

## Store 3 - Norton

## JOHN DEERE 331G 1T0331GMEHF316759

## **Diesel Engine**

## JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (3 GAL)

	J GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		LEC0041575	LEC0039456	LEC0021500
	Sample Date		Client Info		18 Jun 2024	24 Mar 2023	11 Aug 2021
	Machine Age	hrs	Client Info		2641	2257	1766
	Oil Age	hrs	Client Info		384	491	418
	Filter Age	hrs	Client Info		384	491	418
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>51	39	50	20
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>5	0	0	0
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	<1
	Aluminum	ppm	ASTM D5185m	>31	4	6	<1
	Lead	ppm	ASTM D5185m	>26	0	<1	<1
	Copper	ppm	ASTM D5185m	>26	3	5	5
	Tin	ppm	ASTM D5185m	>4	0	<1	<1
	Vanadium	ppm	ASTM D5185m		0	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>!20	14	17	10
	Potassium	ppm	ASTM D5185m	>20	<1	2	2
There is no indication of any contamination in the oil.	Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
	Water		WC Method	>0.21	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.6	0.5	0
	Nitration	Abs/cm	*ASTM D7624	>20	11.2	11.5	10.5
	Sulfation	Abs/.1mm	*ASTM D7415	>30	25.2	26.2	27.6
	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	NORM
	Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	2	6	2
	Boron	ppm	ASTM D5185m		163	193	297
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		<1	3	<1
	Molybdenum	ppm	ASTM D5185m		248	254	282
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		836	825	864
	Calcium	ppm	ASTM D5185m		1537	1482	1517
	Phosphorus	ppm	ASTM D5185m		922	887	913
	Zinc	ppm	ASTM D5185m		1125	1083	1119
	Sulfur	ppm	ASTM D5185m		3392	3034	2610
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	21.2	20.7
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	8.8	9.9
	Vier @ 10000	- 01		4 - 4		107	10.0

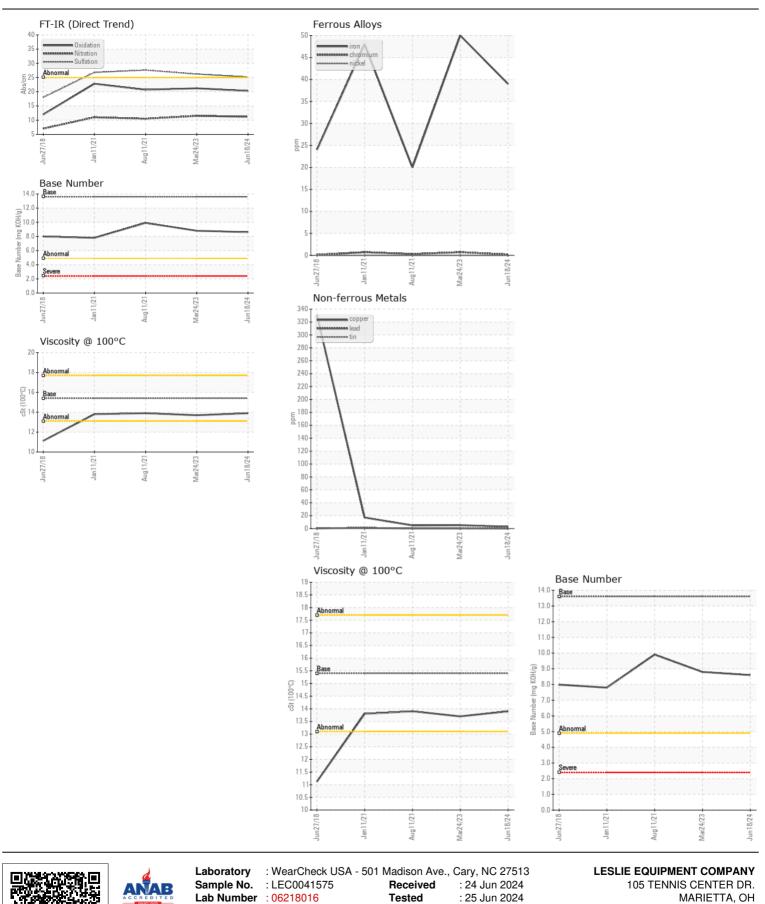
Visc @ 100°C cSt

13.7

13.9

13.9

ASTM D445 15.4



Unique Number : 11096213 Diagnosed : 25 Jun 2024 - Wes Davis US 45750-9765 Test Package : CONST (Additional Tests: TBN) Contact: LEANNE KENDALL Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. KendalLeanne@lec1.com \* - 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) F: (740)373-5570

Submitted By: STORE5 - CROSS LANES - NEIL BALL Page 2 of 2

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