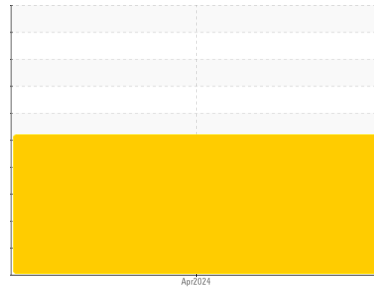




PROBLEM SUMMARY

Area
 Machine Id
[185829-N2STV4W]
 Component
STAR FIRE DOT 3 BRAKE FLUID - TAP
 Fluid
New (Unused) Oil
 {not provided} (--- GAL)

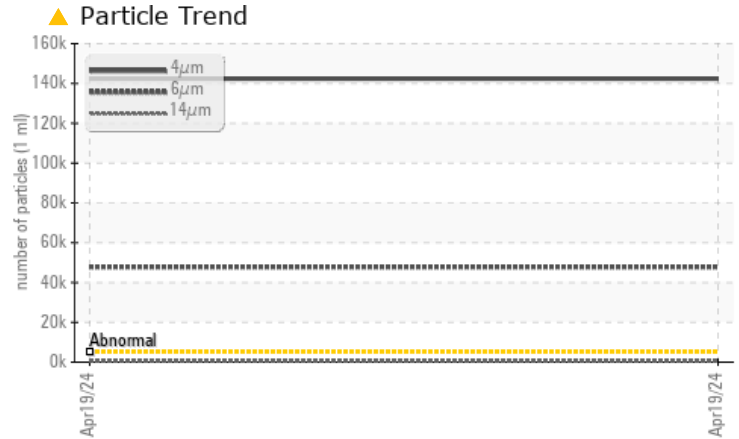
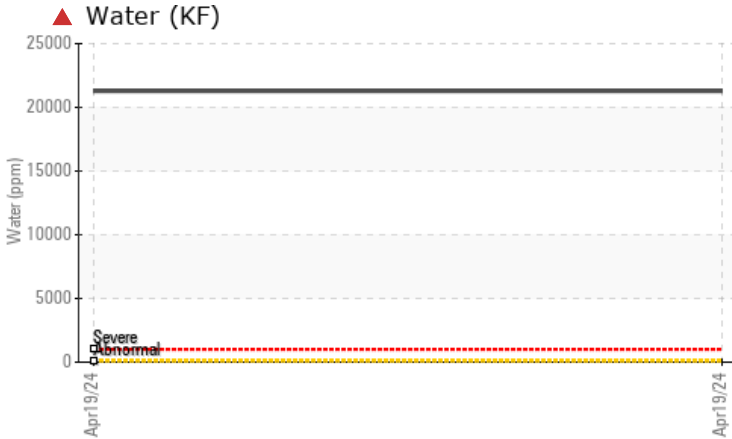
Sample Rating Trend



WATER



COMPONENT CONDITION SUMMARY



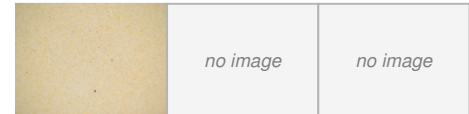
RECOMMENDATION

This is a baseline read-out on the submitted sample.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	---	---
Water	%	ASTM D6304	▲ 2.128	---	---
ppm Water	ppm	ASTM D6304	▲ 21289	---	---
Particles >4µm		ASTM D7647 >5000	▲ 142356	---	---
Particles >6µm		ASTM D7647 >1300	▲ 47807	---	---
Particles >14µm		ASTM D7647 >160	▲ 519	---	---
Particles >21µm		ASTM D7647 >40	▲ 51	---	---
Oil Cleanliness		ISO 4406 (c) >19/17/14	▲ 24/23/16	---	---

PrtFilter



Customer Id: HYSBER
 Sample No.: PH06156512
 Lab Number: 06156512
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

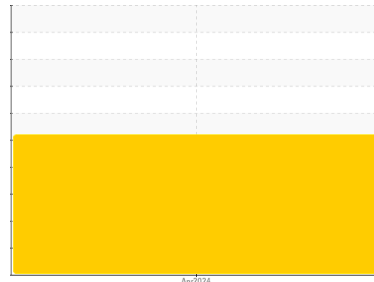
There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area

[185829-N2STV4W]

Machine Id

STAR FIRE DOT 3 BRAKE FLUID - TAP

Component

New (Unused) Oil

Fluid

{not provided} (--- GAL)

DIAGNOSIS

▲ Recommendation

This is a baseline read-out on the submitted sample.

▲ Contamination

There is a high amount of particulates present in the oil. There is a high concentration of water present in the oil.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PH06156512	---	---
Sample Date	Client Info		19 Apr 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >5	3	---	---
Chromium	ppm	ASTM D5185m >5	0	---	---
Nickel	ppm	ASTM D5185m >5	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m >5	0	---	---
Aluminum	ppm	ASTM D5185m >5	0	---	---
Lead	ppm	ASTM D5185m >5	0	---	---
Copper	ppm	ASTM D5185m >5	3	---	---
Tin	ppm	ASTM D5185m >5	0	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	67	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	0	---	---
Magnesium	ppm	ASTM D5185m	0	---	---
Calcium	ppm	ASTM D5185m	18	---	---
Phosphorus	ppm	ASTM D5185m	11	---	---
Zinc	ppm	ASTM D5185m	8	---	---
Sulfur	ppm	ASTM D5185m	51	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	2	---	---
Sodium	ppm	ASTM D5185m	15	---	---
Potassium	ppm	ASTM D5185m >20	<1	---	---
Water	%	ASTM D6304	▲ 2.128	---	---
ppm Water	ppm	ASTM D6304	▲ 21289	---	---

