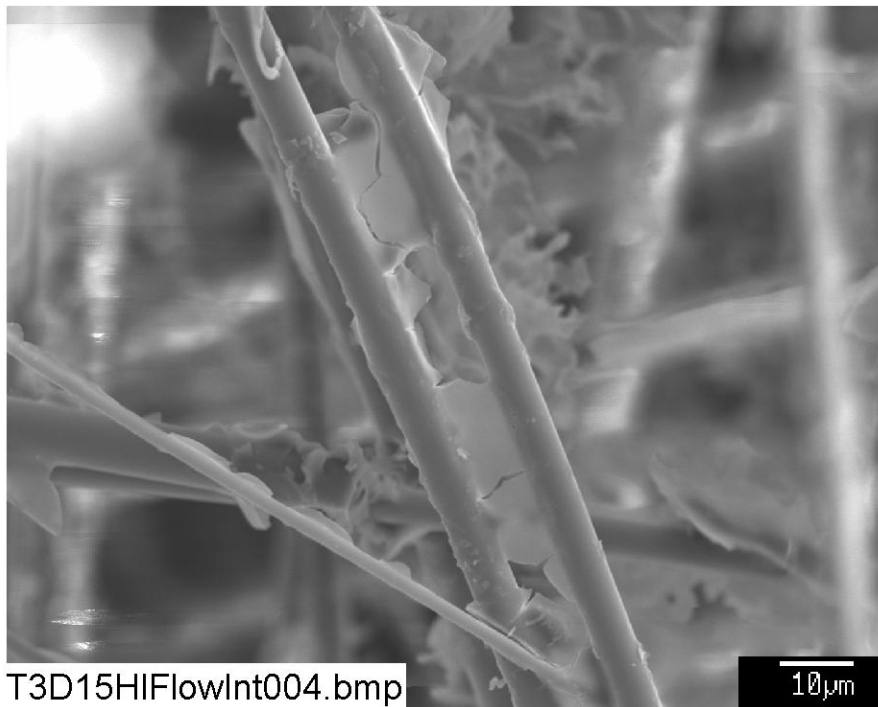


Figure B1-8. SEM image magnified 100 times for a Test #3, Day-15 high-flow interior fiberglass sample. (T3D15HIFlowInt002)



**Figure B1-9.** SEM image magnified 1000 times for a Test #3, Day-15 high-flow interior fiberglass sample. (T3D15HIFlowInt003)



**Figure B1-10.** SEM image magnified 1000 times for a Test #3, Day-15 high-flow interior fiberglass sample. (T3D15HIFlowInt004)

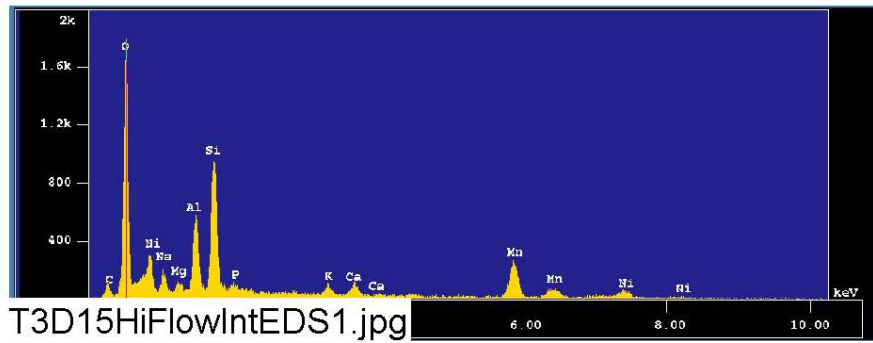


Figure B1-11. EDS counting spectrum for the flocculence deposits between the fibers on SEM image shown in Figure B1-10. (T3D15HiFlowIntEDS1)

