

#### Machine Id JOHN DEERE 85P 1FF085PAAPJ000253 Component Hydraulic System Fluid JOHN DEERE ZINC-FREE HYDRAULIC OIL 46 (--- QTS)

### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

#### **WEAR**

All component wear rates are normal.

## CONTAMINATION

Moderate concentration of visible dirt/debris present in the oil.

# FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

(413)				~~~~~		
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218626		
Sample Date		Client Info		09 Jul 2024		
Machine Age	hrs	Client Info		500		
Oil Age	hrs	Client Info		500		
Filter Age	hrs	Client Info		500		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
<b>DO</b>						
PQ		ASTM D8184		19		
Iron	ppm	ASTM D5185m	>20	2		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	10	0		
Aluminum	ppm	ASTM D5185m	>10	0		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>75	0		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
				NONE		
Silicon	ppm	ASTM D5185m	>20	NONE <1		
				NONE <1 0	 	
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>20 >20	NONE <1		
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>20 >20 >20 >0.1	NONE <1 0 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>20 >20 >0.1 NONE	NONE <1 0 NEG ▲ MODER		
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>20 >20 >0.1 NONE NONE	<pre>NONE &lt;1 0 NEG MODER NONE</pre>		
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual	>20 >20 >0.1 NONE NONE NONE	NONE <1 0 NEG MODER 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	>20 >20 >0.1 NONE NONE NONE NORML	NONE <1 0 NEG MODER 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	>20 >20 >0.1 NONE NONE NORML NORML	NONE <1 NEG MODER NONE NONE NORML 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	>20 >20 >0.1 NONE NONE NORML NORML	NONE <1 NEG MODER NONE NONE NORML NORML	   	   
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	>20 >20 >0.1 NONE NONE NORML NORML	<ul> <li>NONE</li> <li>&lt;1</li> <li>NEG</li> <li>MODER</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 Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >20 >0.1 NONE NONE NORML NORML	NONE <1 NEG MODER NONE NORML NORML NORML NEG <1 0		   
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	>20 >20 >0.1 NONE NONE NORML NORML	<ul> <li>NONE</li> <li>&lt;1</li> <li>0</li> <li>NEG</li> <li>MODER</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>&lt;1</li> <li>0</li> <li>0</li> <li>0</li> <li>0</li> <li>0</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 scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 >0.1 NONE NONE NORML NORML	NONE <1 0 NEG MODER NONE NONE NORML NORML NEG <1 0 0 0 0		
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	>20 >20 >0.1 NONE NONE NORML NORML	<ul> <li>NONE</li> <li>&lt;1</li> <li>0</li> <li>NEG</li> <li>MODER</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>NORML</li> <li>NEG</li> <li>&lt;1</li> <li>0</li> <li>0</li> <li>0</li> <li>0</li> <li>0</li> </ul>		
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	>20 >20 >0.1 NONE NONE NORML NORML	NONE <1 0 NEG NOLE NONE NORML NORML NEG <1 0 0 0 0 0 1 3 3		
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	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 >0.1 NONE NONE NORML NORML	<1         0         NEG         MODER         NONE         NORML         NORML         NORML         0         0         0         0         0         0         13		
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	>20 >20 >0.1 NONE NONE NORML NORML	NONE <1 0 NEG NODER NONE NONE NORML NORML NEG <1 0 0 0 1 3 3 428 54		
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 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	>20 >20 >0.1 NONE NONE NORML NORML	NONE <1 0 NEG NONE NONE NORML NORML NORML 0 0 1 0 0 1 0 1 3 3 428		

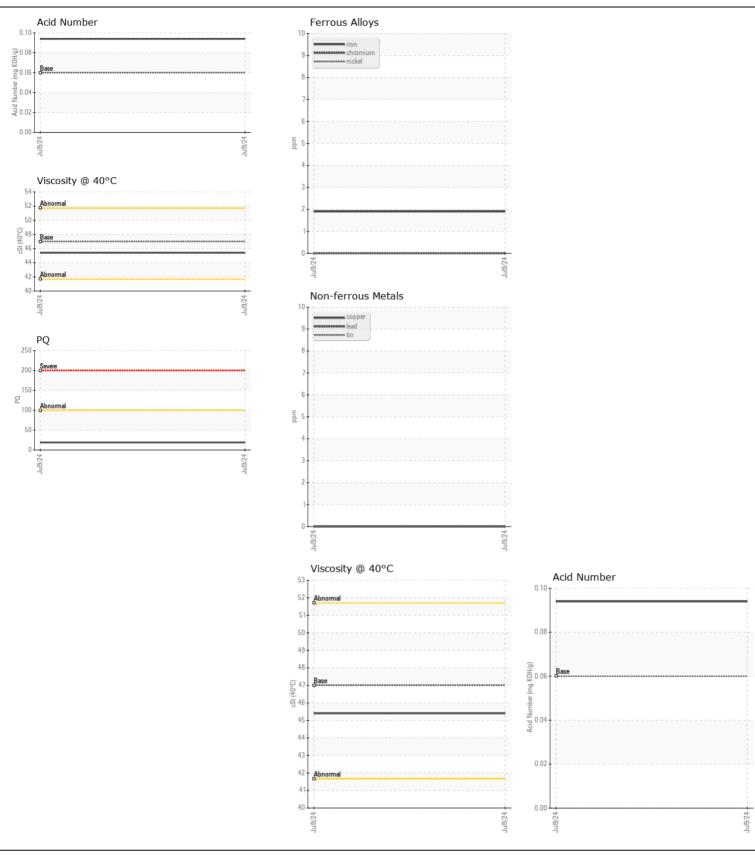
Visc @ 40°C

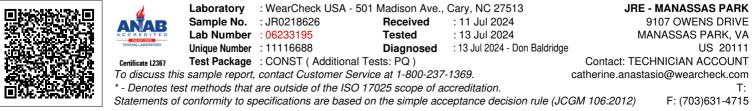
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