



# OIL ANALYSIS REPORT

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

Area

**Mobile Fleet**

Machine Id

**6403 6403**

Component

**Rear Differential**

Fluid

**MOBIL DELVAC 1 SYNTHETIC GEAR SAE 75W90 (9 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0902849</b>	WC0744722	WC0624105
Sample Date		Client Info		<b>27 Feb 2024</b>	06 Oct 2022	15 Sep 2021
Machine Age	hrs	Client Info		<b>10476</b>	8367	6450
Oil Age	hrs	Client Info		<b>2109</b>	4140	2223
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	N/A	Not Changd
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>77</b>	193	66
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	5
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	24	7
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>100	<b>&lt;1</b>	1	3
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

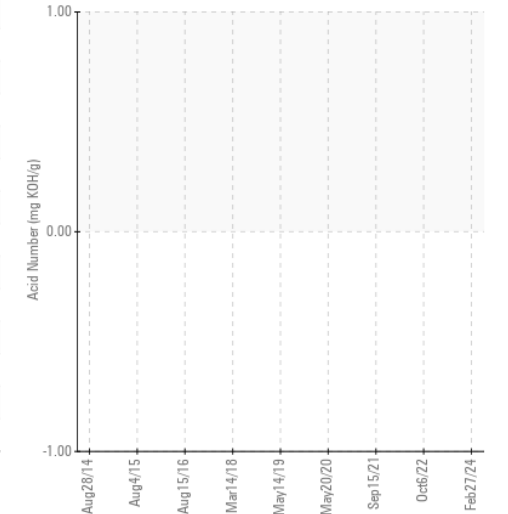
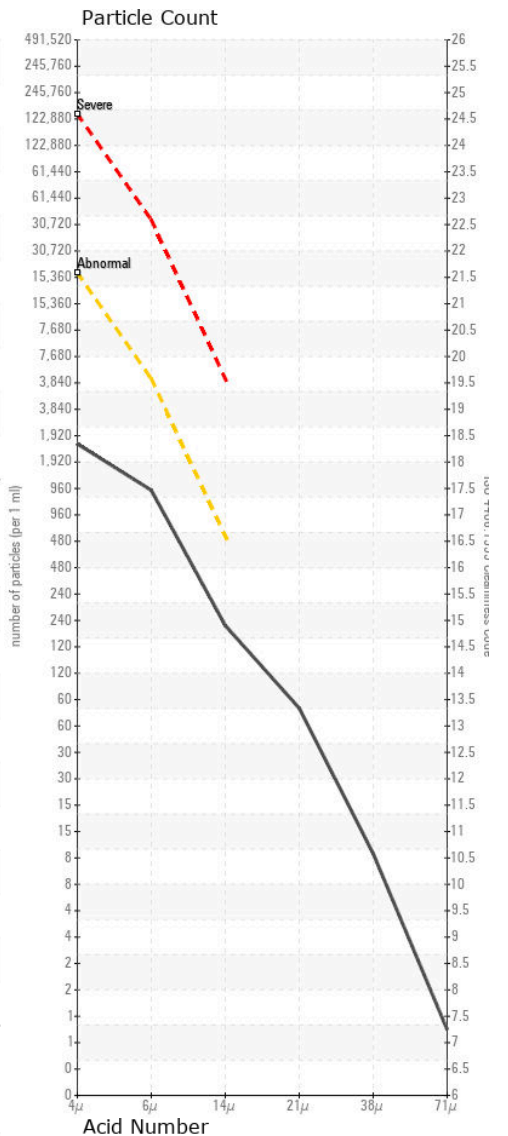
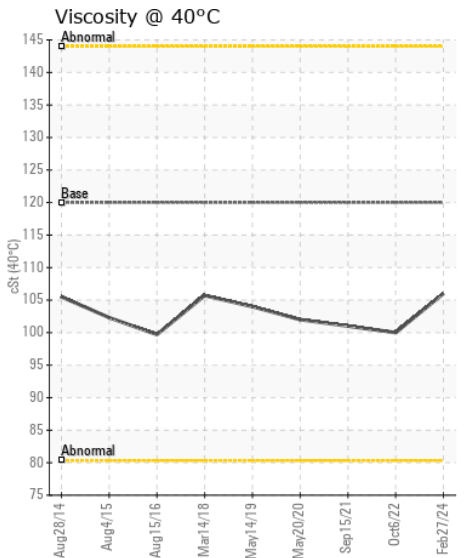
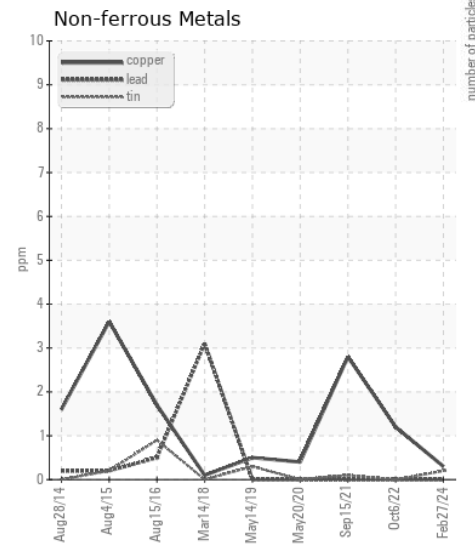
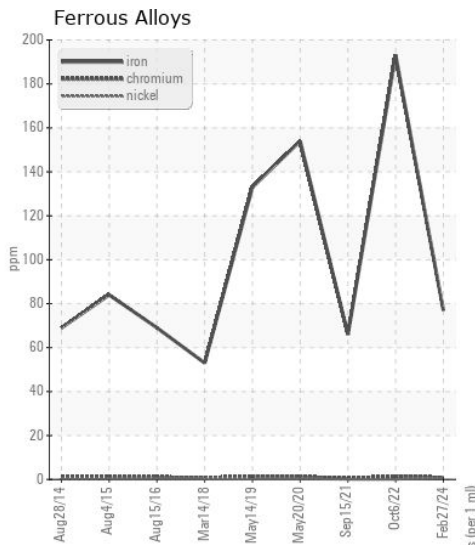
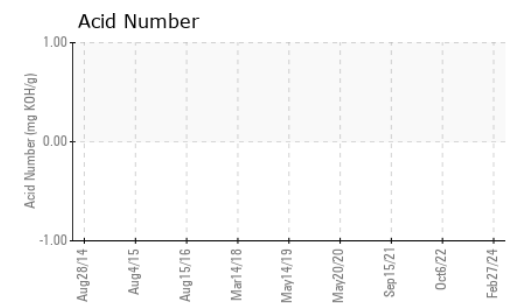
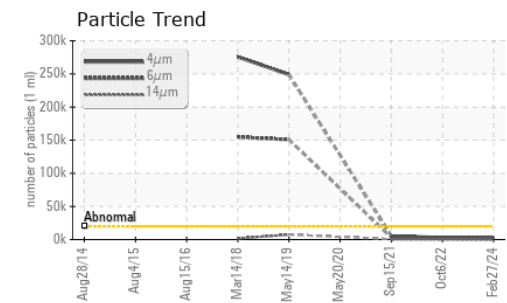
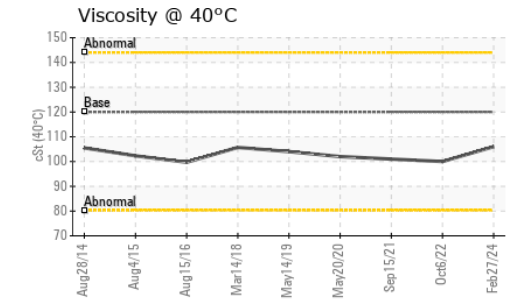
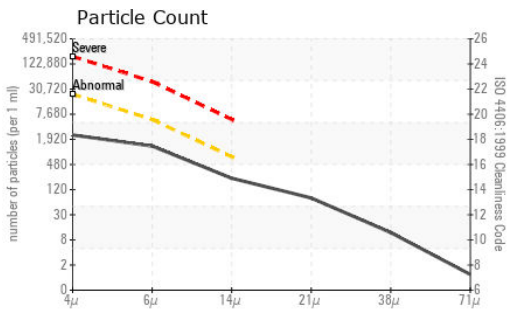
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>13</b>	58	26
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	<1
