

### JOHN DEERE 644 P 1DW644PALPLX18577 Component Rear Differential

{not provided} (--- GAL)

# RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

#### **WEAR**

Bearing and/or bushing wear is indicated. Component wear metal level(s) high for break in.

## CONTAMINATION

There is a moderate concentration of water present in the oil.

## **FLUID CONDITION**

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0214773		
Sample Date		Client Info		23 May 2024		
Machine Age	hrs	Client Info		457		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Changed		
Sample Status				SEVERE		
PQ		ASTM D8184	=	91		
Iron	ppm	ASTM D5185m	>500	238		
Chromium	ppm	ASTM D5185m	>10	1		
Nickel	ppm	ASTM D5185m	>10	2		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	<1		
Lead	ppm	ASTM D5185m	>25	<u> </u>		
Copper	ppm	ASTM D5185m	>100	<b>1</b> 313		
Tin	ppm	ASTM D5185m	>10	2		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	nom	ASTM D5185m	>75	17		
Potassium	ppm	ASTM D5185m	>20	3		
Water	%	ASTM D6304	> 2	0 510		
nom Water	nnm	ASTM D6304	>2000	▲ 5100		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORMI			
Odor	scalar	*Visual	NORMI	NORMI		
Emulsified Water	scalar	*Visual	> 2	▲ 0.2%		
	·····		2.L			
Sodium	ppm	ASTM D5185m		13		
Boron	ppm	ASTM D5185m		9		
Barium	ppm	ASTM D5185m		4		
Molybdenum	ppm	ASTM D5185m		6		
Manganese	ppm	ASTM D5185m		13		
Magnesium	ppm	ASTM D5185m		84		
-				0700		
Calcium	ppm	ASTM D5185m		2709		
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m		1146		
Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		2709 1146 865		
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2709 1146 865 4238	 	

Contact/Location: EDDIE GARRETSON - CWSMAS



Sample No. Received 9102 OWENS DR : JR0214773 : 31 May 2024 Lab Number : 06197040 MANASSAS PARK, VA Tested : 03 Jun 2024 : 04 Jun 2024 - Don Baldridge Unique Number : 11059163 Diagnosed US 20111 Test Package : CONST (Additional Tests: KF, PQ) Contact: EDDIE GARRETSON Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. egarretson@strittmattercompanies.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (703)335-2255 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (703)335-8095

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