



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area  
**Mobile Fleet**  
 Machine Id  
**5227 5227**  
 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		WC0918962	WC0885938	WC0867133
Sample Date		Client Info		15 Apr 2024	25 Jan 2024	09 Nov 2023
Machine Age	hrs	Client Info		4815	4264	3716
Oil Age	hrs	Client Info		551	2064	1516
Filter Age	hrs	Client Info		551	2064	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	40	135	130
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	2	2
Lead	ppm	ASTM D5185m	>25	7	20	▲ 17
Copper	ppm	ASTM D5185m	>100	72	▲ 272	▲ 248
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

## CONTAMINATION

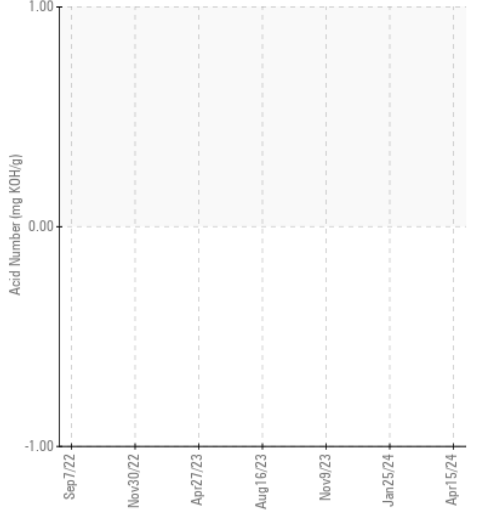
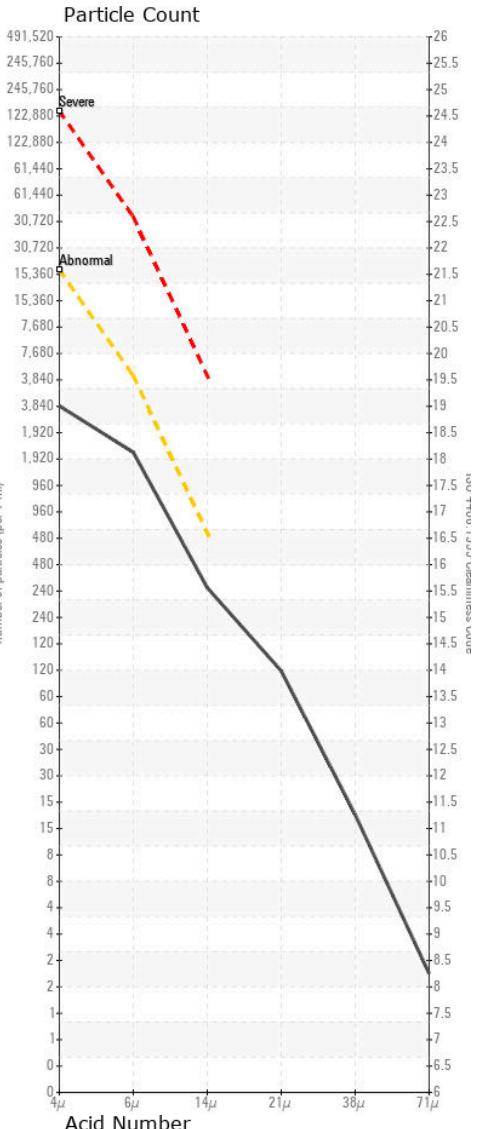
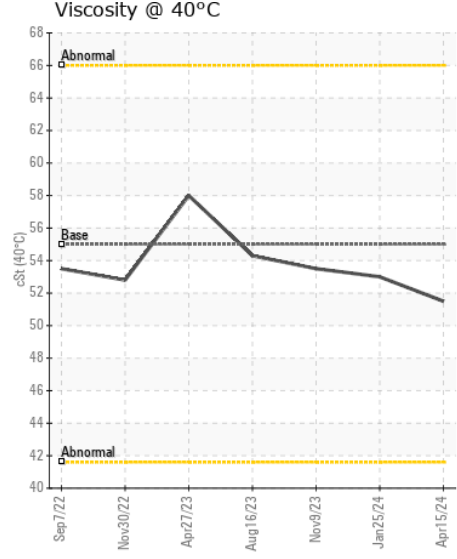
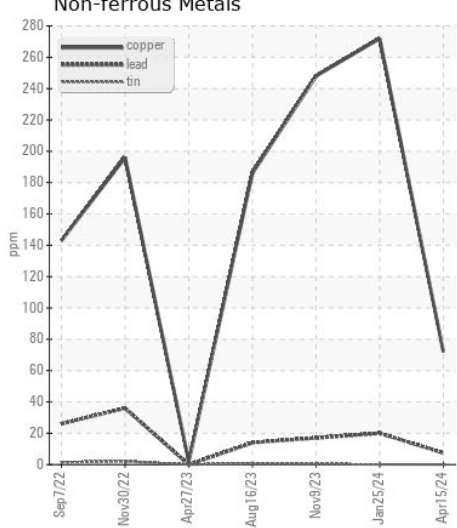
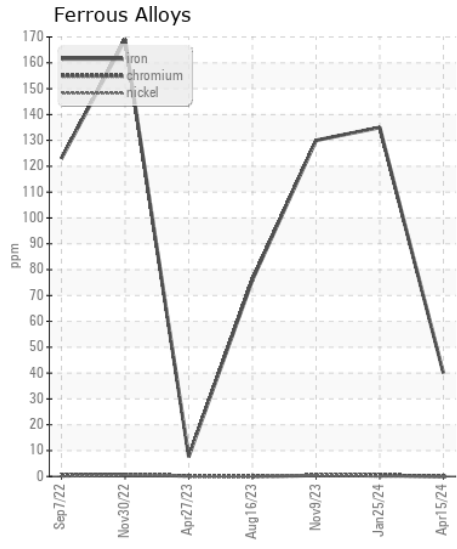
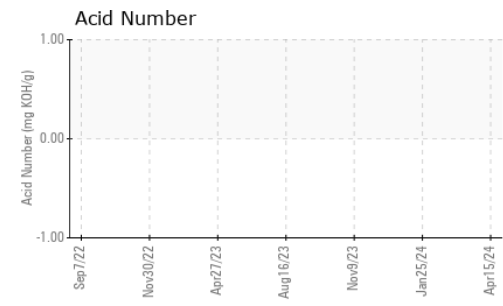
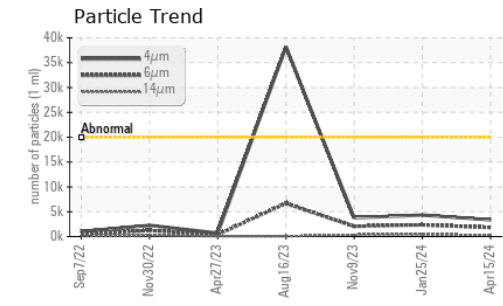
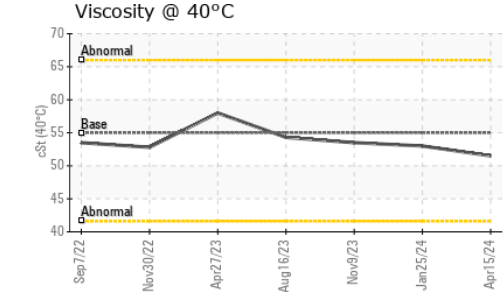
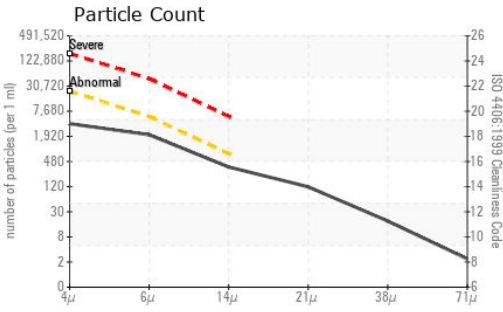
Moderate concentration of visible dirt/debris present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>75	15	11	14
Potassium	ppm	ASTM D5185m	>20	10	1	2
Water		WC Method	>.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	3367	4332	3775
