WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

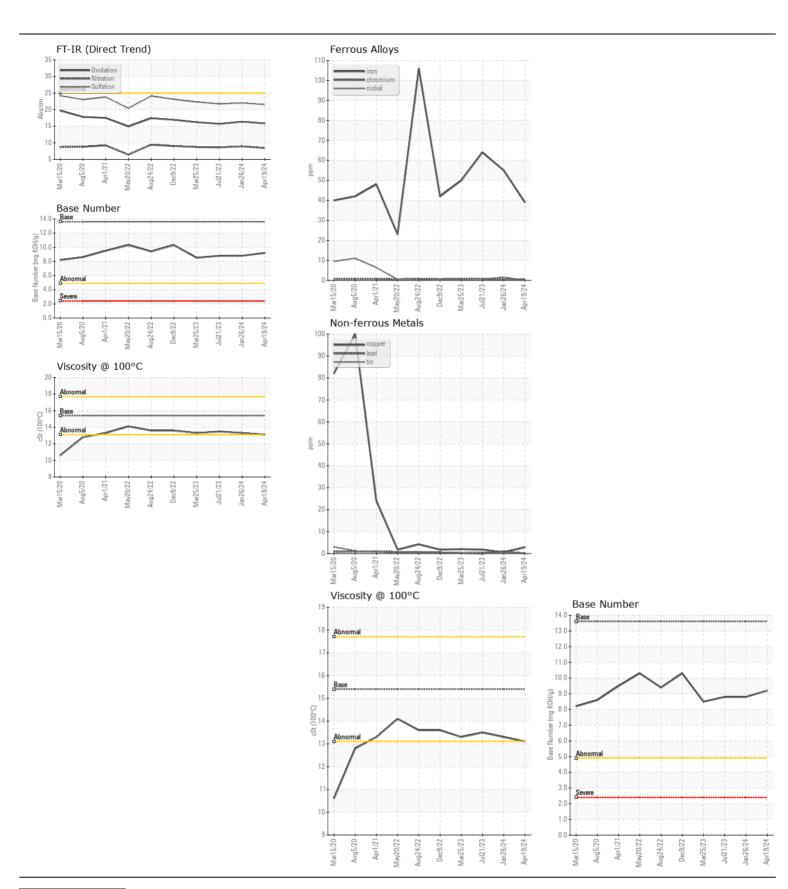
Machine Id

## **JOHN DEERE 350G 1FF350GXTKF814127**

**Diesel Engine** 

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (26 QTS)

