WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Machine Id

JOHN DEERE 50G 1FF050GXLMH296262

Diesel Engine

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

Resample at the next service interval to monitor. Sample Number Sample Date Machine Age hrs Cli Oil Age hrs Cli Filter Age hrs Cli Girliter Age hrs Cli Filter Age hrs Cli Filter Age Cli Filter Changed Sample Status WEAR All component wear rates are normal. Iron ppm ASI Nickel ppm ASI Titanium ppm ASI Silver ppm ASI Aluminum ppm ASI Aluminum ppm ASI Copper ppm ASI Copper ppm ASI Copper ppm ASI Vanadium ppm ASI Silicon ppm ASI Silicon ppm ASI Silicon ppm ASI Silicon ASI Silicon ASI Imm ASI Sili Sacalar VADPED	STM D5185m >26 STM D5185m >26 STM D5185m >4 STM D518	11	History1	History2
Resample at the next service interval to monitor. Sample Number Sample Date Cli Machine Age hrs Cli Oil Age hrs Cli Filter Age hrs Cli Filter Age hrs Cli Gli Changed Sample Status WEAR All component wear rates are normal. Iron ppm ASI Chromium ppm ASI Nickel ppm ASI Titanium ppm ASI Silver ppm ASI Aluminum ppm ASI Aluminum ppm ASI Copper ppm ASI Aluminum ppm ASI Copper ppm ASI Aluminum ppm ASI Copper ppm ASI Copper ppm ASI Vanadium ppm ASI Silicon ppm ASI Silicon ppm ASI Silicon ppm ASI Silicon ASI mpm ASI Silicon Abs/mm ASI Sili Scalar *V Appearance *Scalar *V Appearance *Scal	STM D5185m >26 STM D5185m >4 STM D5185m >6 STM D5185m >26	01 Jul 2024 1700 0 0 Changed Changed NORMAL 51 18 11 1 5 <1 1 3 <1 31 7 26 <1 26 4 4 1 ONE NONE ONE NONE		
Machine Age hrs Cli Machine Age hrs Cli Filter Age hrs Cli Coli Changed Cli Filter Changed Sample Status WEAR All component wear rates are normal. Iron ppm ASI Chromium ppm ASI Nickel ppm ASI Silver ppm ASI Aluminum ppm ASI Copper ppm ASI Copper ppm ASI Vanadium ppm ASI Vallation ABSI Water Glycol Soot % AS Nitration Abs/cm *AS Sulfation Abs/cm *AS	STM D5185m S26 STM D5185m S22 STM D5185m S20 STM D5185m	1700 0 0 Changed Changed NORMAL 51 18 11 1 5 <1 1 3 <1 31 7 26 <1 26 4 4 1 <1 ONE NONE ONE NONE 22 16 20 22		
Oil Age hrs Cil Filter Age hrs Cil Oil Changed Filter Changed Sample Status	STM D5185m >51 STM D5185m >51 STM D5185m >51 STM D5185m >51 STM D5185m >52 STM D5185m >26 STM D5185m >26 STM D5185m >4 STM D5185m >4 STM D5185m >6 STM D5185m >6 STM D5185m >26 STM D5185m >22 STM D5185m >22 STM D5185m >22	0		
Filter Age hrs Cil Oil Changed Filter Changed Sample Status WEAR All component wear rates are normal. Iron ppm ASI Chromium ppm ASI Nickel ppm ASI Silver ppm ASI Aluminum ppm ASI Lead ppm ASI Copper ppm ASI Copper ppm ASI Vanadium ppm ASI Validow Metal scalar *V Validow Metal scal	STM D5185m >51 STM D5185m >51 STM D5185m >51 STM D5185m >51 STM D5185m >5 STM D5185m >3 STM D5185m >36 STM D5185m >26 STM D5185m >26 STM D5185m >4 STM D5185m NON STM D5185m NON STM D5185m >26 STM D5185m >22 STM D5185m >22 STM D5185m >22 STM D5185m >22	0 Changed Changed NORMAL 51 18 11 1 5 <1 1 33 <1 331 7 26 <1 26 4 4 1 <1 ONE NONE ONE NONE 22 16 20 22		
