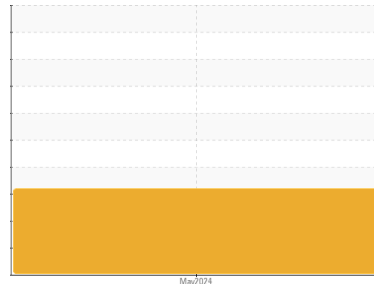


# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**HITACHI HCMDD560P00010248**  
Component  
**Right Final Drive**  
Fluid  
**GEAR OIL SAE 80W90 (--- QTS)**

## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

Gear wear is indicated.

### Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### Fluid Condition

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>JR0211388</b>	---	---
Sample Date	Client Info		<b>16 May 2024</b>	---	---
Machine Age	hrs	Client Info	<b>2473</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
Water	WC Method	>0.2	<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>413</b>	---	---
Iron	ppm	ASTM D5185m >500	<b>▲ 518</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>6</b>	---	---
Nickel	ppm	ASTM D5185m >10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>1</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>● 12</b>	---	---
Lead	ppm	ASTM D5185m >25	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >50	<b>2</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>0</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 400	<b>10</b>	---	---
Barium	ppm	ASTM D5185m 200	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 12	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>6</b>	---	---
Magnesium	ppm	ASTM D5185m 12	<b>0</b>	---	---
Calcium	ppm	ASTM D5185m 150	<b>4</b>	---	---
Phosphorus	ppm	ASTM D5185m 1650	<b>283</b>	---	---
Zinc	ppm	ASTM D5185m 125	<b>&lt;1</b>	---	---
Sulfur	ppm	ASTM D5185m 22500	<b>20023</b>	---	---

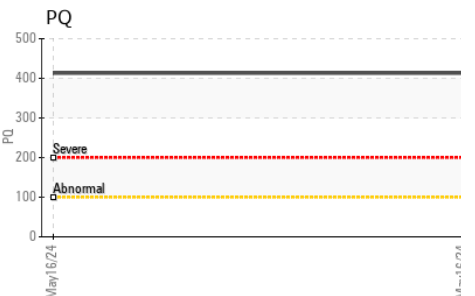
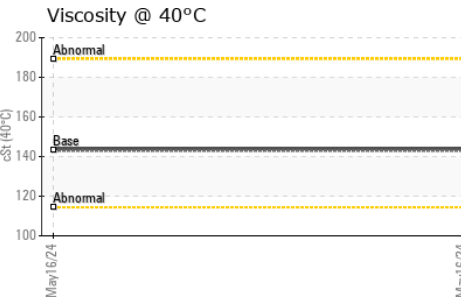
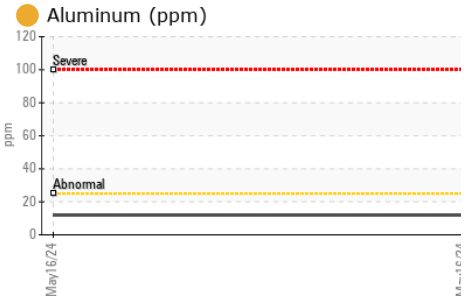
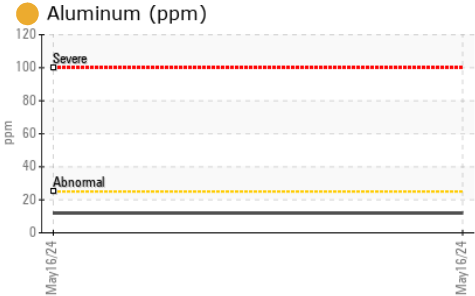
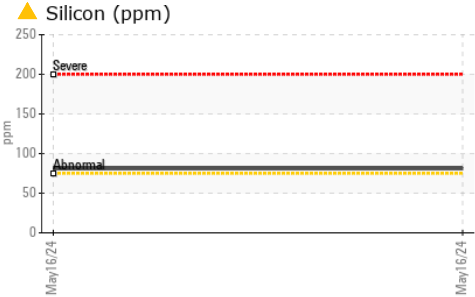
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>▲ 81</b>	---	---
Sodium	ppm	ASTM D5185m >170	<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	---	---

