

JOHN DEERE 345G 1FF345GXKMF020746 Component Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (50 QTS)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0226608	JR0195795	JR0184037
	Sample Date		Client Info		16 Jul 2024	29 Nov 2023	07 Sep 2023
	Machine Age	hrs	Client Info		4638	2941	2449
	Oil Age	hrs	Client Info		1697	492	459
	Filter Age	hrs	Client Info		0	0	459
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed Sample Status		Client Info		Changed NORMAL	Changed ATTENTION	Changed NORMAL
WEAR	Iron	ppm	ASTM D5185m	>51	5	3	4
	Chromium	ppm	ASTM D5185m		<1	0	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		3	1	3
	Lead	ppm	ASTM D5185m		<1	0	<1
	Copper	ppm	ASTM D5185m		2	<1	<1
	Tin	ppm	ASTM D5185m		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	>22	6	4	6
	Potassium	ppm	ASTM D5185m	>20	3	0	3
There is no indication of any contamination in the oil.	Fuel		WC Method	>2.1	<1.0	0.3	<1.0
	Water		WC Method	>0.21	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	7.5	5.8	7.1
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	20.1	20.0
	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	2	2	2
	Boron	ppm	ASTM D5185m		228	147	273
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	0	0
	Molybdenum	ppm	ASTM D5185m		237	131	255
	Manganese	ppm	ASTM D5185m		<1	<1	1
	Magnesium	ppm	ASTM D5185m		881	477	881
	Calcium	ppm	ASTM D5185m		1623	2332	1541
	Phosphorus	ppm	ASTM D5185m		987	965	939
	Zinc	ppm	ASTM D5185m		1167	1110	1206
	Sulfur	ppm	ASTM D5185m		3708	3074	4086
	Oxidation	Abs/.1mm	*ASTM D7414		14.9	13.5	14.5
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7	8.9	8.9

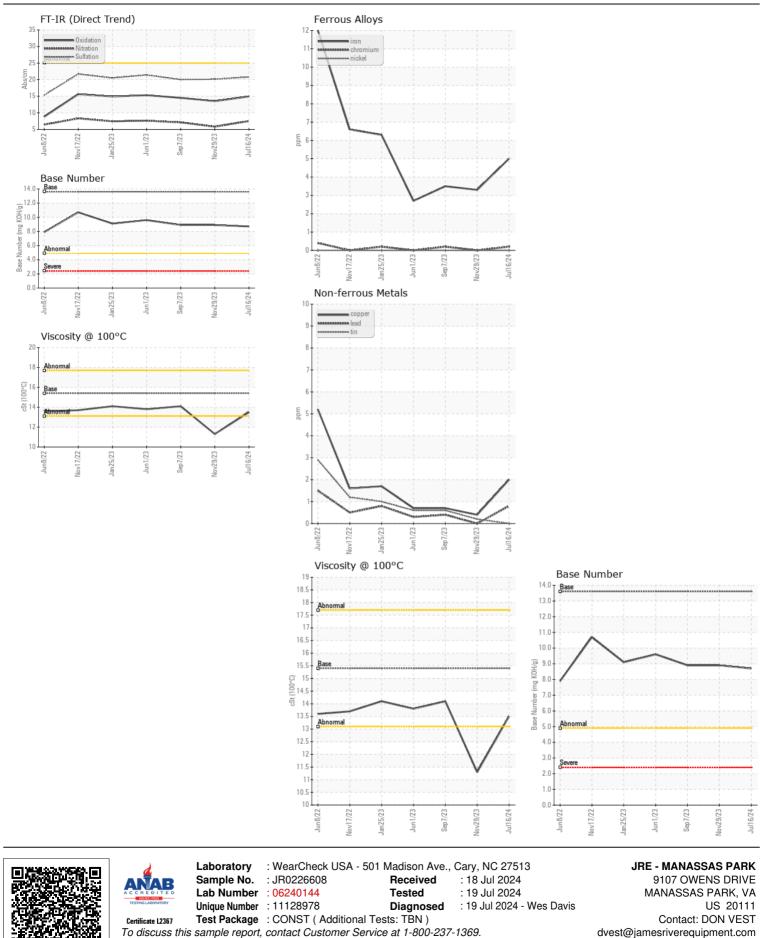
Visc @ 100°C cSt

ASTM D445 15.4

11.3

14.1

13.5



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)

Submitted By: TECHNICIAN ACCOUNT Page 2 of 2

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