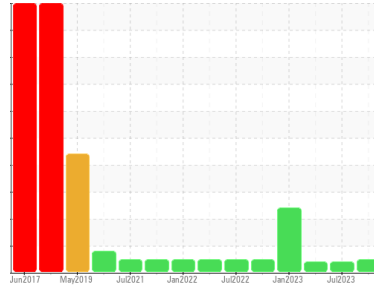




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**UTILITIES**  
Machine Id  
**OS1-GEN**

Component  
**Auxiliary Power Unit Natural Gas Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 5W30 (5 QTS)**

## 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>WC0840390</b>	WC0840394	WC0736982
Sample Date	Client Info			<b>13 Nov 2023</b>	24 Jul 2023	28 Apr 2023
Machine Age	hrs	Client Info		<b>217</b>	207	170
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ATTENTION	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>5</b>	8	4
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>1</b>	2	1
Lead	ppm	ASTM D5185m	>30	<b>9</b>	17	12
Copper	ppm	ASTM D5185m	>35	<b>3</b>	2	2
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>148</b>	109	116
Barium	ppm	ASTM D5185m	10	<b>7</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>130</b>	222	198
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>517</b>	604	556
Calcium	ppm	ASTM D5185m	3000	<b>1113</b>	1455	1272
Phosphorus	ppm	ASTM D5185m	1150	<b>728</b>	771	725
Zinc	ppm	ASTM D5185m	1350	<b>758</b>	954	899
Sulfur	ppm	ASTM D5185m	4250	<b>2554</b>	3160	3180

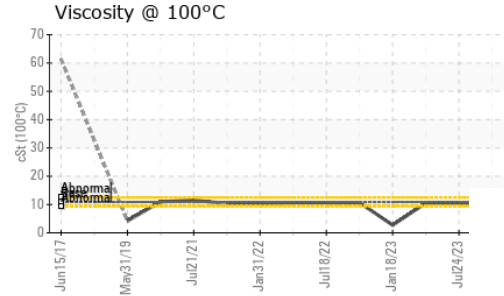
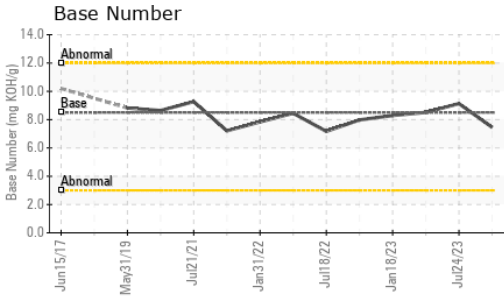
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	<b>11</b>	19	17
Sodium	ppm	ASTM D5185m		<b>0</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.0</b>	6.3	4.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>14.8</b>	16.2	13.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>8.3</b>	10.8	9.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.46</b>	9.13	8.51



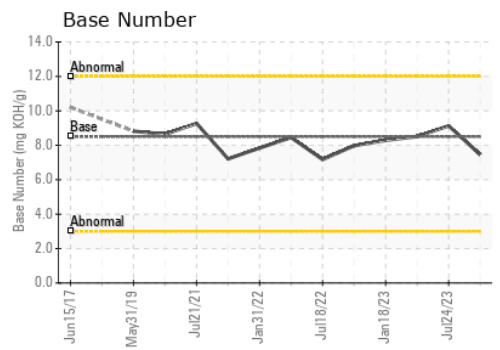
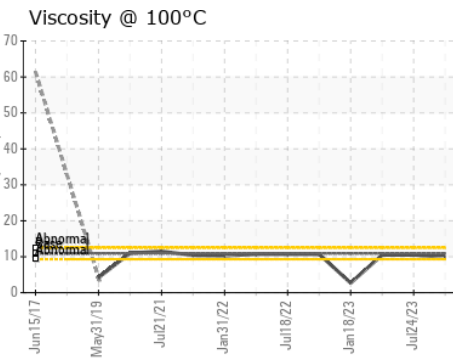
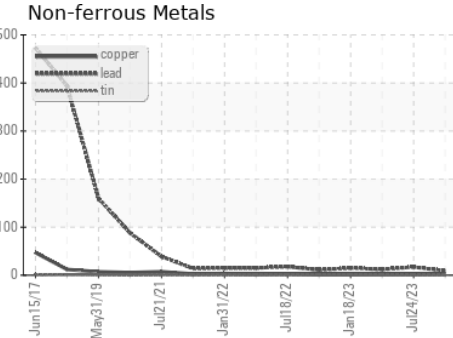
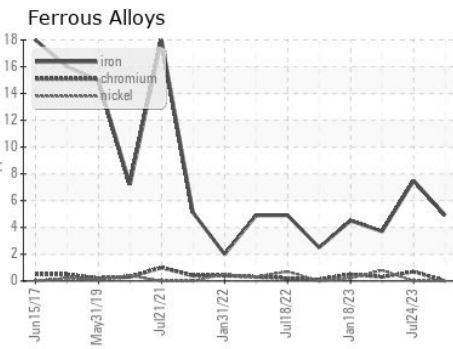
# OIL ANALYSIS REPORT



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	10.9	<b>9.9</b>	▲ 10.5	▲ 10.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0840390 **Received** : 15 Nov 2023  
**Lab Number** : **06009158** **Diagnosed** : 17 Nov 2023  
**Unique Number** : 10742920 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

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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)