



# OIL ANALYSIS REPORT

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

Area  
**Mobile Fleet**

Machine Id  
**8025 8025**

Component  
**Diesel Engine**

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

## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0885957</b>	WC0861738	WC0835056
Sample Date		Client Info		<b>15 Jan 2024</b>	20 Nov 2023	11 Aug 2023
Machine Age	hrs	Client Info		<b>2755</b>	2469	1861
Oil Age	hrs	Client Info		<b>319</b>	617	382
Filter Age	hrs	Client Info		<b>319</b>	617	382
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>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>13</b>	16	8
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>30	<b>4</b>	8	3
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>150	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

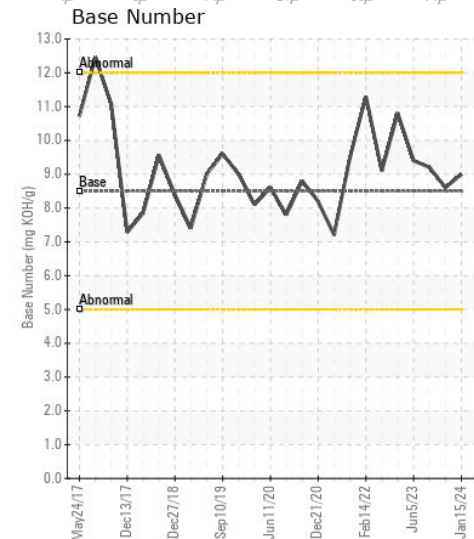
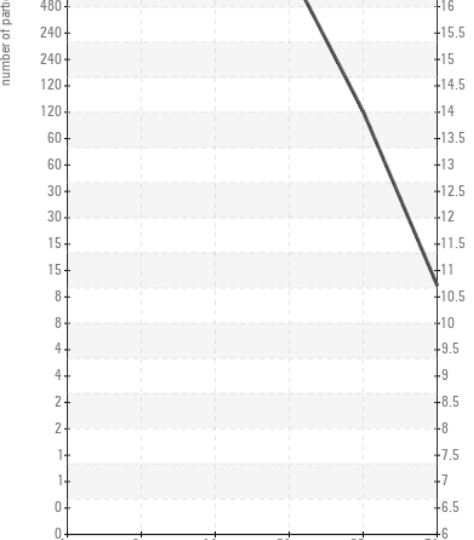
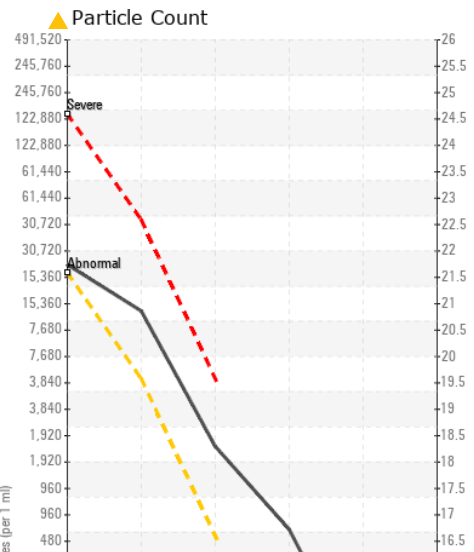
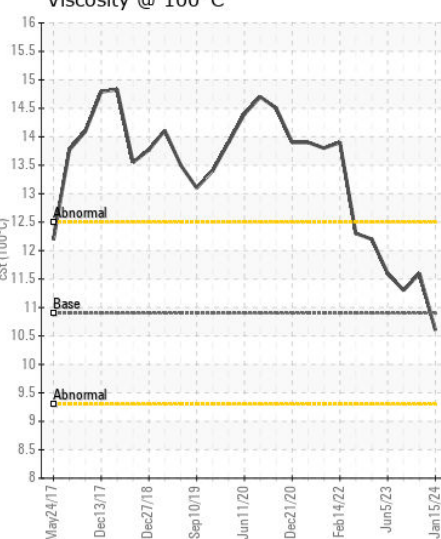
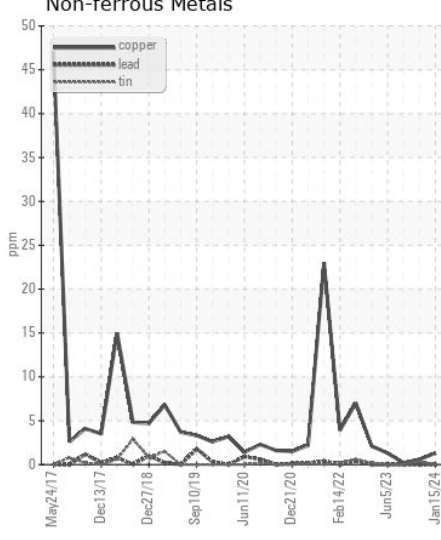
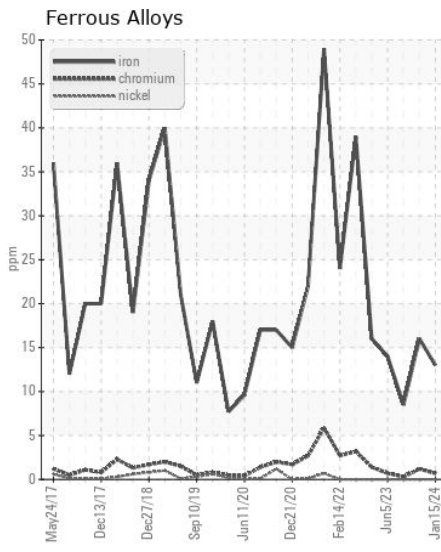
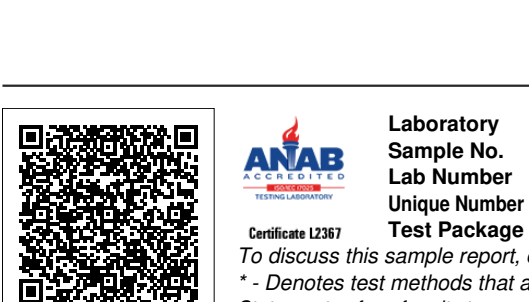
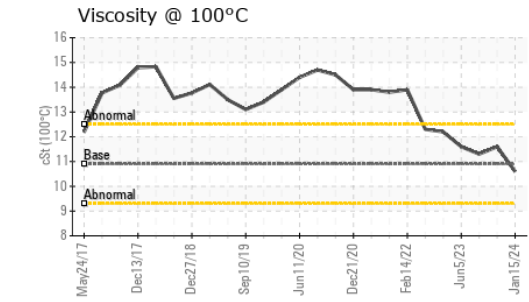
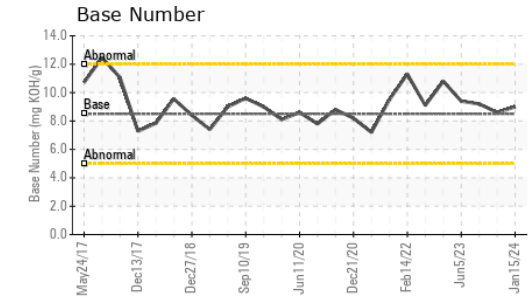
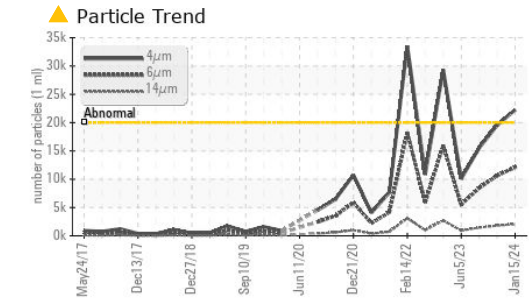
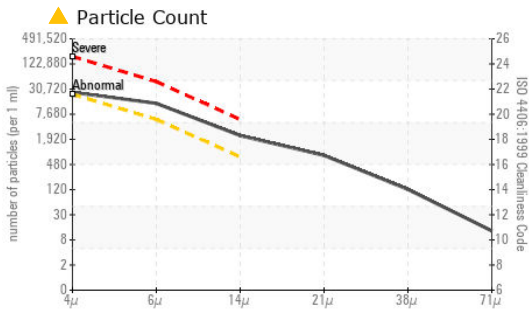
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>8</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	6	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>	1.1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	10.7	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.4</b>	23.2	22.1
