

## [COUNTY OF WARREN] Machine Id JOHN DEERE 50G 1FF050GXTJH287986

## Component Diesel Engine

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

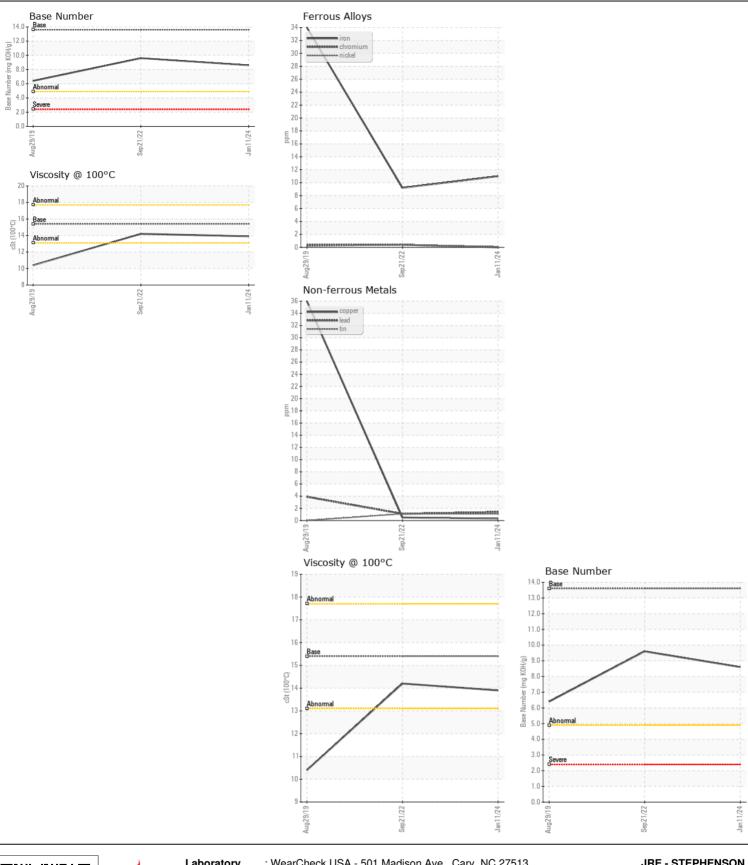
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (	GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0195670	JR0138308	JR0015757
	Sample Date		Client Info		11 Jan 2024	21 Sep 2022	29 Aug 2019
	Machine Age	hrs	Client Info		2330	1829	520
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR	Iron	ppm	ASTM D5185m	>51	11	9	34
	Chromium	ppm	ASTM D5185m	>11	0	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	<1	<1
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>31	5	4	6
	Lead	ppm	ASTM D5185m	>26	1	1	4
	Copper	ppm	ASTM D5185m	>26	<1	<1	36
	Tin	ppm	ASTM D5185m	>4	1	1	0
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	12	10	39
	Potassium	ppm	ASTM D5185m		2	2	<u> </u>
There is no indication of any contamination in the oil.	Fuel	pp	WC Method		- <1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.2	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	9.3	9.6	8.8
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	23.5	18.4
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	1	2	13
	Boron	ppm	ASTM D5185m		209	249	160
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	3
	Molybdenum	ppm	ASTM D5185m		249	247	163
	Manganese	ppm	ASTM D5185m		<1	<1	1
	Magnesium	ppm	ASTM D5185m		819	808	12
	Calcium	ppm	ASTM D5185m		1368	1426	2253
	Phosphorus	ppm	ASTM D5185m		930	929	542
	Zinc	ppm	ASTM D5185m		1091	1112	752
	Sulfur	ppm	ASTM D5185m		2976	3695	2058
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	18.4	14
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	9.6	6.4
	Vier @ 10000	- 01		4 - 4	10.0	110	10.4

Visc @ 100°C cSt ASTM D445 15.4

14.2

13.9

10.4



**JRE - STEPHENSON** Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : JR0195670 Recieved : 17 Jan 2024 245 YARDMASTER COURT Lab Number : 06063282 Diagnosed : 18 Jan 2024 STEPHENSON, VA Unique Number : 10834664 Diagnostician : Wes Davis US 22656-1761 Test Package : CONST (Additional Tests: TBN) Contact: PHIL DAUGHERTY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. pdaugherty@jamesriverequipment.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: x: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (540)693-2588

Contact/Location: PHIL DAUGHERTY - JAMWIN