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>2131</b>	2915	5476
Particles >6µm		ASTM D7647	>5000	<b>1161</b>	1588	2983
Particles >14µm		ASTM D7647	>640	<b>198</b>	270	508
Particles >21µm		ASTM D7647	>160	<b>67</b>	91	171
Particles >38µm		ASTM D7647	>40	<b>10</b>	14	26
Particles >71µm		ASTM D7647	>10	<b>1</b>	1	3
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>18/17/15</b>	19/18/15	20/19/16
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	VLITE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	HAZY	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	<b>NEG</b>	0.2%	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>1</b>	6	2
Boron	ppm	ASTM D5185m		<b>260</b>	267	324
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	3	3
Manganese	ppm	ASTM D5185m		<b>1</b>	3	1
Magnesium	ppm	ASTM D5185m		<b>12</b>	35	32
Calcium	ppm	ASTM D5185m		<b>38</b>	82	82
Phosphorus	ppm	ASTM D5185m		<b>1288</b>	1367	1328
Zinc	ppm	ASTM D5185m		<b>32</b>	58	55
Sulfur	ppm	ASTM D5185m		<b>25315</b>	26933	19767
Visc @ 40°C	cSt	ASTM D445	120	<b>106</b>	100	101



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0902849 **Received** : 29 Feb 2024  
**Lab Number** : 06104226 **Tested** : 05 Mar 2024  
**Unique Number** : 10902456 **Diagnosed** : 05 Mar 2024 - Jonathan Hester  
**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)