



# OIL ANALYSIS REPORT

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



Area  
**Mobile Fleet**  
Machine Id  
**5214 5214**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER 10W30 (7 GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0861919</b>	WC0867185	WC0834955
Sample Date		Client Info		<b>05 Jan 2024</b>	20 Oct 2023	24 Jul 2023
Machine Age	hrs	Client Info		<b>11449</b>	10920	10359
Oil Age	hrs	Client Info		<b>529</b>	570	623
Filter Age	hrs	Client Info		<b>529</b>	570	623
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ABNORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>15</b>	26	27
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	7	8
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	7	7
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
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

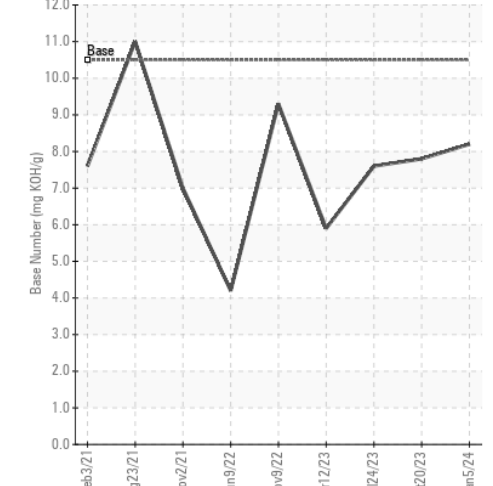
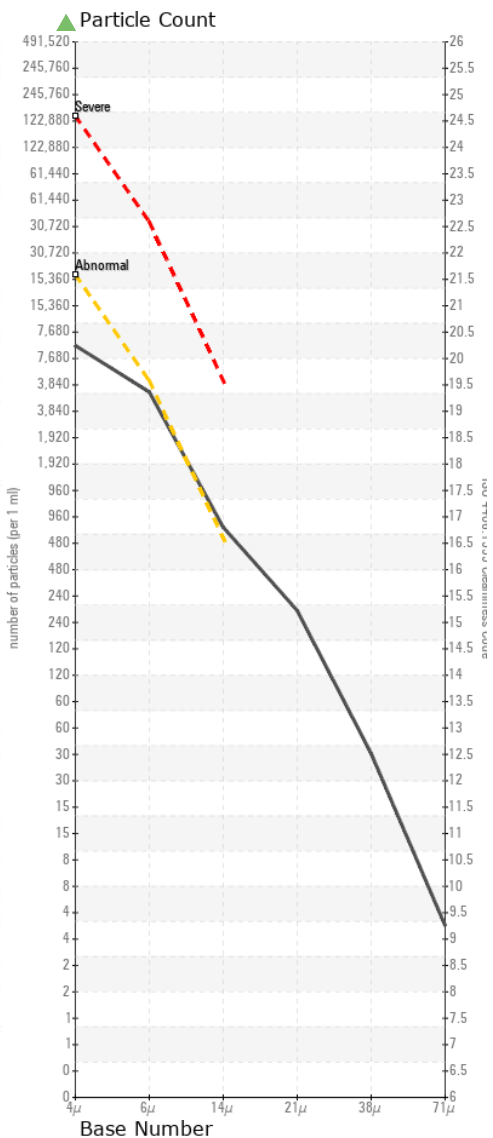
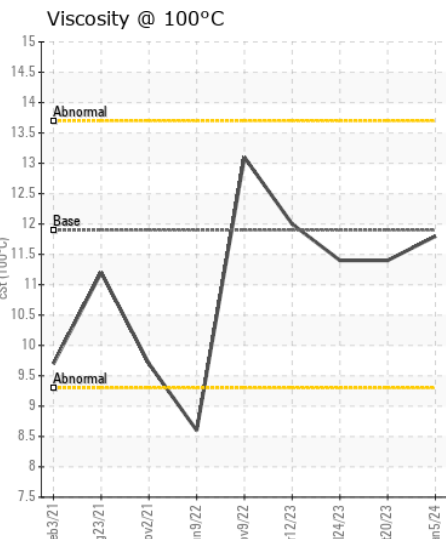
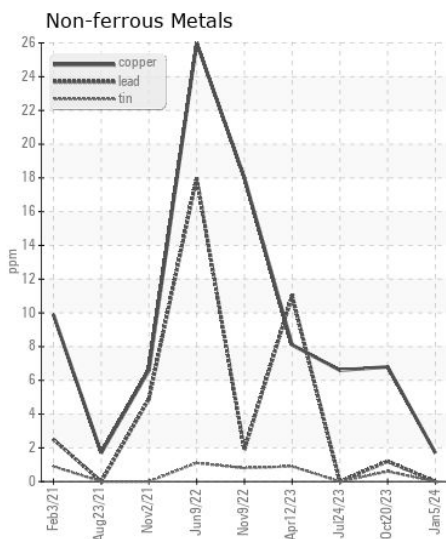
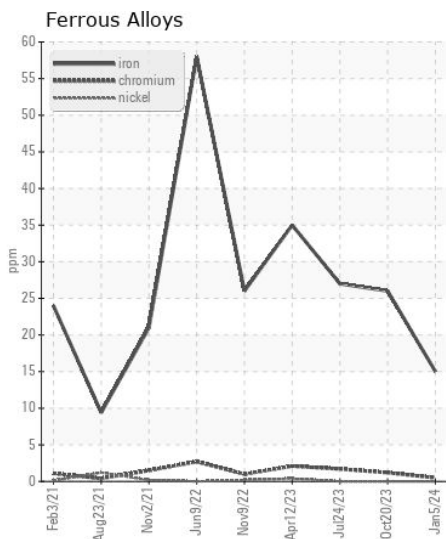
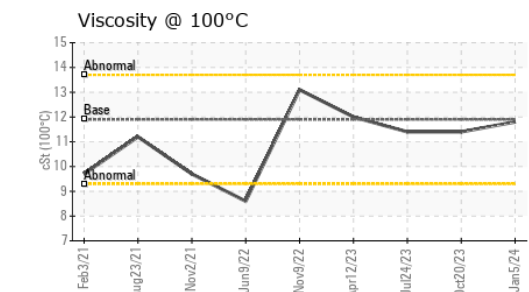
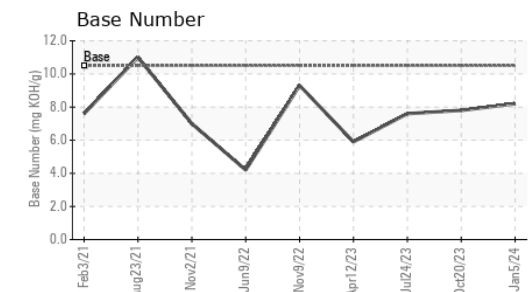
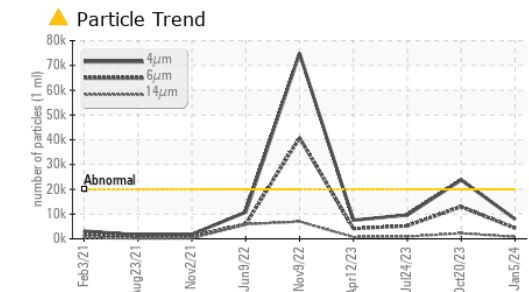
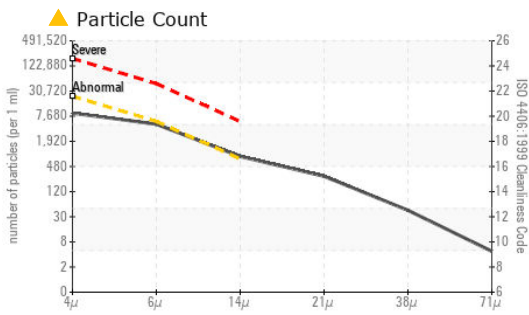
There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>9</b>	16	12
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	0
