



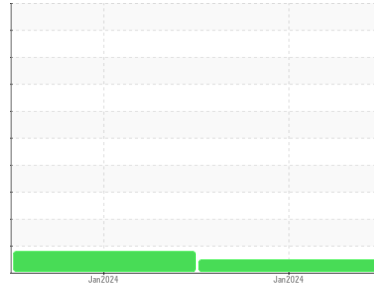
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[CAN 14 RECD 11/29/23]**  
 Machine Id  
**ASTM IHFO 2311**  
 Component  
**Hydraulic System**  
 Fluid  
**{not provided} (--- QTS)**



## 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. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC06056648</b>	WC06051882	---
Sample Date	Client Info	<b>10 Jan 2024</b>	05 Jan 2024	---
Machine Age	hrs Client Info	<b>0</b>	0	---
Oil Age	hrs Client Info	<b>0</b>	0	---
Oil Changed	Client Info	<b>N/A</b>	N/A	---
Sample Status		<b>NORMAL</b>	ATTENTION	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>20	<b>1</b>	3	---
Chromium ppm ASTM D5185m	>20	<b>0</b>	<1	---
Nickel ppm ASTM D5185m	>20	<b>0</b>	0	---
Titanium ppm ASTM D5185m		<b>0</b>	<1	---
Silver ppm ASTM D5185m		<b>0</b>	0	---
Aluminum ppm ASTM D5185m	>20	<b>&lt;1</b>	1	---
Lead ppm ASTM D5185m	>20	<b>0</b>	0	---
Copper ppm ASTM D5185m	>20	<b>2</b>	2	---
Tin ppm ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Vanadium ppm ASTM D5185m		<b>0</b>	0	---
Cadmium ppm ASTM D5185m		<b>0</b>	0	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m		<b>2</b>	<1	---
Barium ppm ASTM D5185m		<b>0</b>	10	---
Molybdenum ppm ASTM D5185m		<b>0</b>	<1	---
Manganese ppm ASTM D5185m		<b>&lt;1</b>	0	---
Magnesium ppm ASTM D5185m		<b>8</b>	7	---
Calcium ppm ASTM D5185m		<b>1554</b>	1517	---
Phosphorus ppm ASTM D5185m		<b>587</b>	615	---
Zinc ppm ASTM D5185m		<b>704</b>	677	---
Sulfur ppm ASTM D5185m		<b>2404</b>	2839	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>15	<b>5</b>	4	---
Sodium ppm ASTM D5185m		<b>1</b>	0	---
Potassium ppm ASTM D5185m	>20	<b>1</b>	3	---
Water % ASTM D6304	>0.05	<b>0.037</b>	0.008	---
ppm Water ppm ASTM D6304	>500	<b>371</b>	88	---

## FLUID CLEANLINESS

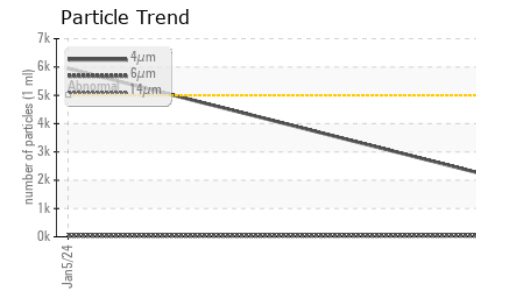
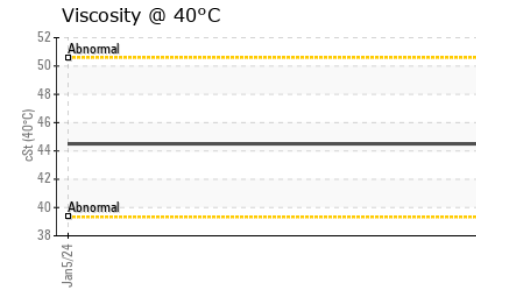
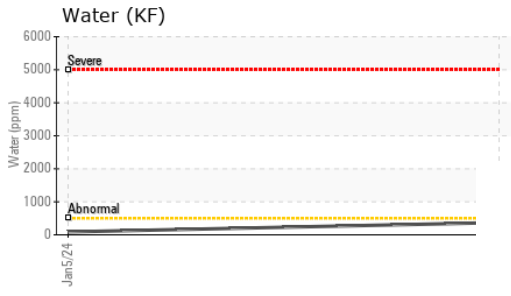
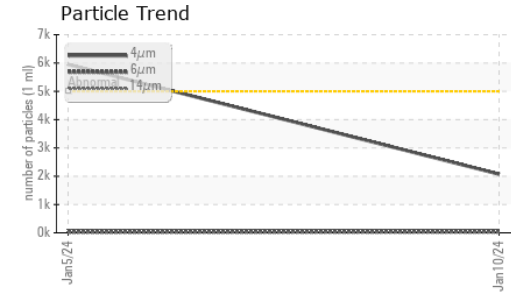
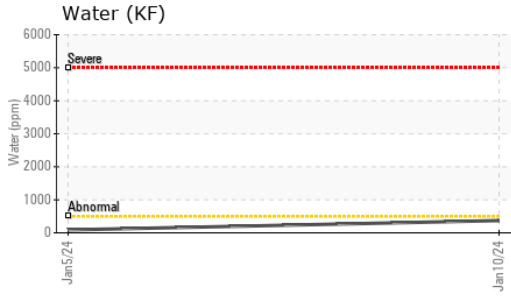
method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>5000	<b>2072</b>	▲ 5950	---
Particles >6µm ASTM D7647	>1300	<b>73</b>	69	---
Particles >14µm ASTM D7647	>160	<b>11</b>	4	---
Particles >21µm ASTM D7647	>40	<b>3</b>	1	---
Particles >38µm ASTM D7647	>10	<b>0</b>	0	---
Particles >71µm ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness ISO 4406 (c)	>19/17/14	<b>18/13/11</b>	▲ 20/13/9	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045		<b>0.852</b>	0.32	---



