



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

Machine Id  
**JOHN DEERE 4060R 5004190**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

We advise that you check the fuel injection system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0158710</b>	---	---
Sample Date		Client Info		<b>07 Feb 2024</b>	---	---
Machine Age	hrs	Client Info		<b>2898</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>35</b>	---	---
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>31	<b>6</b>	---	---
Lead	ppm	ASTM D5185m	>26	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>26	<b>2</b>	---	---
Tin	ppm	ASTM D5185m	>4	<b>1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

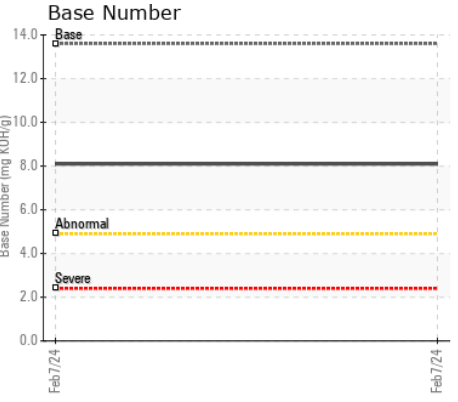
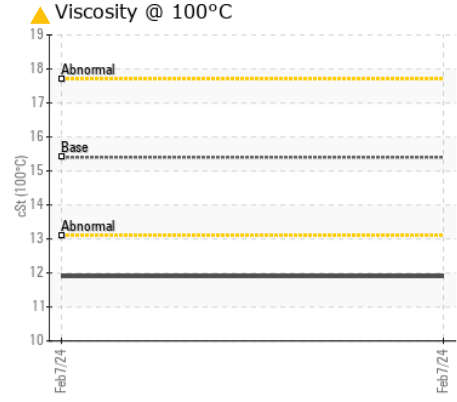
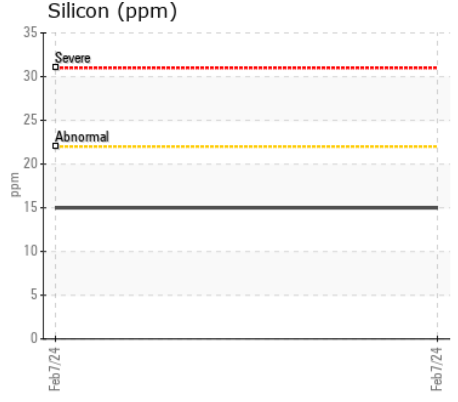
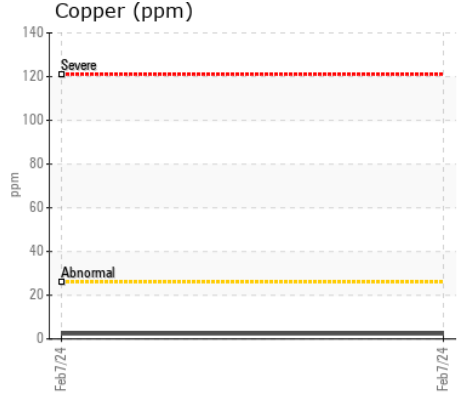
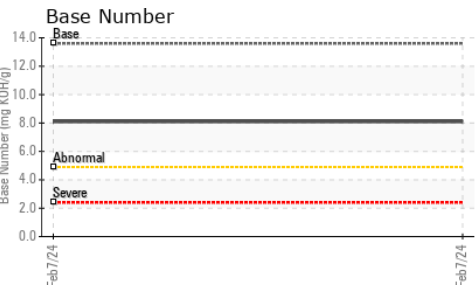
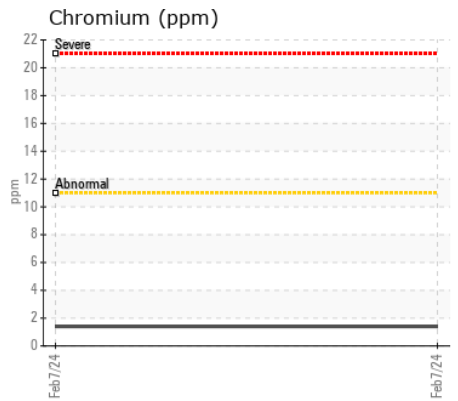
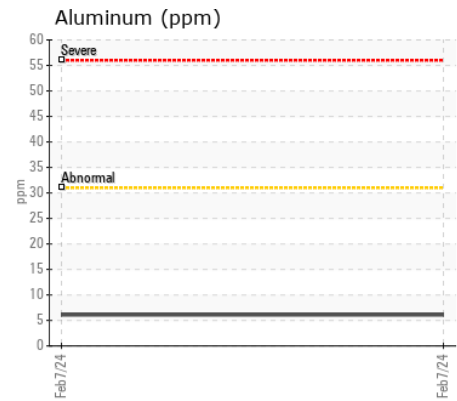
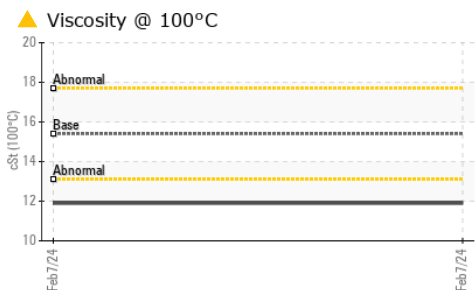
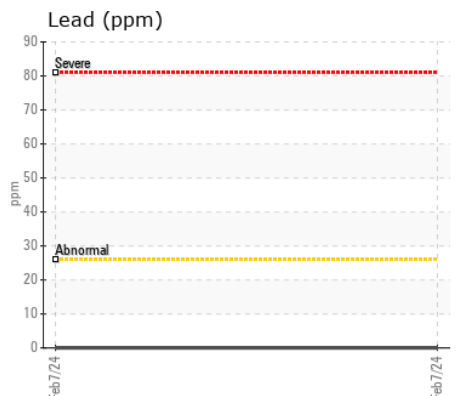
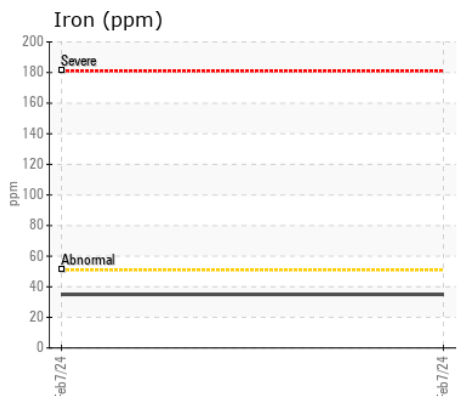
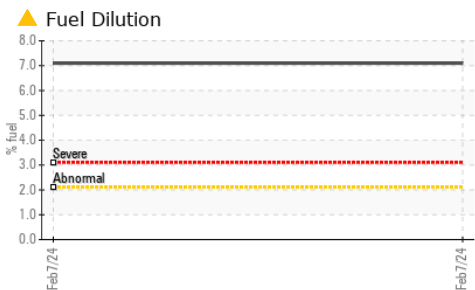
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>15</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Fuel	%	ASTM D3524	>2.1	<b>▲ 7.1</b>	---	---
Water		WC Method	>0.21	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.9</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.6</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	>0.21	<b>NEG</b>	---	---

### FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>31	<b>2</b>	---	---
Boron	ppm	ASTM D5185m		<b>90</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>231</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>771</b>	---	---
Calcium	ppm	ASTM D5185m		<b>1252</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>782</b>	---	---
Zinc	ppm	ASTM D5185m		<b>949</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>2726</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>26.5</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.1</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>▲ 11.9</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0158710 **Received** : 08 Feb 2024  
**Lab Number** : 06084276 **Tested** : 13 Feb 2024  
**Unique Number** : 10871721 **Diagnosed** : 13 Feb 2024 - Jonathan Hester  
**Test Package** : MOBCE ( Additional Tests: FuelDilution, PercentFuel, TBN )

**JRE - FISHERSVILLE**  
 98 EXPO ROAD  
 FISHERSVILLE, VA  
 US 22939

Contact: MIKE JENKINS  
 MIKE.JENKINS@JAMESRIVEREQUIPMENT.COM  
 T: (540)292-3494  
 F: (540)337-1495

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)