



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
EILEEN C
Component
Steering
Fluid
Steering Oil (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0059072	MW0034964	---
Sample Date		Client Info		26 Feb 2024	18 Apr 2023	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>60	7	2	---
Chromium	ppm	ASTM D5185m	>12	<1	<1	---
Nickel	ppm	ASTM D5185m	>6	0	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>4	0	0	---
Lead	ppm	ASTM D5185m	>12	<1	0	---
Copper	ppm	ASTM D5185m	>30	2	1	---
Tin	ppm	ASTM D5185m		0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

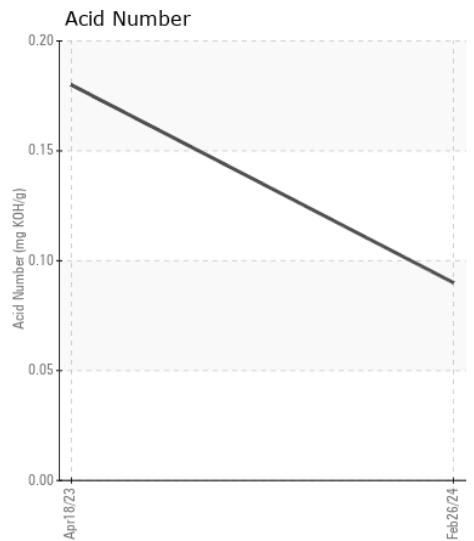
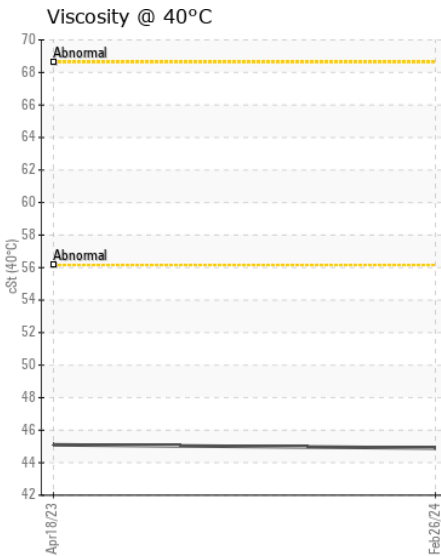
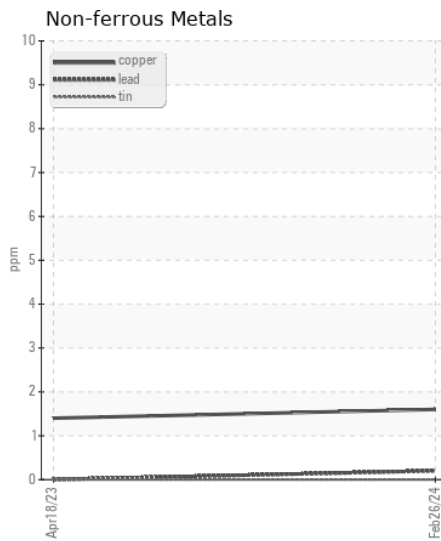
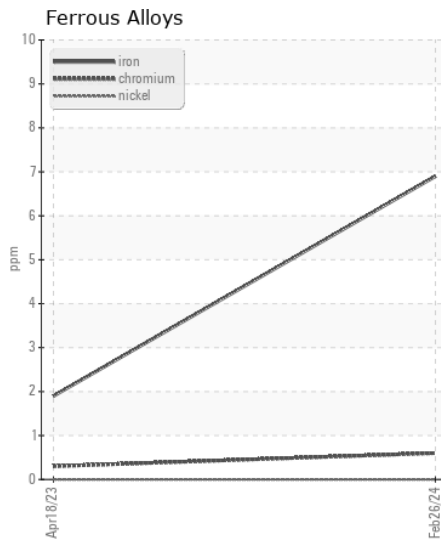
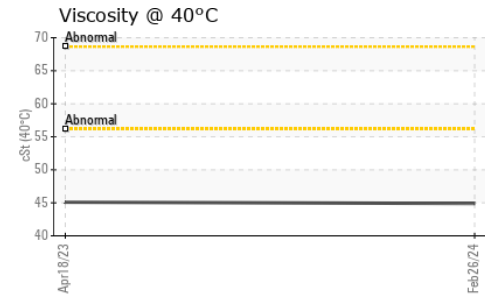
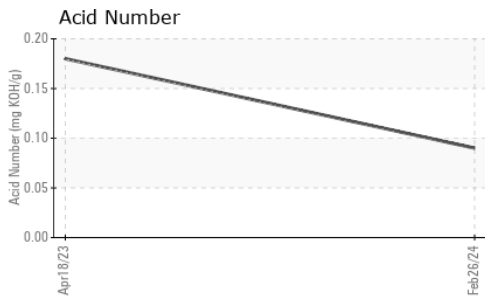
High concentration of visible dirt/debris present in the fluid.

Silicon	ppm	ASTM D5185m	>10	<1	0	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Water		WC Method		NEG	NEG	---
Particles >4µm		ASTM D7647	>2500	---	▲ 37184	---
Particles >6µm		ASTM D7647	>640	---	▲ 8676	---
Particles >14µm		ASTM D7647	>80	---	▲ 411	---
Particles >21µm		ASTM D7647	>20	---	▲ 65	---
Particles >38µm		ASTM D7647	>4	---	2	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	---	▲ 22/20/16	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	▲ HEAVY	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual		NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	2	---
Boron	ppm	ASTM D5185m		0	2	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	<1	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		4	4	---
Calcium	ppm	ASTM D5185m		138	180	---
Phosphorus	ppm	ASTM D5185m		130	178	---
Zinc	ppm	ASTM D5185m		98	104	---
Sulfur	ppm	ASTM D5185m		483	828	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.09	0.18	---
Visc @ 40°C	cSt	ASTM D445		44.9	45.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0059072 **Received** : 27 Feb 2024
Lab Number : 06101567 **Tested** : 29 Feb 2024
Unique Number : 10899797 **Diagnosed** : 29 Feb 2024 - Jonathan Hester
Test Package : MAR 2 (Additional Tests: PrtCount)

ILLINOIS MARINE TOWING
 PO BOX 391
 LEMONT, IL
 US 60439
 Contact: RHETT DANIEL
 rdaniel@imtowing.com
 T: (630)280-4926
 F: (630)739-2041

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)