WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

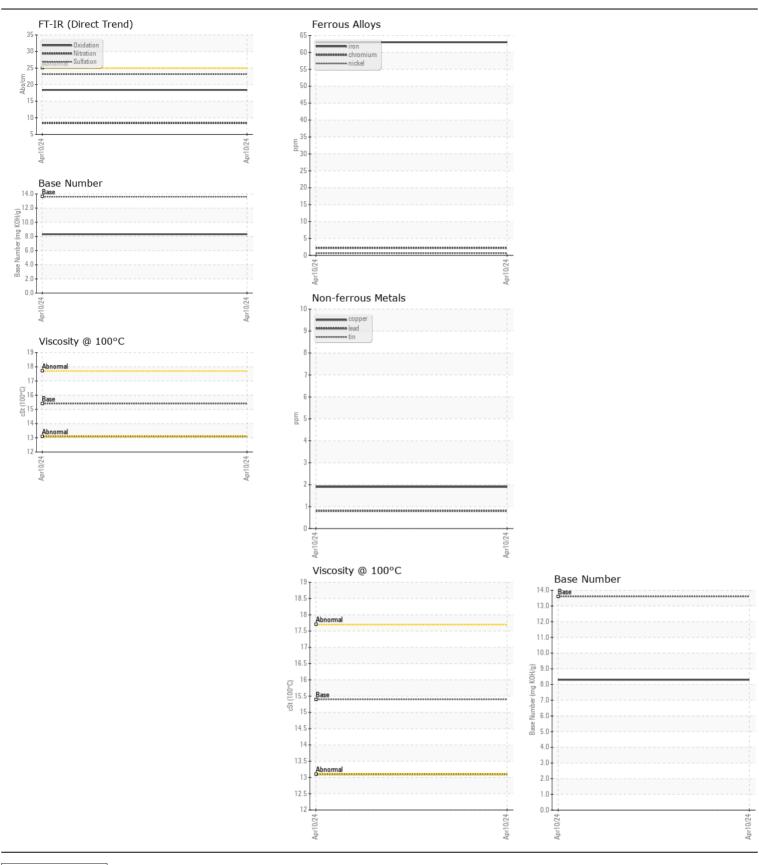
[W51110]

HITACHI 350G 1FF350GXTEF810244

Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0179731		
	Sample Date		Client Info		10 Apr 2024		
	Machine Age	hrs	Client Info		8119		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	63		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	2		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	8		
	Lead	ppm	ASTM D5185m	>40	<1		
	Copper	ppm	ASTM D5185m	>330	2		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
SOTTAIMITATION	Potassium	ppm	ASTM D5185m		1		
There is no indication of any contamination in the oil.	Fuel	PP	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	8.4		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1		
	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	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m		224		
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		<1		
	Molybdenum	ppm	ASTM D5185m		239		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		806		
	Calcium	ppm	ASTM D5185m		1592		
	Phosphorus	ppm	ASTM D5185m		925		
	Zinc	ppm	ASTM D5185m		1071		
	Sulfur	ppm	ASTM D5185m		3604		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4		
	Base Number (BN)				8.3		
	. ,	cSt	ASTM D445		13.1		





Certificate L2367

Laboratory Sample No.

: JR0179731 Lab Number : 06154139

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

Tested Unique Number : 10989562 Diagnosed Test Package : CONST (Additional Tests: TBN)

: 22 Apr 2024 - Wes Davis

: 19 Apr 2024

: 22 Apr 2024

JRE - ASHLAND 11047 LEADBETTER RD ASHLAND, VA US 23005

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

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.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (804)798-0292