

[W67861] Machine Id HITACHI 250LC 1FFDC270THF440068 Component Left Final Drive Fluid JOHN DEERE GL-5 80W90 (2 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil 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. (Customer Sample Comment: W67861)

WEAR

Gear wear is indicated.

CONTAMINATION

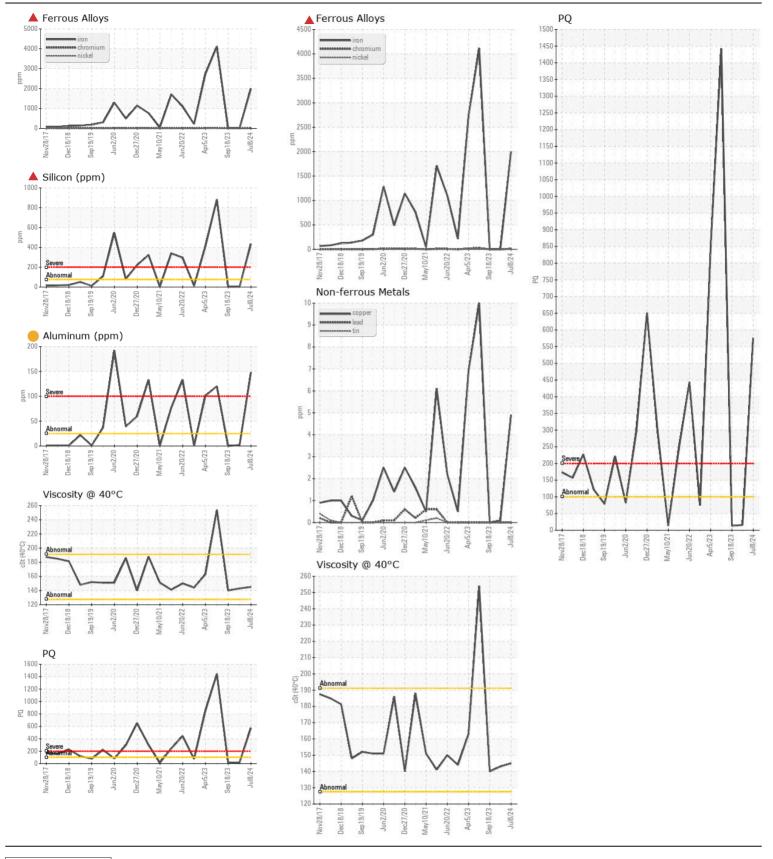
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0205731	JR0206630	JR0178065
Sample Date		Client Info		08 Jul 2024	04 Mar 2024	18 Sep 2023
Machine Age	hrs	Client Info		9440	9004	8457
Oil Age	hrs	Client Info		8387	8498	506
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				SEVERE	NORMAL	NORMAL
					40	40
PQ		ASTM D8184	500	575	16	13
Iron	ppm	ASTM D5185m	>500	1995	3	1
Chromium	ppm	ASTM D5185m	>10	▲ 12	<1	0
Nickel	ppm	ASTM D5185m	>10	1	0	0
Titanium	ppm	ASTM D5185m		11	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	148	2	<1
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>50	5	<1	0
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	MODER	NONE	NONE
		*) /! 1				
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	NONE	NONE 2	2
Silicon	ppm	ASTM D5185m	>75	4 34	2	2
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>75 >20	▲ 434 13	2 2	2 0
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>75 >20 >0.2	▲ 434 13 NEG	2 2 NEG	2 0 NEG
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>75 >20 >0.2 NONE	 434 13 NEG NONE 	2 2 NEG NONE	2 0 NEG NONE
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.2 NONE NONE	 434 13 NEG NONE NONE 	2 2 NEG NONE NONE	2 0 NEG NONE NONE
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.2 NONE NONE NONE	 434 13 NEG NONE NONE NONE 	2 2 NEG NONE NONE NONE	2 0 NEG NONE NONE NONE
Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>75 >20 >0.2 NONE NONE NONE NORML	 434 13 NEG NONE NONE NONE NORML 	2 2 NEG NONE NONE NONE NORML	2 0 NEG NONE NONE NONE NORML
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NONE NORML NORML NEG 	2 2 NEG NONE NONE NONE NORML NORML	2 0 NEG NONE NONE NONE NORML NORML
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	A 434 13 NEG NONE NONE NONE NORML NORML	2 2 NEG NONE NONE NORML NORML NEG 0	2 0 NEG NONE NONE NORML NORML NEG <1
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar gpm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NONE NORML NORML NEG 25 24 	2 2 NEG NONE NONE NORML NORML NEG 0 9	2 0 NEG NONE NONE NORM NORML NEG
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NONE NORML NORML NEG 25 	2 2 NEG NONE NONE NORML NORML NEG 0	2 0 NEG NONE NONE NORML NORML NEG <1 10
