WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ATTENTION



Machine Id

JOHN DEERE 130G 1FF130GXCNF043174

Diesel Engine

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

Sample Number Client Info Sample Number Client Info 15 May 2024	JOHN DEERE ENGINE OIL PLU		4 0 (- GAL)				
Sample Number Client Info SAR209996 Sample Number Sample Number Sample Dat Client Info Sample Dat Sample Status S	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
### A SAIN POTE AND CONTROLLED CO		Sample Number		Client Info		JR0209906		
Machine Age hrs Cilent Info 200	Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		15 May 2024		
Filter Age		Machine Age	hrs	Client Info		434		
Oil Changed Cilent Info Changed Cilent Info Changed Changed Cilent Info Changed		Oil Age	hrs	Client Info		200		
Filter Changed Sample Status		Filter Age	hrs	Client Info		200		
NEAR		Oil Changed		Client Info		Changed		
Iron		Filter Changed		Client Info		Changed		
Chromium ppm ASTM D5185m 511 2 Nickel ppm ASTM D5185m 515 1 Silver ppm ASTM D5185m 511 Silver ppm ASTM D5185m 511 1 ASTM D5185m 512 512 ASTM D5185m 512 AST		Sample Status				ATTENTION		
Chromium ppm ASTM D5185m 511 2 Nickel ppm ASTM D5185m 515 1 Silver ppm ASTM D5185m 511 Silver ppm ASTM D5185m 511 1 ASTM D5185m 512 512 ASTM D5185m 512 AST	NEAD	Iron	nnm	AQTM DE195m	<u>. 51</u>	41		
Nickel ppm ASTM DSISSm 55 1	WLAN							
Titanium ppm ASTM D8185m <1	All component wear rates are normal.							
Silver ppm ASTM D5185m >3 1					>0			
Aluminum ppm ASTM D5185m >31 10					0			
Lead								
Copper								
Tin								
Vanadium White Metal scalar Visual NONE								
White Metal Scalar Visual NONE NON					>4			
Yellow Metal Scalar Visual NONE NONE Potassium ppm ASTM D5185m >22 13 Potassium ppm ASTM D5185m >20 5 Potassium ppm ASTM D5185m >20 5 Water WC Method Soot % % MC Method Soot % % MSTM D70844 >3 0.5 NItration Abs/rmm ASTM D7185 >30 0.5 Sulfation Abs/rmm ASTM D7185 >30 23.9 Sulfation Abs/rmm ASTM D7185 >30 23.9 Sand/Dirt Scalar Visual NONE NONE NONE Appearance Scalar Visual NONE NONE NONE Appearance Scalar Visual NORML					NONE			
Silicon ppm ASTM D5185m >22 13								
Potassium ppm ASTM D5185m ≥20 5		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium ppm ASTM D5185m ≥20 5	CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	13		
Water WC Method 0.21 NEG	Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	5		
Water WC Method >0.21 NEG		Fuel	%	ASTM D3524	>2.1	0.3		
Soot %		Water		WC Method	>0.21	NEG		
Nitration Abs/cm *ASTM D7624 >20 9.5 Sulfation Abs/.tmm Abs/.tmm *ASTM D7415 >30 23.9 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE		Glycol		WC Method		NEG		
Sulfation Abs/.lmm *ASTM D7415 >30 23.9		Soot %	%	*ASTM D7844	>3	0.5		
Silt scalar *Visual NONE NONE NONE NORML		Nitration	Abs/cm	*ASTM D7624	>20	9.5		
Debris Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NONE NORML NOR		Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9		
Sand/Dirt Scalar *Visual NONE NONE NORML		Silt	scalar	*Visual	NONE	NONE		
Appearance Scalar *Visual NORML NORML NORML Codor Scalar *Visual NORML N		Debris	scalar	*Visual	NONE	NONE		
Calcium Calc		Sand/Dirt	scalar	*Visual	NONE	NONE		
Calcium Calc		Appearance	scalar	*Visual	NORML	NORML		
