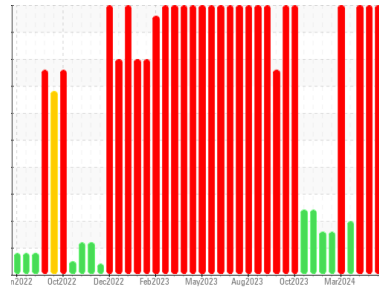




PROBLEM SUMMARY

Sample Rating Trend

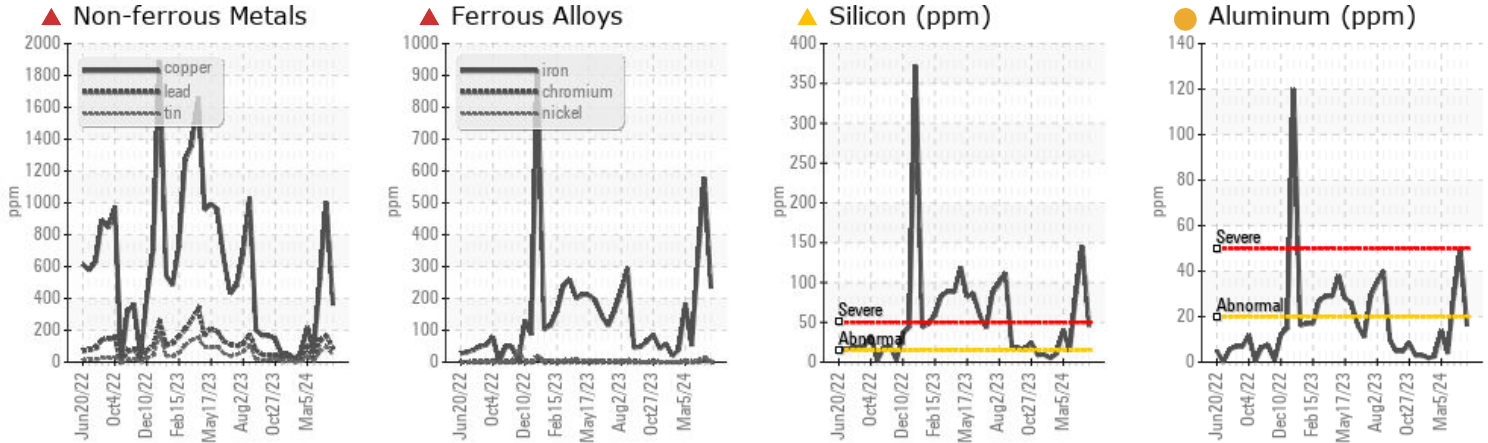


WEAR



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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil filtered at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>20	▲ 233	▲ 578	▲ 330
Lead	ppm	ASTM D5185m	>20	▲ 84	▲ 166	▲ 134
Copper	ppm	ASTM D5185m	>20	▲ 360	▲ 1003	▲ 527
Tin	ppm	ASTM D5185m	>20	▲ 39	▲ 101	▲ 65
Silicon	ppm	ASTM D5185m	>15	▲ 45	▲ 145	▲ 88

Customer Id: THRPIT
 Sample No.: WC0936845
 Lab Number: 06214871
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

WEAR



26 Apr 2024 Diag: Angela Borella

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Bearing and/or bushing wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report



WEAR



23 Mar 2024 Diag: Don Baldrige

We advise that you check all areas where dirt can enter the system. The oil filtered at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Bearing and/or bushing wear is indicated. There is a moderate amount of visible silt present in the sample. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The AN level is acceptable for this fluid.

view report



WEAR



06 Mar 2024 Diag: Don Baldrige

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

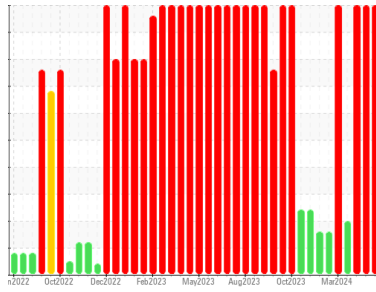
view report





OIL ANALYSIS REPORT

Sample Rating Trend



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

DIAGNOSIS

▲ Recommendation
We advise that you check all areas where dirt can enter the system. The oil filtered at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear
Gear wear is indicated. Bearing and/or bushing wear is indicated.

▲ Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0936845	WC0936870	WC0901938
Sample Date	Client Info		15 May 2024	26 Apr 2024	23 Mar 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			SEVERE	SEVERE	SEVERE

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	▲ 233	▲ 578	▲ 330
Chromium	ppm	ASTM D5185m >20	1	5	2
Nickel	ppm	ASTM D5185m >20	4	13	7
Titanium	ppm	ASTM D5185m	1	4	2
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	● 16	● 49	● 30
Lead	ppm	ASTM D5185m >20	▲ 84	▲ 166	▲ 134
Copper	ppm	ASTM D5185m >20	▲ 360	▲ 1003	▲ 527
Tin	ppm	ASTM D5185m >20	▲ 39	▲ 101	▲ 65
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	18	29	19
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	3	2	0
Manganese	ppm	ASTM D5185m	2	5	3
Magnesium	ppm	ASTM D5185m	9	24	16
Calcium	ppm	ASTM D5185m	8	80	15
Phosphorus	ppm	ASTM D5185m	310	313	277
Zinc	ppm	ASTM D5185m	5	40	4
Sulfur	ppm	ASTM D5185m	18013	15953	16813

