

JOHN DEERE 135P 1FF135PACPF000871

Diesel Engine

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

	MAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0209217		
	Sample Date		Client Info		21 Apr 2024		
	Machine Age	hrs	Client Info		452		
	Oil Age	hrs	Client Info		452		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>51	8		
	Chromium	ppm	ASTM D5185m		0		
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m	20	0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m	>26	- <1		
	Copper	ppm	ASTM D5185m		16		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	17		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3		
	Fuel	%	ASTM D3524	>2.1	<1.0		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	6.9		
	Sulfation	Abs/.1mm	*ASTM D7415		16.2		
	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	ppm	ASTM D5185m	>31	2		
	Boron	ppm	ASTM D5185m		205		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		2		
	Molybdenum	ppm	ASTM D5185m		41		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		135		
	Calcium	ppm	ASTM D5185m		2127		
	Phosphorus	ppm	ASTM D5185m		1007		
	Zinc	ppm	ASTM D5185m		1230		
	Sulfur	ppm	ASTM D5185m		3239		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	10.4		
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.5		
	Visc @ 100°C	cSt	ASTM D445		12.0		
		•					



