



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area  
**Mobile Fleet**

Machine Id  
**8110 8110**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 10W30 (10 GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0947842</b>	WC0939366	WC0902757
Sample Date		Client Info		<b>21 Jun 2024</b>	07 May 2024	06 Mar 2024
Machine Age	hrs	Client Info		<b>14036</b>	13774	13452
Oil Age	hrs	Client Info		<b>270</b>	600	278
Filter Age	hrs	Client Info		<b>270</b>	600	278
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>ATTENTION</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	13	8
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	10	7
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>4</b>	4	4
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

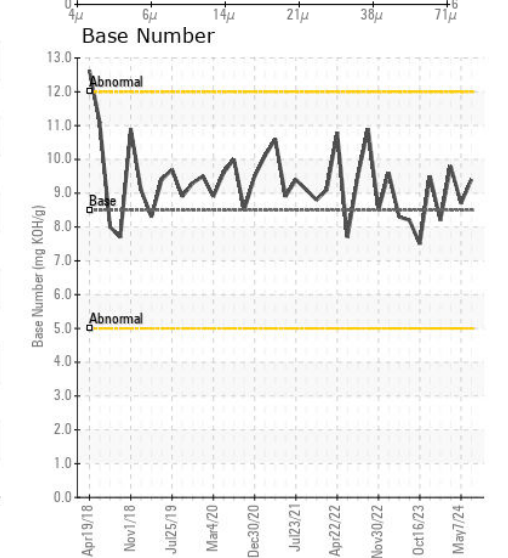
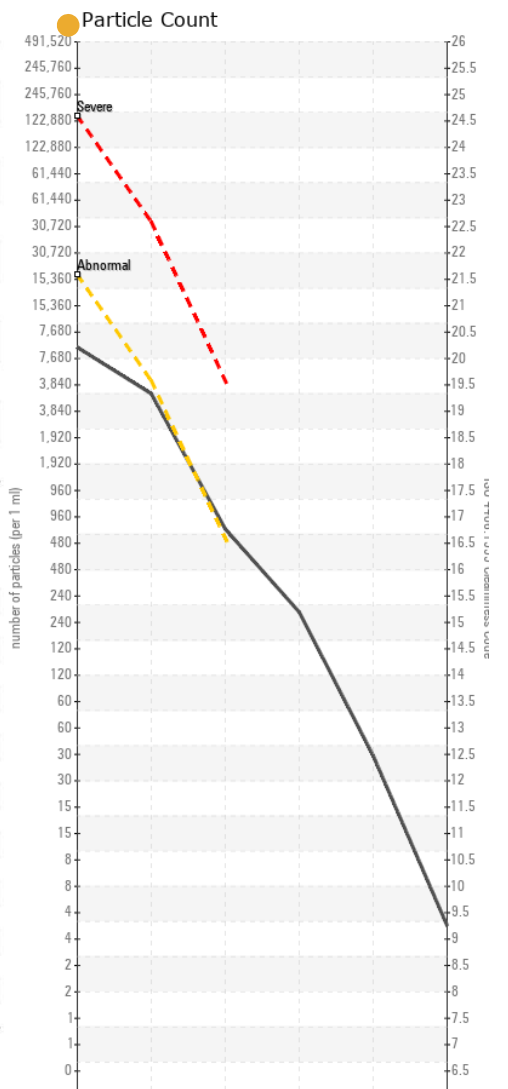
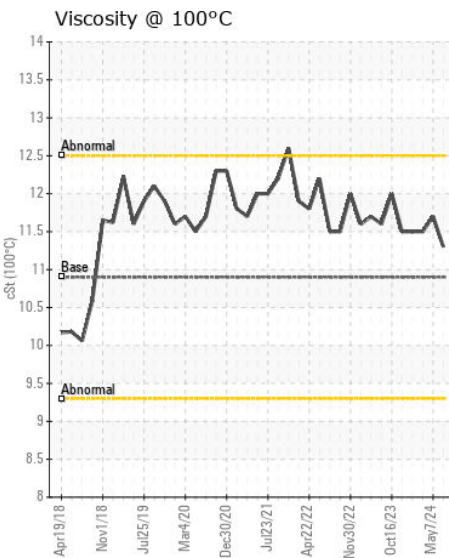
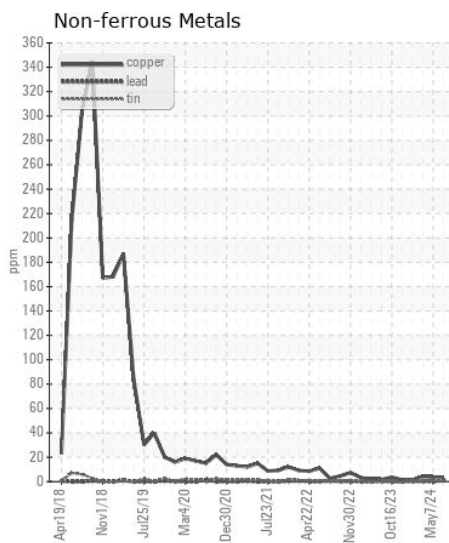
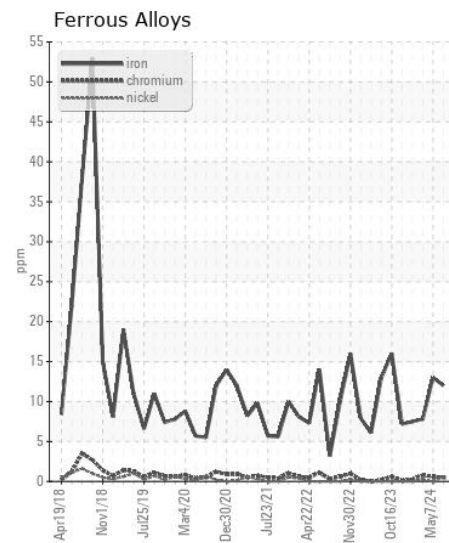
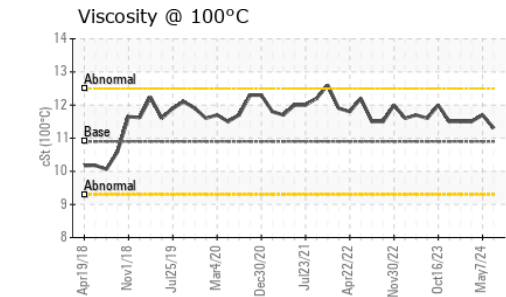
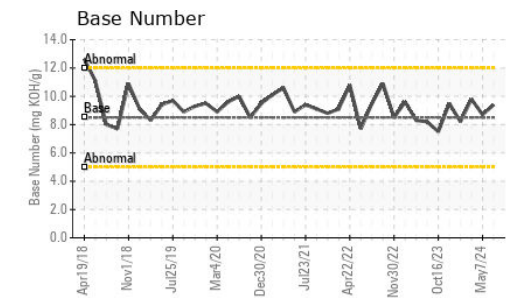
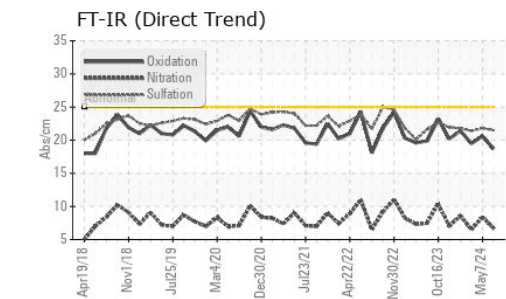
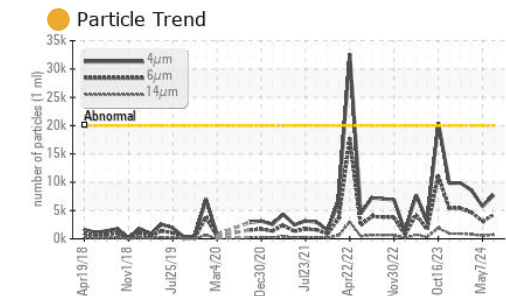
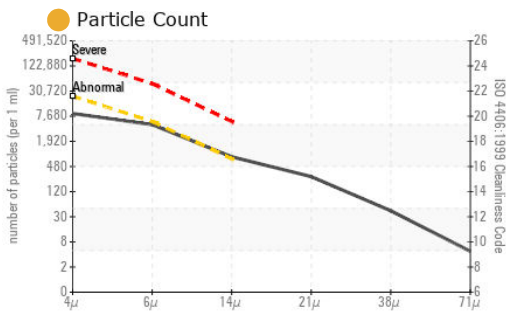
There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>11</b>	11	11
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	1	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>0.3</b>	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.7</b>	8.4	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	21.8	21.4
