



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
WMC
Component
Port Reduction Gear
Fluid
Reduction Gear Oil (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW05824234	WC05745355	MW05685230
Sample Date		Client Info		18 Apr 2023	22 Jan 2023	03 Nov 2022
Machine Age	hrs	Client Info		61976	61204	60587
Oil Age	hrs	Client Info		772	1177	561
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	2	2	2
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	<1	<1
Lead	ppm	ASTM D5185m	>100	0	1	<1
Copper	ppm	ASTM D5185m	>50	1	2	1
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

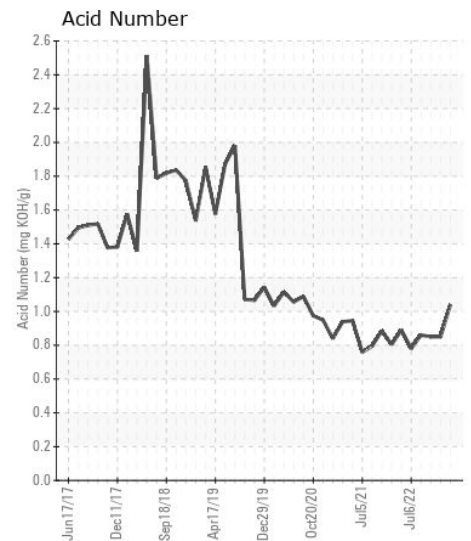
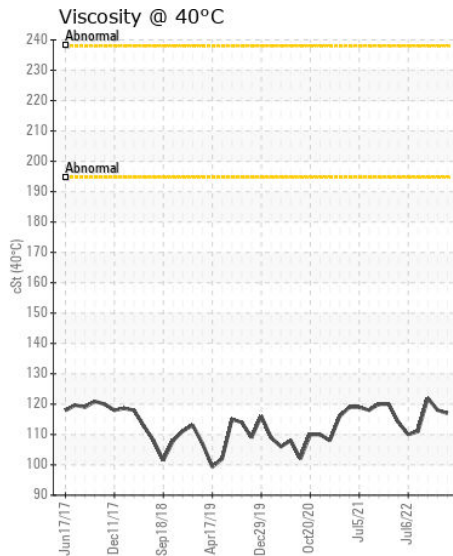
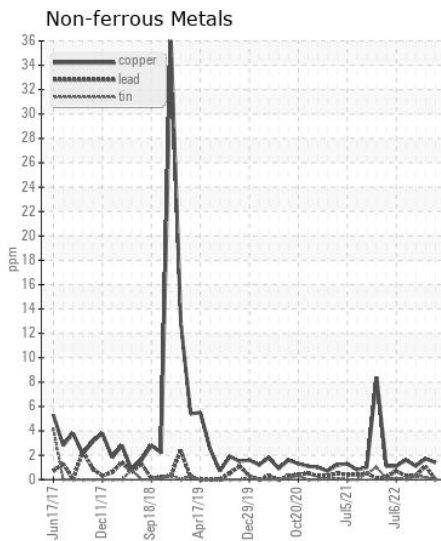
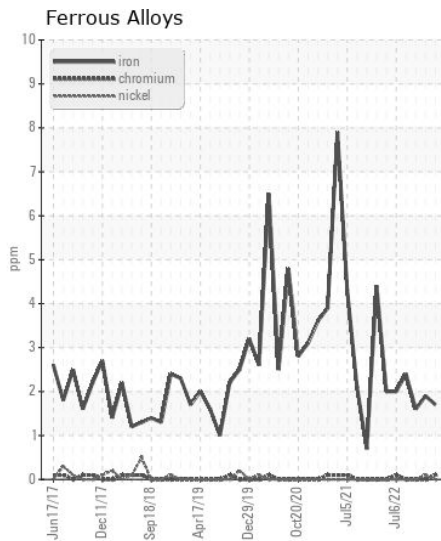
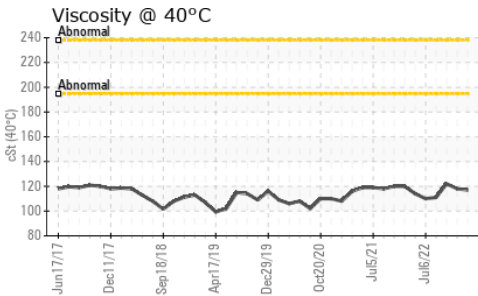
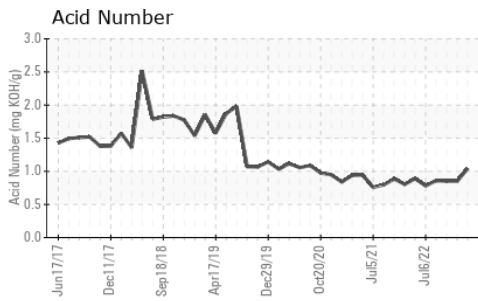
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	5	5	4
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	1	2
Boron	ppm	ASTM D5185m		350	322	339
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		42	42	37
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		99	94	66
Calcium	ppm	ASTM D5185m		2628	2409	2404
Phosphorus	ppm	ASTM D5185m		807	755	710
Zinc	ppm	ASTM D5185m		921	875	797
Sulfur	ppm	ASTM D5185m		3741	3670	3361
Acid Number (AN)	mg KOH/g	ASTM D8045		1.04	0.85	0.85
Visc @ 40°C	cSt	ASTM D445		117	118	122



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW05824234
Lab Number : 05824234
Unique Number : 10432317
Test Package : MAR 2

Received : 19 Apr 2023
Tested : 21 Apr 2023
Diagnosed : 21 Apr 2023 - Jonathan Hester

ILLINOIS MARINE TOWING
 PO BOX 391
 LEMONT, IL
 US 60439

Contact: RHETT DANIEL
 rdaniel@imtowing.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)

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