



OIL ANALYSIS REPORT

**WEAR CONTAMINATION FLUID CONDITION**  **ABNORMAL NORMAL ATTENTION** 



## Store 9 - Marietta

## JOHN DEERE 300P 1FF300PALPF000085

Component Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

Test   UOM   Method   Unitary   LECOMBRIDATION   Sample Date   Client Info   Sample Date   Client Info   Sample Date   Client Info   Or File 2021	JOHN DEERE ENGINE OIL PLU	S 50 II 15W	40 (5	GAL)				
Comparison   Com	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and litter change at the time of sampling has been noted. Resample at the next service interval to monitor.     Machine Age   hrs   Client Info	Oil and filter change at the time of sampling has been noted. Resample	Sample Number		Client Info			,	
Machine Age   http:   Client Info   472						07 Feb 2024		
Filter Age   No.   Client Info   Changed   Client Info   Changed   Client Info   Changed   Changed   Client Info   Changed   Client Info   Changed   Changed   Client Info   Changed   Changed   Client Info   Changed   Changed   Changed   Client Info   Changed   Changed   Client Info   Cli		Machine Age	hrs	Client Info		472		
Oil Changed   Chlent Info   Changed   Change		Oil Age	hrs	Client Info		472		
Filter Changed   Sample Status		Filter Age	hrs	Client Info		472		
Name		Oil Changed		Client Info		Changed		
Iron		Filter Changed		Client Info		Changed		
Chromium   Spring   ASTM D5185m   11   41		Sample Status				ABNORMAL		
Chromium   Spring   ASTM D5185m   11   41								
Nickel	The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking							
Mickel   Sprin   ASTM D5185m   30								
Illanium   ppm   ASIM bitsen   0					>5			
Aluminum   ppm   ASTM D5185m   >26   1			ppm			-		
Lead   ppm   ASTM D6185m   >26   1			• • • • • • • • • • • • • • • • • • • •					
Copper			ppm					
Tin			• • • • • • • • • • • • • • • • • • • •					
Vanadium   ppm   ASTM D5185m   0			ppm					
White Metal   Scalar   Visual   NONE   NON			ppm		>4			
Vellow Metal   Scalar   Visual   NONE   NONE             Potassium   ppm   ASTM D5185m   >20   7           Potassium   ppm   ASTM D5185m   >20   3           Potassium   ppm   ASTM D5185m   >20   3           Pull   % ASTM D5854   >2.1   0.5           Water   WC Method   0.21   NEG           Glycol   %   ASTM D5824   >2.1   0.5           Substitution   Abs/mm   ASTM D5185m   >30   0.6           Substitution   Abs/mm   ASTM D5185m   ASTM D						-		
Potassium   ppm   ASTM D5185m   20   7			scalar					
Potassium   Pota		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium   Pota	CONTAMINATION	Cilicon	nnm	ACTM DE10Em	- 120	7		
Fuel % ASTM D3524 >2.1 0.5	CONTAMINATION		• • • • • • • • • • • • • • • • • • • •					
Water								
Glycol % 'ASTM D2882   NEG           Sod % % 'ASTM D7844   >3   0.6           Nitration   Abs/tmm 'ASTM D7844   >3   0.6           Sulfation   Abs/tmm 'ASTM D7844   >3   0.6           Sulfation   Abs/tmm 'ASTM D7845   >30   22.1           Silt   Scalar   *Visual   NONE   NONE           Silt   Scalar   *Visual   NONE   NONE           Debris   Scalar   *Visual   NONE   NONE           Appearance   Scalar   *Visual   NORML   NOR			70					
Soot %			0/		>0.21			
Nitration   Abs/cm   'ASTM D7624   >20   9.0		-			. 2			
Sulfation   Abs/.tmm   *ASTM D7415   >30   22.1         Silt   scalar   *Visual   NONE   NONE         Debris   scalar   *Visual   NONE   NONE   NONE         Sand/Dirt   scalar   *Visual   NONE   NONE   NONE         Appearance   scalar   *Visual   NORML								
