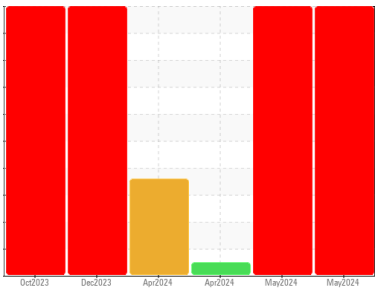
PROBLEM SUMMARY

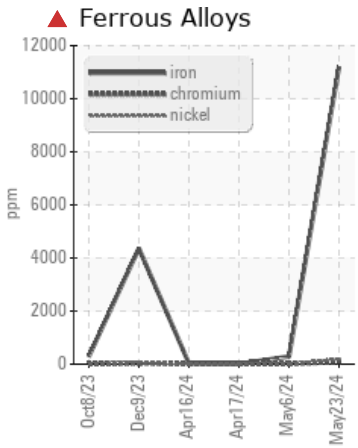
Sample Rating Trend

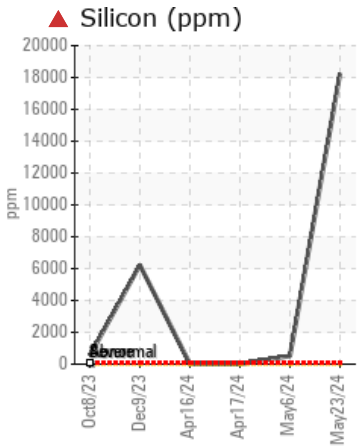


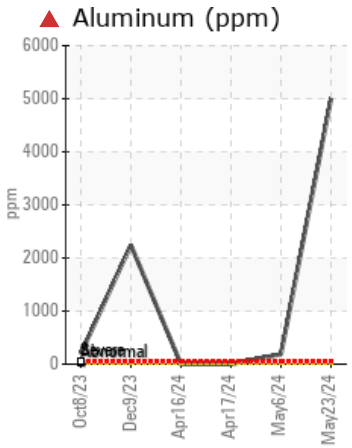
WEAR

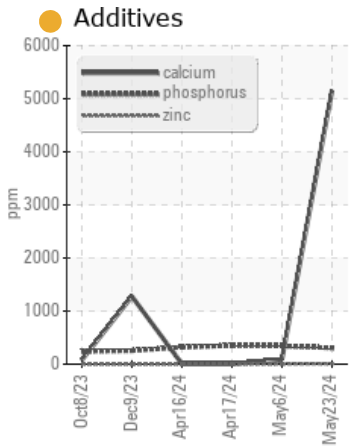
Area
Building 12
Machine Id
Roll Crusher 3
Component
Northwest Bearing
Fluid
MOBIL MOBILGEAR 600 XP ISO 68 (3 GAL)

COMPONENT CONDITION SUMMARY









RECOMMENDATION

LOCKED UP

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>20	▲ **11200**	▲ 286	12
Chromium	ppm	ASTM D5185m	>20	▲ **90**	1	<1
Nickel	ppm	ASTM D5185m	>20	▲ **189**	3	<1
Aluminum	ppm	ASTM D5185m	>20	▲ **5000**	● 188	1
Silicon	ppm	ASTM D5185m	>15	▲ **18239**	▲ 517	5

Customer Id: THRPIT
Sample No.: WC0936849
Lab Number: 06214877
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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

WEAR

06 May 2024 Diag: Angela Borella

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.Gear 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

NORMAL

17 Apr 2024 Diag: Sean Felton

Resample at the next service interval to monitor.All component wear rates are normal. 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

DIRT

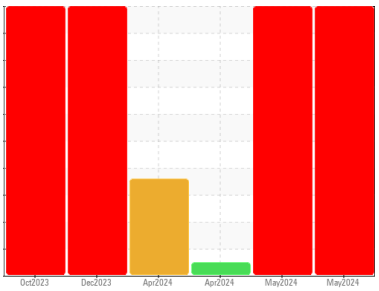
16 Apr 2024 Diag: Don Baldridge

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.The iron level has decreased, but is still abnormal. All other component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

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

DIAGNOSIS

Recommendation
LOCKED UP

Wear
The aluminum, chrome, iron and nickel are severe.

Contamination
Severe concentration of dirt present in the oil.

Fluid Condition
Additive levels indicate the addition of a different brand, or type of oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0936849**	WC0936868	WC0901942
Sample Date		Client Info		**23 May 2024**	06 May 2024	17 Apr 2024
Machine Age	hrs	Client Info		**2170**	2170	2170
Oil Age	hrs	Client Info		**2170**	2170	2170
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**SEVERE**	SEVERE	NORMAL

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

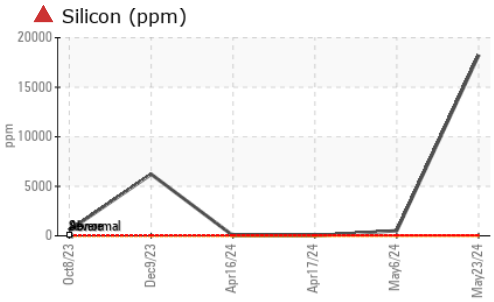
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **11200**	▲ 286	12
Chromium	ppm	ASTM D5185m	>20	▲ **90**	1	<1
Nickel	ppm	ASTM D5185m	>20	▲ **189**	3	<1
Titanium	ppm	ASTM D5185m		**516**	14	<1
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>20	▲ **5000**	● 188	1
Lead	ppm	ASTM D5185m	>20	**5**	5	0
Copper	ppm	ASTM D5185m	>20	**21**	20	<1
Tin	ppm	ASTM D5185m	>20	**4**	3	<1
Vanadium	ppm	ASTM D5185m		**21**	<1	<1
Cadmium	ppm	ASTM D5185m		**2**	<1	<1

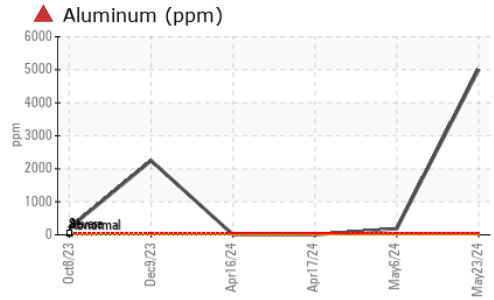
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**20**	34	36
Barium	ppm	ASTM D5185m		**12**	<1	0
Molybdenum	ppm	ASTM D5185m		**9**	<1	0
Manganese	ppm	ASTM D5185m		● **143**	5	0
Magnesium	ppm	ASTM D5185m		● **3229**	78	<1
Calcium	ppm	ASTM D5185m		● **5153**	91	4
Phosphorus	ppm	ASTM D5185m		**306**	343	352
Zinc	ppm	ASTM D5185m		**7**	2	0
Sulfur	ppm	ASTM D5185m		**8226**	9651	8948

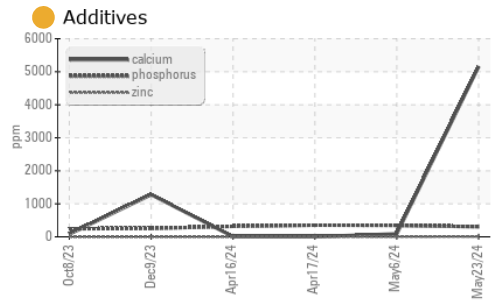
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ **18239**	▲ 517	5
Sodium	ppm	ASTM D5185m		**2523**	57	<1
Potassium	ppm	ASTM D5185m	>20	**317**	20	2

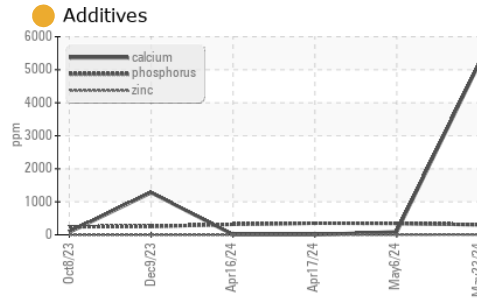
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.221**	0.75	0.83

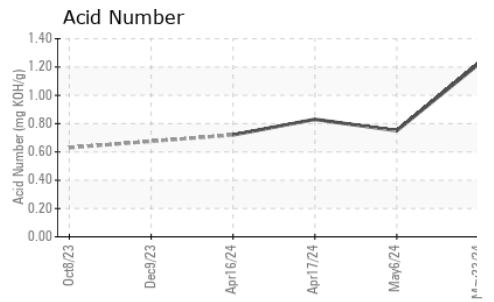
OIL ANALYSIS REPORT









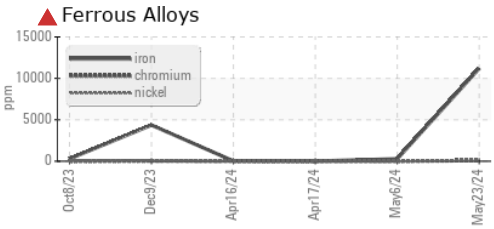


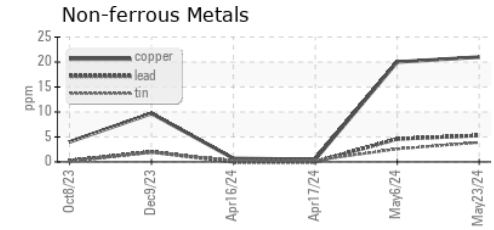
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

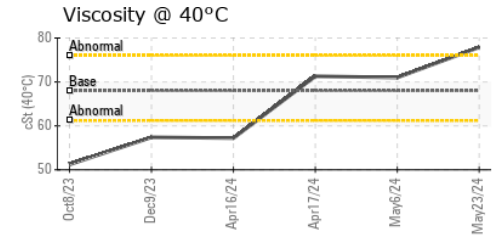
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	**77.9**	71.0	71.3

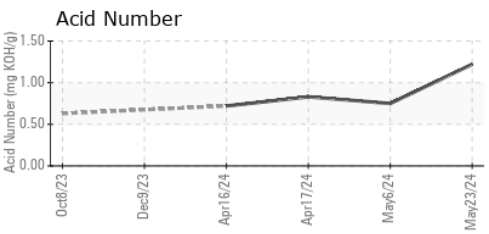
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936849
Lab Number : 06214877
Unique Number : 11087741
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] 06214877 (Generated: 06/21/2024 15:54:22) Rev: 1

Submitted By: JORDAN TUTEN