



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area

## Mobile Fleet

Machine Id

### 6462 6462

Component

## Diesel Engine

Fluid

### DIESEL ENGINE OIL SAE 10W30 (8 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>WC0902844</b>	WC0885845	WC0867053
Sample Date		Client Info		<b>21 Feb 2024</b>	18 Dec 2023	02 Nov 2023
Machine Age	hrs	Client Info		<b>2976</b>	2637	2388
Oil Age	hrs	Client Info		<b>595</b>	256	416
Filter Age	hrs	Client Info		<b>595</b>	256	416
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>7</b>	8	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	6	6
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>48</b>	196	161
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

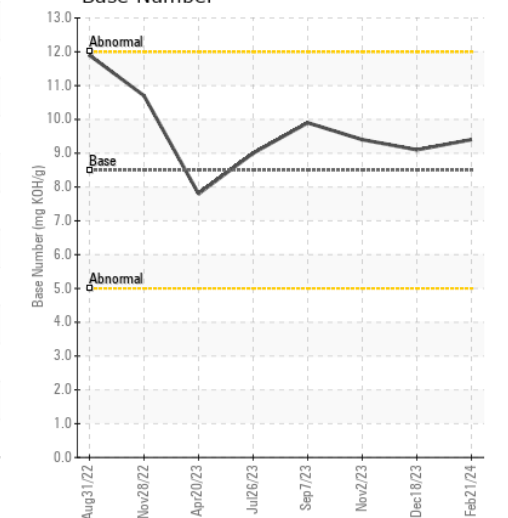
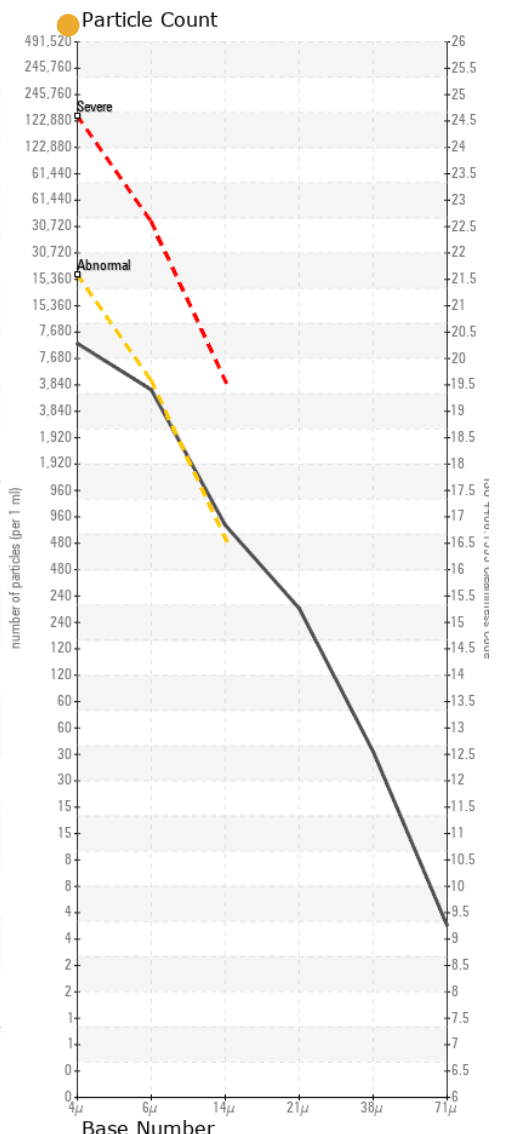
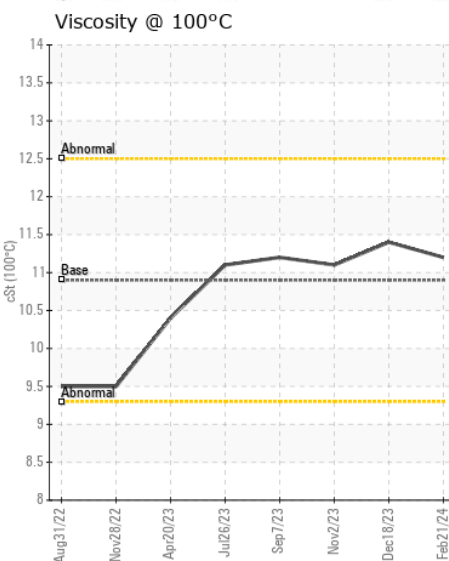
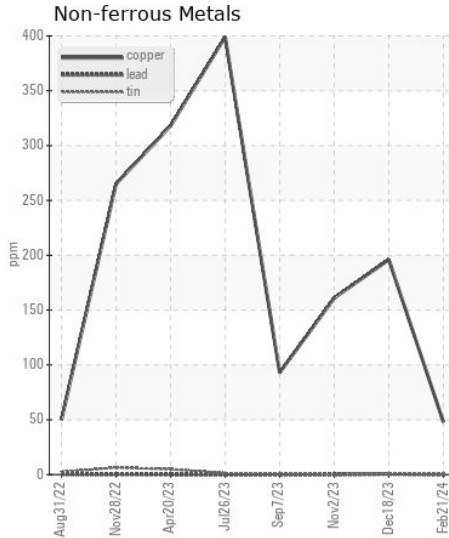
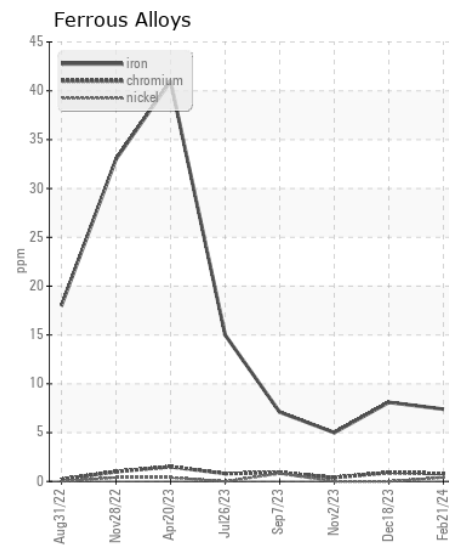
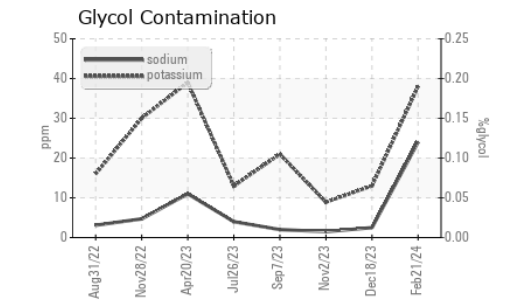
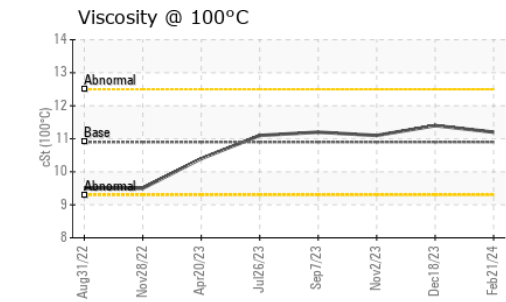
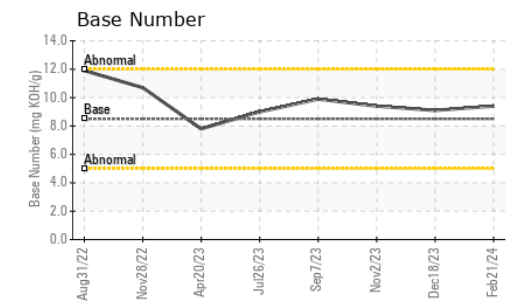
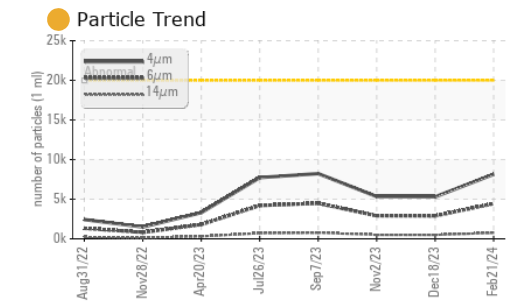
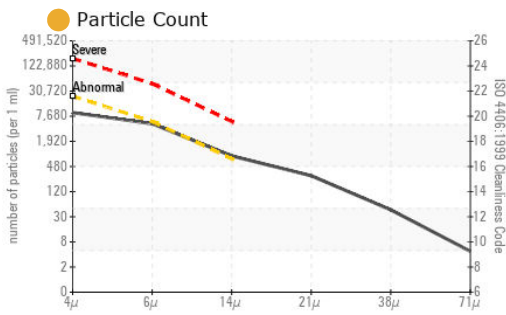
There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>38</b>	13	9
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>0.1</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.0</b>	7.2	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	21.9	22.2
