

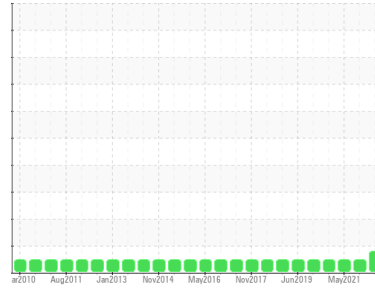


# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**

Area  
**OPF2/BD08**  
 Machine Id  
**200896 SC NAR CYCLO**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL MOBILGEAR 600 XP 320 (8 LTR)**



## DIAGNOSIS

### ▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### ▲ Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0790660</b>	WC0688639	WC0566559
Sample Date	Client Info		<b>30 May 2023</b>	25 May 2022	05 May 2021
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>15</b>	0	19
Iron	ppm	ASTM D5185(m) >200	<b>▲ 316</b>	79	283
Chromium	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >100	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m) >200	<b>2</b>	<1	2
Tin	ppm	ASTM D5185(m) >25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>28</b>	33	24
Barium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>2</b>	<1	2
Magnesium	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185(m)	<b>14</b>	4	17
Phosphorus	ppm	ASTM D5185(m)	<b>338</b>	339	278
Zinc	ppm	ASTM D5185(m)	<b>5</b>	2	5
Sulfur	ppm	ASTM D5185(m)	<b>12715</b>	9672	12529
Lithium	ppm	ASTM D5185(m)	<b>2</b>	<1	2

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>1</b>	1	2
Sodium	ppm	ASTM D5185(m)	<b>2</b>	<1	2
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	<1

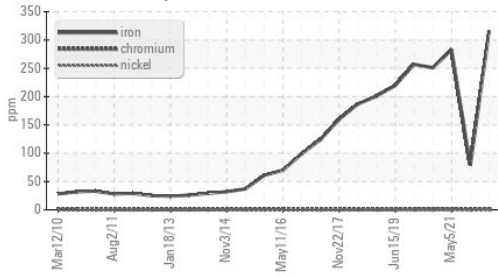
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.81</b>	0.74	0.77

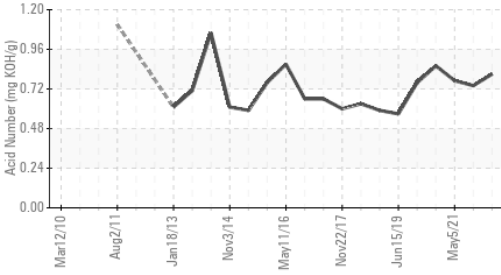


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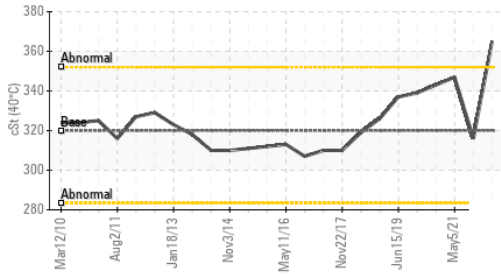
### ▲ Ferrous Alloys



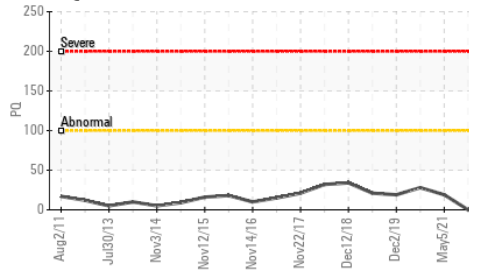
### Acid Number



### Viscosity @ 40°C



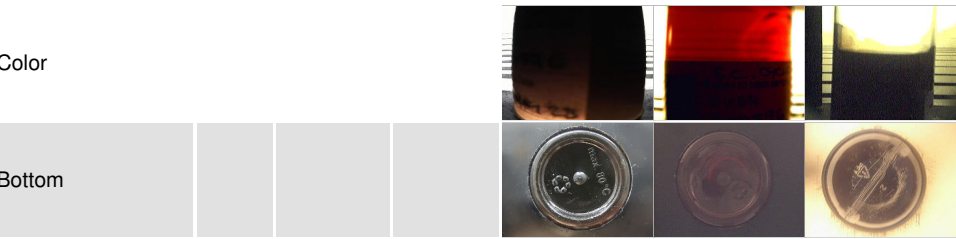
### PQ



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

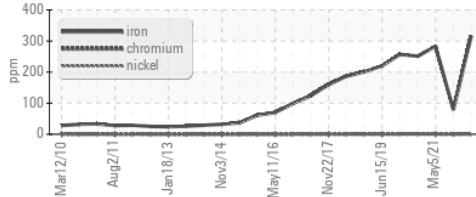
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	316	347

SAMPLE IMAGES	method	limit/base	current	history1	history2
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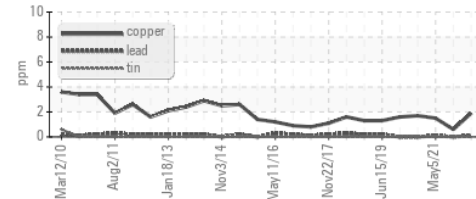


### GRAPHS

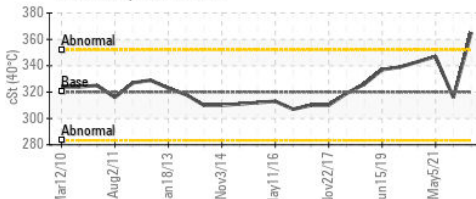
#### ▲ Ferrous Alloys



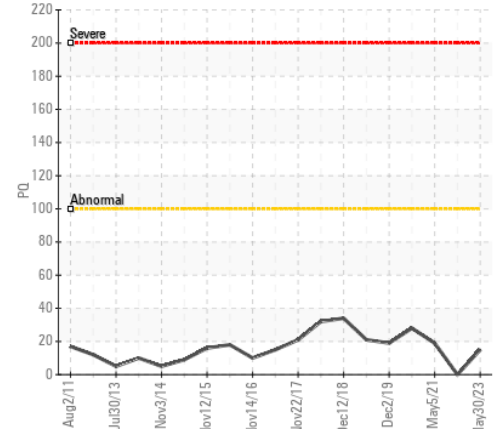
#### Non-ferrous Metals



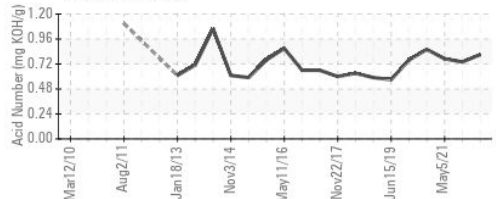
#### Viscosity @ 40°C



#### PQ



#### Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0790660 **Received** : 09 Jun 2023  
**Lab Number** : 02563294 **Diagnosed** : 12 Jun 2023  
**Unique Number** : 5592335 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

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