Appendix B2

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

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

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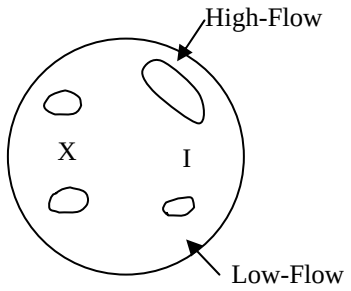
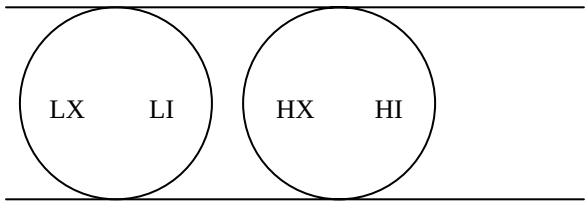
Transcribed Laboratory Log

Laboratory session from April 22, 2005.
Test #3 Day-15 fiberglass in low-flow zones

ESEM



SEM



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

ESEM Fiberglass Low-Flow Interior

Image:	T3D15LI6	100 ×		Figure B2-1
	T3D15LI7	1000 ×		Figure B2-2
	T3D15LI8	1000 ×		Figure B2-3
EDS:	T3D15LIC		EDS on particles shown in T3D15LI8	Figure B2-4

ESEM Fiberglass Low-Flow Exterior

Image:	T3D15LX9	110 ×		Figure B2-5
	T3D15LX0	1000 ×		Figure B2-6
EDS:	T3D15LXD		EDS on particles shown in T3D15LX0	Figure B2-7

SEM Fiberglass Low-Flow Interior

Image:	T3D15LowFlowInt008	100 ×		Figure B2-8
	T3D15LowFlowInt009	1000 ×		Figure B2-9
	T3D15LowFlowInt010	1000 ×		Figure B2-10

SEM Fiberglass Low-Flow Exterior

Image:	T3D15LowFlowExt011	100 ×		Figure B2-11
	T3D15LowFlowExt012	1000 ×		Figure B2-12
	T3D15LowFlowExt013	1000 ×		Figure B2-13
EDS:	T3D15LowFlowExtEDS3		EDS on particles shown in Ext007	Figure B2-14

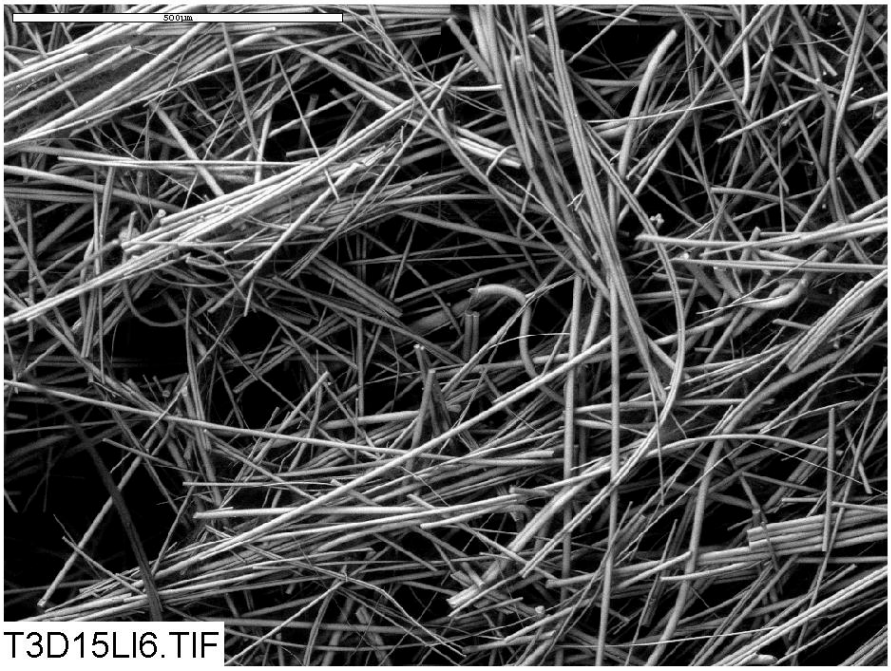


Figure B2-1: Environmental SEM image magnified 100 times for a Test #3 Day-15 low-flow interior fiberglass sample. (T3D15LI6)