Particles >4µm		ASTM D7647	>20000	<b>7743</b>	5716	8569
Particles >6µm		ASTM D7647	>5000	<b>4218</b>	3114	4668
Particles >14µm		ASTM D7647	>640	<b>718</b>	530	794
Particles >21µm		ASTM D7647	>160	<b>242</b>	178	268
Particles >38µm		ASTM D7647	>40	<b>37</b>	28	41
Particles >71µm		ASTM D7647	>10	<b>4</b>	3	4
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>20/19/17</b>	20/19/16	20/19/17
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>2</b>	3	4
Boron	ppm	ASTM D5185m	250	<b>39</b>	29	65
Barium	ppm	ASTM D5185m	10	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>47</b>	49	65
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>469</b>	531	697
Calcium	ppm	ASTM D5185m	3000	<b>1576</b>	1785	2238
Phosphorus	ppm	ASTM D5185m	1150	<b>643</b>	795	1045
Zinc	ppm	ASTM D5185m	1350	<b>861</b>	950	1220
Sulfur	ppm	ASTM D5185m	4250	<b>2206</b>	2890	3616
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.7</b>	20.6	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.4</b>	8.7	9.8
Visc @ 100°C	cSt	ASTM D445	10.9	<b>11.3</b>	11.7	11.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0947842 **Received** : 25 Jun 2024  
**Lab Number** : 06219562 **Tested** : 26 Jun 2024  
**Unique Number** : 11097759 **Diagnosed** : 26 Jun 2024 - 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)

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