

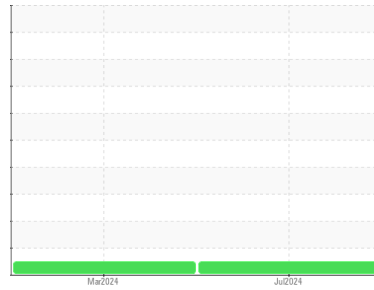


# OIL ANALYSIS REPORT



Machine Id  
**20.027L []**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

### Sample Rating Trend



**NORMAL**



### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

Metal levels are typical for a new component breaking in.

#### 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>WC0918333</b>	WC0901223	---
Sample Date	Client Info			<b>08 Jul 2024</b>	04 Mar 2024	---
Machine Age	hrs	Client Info		<b>394</b>	607	---
Oil Age	hrs	Client Info		<b>0</b>	107	---
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	1.5	---
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>17</b>	9	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	1	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>4</b>	2	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	---
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>46</b>	56	---
Barium	ppm	ASTM D5185m	10	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m	100	<b>38</b>	38	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	450	<b>483</b>	463	---
Calcium	ppm	ASTM D5185m	3000	<b>1745</b>	1631	---
Phosphorus	ppm	ASTM D5185m	1150	<b>924</b>	897	---
Zinc	ppm	ASTM D5185m	1350	<b>1064</b>	991	---
Sulfur	ppm	ASTM D5185m	4250	<b>3177</b>	3081	---

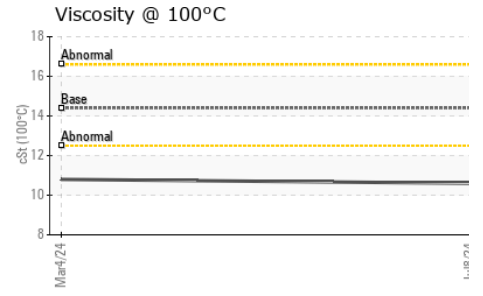
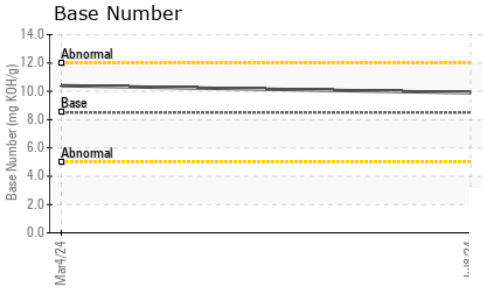
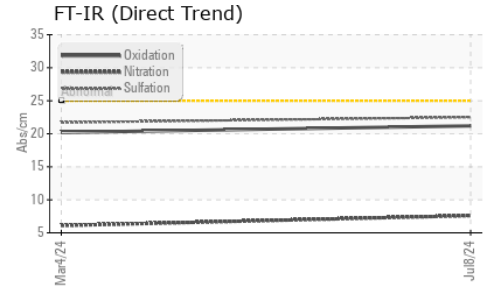
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>16</b>	7	---
Sodium	ppm	ASTM D5185m	>158	<b>6</b>	4	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	6.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.5</b>	21.7	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.2</b>	20.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.9</b>	10.4	---



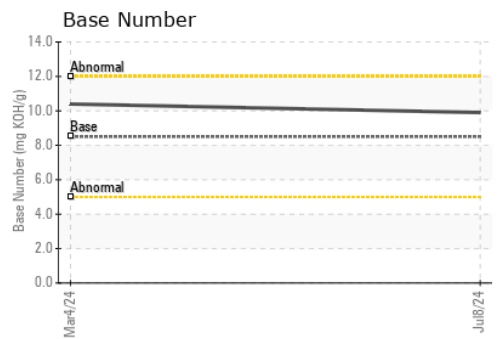
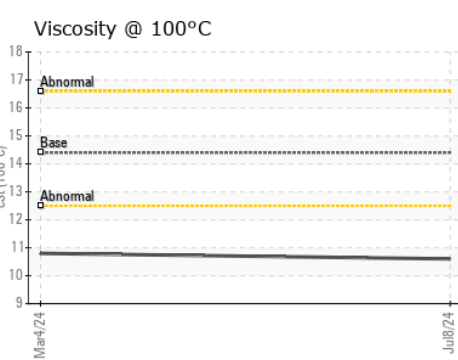
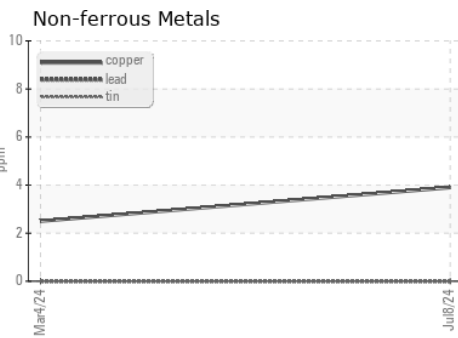
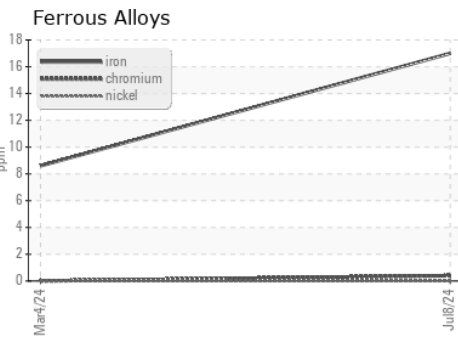
# OIL ANALYSIS REPORT



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	10.6	10.8

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0918333      **Received** : 15 Jul 2024  
**Lab Number** : **06235728**      **Tested** : 16 Jul 2024  
**Unique Number** : 11124562      **Diagnosed** : 16 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: BILL ORCUTT  
 william.orcutt@wildcat.net

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)