

JOHN DEERE 245G 1FF245GXLHF800470 Component Left Final Drive Fluid JOHN DEERE GL-5 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

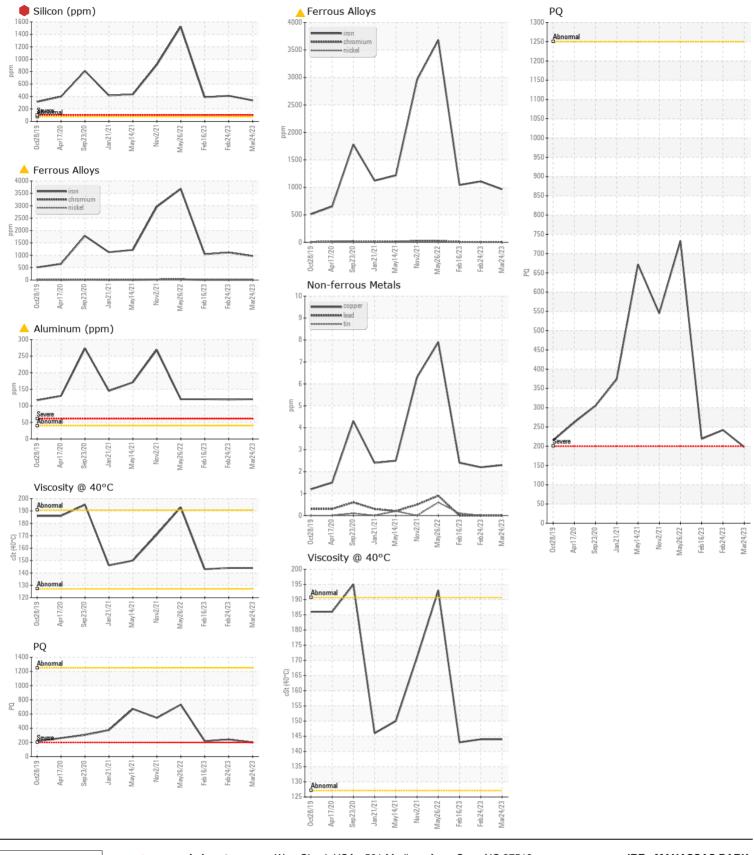
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.