CONTAMINANTS

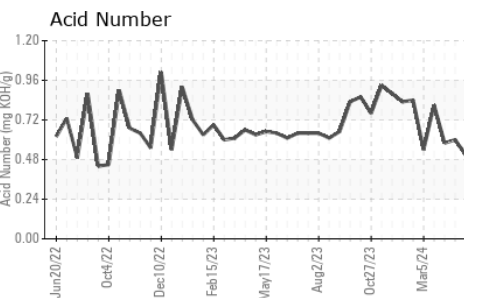
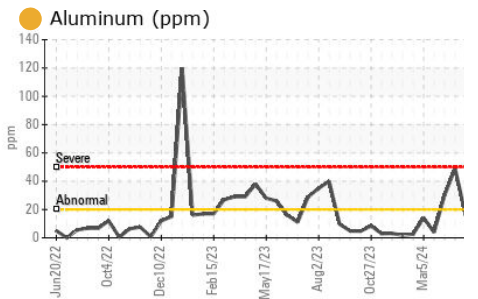
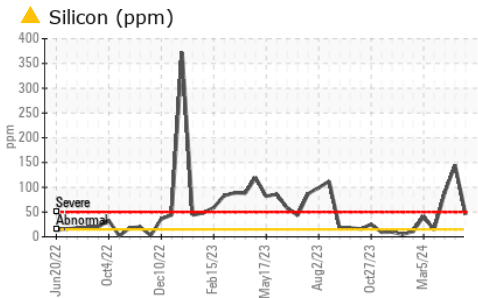
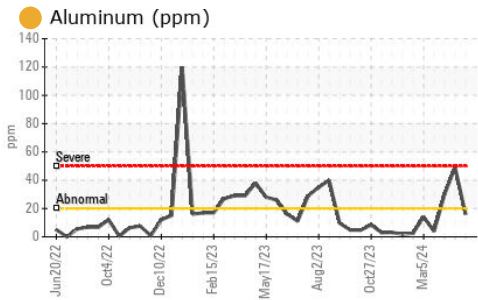
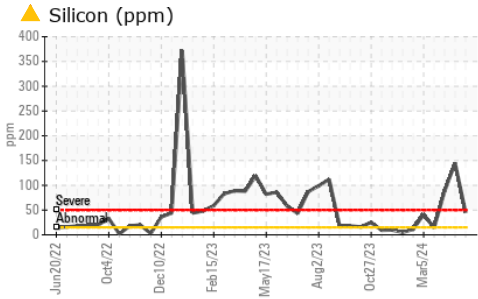
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	▲ 45	▲ 145	▲ 88
Sodium	ppm	ASTM D5185m	6	16	11
Potassium	ppm	ASTM D5185m >20	4	8	3

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.51	0.60	0.58



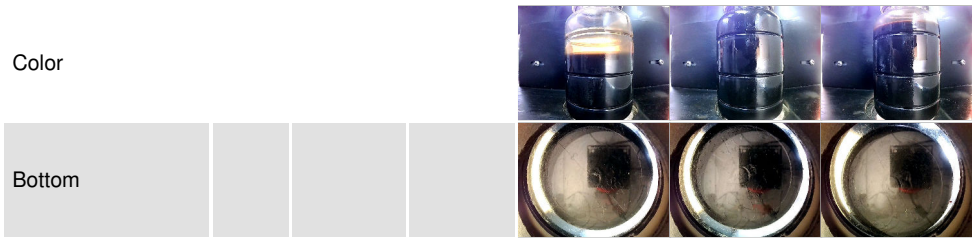
OIL ANALYSIS REPORT



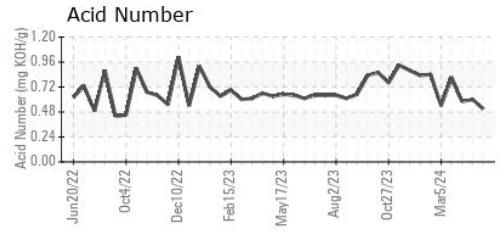
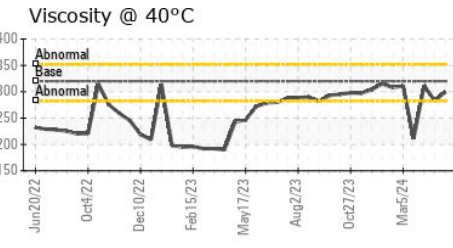
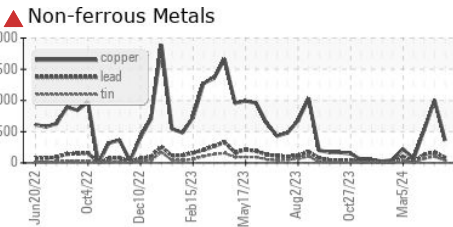
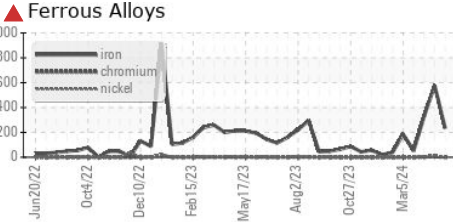
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	299	283

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936845 **Received** : 19 Jun 2024
Lab Number : 06214871 **Tested** : 21 Jun 2024
Unique Number : 11087735 **Diagnosed** : 21 Jun 2024 - Don Baldrige
Test Package : IND 2

3M - PITTSBORO
 4191 NC 87 S
 MONCURE, NC
 US 27559
 Contact: CHARLES JARRELL
 cjarrell@mmm.com

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)