



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

**Mobile Fleet**

Machine Id

**6448 6448**

Component

**Front Differential**

Fluid

**MOBIL DELVAC 1 SYNTHETIC GEAR SAE 75W90 (5 GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0861777</b>	WC0757069	WC0613066
Sample Date		Client Info		<b>17 Jan 2024</b>	05 Dec 2022	11 Aug 2021
Machine Age	hrs	Client Info		<b>6549</b>	4510	2191
Oil Age	hrs	Client Info		<b>3268</b>	2319	1081
Filter Age	hrs	Client Info		<b>3268</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>138</b>	103	80
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	3	0
Lead	ppm	ASTM D5185m	>25	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>100	<b>78</b>	82	83
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	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

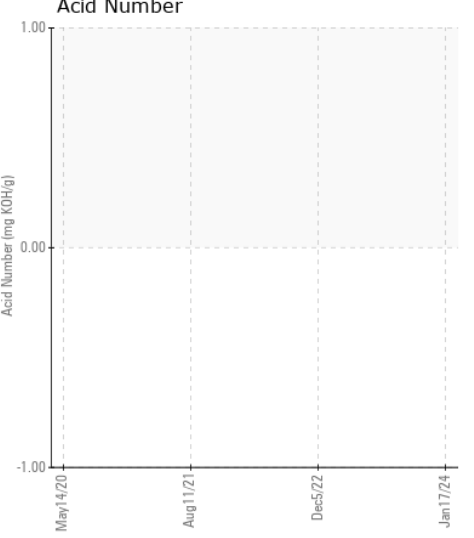
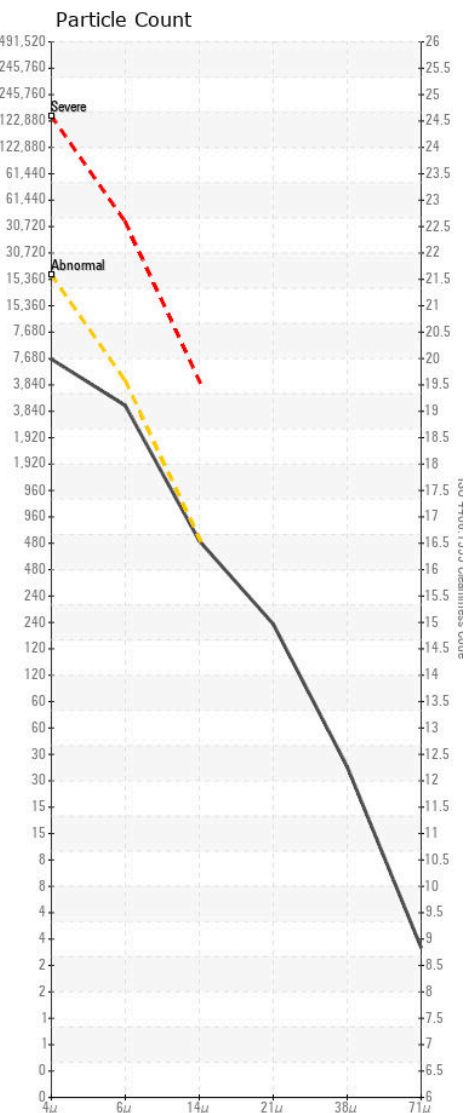
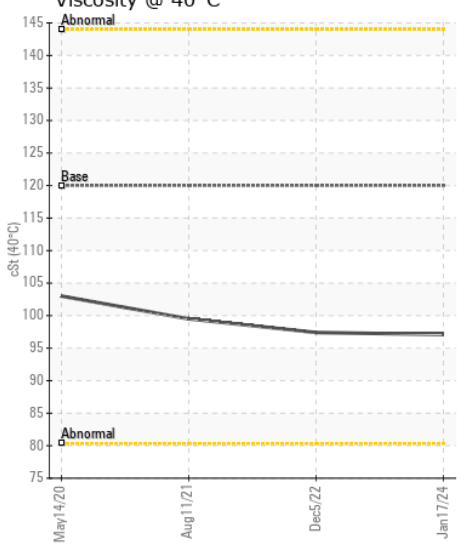
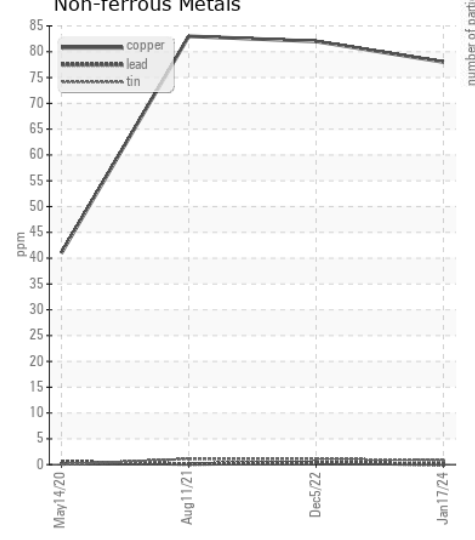
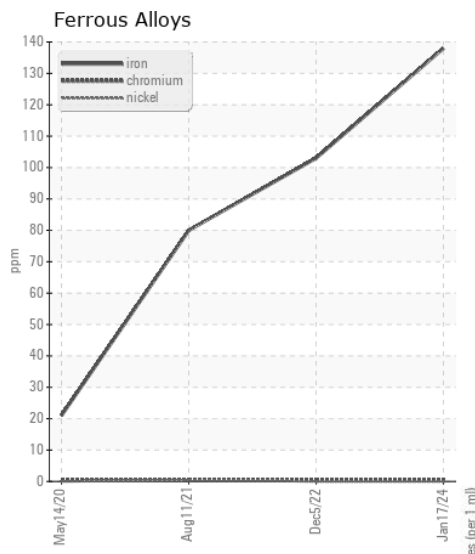
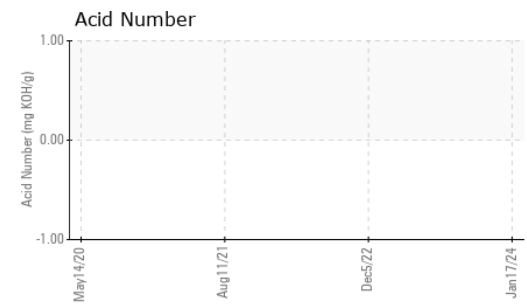
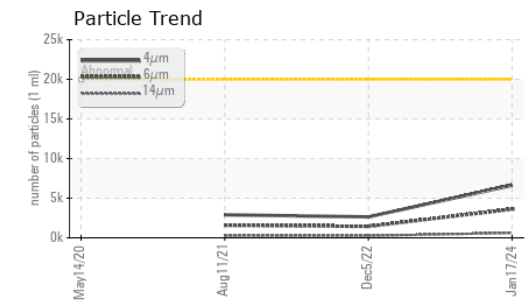
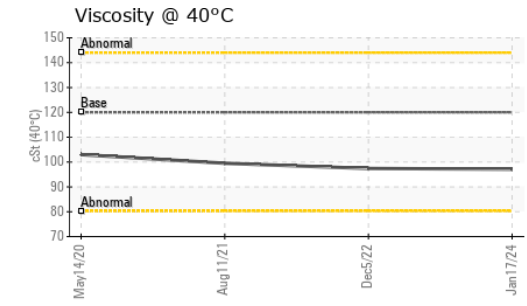
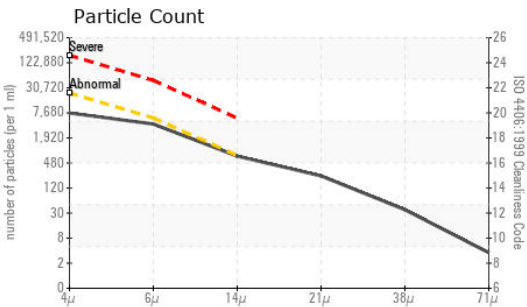
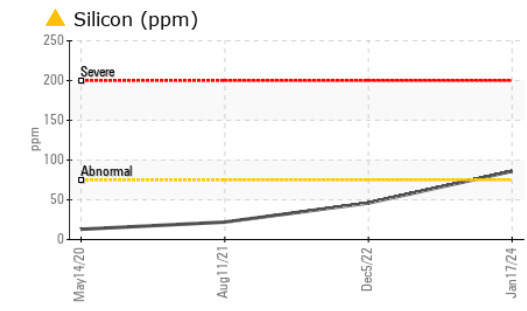
Elemental level of silicon (Si) above normal. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>75	<b>▲ 86</b>	46	22
