



# OIL ANALYSIS REPORT

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

Area

**Mobile Fleet**

Machine Id

**6448 6448**

Component

**Diesel Engine**

Fluid

**MOBIL DELVAC 1300 SUPER 10W30 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0861785</b>	WC0861756	WC0852412
Sample Date		Client Info		<b>17 Jan 2024</b>	15 Nov 2023	24 Aug 2023
Machine Age	hrs	Client Info		<b>6549</b>	6261	5890
Oil Age	hrs	Client Info		<b>325</b>	379	374
Filter Age	hrs	Client Info		<b>325</b>	379	374
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Chngd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Chngd
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>6</b>	11	7
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	7	5
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>9</b>	13	13
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

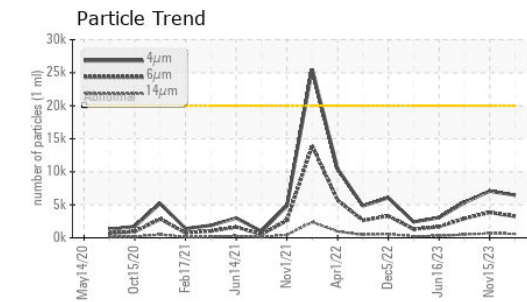
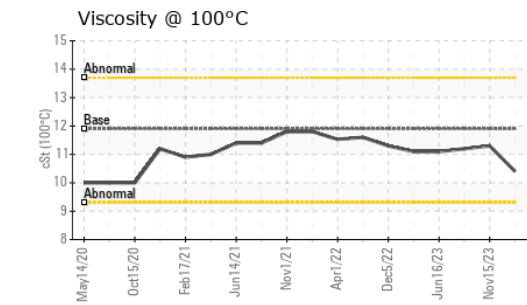
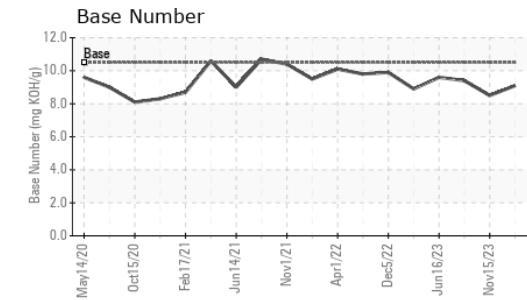
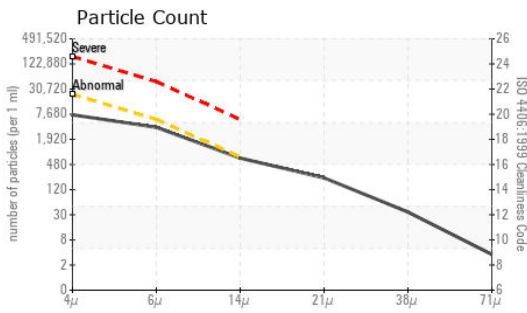
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>21</b>	11	8
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.3</b>	7.9	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.6</b>	22.0	21.6
Particles >4µm		ASTM D7647	>20000	<b>6464</b>	7073	5324
Particles >6µm		ASTM D7647	>5000	<b>3251</b>	3853	2900
Particles >14µm		ASTM D7647	>640	<b>599</b>	▲ 656	494
Particles >21µm		ASTM D7647	>160	<b>202</b>	▲ 221	166
Particles >38µm		ASTM D7647	>40	<b>31</b>	34	26
Particles >71µm		ASTM D7647	>10	<b>3</b>	3	3
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>20/19/16</b>	▲ 20/19/17	20/19/16
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	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	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>10</b>	2	3
Boron	ppm	ASTM D5185m		<b>48</b>	32	55
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>51</b>	48	52
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>524</b>	465	539
Calcium	ppm	ASTM D5185m		<b>1615</b>	1695	1852
Phosphorus	ppm	ASTM D5185m		<b>758</b>	676	817
Zinc	ppm	ASTM D5185m		<b>933</b>	927	1001
Sulfur	ppm	ASTM D5185m		<b>2521</b>	2140	3224
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.3</b>	21.0	19.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>9.1</b>	8.5	9.4
Visc @ 100°C	cSt	ASTM D445	11.9	<b>10.4</b>	11.3	11.2



