

JOHN DEERE 160P FT4/10`2''L-ARM/28''/A (S/N 000398) Component Diesel Engine

{not provided} (--- GAL)

			N/atla!	L Constraint	0	L Bake word	LEaters
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. We recommend an early resample to monitor this condition.	Sample Number		Client Info		JR0220366		
	Sample Date		Client Info		03 Jul 2024		
	Machine Age	hrs	Client Info		1000		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>51	46		
	Chromium	ppm	ASTM D5185m		2		
Bearing and/or bushing wear is indicated.	Nickel	ppm	ASTM D5185m		1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m		12		
	Lead	ppm	ASTM D5185m		<u> </u>		
	Copper	ppm	ASTM D5185m		▲ 55		
	Tin	ppm	ASTM D5185m	>4	3		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm			13		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		8		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.4		
	Nitration	Abs/cm	*ASTM D7624	>20	11.3		
	Sulfation	Abs/.1mm	*ASTM D7415		27.1		
	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	8		
	Boron	ppm	ASTM D5185m		64		
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		0		
	Molybdenum	ppm	ASTM D5185m		243		
	Manganese	ppm	ASTM D5185m		5		
	Magnesium	ppm	ASTM D5185m		902		
	Calcium	ppm	ASTM D5185m		1485		
	Phosphorus	ppm	ASTM D5185m		968		
	Zinc	ppm	ASTM D5185m		1196		
	Sulfur	ppm	ASTM D5185m		2990		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	23.4		
	Base Number (BN)			0	8.3		
		ing toring	.10111102000		0.0		

Visc @ 100°C cSt

ASTM D445

12.6