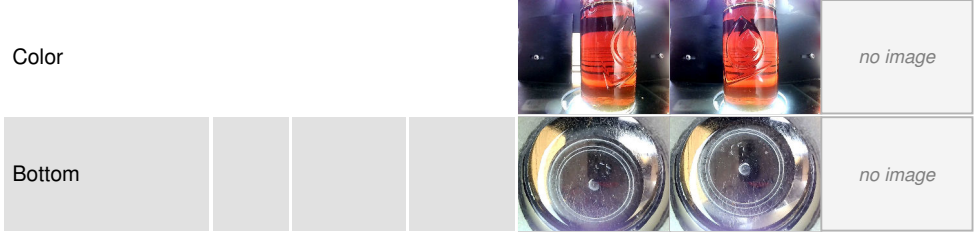
# OIL ANALYSIS REPORT



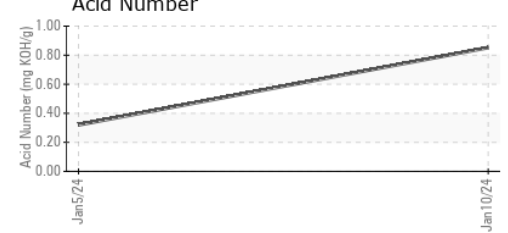
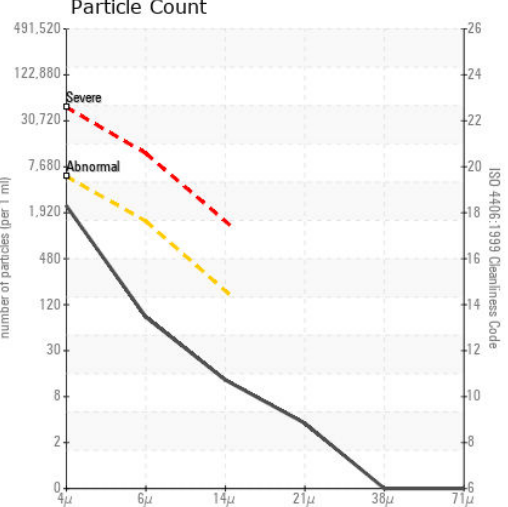
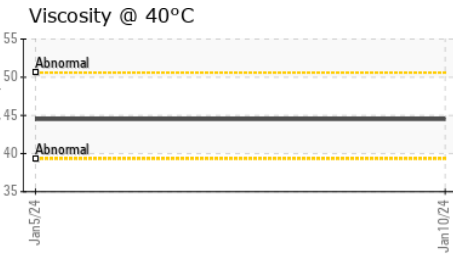
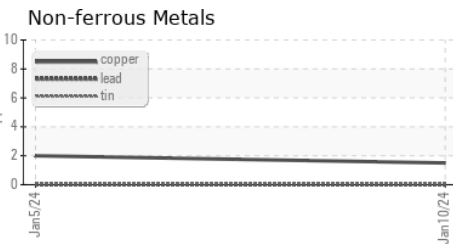
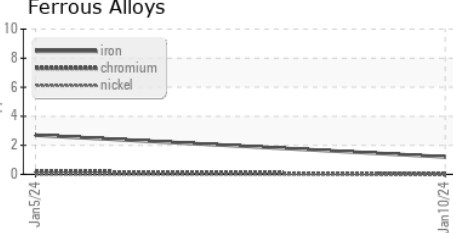
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	44.5	44.5	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC06056648 **Received** : 10 Jan 2024  
**Lab Number** : 06056648 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10822597 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF )

**WEARCHECK LUBRICATION SERVICES PT ACCOUNT**  
 501 Madison Ave  
 Cary, NC  
 US 27513  
 Contact: Doug Bogart  
 dbogart@wearcheckusa.com  
 T:  
 F: (919)379-4050

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)