



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

Area

**[W21491-READ]**

Machine Id

**JOHN DEERE 5055E 1PY5055ELHH401695**

Component

**Diesel Engine**

Fluid

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

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0210810</b>	JR0041665	---
Sample Date		Client Info		<b>18 Apr 2024</b>	31 Jan 2020	---
Machine Age	hrs	Client Info		<b>376</b>	180	---
Oil Age	hrs	Client Info		<b>376</b>	110	---
Filter Age	hrs	Client Info		<b>376</b>	110	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	<b>16</b>	18	---
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	6	---
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>26	<b>2</b>	2	---
Tin	ppm	ASTM D5185m	>4	<b>2</b>	<1	---
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

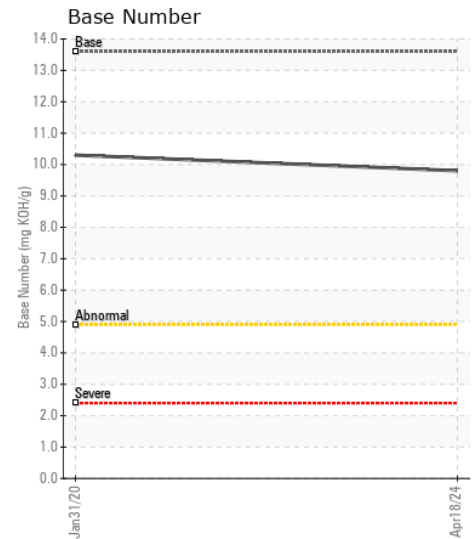
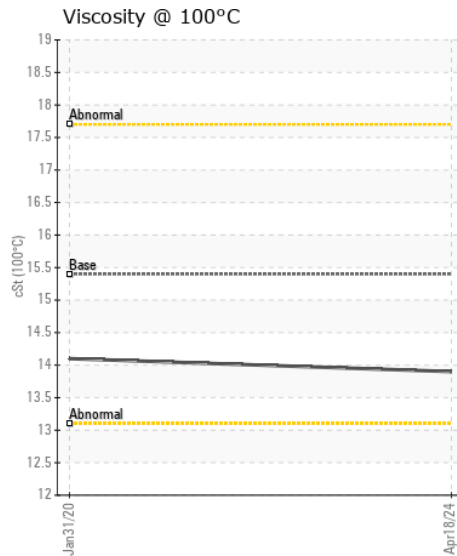
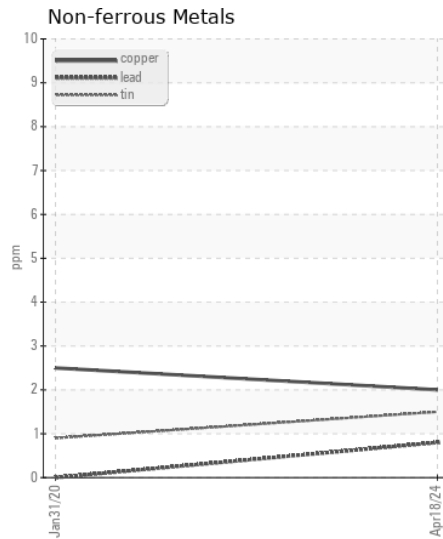
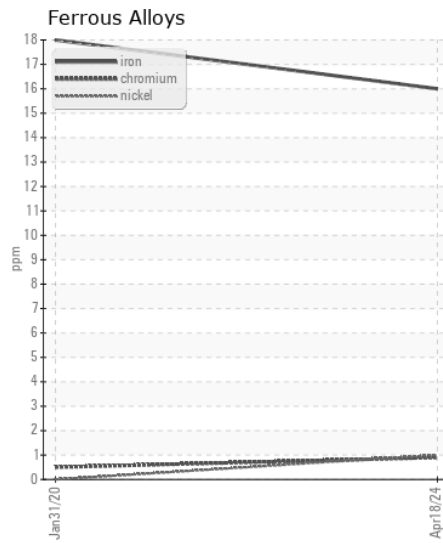
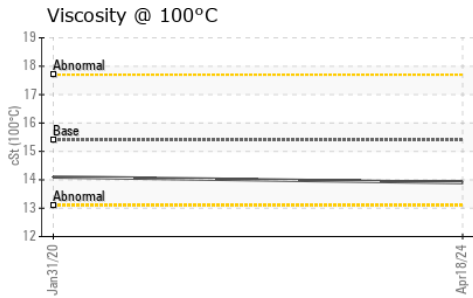
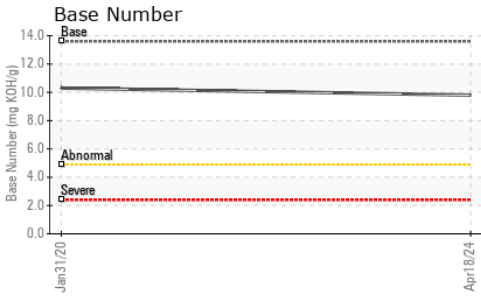
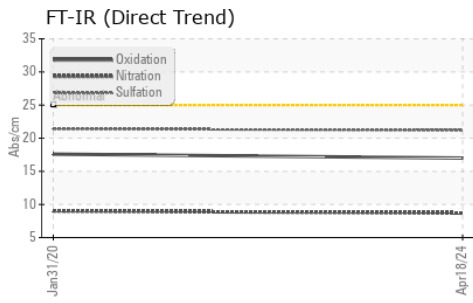
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>9</b>	8	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	---
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>0.2</b>	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.2</b>	21.4	---
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>0</b>	4	---
Boron	ppm	ASTM D5185m		<b>253</b>	268	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>262</b>	281	---
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>799</b>	897	---
Calcium	ppm	ASTM D5185m		<b>1379</b>	1445	---
Phosphorus	ppm	ASTM D5185m		<b>911</b>	909	---
Zinc	ppm	ASTM D5185m		<b>1036</b>	1004	---
Sulfur	ppm	ASTM D5185m		<b>3134</b>	3582	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.0</b>	17.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.8</b>	10.3	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	14.1	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0210810 **Received** : 22 Apr 2024  
**Lab Number** : 06156730 **Tested** : 23 Apr 2024  
**Unique Number** : 10992153 **Diagnosed** : 23 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - BURKEVILLE**  
 510 WEST COLONIAL DR  
 BURKEVILLE, VA  
 US 23922

Contact: BRANDON BOLLING  
 bbolling@jamesriverequipment.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)

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