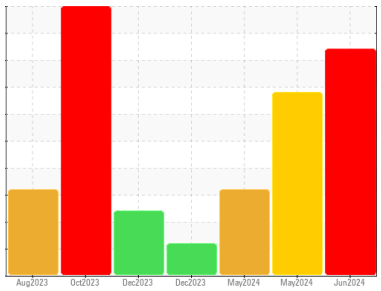
PROBLEM SUMMARY

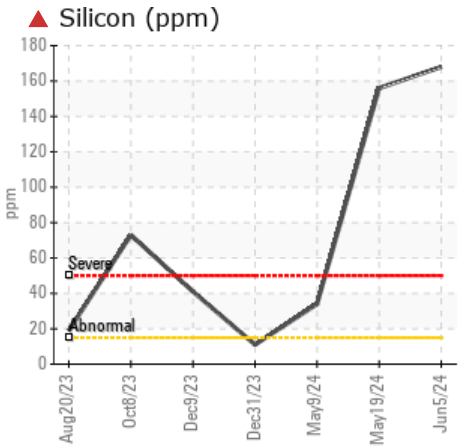
Sample Rating Trend

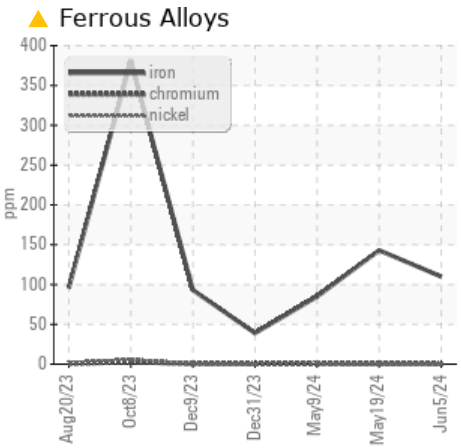


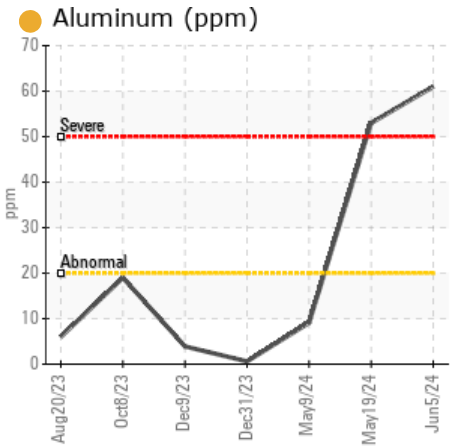
DIRT

Area
Building 12
Machine Id
Roll Crusher 1
Component
Southeast Bearing
Fluid
MOBIL MOBILGEAR 600 XP ISO 68 (3 GAL)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change 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	ABNORMAL
Iron	ppm	ASTM D5185m	>20	▲ **110**	▲ 143	▲ 85
Silicon	ppm	ASTM D5185m	>15	▲ **168**	▲ 156	▲ 34
White Metal	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Silt	scalar	*Visual	NONE	▲ **MODER**	LIGHT	NONE

Customer Id: THRPIT
Sample No.: WC0901951
Lab Number: 06214868
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +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

DIRT

19 May 2024 Diag: Jonathan Hester
We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition.The iron level is abnormal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

view report

DIRT

09 May 2024 Diag: Angela Borella
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. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.The iron level is abnormal. 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 acceptable for the time in service.

view report

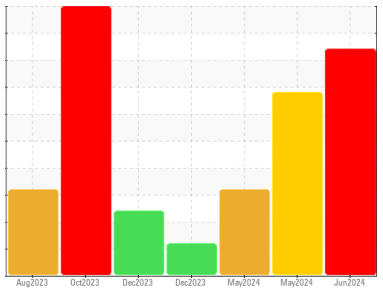
WEAR

31 Dec 2023 Diag: Don Baldridge
The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.The iron level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area
Building 12
Machine Id
Roll Crusher 1
Component
Southeast Bearing
Fluid
MOBIL MOBILGEAR 600 XP ISO 68 (3 GAL)

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. The oil change 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
Moderate concentration of visible metal present. Gear wear is indicated.

Contamination
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.

Fluid Condition
The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0901951**	WC0936859	WC0936863
Sample Date		Client Info		**05 Jun 2024**	19 May 2024	09 May 2024
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	N/A	Changed
Sample Status				**SEVERE**	SEVERE	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **110**	▲ 143	▲ 85
Chromium	ppm	ASTM D5185m	>20	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>20	**<1**	<1	1
Titanium	ppm	ASTM D5185m		**4**	4	1
Silver	ppm	ASTM D5185m		**0**	<1	0
Aluminum	ppm	ASTM D5185m	>20	● **61**	● 53	● 9
Lead	ppm	ASTM D5185m	>20	**0**	0	<1
Copper	ppm	ASTM D5185m	>20	**0**	<1	1
Tin	ppm	ASTM D5185m	>20	**0**	0	<1
Vanadium	ppm	ASTM D5185m		**<1**	<1	0
Cadmium	ppm	ASTM D5185m		**<1**	0	<1