Particles >4µm		ASTM D7647	>20000	<b>▲ 22254</b>	19522	15529
Particles >6µm		ASTM D7647	>5000	<b>▲ 12123</b>	▲ 10635	▲ 8460
Particles >14µm		ASTM D7647	>640	<b>▲ 2063</b>	▲ 1810	▲ 1440
Particles >21µm		ASTM D7647	>160	<b>▲ 695</b>	▲ 610	▲ 485
Particles >38µm		ASTM D7647	>40	<b>▲ 107</b>	▲ 94	▲ 75
Particles >71µm		ASTM D7647	>10	<b>▲ 11</b>	10	8
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>▲ 22/21/18</b>	▲ 21/21/18	▲ 21/20/18
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. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	3	1
Boron	ppm	ASTM D5185m	250	<b>40</b>	14	35
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>49</b>	44	46
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>523</b>	558	549
Calcium	ppm	ASTM D5185m	3000	<b>1608</b>	1524	1694
Phosphorus	ppm	ASTM D5185m	1150	<b>765</b>	817	766
Zinc	ppm	ASTM D5185m	1350	<b>941</b>	994	981
Sulfur	ppm	ASTM D5185m	4250	<b>2573</b>	2829	3302
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.2</b>	22.3	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.0</b>	8.6	9.2
Visc @ 100°C	cSt	ASTM D445	10.9	<b>10.6</b>	11.6	11.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0885957 **Received** : 19 Jan 2024  
**Lab Number** : 06065469 **Diagnosed** : 23 Jan 2024  
**Unique Number** : 10836851 **Diagnostician** : Don Baldridge  
**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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