



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
Mobile Fleet
Machine Id
5504 5504
Component
Pump Drive
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

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		WC0947905	WC0716677	---
Sample Date		Client Info		15 Jul 2024	18 Jul 2022	---
Machine Age	hrs	Client Info		10988	9148	---
Oil Age	hrs	Client Info		1831	2341	---
Filter Age	hrs	Client Info		1831	0	---
Oil Changed		Client Info		Not Changd	Changed	---
Filter Changed		Client Info		Not Changd	Not Changd	---
Sample Status				SEVERE	SEVERE	---

WEAR

Gear wear is indicated. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 3439	▲ 4955	---
Chromium	ppm	ASTM D5185m	>15	▲ 20	▲ 28	---
Nickel	ppm	ASTM D5185m	>10	6	8	---
Titanium	ppm	ASTM D5185m		<1	1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>20	10	21	---
Lead	ppm	ASTM D5185m		0	1	---
Copper	ppm	ASTM D5185m	>35	▲ 99	▲ 170	---
Tin	ppm	ASTM D5185m	>4	2	4	---
Vanadium	ppm	ASTM D5185m		2	3	---
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

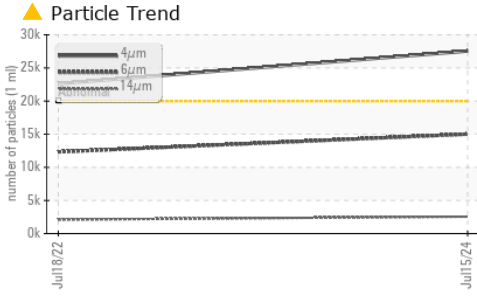
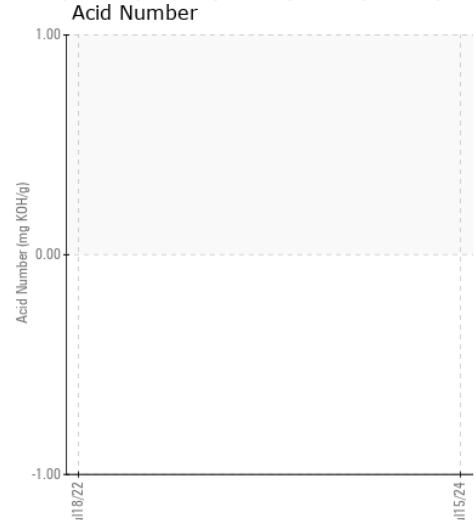
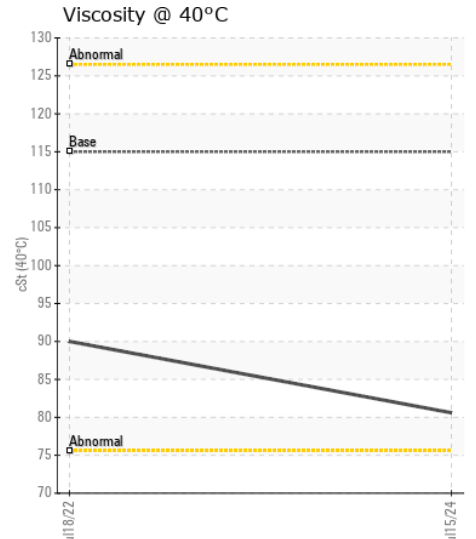
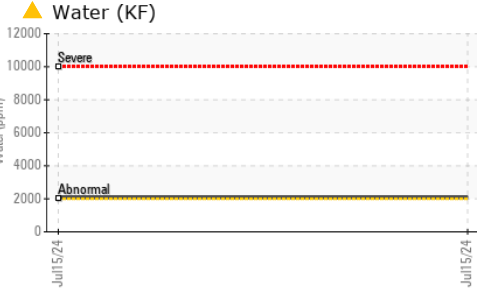
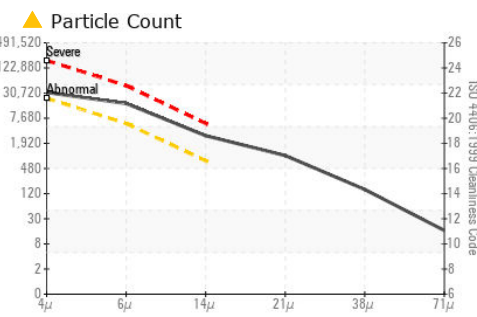
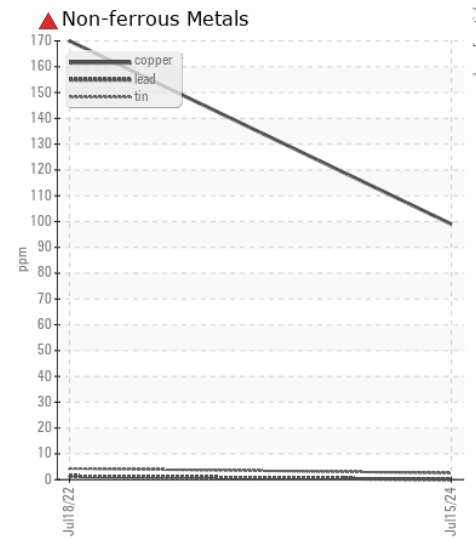
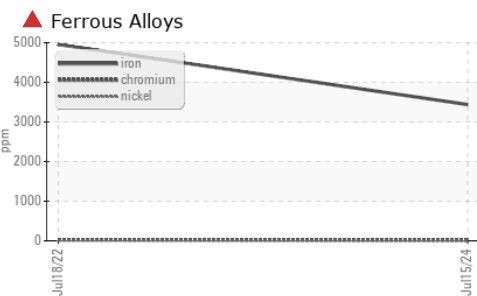
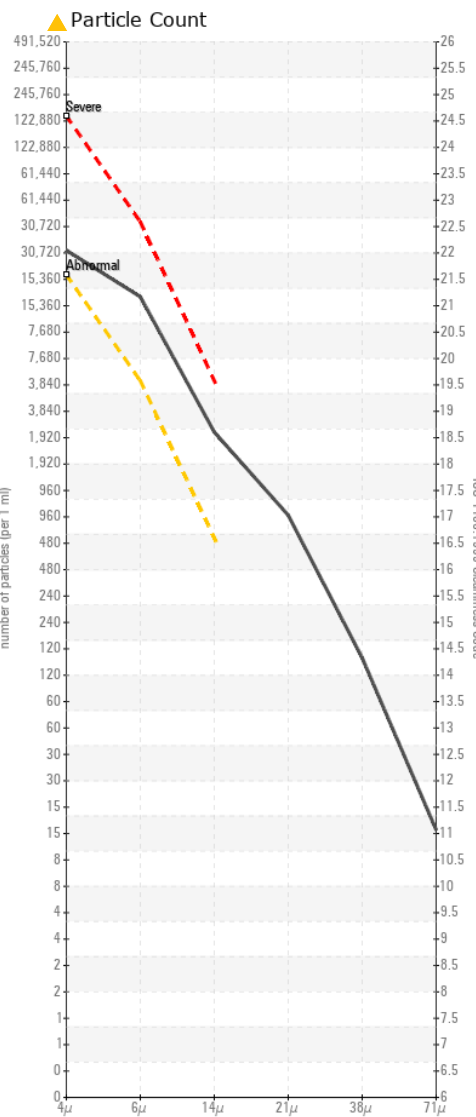
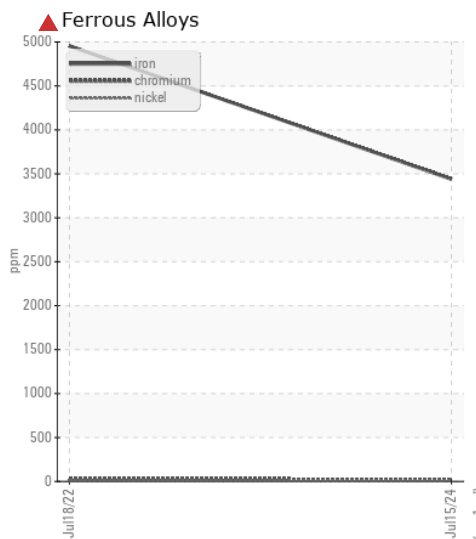
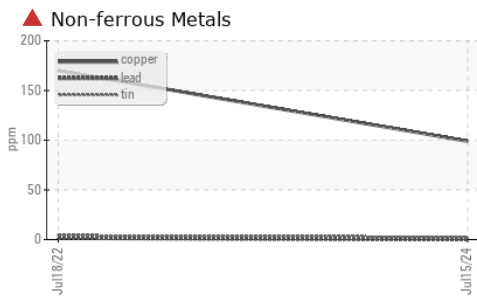
There is a high amount of particulates present in the oil. There is a high amount of visible silt present in the sample. High concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>75	54	67	---