Oil Changed Filter Changed Sample Status WEAR All component wear rates are normal. Iron ppm ASI Chromium ppm ASI Nickel ppm ASI Titanium ppm ASI Aluminum ppm ASI Aluminum ppm ASI Copper ppm ASI Copper ppm ASI Vanadium ppm ASI Valled Valle	STM D5185m >51 STM D5185m >51 STM D5185m >11 STM D5185m >5 STM D5185m >3 STM D5185m >3 STM D5185m >26 STM D5185m >4 STM D5185m >4 STM D5185m NON STM D5185m NON STM D5185m >26 STM D5185m >22 STM D5185m >22	Changed Changed NORMAL 18 11 1 5 <1 133 <1 31 7 26 <1 26 4 4 1 <1 NONE ONE NONE 22 16 20 22		
WEAR All component wear rates are normal. Iron ppm ASI Chromium ppm ASI Nickel ppm ASI Titanium ppm ASI Aluminum ppm ASI Lead ppm ASI Copper ppm ASI Vanadium ppm ASI Vanadium ppm ASI Vanadium ppm ASI White Metal scalar "V Yellow Metal scalar "V Yellow Metal scalar "V Yellow Metal Scalar "V Glycol Wite Glycol Wite Glycol Wite Soot % % "AS Nitration Abs/cm "ASI Sulfation	STM D5185m >51 STM D5185m >51 STM D5185m >11 STM D5185m >5 STM D5185m >3 STM D5185m >3 STM D5185m >26 STM D5185m >4 STM D5185m >4 STM D5185m NON / isual NON	Changed NORMAL 51 18 11 1 5 <1 13 <1 31 7 26 <1 26 4 4 1 <1 ONE NONE ONE NONE 22 16 20 22		
Nickel ppm AST	STM D5185m >51 STM D5185m >51 STM D5185m >5 STM D5185m >5 STM D5185m >3 STM D5185m >3 STM D5185m >31 STM D5185m >26 STM D5185m >4 STM D5185m >4 STM D5185m >4 STM D5185m NON Visual NON STM D5185m >22	NORMAL 51 18 11 1 5 <1 13 <1 31 7 26 <1 26 4 4 1 ONE NONE ONE NONE 22 16 20 22		
WEAR All component wear rates are normal. Als chromium ppm Asilication p	STM D5185m > 5 STM D5185m > 5 STM D5185m > 5 STM D5185m > 3 STM D5185m > 3 STM D5185m > 31 STM D5185m > 24 STM D5185m > 4 STM D5185m > 4 STM D5185m NON ZIM D5185m NON ZIM D5185m > 22 STM D5185m > 22	51 18 11 1 5 <1 13 <1 31 7 26 <1 26 4 4 1 <1 ONE NONE NONE 22 16 20 22		
All component wear rates are normal. Chromium ppm ASI Nickel ppm ASI Titanium ppm ASI Silver ppm ASI Aluminum ppm ASI Lead ppm ASI Copper ppm ASI Copper ppm ASI Vanadium ppm ASI Valed Scalar *V Yellow Metal Scalar *V Soot % % *ASI Nitration Abs/cm *ASI Sulfation Abs/cm *ASI Silt Scalar *V Debris Scalar *V Sand/Dirt Scalar *V Appearance Scal	STM D5185m > 5 STM D5185m > 5 STM D5185m > 5 STM D5185m > 3 STM D5185m > 3 STM D5185m > 31 STM D5185m > 24 STM D5185m > 4 STM D5185m > 4 STM D5185m NON ZIM D5185m NON ZIM D5185m > 22 STM D5185m > 22	11		
