



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**Mobile Fleet**  
 Machine Id  
**6457 6457**  
 Component  
**Front Differential**  
 Fluid  
**GEAR OIL SAE 75W90 (5 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0939285</b>	WC0808815	WC0726354
Sample Date		Client Info		<b>22 May 2024</b>	20 Jul 2023	02 Aug 2022
Machine Age	hrs	Client Info		<b>4174</b>	2236	37
Oil Age	hrs	Client Info		<b>4137</b>	2199	37
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>140</b>	70	34
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	5	<1
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	<1	<1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>100	<b>36</b>	32	21
Tin	ppm	ASTM D5185m	>10	<b>1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

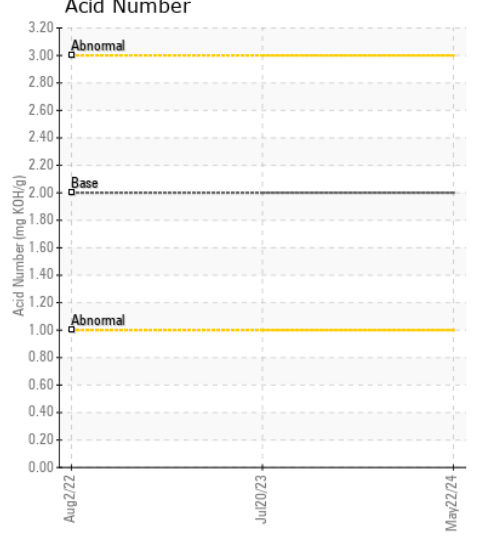
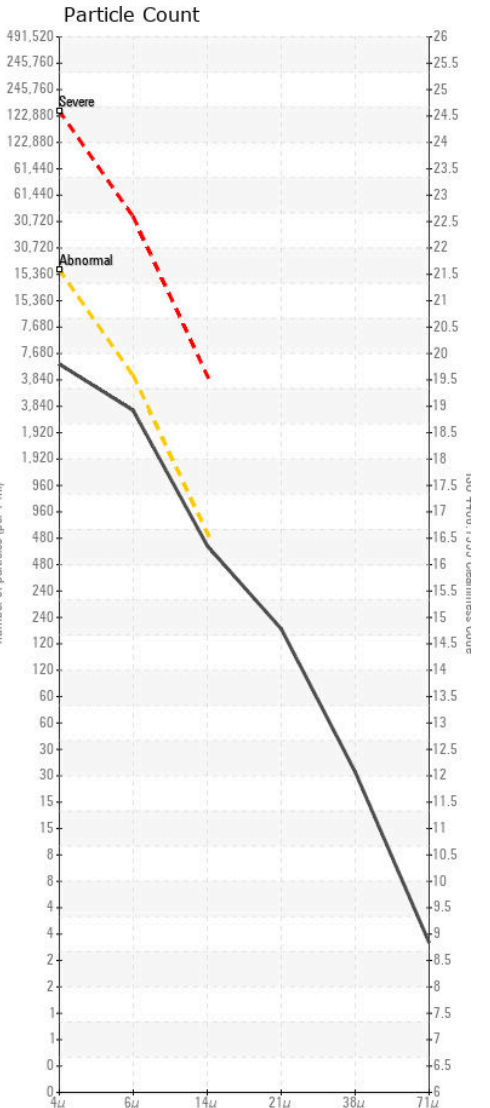
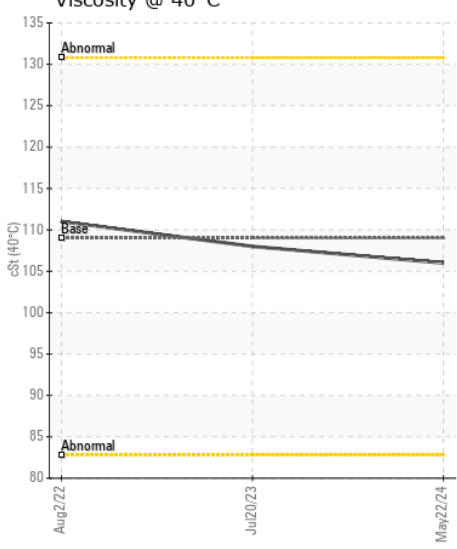
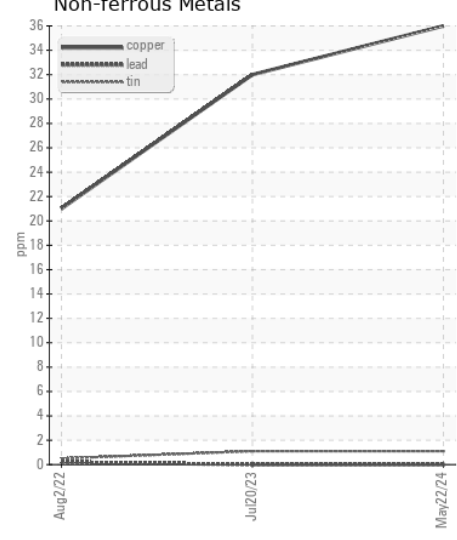
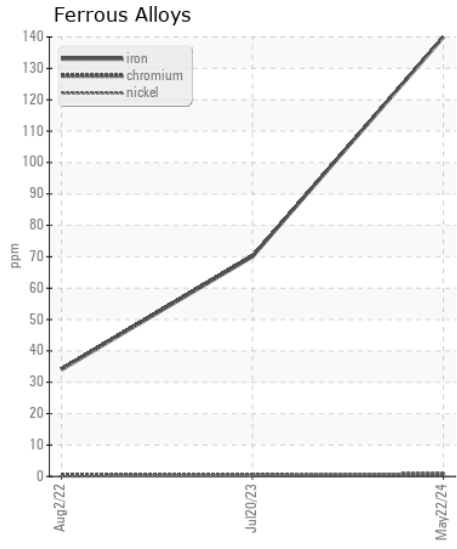
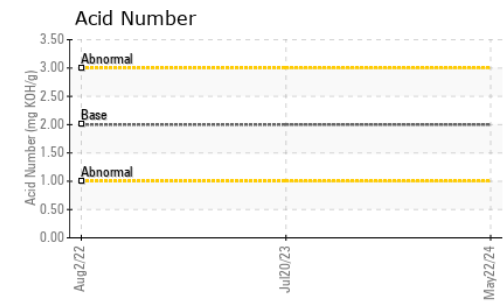
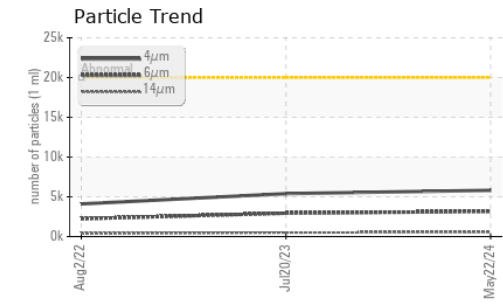
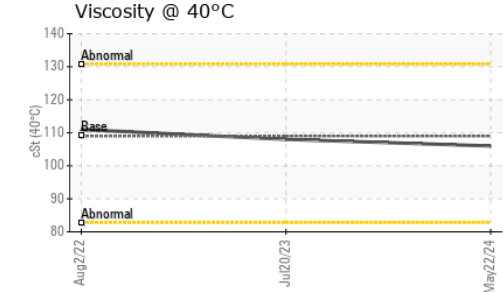
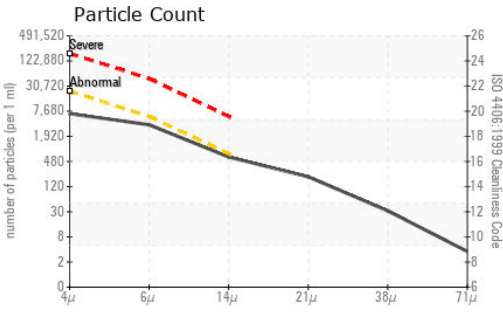
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>75	<b>28</b>	21	19
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	1	2
