WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

[SW RODGERS]

JOHN DEERE 350P 1FF350PAKPF000792

Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

Sample Number Client Info 23 May 2024	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Agriculture Collect Info Colle	TESSIMILIBATION		00111		Limitorion			,
## All component wear rates are normal. Machine Age Inst Client Info 1762	Oil and filter change at the time of sampling has been noted. Resample							
Filter Age Oil Client Info Changed Client Info	at the next service interval to monitor.		hrs			-		
Filter Age Oil Client Info Changed Client Info		Oil Age	hrs	Client Info		500		
Filter Changed Sample Status			hrs	Client Info		500		
Normal		Oil Changed		Client Info		Changed		
Iron		Filter Changed		Client Info		Changed		
Chromium ppm ASTM D5185m > 5 4		Sample Status				NORMAL		
All component wear rates are normal. Chromium ppm ASTM D5186m 51 4 Titanium ppm ASTM D5186m 51 4 Titanium ppm ASTM D5186m 51 4 Titanium ppm ASTM D5186m 51 2 Auminum ppm ASTM D5186m 53 2 Auminum ppm ASTM D5186m 52 1 ASTM D5186m 52 5 ASTM D5186m 53 ASTM D5186m 54 ASTM D5186m 55 ASTM D518	WEAR	Iron	ppm	ASTM D5185m	>51	29		
Titanium ppm ASIM DSISS 4		Chromium	ppm	ASTM D5185m	>11	<1		
Silver ppm ASTM 05185m >3 <1	All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>5	4		
Aluminum ppm ASTM D5185m >31 2		Titanium	ppm	ASTM D5185m		<1		
Lead ppm ASTM DS185m >26 9		Silver	ppm	ASTM D5185m	>3	<1		
Copper		Aluminum	ppm	ASTM D5185m	>31	2		
Tin		Lead	ppm	ASTM D5185m	>26	1		
Vanadium ppm ASTM D5185m <1 White Metal scalar Visual NONE NONE Yellow Metal scalar Visual NONE NONE Young metal Scalar Visual NONE NONE Young metal Young metal NONE NONE NONE Young metal Young metal NONE NON		• •	ppm			9		
White Metal Scalar *Visual NONE NO			ppm		>4			
Yellow Metal Scalar *Visual NONE NONE Silicon ppm ASTM D5185m >22 7 Potassium ppm ASTM D5185m >20 2 Fuel WC Method >2.1 <1.0 Water WC Method >0.21 NEG Soot % % *ASTM D7844 >3 0.4 Sulfation Abs/mm *ASTM D7844 >3 0.4 Sulfation Abs/mm *ASTM D7844 >3 0.4 Sulfation Abs/mm *ASTM D7845 >30 2.9 Silt scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NO			ppm					
Silicon ppm ASTM D5185m >22 7			scalar					
Potassium ppm ASTM D5185m >20 2		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium ppm ASTM D5185m >20 2	CONTAMINATION	Silicon	nnm	ASTM D5185m	-22	7		
Fuel WC Method >2.1 <1.0	CONTAININATION		• •					
Water	There is no indication of any contamination in the oil.		ррпп					
Glycol	·							
Soot % % ASTM D7844 >3 0.4 Nitration Abs/cm 'ASTM D7624 >20 8.0 Sulfation Abs/lmm 'ASTM D7624 >30 22.9 Sulfation Abs/lmm 'ASTM D7615 >30 22.9 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Appearance scalar *Visual NORML NO					70.21			
Nitration Abs/cm *ASTM D7624 >20 8.0 Sulfation Abs/lmm *ASTM D7415 >30 22.9 Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORM		-	%		>3			
Sulfation								
Silt Scalar *Visual NONE NORML		Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9		
Sand/Dirt Scalar *Visual NONE NORML		Silt	scalar			NONE		
Appearance Scalar Visual NORML		Debris	scalar	*Visual	NONE	NONE		
Color Scalar *Visual NORML N		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.21 NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium ppm ASTM D5185m >31 3		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 35		Emulsified Water	scalar	*Visual	>0.21	NEG		
Boron ppm ASTM D5185m 35 Magnesium ppm ASTM D5185m 50 Magnesium ppm ASTM D5185m 50 Magnesium ppm ASTM D5185m 50 Magnesium ppm ASTM D5185m 541 Calcium ppm ASTM D5185m 1890 Phosphorus ppm ASTM D5185m 958 Zinc ppm ASTM D5185m 1136 Sulfur ppm ASTM D5185m 3337 Oxidation Abs/.1mm *ASTM D7414 >25 21.8	FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	3		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service. Barium ppm ASTM D5185m 50 Molybdenum ppm ASTM D5185m 51 Manganese ppm ASTM D5185m 541 Calcium ppm ASTM D5185m 1890 Phosphorus ppm ASTM D5185m 958 Zinc ppm ASTM D5185m 1136 Sulfur ppm ASTM D5185m 3337 Oxidation Abs/.1mm *ASTM D7414 >25 21.8	The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		35		
Molybdenum ppm ASTM D5185m 50 Manganese ppm ASTM D5185m <1		Barium		ASTM D5185m		0		
Magnesium ppm ASTM D5185m 541 Calcium ppm ASTM D5185m 1890 Phosphorus ppm ASTM D5185m 958 Zinc ppm ASTM D5185m 1136 Sulfur ppm ASTM D5185m 3337 Oxidation Abs/.1mm *ASTM D7414 >25 21.8		Molybdenum	ppm	ASTM D5185m		50		
Calcium ppm ASTM D5185m 1890 Phosphorus ppm ASTM D5185m 958 Zinc ppm ASTM D5185m 1136 Sulfur ppm ASTM D5185m 3337 Oxidation Abs/.1mm *ASTM D7414 >25 21.8		Manganese	ppm			<1		
Phosphorus ppm ASTM D5185m 958 Zinc ppm ASTM D5185m 1136 Sulfur ppm ASTM D5185m 3337 Oxidation Abs/.1mm *ASTM D7414 >25 21.8		•	ppm	ASTM D5185m				
Zinc ppm ASTM D5185m 1136 Sulfur ppm ASTM D5185m 3337 Oxidation Abs/.1mm *ASTM D7414 >25 21.8			ppm					
Sulfur ppm ASTM D5185m 3337 Oxidation Abs/.1mm *ASTM D7414 >25 21.8								
Oxidation								
Base Number (BN) mg KOH/g ASTM D2896 13.6 9.8								
An arrange of the second of th								
Visc @ 100°C cSt ASTM D445 15.4 13.5		Visc @ 100°C	cSt	ASTM D445	15.4	13.5		







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0217628 Lab Number : 06191486

Unique Number : 11048238

Received **Tested** Diagnosed

: 24 May 2024 : 29 May 2024 Test Package : CONST (Additional Tests: TBN)

: 29 May 2024 - Angela Borella

JRE - MANASSAS PARK 9107 OWENS DRIVE MANASSAS PARK, VA

US 20111 Contact: MARC GAUTROIS

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

mgautrois@jamesriverequipment.com T: (703)606-7193 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (703)631-4715