

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA22LA150

SYSTEMS

Group Chair's Factual Report

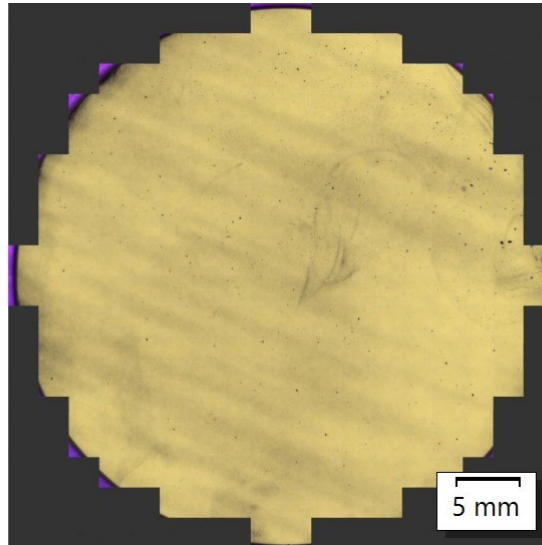
December 04, 2023

Attachment 4 - Patch Test Results from Power Brake & Anti-Skid Valve Right Master Cylinder Port
(3 pages)

Sample Information

Sample ID:	005112_1	Work Order #:	
Test Stand #:		Part:	84-023-02
Technician:	NGHIA	Approval:	NOK
Port:	MCR	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 9F
Overall approval:	NOK
Comment:	84-023-2 , S/N348 , PORT MCR

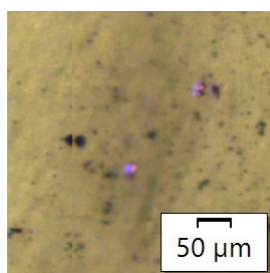
Classification Table (All Particles)

Class	Range [μm]	Absolute Count	Normalized Count [1/100 ml]	Contamination Class	Maximum	Approval (Contamination Class)
B	>=5	28343.00	28343.00	7	5	NOK
C	>=15	6188.00	6188.00	7	5	NOK
D	>=25	2502.00	2502.00	9	5	NOK
E	>=50	647.00	647.00	9	5	NOK
F	>=100	127.00	127.00	9	5	NOK

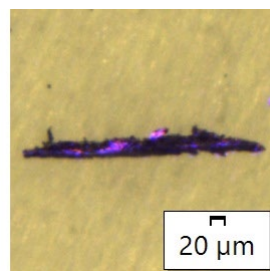
Largest Particle Table (All Particles)

Particle	Feret Max. [μm]	Particle Class	Particle Type	Max. Particle/Fiber Length [μm]
1	372.55	F	Regular Particle	372.55
2	345.62	F	Regular Particle	345.62
3	321.45	F	Regular Particle	321.45
4	311.46	F	Regular Particle	311.46
5	302.22	F	Reflecting Particle	302.22
6	288.89	F	Regular Particle	288.89
7	245.10	F	Regular Particle	245.10
8	243.09	F	Reflecting Particle	243.09
9	226.31	F	Reflecting Particle	226.31
10	225.07	F	Regular Fiber	656.16

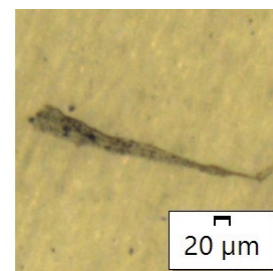
Largest Particle Images (All Particles)



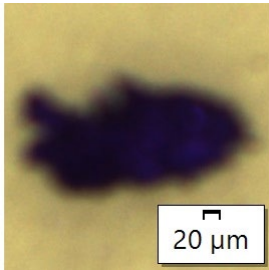
Feret Max.: 372.55 μm
Particle Type: Regular Particle



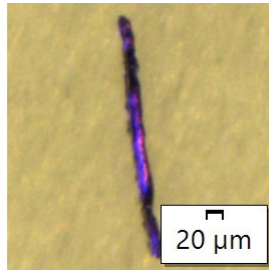
Feret Max.: 345.62 μm
Particle Type: Regular Particle



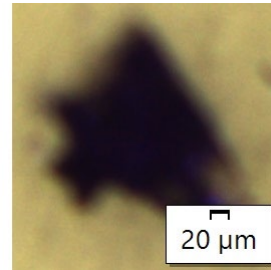
Feret Max.: 321.45 μm
Particle Type: Regular Particle



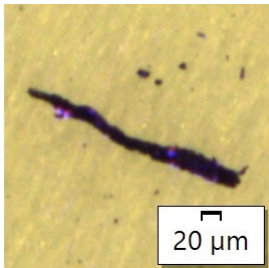
Feret Max.: 311.46 µm
Particle Type: Regular Particle



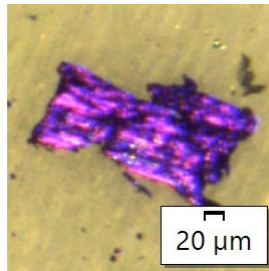
Feret Max.: 302.22 µm
Particle Type: Reflecting Particle



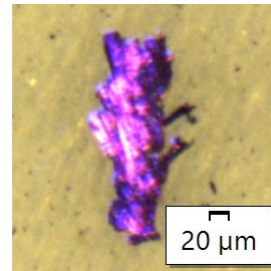
Feret Max.: 288.89 µm
Particle Type: Regular Particle



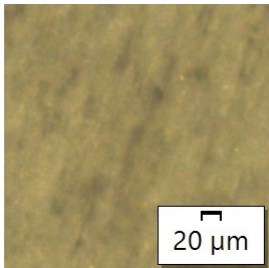
Feret Max.: 245.10 µm
Particle Type: Regular Particle



Feret Max.: 243.09 µm
Particle Type: Reflecting Particle



Feret Max.: 226.31 µm
Particle Type: Reflecting Particle



Feret Max.: 225.07 µm
Particle Type: Regular Fiber