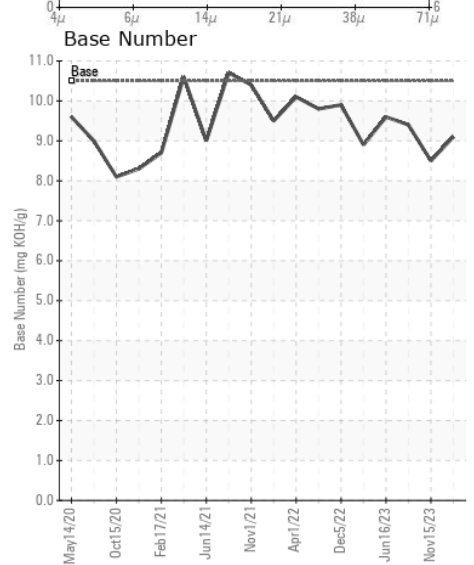
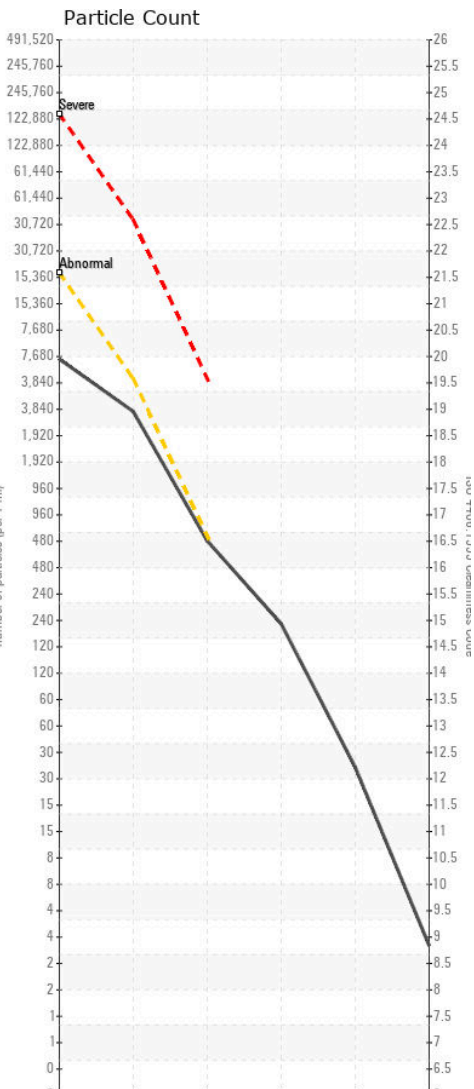
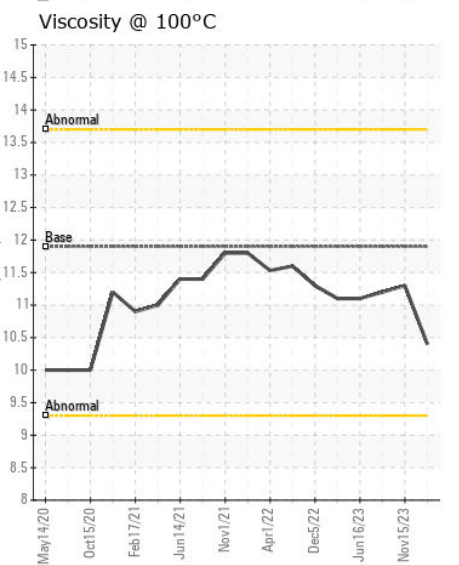
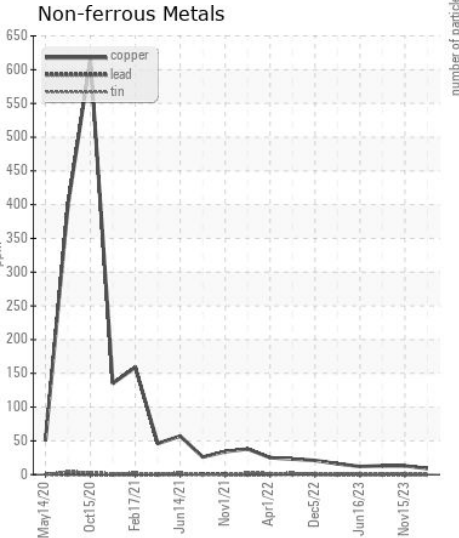
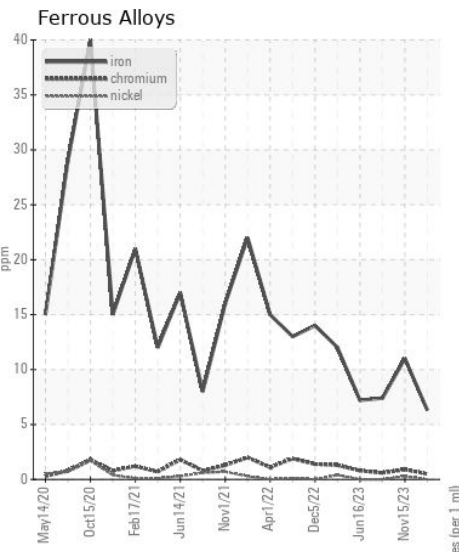
Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0861785 **Received** : 19 Jan 2024  
**Lab Number** : 06065474 **Diagnosed** : 23 Jan 2024  
**Unique Number** : 10836856 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: PrtCount, TBN )

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