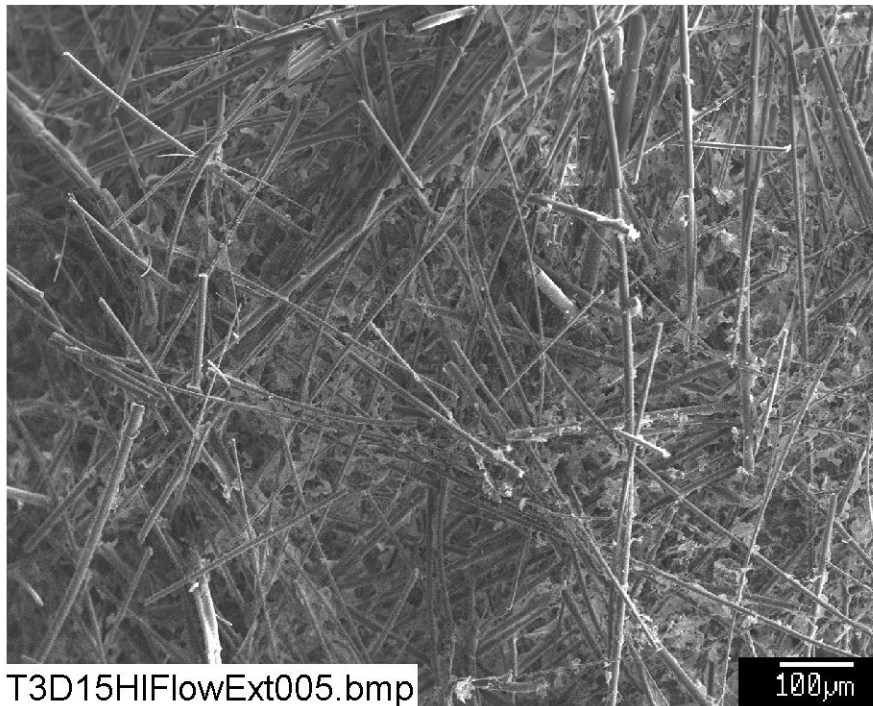
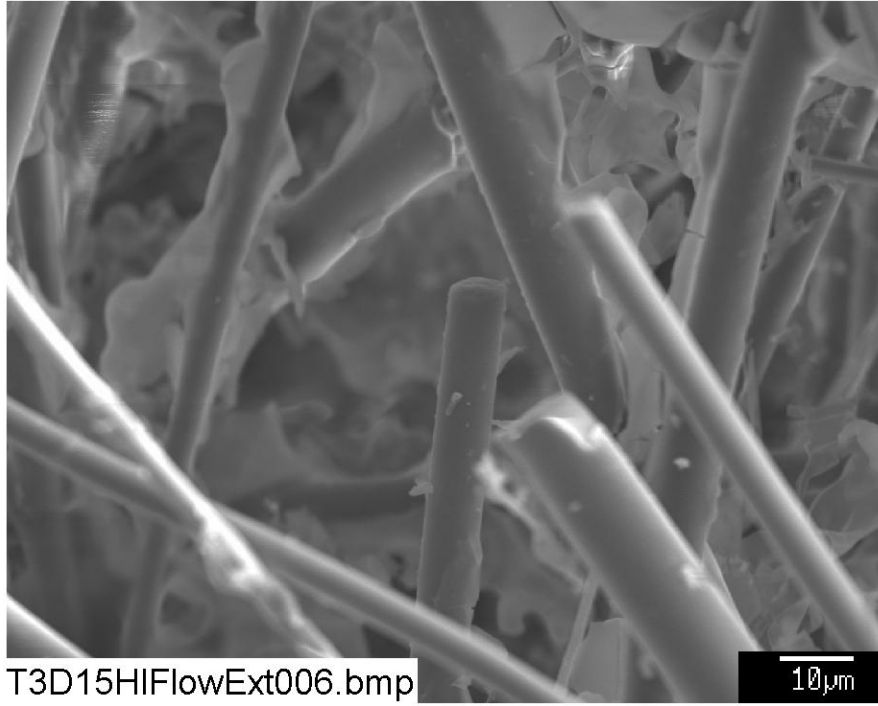
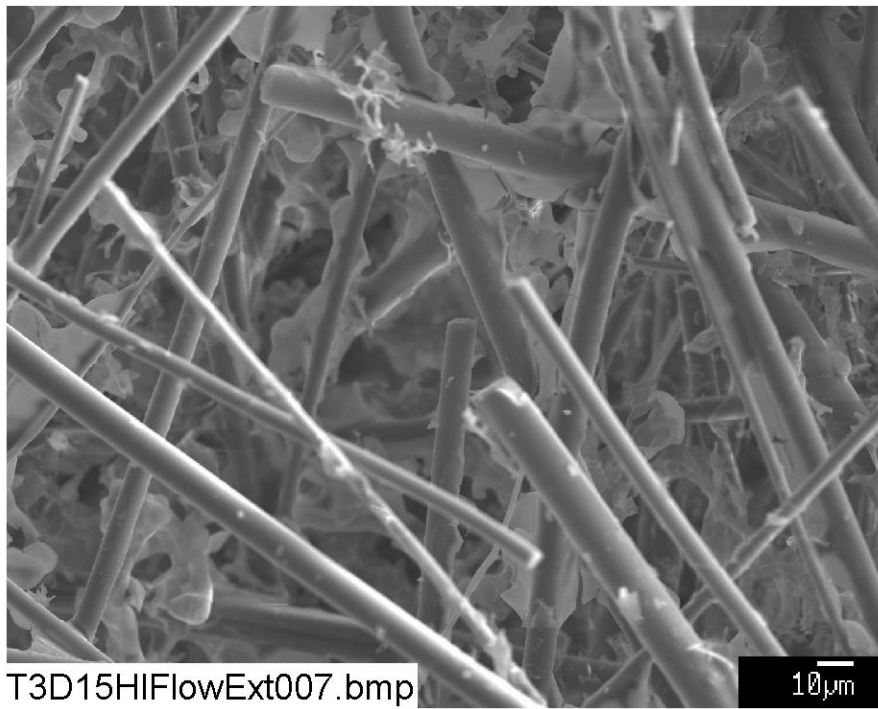


