



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**Mobile Fleet**  
 Machine Id  
**5220 5220**  
 Component  
**Rear Differential**  
 Fluid  
**MOBIL MOBILFLUID 424 (15 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0937920</b>	WC0918998	WC0756973
Sample Date		Client Info		<b>12 Jun 2024</b>	20 Mar 2024	20 Sep 2023
Machine Age	hrs	Client Info		<b>9669</b>	9049	8245
Oil Age	hrs	Client Info		<b>583</b>	885	8245
Filter Age	hrs	Client Info		<b>583</b>	885	8245
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>26</b>	157	54
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	2	0
Lead	ppm	ASTM D5185m	>25	<b>2</b>	3	9
Copper	ppm	ASTM D5185m	>100	<b>26</b>	28	▲ 306
Tin	ppm	ASTM D5185m	>10	<b>0</b>	1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

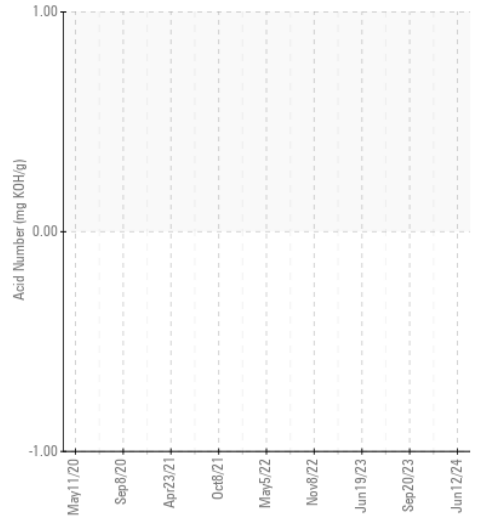
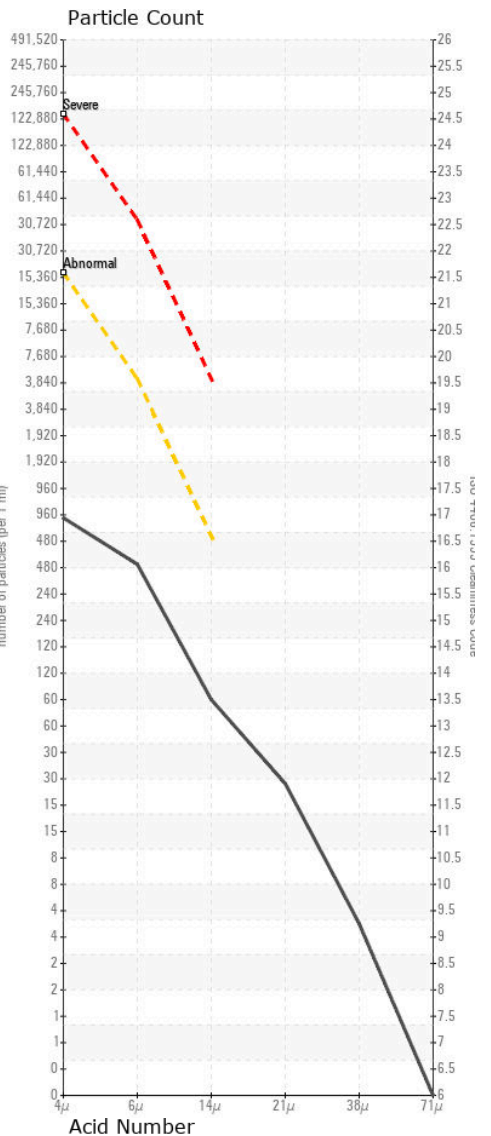
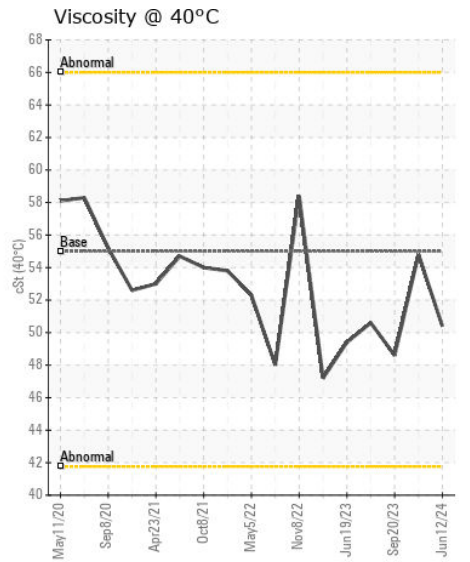
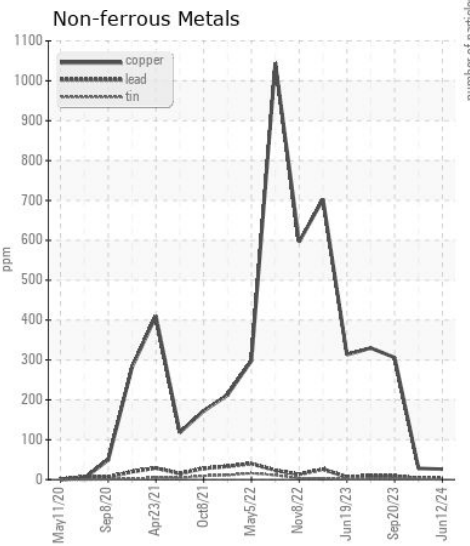
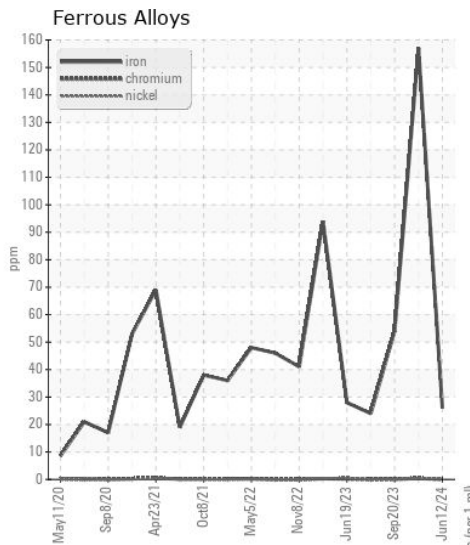
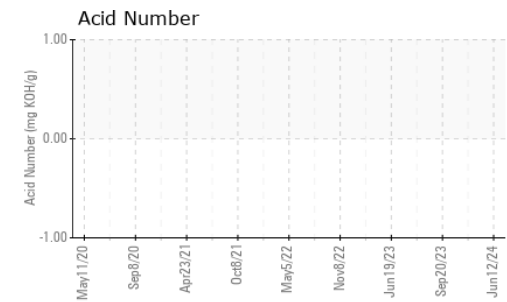
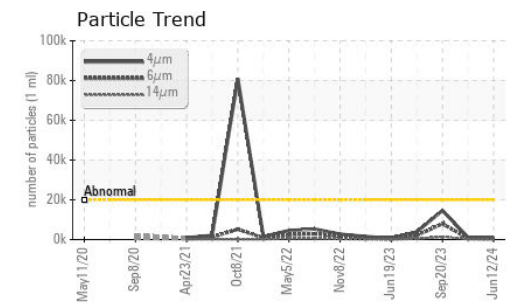
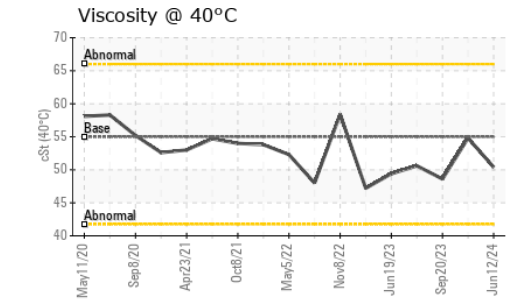
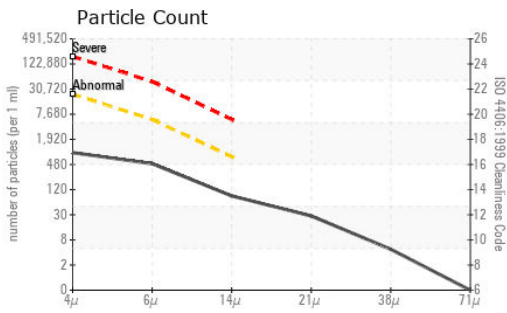
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>75	<b>9</b>	11	13
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	0