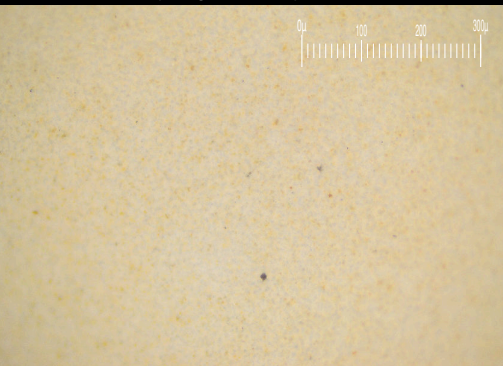
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 142356	---	---
Particles >6µm	ASTM D7647	>1300	▲ 47807	---	---
Particles >14µm	ASTM D7647	>160	▲ 519	---	---
Particles >21µm	ASTM D7647	>40	▲ 51	---	---
Particles >38µm	ASTM D7647	>10	2	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 24/23/16	---	---

FLUID DEGRADATION

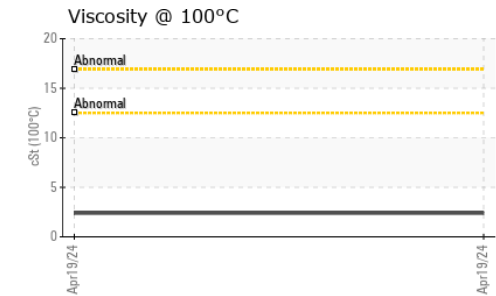
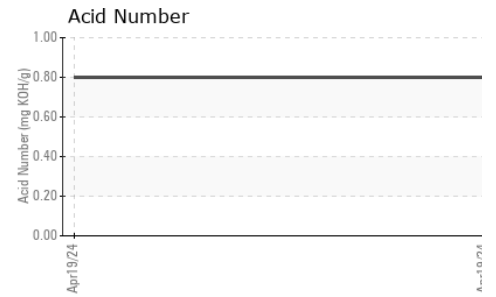
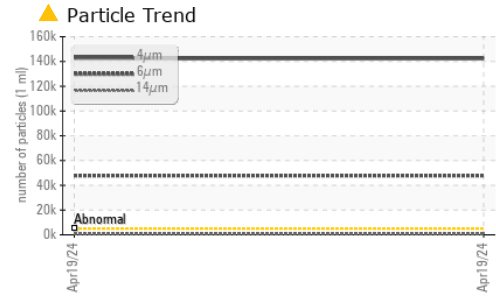
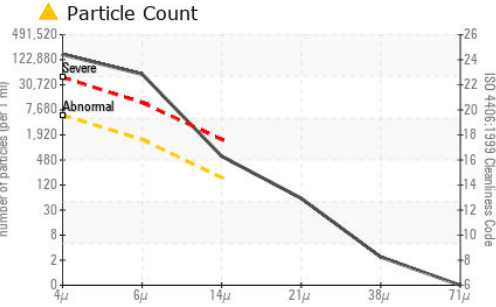
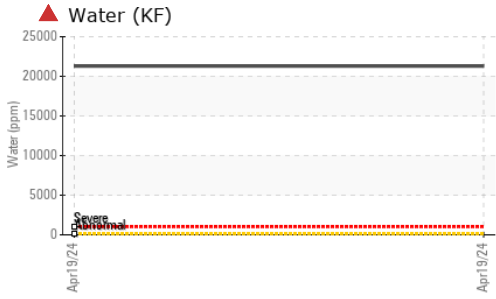
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.80	---	---

Particle Filter (Magn: 200 x)




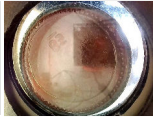



OIL ANALYSIS REPORT

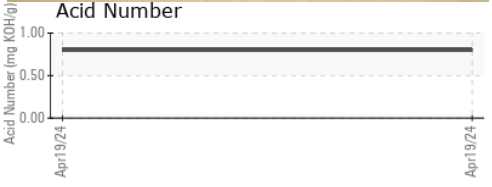
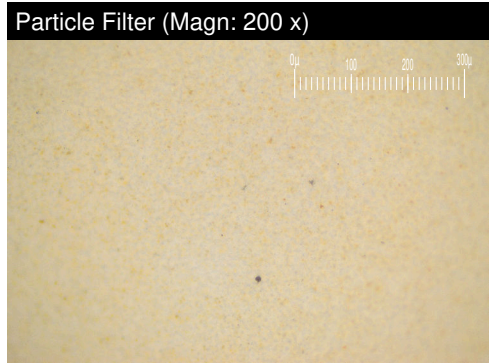
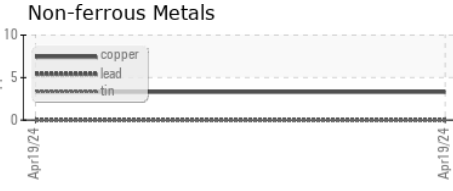
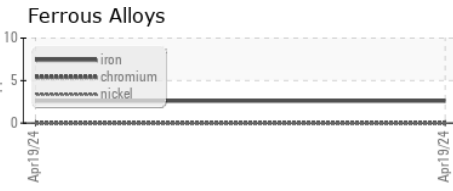


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual		NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	8.09	---	---
Visc @ 100°C	cSt	ASTM D445	2.39	---	---
Viscosity Index (VI)	Scale	ASTM D2270	116	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image
PrtFilter				no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH06156512
Lab Number : 06156512
Unique Number : 10991935
Test Package : PLANT (Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtFilter, VI)

Received : 22 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Jonathan Hester

HYSTER-YALE GROUP
 2200 MENELAUS PIKE
 BEREA, KY
 US 40403

Contact: WARREN WILLIAMS
 warren.williams@hyster-yale.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)