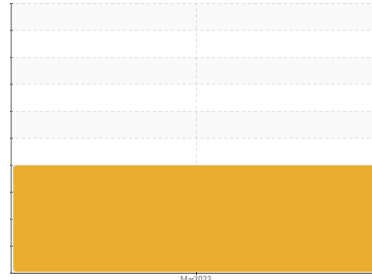




# OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL



Machine Id  
**PSM STRIPPED COND 317**

Component  
**Pump**  
Fluid  
**MOBIL SHC 626 (1 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Analytical Ferrography: Results indicate abnormal levels of external contamination present. Ferrous rubbing wear and sliding wear are slightly elevated as a result. No other notable conditions exist.

### Wear

Moderate concentration of visible metal present.

### Contaminants

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

### Oil Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0783638</b>	---	---
Sample Date	Client Info	<b>24 Mar 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>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	<b>17</b>	---	---
Iron	ppm ASTM D5185m >90	<b>9</b>	---	---
Chromium	ppm ASTM D5185m >5	<b>0</b>	---	---
Nickel	ppm ASTM D5185m >5	<b>0</b>	---	---
Titanium	ppm ASTM D5185m >3	<b>0</b>	---	---
Silver	ppm ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >7	<b>&lt;1</b>	---	---
Lead	ppm ASTM D5185m >12	<b>0</b>	---	---
Copper	ppm ASTM D5185m >30	<b>0</b>	---	---
Tin	ppm ASTM D5185m >9	<b>0</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>0</b>	---	---
Barium	ppm ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m	<b>0</b>	---	---
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm ASTM D5185m	<b>0</b>	---	---
Calcium	ppm ASTM D5185m	<b>0</b>	---	---
Phosphorus	ppm ASTM D5185m	<b>420</b>	---	---
Zinc	ppm ASTM D5185m	<b>0</b>	---	---
Sulfur	ppm ASTM D5185m	<b>0</b>	---	---

## CONTAMINANTS

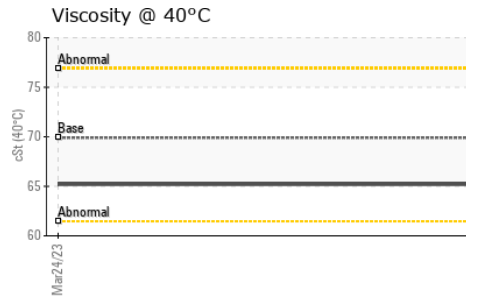
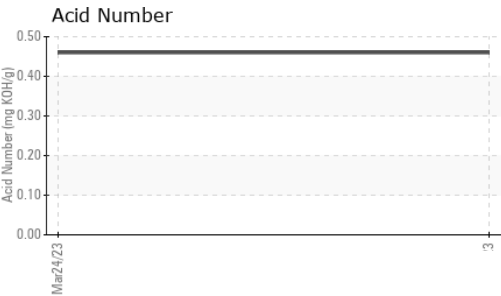
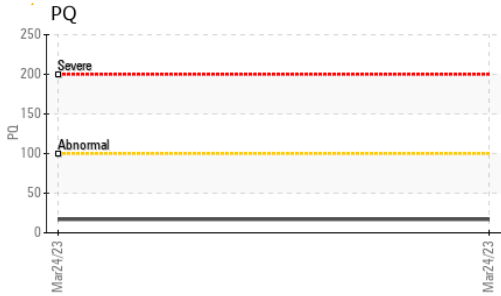
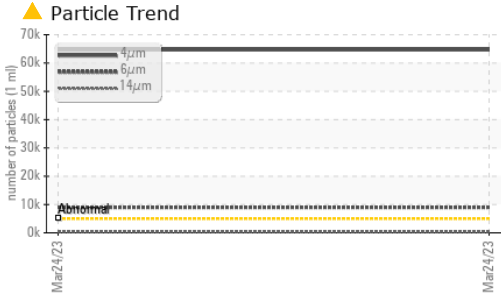
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >60	<b>3</b>	---	---
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>&lt;1</b>	---	---

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 64670</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 8990</b>	---	---
Particles >14µm	ASTM D7647 >160	<b>▲ 340</b>	---	---
Particles >21µm	ASTM D7647 >40	<b>▲ 82</b>	---	---
Particles >38µm	ASTM D7647 >10	<b>10</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 23/20/16</b>	---	---



# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.46</b>	---	---

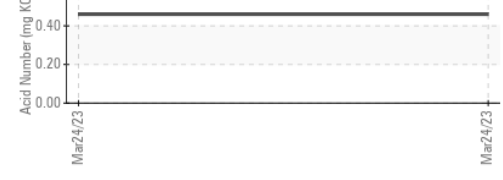
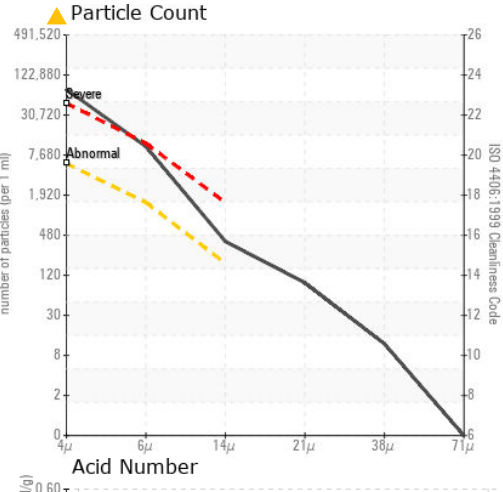
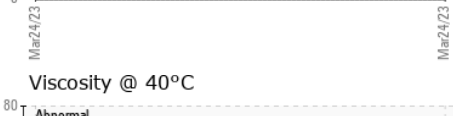
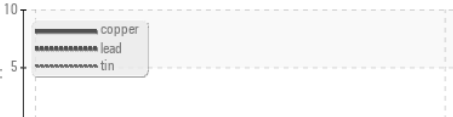
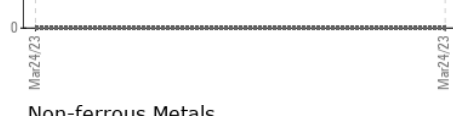
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ <b>LIGHT</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	69.9	<b>65.2</b>	---	---

