



# OIL ANALYSIS REPORT

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

Area  
**Mobile Fleet**  
 Machine Id  
**6443 6443**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER 10W30 (10 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0939422</b>	WC0902842	WC0867110
Sample Date		Client Info		<b>22 May 2024</b>	28 Feb 2024	13 Nov 2023
Machine Age	hrs	Client Info		<b>7659</b>	7256	6960
Oil Age	hrs	Client Info		<b>700</b>	297	244
Filter Age	hrs	Client Info		<b>700</b>	297	244
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>9</b>	7	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>5</b>	4	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>10</b>	10	12
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

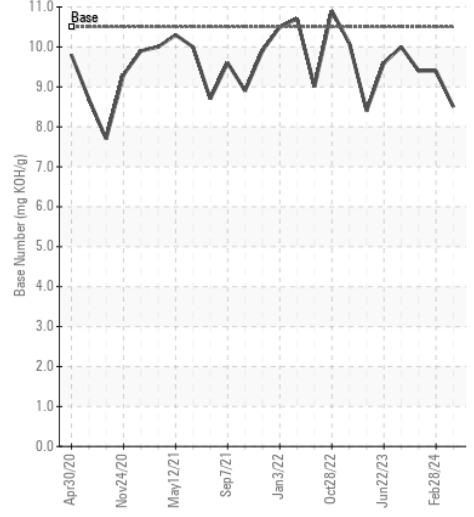
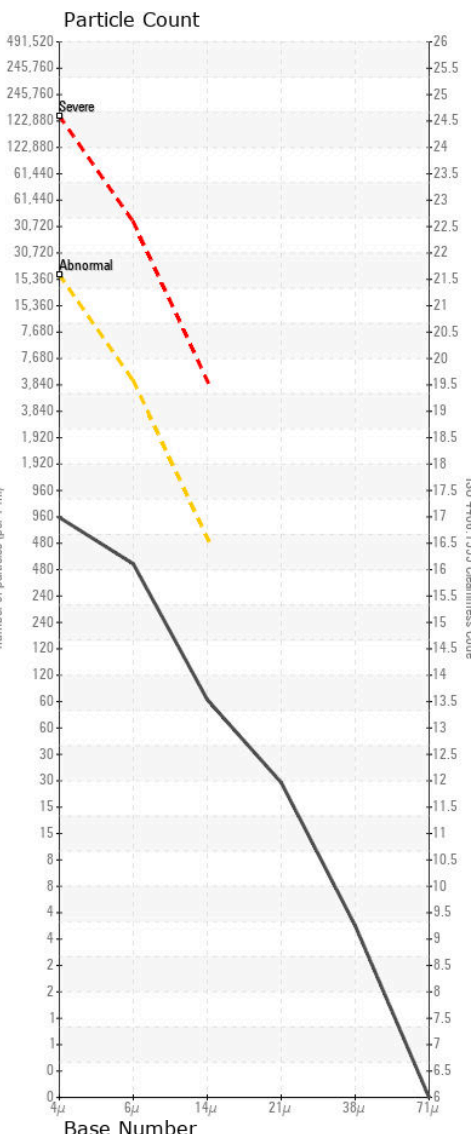
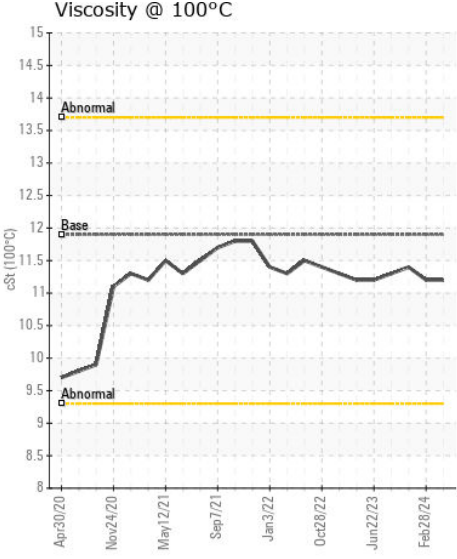
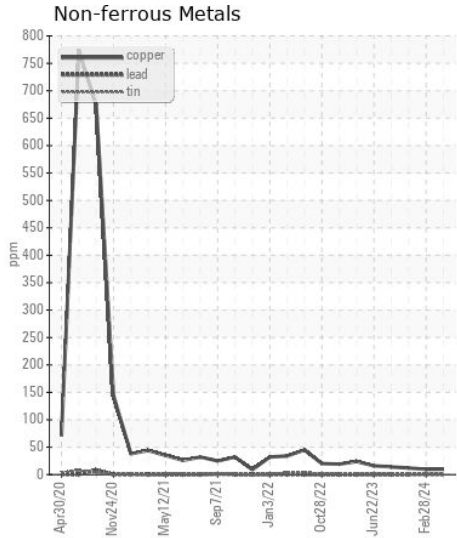
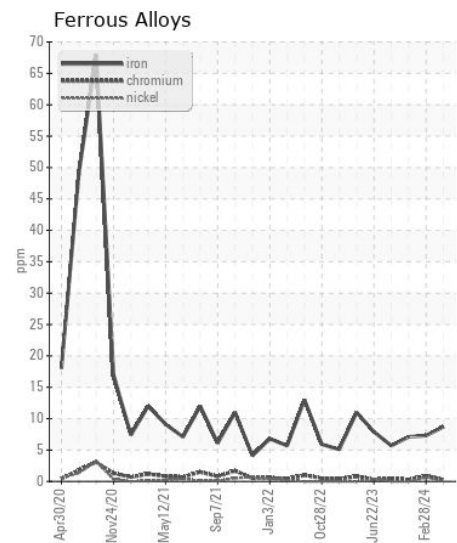
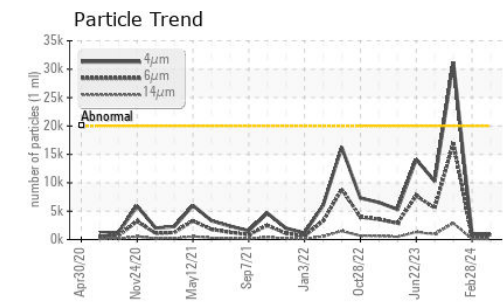
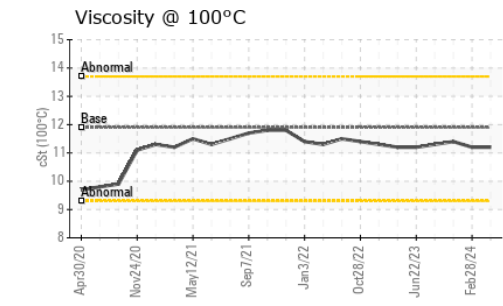
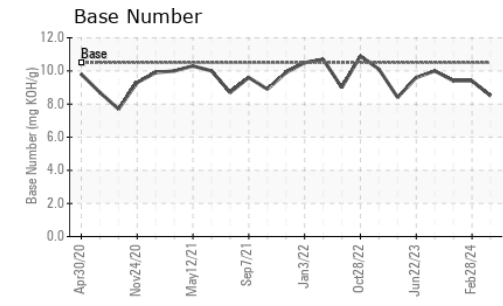
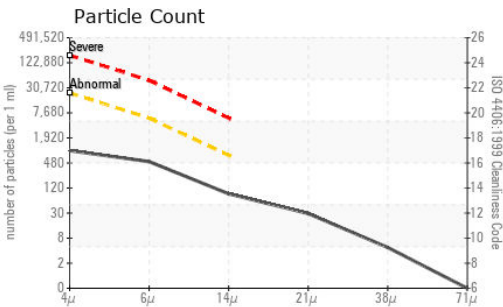
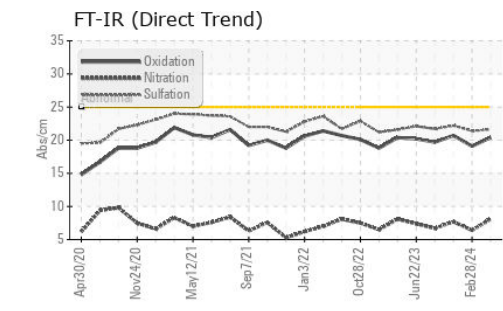
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	4	3
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>0.5</b>	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	6.4	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.6</b>	21.4	22.2