All component wear rates are normal. Chromium ppm ASI Nickel ppm ASI Titanium ppm ASI Silver ppm ASI Aluminum ppm ASI Lead ppm ASI Copper ppm ASI Vanadium ppm ASI Vanadium ppm ASI White Metal scalar *V Yellow Metal scalar *V Yellow Metal Scalar *V There is no indication of any contamination in the oil. CONTAMINATION Silicon ppm ASI Potassium ppm ASI Fuel % ASI Water Glycol WG Soot % % ASI Nitration Abs/cm *ASI Sulfation Abs/cm *ASI Silit scalar *V Debris scalar *V Debris scalar *V Appearance scalar *V Appe	STM D5185m > 5 STM D5185m > 5 STM D5185m > 5 STM D5185m > 3 STM D5185m > 3 STM D5185m > 31 STM D5185m > 24 STM D5185m > 4 STM D5185m > 4 STM D5185m NON ZIM D5185m NON ZIM D5185m > 22 STM D5185m > 22	11		
All component wear rates are normal. Nickel ppm ASI Titanium ppm ASI Aluminum ppm ASI Lead ppm ASI Copper ppm ASI Vanadium ppm ASI Valow Metal scalar *V Yellow Metal scalar *V Yellow Metal Scalar *V Soot % ASI Water Glycol Soot % % ASI Nitration Abs/cm *ASI Sulfation Abs/cm *ASI Sulfatio	STM D5185m >5 STM D5185m >3 STM D5185m >3 STM D5185m >31 STM D5185m >26 STM D5185m >26 STM D5185m >4 STM D5185m >4 STM D5185m NON Visual NON STM D5185m >22	5 <1 1 3 <1 31 7 26 <1 26 4 4 1 <1 ONE NONE NONE 22 16 20 22		
Titanium ppm ASI Silver ppm ASI Lead ppm ASI Copper ppm ASI Tin ppm ASI Vanadium ppm ASI Vallow Metal scalar *V Yellow Metal scalar *V Yellow Metal scalar *V Yellow Metal scalar *V Silicon ppm ASI Potassium ppm ASI Fuel % ASI Water Glycol Soot % % Nitration Abs/cm *ASI Sulfation Ab	### D5185m ### D5185m 3 3 3 3 3 3 3 3 3	1 3 <1 31 7 26 <1 26 4 4 1 <1 ONE NONE NONE 22 16 20 22		
Silver ppm ASI Aluminum ppm ASI Lead ppm ASI Copper ppm ASI Vanadium ppm ASI White Metal scalar *V Yellow Metal scalar *V Yellow Metal scalar *V Silicon ppm ASI Potassium ppm ASI Fuel % ASI Water Glycol WG Glycol WG Soot % % *ASI Nitration Abs/cm *ASI Sulfation Abs/cm *ASI Sulfatio	STM D5185m >3 STM D5185m >31 STM D5185m >26 STM D5185m >26 STM D5185m >4 STM D5185m >4 STM D5185m Visual NON STM D5185m >22 STM D5185m >22 STM D5185m >22 STM D5185m >22	3 <1 31 7 26 <1 26 4 4 1 <1 ONE NONE NONE 22 16 20 22		
Aluminum ppm ASI Lead ppm ASI Copper ppm ASI Tin ppm ASI Vanadium ppm ASI White Metal scalar *V Yellow Metal scalar *V Yellow Metal scalar *V Yellow Metal scalar *V CONTAMINATION Silicon ppm ASI Potassium ppm ASI Fuel % ASI Water Wo Glycol Wo Glycol Wo Soot % % *ASI Nitration Abs/cm *ASI Sulfation Abs/.1mm *ASI Silt scalar *V Debris scalar *V Debris scalar *V Appearance scalar *V Ap	STM D5185m >31 STM D5185m >26 STM D5185m >26 STM D5185m >4 STM D5185m NON Visual NON STM D5185m >22 STM D5185m >22 STM D5185m >20	31 7 26 <1 26 4 4 1 <1 ONE NONE ONE NONE 22 16 20 22	 	