Sodium ppm ASTM D5185m 233			scalar	*Visual				
Boron ppm ASTM D5185m 233 Barium ppm ASTM D5185m 2 Molybdenum ppm ASTM D5185m 2 Manganese ppm ASTM D5185m 2 Manganese ppm ASTM D5185m 6 Magnesium ppm ASTM D5185m 818 Calcium ppm ASTM D5185m 1464 Phosphorus ppm ASTM D5185m 1464 Zinc ppm ASTM D5185m 1068 Sulfur ppm ASTM D5185m 3312 Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4		Emulsified Water	scalar	*Visual	>0.21	NEG		
Boron ppm ASTM D5185m 233 Barium ppm ASTM D5185m 2 Molybdenum ppm ASTM D5185m 2 Manganese ppm ASTM D5185m 2 Manganese ppm ASTM D5185m 6 Magnesium ppm ASTM D5185m 818 Calcium ppm ASTM D5185m 1464 Phosphorus ppm ASTM D5185m 1464 Zinc ppm ASTM D5185m 1068 Sulfur ppm ASTM D5185m 3312 Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4	LUID CONDITION				0.4			
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type. Barium ppm ASTM D5185m 2 Molybdenum ppm ASTM D5185m 254 Manganese ppm ASTM D5185m 6 Magnesium ppm ASTM D5185m 818 Calcium ppm ASTM D5185m 1464 Phosphorus ppm ASTM D5185m 1068 Zinc ppm ASTM D5185m 1068 Sulfur ppm ASTM D5185m 3312 Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4	-LUID CONDITION				>31	-		
# Serium	The oil viscosity is lower than normal. The BN result indicates that							
Manganese ppm ASTM D5185m 254 Manganese ppm ASTM D5185m 6 Magnesium ppm ASTM D5185m 818 Calcium ppm ASTM D5185m 1464 Phosphorus ppm ASTM D5185m 865 Zinc ppm ASTM D5185m 1068 Sulfur ppm ASTM D5185m 3312 Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4	there is suitable alkalinity remaining in the oil. Confirm oil type.							
Magnesium ppm ASTM D5185m 818 Calcium ppm ASTM D5185m 1464 Phosphorus ppm ASTM D5185m 865 Zinc ppm ASTM D5185m 1068 Sulfur ppm ASTM D5185m 3312 Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4								
Calcium ppm ASTM D5185m 1464 Phosphorus ppm ASTM D5185m 865 Zinc ppm ASTM D5185m 1068 Sulfur ppm ASTM D5185m 3312 Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4								
Phosphorus ppm ASTM D5185m 865 Zinc ppm ASTM D5185m 1068 Sulfur ppm ASTM D5185m 3312 Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4		-						
Zinc ppm ASTM D5185m 1068 Sulfur ppm ASTM D5185m 3312 Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4			ppm					
Sulfur ppm ASTM D5185m 3312 Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4		•						
Oxidation Abs/.1mm *ASTM D7414 >25 19.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4								
Base Number (BN) mg KOH/g ASTM D2896 13.6 8.4			ppm					
Visc @ 100°C cSt ASTM D445 15.4 10.8		(,	mg KOH/g	ASTM D2896	13.6	8.4		
		Visc @ 100°C	cSt	ASTM D445	15.4	10.8		





Certificate L2367

Laboratory Sample No.

: JR0209906 Lab Number : 06193613 Unique Number : 11050365

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

Received **Tested**

: 31 May 2024 Diagnosed Test Package: MOBCE (Additional Tests: FuelDilution, PercentFuel, TBN)

: 31 May 2024 - Don Baldridge

: 29 May 2024

Contact: BUTCH JANES bjanes@jamesriverequipment.com T: (336)973-8201

* - 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)

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

F: (336)973-8496

JRE - WILKESBORO

WILKESBORO, NC

288 WESTGATE DRIVE

US 28697