WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

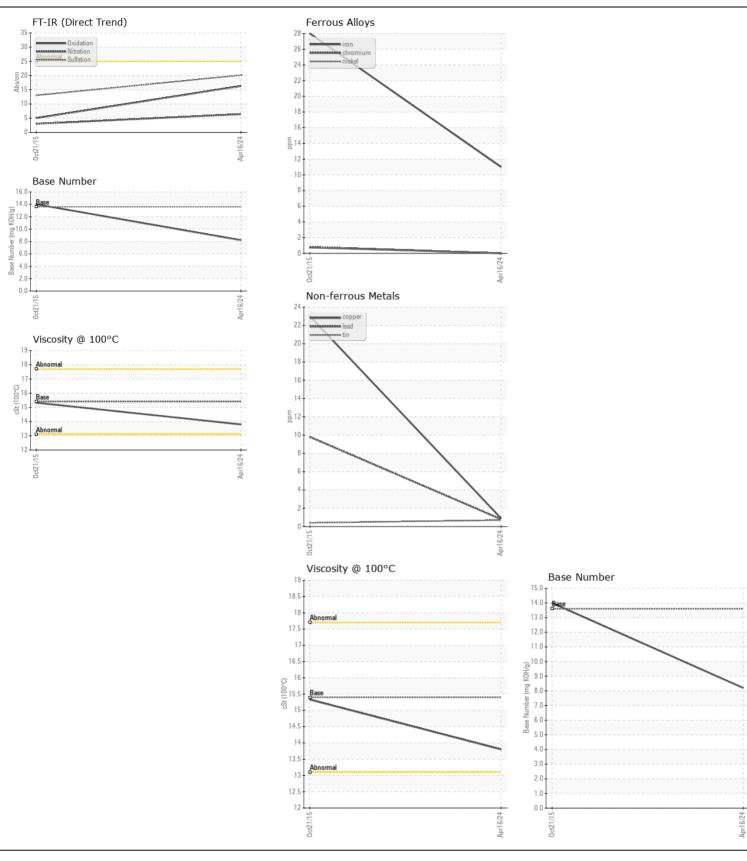
Machine Id

JOHN DEERE 770D DW770DX611297

Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (8 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0211994	JRMC410413	
	Sample Date		Client Info		16 Apr 2024	21 Oct 2015	
	Machine Age	hrs	Client Info		7494	7055	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	11	28	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	0	<1	
	Nickel	ppm	ASTM D5185m	>4	0	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>20	2	5	
	Lead	ppm	ASTM D5185m	>40	<1	10	
	Copper	ppm	ASTM D5185m	>330	<1	23	
	Tin	ppm	ASTM D5185m	>15	<1	<1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	6	
	Potassium	ppm	ASTM D5185m	>20	6	3	
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.1	0	
	Nitration	Abs/cm	*ASTM D7624	>20	6.4	3.	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	13.	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	4	
	Boron	ppm	ASTM D5185m		236	104	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		65	152	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		221	551	
	Calcium	ppm	ASTM D5185m		2177	1707	
	Phosphorus	ppm	ASTM D5185m		999	889	
	Zinc	ppm	ASTM D5185m		1142	1004	
	Sulfur	ppm	ASTM D5185m		4143	3903	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	5.	
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.2	14.00	
	Visc @ 100°C	cSt	ASTM D445	45.4	13.8	15.33	







Laboratory Sample No.

: JR0211994 Lab Number : 06154140 Unique Number : 10989563

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested**

Diagnosed Test Package : CONST (Additional Tests: TBN)

: 19 Apr 2024 : 23 Apr 2024

: 23 Apr 2024 - Don Baldridge

JRE - ASHLAND 11047 LEADBETTER RD ASHLAND, VA US 23005

Contact: DAVID ZIEG dzieg@jamesriverequipment.com T: (804)798-6001

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (804)798-0292