WEAR CONTAMINATION FLUID CONDITION

SEVERE SEVERE NORMAL



JOHN DEERE 844K DW844KX626817

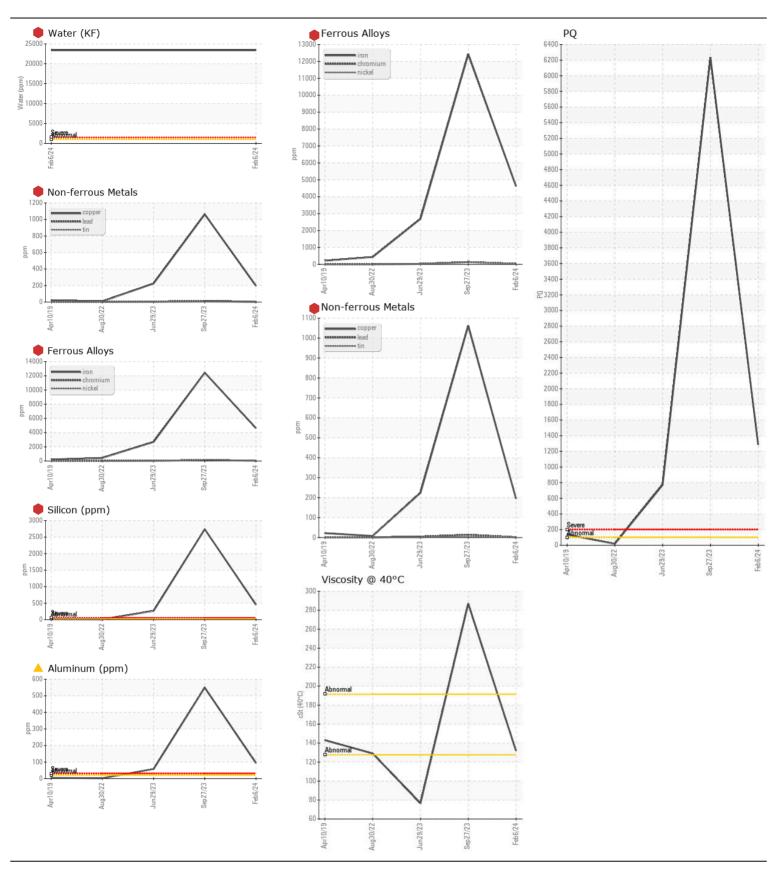
Rear Differential

Rear Differential							
JOHN DEERE GL-5 80W90 (0	GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.	Sample Number		Client Info		JR0202870	JR0183254	JR0173592
	Sample Date		Client Info		06 Feb 2024	27 Sep 2023	29 Jun 2023
	Machine Age	hrs	Client Info		27335	26863	26393
	Oil Age	hrs	Client Info		27335	26863	505
	Filter Age	hrs	Client Info		0	0	505
	Oil Changed		Client Info		Changed	Not Changd	Oil Added
	Filter Changed		Client Info		Changed	Not Changd	Not Changd
	Sample Status				SEVERE	SEVERE	SEVERE
WEAR	PQ		ASTM D8184		1286	6235	771
Gear wear is indicated. Bearing and/or bushing wear is indicated.	Iron	ppm	ASTM D5185m	>1501	4623	12433	<u>^</u> 2684
	Chromium	ppm	ASTM D5185m	>11	32	1 36	2 5
	Nickel	ppm	ASTM D5185m	>10	28	133	• 30
	Titanium	ppm	ASTM D5185m		2	12	2
	Silver	ppm	ASTM D5185m		1	0	0
	Aluminum	ppm	ASTM D5185m	>21	4 94	549	▲ 58
	Lead	ppm	ASTM D5185m	>51	1	14	4
	Copper	ppm	ASTM D5185m	>101	195	1062	224
	Tin	ppm	ASTM D5185m	>10	0	3	0
	Vanadium	ppm	ASTM D5185m		<1	2	0
	White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress. There is a high concentration of water present in the oil.	Silicon	ppm	ASTM D5185m	>31	454	2739	266
	Potassium	ppm	ASTM D5185m	>20	25	179	15
	Water	%	ASTM D6304	>0.1	2.34		
	ppm Water	ppm	ASTM D6304	>1000	23400		
	Silt	scalar	*Visual	NONE	NONE	NONE	MODER
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.1	• 0.2%	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>51	42	236	19
The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m		46	131	97
	Barium	ppm	ASTM D5185m		2	2	3
	Molybdenum	ppm	ASTM D5185m		6	13	3
	Manganese	ppm	ASTM D5185m		37	120	22
	Magnesium	ppm	ASTM D5185m		40	127	4 64
	Calcium	ppm	ASTM D5185m		438	1337	1 2100
	Phosphorus	ppm	ASTM D5185m		1776	812	938
	Zinc	ppm	ASTM D5185m		270	430	670
	Sulfur	ppm	ASTM D5185m		19330		▲ 9123
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Visc @ 40°C

ASTM D445

132 287 ▲ 76.6 Submitted By: RENN MASHBURN





Laboratory Sample No. Lab Number

: JR0202870 : 06082777

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

Received Tested Unique Number : 10870222

: 07 Feb 2024 : 08 Feb 2024 Diagnosed Test Package : CONST (Additional Tests: KF, PQ)

: 09 Feb 2024 - Sean Felton

JRE - GARNER 4161 AUBURN CHURCH RD GARNER, NC

US 27529 Contact: RALEIGH SHOP

To discuss this sample report, contact Customer Service at 1-800-237-1369.

sean.betts@jamesriverequipment.com;catherine.anastasio@wearcheck.com T: (919)614-2260

* - 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: (919)779-5432 Submitted By: RENN MASHBURN