



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Mobile Fleet
Machine Id
5221 5221
Component
Rear Differential
Fluid
MOBIL MOBILFLUID 424 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0947902	WC0937869	WC0885881
Sample Date		Client Info		16 Jul 2024	01 May 2024	22 Jan 2024
Machine Age	hrs	Client Info		10064	9523	8902
Oil Age	hrs	Client Info		491	2347	1726
Filter Age	hrs	Client Info		491	2347	1726
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1501	15	64	58
Chromium	ppm	ASTM D5185m	>11	<1	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	<1	<1
Aluminum	ppm	ASTM D5185m	>21	4	<1	1
Lead	ppm	ASTM D5185m	>51	4	17	14
Copper	ppm	ASTM D5185m	>101	82	▲ 260	▲ 241
Tin	ppm	ASTM D5185m	>10	<1	<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

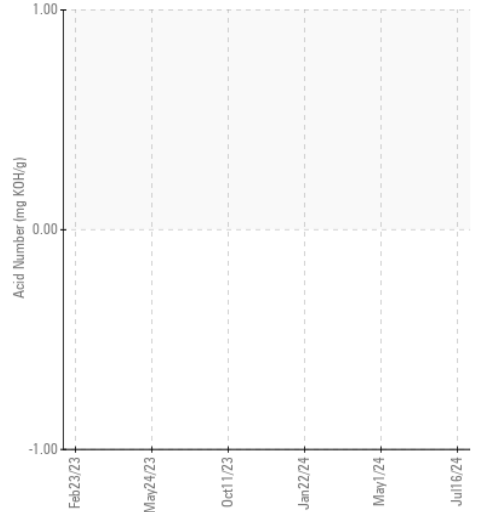
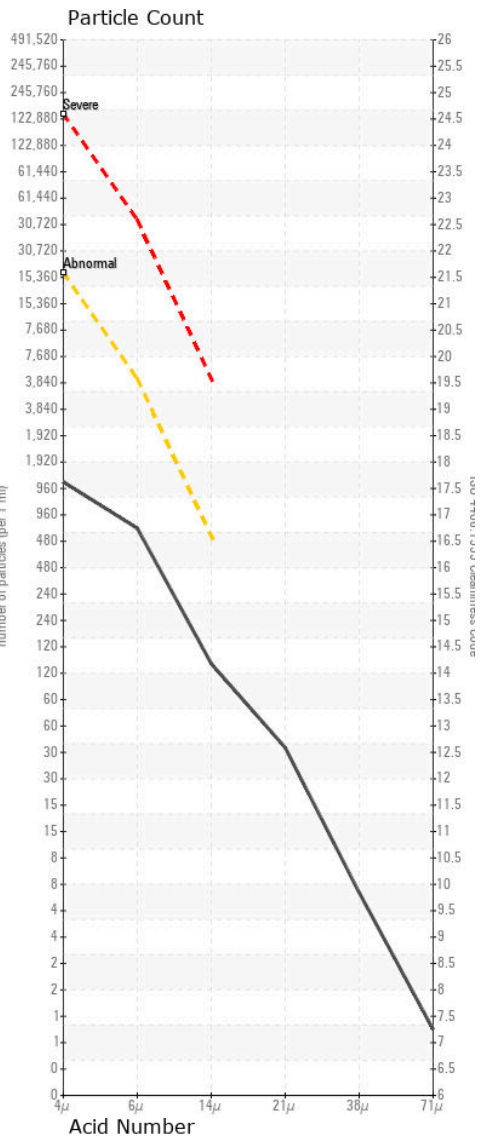
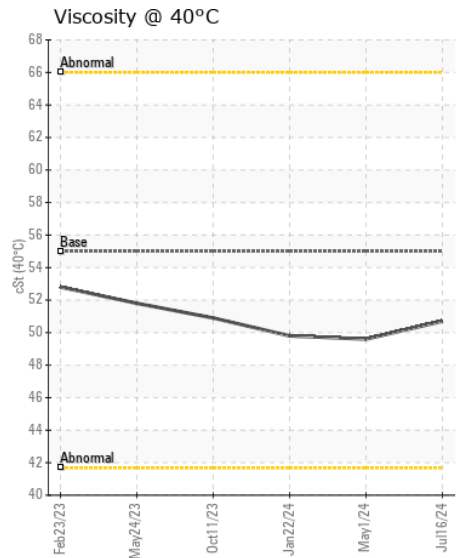
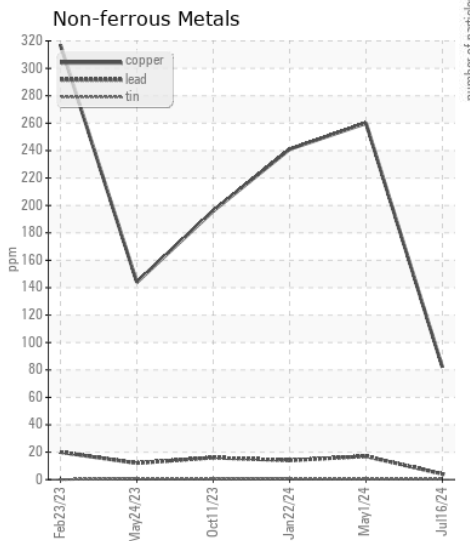
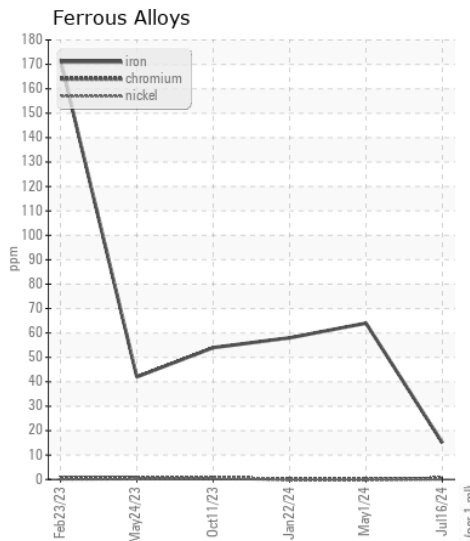
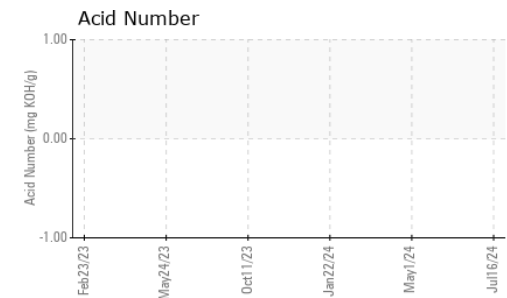
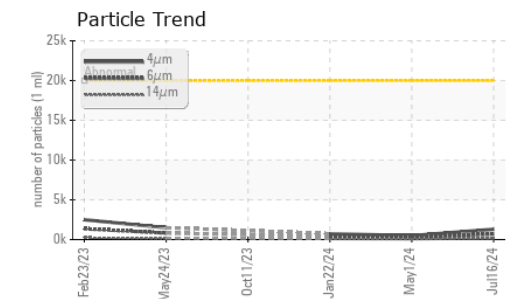
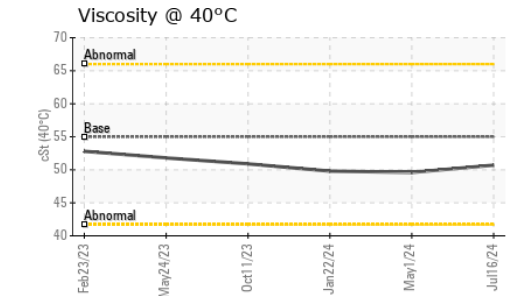
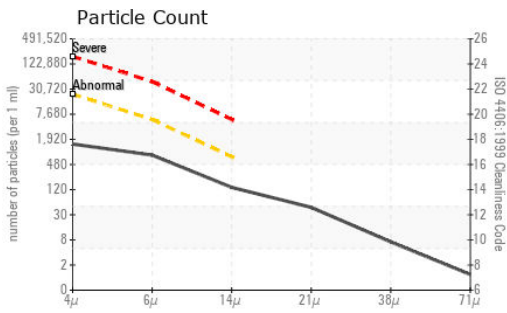
