**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL** NORMAL

## **HITACHI 210LC 1FFDC571CMF341012**

Pump Drive

IOHN DEERE ENGINE OIL PLUS 50 IL 15W40 (-CAL

- GAL)						
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0204338	JR0155702	
Sample Date		Client Info		21 Feb 2024	12 Dec 2022	
Machine Age	hrs	Client Info		1033	404	
Oil Age	hrs	Client Info		1033	404	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	Not Changd	
Filter Changed		Client Info		N/A	Not Changd	
Sample Status				NORMAL	NORMAL	
PQ		ASTM D8184		20	21	
	maa		>500			
Titanium		ASTM D5185m				
Silver				<1	0	
Aluminum			>20	<1	2	
Lead				<1	<1	
Copper	ppm	ASTM D5185m	>35	3	2	
Tin	ppm	ASTM D5185m	>4	<1	0	
Vanadium	ppm	ASTM D5185m		<1	0	
White Metal	scalar	*Visual	NONE	NONE	LIGHT	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Ciliaan	nnm	ACTM DE10Em	. 75	40	1./	
	ppiii					
	coalar					
Emulsified Water		*Visual	>0.2	NEG	NEG	
-						
-						
Magnesium Calcium	ppm			15 3645		
	ppm	ASTM D5185m			4225	
	nnm	ACTM DE10E		1002		
Phosphorus	ppm	ASTM D5185m		1003	1129	
	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		1003 1184 9344	1129 1328 9811	
	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 White Metal Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	Sample Number Sample Date Machine Age hrs Oil Age hrs Filter Age hrs Oil Changed Filter Changed Sample Status  PQ Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm White Metal scalar Yellow Metal scalar Silicon ppm Potassium ppm Water Silt scalar Sand/Dirt scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Sodium ppm Boron ppm Barium ppm Manganese ppm Mrs	Sample Number Sample Date Client Info Machine Age Nrs Client Info Oil Age Nrs Client Info Client Info Client Info Oil Changed Filter Age Oil Changed Filter Changed Sample Status  PQ ASTM D8184 Iron Chromium ppm ASTM D5185m Nickel ppm ASTM D5185m Titanium ppm ASTM D5185m Aluminum ppm ASTM D5185m Copper ppm ASTM D5185m Tin ppm ASTM D5185m Vanadium ppm ASTM D5185m Visual Silicon ppm ASTM D5185m Valual Silicon ppm ASTM D5185m Valual Silicon ppm ASTM D5185m Valual Sand/Dirt scalar Visual Sand/Dirt scalar *Visual Sand/Dirt ASTM D5185m ASTM D5185m Boron ppm ASTM D5185m Barium ppm ASTM D5185m Barium ppm ASTM D5185m ASTM D5185m Barium ppm ASTM D5185m	Sample Number Sample Date Client Info Machine Age Inrs Oil Age Inrs Oil Age Inrs Oil Client Info Oil Changed Filter Age Oil Changed Filter Changed Sample Status  PQ ASTM D8184 Iron Chromium Info Chromium Info Ppm ASTM D5185m Silver Info ASTM D5185m Aluminum Info ASTM D5185m ASTM D5	Sample Number         Client Info         JR0204338           Sample Date         Client Info         21 Feb 2024           Machine Age         hrs         Client Info         1033           Oil Age         hrs         Client Info         0           Filter Age         hrs         Client Info         Changed           Oil Changed         Client Info         N/A           Filter Changed         Client Info         N/A           Sample Status         NORMAL           PQ         ASTM D8184         20           Iron         ppm         ASTM D8185m         >500         50           Chromium         ppm         ASTM D5185m         >15         1           Nickel         ppm         ASTM D5185m         >10         <1	Sample Number         Client Info         JR0204338         JR0155702           Sample Date         Client Info         21 Feb 2024         12 Dec 2022           Machine Age         hrs         Client Info         1033         404           Oil Age         hrs         Client Info         0         0           Filter Age         hrs         Client Info         Changed         Not Changd           Filter Changed         Client Info         N/A         Not Changd           Filter Changed         Client Info         N/A         Not Changd           Sample Status         NORMAL         NORMAL         NORMAL           PQ         ASTM D8184         20         21           Iron         ppm         ASTM D8188         20         55           Chromium         ppm         ASTM D8188m         >15         1         1           Nickel         ppm         ASTM D8188m         >10         <1





Laboratory Sample No. Unique Number : 10897570

Lab Number : 06099340

: JR0204338

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

: 23 Feb 2024 Tested Diagnosed

: 26 Feb 2024 : 27 Feb 2024 - Don Baldridge

JRE - CHARLOTTE 9550 STATESVILLE ROAD CHARLOTTE, NC

US 28269

Contact: CHARLOTTE SHOP myoung@jamesriverequipment.com

T: (704)597-0211

Test Package : CONST ( Additional Tests: PQ ) Certificate L2367 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. F: (704)596-6198 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)