



# OIL ANALYSIS REPORT

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

Machine Id  
**JOHN DEERE 844L 1DW844LXCNL714937**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WE0006841</b>	WE0006373	WE0005169
Sample Date		Client Info		<b>11 Apr 2024</b>	02 Feb 2024	20 Oct 2023
Machine Age	hrs	Client Info		<b>3472</b>	3039	2456
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>17</b>	23	14
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	5	4
Lead	ppm	ASTM D5185m	>26	<b>2</b>	5	3
Copper	ppm	ASTM D5185m	>26	<b>5</b>	9	6
Tin	ppm	ASTM D5185m	>4	<b>2</b>	1	2
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

There is no indication of any contamination in the oil.

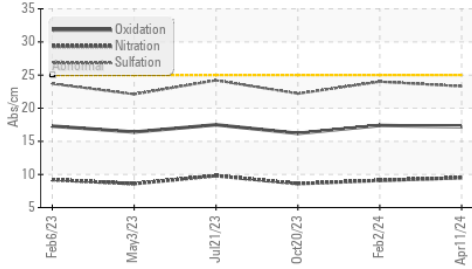
Silicon	ppm	ASTM D5185m	>22	<b>7</b>	12	9
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	<1
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	9.1	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.3</b>	24.0	22.2
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

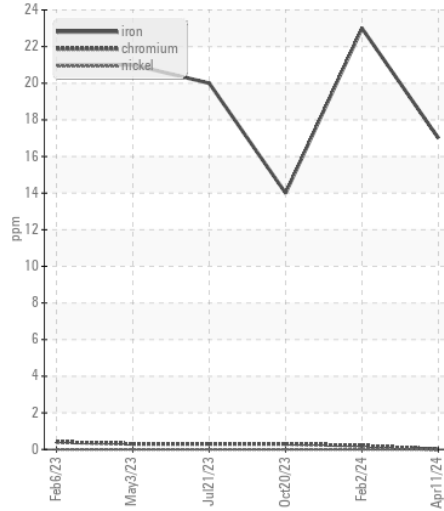
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>5</b>	0	3
Boron	ppm	ASTM D5185m		<b>165</b>	201	191
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	6	0
Molybdenum	ppm	ASTM D5185m		<b>222</b>	353	257
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>809</b>	1104	852
Calcium	ppm	ASTM D5185m		<b>1388</b>	1614	1452
Phosphorus	ppm	ASTM D5185m		<b>815</b>	915	911
Zinc	ppm	ASTM D5185m		<b>984</b>	1297	1105
Sulfur	ppm	ASTM D5185m		<b>3359</b>	3587	3152
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.2</b>	17.4	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.6</b>	7.5	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.5</b>	13.4	13.8

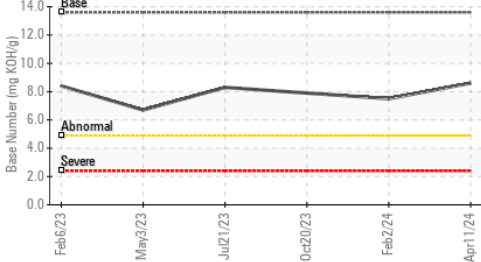
**FT-IR (Direct Trend)**



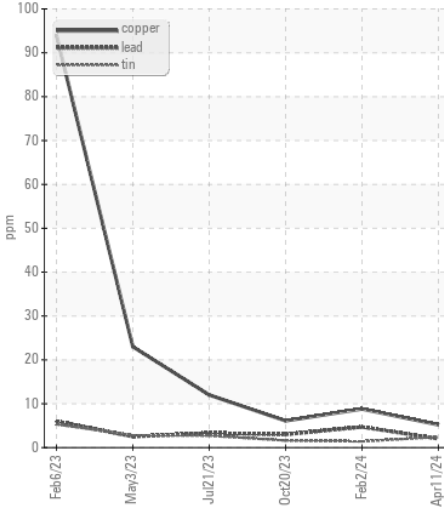
**Ferrous Alloys**



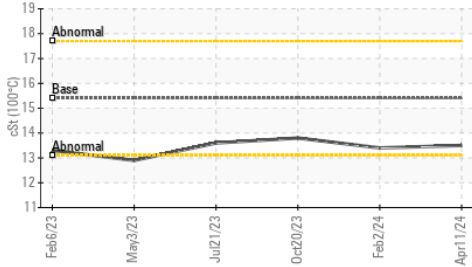
**Base Number**



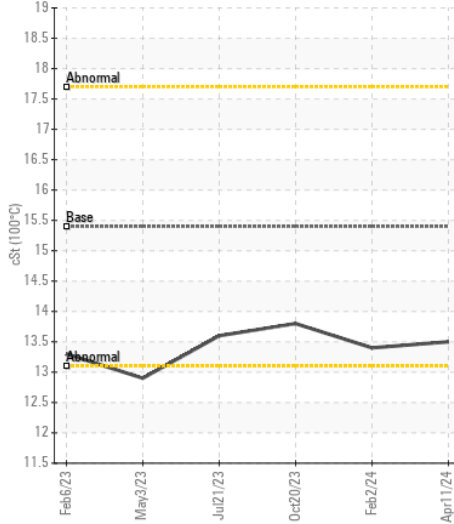
**Non-ferrous Metals**



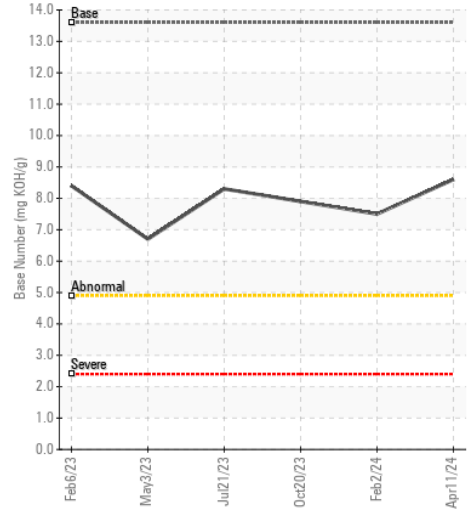
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WE0006841 **Received** : 16 Apr 2024  
**Lab Number** : 06150152 **Tested** : 17 Apr 2024  
**Unique Number** : 10980230 **Diagnosed** : 17 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**WARRIOR TRACTOR AND EQUIPMENT - NORTHPORT**  
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 US 35476  
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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)