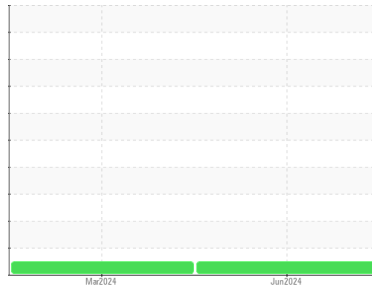


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR BAILEY MATTHEW**  
Component  
**Port Genset**  
Fluid  
**KENDALL SUPER-D XA 15W40 (--- GAL)**

Sample Rating Trend



**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>HRE0000277</b>	WC0843952	---
Sample Date	Client Info	<b>05 Jun 2024</b>	08 Mar 2024	---
Machine Age	hrs	Client Info	<b>2431</b>	1587
Oil Age	hrs	Client Info	<b>250</b>	500
Oil Changed	Client Info	<b>Changed</b>	Changed	---
Sample Status		<b>NORMAL</b>	NORMAL	---

**CONTAMINATION** method limit/base current history1 history2

Fuel	WC Method	>4.0	<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.1	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

**WEAR METALS** method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>50	<b>19</b>	25	---
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>70</b>	42	---
Silver	ppm	ASTM D5185m	>5	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>12	<b>2</b>	2	---
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</b>	3	---
Copper	ppm	ASTM D5185m	>70	<b>12</b>	24	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	---

**ADDITIVES** method limit/base current history1 history2

Boron	ppm	ASTM D5185m	50	<b>71</b>	54	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>12</b>	10	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	---
Magnesium	ppm	ASTM D5185m	270	<b>356</b>	417	---
Calcium	ppm	ASTM D5185m	1900	<b>2190</b>	2240	---
Phosphorus	ppm	ASTM D5185m	1000	<b>889</b>	1024	---
Zinc	ppm	ASTM D5185m	1260	<b>1232</b>	1314	---
Sulfur	ppm	ASTM D5185m	3400	<b>3596</b>	5325	---

**CONTAMINANTS** method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	6	---
Sodium	ppm	ASTM D5185m		<b>2</b>	4	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	---

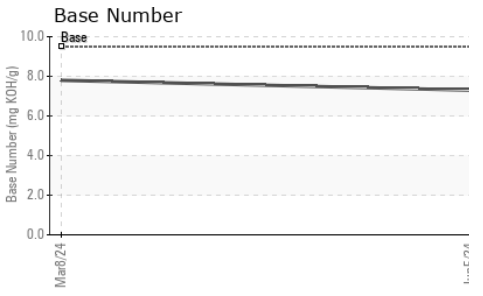
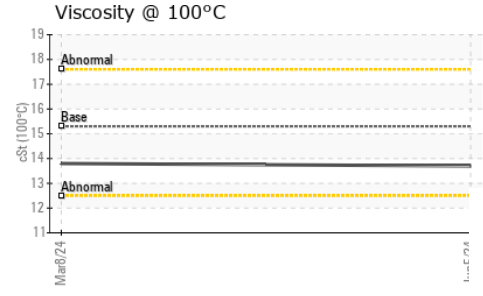
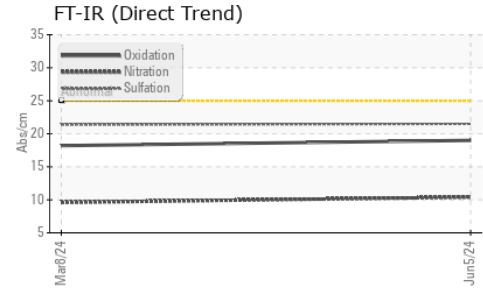
**INFRA-RED** method limit/base current history1 history2

Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	9.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	21.4	---

**FLUID DEGRADATION** method limit/base current history1 history2

Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.0</b>	18.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	<b>7.3</b>	7.8	---

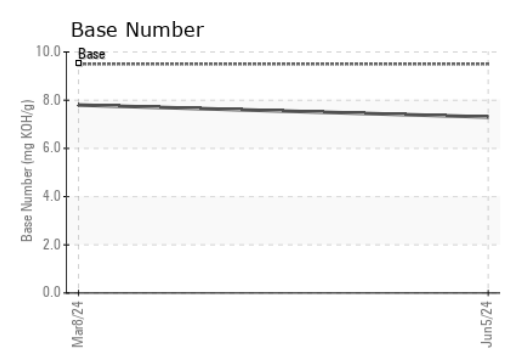
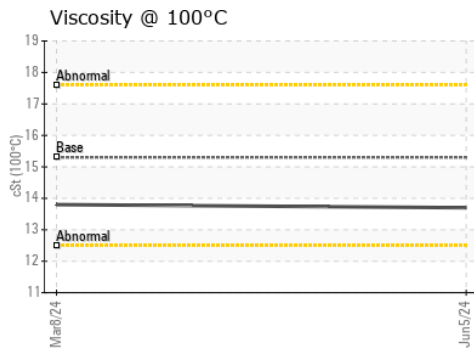
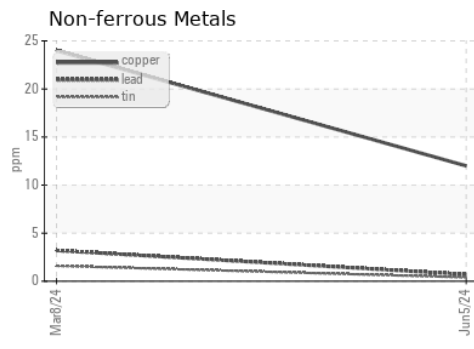
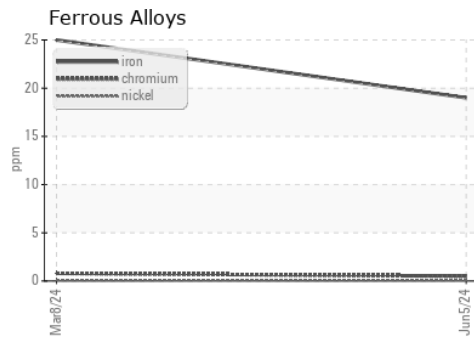
# OIL ANALYSIS REPORT



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	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.3	<b>13.7</b>	13.8

**GRAPHS**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HRE0000277      **Received** : 07 Jun 2024  
**Lab Number** : **06203830**      **Tested** : 12 Jun 2024  
**Unique Number** : 11071291      **Diagnosed** : 12 Jun 2024 - Angela Borella  
**Test Package** : FLEET

**SUPERIOR MARINE**  
 201 KELLY LANE  
 CHESAPEAKE, OH  
 US 45619  
 Contact: DARRELL KEARNS  
 darrellkearns@superiormarineinc.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)