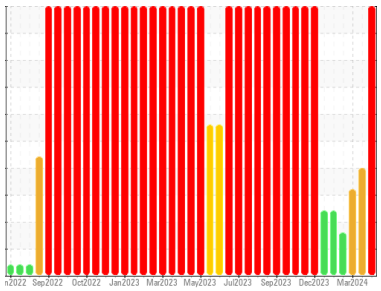
PROBLEM SUMMARY

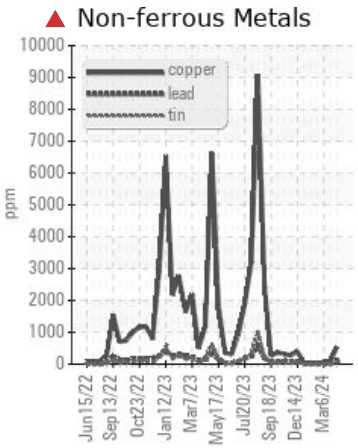
Area
Building 12
Machine Id
Cone 2A
Component
Bulk Tank Lube System
Fluid
MOBIL MOBILGEAR 600 XP 320 (105 GAL)

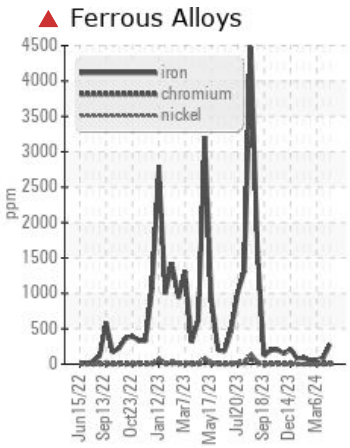
Sample Rating Trend

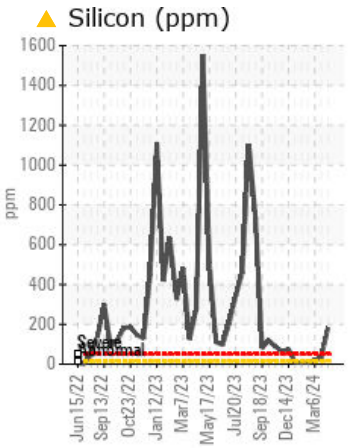


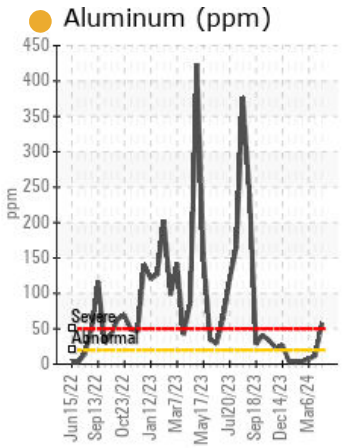
WEAR

COMPONENT CONDITION SUMMARY









RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend that you drain the oil from the component if this has not already been done. 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	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	▲ **278**	▲ 86	▲ 64
Lead	ppm	ASTM D5185m	>20	▲ **123**	22	18
Copper	ppm	ASTM D5185m	>20	▲ **539**	▲ 101	▲ 60
Tin	ppm	ASTM D5185m	>20	▲ **49**	12	7
Silicon	ppm	ASTM D5185m	>15	▲ **183**	▲ 35	▲ 19

Customer Id: THRPIT
Sample No.: WC0936871
Lab Number: 06177805
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

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.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
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.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

DIRT

02 Apr 2024 Diag: Don Baldridge

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.Bearing and/or gear 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 condition of the oil is suitable for further service.

view report

DIRT

06 Mar 2024 Diag: Don Baldridge

No corrective action is recommended at this time. Resample at the next service interval to monitor.Bearing and/or gear wear is indicated. Elemental level of silicon (Si) above normal. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

WEAR

22 Feb 2024 Diag: Don Baldridge

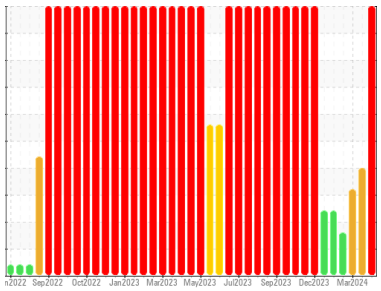
No corrective action is recommended at this time. Resample at the next service interval to monitor.Bearing and/or gear wear is indicated. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Area
Building 12
Machine Id
Cone 2A
Component
Bulk Tank Lube System
Fluid
MOBIL MOBILGEAR 600 XP 320 (105 GAL)

Sample Rating Trend



WEAR

DIAGNOSIS

▲ Recommendation
We advise that you check all areas where dirt can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend that you drain the oil from the component if this has not already been done. 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.

▲ 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. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0936871**	WC0901937	WC0901954
Sample Date		Client Info		**26 Apr 2024**	02 Apr 2024	06 Mar 2024
Machine Age	hrs	Client Info		**735**	735	735
Oil Age	hrs	Client Info		**735**	735	735
Oil Changed		Client Info		**Filtered**	Filtered	Filtered
Sample Status				**SEVERE**	ABNORMAL	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	▲ **278**	▲ 86	▲ 64
Chromium	ppm	ASTM D5185m	>20	**2**	<1	0
Nickel	ppm	ASTM D5185m	>20	**5**	<1	<1
Titanium	ppm	ASTM D5185m		**5**	<1	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	● **58**	● 12	7
Lead	ppm	ASTM D5185m	>20	▲ **123**	22	18
Copper	ppm	ASTM D5185m	>20	▲ **539**	▲ 101	▲ 60
Tin	ppm	ASTM D5185m	>20	▲ **49**	12	7
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

