WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Area

[W9010]

8036-1024

Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (10 QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. (Customer Sample Comment: W9010)	Sample Number		Client Info		JR0196814	JR0197069	
	Sample Date		Client Info		12 Jun 2024	01 Feb 2024	
	Machine Age	hrs	Client Info		1882	1391	
	Oil Age	hrs	Client Info		491	1391	
	Filter Age	hrs	Client Info		491	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	10	22	
	Chromium	ppm	ASTM D5185m	>20	<1	2	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		5	7	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m		10	1	
	Tin	ppm	ASTM D5185m		<1	<1	
	Vanadium	ppm	ASTM D5185m	2.0	0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
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CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8	13	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2	0	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	8.2	8.6	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	20.9	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m		0	2	
	Boron	ppm	ASTM D5185m		264	234	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		258	247	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		792	806	
	Calcium	ppm	ASTM D5185m		1374	1315	
	Phosphorus	ppm	ASTM D5185m		796	926	
	Zinc	ppm	ASTM D5185m		1059	1089	
	Sulfur	ppm	ASTM D5185m		3091	2907	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	16.2	
	Base Number (BN)				8.6	8.7	
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Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06209871

: JR0196814

Received **Tested** Unique Number : 11082735

Diagnosed

: 15 Jun 2024 : 17 Jun 2024 - Angela Borella

JRE - HOPE MILLS/FAYETTEVILLE 5039 HWY 301 SOUTH

HOPE MILLS, NC US 28348

Contact: FAYETTEVILLE SHOP

Test Package: MOBCE (Additional Tests: TBN) To discuss this sample report, contact Customer Service at 1-800-237-1369. stephen.mullis@jamesriverequipment.com;canastasio@wearcheck.com T:

: 14 Jun 2024

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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