

[W45968] Machine Id HITACHI 350LC-6 1FFDDR70PMF940930 Component Left Final Drive

JOHN DEERE GL-5 80W90 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211238	JR0197498	
Sample Date		Client Info		17 Apr 2024	12 Jan 2024	
Machine Age	hrs	Client Info		3791	3788	
Oil Age	hrs	Client Info		0	0	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	N/A	
Filter Changed		Client Info		N/A	N/A	
Sample Status				ATTENTION	ABNORMAL	
					~~~	
PQ		ASTM D8184		93	90	
Iron	ppm	ASTM D5185m	>500	201	198	
Chromium	ppm	ASTM D5185m	>10	2	3	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	12	12	
Lead	ppm	ASTM D5185m	>25	<1	0	
Copper	ppm	ASTM D5185m	>50	1	2	
Tin	ppm	ASTM D5185m	>10	<1	0	
Vanadium	ppm	ASTM D5185m		<1	0	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Silicon	maa	ASTM D5185m	>75	35	31	
Silicon Potassium	ppm ppm	ASTM D5185m ASTM D5185m	>75 >20	35 0	31 0	
Potassium	ppm ppm	ASTM D5185m	>20	0	0	
	ppm	ASTM D5185m WC Method	>20 >0.2			
Potassium Water	ppm scalar	ASTM D5185m	>20 >0.2 NONE	0 NEG NONE	0 NEG NONE	
Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185m WC Method *Visual *Visual	>20 >0.2 NONE NONE	0 NEG NONE NONE	0 NEG	
Potassium Water Silt Debris Sand/Dirt	ppm scalar	ASTM D5185m WC Method *Visual *Visual *Visual	>20 >0.2 NONE	0 NEG NONE	0 NEG NONE NONE	
Potassium Water Silt Debris	ppm scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual	>20 >0.2 NONE NONE NONE	0 NEG NONE NONE NONE	0 NEG NONE NONE	
Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NONE	0 NEG NONE NONE NONE NORML	0 NEG NONE NONE NONE	  
Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NONE NORML	0 NEG NONE NONE NONE NORML NORML	    
Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NONE NORML	0 NEG NONE NONE NONE NORML NORML	    
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG	0 NEG NONE NONE NORML NORML 0.2%	    
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG	0 NEG NONE NONE NORML NORML 0.2%	    
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 37	0 NEG NONE NONE NORML 0.2% 0 27	    
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 37 <1	0 NEG NONE NONE NORML 0.2% 0 27 0	    
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 37 <1 10	0 NEG NONE NONE NORML 0.2% 0 27 0 27	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 37 <1 10 3	0 NEG NONE NONE NORML 0.2% 0 27 0 27 0 5 4	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 37 <1 10 3 3 (1) 10 3	0 NEG NONE NONE NORML 0.2% 0 27 0 27 0 5 4 32	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 37 <1 10 3 - 51 51 2107	0 NEG NONE NONE NORML 0.2% 0 27 0 27 0 5 4 32 2008	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 37 <1 10 3 51 51 2107 758	0 NEG NONE NONE NORML 0.2% 0 27 0 27 0 27 0 5 4 32 2008 795	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORML NORML NEG 1 37 <1 10 37 <1 10 3 51 2107 758 733	0 NEG NONE NONE NONE 0.2% 0 27 0 27 0 27 0 27 0 5 4 32 2008 795 865	



**JRE - MANASSAS PARK** Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : JR0211238 Received 9107 OWENS DRIVE : 19 Apr 2024 Lab Number : 06154747 MANASSAS PARK, VA Tested : 22 Apr 2024 Unique Number : 10990170 : 23 Apr 2024 - Sean Felton US 20111 Diagnosed Test Package : CONST (Additional Tests: PQ) Contact: DON VEST Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. dvest@jamesriverequipment.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (703)631-8500 F: (703)631-4715 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)