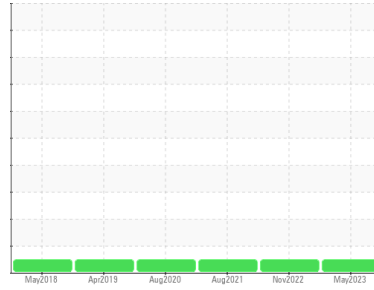




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**SUNLIFE**  
 Machine Id  
**MTU WARRIOR A (S/N 95030500208)**

Component  
**Diesel Engine**  
 Fluid  
**APRIL SUPERFLO UNIVERSAL ENGINE OIL SP 15W40 (300 LTR)**

## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid. this testkit includes BN to determine the suitability of the oil for continued use.

### Wear

Metal levels are typical for a new component breaking in. Component wear rates appear to be normal (unconfirmed).

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service (unconfirmed).

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0817536</b>	WC0521225	WC0616818
Sample Date	Client Info		<b>08 May 2023</b>	19 Nov 2022	18 Aug 2021
Machine Age	hrs	Client Info	<b>149</b>	142	126
Oil Age	hrs	Client Info	<b>6</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>&lt;1</b>	1	1
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	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>8</b>	13	8
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	<b>58</b>	57	53
Manganese	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	<b>923</b>	923	906
Calcium	ppm	ASTM D5185(m)	<b>1069</b>	1081	1073
Phosphorus	ppm	ASTM D5185(m)	<b>1040</b>	1068	1029
Zinc	ppm	ASTM D5185(m)	<b>1138</b>	1158	1182
Sulfur	ppm	ASTM D5185(m)	<b>2627</b>	2709	2665
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>4</b>	3	3
Sodium	ppm	ASTM D5185(m)	<b>1</b>	2	1
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	<1

## INFRA-RED

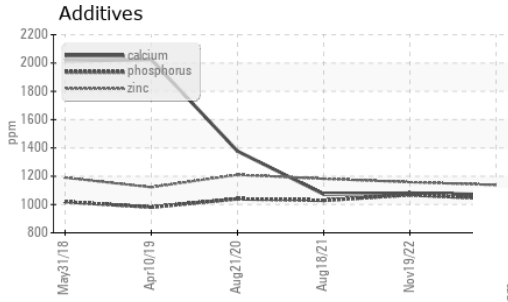
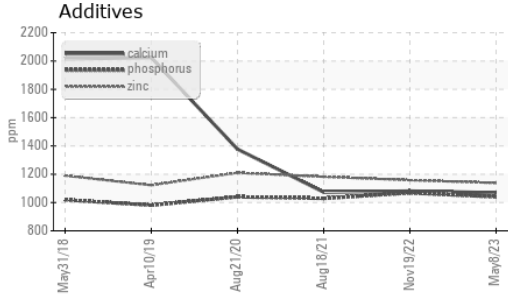
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624* >20	<b>4.6</b>	5.1	4.8
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>17.6</b>	19.0	18.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>12.8</b>	13.8	13.7



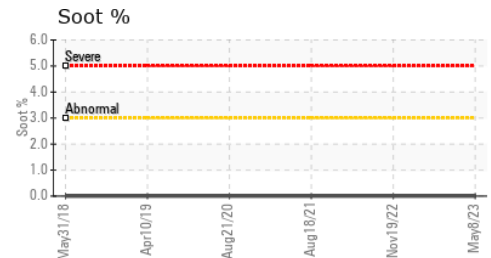
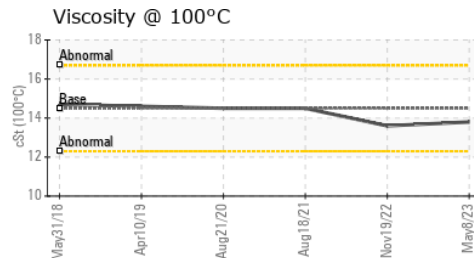
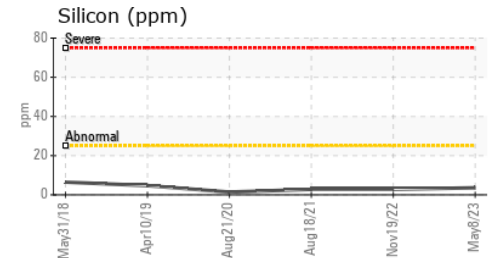
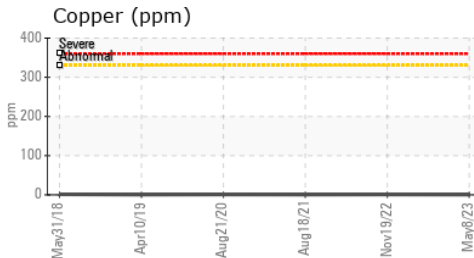
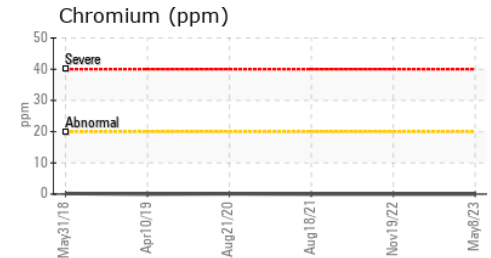
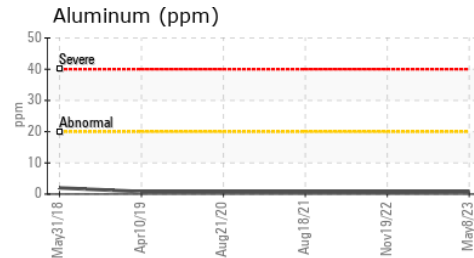
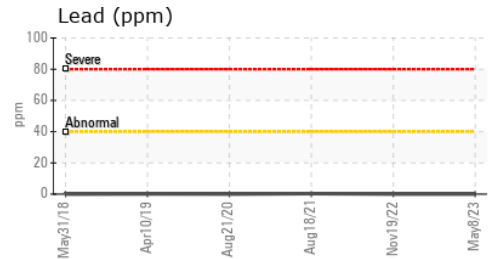
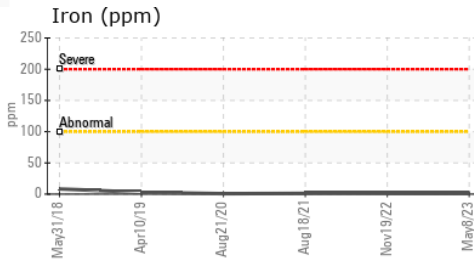
# OIL ANALYSIS REPORT



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	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	13.8	13.6

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **SOMMERS GENERATOR SALES LTD.**  
**Sample No.** : WC0817536 **Received** : 29 May 2023 **70 PACKHAM AVENUE**  
**Lab Number** : 02560042 **Diagnosed** : 29 May 2023 **STRATFORD, ON**  
**Unique Number** : 5581082 **Diagnostician** : Wes Davis **CA N4Z 0A6**  
**Test Package** : MOB 1 ( Additional Tests: Visual ) **Contact: Pat Devereaux**

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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