

# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**CC-7**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- LTR)**

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### ▲ Wear

Cylinder, crank, or cam shaft wear is indicated. All other 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 acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0113891</b>	---	---
Sample Date	Client Info	<b>11 Mar 2024</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---
Oil Age	hrs	Client Info	<b>0</b>	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	---	---
Water	WC Method >0.2	<b>NEG</b>	---	---
Glycol	WC Method	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>▲ 211</b>	---	---
Chromium	ppm ASTM D5185m >20	<b>4</b>	---	---
Nickel	ppm ASTM D5185m >4	<b>3</b>	---	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >20	<b>6</b>	---	---
Lead	ppm ASTM D5185m >40	<b>9</b>	---	---
Copper	ppm ASTM D5185m >330	<b>35</b>	---	---
Tin	ppm ASTM D5185m >15	<b>5</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 250	<b>42</b>	---	---
Barium	ppm ASTM D5185m 10	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m 100	<b>73</b>	---	---
Manganese	ppm ASTM D5185m	<b>2</b>	---	---
Magnesium	ppm ASTM D5185m 450	<b>978</b>	---	---
Calcium	ppm ASTM D5185m 3000	<b>1185</b>	---	---
Phosphorus	ppm ASTM D5185m 1150	<b>1148</b>	---	---
Zinc	ppm ASTM D5185m 1350	<b>1305</b>	---	---
Sulfur	ppm ASTM D5185m 4250	<b>3316</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>10</b>	---	---
Sodium	ppm ASTM D5185m >158	<b>5</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>5</b>	---	---

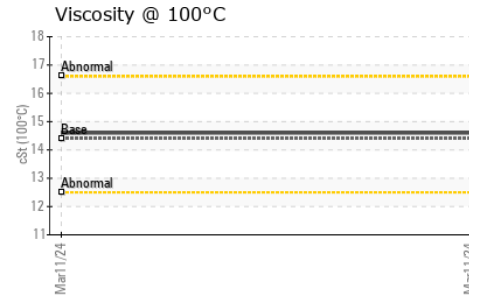
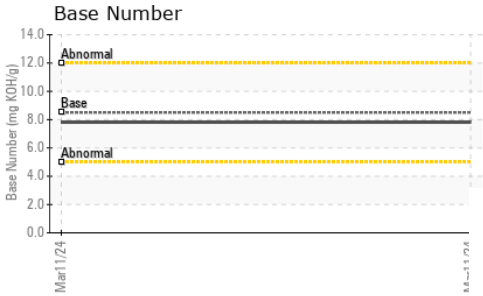
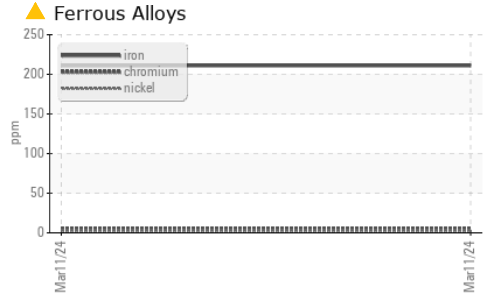
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.6</b>	---	---
Nitration	Abs/cm *ASTM D7624 >20	<b>13.5</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>25.5</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>29.2</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896 8.5	<b>7.82</b>	---	---

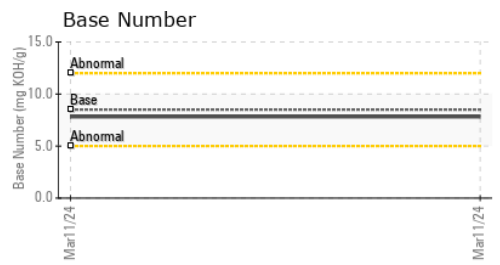
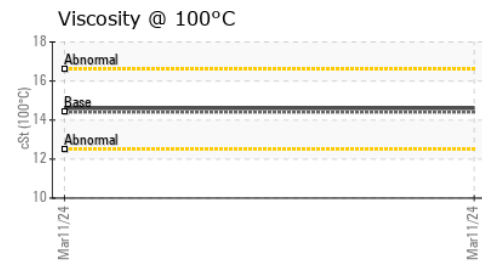
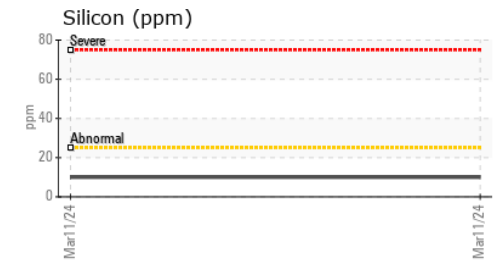
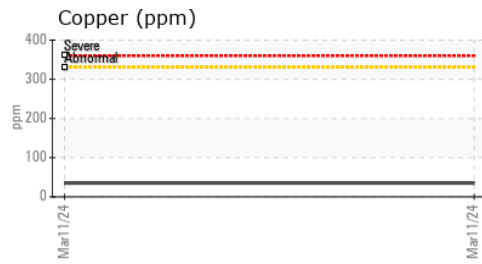
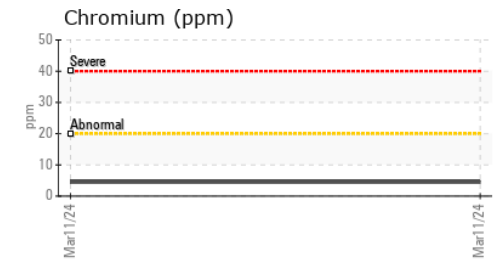
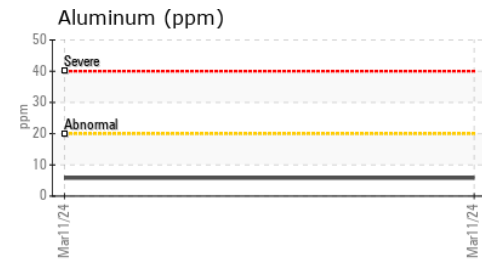
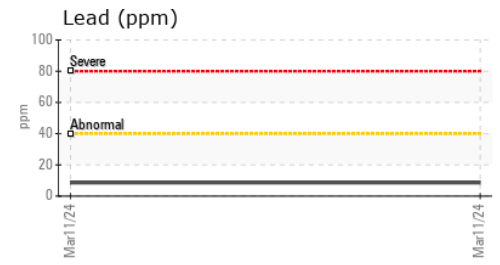
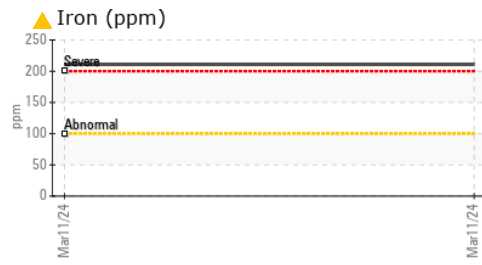
# OIL ANALYSIS REPORT



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	<b>14.6</b>	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0113891  
**Lab Number** : 06129569  
**Unique Number** : 10943720  
**Test Package** : MOB 2

**Received** : 26 Mar 2024  
**Tested** : 27 Mar 2024  
**Diagnosed** : 29 Mar 2024 - Don Baldrige

**SCRAP METAL SERVICES (SMS Mill Services LLC)**  
 250 WEST U.S. HWY 12  
 CHESTERTON, IN  
 US 46304  
 Contact: DOMINIC WHITE  
 dwhite@scrapmetalservices.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)

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