

Machine Id JOHN DEERE 345G 1FF345GXKMF020827 Component Right Final Drive Fluid GEAR OIL SAE 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. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

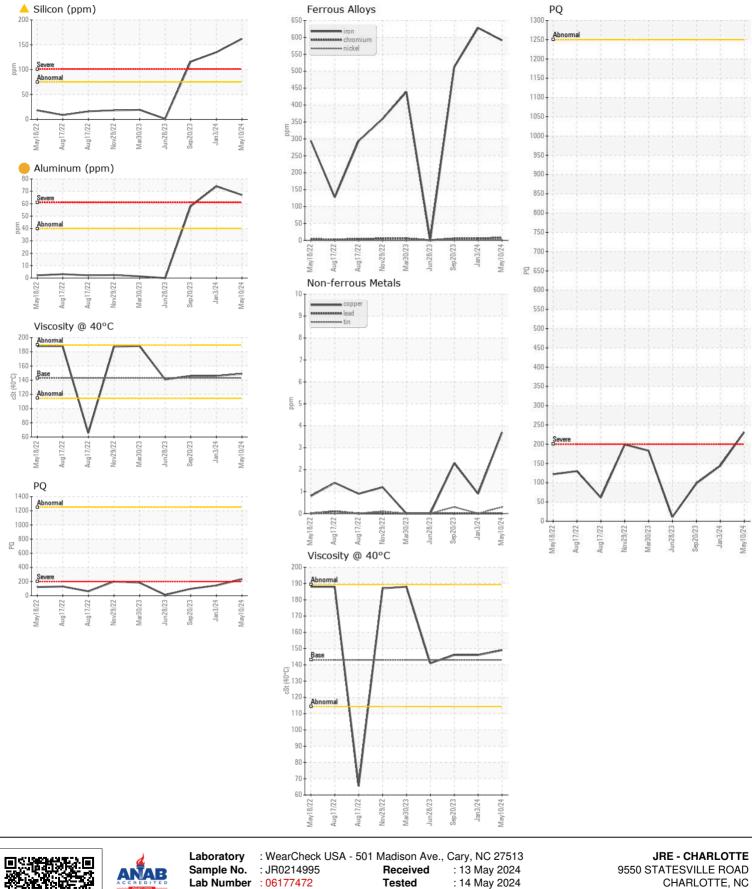
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.

