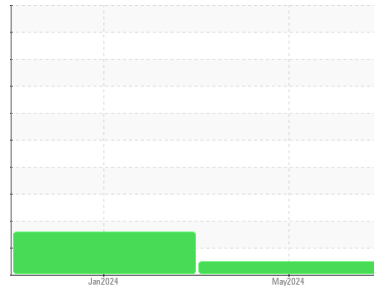




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**YALE 5592**

Component

**Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0912322</b>	WC0858404	---
Sample Date	Client Info			<b>22 May 2024</b>	29 Jan 2024	---
Machine Age	hrs	Client Info		<b>13695</b>	14609	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	<b>&lt;1.0</b>	0.3	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>15</b>	29	---
Chromium	ppm	ASTM D5185m	>20	<b>10</b>	▲ 23	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>14</b>	▲ 25	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>3</b>	3	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>14</b>	10	---
Barium	ppm	ASTM D5185m	10	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m	100	<b>57</b>	58	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	450	<b>845</b>	886	---
Calcium	ppm	ASTM D5185m	3000	<b>1179</b>	1128	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1118</b>	1024	---
Zinc	ppm	ASTM D5185m	1350	<b>1163</b>	1204	---
Sulfur	ppm	ASTM D5185m	4250	<b>3973</b>	3511	---

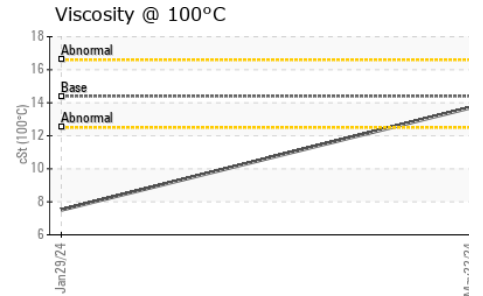
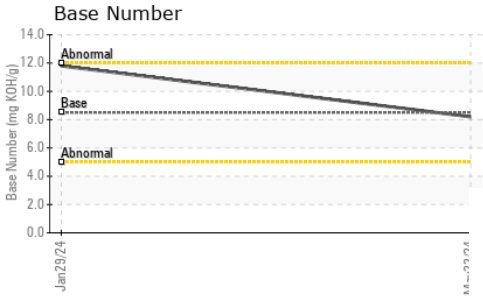
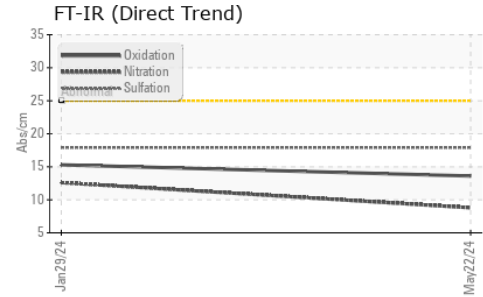
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>11</b>	13	---
Sodium	ppm	ASTM D5185m	>216	<b>5</b>	4	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.8</b>	12.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.9</b>	17.9	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.6</b>	15.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.2</b>	11.8	---



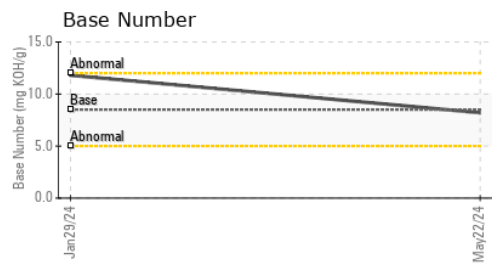
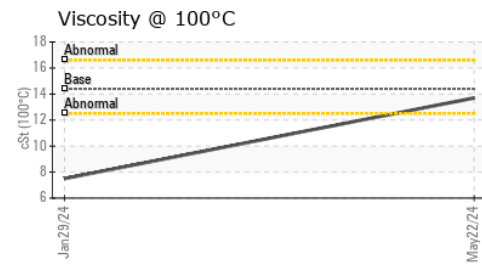
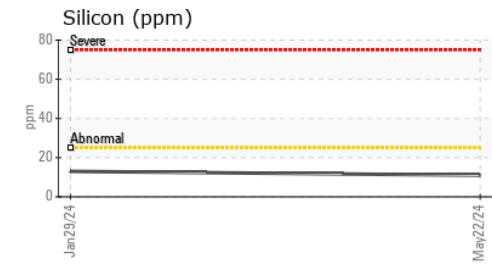
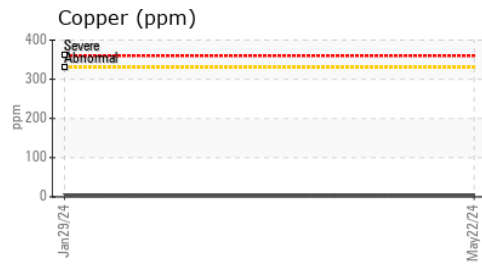
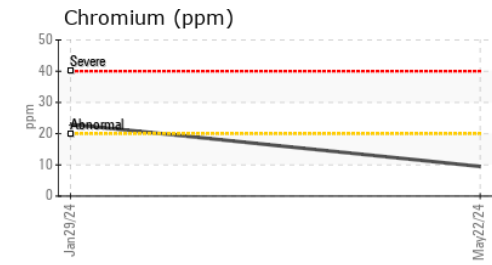
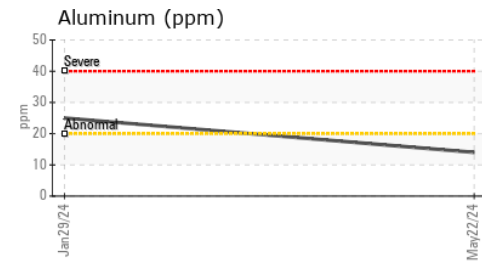
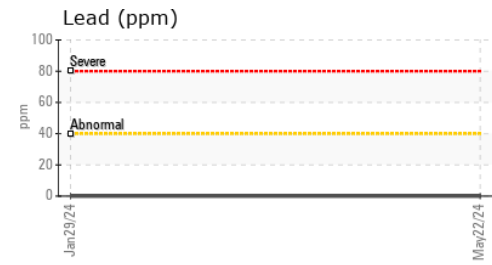
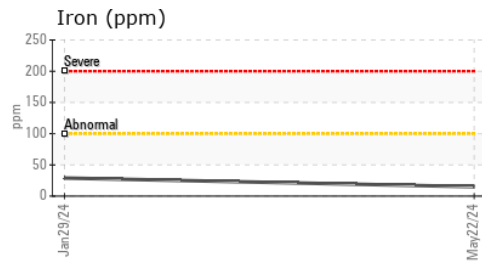
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	7.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0912322      **Received** : 05 Jun 2024  
**Lab Number** : 06199823      **Tested** : 05 Jun 2024  
**Unique Number** : 11061946      **Diagnosed** : 05 Jun 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**INTERSTATE WASTE-NEWARK**  
 110 EVERGREEN AVE, BAY 3  
 NEWARK, NJ 07114  
 Contact: Robert Witynski  
 RWitynski@interstatewaste.com

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)