WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Machine Id

JOHN DEERE 6420 L06420V358440

Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0215944		
	Sample Date		Client Info		27 Jun 2024		
	Machine Age	hrs	Client Info		1505		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>51	13		
	Chromium	ppm	ASTM D5185m	>11	0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m		6		
	Lead	ppm	ASTM D5185m		2		
	Copper	ppm	ASTM D5185m		- <1		
	Tin	ppm	ASTM D5185m		1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		7		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.21	NEG		
	Glycol	21	WC Method	0	NEG		
	Soot %	%	*ASTM D7844		0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	8.9		
	Sulfation	Abs/.1mm	*ASTM D7415		22.3		
	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	>0.21	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	2		
	Boron	ppm	ASTM D5185m		219		
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		
	Molybdenum	ppm	ASTM D5185m		245		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		894		
	Calcium	ppm	ASTM D5185m		1432		
	Phosphorus	ppm	ASTM D5185m		948		
	Zinc	ppm	ASTM D5185m		1130		
	Sulfur	ppm	ASTM D5185m		3601		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5		
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.5		
	Visc @ 100°C	cSt	ASTM D445	4 = 4	14.9		





Laboratory Sample No.

Lab Number : 06227197

: JR0215944

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

Tested Unique Number : 11110690 Diagnosed Test Package : CONST (Additional Tests: TBN, KV40)

: 05 Jul 2024 To discuss this sample report, contact Customer Service at 1-800-237-1369.

: 05 Jul 2024 - Angela Borella

: 03 Jul 2024

Contact: MIKE CRANFILL MCRANFILL@JAMESRIVEREQUIPMENT.COM T: (704)872-6411

* - 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)

JRE - STATESVILLE

STATESVILLE, NC

US 28625

635 MOCKSVILLE HWY