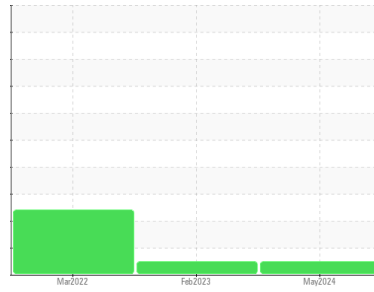




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area

**[W52052 HENDERSON]**

Machine Id

**JOHN DEERE 331G 1T0331GMVLF371179**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### 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>JR0211644</b>	JR0147060	JR0125403
Sample Date	Client Info		<b>28 May 2024</b>	28 Feb 2023	23 Mar 2022
Machine Age	hrs	Client Info	<b>1431</b>	941	647
Oil Age	hrs	Client Info	<b>0</b>	0	647
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

### CONTAMINATION

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

### WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>51	<b>47</b>	34	58
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>31	<b>8</b>	6	7
Lead	ppm	ASTM D5185m	>26	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>26	<b>21</b>	43	▲ 164
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>114</b>	163	108
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>264</b>	268	242
Manganese	ppm	ASTM D5185m		<b>1</b>	1	2
Magnesium	ppm	ASTM D5185m		<b>878</b>	816	805
Calcium	ppm	ASTM D5185m		<b>1570</b>	1605	1879
Phosphorus	ppm	ASTM D5185m		<b>969</b>	913	901
Zinc	ppm	ASTM D5185m		<b>1185</b>	1129	1189
Sulfur	ppm	ASTM D5185m		<b>3198</b>	3015	2341

### CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>22	<b>17</b>	17	▲ 38
Sodium	ppm	ASTM D5185m	>31	<b>2</b>	1	8
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	3

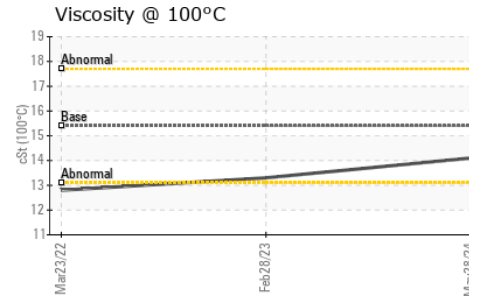
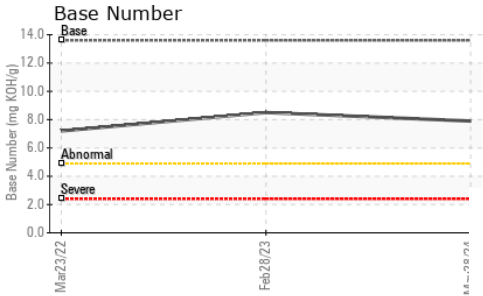
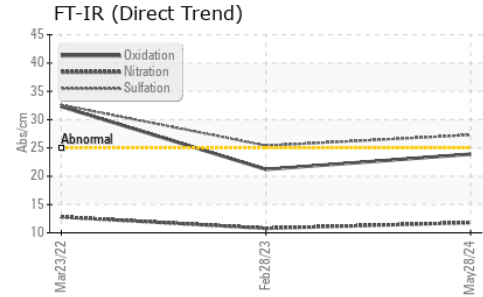
### INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.8</b>	10.8	12.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>27.3</b>	25.4	32.6

### FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>23.9</b>	21.2	32.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.9</b>	8.5	7.2

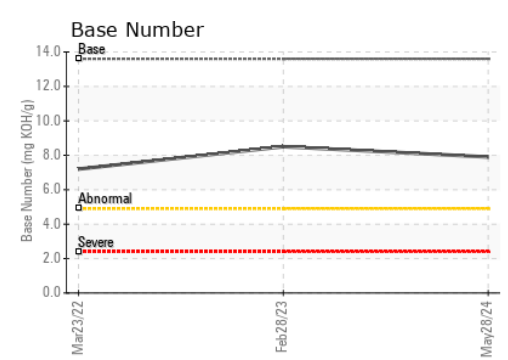
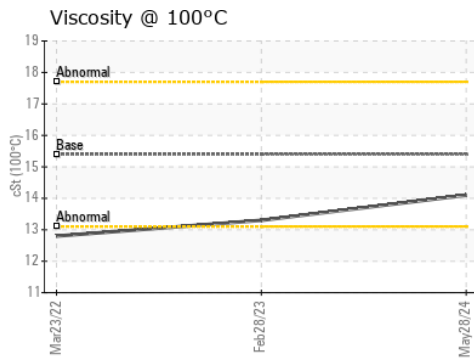
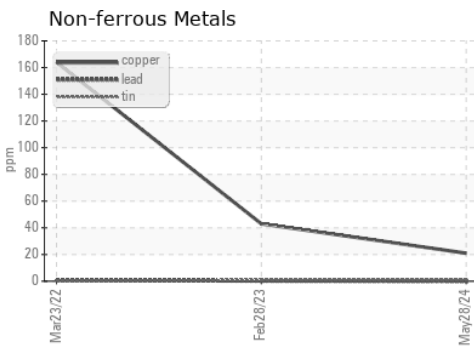
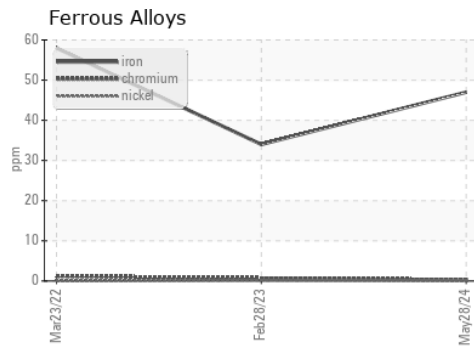
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	13.3	12.8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0211644      **Received** : 31 May 2024  
**Lab Number** : **06196391**      **Tested** : 03 Jun 2024  
**Unique Number** : 11058514      **Diagnosed** : 03 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - ASHLAND**  
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 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)