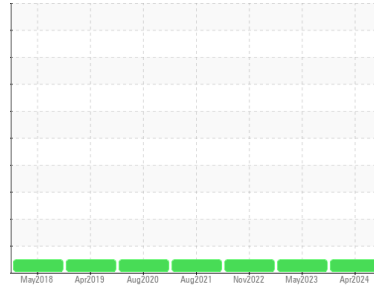




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

SUNLIFE [33548]

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

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		WC0841626	WC0817536	WC0521225
Sample Date	Client Info		09 Apr 2024	08 May 2023	19 Nov 2022
Machine Age	hrs	Client Info	159	149	142
Oil Age	hrs	Client Info	0	6	0
Oil Changed	Client Info		N/A	Not Changd	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
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
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
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
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
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

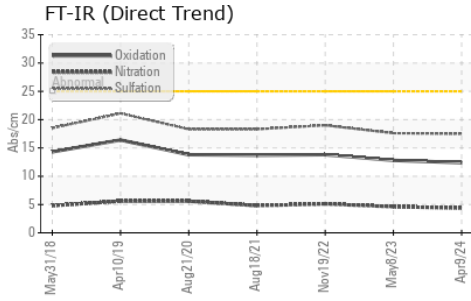
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	3	4	3
Sodium	ppm	ASTM D5185(m)		1	1	2
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1

INFRA-RED

	method	limit/base	current	history1	history2	
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



OIL ANALYSIS REPORT

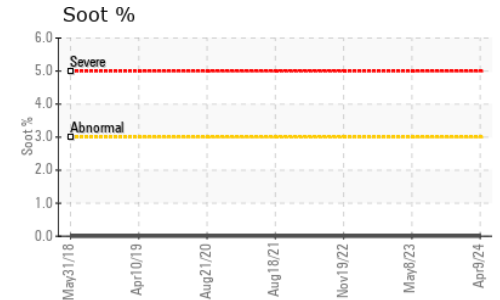
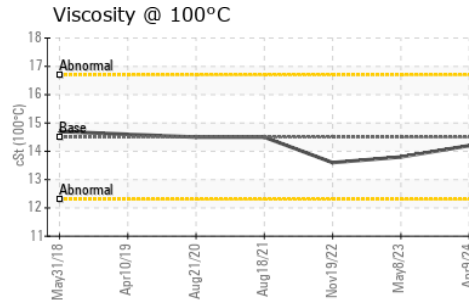
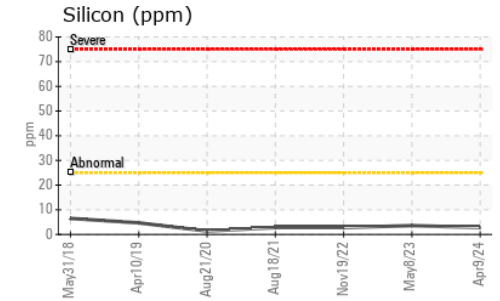
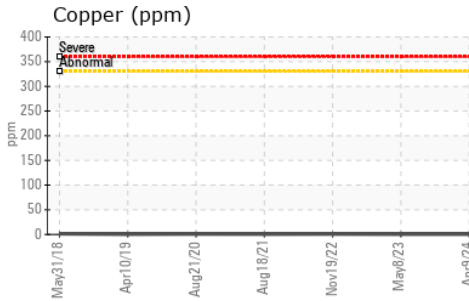
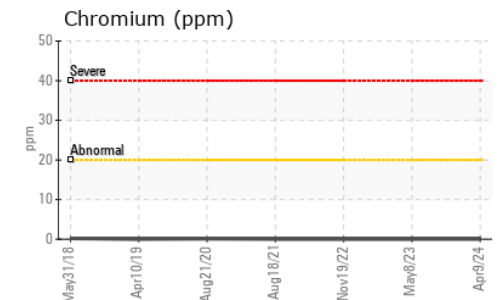
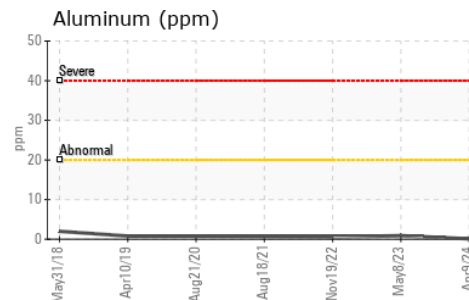
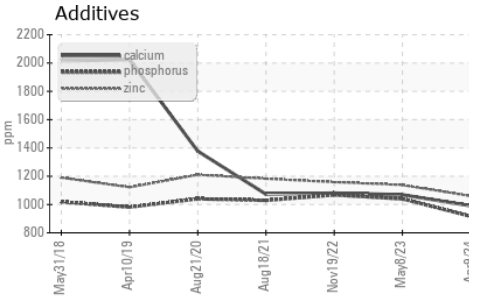
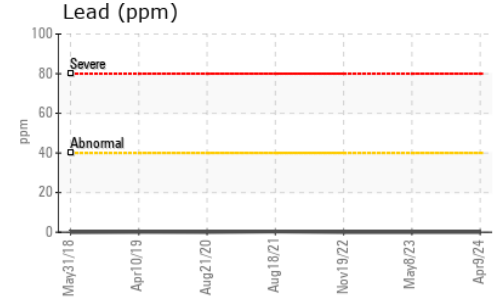
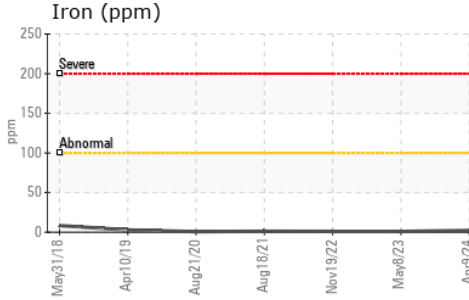
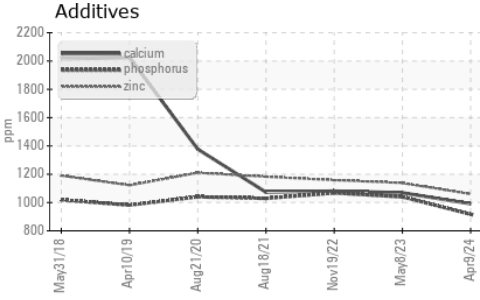


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	12.4	12.8	13.8

VISUAL	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	14.2	13.8	13.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0841626
Lab Number : 02628067
Unique Number : 5761199
Test Package : MOB 1

SOMMERS GENERATOR SALES LTD.
 70 PACKHAM AVENUE
 STRATFORD, ON
 CA N4Z 0A6
 Contact: Pat Devereaux
 pat.devereaux@sommersgen.com
 T: (519)655-2396
 F: (519)655-6881

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.