



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
Mobile Fleet
Machine Id
348 348
Component
Boom Gearbox
Fluid
GEAR OIL SAE 85W140 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0784713	---	---
Sample Date		Client Info		28 Feb 2023	---	---
Machine Age	hrs	Client Info		30158	---	---
Oil Age	hrs	Client Info		1564	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				SEVERE	---	---

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>200	▲ 1556	---	---
Chromium	ppm	ASTM D5185m	>10	▲ 10	---	---
Nickel	ppm	ASTM D5185m	>10	4	---	---
Titanium	ppm	ASTM D5185m		5	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>25	● 57	---	---
Lead	ppm	ASTM D5185m	>50	0	---	---
Copper	ppm	ASTM D5185m	>200	28	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	LIGHT	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

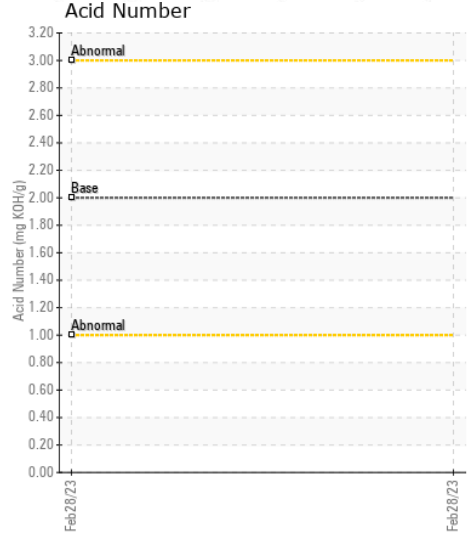
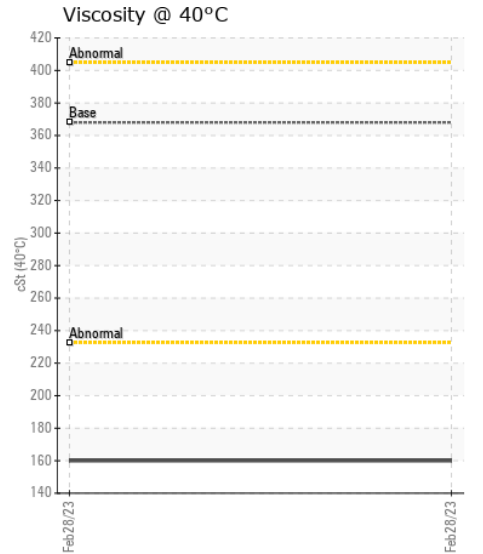
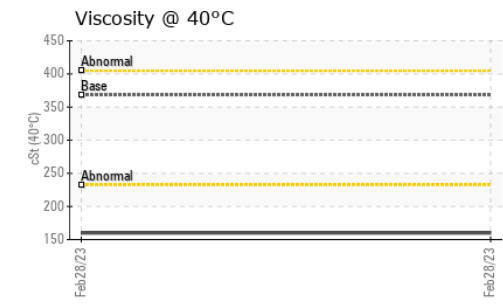
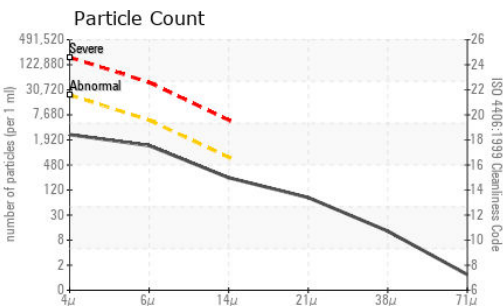
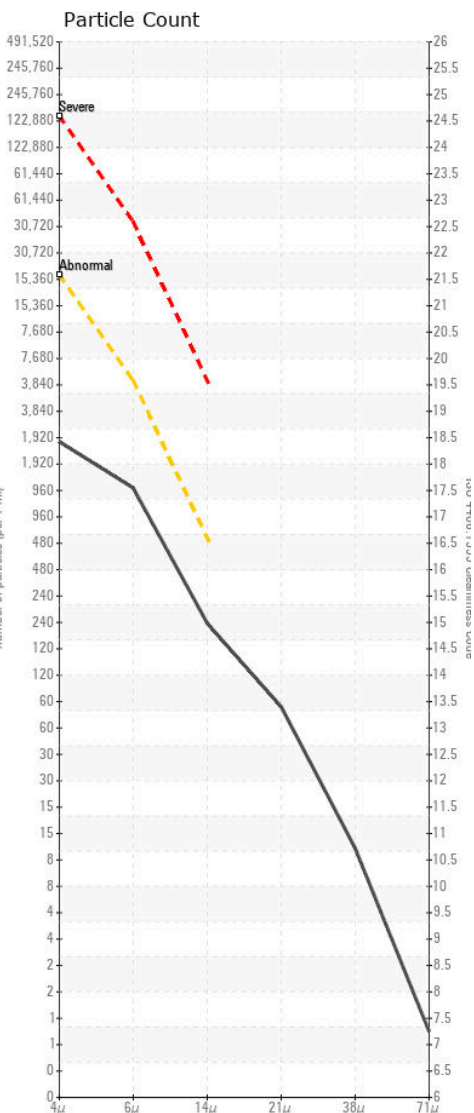
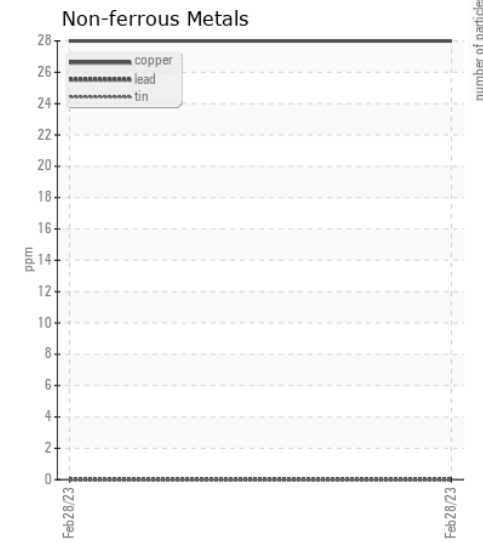
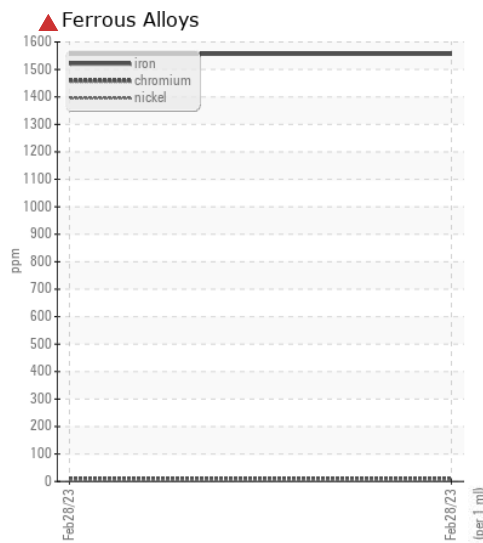
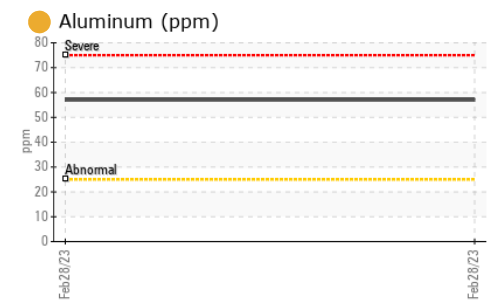
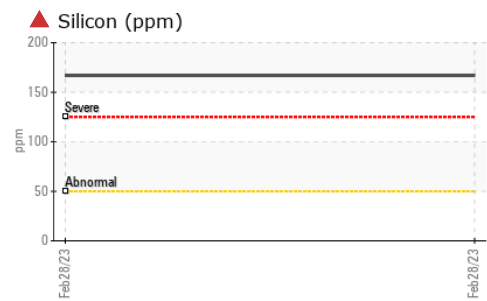
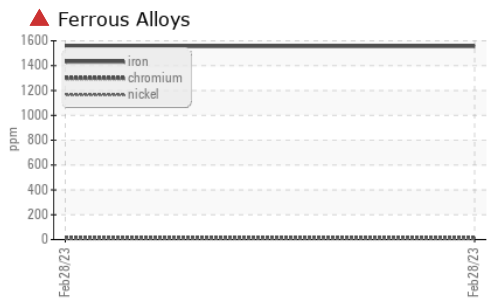
