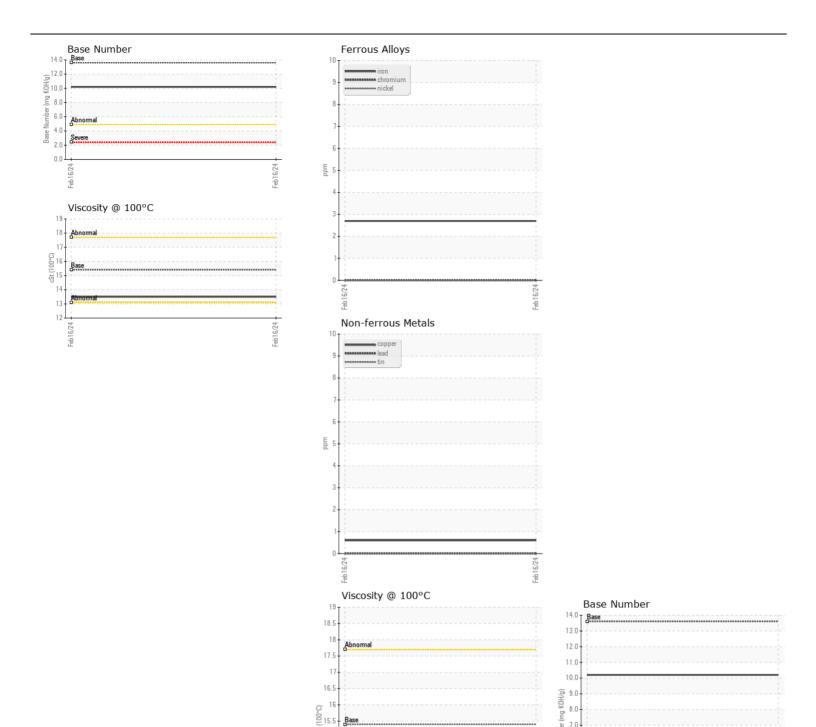
WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**

JOHN DEERE 3320 LV3320P427010

Component Diesel Engine

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

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (-	GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		JR0183668		
Resample at the next service interval to monitor.	Sample Date		Client Info		16 Feb 2024		
	Machine Age	hrs	Client Info		1434		
	Oil Age	hrs	Client Info		23		
	Filter Age	hrs	Client Info		23		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	<u>-51</u>	3		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0		
	Nickel		ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m	75	0		
	Silver	ppm	ASTM D5185m	~3	0		
	Aluminum	ppm	ASTM D5185m		4		
	Lead		ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		<1		
	Tin	ppm ppm	ASTM D5185m		0		
	Vanadium		ASTM D5185m	24	<1		
	White Metal	ppm scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
			Visuai	NONL	·····		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	7		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2		
	Fuel		WC Method	>2.1	<1.0		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624		6.0		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2		
	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	<1		
TEOID CONDITION	Boron	ppm	ASTM D5185m	701	267		
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		232		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		853		
	Calcium	ppm	ASTM D5185m		1464		
	Phosphorus	ppm	ASTM D5185m		872		
	Zinc	ppm	ASTM D5185m		1044		
	Sulfur	ppm	ASTM D5185m		3102		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.1		
	Base Number (BN)		ASTM D2896		10.2		
	Visc @ 100°C	cSt	ASTM D445		13.5		
					.3.0		







Laboratory Sample No.

Lab Number : 06098914 Unique Number : 10897144 Test Package : CONST (Additional Tests: TBN)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0183668

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13.5

12.5

Received **Tested** Diagnosed

: 23 Feb 2024 : 26 Feb 2024 : 26 Feb 2024 - Wes Davis

6.0

2.0

JRE - HARRISONBURG 1332 GARBERS CHURCH RD

HARRISONBURG, VA US 22801 Contact: ETHAN SHEETS

ETHAN.SHEETS@JAMESRIVEREQUIPMENT.COM T:

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)

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