

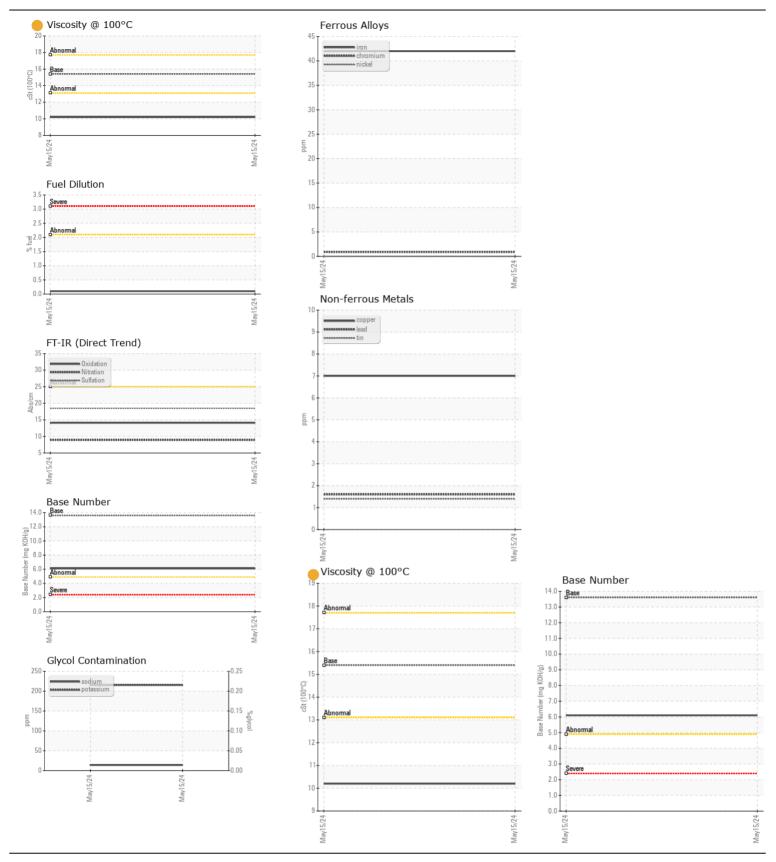
Machine Id JOHN DEERE 60P 1FF060PALPJ000215 Component Diesel Engine Fluid JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

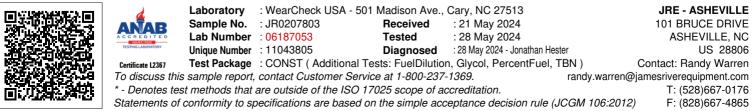
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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		JR0207803		
	Sample Date		Client Info		15 May 2024		
	Machine Age	hrs	Client Info		711		
	Oil Age	hrs	Client Info		711		
	Filter Age	hrs	Client Info		711		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR Metal levels are typical for a new component breaking in.	Iron	nnm	ASTM D5185m	<u>51</u>	42		
	Chromium	ppm ppm	ASTM D5185m		42 <1		
	Nickel		ASTM D5185m		0		
	Titanium	ppm ppm	ASTM D5185m	25	ہ <1		
	Silver	ppm	ASTM D5185m	-3	0		
	Aluminum	ppm	ASTM D5185m		6		
	Lead		ASTM D5185m		2		
	Copper	ppm ppm	ASTM D5185m		7		
	Tin	ppm	ASTM D5185m		1		
	Vanadium	ppm	ASTM D5185m	27	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION Sodium and/or potassium levels are high. Fuel content negligible. Test for glycol is negative.	Silicon	ppm	ASTM D5185m	>22	55		
	Potassium	ppm	ASTM D5185m	>20	🔺 215		
	Fuel	%	ASTM D3524	>2.1	0.1		
	Water		WC Method	>0.21	NEG		
	Glycol	%	*ASTM D2982		NEG		
	Soot %	%	*ASTM D7844	>3	0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	8.9		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.21	NEG		
FLUID CONDITION	Sodium	nnm	ASTM D5185m	<u>_</u> 31	14		
	-	ppm	ASTM D5185m	>01			
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron Barium	ppm	ASTM D5185m		209 3		
	Molybdenum	ppm	ASTM D5185m		188		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm ppm	ASTM D5185m		30		
	Calcium		ASTM D5185m		2305		
	Phosphorus	ppm ppm	ASTM D5185m		685		
	Zinc	ppm	ASTM D5185m		818		
	Sulfur	ppm	ASTM D5185m		3139		
	Oxidation	Abs/.1mm	*ASTM D5105111	>25	14.1		
	Base Number (BN)				6.1		
	Dase Nulliber (DIN)	IIIY NOR/9	AG TWI D2090	10.0	0.1		

Visc @ 100°C cSt

ASTM D445 15.4

10.2





Contact/Location: Randy Warren - VANASH Page 2 of 2