



# OIL ANALYSIS REPORT

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

Area

## Mobile Fleet

Machine Id

### 5207 5207

Component

## Diesel Engine

Fluid

### MOBIL DELVAC 1300 SUPER15W40 (7 GAL)

### RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0939248</b>	WC0867066	WC0809023
Sample Date		Client Info		<b>20 May 2024</b>	26 Oct 2023	05 Jun 2023
Machine Age	hrs	Client Info		<b>15141</b>	14680	14186
Oil Age	hrs	Client Info		<b>461</b>	494	696
Filter Age	hrs	Client Info		<b>461</b>	494	696
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### WEAR

The aluminum level is abnormal.

Iron	ppm	ASTM D5185m	>100	<b>49</b>	35	36
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>▲ 28</b>	▲ 24	▲ 37
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>4</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

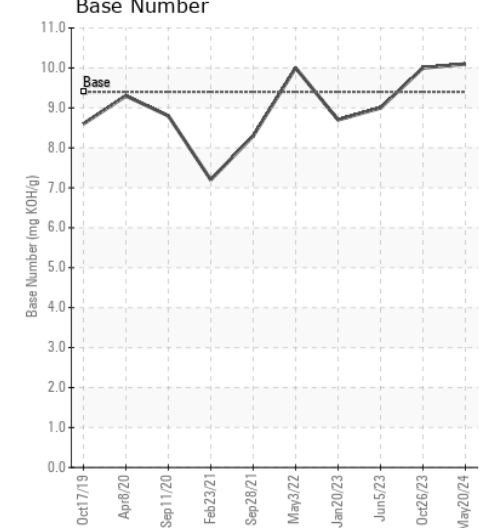
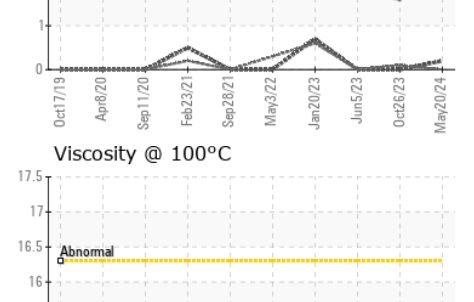
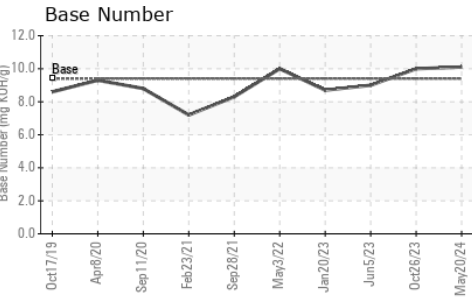
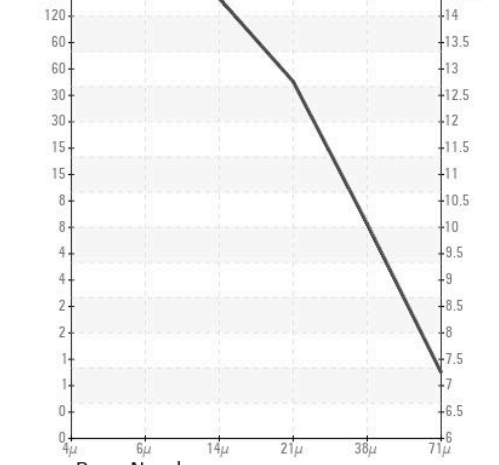
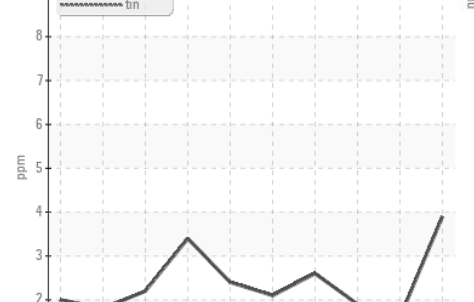
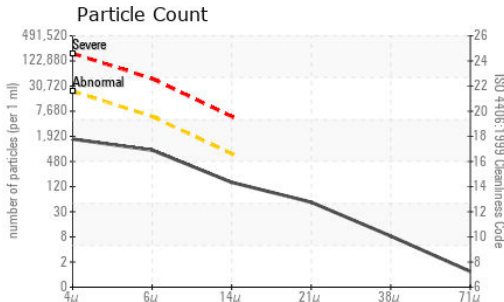
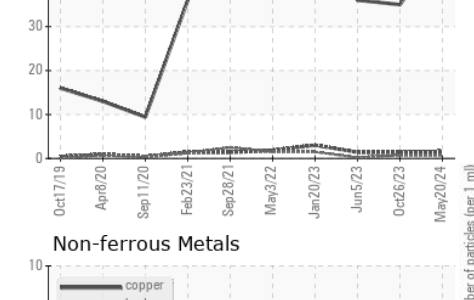
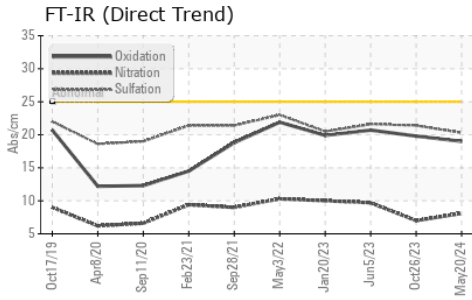
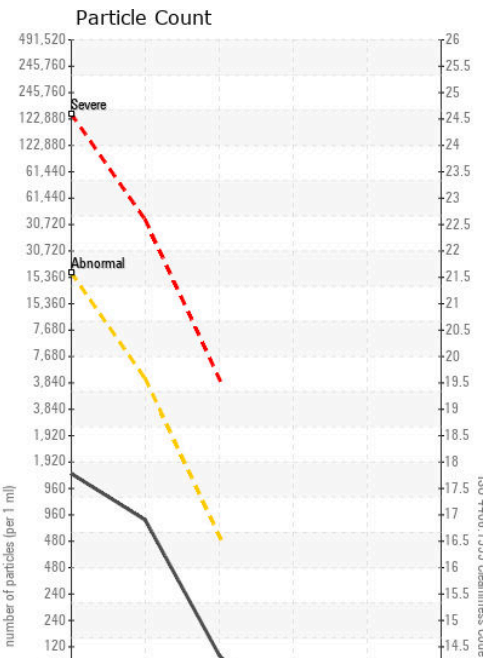
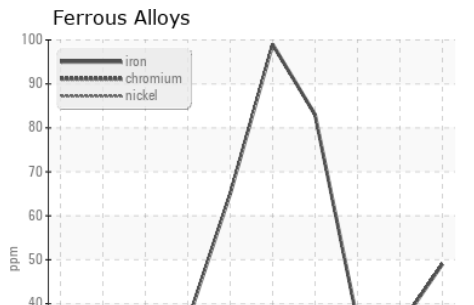
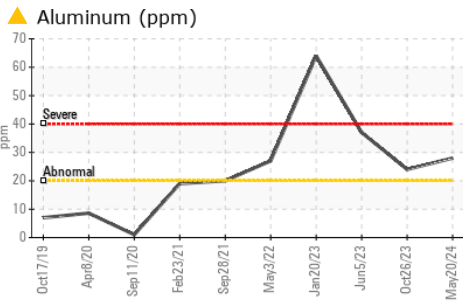
Sodium and/or potassium levels are high. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	11	8
Potassium	ppm	ASTM D5185m	>20	<b>▲ 24</b>	3	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	7.0	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	21.4	21.6