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gpm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NONE NORML NORML NEG 25 24 <1 	2 2 NEG NONE NONE NORML NORML NEG 0 9 0	2 0 NEG NONE NONE NORML NORML NEG <1 10 0
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar gpm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NONE NORML NORML NEG 25 24 <1 <1 	2 NEG NONE NONE NORML NORML NEG 0 9 0 7	2 0 NEG NONE NONE NORML NORML NEG <1 10 0 4
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NONE NORML NORML NEG 25 24 <1 <1 13 	2 2 NEG NONE NONE NORML NORML NEG 0 9 0 7 0	2 0 NEG NONE NONE NORML NORML NEG <1 10 0 4 0
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NONE NORML NORML NEG 25 24 <1 <1<!--</th--><th>2 2 NEG NONE NONE NORML NORML NEG 0 9 0 7 0 29</th><th>2 0 NEG NONE NONE NORML NORML NEG <1 10 0 4 0 14</th>	2 2 NEG NONE NONE NORML NORML NEG 0 9 0 7 0 29	2 0 NEG NONE NONE NORML NORML NEG <1 10 0 4 0 14
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NORML NORML NORML 25 24 <1 <1 13 20 41 	2 2 NEG NONE NONE NORML NORML NEG 0 9 0 7 0 29 43	2 0 NEG NONE NONE NORML NORML NEG <1 10 0 4 0 14 23
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NONE NORML NORML NEG 25 24 <1 <1 13 20 41 471 	2 NEG NONE NONE NORML NORML NEG 0 9 0 7 0 9 0 7 0 29 43 293	2 0 NEG NONE NONE NORML NORML NEG <1 10 0 4 0 14 23 404
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.2 NONE NONE NONE NORML NORML	 434 13 NEG NONE NONE NORML NORML NEG 25 24 <1 <1 13 20 41 471 6 	2 2 NEG NONE NONE NORML NORML NEG 0 9 0 7 0 29 43 293 23	2 0 NEG NONE NONE NORML NORML NEG <1 10 0 4 0 14 23 404 12

Submitted By: Mike Young - CHARLOTTE SHOP



	d La	aboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513			JF	RE - CHARLOTTE
		ample No.	: JR0205731	Received	: 10 Jul 2024	9550 STA	ATESVILLE ROAD
- 25-27-26-26-26-26-26-26-26-26-26-26-26-26-26-		ab Number	: 06232454	Tested	: 11 Jul 2024		CHARLOTTE, NC
TESTING OF	TESTING LABORATORY UNI	ique Number	: 11115947	Diagnosed	: 11 Jul 2024 - Sean Felton		US 28269
	Certificate L2367 Te	st Package	: CONST (Additional Te	ests: PQ)		Contact: CH	HARLOTTE SHOP
	To discuss this sar	mple report,	contact Customer Servic	ce at 1-800-237	-1369.	myoung@jamesriv	verequipment.com
	* - Denotes test me		T: (704)597-0211				
	Statements of con	formity to sp	ecifications are based of	n the simple acc	ceptance decision rule (JCC	GM 106:2012)	F: (704)596-6198

Submitted By: Mike Young - CHARLOTTE SHOP Page 2 of 2