



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

Machine Id  
**JOHN DEERE 844P LX07617**

Component  
**Diesel Engine**

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

**RECOMMENDATION**

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0197662</b>	---	---
Sample Date		Client Info		<b>08 Jan 2024</b>	---	---
Machine Age	hrs	Client Info		<b>31</b>	---	---
Oil Age	hrs	Client Info		<b>31</b>	---	---
Filter Age	hrs	Client Info		<b>31</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>ATTENTION</b>	---	---

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	<b>6</b>	---	---
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>31	<b>1</b>	---	---
Lead	ppm	ASTM D5185m	>26	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>26	<b>14</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**

Fuel content negligible. There is no indication of any contamination in the oil.

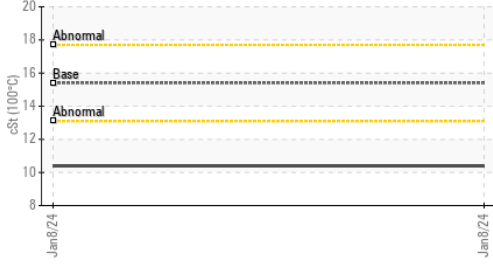
Silicon	ppm	ASTM D5185m	>22	<b>8</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Fuel	%	ASTM D3524	>8.0	<b>0.4</b>	---	---
Water		WC Method	>0.21	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>3.4</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>30.5</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**

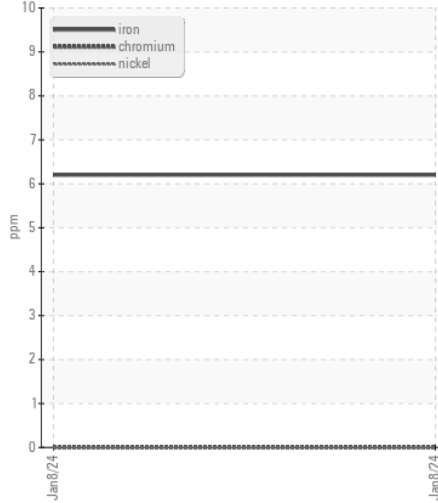
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	<b>4</b>	---	---
Boron	ppm	ASTM D5185m		<b>109</b>	---	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>95</b>	---	---
Manganese	ppm	ASTM D5185m		<b>4</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>313</b>	---	---
Calcium	ppm	ASTM D5185m		<b>626</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>780</b>	---	---
Zinc	ppm	ASTM D5185m		<b>951</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>2214</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.1</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>5.2</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>▲ 10.4</b>	---	---

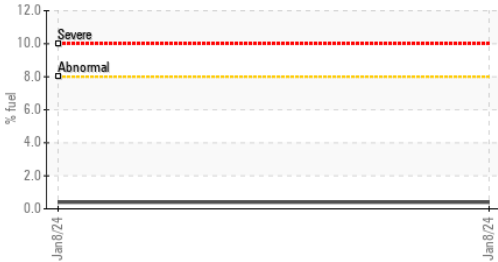
▲ Viscosity @ 100°C



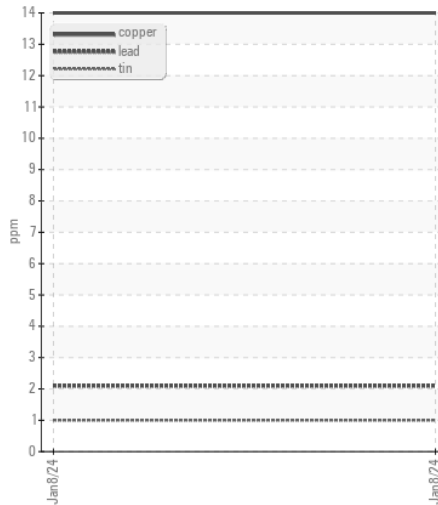
Ferrous Alloys



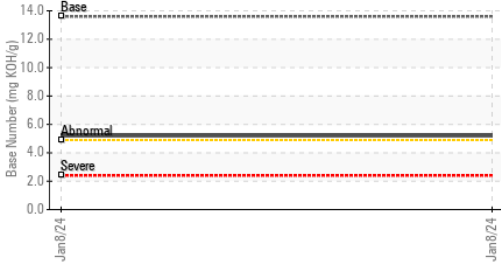
Fuel Dilution



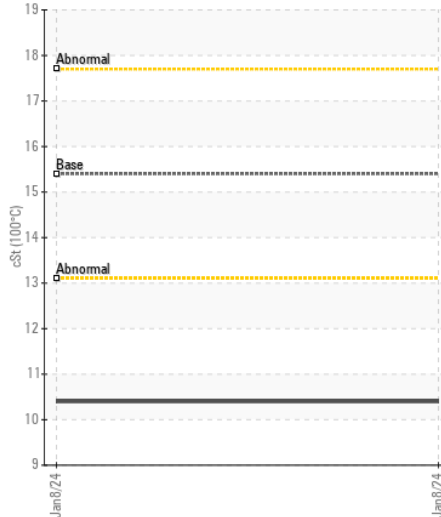
Non-ferrous Metals



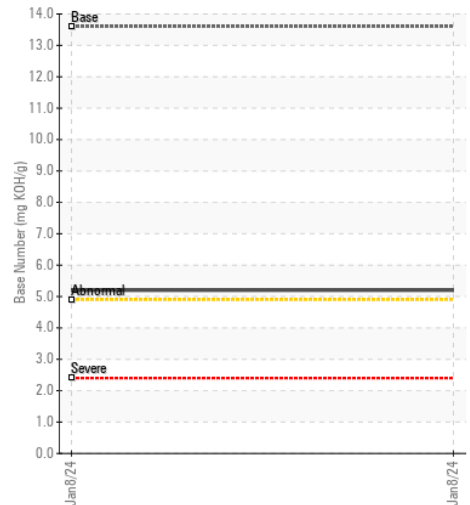
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0197662 **Received** : 10 Jan 2024  
**Lab Number** : 06056529 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10822478 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**JRE - GARNER**  
 4161 AUBURN CHURCH RD  
 GARNER, NC  
 US 27529

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: RALEIGH SHOP  
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

T: (919)614-2260

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (919)779-5432