

## [W53163] JOHN DEERE 296343 Component Hydraulic System

## JOHN DEERE ZINC-FREE HYDRAULIC OIL 46 (--- GAL)

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



All component wear rates are normal.

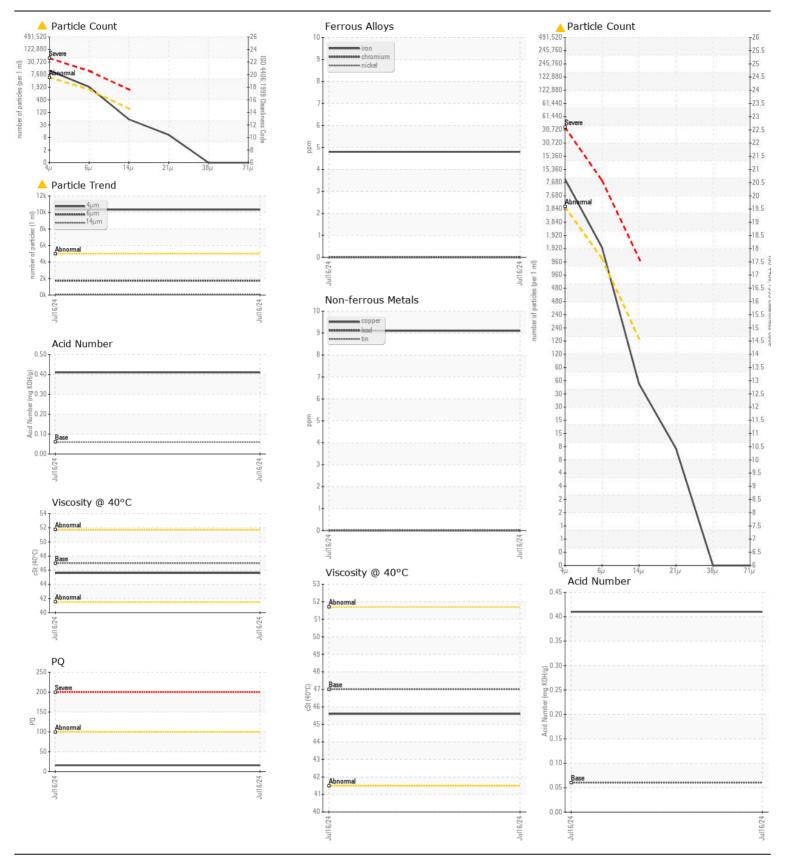
## CONTAMINATION

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

## FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0224539		
Sample Date		Client Info		16 Jul 2024		
Machine Age	hrs	Client Info		711		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
PQ		ASTM D8184		16		
Iron	ppm	ASTM D5185m	>20	5		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	0		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>75	9		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>20	2		
Potassium	ppm	ASTM D5185m	>20	<1		
Water		WC Method	>0.1	NEG		
Particles >4µm		ASTM D7647	>5000	<b>10339</b>		
Particles >6µm		ASTM D7647	>1300	1737		
Particles >14µm		ASTM D7647	>160	49		
Particles >21µm		ASTM D7647	>40	9		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>1</b> 21/18/13		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.1	NEG		
Sodium	ppm	ASTM D5185m		2		
Boron	ppm	ASTM D5185m		6		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		9		
Calcium	ppm	ASTM D5185m		515		
Phosphorus	ppm	ASTM D5185m		568		
Zinc	ppm	ASTM D5185m		247		
Sulfur	ppm	ASTM D5185m		1271		
Acid Number (AN)	mg KOH/g	ASTM D3103III ASTM D8045	0.06	0.41		
Visc @ 40°C	cSt	ASTM D0045 ASTM D445	47	45.6		
	001	A011010443	-+1	43.0		



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - ASHLAND** Sample No. : JR0224539 Received 11047 LEADBETTER RD : 17 Jul 2024 Lab Number : 06239061 ASHLAND, VA Tested : 18 Jul 2024 : 18 Jul 2024 - Don Baldridge US 23005 Unique Number : 11127895 Diagnosed Test Package : CONST (Additional Tests: PQ) Contact: DAVID ZIEG Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. dzieg@jamesriverequipment.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (804)798-6001 F: (804)798-0292 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: DAVID ZIEG - JAMASH Page 2 of 2