

#### Machine Id HITACHI 300LC 1FFDDP70THF840156 Component Right Final Drive

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

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

#### WEAR

Gear wear is indicated.

## CONTAMINATION

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

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Toot		Mothad	limit/Abr	Current	Historyd	Lliotor: 0
rest	UUIVI		LIIIII(/ADN			
Sample Number				JR0212957	JR0186200	JRU168183
Sample Date				17 Apr 2024	17 NOV 2023	18 Apr 2023
Machine Age	nrs	Client Info		4984	4521	3606
Oil Age	hrs	Client Info		3041	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	None	None
Sample Status				ABNORMAL	SEVERE	ABNORMAL
PQ		ASTM D8184		722	▲ 862	758
Iron	ppm	ASTM D5185m	>500	<b>1354</b>	<b>▲</b> 1233	<b>1</b> 237
Chromium	ppm	ASTM D5185m	>10	<b>1</b> 0	<b>1</b> 0	<b>1</b> 1
Nickel	ppm	ASTM D5185m	>10	2	3	3
Titanium	mag	ASTM D5185m		3	3	3
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	35	32	39
Lead	mag	ASTM D5185m	>25	0	0	0
Copper	mag	ASTM D5185m	>50	2	3	1
Tin	mag	ASTM D5185m	>10	<1	0	0
Vanadium	mag	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	<b>A</b> 183	<b>▲</b> 162	<b>1</b> 86
Potassium	ppm	ASTM D5185m	>20	15	16	13
Water				15	-	
		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	WC Method *Visual	>0.2 NONE	NEG NONE	NEG NONE	NEG NONE
Silt Debris	scalar scalar	WC Method *Visual *Visual	>0.2 NONE NONE	NEG NONE NONE	NEG NONE NONE	NEG NONE NONE
Silt Debris Sand/Dirt	scalar scalar scalar	WC Method *Visual *Visual *Visual	>0.2 NONE NONE NONE	NEG NONE NONE NONE	NEG NONE NONE NONE	NEG NONE NONE NONE
Silt Debris Sand/Dirt Appearance	scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual	>0.2 NONE NONE NONE	NEG NONE NONE NONE NORML	NEG NONE NONE NORE	NEG NONE NONE NORML
Silt Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual *Visual	>0.2 NONE NONE NORML NORML	NEG NONE NONE NONE NORML	NEG NONE NONE NORML NORML	NEG NONE NONE NORML NORML
Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NONE NORML NEG	NEG NONE NONE NORML NORML NEG	NEG NONE NONE NORML NORML NEG
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar scalar ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORE NORML NEG	NEG NONE NONE NORML NORML NEG	NEG NONE NONE NORML NORML NEG
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar scalar ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORML NORML NEG 7 11	NEG NONE NONE NORML NORML NEG 4	NEG NONE NONE NORML NORML NEG 6 21
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar scalar ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORML NORML NEG 7 11	NEG NONE NONE NORML NORML NEG 4 14 0	NEG NONE NONE NORML NORML NEG 6 21 0
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar scalar ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORML NORML NEG 7 11 1 2	NEG NONE NONE NORML NORML NEG 4 14 0 1	NEG NONE NONE NORML NORML NEG 6 21 0 < 1
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar scalar ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORML NORML NEG 7 11 1 <1 1 1	NEG NONE NONE NORML NORML NEG 4 14 0 1 1	NEG NONE NONE NORML NORML NEG 6 21 0 <1 10
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NEG NONE NONE NORML NORML NEG 7 11 1 1 <1 1 <1 10 <1	NEG NONE NONE NORML NORML NEG 4 14 0 1 10 3	NEG NONE NONE NORML NORML NEG 6 21 0 21 0 ( 10 0 0
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	N3   NEG   NONE   NONE   NORML   NORML   NEG   7   11   1   <1   10   <1   7	NEG NONE NONE NORML NORML NEG 4 14 0 1 10 3 25	NEG NONE NONE NORML NORML NEG 6 21 0 21 0 ( 21 0 ( 21 0 0 21 0 1 10
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium Phosphorus	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML >0.2	NS   NEG   NONE   NONE   NORML   NORML   NEG   7   11   1   <1   10   <1   7   11   12   13   <1   7   11   10   <1   7   1718	NEG NONE NONE NORML NORML NEG 4 14 0 1 14 0 1 10 3 25 1593	NEG NONE NONE NORML NORML NEG 6 21 0 < 21 0 < 21 10 0 1 10 2206
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NS   NEG   NONE   NONE   NORML   NORML   NEG   7   11   1   <1   10   <1   7   11   12   13   <1   10   <1   7   1718   23	NEG NONE NONE NORML NORML NEG 4 14 0 1 10 3 25 1593 21	NEG NONE NONE NORML NORML NEG 6 21 0 ( 21 0 ( 21 0 ( 1 21 0 0 ( 21 0 0 ( 21 0 0 ( 21 0 0 ( 21 0 0 ( 21 0 0 ( 21 0 0 ( 21 0 0 ( 21 0 ( 21 0 ( 21 0 ( 20 ( 2
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	N3   NEG   NONE   NONE   NORML   NORML   NEG   7   11   1   <1   10   <1   7   1718   23   26644	NEG NONE NONE NORML NORML NEG 4 14 0 14 0 1 10 3 25 1593 21 30095	NEG NONE NONE NORML NORML NEG 6 21 0 21 0 ( 21 0 ( 21 0 0 ( 21 0 0 1 10 2 0 1 2206 0 0 25056

Submitted By: Steven Bass



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - GARNER** : JR0212957 4161 AUBURN CHURCH RD Sample No. Received : 19 Apr 2024 : 06154706 GARNER, NC Lab Number Tested : 22 Apr 2024 : 23 Apr 2024 - Sean Felton US 27529 Unique Number : 10990129 Diagnosed Test Package : CONST (Additional Tests: PQ) Contact: RALEIGH SHOP Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. sean.betts@jamesriverequipment.com;catherine.anastasio@wearcheck.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)614-2260 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)779-5432