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		JR0166458	JR0162840	JR0160213
Sample Date		Client Info		24 Mar 2023	24 Feb 2023	16 Feb 2023
Machine Age	hrs	Client Info		4457	4457	4440
Oil Age	hrs	Client Info		3958	300	482
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	N/A
Filter Changed		Client Info		None	Not Changd	N/A
Sample Status				SEVERE	SEVERE	SEVERE
PQ		ASTM D8184	>1250	198	242	219
Iron	ppm	ASTM D5185m	>750	A 965	▲ 1108	1044
Chromium	ppm	ASTM D5185m	>9	7	7	8
Nickel	ppm	ASTM D5185m	>10	2	2	2
Titanium	ppm	ASTM D5185m		- 8	8	9
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>40	▲ 120	▲ 119	▲ 120
Lead	ppm	ASTM D5185m	>15	0	0	0
Copper	ppm	ASTM D5185m	>40	2	2	2
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	MODER	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
						•
Silicon	ppm	ASTM D5185m	>75	• 337	• 411	• 388
Silicon Potassium		ASTM D5185m ASTM D5185m	>75 >20	 337 31 	411 34	38836
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>75 >20 >0.075	 337 31 NEG 	 411 34 NEG 	 388 36 NEG
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>75 >20 >0.075 NONE	 337 31 NEG NONE 	 411 34 NEG NONE 	 388 36 NEG NONE
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.075 NONE NONE	 337 31 NEG NONE NONE 	 411 34 NEG NONE NONE 	 388 36 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 >0.075 NONE NONE NONE	 337 31 NEG NONE NONE NONE 	 411 34 NEG NONE NONE NONE 	 388 36 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 >0.075 NONE NONE NONE NORML	 337 31 NEG NONE NONE NONE NORML 	 411 34 NEG NONE NONE NONE NORML 	 388 36 NEG NONE NONE NONE NORML
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>75 >20 >0.075 NONE NONE NONE NORML	 337 31 NEG NONE NONE NORE NORML NORML 	 411 34 NEG NONE NONE NONE NORML NORML 	 388 36 NEG NONE NONE NONE NORML NORML
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 >0.075 NONE NONE NONE NORML	 337 31 NEG NONE NONE NONE NORML 	 411 34 NEG NONE NONE NONE NORML 	 388 36 NEG NONE NONE NONE NORML
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>75 >20 >0.075 NONE NONE NONE NORML	 337 31 NEG NONE NONE NORE NORML NORML 	 411 34 NEG NONE NONE NORML NORML NEG 18 	 388 36 NEG NONE NONE NORML NORML NEG 18
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 *Visual	>75 >20 >0.075 NONE NONE NORML NORML >0.075	 337 31 NEG NONE NONE NORE NORML NEG 	 411 34 NEG NONE NONE NORE NORML NORML NEG 	 388 36 NEG NONE NONE NORML NORML NEG
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>75 >20 >0.075 NONE NONE NORML NORML >0.075	 337 31 NEG NONE NONE NORML NORML NEG 15 	 411 34 NEG NONE NONE NORML NORML NEG 18 	 388 36 NEG NONE NONE NORML NORML NEG 18
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar gppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.075 NONE NONE NORML NORML >0.075	 337 31 NEG NONE NONE NORML NORML NEG 15 6 	 411 34 NEG NONE NONE NORML NORML NEG 18 7 0 1 	 388 36 NEG NONE NONE NORML NORML NEG 18 5 0 2
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.075 NONE NONE NORML NORML >0.075	 337 31 NEG NONE NONE NORML NORML NEG 15 6 0 2 8 	 411 34 NEG NONE NONE NORML NORML NEG 18 7 0 1 9 	 388 36 NEG NONE NONE NORML NORML NEG 18 5 0 2 9
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >0.075 NONE NONE NORML NORML >0.075	 337 31 NEG NONE NONE NORML NORML NEG 15 6 0 2 8 31 	 411 34 NEG NONE NONE NORML NORML NEG 18 7 0 1 9 30 	 388 36 NEG NONE NONE NORML NORML NEG 18 5 0 2 9 30
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	ppm ppm scalar 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 ASTM D5185m	>75 >20 >0.075 NONE NONE NORML NORML >0.075	 337 31 NEG NONE NONE NORML NORML NEG 15 6 0 2 8 31 52 	 411 34 NEG NONE NONE NORML NORML NEG 18 7 0 1 9 30 50 	 388 36 NEG NONE NONE NORML NORML NEG 18 5 0 2 9 30 48
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	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 >0.075 NONE NONE NORML NORML >0.075	 337 31 NEG NONE NONE NORML NORML NEG 15 6 0 2 8 31 52 305 	 411 34 NEG NONE NONE NORML NORML NEG 18 7 0 1 9 30 50 311 	 388 36 NEG NONE NORML NORML NEG 18 5 0 2 9 30 48 317
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium 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 >0.075 NONE NONE NORML NORML >0.075	 337 31 NEG NONE NONE NORML NORML NEG 15 6 0 2 8 31 52 305 17 	 411 34 NEG NONE NONE NORML NORML NEG 18 7 0 1 9 30 50 311 18 	 388 36 NEG NONE NONE NORML NORML NEG 18 5 0 2 9 30 48 317 16
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm pm scalar scalar scalar scalar scalar 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	>75 >20 >0.075 NONE NONE NORML NORML >0.075	 337 31 NEG NONE NONE NORML NORML NEG 15 6 0 2 8 31 52 305 	 411 34 NEG NONE NONE NORML NORML NEG 18 7 0 1 9 30 50 311 	 388 36 NEG NONE NONE NORML NORML NEG 18 5 0 2 9 30 48 317

Submitted By: TECHNICIAN ACCOUNT



JRE - MANASSAS PARK Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0166458 : 27 Mar 2023 9107 OWENS DRIVE Sample No. Recieved Lab Number : 05802659 MANASSAS PARK, VA Diagnosed : 30 Mar 2023 : 10400188 US 20111 **Unique Number** Diagnostician : Don Baldridge 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)

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