Particles >4µm		ASTM D7647	>20000	<b>1444</b>	▲ 25186	● 22184
Particles >6µm		ASTM D7647	>5000	<b>787</b>	▲ 13720	▲ 12085
Particles >14µm		ASTM D7647	>640	<b>134</b>	▲ 2335	▲ 2057
Particles >21µm		ASTM D7647	>160	<b>45</b>	▲ 787	▲ 693
Particles >38µm		ASTM D7647	>40	<b>7</b>	▲ 121	▲ 107
Particles >71µm		ASTM D7647	>10	<b>1</b>	▲ 12	▲ 11
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>18/17/14</b>	▲ 22/21/18	▲ 22/21/18
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.

Sodium	ppm	ASTM D5185m		<b>▲ 212</b>	9	12
Boron	ppm	ASTM D5185m	0	<b>24</b>	35	29
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	0	<b>59</b>	48	43
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>520</b>	525	514
Calcium	ppm	ASTM D5185m		<b>1877</b>	1669	1703
Phosphorus	ppm	ASTM D5185m		<b>840</b>	804	728
Zinc	ppm	ASTM D5185m		<b>1011</b>	996	911
Sulfur	ppm	ASTM D5185m		<b>3205</b>	3139	2933
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.0</b>	19.8	20.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>10.1</b>	10.0	9.0
Visc @ 100°C	cSt	ASTM D445	14	<b>12.5</b>	12.8	12.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0939248 **Received** : 22 May 2024  
**Lab Number** : 06187519 **Tested** : 28 May 2024  
**Unique Number** : 11044271 **Diagnosed** : 28 May 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: Glycol, PrtCount, TBN )

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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)