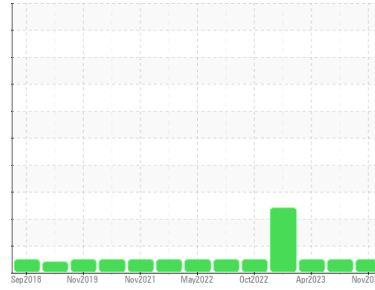




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**UTILITIES**  
 Machine Id  
**PS1-GEN**

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

## 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>WC0840388</b>	WC0840391	WC0736984
Sample Date	Client Info			<b>13 Nov 2023</b>	24 Jul 2023	28 Apr 2023
Machine Age	hrs	Client Info		<b>201</b>	194	158
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>	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	0	1
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	0	<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>	<1	<1
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>35	<b>4</b>	21	12
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>10</b>	70	67
Barium	ppm	ASTM D5185m	10	<b>6</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>63</b>	44	40
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>903</b>	667	650
Calcium	ppm	ASTM D5185m	3000	<b>1107</b>	1543	1413
Phosphorus	ppm	ASTM D5185m	1150	<b>1110</b>	1036	1015
Zinc	ppm	ASTM D5185m	1350	<b>1188</b>	1247	1220
Sulfur	ppm	ASTM D5185m	4250	<b>3391</b>	3971	4062

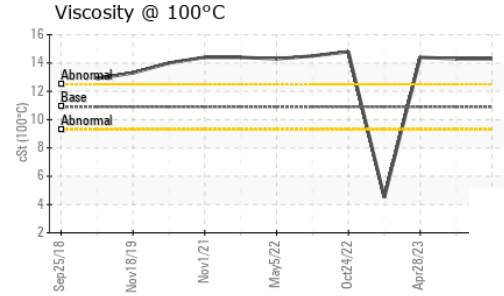
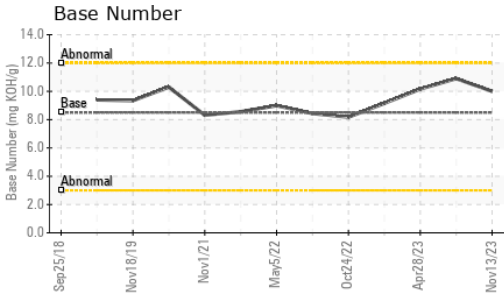
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	<b>4</b>	2	2
Sodium	ppm	ASTM D5185m		<b>0</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.5</b>	5.8	5.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.6</b>	18.7	16.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.8</b>	14.8	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>10.00</b>	10.90	10.16



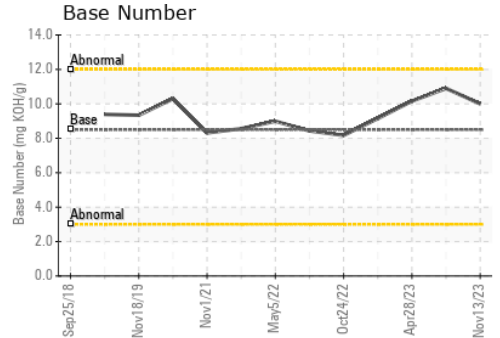
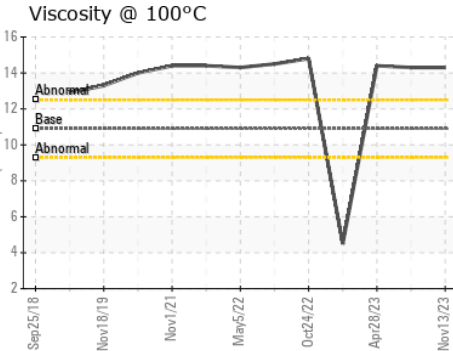
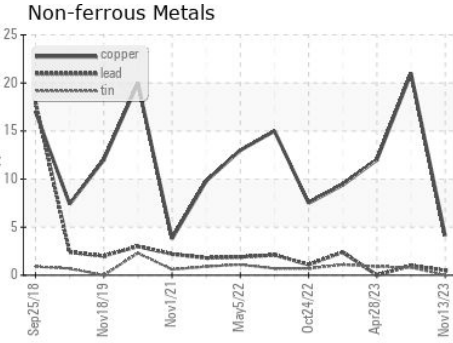
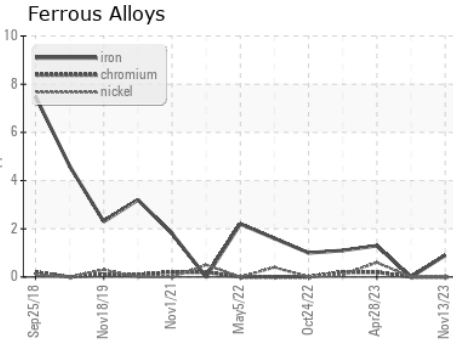
# OIL ANALYSIS REPORT



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>14.3</b>	14.3	14.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0840388 **Received** : 15 Nov 2023  
**Lab Number** : **06009157** **Diagnosed** : 17 Nov 2023  
**Unique Number** : 10742919 **Diagnostician** : Angela Borella  
**Test Package** : IND 2

**TORAY CARBON FIBERS AMERICA INC**  
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 MOORE, SC  
 US 29369  
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 T:  
 F:

Certificate L2367  
 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)