Figure B2-2: Environmental SEM image magnified 1000 times for a Test #3 Day-15 low-flow interior fiberglass sample. (T3D15LI7)

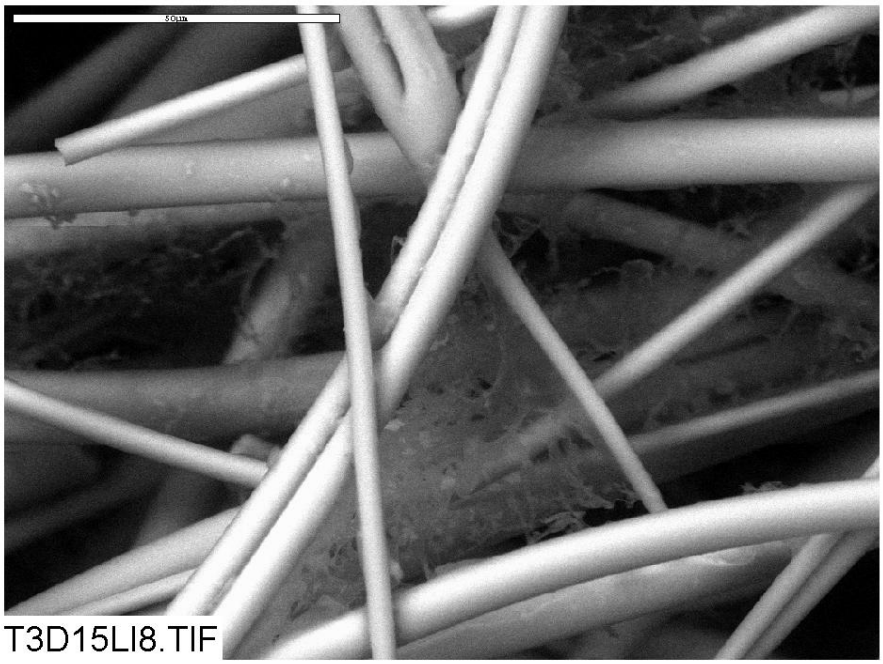


Figure B2-3: Environmental SEM image magnified 1000 times for a Test #3 Day-15 low-flow interior fiberglass sample. (T3D15LI8)

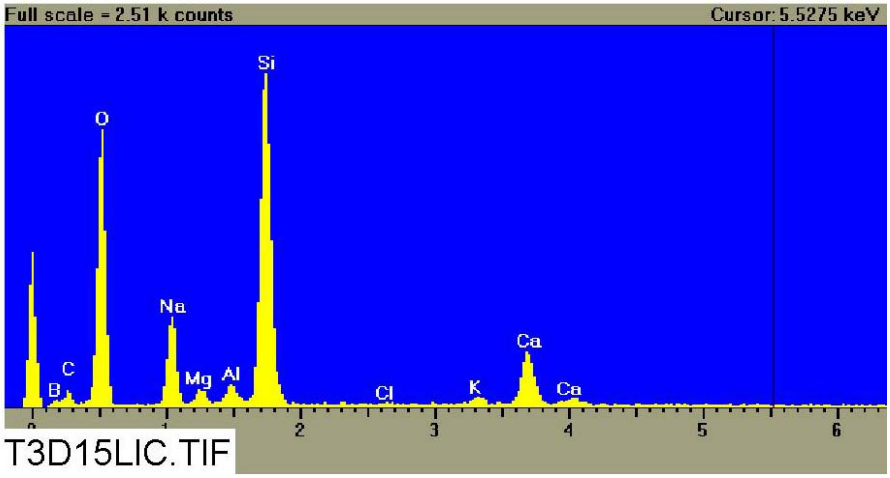


Figure B2-4: EDS counting spectrum for the flocculence deposits between the fibers on ESEM image shown in Figure B2-3. (T3D15LIC)

