

# SUNLIFE [33548] Machine Id MTU WARRIOR A (S/N 95030500208) Diesel Engine

**APRIL SUPERFLO UNIVERSAL ENGINE OIL SP 15W40 (300 LTR)** 

### 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**

Component wear rates appear to be normal (unconfirmed).

# CONTAMINATION

There is no indication of any contamination in the oil.

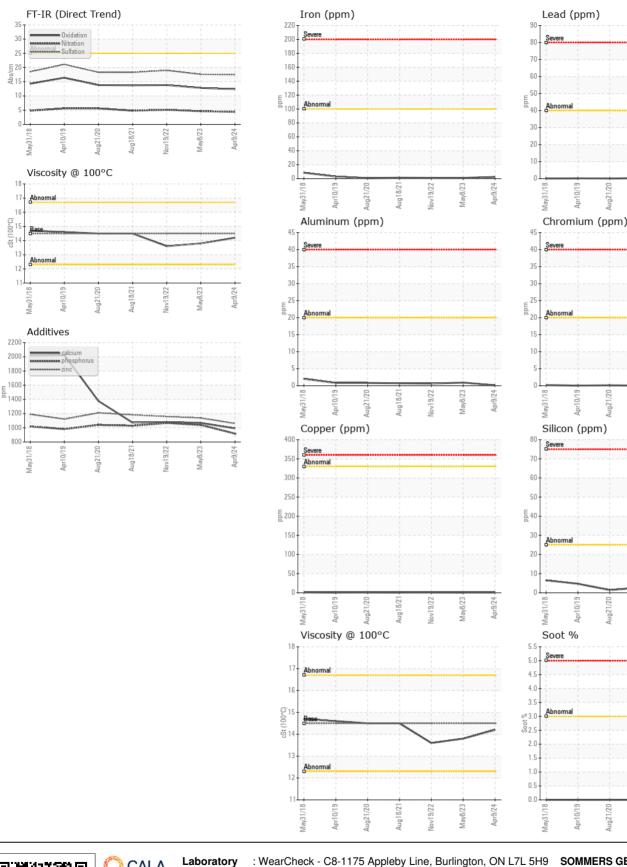
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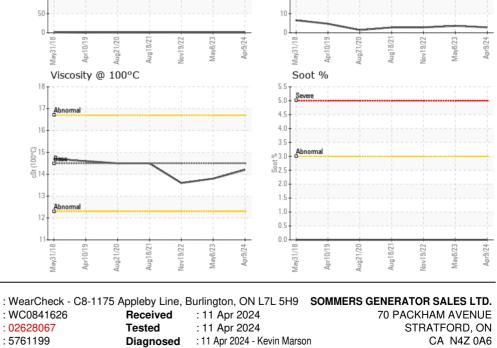
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	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0841626	WC0817536	WC0521225
ır	Sample Date		Client Info		09 Apr 2024	08 May 2023	19 Nov 2022
tkit	Machine Age	hrs	Client Info		159	149	142
trut	Oil Age	hrs	Client Info		0	6	0
itkit	Filter Age	hrs	Client Info		0	6	0
	Oil Changed		Client Info		N/A	Not Changd	Changed
	Filter Changed		Client Info		N/A	Not Changd	N/A
	Sample Status				NORMAL	NORMAL	NORMAL
				100	•		
	Iron	ppm	ASTM D5185(m)	>100	2	<1	1
	Chromium	ppm	ASTM D5185(m)	>20	0	0	0
	Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
	Titanium	ppm	ASTM D5185(m)	0	0	0	0
	Silver	ppm	ASTM D5185(m)	>3	0	0	0
	Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
	Lead	ppm	ASTM D5185(m)	>40	0	0	0
	Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
	Tin	ppm	ASTM D5185(m)	>15	0	0	0
	Vanadium	ppm	ASTM D5185(m)		0	0	0
	Silicon	ppm	ASTM D5185(m)	>25	3	4	3
	Potassium	ppm	ASTM D5185(m)	>20	0	0	<1
	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	ASTM D7844*	>3	0	0	0
	Nitration	Abs/cm	ASTM D7624*	>20	4.4	4.6	5.1
	Sulfation	Abs/.1mm	ASTM D7415*	>30	17.5	17.6	19.0
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
	Sodium	ppm	ASTM D5185(m)		1	1	2
il.	Boron	ppm	ASTM D5185(m)		13	8	13
	Barium	ppm	ASTM D5185(m)		0	0	0
	Molybdenum	ppm	ASTM D5185(m)		55	58	57
	Manganese	ppm	ASTM D5185(m)		0	<1	<1
	Magnesium	ppm	ASTM D5185(m)		877	923	923
	Calcium	ppm	ASTM D5185(m)		991	1069	1081
	Phosphorus	ppm	ASTM D5185(m)		917	1040	1068
	Zinc	ppm	ASTM D5185(m)		1060	1138	1158
	Sulfur	ppm	ASTM D5185(m)		2409	2627	2709
	Oxidation	Abs/.1mm	ASTM D7414*	>25	12.4	12.8	13.8
	Visc @ 100°C	cSt	ASTM D7279(m)	14.5	14.2	13.8	13.6
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### 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).

Contact/Location: Pat Devereaux - VP756504





May8/23

Apr9/24

Aug18/21

Aug18/21

19/77

Vov19/22



(J)

Test Package : MOB 1 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.

Received

Diagnosed

Tested

: 11 Apr 2024

: 11 Apr 2024

: WC0841626

Contact: Pat Devereaux pat.devereaux@sommersgen.com T: (519)655-2396 F: (519)655-6881

CALA

ISO 17025:2017

Sample No.

Lab Number : 02628067

Unique Number : 5761199

Contact/Location: Pat Devereaux - VP756504 Page 2 of 2