Particles >6µm		ASTM D7647	>5000	1834	2360	2057
Particles >14µm		ASTM D7647	>640	312	402	350
Particles >21µm		ASTM D7647	>160	105	135	118
Particles >38µm		ASTM D7647	>40	16	21	18
Particles >71µm		ASTM D7647	>10	2	2	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/18/15	19/18/16	19/18/16
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		4	3	2
Boron	ppm	ASTM D5185m		83	0	<1
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		13	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		52	91	90
Calcium	ppm	ASTM D5185m		2966	2846	3040
Phosphorus	ppm	ASTM D5185m		938	908	967
Zinc	ppm	ASTM D5185m		1000	1122	1107
Sulfur	ppm	ASTM D5185m		6980	3472	3584
Visc @ 40°C	cSt	ASTM D445	55	51.5	53.0	53.5



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0918962 **Received** : 17 Apr 2024  
**Lab Number** : 06151856 **Tested** : 19 Apr 2024  
**Unique Number** : 10981934 **Diagnosed** : 19 Apr 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PrtCount )

**CAROLINA SUNROCK**  
 PO BOX 25  
 BUTNER, NC  
 US 27509  
 Contact: Leigh Dennis  
 rdennis@thesunrockgroup.com  
 T: (919)575-4505  
 F: (919)575-0162

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)