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	4
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>6629</b>	2640	2904
Particles >6µm		ASTM D7647	>5000	<b>3611</b>	1438	1582
Particles >14µm		ASTM D7647	>640	<b>615</b>	245	269
Particles >21µm		ASTM D7647	>160	<b>207</b>	82	91
Particles >38µm		ASTM D7647	>40	<b>32</b>	13	14
Particles >71µm		ASTM D7647	>10	<b>3</b>	1	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>20/19/16</b>	19/18/15	19/18/15
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	<b>▲ MODER</b>	LIGHT
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>7</b>	9	9
Boron	ppm	ASTM D5185m		<b>196</b>	234	283
Barium	ppm	ASTM D5185m		<b>0</b>	1	<1
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>15</b>	14	14
Magnesium	ppm	ASTM D5185m		<b>4</b>	2	1
Calcium	ppm	ASTM D5185m		<b>15</b>	12	10
Phosphorus	ppm	ASTM D5185m		<b>1457</b>	1353	1481
Zinc	ppm	ASTM D5185m		<b>17</b>	21	4
Sulfur	ppm	ASTM D5185m		<b>23284</b>	27086	23678
Visc @ 40°C	cSt	ASTM D445	120	<b>97.1</b>	97.4	99.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0861777 **Received** : 19 Jan 2024  
**Lab Number** : 06065482 **Diagnosed** : 23 Jan 2024  
**Unique Number** : 10836864 **Diagnostician** : Don Baldrige  
**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)

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