Particles >4µm		ASTM D7647	>20000	<b>835</b>	992	▲ 31241
Particles >6µm		ASTM D7647	>5000	<b>455</b>	540	▲ 17019
Particles >14µm		ASTM D7647	>640	<b>77</b>	92	▲ 2896
Particles >21µm		ASTM D7647	>160	<b>26</b>	31	▲ 976
Particles >38µm		ASTM D7647	>40	<b>4</b>	5	▲ 151
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	▲ 15
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>17/16/13</b>	17/16/14	▲ 22/21/19
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>2</b>	2	4
Boron	ppm	ASTM D5185m		<b>39</b>	54	37
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>47</b>	48	51
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>503</b>	494	520
Calcium	ppm	ASTM D5185m		<b>1674</b>	1548	1662
Phosphorus	ppm	ASTM D5185m		<b>743</b>	761	705
Zinc	ppm	ASTM D5185m		<b>913</b>	916	932
Sulfur	ppm	ASTM D5185m		<b>2584</b>	2684	2434
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.4</b>	19.1	20.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>8.5</b>	9.4	9.4
Visc @ 100°C	cSt	ASTM D445	11.9	<b>11.2</b>	11.2	11.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0939422 **Received** : 24 May 2024  
**Lab Number** : 06191748 **Tested** : 30 May 2024  
**Unique Number** : 11048500 **Diagnosed** : 30 May 2024 - Sean Felton  
**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