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>0.7</b>	0.9	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.4</b>	12.2	13.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.0</b>	24.0	24.8
Particles >4µm		ASTM D7647	>20000	<b>7917</b>	▲ 23759	9604
Particles >6µm		ASTM D7647	>5000	<b>4313</b>	▲ 12943	▲ 5232
Particles >14µm		ASTM D7647	>640	▲ <b>734</b>	▲ 2203	▲ 890
Particles >21µm		ASTM D7647	>160	▲ <b>247</b>	▲ 742	▲ 300
Particles >38µm		ASTM D7647	>40	<b>38</b>	▲ 115	▲ 46
Particles >71µm		ASTM D7647	>10	<b>4</b>	▲ 12	5
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ <b>20/19/17</b>	▲ 22/21/18	▲ 20/20/17
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>6</b>	10	10
Boron	ppm	ASTM D5185m		<b>36</b>	24	25
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>49</b>	46	48
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>504</b>	518	523
Calcium	ppm	ASTM D5185m		<b>1974</b>	2144	2240
Phosphorus	ppm	ASTM D5185m		<b>880</b>	921	942
Zinc	ppm	ASTM D5185m		<b>1030</b>	1144	1175
Sulfur	ppm	ASTM D5185m		<b>3355</b>	3290	4122
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>23.8</b>	24.4	25.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>8.2</b>	7.8	7.6
Visc @ 100°C	cSt	ASTM D445	11.9	<b>11.8</b>	11.4	11.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0861919 **Received** : 09 Jan 2024  
**Lab Number** : 06055817 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10821766 **Diagnostician** : 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