

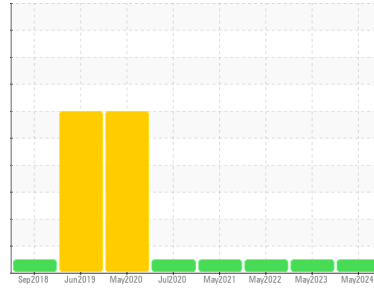


# OIL ANALYSIS REPORT



Area  
**(EQ4541) N**  
 Machine Id  
**Webster WTP, CAT 1500kW (S/N EBG01074)**  
 Component  
**Diesel Engine**  
 Fluid  
**KENDALL SHP 5W40 Diesel Engine Oil (83 GAL)**

### Sample Rating Trend



**NORMAL**



### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### 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>WC0934061</b>	WC0810879	WC0696100
Sample Date	Client Info		<b>08 May 2024</b>	18 May 2023	11 May 2022
Machine Age	hrs	Client Info	<b>129</b>	105	102
Oil Age	hrs	Client Info	<b>129</b>	105	102
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
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

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>11</b>	6	9
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>5</b>	5	5
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185m >40	<b>2</b>	1	1
Copper	ppm	ASTM D5185m >330	<b>37</b>	26	25
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>107</b>	113	107
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>8</b>	6	6
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>190</b>	136	163
Calcium	ppm	ASTM D5185m	<b>2324</b>	2176	2154
Phosphorus	ppm	ASTM D5185m	<b>1114</b>	985	1068
Zinc	ppm	ASTM D5185m 1288	<b>1327</b>	1225	1197
Sulfur	ppm	ASTM D5185m	<b>5072</b>	4378	3659

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>3</b>	2	3
Sodium	ppm	ASTM D5185m	<b>12</b>	11	12
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	<1

### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.5</b>	6.1	5.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>16.4</b>	16.2	16.1

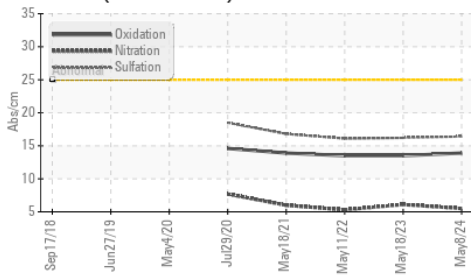
### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.9</b>	13.5	13.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>8.0</b>	8.4	7.9

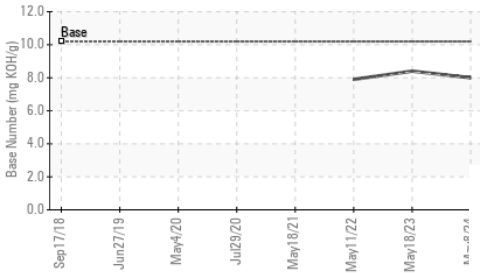


# OIL ANALYSIS REPORT

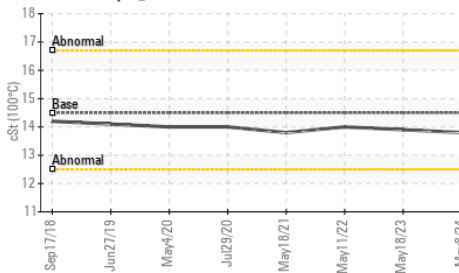
FT-IR (Direct Trend)



Base Number



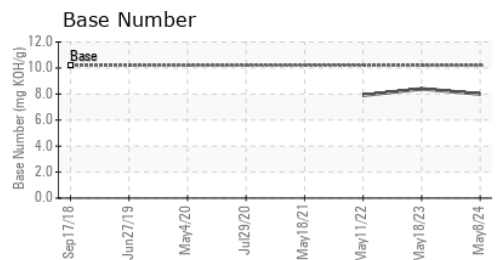
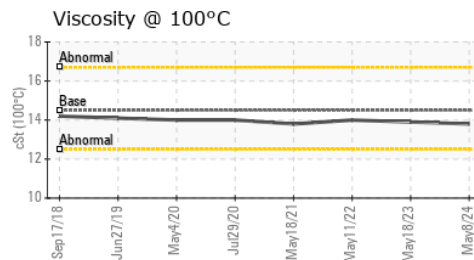
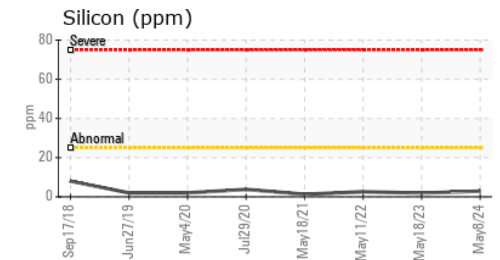
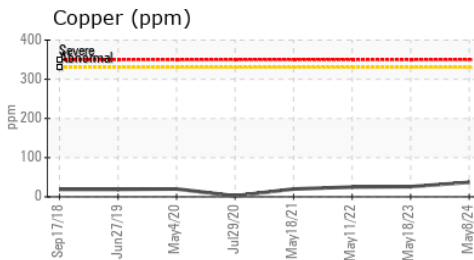
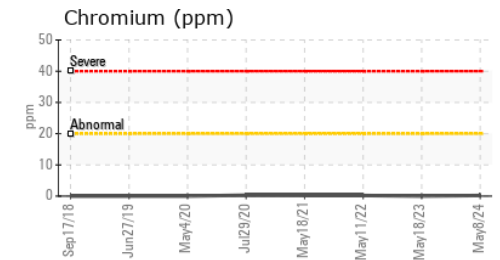
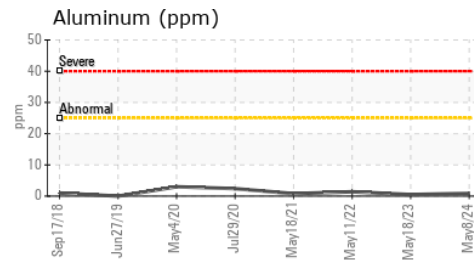
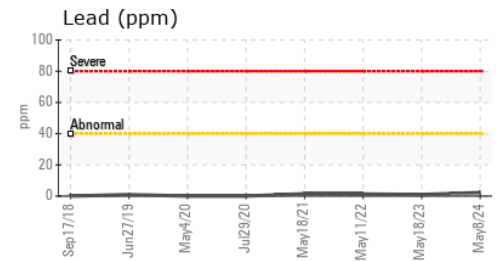
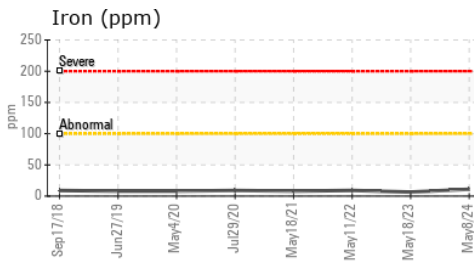
Viscosity @ 100°C



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.5	13.8	13.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0934061 **Received** : 13 May 2024  
**Lab Number** : 06176918 **Tested** : 14 May 2024  
**Unique Number** : 11022971 **Diagnosed** : 14 May 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MONROE COUNTY WATER AUTHORITY**  
 4799 DEWEY AVE  
 ROCHESTER, NY  
 US 14612  
 Contact: SCOTT TRAIL  
 scott.trail@mcwa.com  
 T: (585)775-5257  
 F:

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)