**WEAR** CONTAMINATION **FLUID CONDITION** 

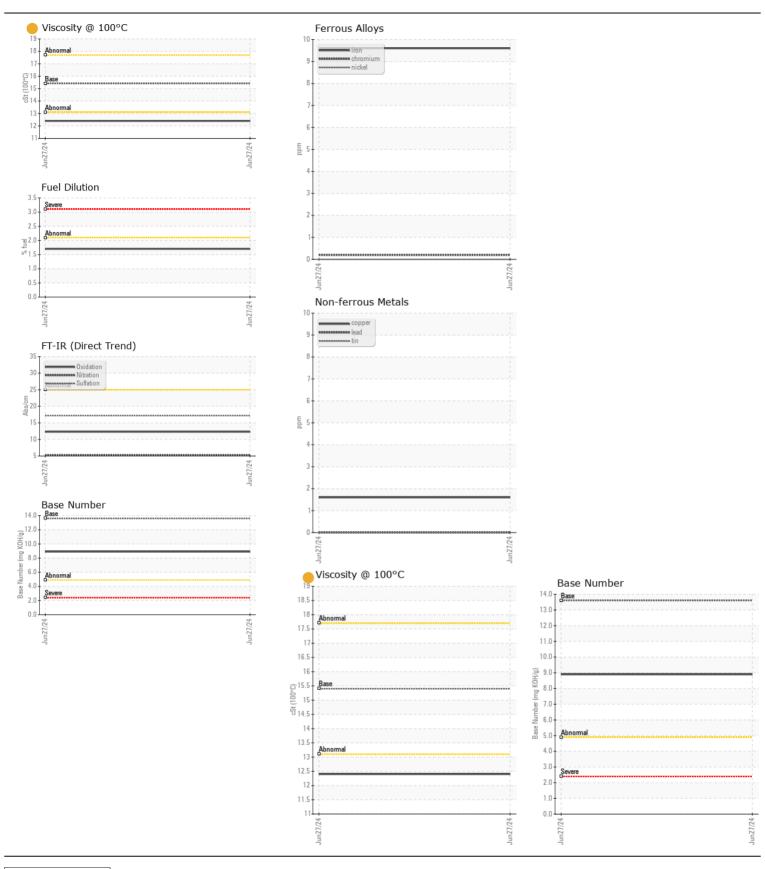
**NORMAL NORMAL ATTENTION** 

[W52752]

## **JOHN DEERE 4024 101600**

**Diesel Engine** 

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0211872		
	Sample Date		Client Info		27 Jun 2024		
	Machine Age	hrs	Client Info		19060		
	Oil Age	hrs	Client Info		47		
	Filter Age	hrs	Client Info		47		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				ATTENTION		
MEAR	Iron	nnm	ASTM D5185m	<u>. 51</u>	10		
WEAR		ppm					
All component wear rates are normal.	Chromium Nickel	ppm	ASTM D5185m		<1		
		ppm	ASTM D5185m	>5	0		
	Titanium	ppm	ASTM D5185m	0	<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m	>4	0		
	Vanadium	ppm	ASTM D5185m	NONE	<1 NONE		
	White Metal	scalar	*Visual	NONE	NONE NONE		
·	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		8		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		1		
	Fuel	%	ASTM D3524	>2.1	1.7		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	5.3		
	Sulfation	Abs/.1mm	*ASTM D7415		17.2		
	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	2		
	Boron	ppm	ASTM D5185m		_ 35		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		89		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		830		
	Calcium	ppm	ASTM D5185m		1440		
	Phosphorus	ppm	ASTM D5185m		1099		
	Zinc	ppm	ASTM D5185m		1355		
	Sulfur	ppm	ASTM D5185m		4000		
		L.L			.500		
		Ahs/ 1mm	*ASTM D7414	>25	12.3		
	Oxidation Base Number (BN)	Abs/.1mm mg KOH/g	*ASTM D7414 ASTM D2896		12.3 8.9		





Certificate L2367

Laboratory Sample No.

Lab Number : 06223267 Unique Number : 11101464

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0211872

Received **Tested** 

Diagnosed

Test Package: CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

: 28 Jun 2024 : 02 Jul 2024 : 02 Jul 2024 - Don Baldridge

11047 LEADBETTER RD ASHLAND, VA US 23005 Contact: DAVID ZIEG dzieg@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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: (804)798-6001 F: (804)798-0292

JRE - ASHLAND