Sample Date   Machine Age   hrs   Client Info   49 Apr 2024   43 Machine Age   hrs   Client Info   0   0   0   0   0   0   0   0   0	JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (	26 Q (S)						
Sample Number   Client Info   JR0208832   B01652   B017652   B01	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age   hrs   Client Info   393   500   405     Cli Age   hrs   Client Info   393   500   405     Filter Changed   Client Info   0   500   500     Cli Changed   Client Info   Changed   Cha	Resample at the next service interval to monitor.	Sample Number		Client Info		JR0208832	JR0165723	JR0176657
Oil Age		Sample Date		Client Info		19 Apr 2024	26 Jan 2024	21 Jul 2023
Filter Age   Diter Info   Changed   Changed		Machine Age	hrs	Client Info		4973	4580	4065
Oil Changed   Client Info   Changed   Chang		Oil Age	hrs	Client Info		393	500	441
Filter Changed   Chenged   Changed   Change		Filter Age	hrs	Client Info		0	500	0
		Oil Changed		Client Info		Changed	Changed	Changed
				Client Info		Changed	Changed	Changed
All component wear rates are normal.   Chromium   ppm   ASTM 05165m   51   c1   c1   c1   c1   c1   c1   c1		_				_	ABNORMAL	ABNORMAL
All component wear rates are normal.   Chromium   ppm   ASTM 05165m   51   c1   c1   c1   c1   c1   c1   c1	WEAR	Iron	ppm	ASTM D5185m	>51	39	<u> </u>	<u>^</u> 64
Nickel   ppm   ASTM D5165m   5.5   0   2   <1		Chromium		ASTM D5185m	>11			
Titanium   ppm   ASTM D5185m   3   0   0   0   0   0   0   0   0   0	All component wear rates are normal.							
Silver   ppm   ASTM D5185m   >3   0   0   0   0					70			
Aluminum   ppm   ASTM D5185m   >26   0					- 3			
Lead   ppm   ASTM D5185m   >26   0   <1   0   0								
Copper								
Time   ppm   ASTM   D5185m   >4   <1   <1   <1   <1   <1   <1   <1   <								
Vanadium   ppm   ASTM D5185m   NONE   NONE								
White Metal Yellow Metal Scalar "Visual NONE NONE NONE NONE NONE NONE NONE NON					>4			
Vellow Metal   Scalar   Visual   NONE   NO						-		
Silicon   ppm   ASTM D5185m   >22   7   7   8								
Potassium   ppm   ASTM D5185m   220   <1   2   1		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Fuel   WC Method   So.2.1   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0   <1.0	CONTAMINATION	Silicon	ppm			7	7	8
Water   WC Method   So.21   NEG	There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	<1	2	1
Glycol		Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Soot %		Water		WC Method	>0.21	NEG	NEG	NEG
Nitration		Glycol		WC Method		NEG	NEG	NEG
Sulfation   Abs/.tmm   *ASTM D7415   >30   21.5   22.0   21.7		Soot %	%	*ASTM D7844	>3	0.3	0.4	0.5
Silt   scalar   *Visual   NONE   NO		Nitration	Abs/cm	*ASTM D7624	>20	8.4	8.9	8.6
Silt   scalar   *Visual   NONE   NO		Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	22.0	21.7
Debris   Scalar   *Visual   NONE		Silt	scalar	*Visual	NONE		NONE	
Sand/Dirt   Scalar   *Visual   NONE   NONE   NONE   NONE   Appearance   Scalar   *Visual   NORML   N			scalar	*Visual	NONE	NONE	NONE	NONE
Appearance   Scalar   *Visual   NORML   NORM								
Codor   Scalar   *Visual   NORML   NORML   NORML   NORML   NORML   NORML   NORML   NORML   NORML   NEG   N								
Emulsified Water   scalar *Visual   >0.21   NEG   NEG   NEG						-		
Boron   ppm   ASTM D5185m   236   181   225								
Boron   ppm   ASTM D5185m   236   181   225	ELUID CONDITION	Sodium	nnm	ASTM D5185m	>31	5	4	4
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   257   248   283     Manganese   ppm   ASTM D5185m   2   <1   1     Magnesium   ppm   ASTM D5185m   853   819   927     Calcium   ppm   ASTM D5185m   1499   1443   1680     Phosphorus   ppm   ASTM D5185m   914   887   988     Zinc   ppm   ASTM D5185m   1073   1089   1220     Sulfur   ppm   ASTM D5185m   3356   3324   3847     Oxidation   Abs/.tmm *ASTM D7414   >25   15.8   16.3   15.7     Base Number (BN)   mg KOH/g   ASTM D2896   13.6   9.2   8.8   8.8	I EOID OONDITION						181	225
Molybdenum ppm ASTM D5185m 257 248 283  Manganese ppm ASTM D5185m 2 < <1 1  Magnesium ppm ASTM D5185m 2 < <1 1  Magnesium ppm ASTM D5185m 1499 1443 1680  Phosphorus ppm ASTM D5185m 914 887 988  Zinc ppm ASTM D5185m 914 887 988  Zinc ppm ASTM D5185m 1073 1089 1220  Sulfur ppm ASTM D5185m 3356 3324 3847  Oxidation Abs/.1mm *ASTM D7414 >25 15.8 16.3 15.7  Base Number (BN) mg KOH/g ASTM D2896 13.6 9.2 8.8 8.8	The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.							
Manganese         ppm         ASTM D5185m         2         <1         1           Magnesium         ppm         ASTM D5185m         853         819         927           Calcium         ppm         ASTM D5185m         1499         1443         1680           Phosphorus         ppm         ASTM D5185m         914         887         988           Zinc         ppm         ASTM D5185m         1073         1089         1220           Sulfur         ppm         ASTM D5185m         3356         3324         3847           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.8         16.3         15.7           Base Number (BN)         mg KOH/g         ASTM D2896         13.6         9.2         8.8         8.8								
Magnesium         ppm         ASTM D5185m         853         819         927           Calcium         ppm         ASTM D5185m         1499         1443         1680           Phosphorus         ppm         ASTM D5185m         914         887         988           Zinc         ppm         ASTM D5185m         1073         1089         1220           Sulfur         ppm         ASTM D5185m         3356         3324         3847           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.8         16.3         15.7           Base Number (BN)         mg KOH/g         ASTM D2896         13.6         9.2         8.8         8.8		-						
Calcium         ppm         ASTM D5185m         1499         1443         1680           Phosphorus         ppm         ASTM D5185m         914         887         988           Zinc         ppm         ASTM D5185m         1073         1089         1220           Sulfur         ppm         ASTM D5185m         3356         3324         3847           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.8         16.3         15.7           Base Number (BN)         mg KOH/g         ASTM D2896         13.6         9.2         8.8         8.8								
Phosphorus         ppm         ASTM D5185m         914         887         988           Zinc         ppm         ASTM D5185m         1073         1089         1220           Sulfur         ppm         ASTM D5185m         3356         3324         3847           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.8         16.3         15.7           Base Number (BN)         mg KOH/g         ASTM D2896         13.6         9.2         8.8         8.8		•						
Zinc         ppm         ASTM D5185m         1073         1089         1220           Sulfur         ppm         ASTM D5185m         3356         3324         3847           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.8         16.3         15.7           Base Number (BN)         mg KOH/g         ASTM D2896         13.6         9.2         8.8         8.8								
Sulfur         ppm         ASTM D5185m         3356         3324         3847           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.8         16.3         15.7           Base Number (BN)         mg KOH/g         ASTM D2896         13.6         9.2         8.8         8.8								
Oxidation         Abs/.1mm         *ASTM D7414         >25         15.8         16.3         15.7           Base Number (BN)         mg KOH/g         ASTM D2896         13.6         9.2         8.8         8.8								
Base Number (BN)         mg KOH/g         ASTM D2896         13.6         9.2         8.8         8.8					0.5			
Visc @ 100°C cSt ASTM D445 15.4 13.1 13.3 13.5								
		Visc @ 100°C	cSt	ASTM D445	15.4	13.1	13.3	13.5







Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Lab Number : 06155660

: JR0208832

Unique Number: 10991083

Received **Tested** Diagnosed Test Package : CONST (Additional Tests: TBN)

: 22 Apr 2024 : 23 Apr 2024 : 23 Apr 2024 - Wes Davis

JRE - GREENVILLE 3604 HIGHWAY 264 E GREENVILLE, NC US 27834-5800 Contact: GREENVILLE SHOP

Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. christopher.martin@jamesriverequipment.com

\* - 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)

T: F: