WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

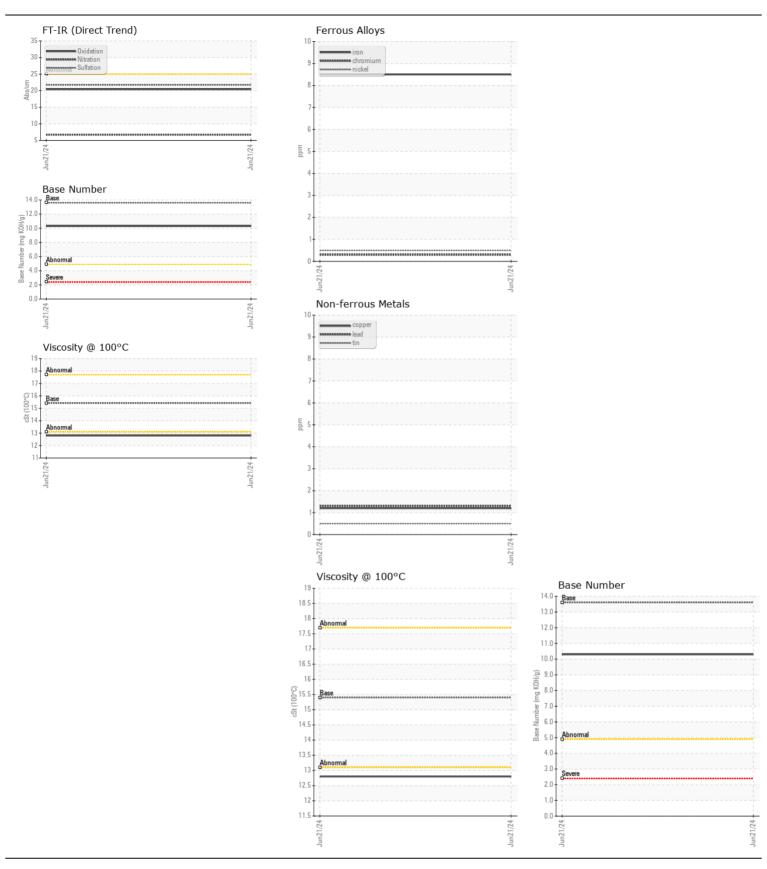
Machine Id

JOHN DEERE 410L 1T0410LXCGF304512

Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (14 QTS)

Nickel ppri ASTM 051885 <1 Silver ppm ASTM 051885 <1 Silver ppm ASTM 051885 >3 <1 Silver ppm ASTM 05185 >3 <1 Aluminum ppm ASTM 05185 >3 <1 ASTM 05185 >26 1 Copper ppm ASTM 05185 >26 1 Vanadium ppm ASTM 05185 >26 1 Vanadium ppm ASTM 05185 >4 <1 Vanadium ppm ASTM 05185 >2 Vanadium ppm ASTM 05185 >3	JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (14 QTS)						
Resample at the next service interval to monitor. Sample Number Sample Number Sample Date Client Info 20 20 20 20 20 20 20 20 20 20 20 20 20	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date Client Info Collect Info Changed Client Info Changed Client Info Changed Client Info Changed Changed Client Info Changed Chang		Sample Number						
Machine Age hrs Client Info 6203	Resample at the next service interval to monitor.					21 Jun 2024		
Oil Age his Cilient Info 6203			hrs	Client Info		6203		
Oil Changed Client Info Changed Client Info Changed Changed Client Info Changed Changed		Oil Age	hrs	Client Info				
Filter Changed Sample Status			hrs	Client Info				
Filter Changed Sample Status		Oil Changed		Client Info		Changed		
Normal N		-		Client Info		Changed		
Chromium ppm ASTM D6185m 51 51 51 51 51 51 51		Sample Status				_		
Chromium ppm ASTM D6185m 51 51 51 51 51 51 51	WEAR.							
Nickel ppm ASTM D5165m 55 <1	WEAR							
Titalium ppm ASTMOSISS <1	All component wear rates are normal.							
Silver					>5			
Aluminum ppm ASTM D5185m >31 3								
Lead								
Copper								
Time								
Vanadium Vanadium								
White Metal Scalar Visual NONE NON					>4			
Yellow Metal Scalar Visual NONE NONE There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >22 5 Potassium ppm ASTM D5185m >20 2 Fuel % ASTM D3324 >2.1 <1.0 Wide mod 0.2 1 NEG Glycol WC Method 0.2 1 NEG Soot % % ASTM D7344 >3 0.1 Sulfation Abs/:mm ASSTM D7345 >20 6.7 Sulfation Abs/:mm ASTM D7345 >20 6.7 Sulfation Abs/:mm ASTM D7345 >30 21.7 Sand/Dirt Scalar Visual NONE NONE NONE NONE NONE Appearance Scalar Visual NONE NONE NONE Appearance Scalar Visual NORML NORM					NONE			
Silicon ppm ASTM 05185m >22 5								
Potassium ppm ASTM D5185m 2-0 2		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium ppm ASTM D5185m 2-0 2	CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	5		
There is no indication of any contamination in the oil. Fuel % ASTM D3524 > 2.1 < 1.0 Water WC Method > 0.21 NEG Soot % % *ASTM D7844 > 3 0.1 Sulfation Abs/cm *ASTM D7624 > 20 6.7 Sulfation Abs/cm *Visual NONE NONE NONE NONE Sand/Dirt Scalar *Visual NONE		Potassium		ASTM D5185m	>20			
Water WC Method O.2.1 NEG	There is no indication of any contamination in the oil.	Fuel				<1.0		
Glycol		Water		WC Method	>0.21			
Soot %		Glycol				NEG		
Nitration Abs/cm *ASTM D7624 >20 6.7		•	%		>3	0.1		
Silt Scalar *Visual NONE NORML NOR		Nitration	Abs/cm			6.7		
Silt Scalar *Visual NONE NORML NOR		Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7		
Sand/Dirt Scalar *Visual NONE NONE NORML		Silt	scalar					
Sand/Dirt Scalar *Visual NONE NONE Appearance Scalar *Visual NORML		Debris	scalar	*Visual	NONE	NONE		
Calcium Calc		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.21 NEG		Appearance	scalar	*Visual	NORML	NORML		
Emulsified Water scalar *Visual >0.21 NEG		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 38 Magnesium ppm ASTM D5185m 38 Magnesium ppm ASTM D5185m 457 Magnesium ppm ASTM D5185m 457 Calcium ppm ASTM D5185m 457 Phosphorus ppm ASTM D5185m 857 Zinc ppm ASTM D5185m 1095 Sulfur ppm ASTM D5185m 2931 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3		Emulsified Water	scalar	*Visual	>0.21	NEG		
Boron ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 38 Magnesium ppm ASTM D5185m 38 Magnesium ppm ASTM D5185m 457 Magnesium ppm ASTM D5185m 457 Calcium ppm ASTM D5185m 457 Phosphorus ppm ASTM D5185m 857 Zinc ppm ASTM D5185m 1095 Sulfur ppm ASTM D5185m 2931 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3	EL LUD AGNIDITION							
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 38 Molybdenum ppm ASTM D5185m 457 Magnesium ppm ASTM D5185m 457 Calcium ppm ASTM D5185m 1668 Phosphorus ppm ASTM D5185m 857 Zinc ppm ASTM D5185m 1095 Sulfur ppm ASTM D5185m 2931 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3	FLUID CONDITION				>31			
Oil. The condition of the oil is suitable for further service. Molybdenum ppm ASTM D5185m 38 Magnesium ppm ASTM D5185m 457 Calcium ppm ASTM D5185m 1668 Phosphorus ppm ASTM D5185m 857 Zinc ppm ASTM D5185m 1095 Sulfur ppm ASTM D5185m 2931 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3	The BN result indicates that there is suitable alkalinity remaining in the							
Manganese ppm ASTM D5185m <1	oil. The condition of the oil is suitable for further service.							
Magnesium ppm ASTM D5185m 457 Calcium ppm ASTM D5185m 1668 Phosphorus ppm ASTM D5185m 857 Zinc ppm ASTM D5185m 1095 Sulfur ppm ASTM D5185m 2931 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3		•						
Calcium ppm ASTM D5185m 1668 Phosphorus ppm ASTM D5185m 857 Zinc ppm ASTM D5185m 1095 Sulfur ppm ASTM D5185m 2931 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3		_						
Phosphorus ppm ASTM D5185m 857 Zinc ppm ASTM D5185m 1095 Sulfur ppm ASTM D5185m 2931 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3		•						
Zinc ppm ASTM D5185m 1095 Sulfur ppm ASTM D5185m 2931 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3								
Sulfur ppm ASTM D5185m 2931 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3								
Oxidation Abs/.1mm *ASTM D7414 >25 20.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3								
Base Number (BN) mg KOH/g ASTM D2896 13.6 10.3					0.5			
Visc @ 100°C cSt ASIM D445 15.4 12.8								
		Visc @ 100°C	cSt	ASTM D445	15.4	12.8		







Certificate L2367

Laboratory Sample No.

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

: JR0218212 Lab Number : 06219541 Unique Number : 11097738

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

Received : 25 Jun 2024 **Tested** : 26 Jun 2024 Diagnosed

Test Package : CONST (Additional Tests: FuelDilution, TBN)

: 26 Jun 2024 - Don Baldridge

MANASSAS PARK, VA US 20111 Contact: DON VEST

dvest@jamesriverequipment.com T: (703)631-8500

JRE - MANASSAS PARK

9107 OWENS DRIVE

* - 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) F: (703)631-4715