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>31	10	11	12
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	1296	496	731
Particles >6µm		ASTM D7647	>5000	706	270	398
Particles >14µm		ASTM D7647	>640	120	46	68
Particles >21µm		ASTM D7647	>160	40	15	23
Particles >38µm		ASTM D7647	>40	6	2	4
Particles >71µm		ASTM D7647	>10	1	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	17/17/14	16/15/13	17/16/13
Silt	scalar	*Visual	NONE	LIGHT	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	▲ HEAVY
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>51	0	3	3
Boron	ppm	ASTM D5185m		126	107	100
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		8	12	13
Manganese	ppm	ASTM D5185m		<1	1	2
Magnesium	ppm	ASTM D5185m		61	50	52
Calcium	ppm	ASTM D5185m		3404	3150	3213
Phosphorus	ppm	ASTM D5185m		1077	1049	1143
Zinc	ppm	ASTM D5185m		1373	1224	1304
Sulfur	ppm	ASTM D5185m		7646	8256	7459
Visc @ 40°C	cSt	ASTM D445	55	50.7	49.6	49.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0947902 **Received** : 18 Jul 2024
Lab Number : 06240170 **Tested** : 19 Jul 2024
Unique Number : 11129004 **Diagnosed** : 19 Jul 2024 - Don Baldridge
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)