

Machine Id JOHN DEERE 4045 U156189 Component

Component Diesel Engine

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

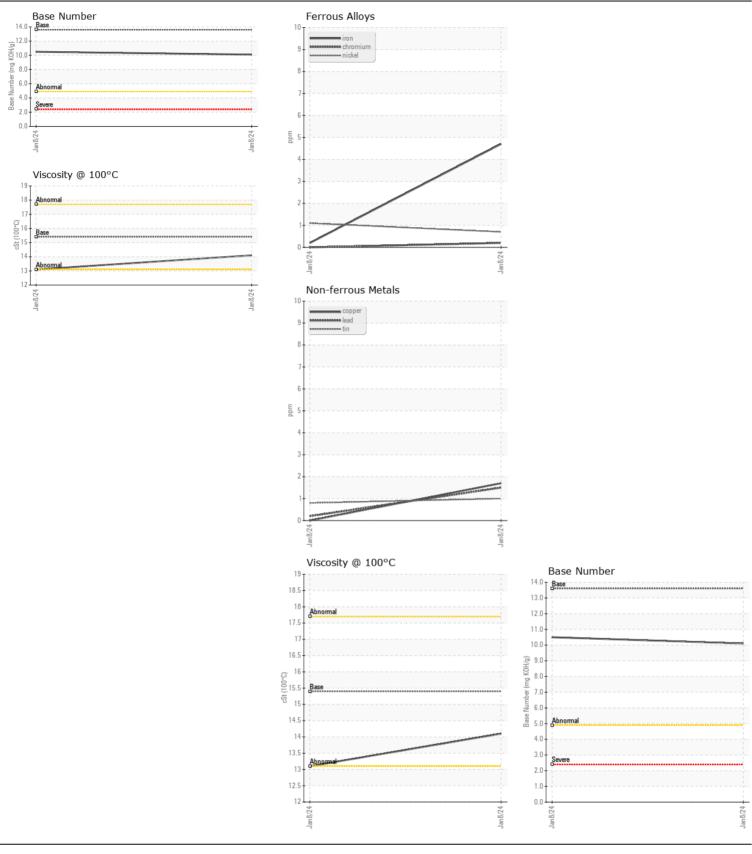
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (<u> </u>						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0200287	JR0200264	
	Sample Date		Client Info		08 Jan 2024	08 Jan 2024	
	Machine Age	hrs	Client Info		434	434	
	Oil Age	hrs	Client Info		0	434	
	Filter Age	hrs	Client Info		0	434	
	Oil Changed		Client Info		Changed	Not Changd	
	Filter Changed		Client Info		Changed	Not Changd	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>51	<1	5	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>11	0	<1	
	Nickel	ppm	ASTM D5185m	>5	1	<1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>31	4	2	
	Lead	ppm	ASTM D5185m		<1	2	
	Copper	ppm	ASTM D5185m	>26	0	2	
	Tin	ppm	ASTM D5185m	>4	<1	1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	7	9	
	Potassium	ppm	ASTM D5185m		0	2	
There is no indication of any contamination in the oil.	Fuel	le le	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0	0	
	Nitration	Abs/cm	*ASTM D7624		5.4	5.0	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	22.0	
	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	0	0	
	Boron	ppm	ASTM D5185m		254	87	
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	
	Molybdenum	ppm	ASTM D5185m		212	53	
	Manganese	ppm	ASTM D5185m		<1	1	
	Magnesium	ppm	ASTM D5185m		805	501	
	Calcium	ppm	ASTM D5185m		1306	1612	
	Phosphorus	ppm	ASTM D5185m		875	829	
	Zinc	ppm	ASTM D5185m		1094	1082	
	Sulfur	ppm	ASTM D5185m		3205	3123	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.0	19.4	
	Base Number (BN)				10.1	10.5	
		0		45.4		10.1	

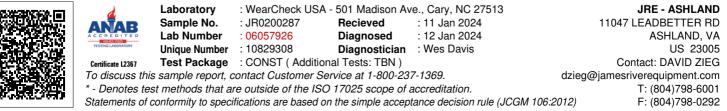
Visc @ 100°C cSt

ASTM D445 15.4

13.1

14.1





Contact/Location: DAVID ZIEG - JAMASH

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