WEAR CONTAMINATION FLUID CONDITION

SEVERE SEVERE NORMAL

Area

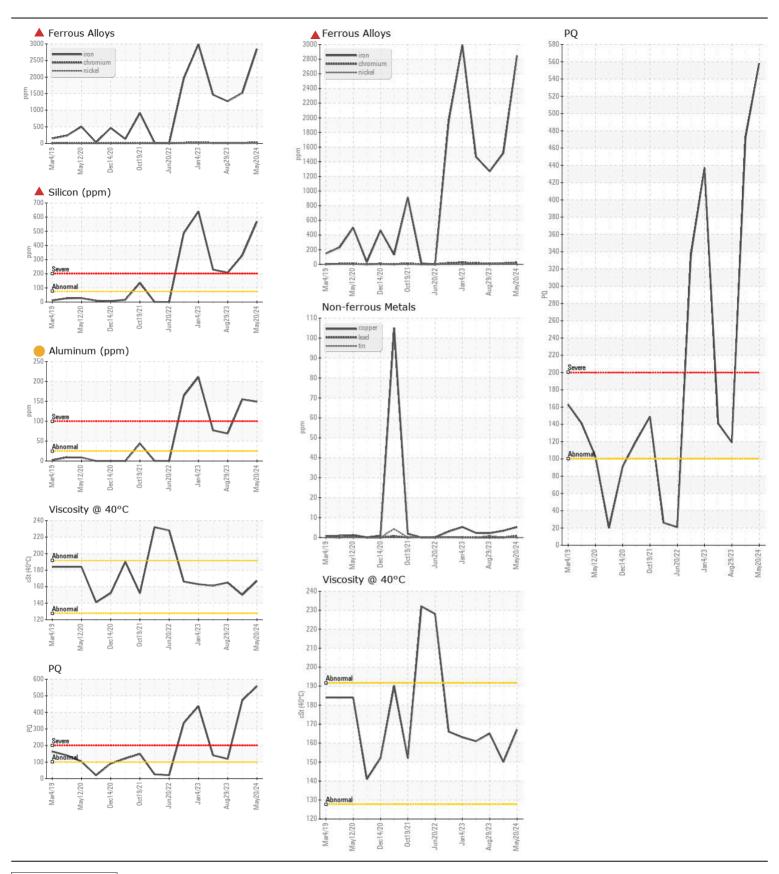
[W67130]

HITACHI 470LC HCMJAG60C00060577

Right Final Drive

JOHN DEERE GL-5 80W90 (3 GAL)

JOHN DEERE GL-5 80W90 (3 GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check all areas where dirt can enter the system. The oil 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. (Customer Sample Comment: W67130)	Sample Number		Client Info		JR0215763	JR0188511	JR0178040
	Sample Date		Client Info		20 May 2024	05 Jan 2024	29 Aug 2023
	Machine Age	hrs	Client Info		8038	8575	8296
	Oil Age	hrs	Client Info		6509	6788	1787
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Not Changd	Not Changd
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				SEVERE	SEVERE	ABNORMAL
WEAR	PQ		ASTM D8184		558	472	119
Gear wear is indicated.	Iron	ppm	ASTM D5185m	>500	2844	▲ 1518	△ 1269
	Chromium	ppm	ASTM D5185m	>10	<u> </u>	<u> </u>	<u>12</u>
	Nickel	ppm	ASTM D5185m	>10	3	2	<1
	Titanium	ppm	ASTM D5185m		<u> </u>	11	4
	Silver	ppm	ASTM D5185m		1	0	0
	Aluminum	ppm	ASTM D5185m	>25	149	155	69
	Lead	ppm	ASTM D5185m	>25	<1	0	0
	Copper	ppm	ASTM D5185m	>50	5	3	2
	Tin	ppm	ASTM D5185m	>10	0	0	<1
	Vanadium	ppm	ASTM D5185m		1	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	▲ MODER	▲ MODER
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.	Silicon	ppm	ASTM D5185m	>75	▲ 568	▲ 329	<u>^</u> 207
	Potassium	ppm	ASTM D5185m	>20	24	14	8
	Water		WC Method	>0.2	NEG	NEG	NEG
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	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	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		19	15	14
The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m		51	15	42
	Barium	ppm	ASTM D5185m		2	2	0
	Molybdenum	ppm	ASTM D5185m		2	<1	1
	Manganese	ppm	ASTM D5185m		22	14	11
	Magnesium	ppm	ASTM D5185m		14	26	9
	Calcium	ppm	ASTM D5185m		19	130	16
	Phosphorus	ppm	ASTM D5185m		1003	366	985
	Zinc	ppm	ASTM D5185m		12	41	8
	Sulfur	ppm	ASTM D5185m		23724	17395	25056
	Visc @ 40°C	cSt	ASTM D445		167	150	165





Certificate L2367

Laboratory

Sample No. **Lab Number**

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0215763

: 06191316 Unique Number: 11048068 Test Package : CONST (Additional Tests: PQ)

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Received **Tested** Diagnosed

: 24 May 2024 : 29 May 2024

: 29 May 2024 - Sean Felton

JRE - CHARLOTTE 9550 STATESVILLE ROAD CHARLOTTE, NC

US 28269 Contact: CHARLOTTE SHOP

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

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)