### SAMPLE IMAGES

method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

### GRAPHS



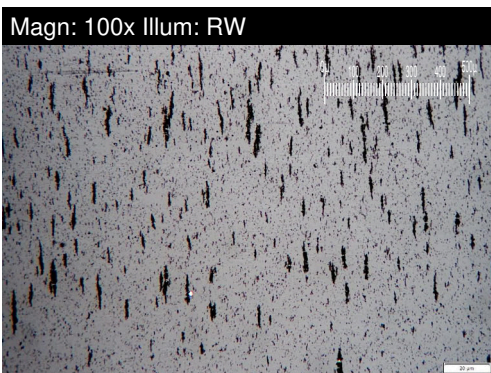
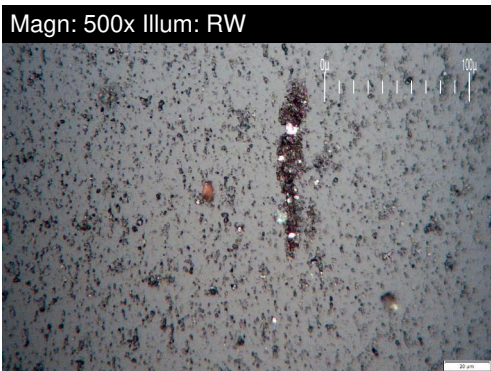
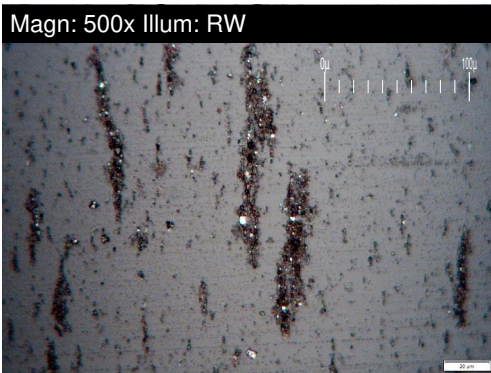
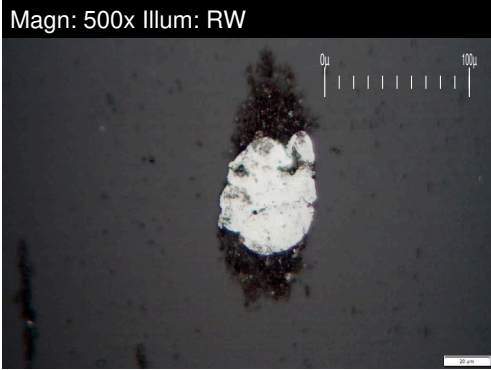
**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0783638 **Received** : 28 Mar 2023  
**Lab Number** : **05803840** **Diagnosed** : 30 Mar 2023  
**Unique Number** : 10401369 **Diagnostician** : Aaron Black  
**Test Package** : PLANT ( Additional Tests: A-FERR )

**GRAPHIC PACKAGING INTERNATIONAL**  
 100 GRAPHIC PACKAGING INTERNATIONAL  
 MACON, GA  
 US 31206  
 Contact: DARYL SPRINGER  
 daryl.springer@graphicpkg.com  
 T: (478)784-3677  
 F:

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)

# FERROGRAPHY REPORT

Machine Id  
**PSM STRIPPED COND 317**  
 Component  
**Pump**  
 Fluid  
**MOBIL SHC 626 (1 GAL)**



FERROGRAPHY	method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10 *ASTM D7684		2		
Ferrous Sliding	Scale 0-10 *ASTM D7684		2		
Ferrous Cutting	Scale 0-10 *ASTM D7684				
Ferrous Rolling	Scale 0-10 *ASTM D7684				
Ferrous Break-in	Scale 0-10 *ASTM D7684				
Ferrous Spheres	Scale 0-10 *ASTM D7684				
Ferrous Black Oxides	Scale 0-10 *ASTM D7684				
Ferrous Red Oxides	Scale 0-10 *ASTM D7684				
Ferrous Corrosive	Scale 0-10 *ASTM D7684				
Ferrous Other	Scale 0-10 *ASTM D7684				
Nonferrous Rubbing	Scale 0-10 *ASTM D7684				
Nonferrous Sliding	Scale 0-10 *ASTM D7684				
Nonferrous Cutting	Scale 0-10 *ASTM D7684				
Nonferrous Rolling	Scale 0-10 *ASTM D7684				
Nonferrous Other	Scale 0-10 *ASTM D7684				
Carbonaceous Material	Scale 0-10 *ASTM D7684				
Lubricant Degradation	Scale 0-10 *ASTM D7684				
Sand/Dirt	Scale 0-10 *ASTM D7684				
Fibres	Scale 0-10 *ASTM D7684				
Spheres	Scale 0-10 *ASTM D7684				
Other	Scale 0-10 *ASTM D7684		▲ 5		

## WEAR

Moderate concentration of visible metal present.

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