WEAR CONTAMINATION FLUID CONDITION

SEVERE SEVERE NORMAL



JOHN DEERE 644K 1DW644KZLED664203

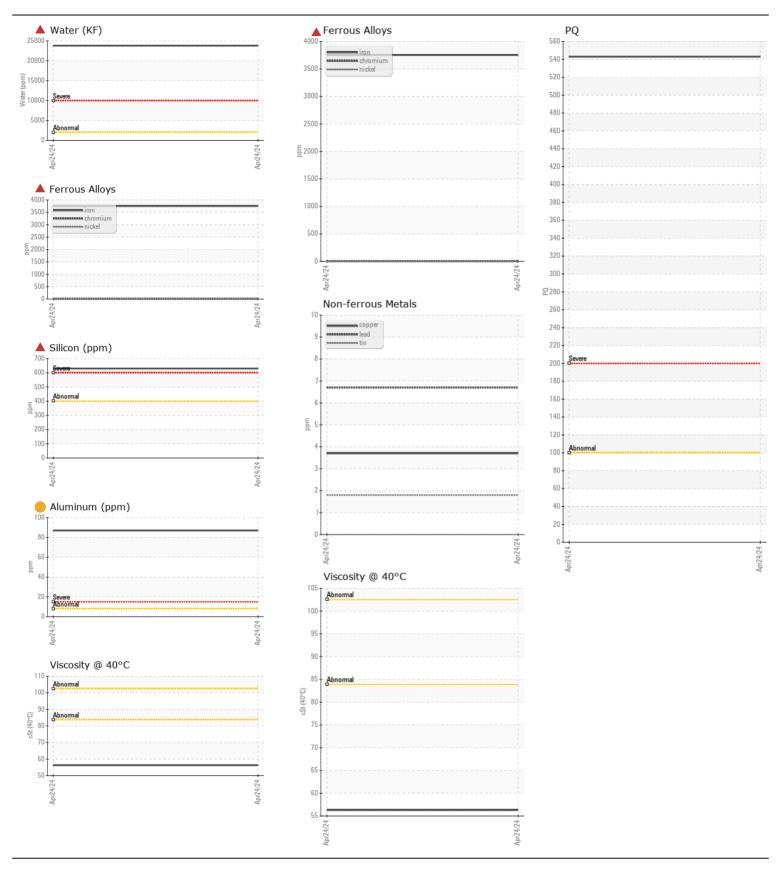
Component **Brake**

{not provided} (GAL)							
RECOMMENDATION	Toot	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the fluid from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.	Test Sample Number	UOIVI	Client Info	LIIIII/AUII	JR0213567		
	Sample Date		Client Info		24 Apr 2024		
	Machine Age	hrs	Client Info		9482		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed	0	Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
WEAR	PQ		ASTM D8184		543		
The iron level is severe.	Iron	ppm	ASTM D5185m		▲ 3755		
	Chromium	ppm	ASTM D5185m		3		
	Nickel	ppm	ASTM D5185m	>5	1		
	Titanium	ppm	ASTM D5185m		2		
	Silver	ppm	ASTM D5185m	0	0		
	Aluminum	ppm	ASTM D5185m		87		
	Lead	ppm	ASTM D5185m		7		
	Copper	ppm	ASTM D5185m		4		
	Tin	ppm	ASTM D5185m	>5	2		
	Vanadium White Metal	ppm	*Visual	NONE	<1 NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
			visuai				
CONTAMINATION There is a high concentration of water present in the fluid. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.	Silicon	ppm	ASTM D5185m	>400	▲ 630		
	Potassium	ppm	ASTM D5185m	>20	22		
	Water	%	ASTM D6304	>0.2	2.38		
	ppm Water	ppm	ASTM D6304	>2000	23800		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	HAZY		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	4 0.2%		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		196		
The fluid is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m		6		
	Barium	ppm	ASTM D5185m		2		
	Molybdenum	ppm	ASTM D5185m		31		
	Manganese	ppm	ASTM D5185m		33		
	Magnesium	ppm	ASTM D5185m		90		
	Calcium	ppm	ASTM D5185m		1848		
	Phosphorus	ppm	ASTM D5185m		1007		
	Zinc	ppm	ASTM D5185m		918		
	Sulfur	ppm	ASTM D5185m		3698		

Visc @ 40°C

ASTM D445

56.3





Laboratory Sample No.

: JR0213567 Lab Number : 06160634

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

Received **Tested** Unique Number: 10996057 Diagnosed : 25 Apr 2024

: 26 Apr 2024

: 27 Apr 2024 - Don Baldridge

Test Package : CONST (Additional Tests: KF, PQ) 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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