

Machine Id JOHN DEERE B07772 Component Diesel Engine

{not provided} (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

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.

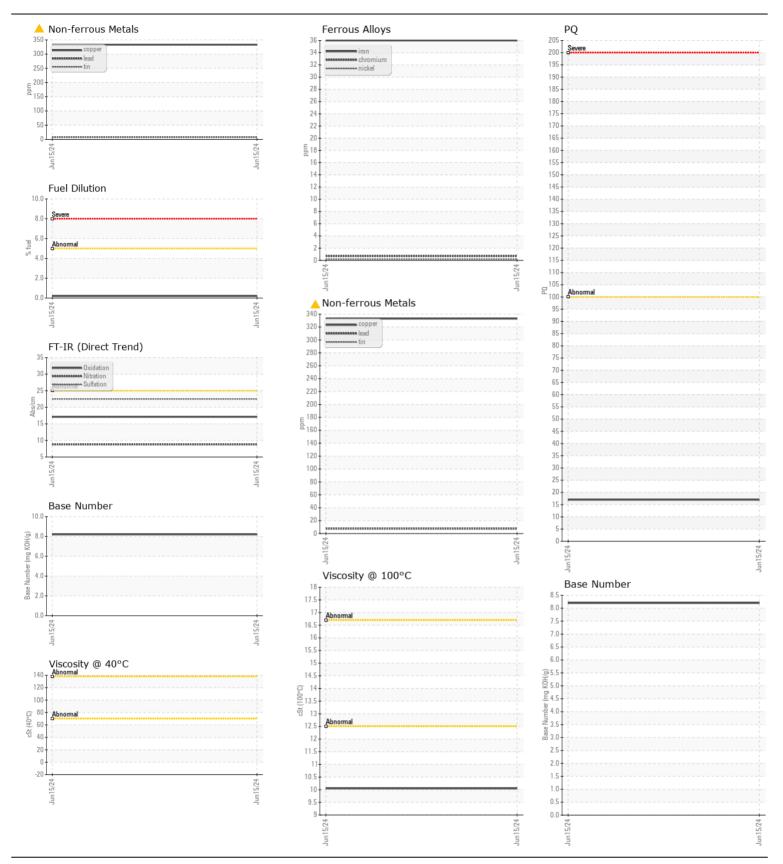
CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0205812		
Sample Date		Client Info		15 Jun 2024		
Machine Age	hrs	Client Info		547		
Oil Age	hrs	Client Info		547		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
					- <mark></mark>	
PQ		ASTM D8184		17		
Iron	ppm	ASTM D5185m	>100	36		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	5		
Lead	ppm	ASTM D5185m	>40	8		
Copper	ppm	ASTM D5185m	>330	<b>A</b> 333		
Tin	ppm	ASTM D5185m	>15	7		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
					- <mark></mark>	
Silicon	ppm	ASTM D5185m	>25	15		
Potassium	ppm	ASTM D5185m	>20	4		
Fuel	%	ASTM D3524	>5	0.2		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844	>3	0.4		
Nitration	Abs/cm	*ASTM D7624	>20	8.8		
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5		
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	>0.2	NEG		
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Sodium	ppm	ASTM D5185m		5		
Boron	ppm	ASTM D5185m		136		
Barium	ppm	ASTM D5185m		1		
Molybdenum	ppm	ASTM D5185m		248		
Manganese	ppm	ASTM D5185m		11		
Magnesium	ppm	ASTM D5185m		765		
Calcium	ppm	ASTM D5185m		1305		
Phosphorus	ppm	ASTM D5185m		837		
Zinc	ppm	ASTM D5185m		1023		
Sulfur	ppm	ASTM D5185m		2965		
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1		
Base Number (BN)	mg KOH/g	ASTM D2896		8.2		
Visc @ 100°C	cSt	ASTM D445		10.05		
Viscosity Index (VI)	Scale	ASTM D2270		142		
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# FLUID CONDITION

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.



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - CHARLOTTE** Sample No. : JR0205812 Received 9550 STATESVILLE ROAD : 18 Jun 2024 Lab Number : 06213772 Tested : 24 Jun 2024 CHARLOTTE, NC : 24 Jun 2024 - Jonathan Hester Unique Number : 11086636 Diagnosed US 28269 Test Package : CONST (Additional Tests: FUELDILUTION, KV40, PercentFuel, PQ, TBNp/htact: CHARLOTTE SHOP Certificate L2367 myoung@jamesriverequipment.com To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (704)597-0211 F: (704)596-6198 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)