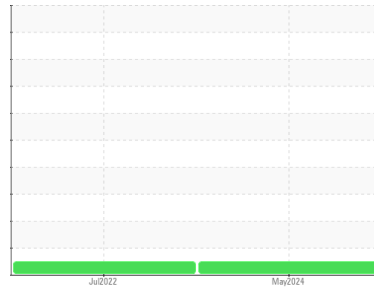


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**JOHN DEERE 50G 1FF050GXAKH291948**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (9 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.

**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>JR0212168</b>	JR0136979	---
Sample Date	Client Info			<b>28 May 2024</b>	12 Jul 2022	---
Machine Age	hrs	Client Info		<b>2377</b>	1896	---
Oil Age	hrs	Client Info		<b>500</b>	1896	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>2.1		<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.21		<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	<b>12</b>	---	---
Iron	ppm	ASTM D5185m	>51	<b>14</b>	15	---
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>31	<b>6</b>	4	---
Lead	ppm	ASTM D5185m	>26	<b>1</b>	2	---
Copper	ppm	ASTM D5185m	>26	<b>1</b>	1	---
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---

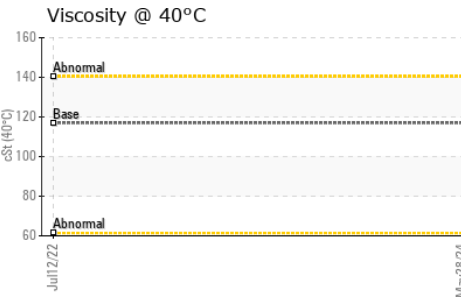
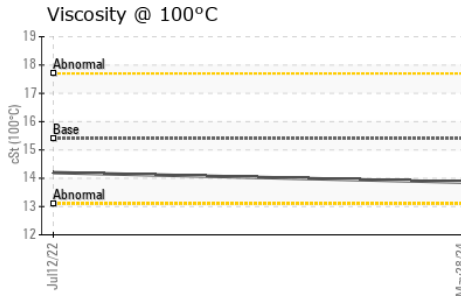
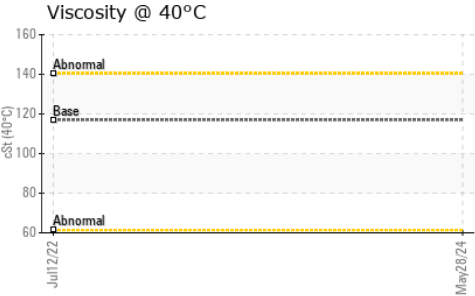
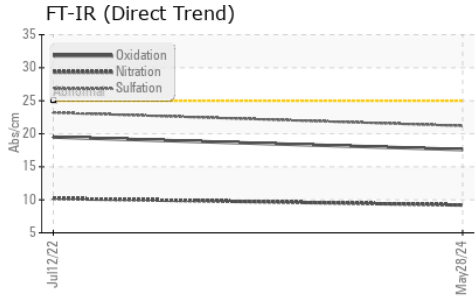
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>245</b>	248	---
Barium	ppm	ASTM D5185m		<b>2</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>248</b>	267	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>772</b>	865	---
Calcium	ppm	ASTM D5185m		<b>1385</b>	1603	---
Phosphorus	ppm	ASTM D5185m		<b>900</b>	947	---
Zinc	ppm	ASTM D5185m		<b>1043</b>	1163	---
Sulfur	ppm	ASTM D5185m		<b>2938</b>	3797	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	<b>13</b>	15	---
Sodium	ppm	ASTM D5185m	>31	<b>1</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	10.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.2</b>	23.2	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.6</b>	19.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.3</b>	9.5	---

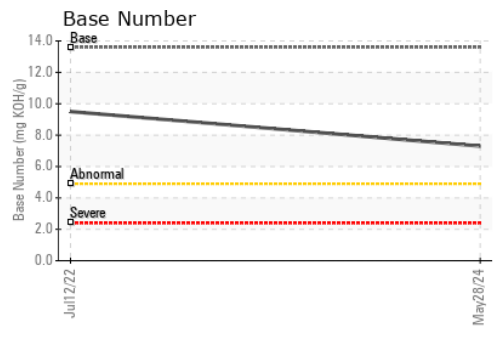
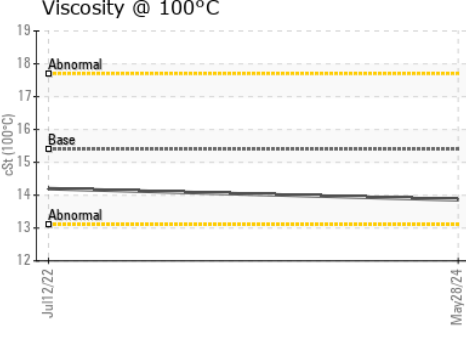
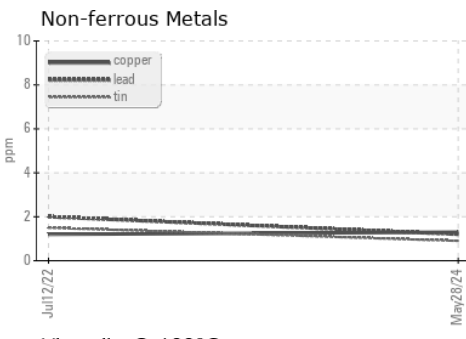
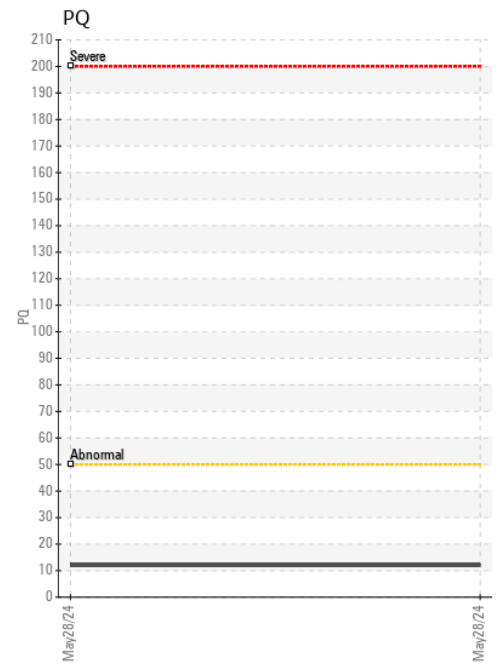
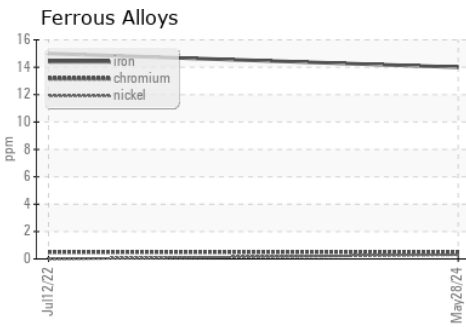
# OIL ANALYSIS REPORT



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	>0.21	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	117	105	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.86	14.2
Viscosity Index (VI)	Scale	ASTM D2270	139	132	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0212168 **Received** : 29 May 2024  
**Lab Number** : 06194707 **Tested** : 03 Jun 2024  
**Unique Number** : 11056830 **Diagnosed** : 03 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: KV40, PQ, TBN, VI )

**JRE - ASHLAND**  
 11047 LEADBETTER RD  
 ASHLAND, VA  
 US 23005  
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 dzieg@jamesriverequipment.com  
 T: (804)798-6001  
 F: (804)798-0292

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)