



# OIL ANALYSIS REPORT

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

Machine Id  
**JOHN DEERE 844L 1DW844LXVNL715689**  
 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>WE0007507</b>	WE0005263	WE0005356
Sample Date		Client Info		<b>12 Jun 2024</b>	13 Mar 2024	09 Nov 2023
Machine Age	hrs	Client Info		<b>4488</b>	4003	3197
Oil Age	hrs	Client Info		<b>0</b>	500	0
Filter Age	hrs	Client Info		<b>0</b>	500	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>14</b>	12	14
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>6</b>	4	4
Lead	ppm	ASTM D5185m	>26	<b>5</b>	4	6
Copper	ppm	ASTM D5185m	>26	<b>4</b>	4	4
Tin	ppm	ASTM D5185m	>4	<b>2</b>	0	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	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.

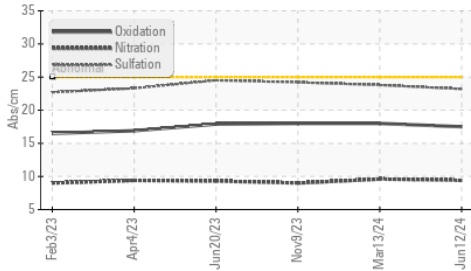
Silicon	ppm	ASTM D5185m	>22	<b>7</b>	5	7
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	1
Fuel	%	ASTM D3524	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.4</b>	9.6	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.2</b>	23.8	24.2
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

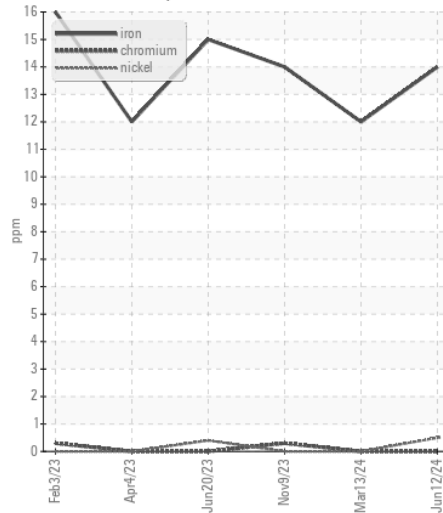
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>8</b>	7	3
Boron	ppm	ASTM D5185m		<b>136</b>	155	162
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>250</b>	233	262
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>854</b>	817	895
Calcium	ppm	ASTM D5185m		<b>1363</b>	1380	1376
Phosphorus	ppm	ASTM D5185m		<b>857</b>	765	918
Zinc	ppm	ASTM D5185m		<b>1013</b>	1076	1128
Sulfur	ppm	ASTM D5185m		<b>3464</b>	3467	3243
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.5</b>	18.0	18.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.0</b>	8.5	7.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.9</b>	13.2	13.4

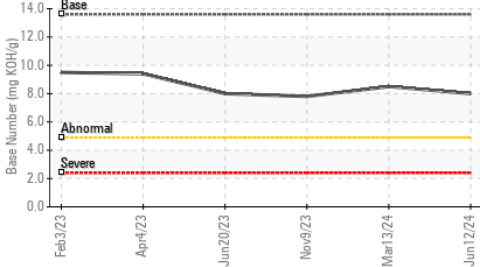
**FT-IR (Direct Trend)**



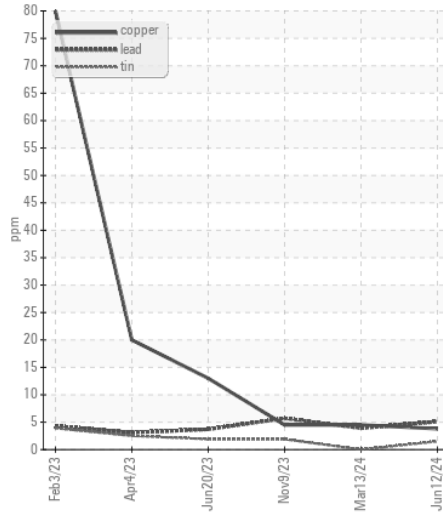
**Ferrous Alloys**



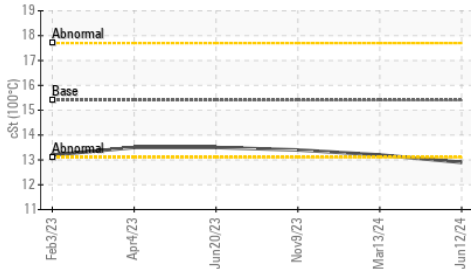
**Base Number**



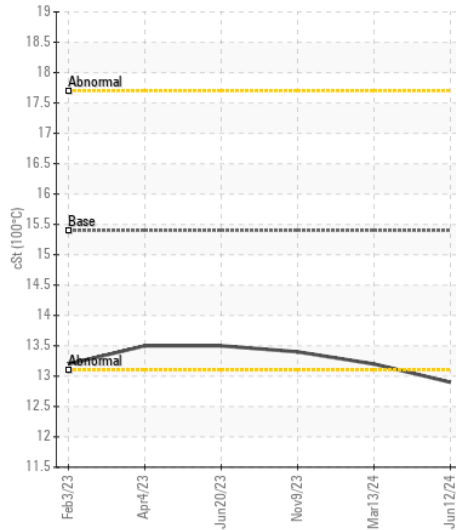
**Non-ferrous Metals**



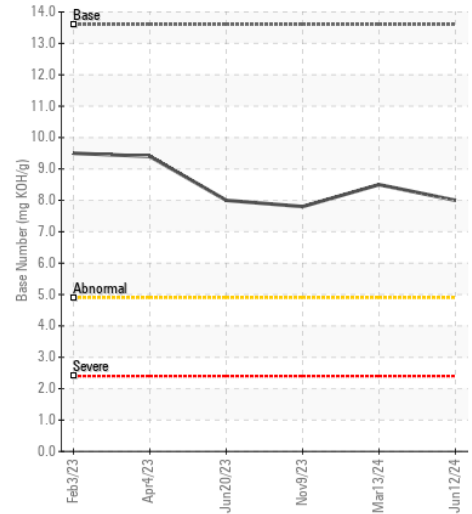
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WE0007507  
**Lab Number** : 06211455  
**Unique Number** : 11084319  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**WARRIOR TRACTOR AND EQUIPMENT - MONROEVILLE**  
 66 INDUSTRIAL PARK DR  
 MONROEVILLE, AL  
 US 36460  
 Contact: SCOTT WILLIAMSON  
 swilliamson@warriortractor.com

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)

T: (251)575-7111

F: