

## JOHN DEERE 1023E 1LV1023EHEH412906 Component Diesel Engine

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

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (-	((15)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0183666		
	Sample Date		Client Info		01 Mar 2024		
	Machine Age	hrs	Client Info		464		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>51	5		
WEAR	Chromium	ppm	ASTM D5185m		<1		
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>31	5		
	Lead	ppm	ASTM D5185m		1		
	Copper	ppm	ASTM D5185m	>26	1		
	Tin	ppm	ASTM D5185m	>4	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Silicon				7		
CONTAMINATION	Potassium	ppm	ASTM D5185m ASTM D5185m		7 2		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		2 <1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	20.21	NEG		
	Soot %	%	*ASTM D7844	>3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	7.1		
	Sulfation	Abs/.1mm	*ASTM D7415		20.0		
	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	Cadium			0.1	4		
FLUID CONDITION	Sodium Boron	ppm	ASTM D5185m ASTM D5185m	>31	<1 283		
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		203 <1		
	Molybdenum	ppm ppm	ASTM D5185m		269		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		966		
	Calcium	ppm	ASTM D5185m		1684		
	Phosphorus	ppm	ASTM D5185m		1066		
	Zinc	ppm	ASTM D5185m		1311		
	Sulfur	ppm	ASTM D5185m		4011		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.0		
	Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.8		

Visc @ 100°C cSt

ASTM D445 15.4

14.3



**JRE - HARRISONBURG** Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : JR0183666 Received 1332 GARBERS CHURCH RD : 11 Apr 2024 Lab Number : 06145725 Tested : 12 Apr 2024 HARRISONBURG, VA Unique Number : 10970533 Diagnosed : 12 Apr 2024 - Wes Davis US 22801 Test Package : CONST (Additional Tests: TBN) Contact: ETHAN SHEETS Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. ETHAN.SHEETS@JAMESRIVEREQUIPMENT.COM \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: ETHAN SHEETS - JAMROCVA Page 2 of 2