FLUID CONDITION

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

TestUOMMethodLimit/AbCurrentHistory1History2Sample NumberClient InfoJRQ214995JR0188777Sample DateClient Info10 May 202003 Jan 202420 Sep 2023Machine AgehrsClient Info413235302944Oil AgehrsClient Info257925132478Filter AgehrsClient InfoChangedNot ChangdNot ChangdFilter ChangedClient InfoN/AN/AMACSample StatusClient InfoN/AABNORMALABNORMALPQASTM D5185>750591628512ChromiumppmASTM D5185>9765NickelppmASTM D5185>101<1<<1TitaniumppmASTM D5185>101<1<2SilverppmASTM D5185>406644SilverppmASTM D5185>406643VanadumppmASTM D5185>404<12TinnppmASTM D5185>404162VanadumppmASTM D5185>404163VanadumppmASTM D5185>404163VanadumppmASTM D5185>404163SilverppmASTM D5185>5066716PotassiumppmASTM D5185							
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Barium ppm ASTM D5185m 200 0 <1	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>75 >20 >0.075 NONE NONE NONE NORML	 162 6 NEG NONE NONE NONE NORML NORML 	 135 7 NEG NONE NONE NONE NORE NORML NORML 	 116 6 NEG NONE NONE NONE NORML NORML
Molybdenum ppm ASTM D5185m 12 0 0 <1	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 ASTM D5185m	>75 >20 >0.075 NONE NONE NORM NORM >0.075	 162 6 NEG NONE NONE NORML NORML NEG 7 	 135 7 NEG NONE NONE NORML NEG 3 	 116 6 NEG NONE NONE NORML NORML NEG 5
Manganese ppm ASTM D5185m 9 6 6 Magnesium ppm ASTM D5185m 12 8 4 6 Calcium ppm ASTM D5185m 150 22 14 23 Phosphorus ppm ASTM D5185m 1650 375 369 339 Zinc ppm ASTM D5185m 125 0 6 6 Sulfur ppm ASTM D5185m 22500 21435 19670 21091 Visc @ 40°C cSt ASTM D445 143 149 146 146	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	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 NORM NORM >0.075	 162 6 NEG NONE NONE NORML NORML NEG 7 	 135 7 NEG NONE NONE NORML NEG 3 	 116 6 NEG NONE NONE NORML NORML NEG 5
Magnesium ppm ASTM D5185m 12 8 4 6 Calcium ppm ASTM D5185m 150 22 14 23 Phosphorus ppm ASTM D5185m 1650 375 369 339 Zinc ppm ASTM D5185m 125 0 6 6 Sulfur ppm ASTM D5185m 22500 21435 19670 21091 Visc @ 40°C cSt ASTM D445 143 149 146 146	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 *Visual ASTM D5185m ASTM D5185m	 >75 >20 >0.075 NONE NONE NORML >0.075 >170 400 	 162 6 NEG NONE NONE NORML NORML NEG 7 14 0 	 135 7 NEG NONE NONE NORML NORML NEG 3 15 <1 	 116 6 NEG NONE NONE NORML NORML NEG 5 7
Calcium ppm ASTM D5185m 150 22 14 23 Phosphorus ppm ASTM D5185m 1650 375 369 339 Zinc ppm ASTM D5185m 125 0 6 6 Sulfur ppm ASTM D5185m 22500 21435 19670 21091 Visc @ 40°C cSt ASTM D445 143 149 146 146	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 *Visual ASTM D5185m ASTM D5185m	 >75 >20 >0.075 NONE NONE NORML NORML >0.075 >170 400 200 	 162 6 NEG NONE NONE NORML NORML NEG 7 14 0 	 135 7 NEG NONE NONE NORML NORML NEG 3 15 <1 	 116 6 NEG NONE NONE NORML NORML NEG 5 7 0
Phosphorus ppm ASTM D5185m 1650 375 369 339 Zinc ppm ASTM D5185m 125 0 6 6 Sulfur ppm ASTM D5185m 22500 21435 19670 21091 Visc @ 40°C cSt ASTM D45 143 149 146 146	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 >170 400 200 	 162 NEG NONE NONE NORML NORML NEG 7 14 0 0 9 	 135 7 NEG NONE NONE NORML NORML NEG 3 15 <1 0 6 	 116 NEG NONE NONE NORML NORML NEG 5 7 0 <1 6
Zinc ppm ASTM D5185m 125 O 6 6 Sulfur ppm ASTM D5185m 22500 21435 19670 21091 Visc @ 40°C cSt ASTM D445 143 149 146 146	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm 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	 >75 >20 >0.075 NONE NONE NORML >0.075 >170 400 200 12 	 162 NEG NONE NONE NORML NORML NEG 7 14 0 0 9 	 135 7 NEG NONE NONE NORML NORML NEG 3 15 <1 0 6 	 116 NEG NONE NONE NORML NORML NEG 5 7 0 <1 6
Sulfur ppm ASTM D5185m 22500 21435 19670 21091 Visc @ 40°C cSt ASTM D445 143 149 146 146	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm 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	 >75 >20 >0.075 NONE NONE NORML NORML >0.075 >170 400 200 12 12 	 162 6 NEG NONE NONE NORML NORML NEG 7 14 0 0 9 8 	 135 7 NEG NONE NONE NORML NORML NEG 3 15 <1 0 6 4 	 116 6 NEG NONE NONE NORML NORML NEG 5 7 0 <1 6 6
Visc @ 40°C cSt ASTM D445 143 149 146 146	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	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 NORME NORML >0.075 >170 400 200 12 12 12 150 	 162 6 NEG NONE NONE NORML NORML NORML 14 0 0 9 8 22 	 135 7 NEG NONE NONE NORML NORML NEG 3 15 <1 0 6 4 14 	 116 6 NEG NONE NONE NORML NORML NEG 5 7 0 <1 6 6 23
-	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 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 NORM NORML >0.075 >170 400 200 12 150 1650 	 162 NEG NONE NONE NORML NORML NEG 7 14 0 0 9 8 22 375 	 135 7 NEG NONE NONE NORML NORML NEG 3 15 <1 0 6 4 14 369 	 116 NEG NONE NONE NORML NORML NEG 5 7 0 <1 6 23 339
	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 ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *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 >0.075 >170 400 200 12 150 1650 125 	 162 6 NEG NONE NONE NORML NORML NEG 7 14 0 0 9 8 22 375 0 	 135 7 NEG NONE NONE NORML NORML NEG 3 15 41 0 6 4 14 369 6 	 116 6 NEG NONE NONE NORML NORML NEG 5 7 0 <11 6 23 339 6

Submitted By: Mike Young - CHARLOTTE SHOP



 Unique Number
 : 11023525
 Diagnosed
 : 15 May 2024 - Don Baldridge
 US 28269

 Certificate L2367
 Test Package
 : CONST (Additional Tests: PQ)
 Contact: CHARLOTTE SHOP

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 myoung@jamesriverequipment.com

 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 T: (704)597-0211

 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 Page 2 of 2