

## WEAR ABNORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

#### [127448] Machine Id JOHN DEERE 644P 1DW644PAPNLZ13910 Component Brake

JOHN DEERE HY-GARD HYD/TRANS (--- QTS)

# RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### **WEAR**

Bearing and/or bushing wear is indicated. All other metal levels are typical for a new component breaking in.

#### CONTAMINATION

There is no indication of any contamination in the oil.

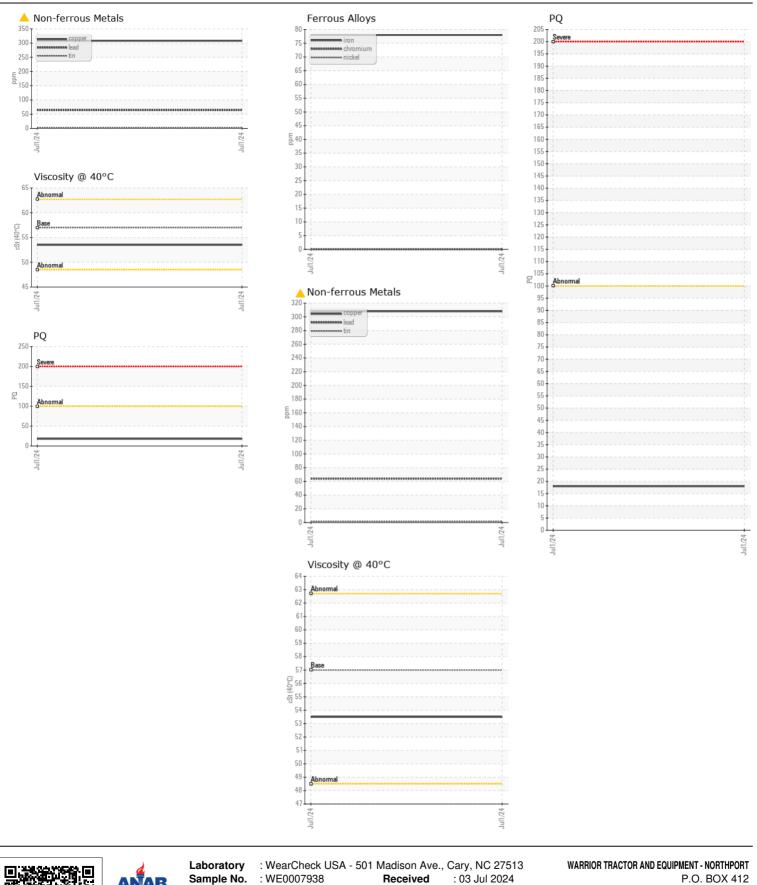
#### **FLUID CONDITION**

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

	/					
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0007938		
Sample Date		Client Info		01 Jul 2024		
Machine Age	hrs	Client Info		641		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				ABNORMAL		
				40		
PQ		ASTM D8184	050	18		
Iron	ppm	ASTM D5185m	>350	78		
Chromium	ppm	ASTM D5185m	>5	0		
Nickel	ppm	ASTM D5185m	>5	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	6	<1		
Aluminum	ppm	ASTM D5185m	>8	<1		
Lead	ppm	ASTM D5185m	>10	<u> </u>		
Copper	ppm	ASTM D5185m	>150	<b>▲</b> 308		
Tin	ppm	ASTM D5185m	>5	2		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Yellow Metal Silicon		*Visual ASTM D5185m	NONE >400	NONE 6		
	ppm					
Silicon		ASTM D5185m	>400	6		  
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m WC Method	>400 >20	6 3		
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m	>400 >20 >0.2	6 3 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>400 >20 >0.2 NONE	6 3 NEG NONE		
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>400 >20 >0.2 NONE NONE	6 3 NEG NONE NONE	 	
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>400 >20 >0.2 NONE NONE NONE	6 3 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	>400 >20 >0.2 NONE NONE NONE NORML	6 3 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	<ul> <li>&gt;400</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> </ul>	6 3 NEG NONE NONE NONE NORML NORML	   	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m	<ul> <li>&gt;400</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> </ul>	6 3 NEG NONE NONE NORML NORML NEG 7	   	
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	<ul> <li>&gt;400</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> </ul>	6 3 NEG NONE NONE NORML NORML NEG 7 6		
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 ASTM D5185m	>400 >20 >0.2 NONE NONE NORML NORML >0.2	6 3 NEG NONE NONE NORML NORML NEG 7 6 5		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm ppm scalar scalar scalar scalar scalar scalar gpm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;400</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.2</li> <li>6</li> </ul>	6 3 NEG NONE NONE NORML NORML NEG 7 6		
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	>400 >20 >0.2 NONE NONE NORML >0.2 6 0	6 3 NEG NONE NONE NORML NORML NEG 7 6 5 4 4		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	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 ASTM D5185m	<ul> <li>&gt;400</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.2</li> <li>6</li> <li>0</li> <li>0</li> <li>145</li> </ul>	6 3 NEG NONE NONE NORML NORML NEG 7 6 5 4 4 4 118		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar gpm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>400 >20 >0.2 NONE NONE NORML >0.2 6 0	6 3 NEG NONE NONE NORML NORML NEG 7 6 5 4 4		
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	<ul> <li>&gt;400</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.2</li> <li>6</li> <li>0</li> <li>0</li> <li>145</li> </ul>	6 3 NEG NONE NONE NORML NORML NEG 7 6 5 4 4 4 118		
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 ASTM D5185m	<ul> <li>&gt;400</li> <li>&gt;20</li> <li>&gt;0.2</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.2</li> <li>6</li> <li>0</li> <li>0</li> <li>145</li> <li>3570</li> </ul>	6 3 NEG NONE NONE NORML NORML NEG 7 6 5 4 4 4 118 3479 1118 1258		
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	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>400 >20 >0.2 NONE NONE NORM >0.2 6 0 0 0 145 3570 1290	6 3 NEG NONE NONE NORML NORML NEG 7 6 5 4 4 4 118 3479 1118		

Report Id: WARNOR [WUSCAR] 06227786 (Generated: 07/09/2024 15:54:24) Rev: 1

Contact/Location: CRAIG ANDOE - WARNOR



Lab Number : 06227786 Tested NORTHPORT, AL : 05 Jul 2024 Unique Number : 11111279 Diagnosed : 06 Jul 2024 - Don Baldridge US 35476 Test Package : CONST (Additional Tests: PQ) Contact: CRAIG ANDOE Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. serve01@warriortractor.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (205)339-0300 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: CRAIG ANDOE - WARNOR Page 2 of 2