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>50	▲ 167	---	---
Potassium	ppm	ASTM D5185m	>20	12	---	---
Water		WC Method	>0.2	NEG	---	---
Particles >4µm		ASTM D7647	>20000	2253	---	---
Particles >6µm		ASTM D7647	>5000	1227	---	---
Particles >14µm		ASTM D7647	>640	209	---	---
Particles >21µm		ASTM D7647	>160	70	---	---
Particles >38µm		ASTM D7647	>40	11	---	---
Particles >71µm		ASTM D7647	>10	1	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	18/17/15	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		24	---	---
Boron	ppm	ASTM D5185m	400	27	---	---
Barium	ppm	ASTM D5185m	200	0	---	---
Molybdenum	ppm	ASTM D5185m	12	4	---	---
Manganese	ppm	ASTM D5185m		15	---	---
Magnesium	ppm	ASTM D5185m	12	26	---	---
Calcium	ppm	ASTM D5185m	150	392	---	---
Phosphorus	ppm	ASTM D5185m	1650	622	---	---
Zinc	ppm	ASTM D5185m	125	772	---	---
Sulfur	ppm	ASTM D5185m	22500	16866	---	---
Visc @ 40°C	cSt	ASTM D445	368	160	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0784713 **Received** : 02 Mar 2023
Lab Number : 05781129 **Tested** : 03 Mar 2023
Unique Number : 10360799 **Diagnosed** : 03 Mar 2023 - Don Baldrige
Test Package : CONST (Additional Tests: PrtCount)

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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)