Particles >4µm		ASTM D7647	>20000	<b>8143</b>	5298	5333
Particles >6µm		ASTM D7647	>5000	<b>4436</b>	2886	2905
Particles >14µm		ASTM D7647	>640	<b>755</b>	491	494
Particles >21µm		ASTM D7647	>160	<b>254</b>	165	167
Particles >38µm		ASTM D7647	>40	<b>39</b>	26	26
Particles >71µm		ASTM D7647	>10	<b>4</b>	3	3
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>20/19/17</b>	20/19/16	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>24</b>	2	2
Boron	ppm	ASTM D5185m	250	<b>58</b>	51	47
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>56</b>	55	53
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	450	<b>549</b>	520	491
Calcium	ppm	ASTM D5185m	3000	<b>1788</b>	1687	1599
Phosphorus	ppm	ASTM D5185m	1150	<b>740</b>	779	608
Zinc	ppm	ASTM D5185m	1350	<b>1004</b>	927	868
Sulfur	ppm	ASTM D5185m	4250	<b>2663</b>	2415	2239
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.5</b>	20.5	20.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.4</b>	9.1	9.4
Visc @ 100°C	cSt	ASTM D445	10.9	<b>11.2</b>	11.4	11.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0902844 **Received** : 28 Feb 2024  
**Lab Number** : 06102846 **Tested** : 29 Feb 2024  
**Unique Number** : 10901076 **Diagnosed** : 29 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: Glycol, 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)

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