



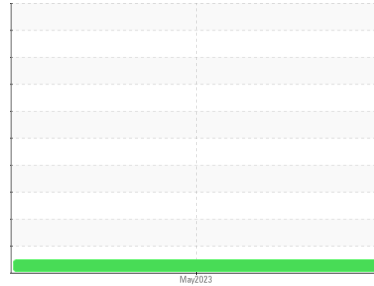
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[185834-N2STV4W]**  
 Machine Id  
**DANA 220513-001374 (6-9 TON LINE)**  
 Component  
**Wet Disc Brake**  
 Fluid  
**DEXRON III (0 LTR)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PH05843242</b>	---	---
Sample Date	Client Info		<b>04 May 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >10	<b>1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	---	---
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m >75	<b>0</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>18</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>3</b>	---	---
Calcium	ppm	ASTM D5185m	<b>25</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>112</b>	---	---
Zinc	ppm	ASTM D5185m	<b>7</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>681</b>	---	---

## CONTAMINANTS

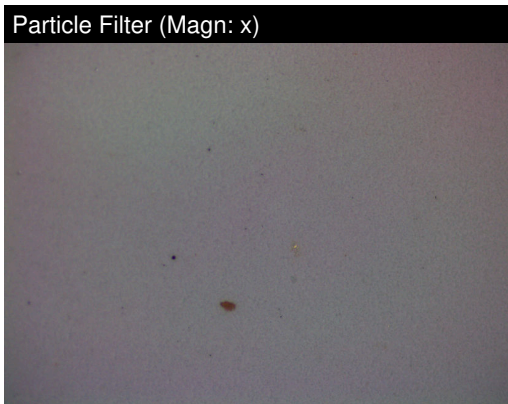
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m	<b>2</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>3</b>	---	---
Water	%	ASTM D6304 >0.1	<b>NEG</b>	---	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>3781</b>	---	---
Particles >6µm	ASTM D7647	>2500	<b>412</b>	---	---
Particles >14µm	ASTM D7647	>320	<b>10</b>	---	---
Particles >21µm	ASTM D7647	>80	<b>3</b>	---	---
Particles >38µm	ASTM D7647	>20	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>4	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>19/16/10</b>	---	---

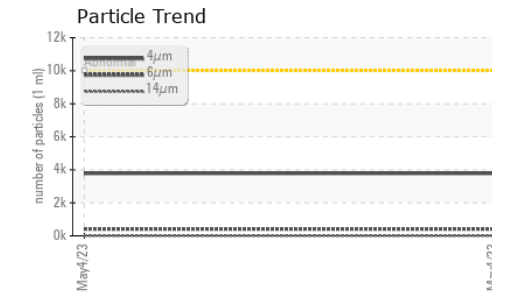
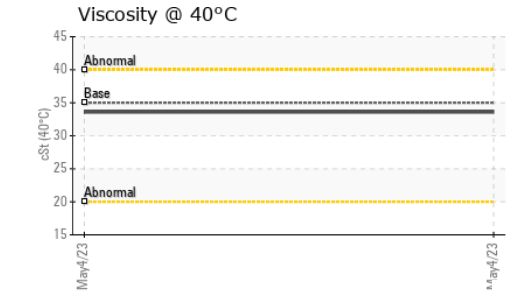
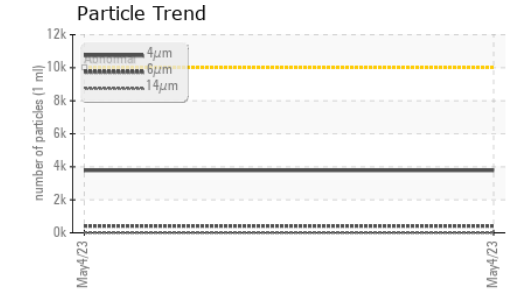
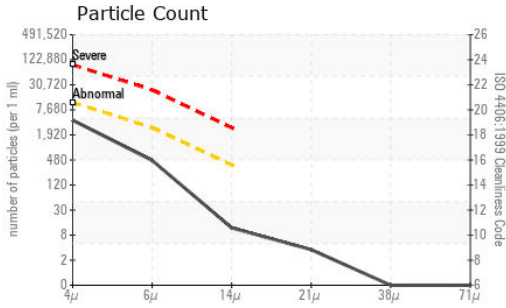
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.49</b>	---	---





# OIL ANALYSIS REPORT



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PH05843242      **Received** : 10 May 2023  
**Lab Number** : 05843242      **Tested** : 17 May 2023  
**Unique Number** : 10467349      **Diagnosed** : 17 May 2023 - Doug Bogart  
**Test Package** : PLANT ( Additional Tests: KF )

**HYSTER-YALE GROUP**  
 2200 MENELAUS PIKE  
 BEREA, KY  
 US 40403  
 Contact: WARREN WILLIAMS  
 warren.williams@hyster-yale.com  
 T: (859)228-1524  
 F:

Certificate L2367  
 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)

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	>0.1	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	35.0	33.6	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter					

## GRAPHS