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>5820</b>	5402	4111
Particles >6µm		ASTM D7647	>5000	<b>3171</b>	2943	2239
Particles >14µm		ASTM D7647	>640	<b>540</b>	501	381
Particles >21µm		ASTM D7647	>160	<b>182</b>	169	128
Particles >38µm		ASTM D7647	>40	<b>28</b>	26	20
Particles >71µm		ASTM D7647	>10	<b>3</b>	3	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>20/19/16</b>	20/19/16	19/18/16
Silt	scalar	*Visual	NONE	<b>MODER</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>6</b>	5	4
Boron	ppm	ASTM D5185m	400	<b>317</b>	254	323
Barium	ppm	ASTM D5185m	200	<b>2</b>	4	0
Molybdenum	ppm	ASTM D5185m	12	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>13</b>	11	13
Magnesium	ppm	ASTM D5185m	12	<b>3</b>	2	2
Calcium	ppm	ASTM D5185m	150	<b>11</b>	11	11
Phosphorus	ppm	ASTM D5185m	1650	<b>1363</b>	1188	1351
Zinc	ppm	ASTM D5185m	125	<b>16</b>	20	16
Sulfur	ppm	ASTM D5185m	22500	<b>27396</b>	21826	27893
Visc @ 40°C	cSt	ASTM D445	109	<b>106</b>	108	111



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0939285 **Received** : 28 May 2024  
**Lab Number** : 06192737 **Tested** : 31 May 2024  
**Unique Number** : 11049489 **Diagnosed** : 31 May 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: 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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