

## Store 4 - Fairmont

### JOHN%252525252525252 1FF210GXLNF530390

**Diesel Engine** 

### JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (6 GAL)

#### RECOMMENDATION

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.	Sample Number	00111	Client Info		LEC0045276		
	Sample Date		Client Info		04 Oct 2023		
	Machine Age		Client Info		527		
	Oil Age		Client Info		527		
	Filter Age		Client Info		527		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
	·····						
WEAR The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m		71		
	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m	>5	10		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		5		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		<u> </u>		
	Tin	ppm	ASTM D5185m	>4	2		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION Fuel content negligible. There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>!20	11		
	Potassium	ppm	ASTM D5185m		4		
	Fuel	%	ASTM D3524		0.4		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.8		
	Nitration	Abs/cm	*ASTM D7624	>20	10.2		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	25.2		
	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	8		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		125		
	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m ASTM D5185m		198		
	Manganese Magnesium	ppm			5 707		
	Calcium	ppm	ASTM D5185m ASTM D5185m		1727		
	Phosphorus	ppm	ASTM D5185m		960		
	Zinc	ppm	ASTM D5185m		960 1206		
	Sulfur	ppm ppm	ASTM D5185m		2919		
	Oxidation	Abs/.1mm	*ASTM D5185111 *ASTM D7414	>25	2919		
	Base Number (BN)				8.3		
				10.0	0.3		

ASTM D445 15.4

11.6

Visc @ 100°C cSt

# **FLUID CONDITION**