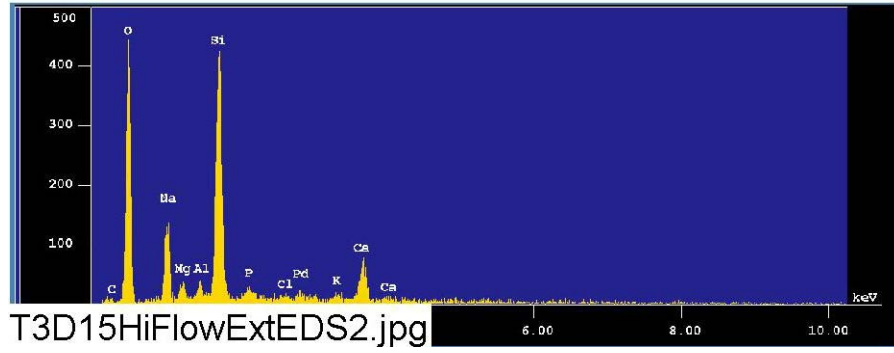
Figure B1-12. SEM image magnified 100 times for a Test #3, Day-15 high-flow exterior fiberglass sample. (T3D15HiFlowExt005)



**Figure B1-13.** SEM image magnified 1000 times for a Test #3, Day-15 high-flow exterior fiberglass sample. (T3D15HIFlowExt006)



**Figure B1-14.** SEM image magnified 500 times for a Test #3, Day-15 high-flow exterior fiberglass sample. (T3D15HIFlowExt007)



**Figure B1-15. EDS counting spectrum for the flocculence deposits between the fibers on SEM image shown in Figure B1-14. (T3D15HiFlowExtEDS2)**