WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Area

[W68476]

## HITACHI 1FFDC571HLF340857

Swing Drive

JOHN DEERE GL-5 80W90 (2 GAL)

Sample Number Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium	hrs hrs hrs ppm ppm ppm ppm ppm ppm ppm ppm	Method Client Info ASTM D8184 ASTM D5185m	>10 >10 >25 >50 >200	Current JR0219655 09 Jul 2024 3908 905 0 Changed N/A NORMAL 24 38 0 0 0  0 0 0	History1 JR0188364 07 Sep 2023 3003 3003 0 Changed N/A NORMAL 22 111 1 0 <1 0 <1 0 <1	
Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info Client Info ASTM D8184 ASTM D5185m	>10 >10 >25 >50 >200	3908 905 0 Changed N/A NORMAL 24 38 0 0 0 0 <1	3003 3003 0 Changed N/A NORMAL 22 111 1 0 <1 0	
Oil Age Filter Age Oil Changed Filter Changed Sample Status PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info ASTM D8184 ASTM D5185m	>10 >10 >25 >50 >200	905 0 Changed N/A NORMAL 24 38 0 0 0 <1 0	3003 3003 0 Changed N/A NORMAL 22 111 1 0 <1 0	
Oil Age Filter Age Oil Changed Filter Changed Sample Status PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info ASTM D8184 ASTM D5185m	>10 >10 >25 >50 >200	0 Changed N/A NORMAL 24 38 0 0 0 0 <1	0 Changed N/A NORMAL 22 111 1 0 <1 0 <1	
Filter Age Oil Changed Filter Changed Sample Status PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm ppm ppm	Client Info Client Info  ASTM D8184  ASTM D5185m	>10 >10 >25 >50 >200	0 Changed N/A NORMAL 24 38 0 0 0 0 <1	0 Changed N/A NORMAL 22 111 1 0 <1 0 <1	
Oil Changed Filter Changed Sample Status PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm ppm ppm	Client Info Client Info  ASTM D8184  ASTM D5185m	>10 >10 >25 >50 >200	N/A NORMAL 24 38 0 0 0 0 <1	N/A NORMAL  22  111  1  0  <1  0  <1  0	
Sample Status PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper	ppm ppm ppm ppm ppm ppm ppm	ASTM D8184 ASTM D5185m	>10 >10 >25 >50 >200	N/A NORMAL 24 38 0 0 0 0 <1	N/A NORMAL  22  111  1  0  <1  0  <1  0	
Sample Status PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper	ppm ppm ppm ppm ppm ppm ppm	ASTM D8184 ASTM D5185m	>10 >10 >25 >50 >200	24 38 0 0 0 0 0 <1	22 111 1 0 <1 0 <1	
Iron Chromium Nickel Titanium Silver Aluminum Lead Copper	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>10 >10 >25 >50 >200	38 0 0 0 0 0 <1	111 1 0 <1 0 <1 0	
Iron Chromium Nickel Titanium Silver Aluminum Lead Copper	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>10 >10 >25 >50 >200	38 0 0 0 0 0 <1	111 1 0 <1 0 <1 0	
Chromium Nickel Titanium Silver Aluminum Lead Copper	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>10 >10 >25 >50 >200	0 0 0 0 <1	1 0 <1 0 <1 0	
Nickel Titanium Silver Aluminum Lead Copper	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>10 >25 >50 >200	0 0 0 <1 0	0 <1 0 <1	
Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >50 >200	0 0 <1 0	<1 0 <1 0	
Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>50 >200	0 <1 0	0 <1 0	
Aluminum Lead Copper Tin	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>50 >200	<1 0	<1 0	
Lead Copper Tin	ppm ppm	ASTM D5185m ASTM D5185m	>50 >200	0	0	
Copper Tin	ppm	ASTM D5185m	>200			
Tin	ppm			0	<1	
		ASTM D5185m	>10			
Vanadium	10 10 100		- 10	0	0	
	ppm	ASTM D5185m		0	0	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
O:::		AOTM DEGOS		_	10	
	ppm					
Silt						
				-		
≟mulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Sodium	ppm	ASTM D5185m		2	3	
Boron	ppm	ASTM D5185m		13	62	
Barium	ppm	ASTM D5185m		<1	0	
Molybdenum		ASTM D5185m			<1	
Manganese	ppm	ASTM D5185m		<1	4	
_		ASTM D5185m		2	0	
Calcium		ASTM D5185m			36	
Zinc						
Y S P V S C S A C E S B B M M C P Z S	White Metal Vellow Metal Silicon Potassium Vater Silt Debris Sand/Dirt Appearance Odor Smulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	White Metal scalar Vellow Metal scalar Vellow Metal scalar Sillicon ppm Potassium ppm Vater Silt scalar Sca	White Metal scalar *Visual scalar *Visual scalar *Visual scalar *Visual *Visual scalar *Visual scalar *Visual scalar *Visual ppm ASTM D5185m WC Method Silt scalar *Visual visual scalar *Visual scalar *	White Metal scalar *Visual NONE Zellow Metal scalar *Visual Scalar Scalar *Visual NONE Zellow Scalar *Visual NORML Zellow Scalar *Zellow NORML Zellow NORML Zello	White Metalscalar*VisualNONENONEYellow Metalscalar*VisualNONENONEYotassiumppmASTM D5185m>505PotassiumppmASTM D5185m>20<1	White Metal scalar *Visual NONE NONE NONE NONE Scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON





Laboratory Sample No.

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

: JR0219655 Lab Number : 06232532 Unique Number : 11116025

Received **Tested** Diagnosed Test Package : CONST ( Additional Tests: PQ )

: 10 Jul 2024 : 11 Jul 2024

: 12 Jul 2024 - Don Baldridge

JRE - CHARLOTTE 9550 STATESVILLE ROAD CHARLOTTE, NC

US 28269

Contact: CHARLOTTE SHOP myoung@jamesriverequipment.com

T: (704)597-0211

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) F: (704)596-6198

Submitted By: Mike Young - CHARLOTTE SHOP