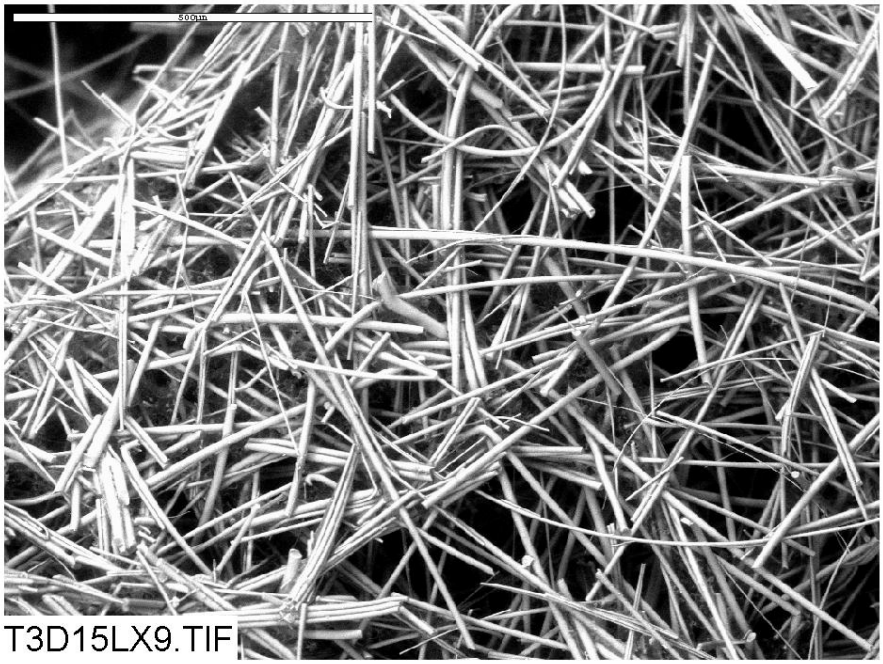


Figure B2-5: Environmental SEM image magnified 110 times for a Test #3 Day-15 low-flow exterior fiberglass sample. (T3D15LX9)

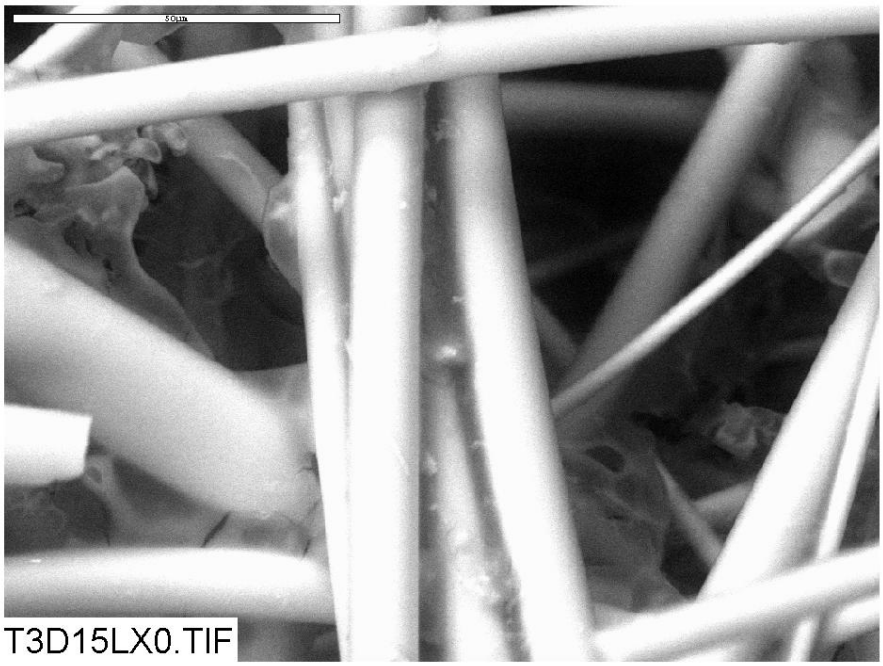


Figure B2-6: Environmental SEM image magnified 1000 times for a Test #3 Day-15 low-flow exterior fiberglass sample. (T3D15LX0)

