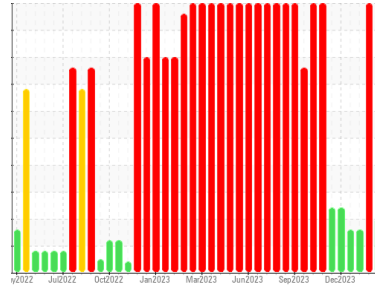




OIL ANALYSIS REPORT

Area
Building 12
 Machine Id
Cone 2B
 Component
Bulk Tank Lube System
 Fluid
MOBIL MOBILGEAR 600 XP 320 (--- GAL)

Sample Rating Trend



DIAGNOSIS

- Recommendation**
No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**
Bearing and/or gear wear is indicated.
- Contamination**
There is no indication of any contamination in the oil.
- Fluid Condition**
Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0901929	WC0901955	WC0901961
Sample Date	Client Info		06 Mar 2024	05 Mar 2024	05 Feb 2024
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Filtered	Filtered	Filtered
Sample Status			ABNORMAL	SEVERE	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	▲ 52	▲ 185	▲ 39
Chromium	ppm	ASTM D5185m >20	0	<1	0
Nickel	ppm	ASTM D5185m >20	0	3	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	4	● 14	3
Lead	ppm	ASTM D5185m >20	19	▲ 104	12
Copper	ppm	ASTM D5185m >20	▲ 66	▲ 219	▲ 47
Tin	ppm	ASTM D5185m >20	7	▲ 31	4
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	24	19	15
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	4	2	0
Manganese	ppm	ASTM D5185m	<1	2	<1
Magnesium	ppm	ASTM D5185m	2	7	<1
Calcium	ppm	ASTM D5185m	1	6	1
Phosphorus	ppm	ASTM D5185m	292	267	290
Zinc	ppm	ASTM D5185m	0	0	0
Sulfur	ppm	ASTM D5185m	16962	15977	16360

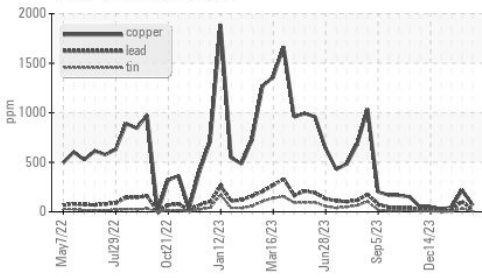
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	14	▲ 41	11
Sodium	ppm	ASTM D5185m	2	6	1
Potassium	ppm	ASTM D5185m >20	<1	<1	0

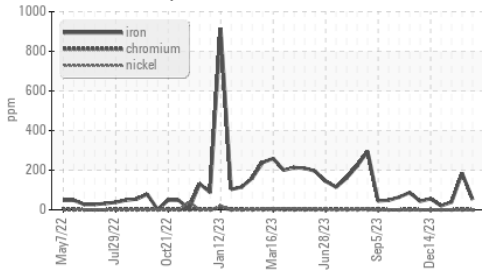
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.81	0.54	0.84

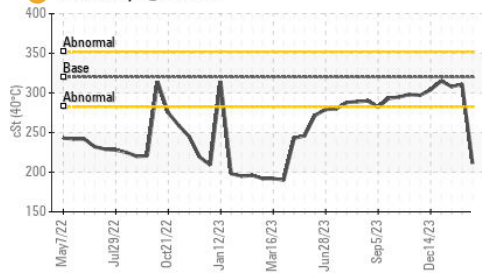
▲ Non-ferrous Metals



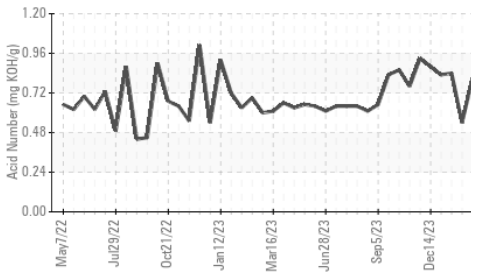
▲ Ferrous Alloys



● Viscosity @ 40°C



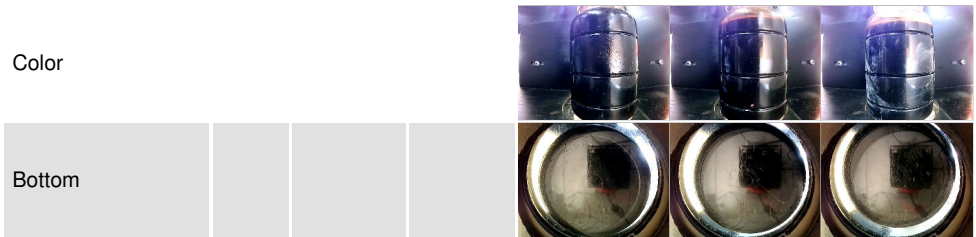
Acid Number



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	MODER	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	MODER	MODER	MODER
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

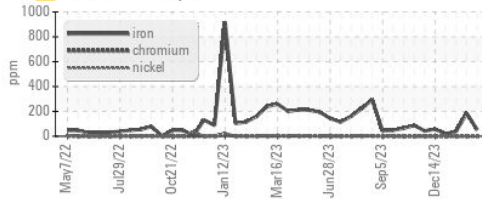
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320 ● 211	311	308

SAMPLE IMAGES	method	limit/base	current	history1	history2
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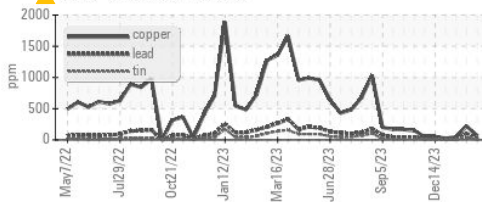


GRAPHS

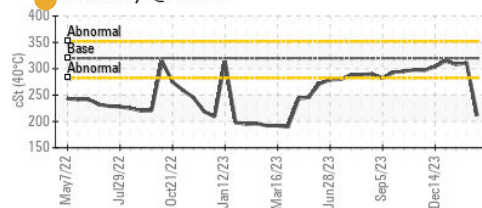
▲ Ferrous Alloys



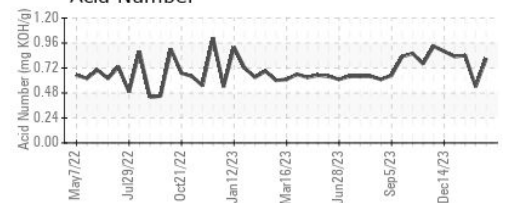
▲ Non-ferrous Metals



● Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0901929

Lab Number : 06140080

Unique Number : 10964888

Test Package : IND 2

Received : 05 Apr 2024

Tested : 09 Apr 2024

Diagnosed : 09 Apr 2024 - Don Baldrige

3M - PITTSBORO

4191 NC 87 S

MONCURE, NC

US 27559

Contact: CHARLES JARRELL

cjarrell@mmm.com

T:

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)