Potassium	ppm	ASTM D5185m	>20	5	6	---
Water	%	ASTM D6304	>0.2	▲ 0.207	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 2070	---	---
Particles >4µm		ASTM D7647	>20000	▲ 27552	▲ 22621	---
Particles >6µm		ASTM D7647	>5000	▲ 15009	▲ 12323	---
Particles >14µm		ASTM D7647	>640	▲ 2554	▲ 2097	---
Particles >21µm		ASTM D7647	>160	▲ 860	▲ 706	---
Particles >38µm		ASTM D7647	>40	▲ 133	▲ 109	---
Particles >71µm		ASTM D7647	>10	▲ 14	11	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 22/21/19	▲ 22/21/18	---
Silt	scalar	*Visual	NONE	▲ HEAVY	NONE	---
Debris	scalar	*Visual	NONE	▲ HEAVY	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	0.2%	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>158	6	8	---
Boron	ppm	ASTM D5185m	250	63	104	---
Barium	ppm	ASTM D5185m	10	0	<1	---
Molybdenum	ppm	ASTM D5185m	100	33	12	---
Manganese	ppm	ASTM D5185m		26	37	---
Magnesium	ppm	ASTM D5185m	450	575	713	---
Calcium	ppm	ASTM D5185m	3000	1336	1285	---
Phosphorus	ppm	ASTM D5185m	1150	760	705	---
Zinc	ppm	ASTM D5185m	1350	808	696	---
Sulfur	ppm	ASTM D5185m	4250	3490	3729	---
Visc @ 40°C	cSt	ASTM D445	115	80.6	90.0	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0947905 **Received** : 17 Jul 2024
Lab Number : 06239025 **Tested** : 18 Jul 2024
Unique Number : 11127859 **Diagnosed** : 18 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF, PrtCount)

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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