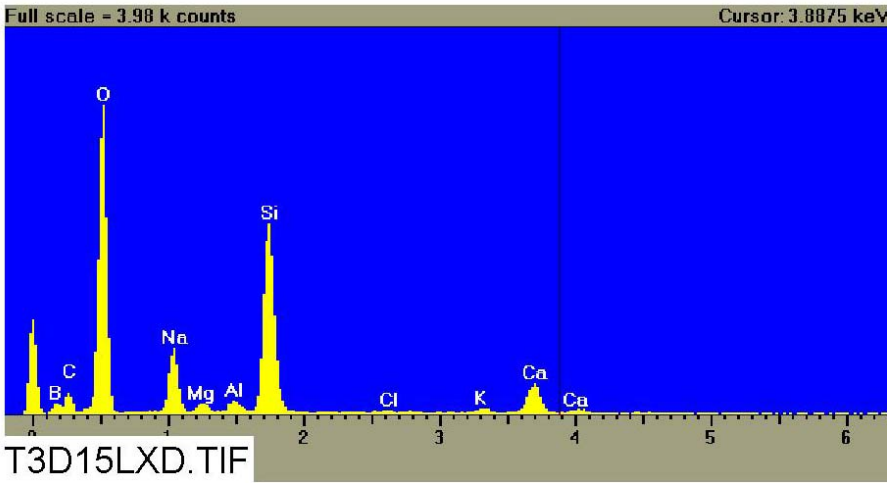


Figure B2-7: EDS counting spectrum for the deposits between the fibers on ESEM image shown in Figure B2-6. (T3D15LXD)

Figure B2-8: SEM image magnified 100 times for a Test #3 Day-15 low-flow interior fiberglass sample. (T3D15LowFlowInt008)

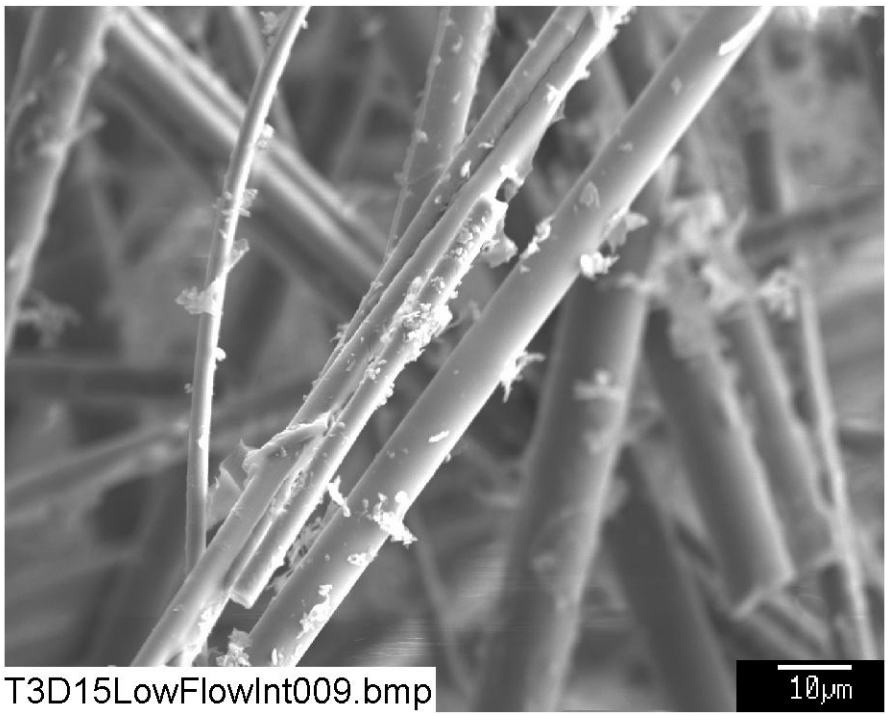


Figure B2-9: SEM image magnified 1000 times for a Test #3 Day-15 low-flow interior fiberglass sample. (T3D15LowFlowInt009)