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual >0.2	<b>NEG</b>	---	---
Free Water	scalar	*Visual	<b>NEG</b>	---	---

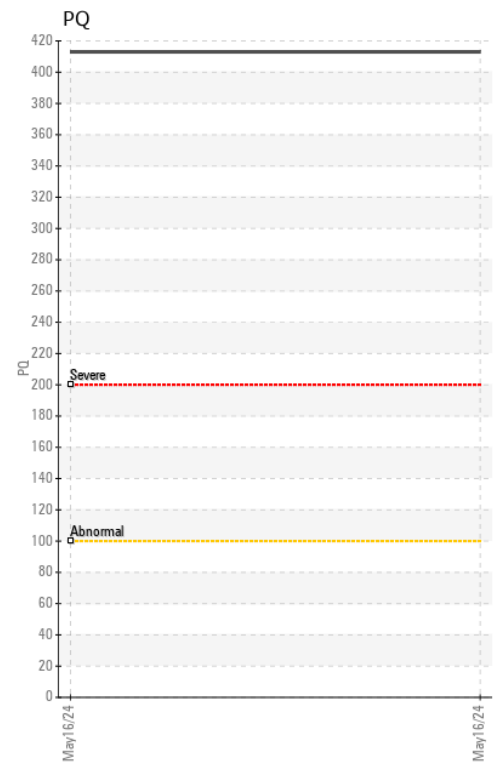
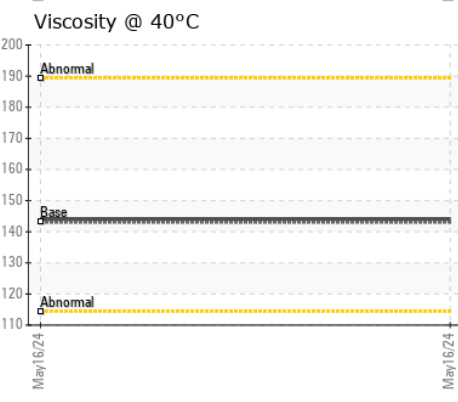
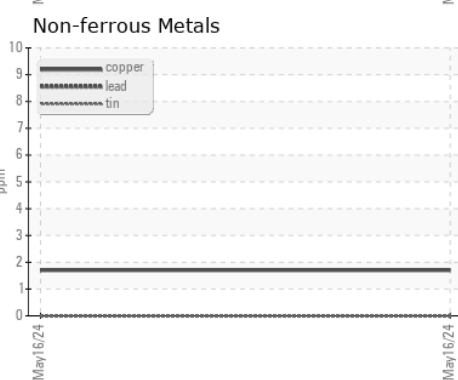
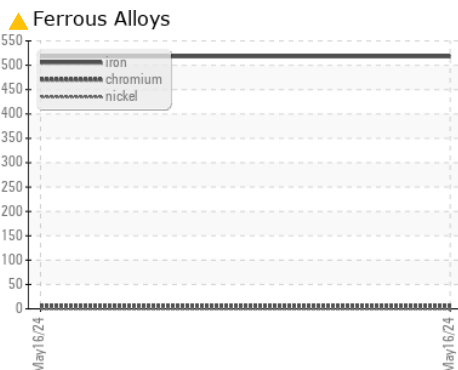
# OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 143	<b>144</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0211388  
**Lab Number** : **06183156**  
**Unique Number** : 11034482  
**Test Package** : CONST ( Additional Tests: PQ )  
**Received** : 17 May 2024  
**Tested** : 20 May 2024  
**Diagnosed** : 21 May 2024 - Sean Felton

**JRE - ASHLAND**  
 11047 LEADBETTER RD  
 ASHLAND, VA  
 US 23005  
 Contact: John Deere  
 jon.fazenbaker@wearcheck.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)