

Machine Id JOHN DEERE 850L 1T0850LXJMF395619 Component Diesel Engine

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		JR0212970	JR0173466	JR0153069
	Sample Date		Client Info		15 Apr 2024	23 Aug 2023	08 Nov 2022
	Machine Age	hrs	Client Info		2960	2542	1954
	Oil Age	hrs	Client Info		418	588	1954
	Filter Age	hrs	Client Info		418	588	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	ABNORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>51	35	▲ 52	41
	Chromium	ppm	ASTM D5185m		<1	1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		4	5	4
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>31	6	6	4
	Lead	ppm	ASTM D5185m		<1	0	1
	Copper	ppm	ASTM D5185m	>26	4	8	11
	Tin	ppm	ASTM D5185m	>4	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	10	12	11
OONTAILINATION	Potassium	ppm	ASTM D5185m		3	<1	0
There is no indication of any contamination in the oil.	Fuel	pp	WC Method	>2.1	<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.7	0.7	0.7
	Nitration	Abs/cm	*ASTM D7624	>20	9.4	9.6	10.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	23.2	24.9
	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	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	<1	3	2
	Boron	ppm	ASTM D5185m		198	198	185
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		277	259	270
	Manganese	ppm	ASTM D5185m		0	<1	<1
	Magnesium	ppm	ASTM D5185m		834	870	835
	Calcium	ppm	ASTM D5185m		1516	1741	1461
	Phosphorus	ppm	ASTM D5185m		1003	999	868
	Zinc	ppm	ASTM D5185m		1145	1224	1107
	Sulfur	ppm	ASTM D5185m		3026	3791	3194
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	17.2	18.7
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.4	9.3	10

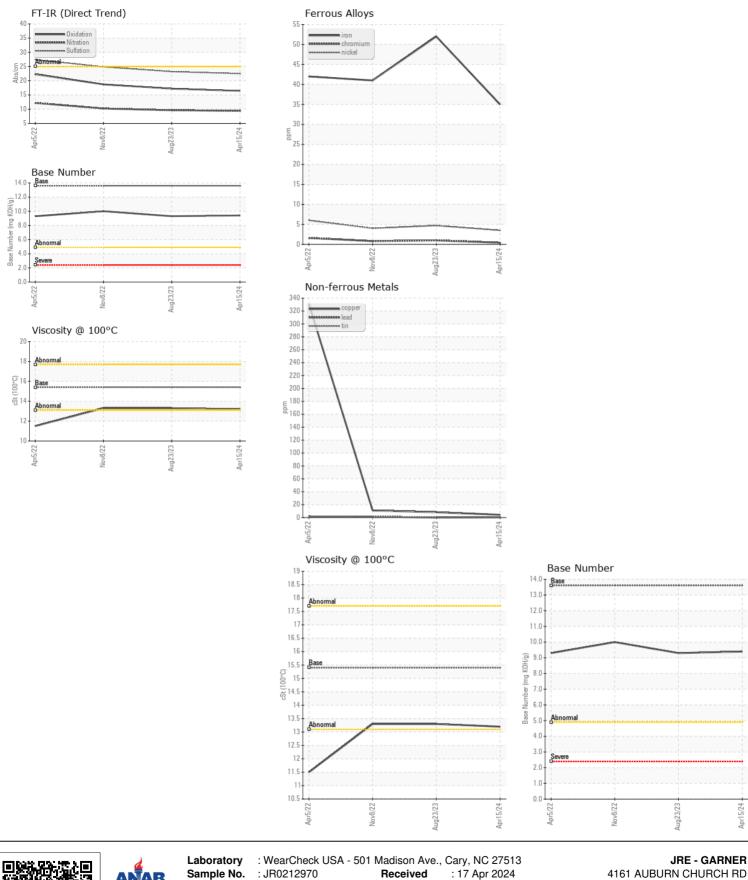
Visc @ 100°C cSt

ASTM D445 15.4

13.3

13.3

13.2



Sample No. : JR0212970 Received : 17 Apr 2024 Lab Number : 06151733 Tested : 18 Apr 2024 GARNER, NC Unique Number : 10981811 Diagnosed : 19 Apr 2024 - Sean Felton US 27529 Test Package : CONST (Additional Tests: TBN) Contact: RALEIGH SHOP Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. sean.betts@jamesriverequipment.com;catherine.anastasio@wearcheck.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)614-2260 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)779-5432

Submitted By: JOHN GUASCHINO Page 2 of 2