



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

**[05w34160]**

Machine Id

**JOHN DEERE 298589**

Component

**Diesel Engine**

Fluid

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

### RECOMMENDATION

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0132867</b>	JR0101358	---
Sample Date		Client Info		<b>27 Jun 2022</b>	21 Sep 2021	---
Machine Age	hrs	Client Info		<b>4398</b>	3777	---
Oil Age	hrs	Client Info		<b>621</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>35</b>	48	---
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	2	---
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>31	<b>8</b>	11	---
Lead	ppm	ASTM D5185m	>26	<b>19</b>	▲ 90	---
Copper	ppm	ASTM D5185m	>26	<b>4</b>	6	---
Tin	ppm	ASTM D5185m	>4	<b>1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

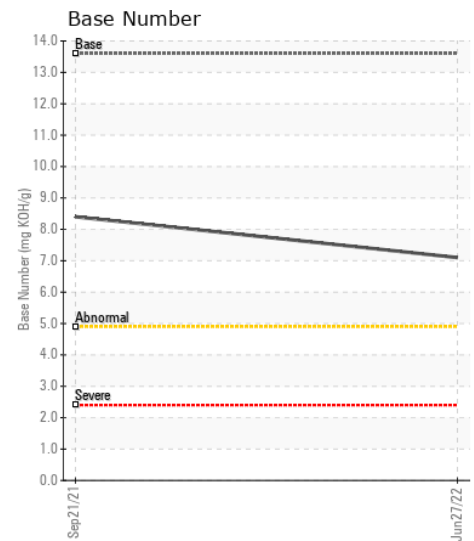
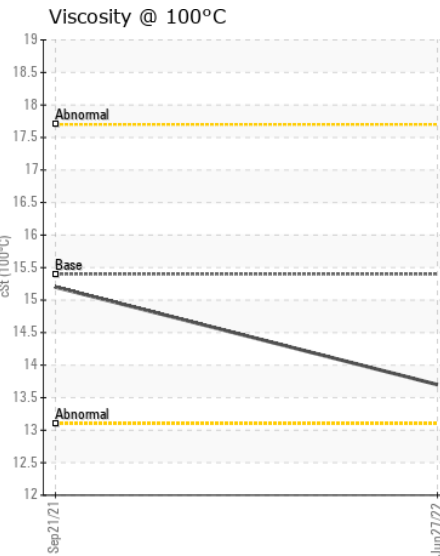
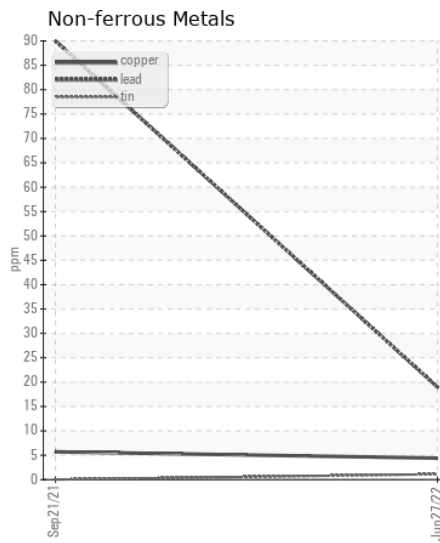
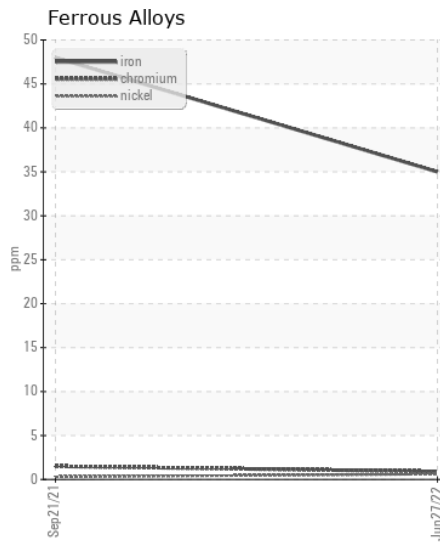
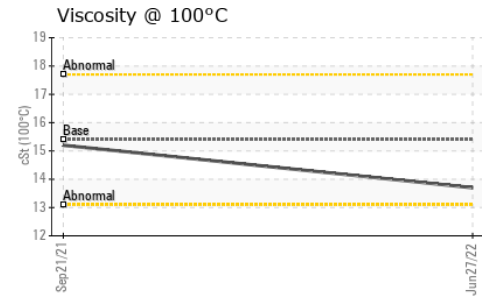
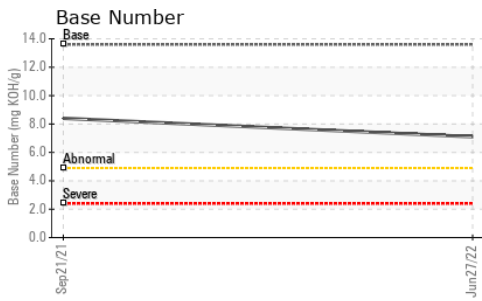
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>8</b>	8	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	---
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	---
Soot %	%	*ASTM D7844	>3	<b>0.9</b>	1.2	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.1</b>	12.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>27.0</b>	29.6	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	---

### 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.

Sodium	ppm	ASTM D5185m	>31	<b>2</b>	3	---
Boron	ppm	ASTM D5185m		<b>95</b>	59	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>211</b>	213	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>751</b>	768	---
Calcium	ppm	ASTM D5185m		<b>1607</b>	1738	---
Phosphorus	ppm	ASTM D5185m		<b>881</b>	872	---
Zinc	ppm	ASTM D5185m		<b>1157</b>	1068	---
Sulfur	ppm	ASTM D5185m		<b>3509</b>	2334	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.0</b>	24.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.1</b>	8.4	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	15.2	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0132867 **Received** : 30 Jun 2022  
**Lab Number** : 05581243 **Diagnosed** : 01 Jul 2022  
**Unique Number** : 10035669 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - MANASSAS PARK**  
 9107 OWENS DRIVE  
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 US 20111

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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)