



# OIL ANALYSIS REPORT

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

Machine Id  
**JOHN DEERE 844L 1DW844LXHNL714031**  
 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>WE0005246</b>	WE0005281	WE0005355
Sample Date		Client Info		<b>12 Jul 2024</b>	29 Mar 2024	07 Mar 2024
Machine Age	hrs	Client Info		<b>15954</b>	13745	13178
Oil Age	hrs	Client Info		<b>500</b>	745	500
Filter Age	hrs	Client Info		<b>500</b>	745	500
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

The iron level is abnormal. The copper level is abnormal.

Iron	ppm	ASTM D5185m	>51	<b>▲ 69</b>	15	22
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>&lt;1</b>	6	6
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	3	12
Copper	ppm	ASTM D5185m	>26	<b>▲ 43</b>	5	6
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

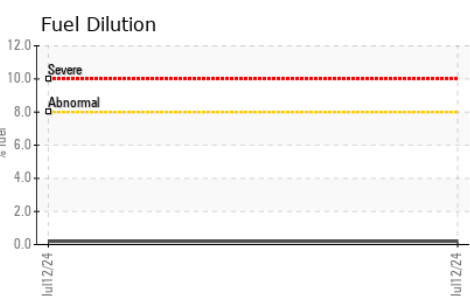
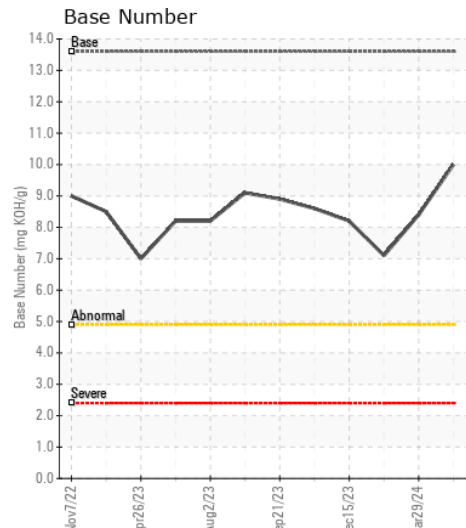
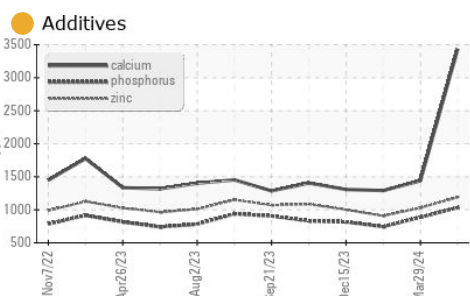
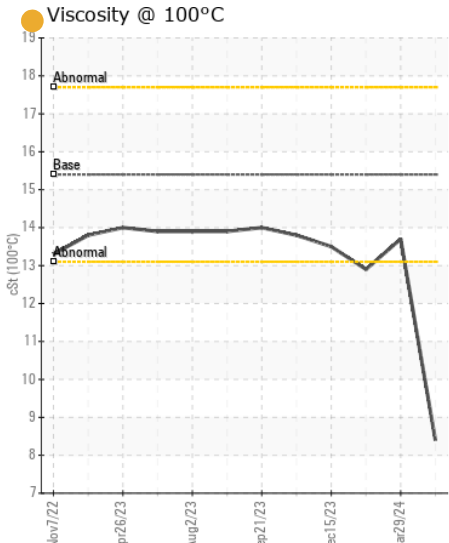
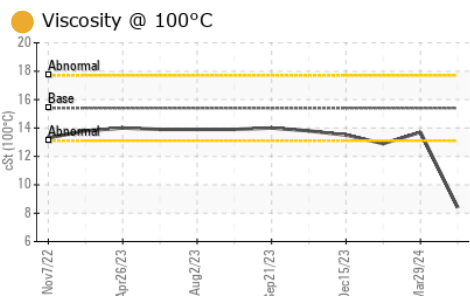
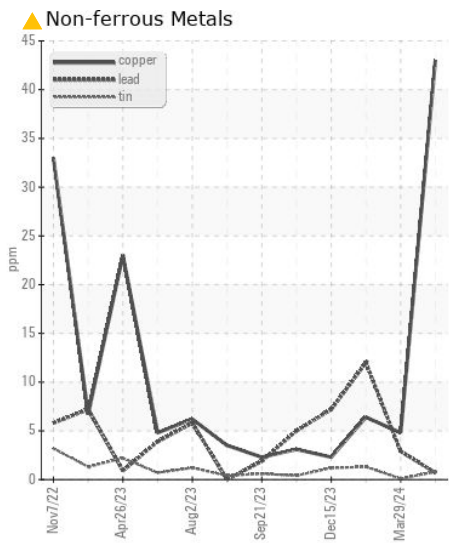
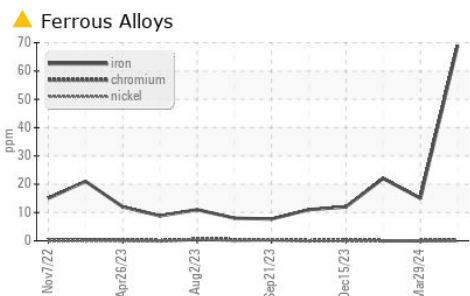
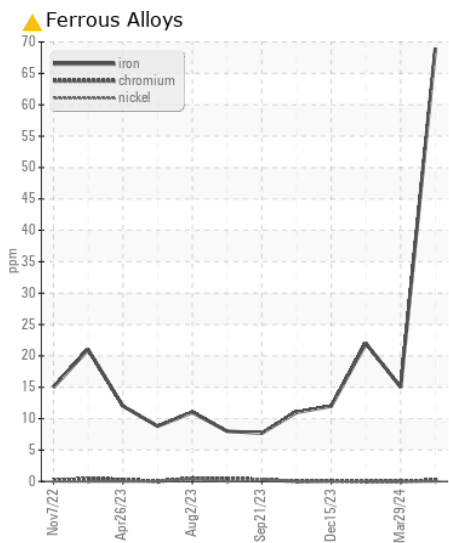
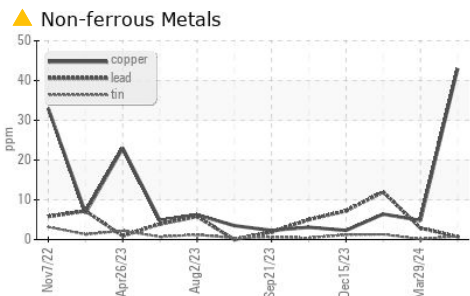
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>10</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Fuel	%	ASTM D3524	>8.0	<b>0.2</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0</b>	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>3.3</b>	9.1	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.4</b>	23.2	26.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	<b>2</b>	3	5
Boron	ppm	ASTM D5185m		<b>● 2</b>	161	56
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>● 5</b>	248	245
Manganese	ppm	ASTM D5185m		<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>● 116</b>	867	791
Calcium	ppm	ASTM D5185m		<b>● 3431</b>	1440	1291
Phosphorus	ppm	ASTM D5185m		<b>1034</b>	888	743
Zinc	ppm	ASTM D5185m		<b>1190</b>	1030	908
Sulfur	ppm	ASTM D5185m		<b>3917</b>	3685	3057
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.5</b>	18.2	21.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>10.0</b>	8.4	7.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>● 8.4</b>	13.7	12.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WE0005246 **Received** : 17 Jul 2024  
**Lab Number** : 06238932 **Tested** : 19 Jul 2024  
**Unique Number** : 11127766 **Diagnosed** : 19 Jul 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**WARRIOR TRACTOR AND EQUIPMENT - MONROEVILLE**  
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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)