



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**JOHN DEERE 748L 1DW748LBVLF707417**  
 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>WE0007537</b>	WE0000698	---
Sample Date		Client Info		<b>19 Jun 2024</b>	15 Nov 2021	---
Machine Age	hrs	Client Info		<b>7919</b>	2509	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>8</b>	18	---
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	6	---
Lead	ppm	ASTM D5185m	>26	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>26	<b>&lt;1</b>	▲ 286	---
Tin	ppm	ASTM D5185m	>4	<b>0</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.

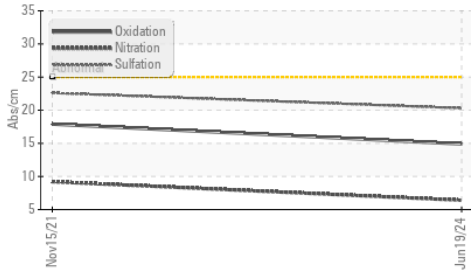
Silicon	ppm	ASTM D5185m	>22	<b>10</b>	6	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	27	---
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.4</b>	9.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	22.6	---
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

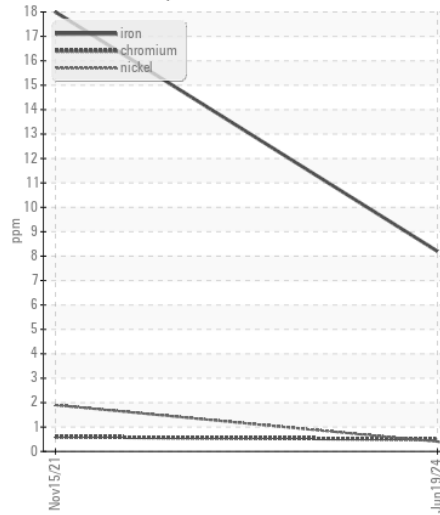
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>&lt;1</b>	3	---
Boron	ppm	ASTM D5185m		<b>254</b>	74	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>260</b>	11	---
Manganese	ppm	ASTM D5185m		<b>0</b>	1	---
Magnesium	ppm	ASTM D5185m		<b>844</b>	47	---
Calcium	ppm	ASTM D5185m		<b>1364</b>	2455	---
Phosphorus	ppm	ASTM D5185m		<b>927</b>	1050	---
Zinc	ppm	ASTM D5185m		<b>1096</b>	1160	---
Sulfur	ppm	ASTM D5185m		<b>3092</b>	2738	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.9</b>	17.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.5</b>	6.6	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.6</b>	13.2	---

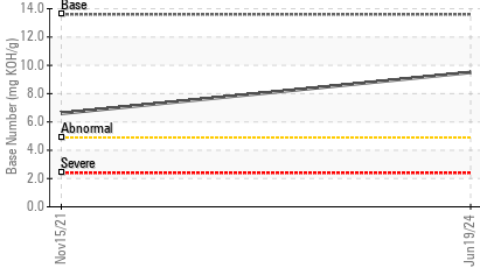
FT-IR (Direct Trend)



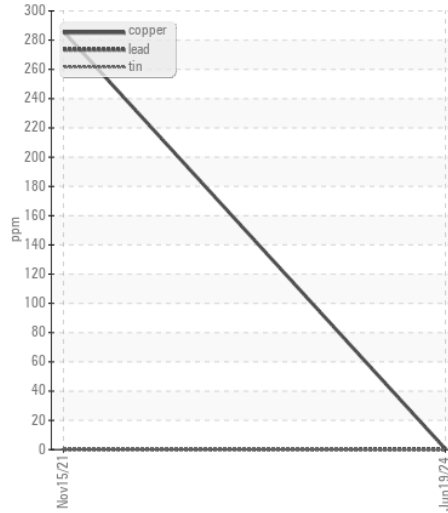
Ferrous Alloys



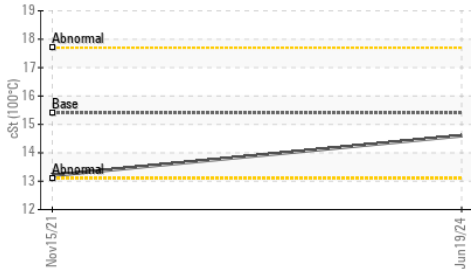
Base Number



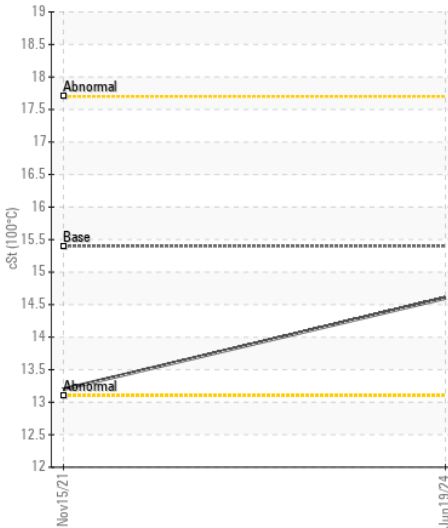
Non-ferrous Metals



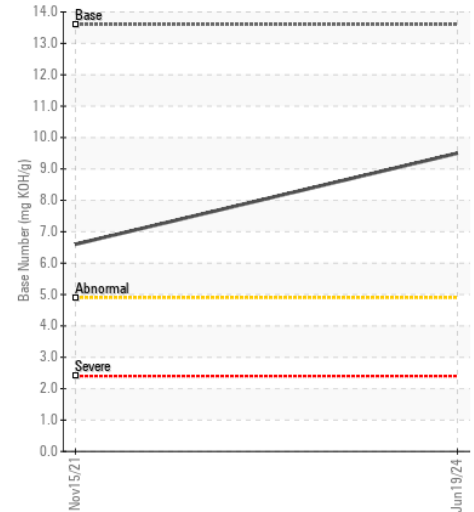
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WE0007537

Lab Number : 06216592

Unique Number : 11089456

Test Package : CONST ( Additional Tests: TBN )

Received : 21 Jun 2024

Tested : 24 Jun 2024

Diagnosed : 24 Jun 2024 - Wes Davis

WARRIOR TRACTOR AND EQUIPMENT - MONROEVILLE

66 INDUSTRIAL PARK DR

MONROEVILLE, AL

US 36460

Contact: SCOTT WILLIAMSON

swilliamson@warriortractor.com

T: (251)575-7111

F:

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)