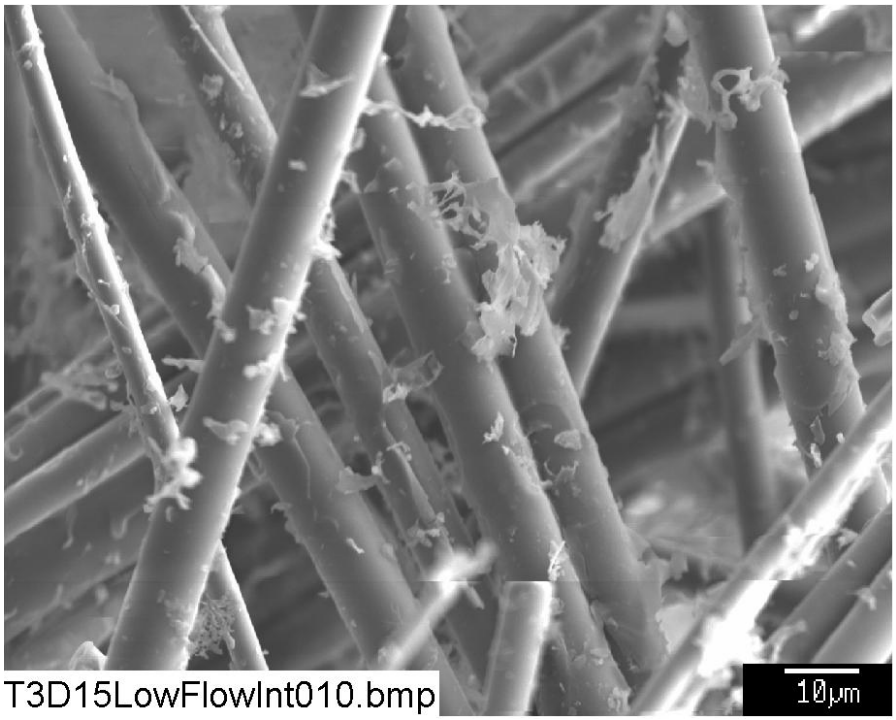


Figure B2-10: SEM image magnified 1000 times for a Test #3 Day-15 low-flow interior fiberglass sample. (T3D15LowFlowInt010)

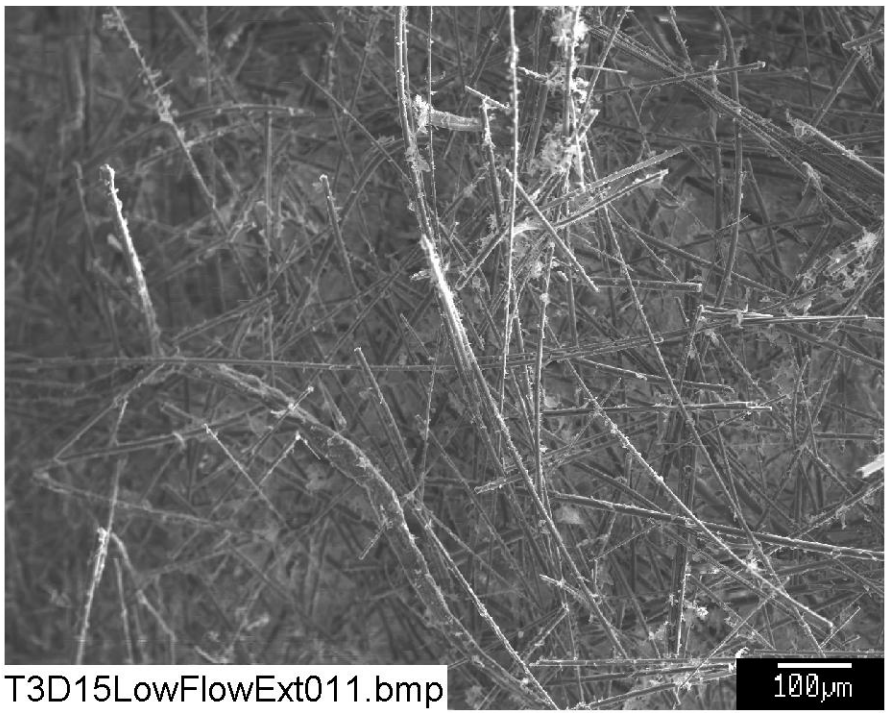


Figure B2-11: SEM image magnified 100 times for a Test #3 Day-15 low-flow exterior fiberglass sample. (T3D15LowFlowExt011)