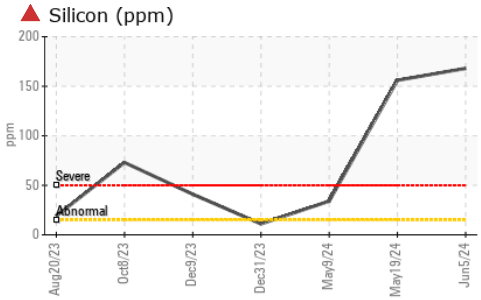
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**28**	30	40
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**2**	0	10
Manganese	ppm	ASTM D5185m		**2**	2	1
Magnesium	ppm	ASTM D5185m		**37**	0	4
Calcium	ppm	ASTM D5185m		**38**	7	18
Phosphorus	ppm	ASTM D5185m		**380**	295	368
Zinc	ppm	ASTM D5185m		**15**	0	6
Sulfur	ppm	ASTM D5185m		**10293**	8877	9784

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ **168**	▲ 156	▲ 34
Sodium	ppm	ASTM D5185m		**20**	21	<1
Potassium	ppm	ASTM D5185m	>20	**6**	4	3

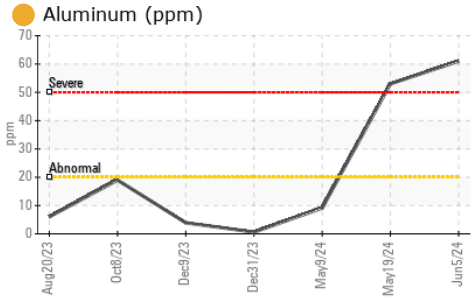
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.76**	0.58	0.79

OIL ANALYSIS REPORT

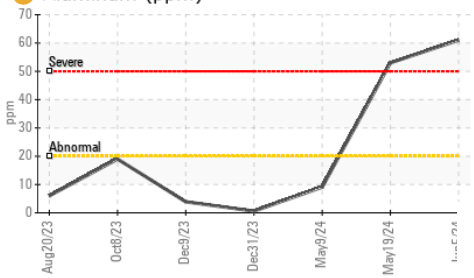
Silicon (ppm)



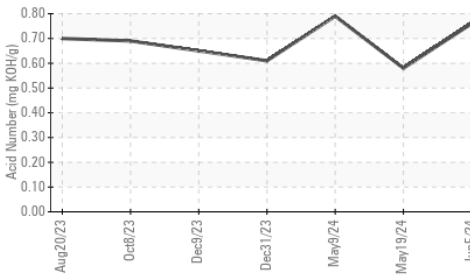
Aluminum (ppm)



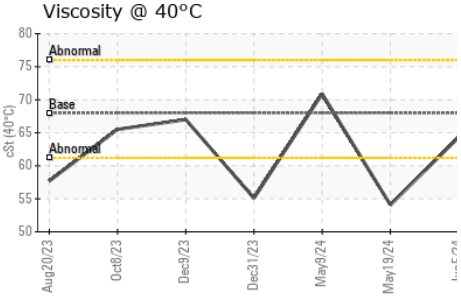
Aluminum (ppm)



Acid Number

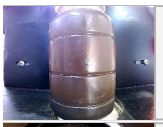


Viscosity @ 40°C



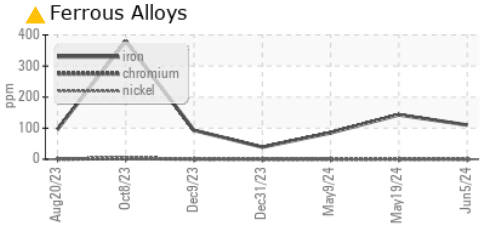
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	▲ **MODER**	LIGHT	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
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	>2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	**64.3**	54.08	70.9

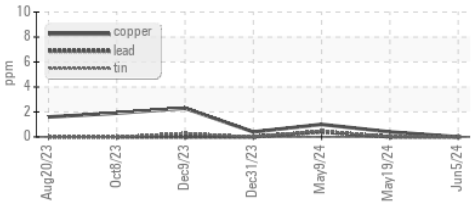
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	
Bottom				*no image*	

GRAPHS

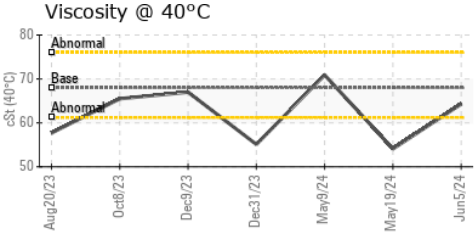
Ferrous Alloys



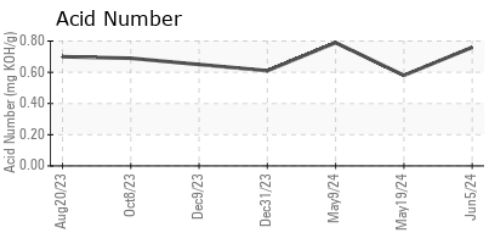
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0901951
Lab Number : 06214868
Unique Number : 11087732
Test Package : IND 2

Received : 19 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 21 Jun 2024 - Don Baldridge

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] 06214868 (Generated: 06/21/2024 15:54:00) Rev: 1

Submitted By: JORDAN TUTEN