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>809</b>	1105	14589
Particles >6µm		ASTM D7647	>5000	<b>441</b>	602	▲ 7948
Particles >14µm		ASTM D7647	>640	<b>75</b>	102	▲ 1353
Particles >21µm		ASTM D7647	>160	<b>25</b>	35	▲ 456
Particles >38µm		ASTM D7647	>40	<b>4</b>	5	▲ 70
Particles >71µm		ASTM D7647	>10	<b>0</b>	1	7
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>17/16/13</b>	17/16/14	▲ 21/20/18
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>MODER</b>	▲ MODER	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>4</b>	14	2
Boron	ppm	ASTM D5185m		<b>129</b>	3	112
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>25</b>	0	6
Manganese	ppm	ASTM D5185m		<b>2</b>	3	<1
Magnesium	ppm	ASTM D5185m		<b>51</b>	96	67
Calcium	ppm	ASTM D5185m		<b>3080</b>	3309	3178
Phosphorus	ppm	ASTM D5185m		<b>1047</b>	1027	1070
Zinc	ppm	ASTM D5185m		<b>1244</b>	1088	1163
Sulfur	ppm	ASTM D5185m		<b>7693</b>	4342	10231
Visc @ 40°C	cSt	ASTM D445	55	<b>50.4</b>	54.8	48.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0937920 **Received** : 14 Jun 2024  
**Lab Number** : 06209942 **Tested** : 20 Jun 2024  
**Unique Number** : 11082806 **Diagnosed** : 20 Jun 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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