

### [W66199] JOHN DEERE 85G 1FF085GXAKJ021049 Component Left Final Drive

# JOHN DEERE GL-5 80W90 (2 QTS)

## 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. ( Customer Sample Comment: W66199 )

#### **WEAR**

All component wear rates are normal.

## CONTAMINATION

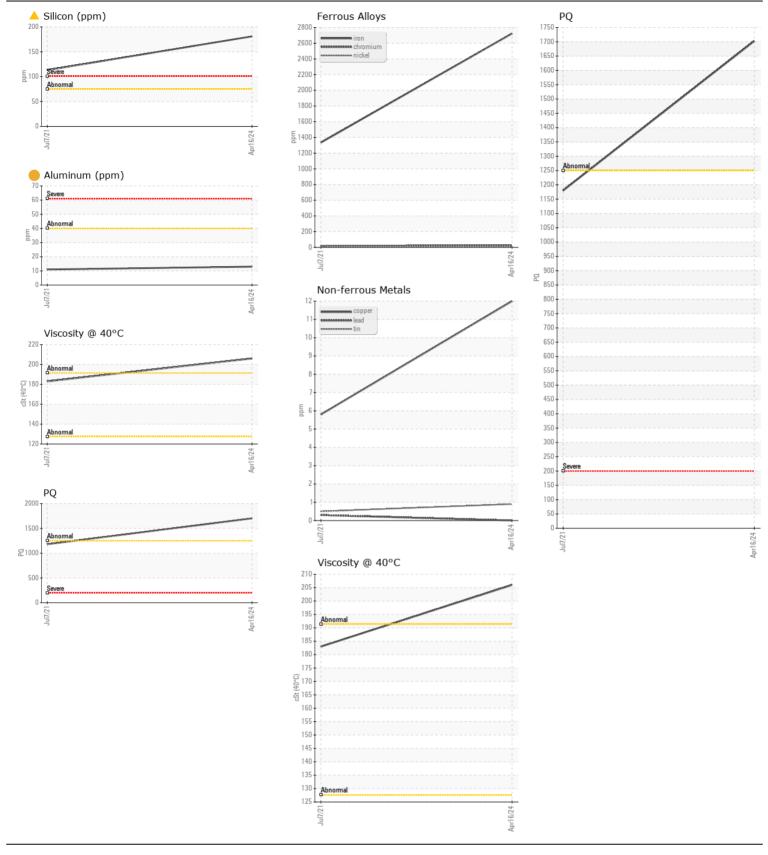
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.

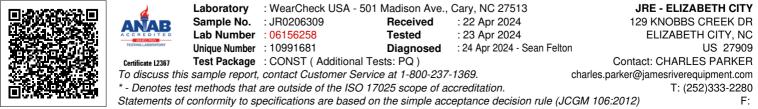
## FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0206309	JR0079309	
Sample Date		Client Info		16 Apr 2024	07 Jul 2021	
Machine Age	hrs	Client Info		2667	1323	
Oil Age	hrs	Client Info		2667	1323	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	Not Changd	
Filter Changed		Client Info		N/A	N/A	
Sample Status				ABNORMAL	ABNORMAL	
			4050		1100	
PQ ·		ASTM D8184	>1250	1702	1180	
Iron	ppm	ASTM D5185m	>750	2723	1335	
Chromium	ppm	ASTM D5185m	>9	28	15	
Nickel	ppm	ASTM D5185m	>10	12	9	
Titanium	ppm	ASTM D5185m		4	2	
Silver	ppm	ASTM D5185m		0	2	
Aluminum	ppm	ASTM D5185m	>40	<b>1</b> 3	11	
Lead	ppm	ASTM D5185m	>15	0	<1	
Copper	ppm	ASTM D5185m	>40	12	6	
Tin	ppm	ASTM D5185m	>10	<1	<1	
Vanadium	ppm	ASTM D5185m		<1	<1	
White Metal	scalar	*Visual	NONE	MODER	HEAVY	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Silicon	ppm	ASTM D5185m	>75	NONE 181 2	<b>1</b> 13	
Silicon Potassium		ASTM D5185m ASTM D5185m	>75 >20	▲ 181 2	▲ 113 3	
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>75	<b>1</b> 81	<b>1</b> 13	
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>75 >20 >0.075 NONE	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> </ul>	<ul> <li>113</li> <li>3</li> <li>NEG</li> <li>NONE</li> </ul>	
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method	>75 >20 >0.075	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> </ul>	<ul> <li>113</li> <li>3</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> </ul>	
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.075 NONE NONE	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> </ul>	<ul> <li>113</li> <li>3</li> <li>NEG</li> <li>NONE</li> </ul>	
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >0.075 NONE NONE NONE	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> </ul>	<ul> <li>113</li> <li>3</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> </ul>	  
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	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> </ul>	<ul> <li>113</li> <li>3</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> </ul>	   
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>75 >20 >0.075 NONE NONE NONE NORML	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NORML</li> </ul>	<ul> <li>113</li> <li>3</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NORML</li> </ul>	   
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>75 >20 >0.075 NONE NONE NONE NORML	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NORML</li> </ul>	<ul> <li>113</li> <li>3</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NORML</li> </ul>	   
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	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NEG</li> </ul>	<ul> <li>113</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> </ul>	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>75 >20 >0.075 NONE NONE NORML NORML >0.075	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> </ul>	<ul> <li>113</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>4</li> </ul>	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>75 >20 >0.075 NONE NONE NORML NORML >0.075	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>59</li> </ul>	<ul> <li>113</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>4</li> <li>61</li> </ul>	
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 ASTM D5185m	>75 >20 >0.075 NONE NONE NORML NORML >0.075	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>59</li> <li>63</li> <li>&lt;1</li> <li>30</li> </ul>	<ul> <li>113</li> <li>3</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>4</li> <li>61</li> <li>59</li> </ul>	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	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	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>59</li> <li>63</li> <li>&lt;1</li> </ul>	<ul> <li>113</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>4</li> <li>61</li> <li>59</li> <li>&lt;1</li> </ul>	
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 NORML >0.075	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>59</li> <li>63</li> <li>&lt;1</li> <li>30</li> </ul>	<ul> <li>113</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>4</li> <li>61</li> <li>59</li> <li>&lt;1</li> <li>17</li> </ul>	
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 ASTM D5185m	>75 >20 >0.075 NONE NONE NORML NORML >0.075	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>59</li> <li>63</li> <li>&lt;1</li> <li>30</li> <li>4</li> </ul>	<ul> <li>113</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>4</li> <li>61</li> <li>59</li> <li>&lt;1</li> <li>17</li> <li>3</li> </ul>	
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	>75 >20 >0.075 NONE NONE NORML NORML >0.075	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>59</li> <li>63</li> <li>&lt;1</li> <li>30</li> <li>4</li> <li>15</li> </ul>	<ul> <li>113</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>4</li> <li>61</li> <li>59</li> <li>&lt;1</li> <li>17</li> <li>3</li> <li>11</li> </ul>	
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 NORML NORML >0.075	<ul> <li>181</li> <li>2</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>6</li> <li>59</li> <li>63</li> <li>&lt;1</li> <li>30</li> <li>4</li> <li>15</li> <li>461</li> </ul>	<ul> <li>113</li> <li>NEG</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>4</li> <li>61</li> <li>59</li> <li>&lt;1</li> <li>17</li> <li>3</li> <li>11</li> <li>480</li> </ul>	

Submitted By: Mike Young - CHARLOTTE SHOP





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