WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

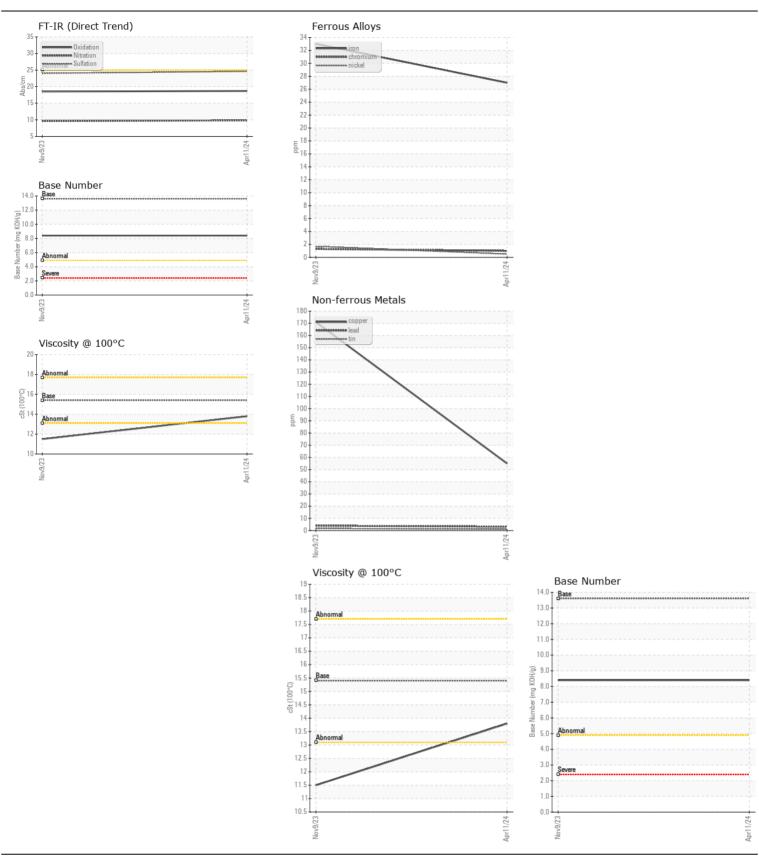
Machine Id

## **JOHN DEERE 650P 1T0650PAVPLX02650**

**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		JR0179250	JR0179826	
	Sample Date		Client Info		11 Apr 2024	09 Nov 2023	
	Machine Age	hrs	Client Info		940	470	
	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	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m	>51	27	33	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>11	1	1	
	Nickel	ppm	ASTM D5185m	>5	<1	2	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	0	<1	
	Aluminum	ppm	ASTM D5185m	>31	5	7	
	Lead	ppm	ASTM D5185m	>26	3	4	
	Copper	ppm	ASTM D5185m	>26	55	<u> </u>	
	Tin	ppm	ASTM D5185m	>4	1	2	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	9	9	
	Potassium	ppm	ASTM D5185m	>20	3	3	
There is no indication of any contamination in the oil.	Fuel		WC Method	>2.1	<1.0	0.4	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.8	0.6	
	Nitration	Abs/cm	*ASTM D7624		9.8	9.6	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	24.0	
	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	>0.21	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	2	5	
	Boron	ppm	ASTM D5185m		200	145	
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		2	3	
	Molybdenum	ppm	ASTM D5185m		273	222	
	Manganese	ppm	ASTM D5185m		1	4	
	Magnesium	ppm	ASTM D5185m		853	752	
	Calcium	ppm	ASTM D5185m		1523	1526	
	Phosphorus	ppm	ASTM D5185m		953	948	
	Zinc	ppm	ASTM D5185m		1129	1170	
	Sulfur	ppm	ASTM D5185m		3056	2938	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	18.5	
	Base Number (BN)		ASTM D2896	13.6	8.4	8.4	
	Visc @ 100°C	cSt	ASTM D445		13.8	11.5	







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0179250 Lab Number : 06148502

Unique Number : 10978580

Received : 15 Apr 2024 **Tested** Diagnosed Test Package : CONST (Additional Tests: TBN)

: 16 Apr 2024 : 16 Apr 2024 - Wes Davis

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 Contact/Location: DAVID ZIEG - JAMASH