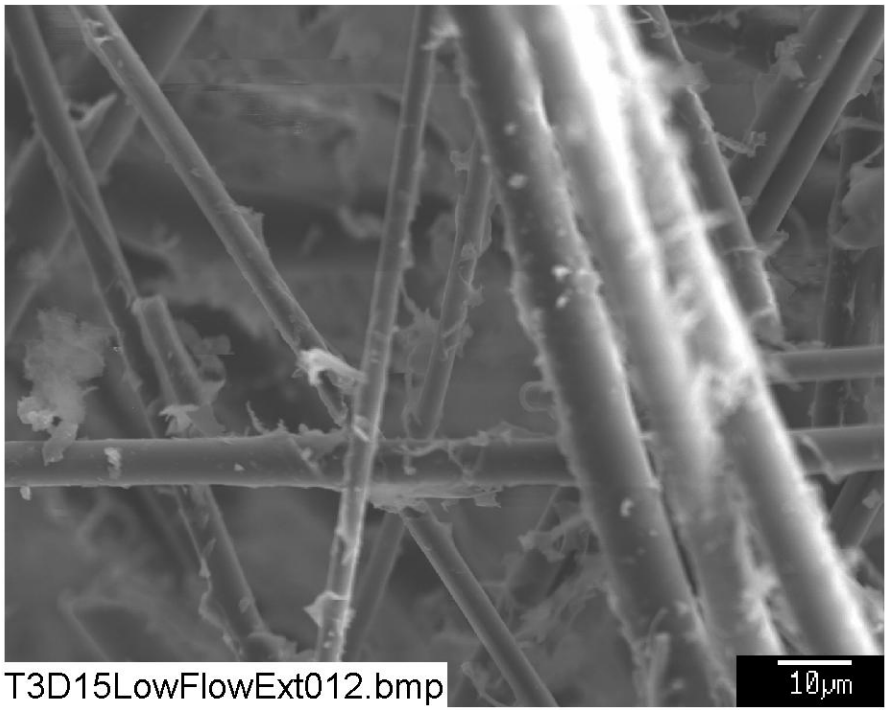


Figure B2-12: SEM image magnified 1000 times for a Test #3 Day-15 low-flow exterior fiberglass sample. (T3D15LowFlowExt012)

Figure B2-13: SEM image magnified 1000 times for a Test #3 Day-15 low-flow exterior fiberglass sample. (T3D15LowFlowExt013)

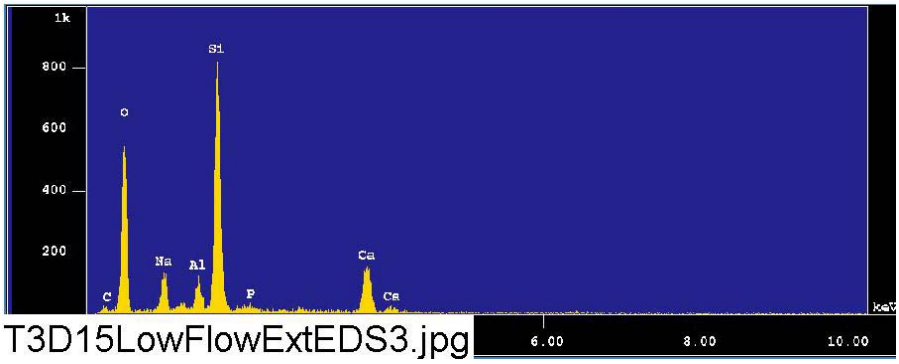


Figure B2-14: EDS counting spectrum for the flocculence deposits between the fibers on SEM image shown in Figure B2-13. (T3D15LowFlowExtEDS3)