

## [16W16119] Machine Id JOHN DEERE 333G 1T0333GMAPF434848 Component Diesel Engine Fluid JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (3 GAL)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: 16W16119 )	Sample Number		Client Info		JR0207129	JR0153970	
	Sample Date		Client Info		25 Apr 2024	28 Apr 2023	
	Machine Age	hrs	Client Info		965	286	
	Oil Age	hrs	Client Info		679	286	
	Filter Age	hrs	Client Info		679	286	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ABNORMAL	ABNORMAL	
VEAR	Iron	ppm	ASTM D5185m	>51	66	29	
The copper level has decreased, but is still abnormal. All other metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>11	2	<1	
	Nickel	ppm	ASTM D5185m		<1	0	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	0	<1	
	Aluminum	ppm	ASTM D5185m		10	6	
	Lead	ppm	ASTM D5185m		2	0	
	Copper	ppm	ASTM D5185m		_ <b>7</b> 1	▲ 224	
	Tin	ppm	ASTM D5185m		1	<1	
	Vanadium	ppm	ASTM D5185m	21	<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
		Scalai	visuai			NONL	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	22	<b>5</b> 3	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3	<1	
	Fuel		WC Method	>2.1	<1.0	<1.0	
	Water		WC Method	>0.21	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.8	0.3	
	Nitration	Abs/cm	*ASTM D7624	>20	12.6	10.0	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	29.0	26.1	
	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	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	4	9	
	Boron	ppm	ASTM D5185m		63	201	
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		3	<1	
	Molybdenum	ppm	ASTM D5185m		283	256	
	Manganese	ppm	ASTM D5185m		2	2	
	Magnesium	ppm	ASTM D5185m		959	798	
	Calcium		ASTM D5185m		959 1903	1880	
	Phosphorus	ppm	ASTM D5185m		1903	891	
	Zinc	ppm	ASTM D5185m		1027	1141	
		ppm					
	Sulfur	ppm	ASTM D5185m		2951	3525	

Oxidation

Visc @ 100°C cSt

25.8

6.4

13.1

27.7

8.1

14.8

Abs/.1mm \*ASTM D7414 >25

ASTM D445 15.4

Base Number (BN) mg KOH/g ASTM D2896 13.6



