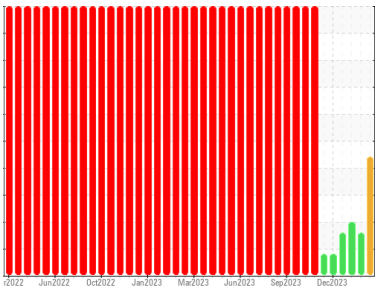
OIL ANALYSIS REPORT

Area
Building 12
Machine Id
Cone 1
Component
Bulk Tank Lube System
Fluid
Mobilgear 629 (105 GAL)

Sample Rating Trend



DIRT

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
Gear wear is indicated.

Contamination
Elemental level of silicon (Si) above normal.

Fluid Condition
The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0901956**	WC0901928	WC0901963
Sample Date		Client Info		**28 Feb 2024**	24 Feb 2024	05 Feb 2024
Machine Age	hrs	Client Info		**1340**	1340	1340
Oil Age	hrs	Client Info		**1340**	1340	1340
Oil Changed		Client Info		**Filtered**	Filtered	Filtered
Sample Status				**ABNORMAL**	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	▲ **23**	▲ 30	▲ 29
Chromium	ppm	ASTM D5185m	>20	**0**	0	0
Nickel	ppm	ASTM D5185m	>20	**0**	<1	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**5**	5	4
Lead	ppm	ASTM D5185m	>20	**<1**	18	19
Copper	ppm	ASTM D5185m	>20	**8**	▲ 74	▲ 65
Tin	ppm	ASTM D5185m	>20	**<1**	8	6
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		● **114**	12	14
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		● **410**	1	1
Manganese	ppm	ASTM D5185m		**1**	<1	<1
Magnesium	ppm	ASTM D5185m		**4**	6	6
Calcium	ppm	ASTM D5185m		**13**	15	15
Phosphorus	ppm	ASTM D5185m		● **1242**	242	246
Zinc	ppm	ASTM D5185m		**6**	12	11
Sulfur	ppm	ASTM D5185m		● **28936**	15721	15718

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ **27**	15	12
Sodium	ppm	ASTM D5185m		**6**	3	2
Potassium	ppm	ASTM D5185m	>20	**3**	<1	<1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**3.23**	0.78	0.82

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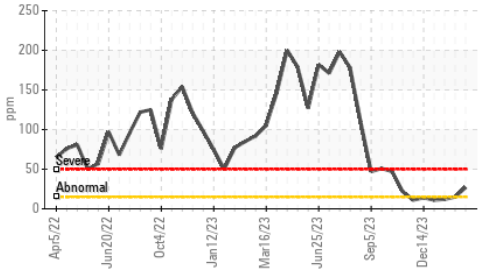
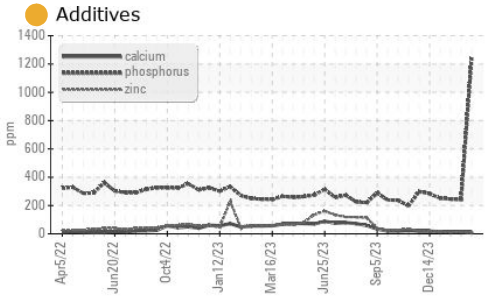
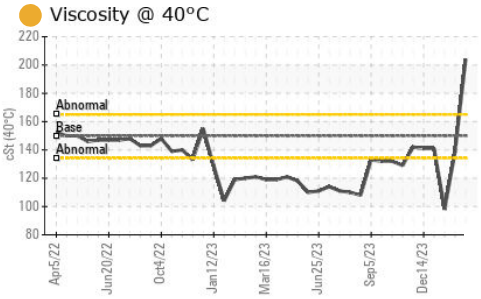
Silicon (ppm)



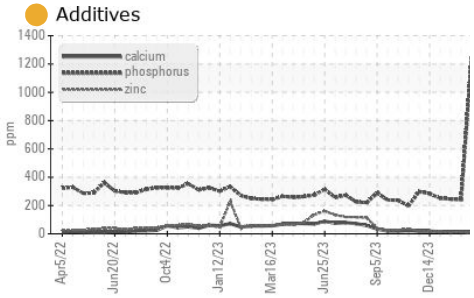
Additives



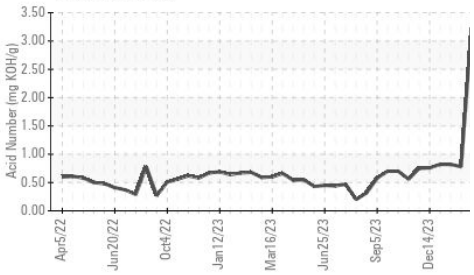
Viscosity @ 40°C



Additives



Acid Number



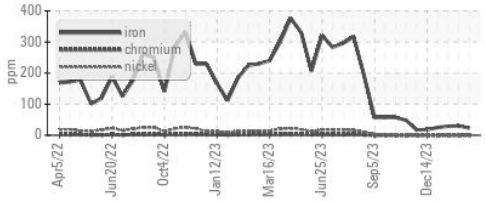
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	150	**204**	139	98.0

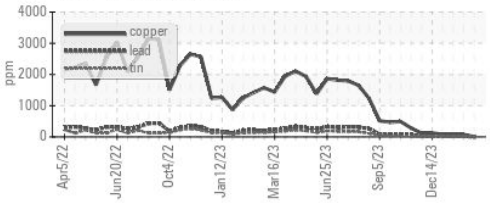
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

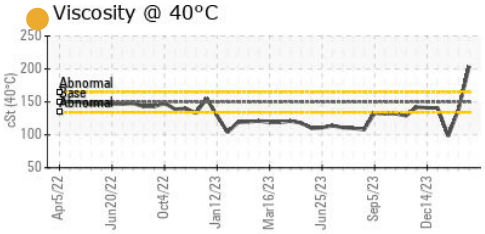
Ferrous Alloys



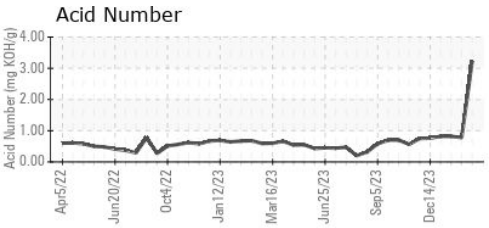
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0901956
Lab Number : 06140079
Unique Number : 10964887
Test Package : IND 2

Received : 05 Apr 2024
Tested : 08 Apr 2024
Diagnosed : 08 Apr 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
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F:

Report Id: THRPIT [WUSCAR] 06140079 (Generated: 04/08/2024 15:34:54) Rev: 1

Submitted By: JORDAN TUTEN