

### **OIL ANALYSIS REPORT**

Sample Rating Trend

## NORMAL

# JOHN DEERE 843L 1DW843LBJLF708510

Diesel Engine

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

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### 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.

SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WE0007459	WE0000692	
Sample Date		Client Info		06 Jun 2024	15 Nov 2021	
Machine Age	hrs	Client Info		6639	1866	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>2.1	<1.0	<1.0	
Water		WC Method	>0.21	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	3	12	
Chromium	ppm	ASTM D5185m	>11	<1	<1	
Nickel	ppm	ASTM D5185m	>5	0	<1	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>31	4	2	
Lead	ppm	ASTM D5185m	>26	0	<1	
Copper	ppm	ASTM D5185m	>26	0	3	
Tin	ppm	ASTM D5185m	>4	0	<1	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		318	112	
Barium	ppm	ASTM D5185m		<1	0	
Molybdenum	ppm	ASTM D5185m		249	15	
Manganese	ppm	ASTM D5185m		0	<1	
Magnesium	ppm	ASTM D5185m		768	62	
Calcium	ppm	ASTM D5185m		1295	2315	
Phosphorus	ppm	ASTM D5185m		822	1005	
Zinc	ppm	ASTM D5185m		1009	1113	
Sulfur	ppm	ASTM D5185m		3127	2732	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	10	4	
Sodium	ppm	ASTM D5185m	>31	<1	2	
Potassium	ppm	ASTM D5185m	>20	2	16	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0	0.4	
Nitration	Abs/cm	*ASTM D7624	>20	5.8	8	
Sulfation	Abs/.1mm	*ASTM D7624	>30	20.0	21.3	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	17.1	
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	10.2	7.9	
6:46:36) Boy: 1	0 0					

Report Id: WARMONAL [WUSCAR] 06204442 (Generated: 07/05/2024 06:46:36) Rev: 1

Contact/Location: SCOTT WILLIAMSON - WARMONAL



3

30

25 Abs/cm

10

lov1

14.0 T Ba

Abnor Ser 0.0

20

19 18 Abno

cSt (100°C) Ba

-14

12 Nov15/21

Abnormal 13

0.21 (mg K0H/g) 0.8 (mg K0H/g) 0.9 (mg K0H/g)

Base Number

Viscosity @ 100°C

FT-IR (Direct Trend)

Oxidation

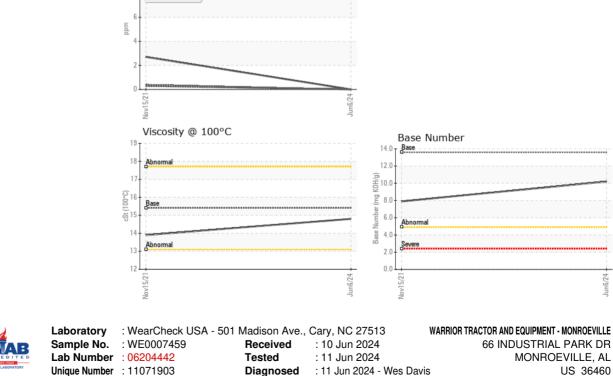
Vitratior Sulfation

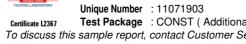
### **OIL ANALYSIS REPORT**

VISUAL		method	limit/base	current	history1	history
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPERTIES		method	limit/base	current	history1	history
Visc @ 100°C	cSt	ASTM D445	15.4	14.8	13.9	
	cSt	ASTM D445	15.4	14.8	13.9	
Visc @ 100°C	cSt	ASTM D445	15.4	14.8	13.9	
Visc @ 100°C GRAPHS Ferrous Alloys	cSt	ASTM D445	15.4	14.8	13.9	
Visc @ 100°C GRAPHS Ferrous Alloys	cSt	ASTM D445	15.4	14.8	13.9	
Visc @ 100°C GRAPHS Ferrous Alloys	cSt	ASTM D445	15.4	14.8	13.9	
Visc @ 100°C GRAPHS Ferrous Alloys	cSt	ASTM D445	15.4	14.8	13.9	
Visc @ 100°C GRAPHS Ferrous Alloys	cSt	ASTM D445	15.4	14.8	13.9	
Visc @ 100°C GRAPHS Ferrous Alloys	cSt	ASTM D445	15.4	14.8	13.9	
Visc @ 100°C GRAPHS Ferrous Alloys	cSt	ASTM D445	15.4	14.8	13.9	

n6/24







Test Package : CONST (Additional Tests: TBN) 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)

Contact/Location: SCOTT WILLIAMSON - WARMONAL

F:

T: (251)575-7111

Contact: SCOTT WILLIAMSON

swilliamson@warriortractor.com