

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA22LA150

SYSTEMS

Group Chair's Factual Report

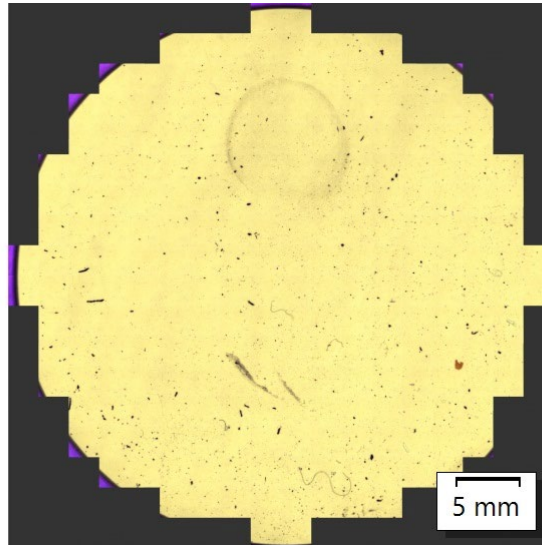
December 04, 2023

Attachment 3 - Patch Test Results from Power Brake & Anti-Skid Valve Left Master Cylinder Port
(3 pages)

Sample Information

Sample ID:	005111_1	Work Order #:	
Test Stand #:		Part:	348
Technician:	NGHIA	Approval:	NOK
Port:	MCL	Serial Number:	348

Sample Image



Inspection Information

Objective:	5x	Image resolution:	1.25 μ m
Inspection date:	10/19/2022	Last system check:	10/19/2022
Inspected area:	1164.16 mm ²	Flow-through area:	
Preparation Date:	10/18/2022	RMA #:	

Approval

Standard name:	SAE AS4059:2011 -Master Rev 2
Result code:	AS4059 Class 11F
Overall approval:	NOK
Comment:	84-023-02 , S/N348 , PORT MCL

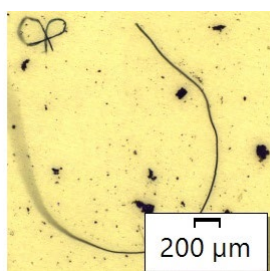
Classification Table (All Particles)

Class	Range [μm]	Absolute Count	Normalized Count [1/100 ml]	Contamination Class	Maximum	Approval (Contamination Class)
B	>=5	57318.00	57318.00	8	5	NOK
C	>=15	11091.00	11091.00	8	5	NOK
D	>=25	4110.00	4110.00	9	5	NOK
E	>=50	1203.00	1203.00	10	5	NOK
F	>=100	367.00	367.00	11	5	NOK

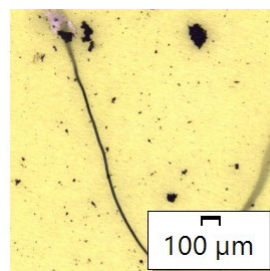
Largest Particle Table (All Particles)

Particle	Feret Max. [μm]	Particle Class	Particle Type	Max. Particle/Fiber Length [μm]
1	1925.93	F	Regular Fiber	3379.92
2	1485.04	F	Regular Particle	1485.04
3	1373.25	F	Regular Particle	1373.25
4	949.72	F	Regular Particle	949.72
5	884.51	F	Regular Fiber	1245.69
6	873.25	F	Regular Particle	873.25
7	831.89	F	Regular Particle	831.89
8	577.96	F	Regular Particle	577.96
9	567.78	F	Regular Particle	567.78
10	559.61	F	Regular Particle	559.61

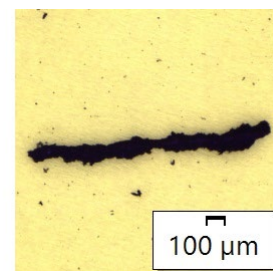
Largest Particle Images (All Particles)



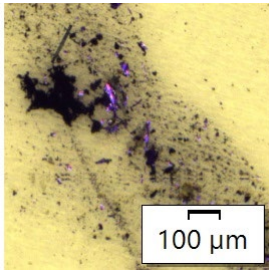
Feret Max.: 1925.93 μm
Particle Type: Regular Fiber



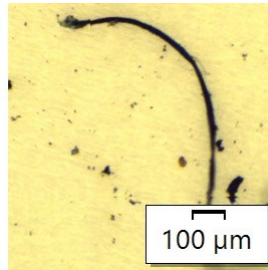
Feret Max.: 1485.04 μm
Particle Type: Regular Particle



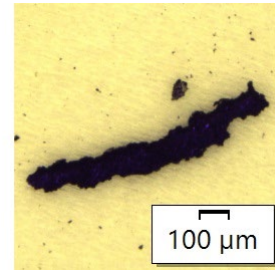
Feret Max.: 1373.25 μm
Particle Type: Regular Particle



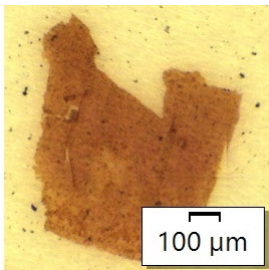
Feret Max.: 949.72 μm
Particle Type: Regular Particle



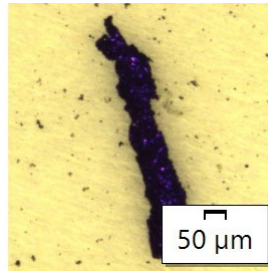
Feret Max.: 884.51 μm
Particle Type: Regular Fiber



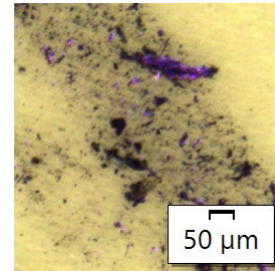
Feret Max.: 873.25 μm
Particle Type: Regular Particle



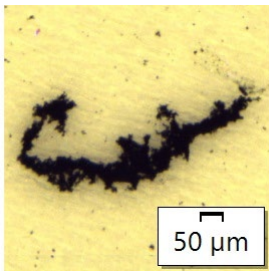
Feret Max.: 831.89 μm
Particle Type: Regular Particle



Feret Max.: 577.96 μm
Particle Type: Regular Particle



Feret Max.: 567.78 μm
Particle Type: Regular Particle



Feret Max.: 559.61 μm
Particle Type: Regular Particle