Lead ppm ASI Copper ppm ASI Tin ppm ASI Vanadium ppm ASI White Metal scalar *V Yellow Metal scalar *V Yellow Metal scalar *V Yellow Metal scalar *V Silicon ppm ASI Potassium ppm ASI Fuel % ASI Water Glycol W0 Soot % % *ASI Nitration Abs/.1mm *ASI Sulfation Abs/.1mm *ASI Silt scalar *V Debris scalar *V Appearance scalar *V Appearance scalar *V	STM D5185m >26	26 <1 26 4 4 1 <1 ONE NONE ONE NONE 22 16 20 22	 	
Copper ppm ASI Tin ppm ASI Vanadium ppm ASI White Metal scalar *V Yellow Metal scalar *V Yellow Metal scalar *V There is no indication of any contamination in the oil. Silicon ppm ASI Potassium ppm ASI Fuel % ASI Water Glycol WC Soot % % *ASI Nitration Abs/cm *ASI Sulfation Abs/.1mm *ASI Silt scalar *V Debris scalar *V Sand/Dirt scalar *V Appearance scalar *V	### D5185m >26 ### D5185m >4 ### D5185m NON ### NON ### NON ### NON ### D5185m >22 ### D5185m >22	26 4 4 1		
Tin ppm ASI Vanadium ppm ASI White Metal scalar *V Yellow Metal scalar *V Yellow Metal scalar *V There is no indication of any contamination in the oil. Silicon ppm ASI Potassium ppm ASI Fuel % ASI Water Glycol WC Glycol WC Soot % % *ASI Nitration Abs/cm *ASI Sulfation Abs/.1mm *ASI Silt scalar *V Debris scalar *V Appearance scalar *V Appearance scalar *V	### D5185m >4 ### D5185m Visual NON ### NON ## NON ## NON ## NON ## NON ## NON ## NON ## NON ## NON ## NON ## NON ## NON ## NON ## NON ## NON ## NON ##	4 1 <1 NONE NONE NONE 22 16 20 22		
Vanadium ppm ASI White Metal scalar *V Yellow Metal scalar *V CONTAMINATION Silicon ppm ASI Potassium ppm ASI Fuel % ASI Water Glycol WC Soot % % *ASI Nitration Abs/cm *ASI Sulfation Abs/.1mm *ASI Sulfation Abs/.1mm *ASI Silt scalar *V Debris scalar *V Appearance scalar *V Appearance scalar *V	TM D5185m /isual NON TM D5185m >22 TM D5185m >20	<1 ONE NONE ONE NONE 22 16 20 22		
White Metal scalar *V Yellow Metal scalar *V CONTAMINATION Silicon ppm ASI Potassium ppm ASI Fuel % ASI Water Glycol WC Soot % % *ASI Nitration Abs/cm *ASI Sulfation Abs/.1mm *ASI Sulfation Abs/.1mm *ASI Sulfation Abs/.1mm *ASI Silt scalar *V Debris scalar *V Appearance scalar *V Appearance scalar *V	/isual NON /isual NON STM D5185m >22 STM D5185m >20	ONE NONE NONE 22 16 22 22		
Yellow Metal scalar *V CONTAMINATION There is no indication of any contamination in the oil. Silicon ppm ASI Potassium ppm ASI Fuel % AS Water Glycol WC Soot % % *AS Nitration Abs/cm *AS Sulfation Abs/.1mm *AS Sulfation Abs/.1mm *AS Silt scalar *V Debris scalar *V Appearance scalar *V Appearance scalar *V	/isual NON ETM D5185m >22 ETM D5185m >20	ONE NONE 22 16 20 22		
CONTAMINATION There is no indication of any contamination in the oil. Silicon ppm ASI Potassium ppm ASI Fuel % AS Water Glycol WC Soot % % *AS Nitration Abs/cm *AS Sulfation Abs/.1mm *AS Silt scalar *V Debris scalar *V Appearance scalar *V Appearance scalar *V	STM D5185m >22 STM D5185m >20	22 16 22		
There is no indication of any contamination in the oil. Potassium ppm AST Fuel % AST Water Glycol W0 Soot % % *AST Nitration Abs/cm *AST Sulfation Abs/.1mm *AST Silt scalar *V Debris scalar *V Appearance scalar *V Appearance scalar *V	STM D5185m >20	20 22		
There is no indication of any contamination in the oil. Potassium ppm AST Fuel % AST Water Glycol WC Soot % % *AST Nitration Abs/cm *AST Sulfation Abs/.1mm *AST Silt scalar *V Debris scalar *V Appearance scalar *V Appearance scalar *V	STM D5185m >20	20 22		
There is no indication of any contamination in the oil. Fuel % AS Water W0 Glycol W0 Soot % % *AS Nitration Abs/cm *AS Sulfation Abs/.1mm *AS Silt scalar *V Debris scalar *V Sand/Dirt scalar *V Appearance scalar *V				
Water W0 Glycol W0 Soot % % *AS Nitration Abs/cm *AS Sulfation Abs/.1mm *AS Silt scalar *V Debris scalar *V Sand/Dirt scalar *V Appearance scalar *V				
Glycol WC Soot % % *AS Nitration Abs/cm *AS Sulfation Abs/.1mm *AS Silt scalar *V Debris scalar *V Sand/Dirt scalar *V Appearance scalar *V	C Method >0.2			
Soot % % *AS Nitration Abs/cm *AS Sulfation Abs/.1mm *AS Silt scalar *V Debris scalar *V Sand/Dirt scalar *V Appearance scalar *V	C Method >0.2	NEG		
Nitration Abs/cm *As Sulfation Abs/.1mm *As Silt scalar *V Debris scalar *V Sand/Dirt scalar *V Appearance scalar *V	STM D7844 >3			
Sulfation Abs/.1mm *As Silt scalar *V Debris scalar *V Sand/Dirt scalar *V Appearance scalar *V	STM D7644 >3			
Silt scalar *V Debris scalar *V Sand/Dirt scalar *V Appearance scalar *V	STM D7024 >20 STM D7415 >30			
Debris scalar *V Sand/Dirt scalar *V Appearance scalar *V		ONE NONE		
Sand/Dirt scalar *V Appearance scalar *V		ONE NONE		
Appearance scalar *V		ONE NONE		
		ORML NORML		
		ORML NORML		
	/isual >0.2			
Linuisileu Water Scalar V	715uai >0.2	O.ZI NEG		
FLUID CONDITION Sodium ppm AST	TM D5185m >31	31 3		
Boron ppm AST	TM D5185m	204		
The BN result indicates that there is suitable alkalinity remaining in the	TM D5185m	0		
oil. The condition of the oil is suitable for further service. Molybdenum ppm ASI	STM D5185m	251		
	TM D5185m	1		
3 11	STM D5185m	809		
	STM D5185m	1474		
	STM D5185m	903		
		1138		
	TM D5185m	3067		
	TM D5185m TM D5185m			
	TM D5185m	10.0		
Visc @ 100°C cSt AS				







Laboratory Sample No.

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

Lab Number : 06229677 Unique Number : 11113170

: JR0218890 Received **Tested** Diagnosed

: 09 Jul 2024 : 09 Jul 2024 - Jonathan Hester

: 08 Jul 2024

JRE - ASHEVILLE 101 BRUCE DRIVE ASHEVILLE, NC US 28806 Contact: Randy Warren

Test Package : CONST (Additional Tests: FuelDilution, TBN) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

randy.warren@jamesriverequipment.com T: (528)667-0176

* - 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: (828)667-4865