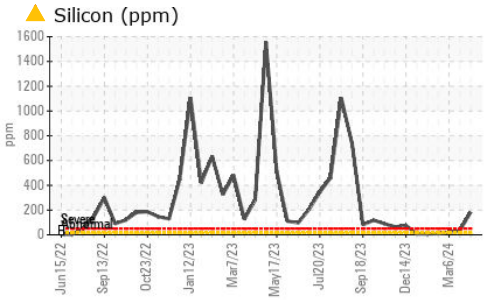
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**23**	22	22
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**18**	3	0
Manganese	ppm	ASTM D5185m		**3**	1	1
Magnesium	ppm	ASTM D5185m		**23**	7	3
Calcium	ppm	ASTM D5185m		**33**	5	3
Phosphorus	ppm	ASTM D5185m		**285**	280	304
Zinc	ppm	ASTM D5185m		**23**	2	<1
Sulfur	ppm	ASTM D5185m		**16885**	17621	18288

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ **183**	▲ 35	▲ 19
Sodium	ppm	ASTM D5185m		**21**	5	4
Potassium	ppm	ASTM D5185m	>20	**10**	<1	<1

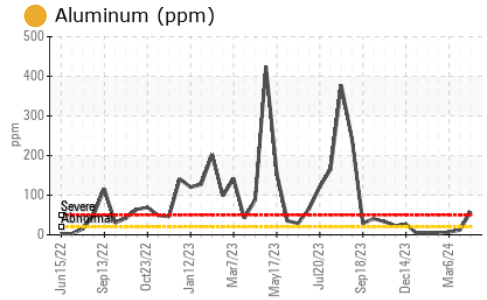
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.56**	0.78	0.83

OIL ANALYSIS REPORT

Silicon (ppm)



Aluminum (ppm)



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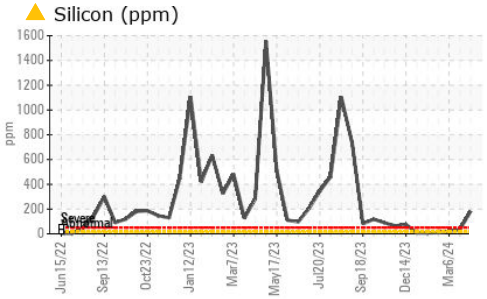
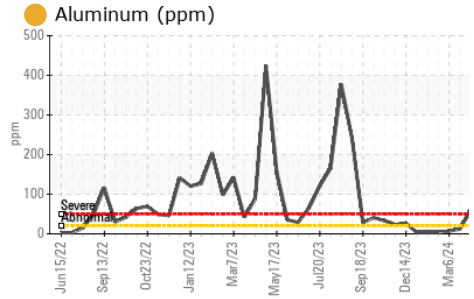
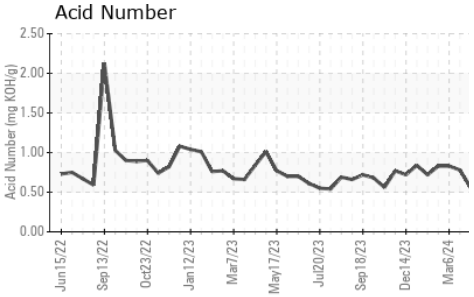


Aluminum (ppm)

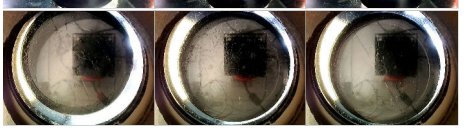


Acid Number



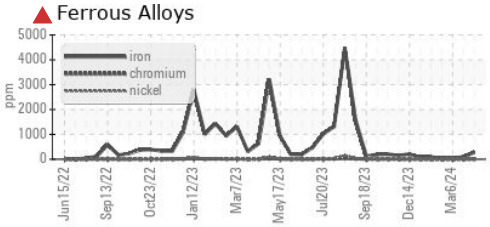
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	**311**	310	315

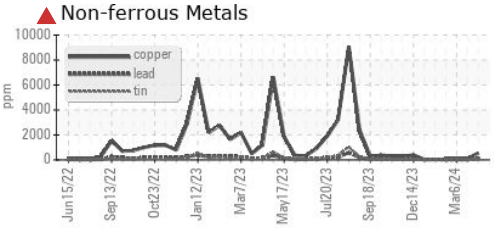
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

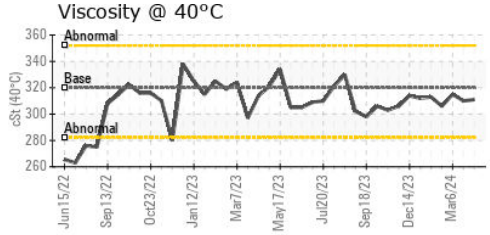
Ferrous Alloys



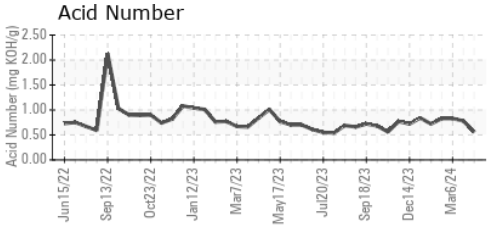
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936871
Lab Number : 06177805
Unique Number : 11029131
Test Package : IND 2

Received : 13 May 2024
Tested : 15 May 2024
Diagnosed : 15 May 2024 - Angela Borella

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)

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

Report Id: THRPIT [WUSCAR] 06177805 (Generated: 05/15/2024 21:48:22) Rev: 1

Submitted By: JORDAN TUTEN