Silt   scalar *Visual   NONE   NONE   NONE   Sand/Dirt   Scalar *Visual   NONE   NONE   Scalar *Visual   NORML   NORML   Scalar *Visual   NORML   NORML   Scalar *Visual   NORML   Scalar *Visual *Visual   NORML   Scalar *Visual								
Debris   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NORML   NORML   Scalar   *Visual   NORML   NORML   Scalar   *Visual   NORML   NORML   Scalar   *Visual   NORML   NORML   Scalar   *Visual   Scalar   *Visual   Scalar   *Visual   NORML   Scalar   *Visual   Scalar   *Visua								
Sand/Dirt   Scalar   *Visual   NONE   NORE   Appearance   Scalar   *Visual   NORML								
Appearance								
Codor   Scalar *Visual   NORML   NORML   Fmulsified Water   Scalar *Visual   Scalar *Visual *Scalar *Visual   Scalar *Visual *Scalar *Visua								
Emulsified Water   scalar *Visual   >0.21   NEG								
Sodium   ppm   ASTM D5185m   >31   5						_		
Boron   ppm   ASTM D5185m   106           Molybdenum   ppm   ASTM D5185m   196           Manganese   ppm   ASTM D5185m   196           Magnesium   ppm   ASTM D5185m   196           Magnesium   ppm   ASTM D5185m   6           Magnesium   ppm   ASTM D5185m   801           Calcium   ppm   ASTM D5185m   1188           Phosphorus   ppm   ASTM D5185m   808           Zinc   ppm   ASTM D5185m   977           Sulfur   ppm   ASTM D5185m   977           Sulfur   ppm   ASTM D5185m   2522           Oxidation   Abs/.1mm   *ASTM D7414   >25   17.3           Base Number (BN)   mg KOHlg   ASTM D2896   13.6   8.7								
Barium   ppm   ASTM D5185m   196         Molybdenum   ppm   ASTM D5185m   196         Manganese   ppm   ASTM D5185m   801         Calcium   ppm   ASTM D5185m   1188         Phosphorus   ppm   ASTM D5185m   808         Zinc   ppm   ASTM D5185m   977         Sulfur   ppm   ASTM D5185m   977         Sulfur   ppm   ASTM D5185m   2522         Oxidation   Abs/.1mm   *ASTM D7414   >25   17.3         Base Number (BN)   mg KOHlg   ASTM D2896   13.6   8.7	FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	5		
there is suitable alkalinity remaining in the oil. Confirm oil type.    Molybdenum   ppm   ASTM D5185m   196         Manganese   ppm   ASTM D5185m   801         Calcium   ppm   ASTM D5185m   1188         Phosphorus   ppm   ASTM D5185m   808         Zinc   ppm   ASTM D5185m   977         Sulfur   ppm   ASTM D5185m   2522         Oxidation   Abs/.1mm *ASTM D7414   >25   17.3         Base Number (BN)   mg KOH/g   ASTM D2896   13.6   8.7	The state of the s	Boron	ppm	ASTM D5185m		106		
Manganese         ppm         ASTM D5185m         6             Magnesium         ppm         ASTM D5185m         801             Calcium         ppm         ASTM D5185m         1188             Phosphorus         ppm         ASTM D5185m         808             Zinc         ppm         ASTM D5185m         977             Sulfur         ppm         ASTM D5185m         2522             Oxidation         Abs/.1mm         *ASTM D7414         >25         17.3             Base Number (BN)         mg KOH/g         ASTM D2896         13.6         8.7		Barium	ppm	ASTM D5185m		0		
Magnesium         ppm         ASTM D5185m         801             Calcium         ppm         ASTM D5185m         1188             Phosphorus         ppm         ASTM D5185m         808             Zinc         ppm         ASTM D5185m         977             Sulfur         ppm         ASTM D5185m         2522             Oxidation         Abs/.1mm         *ASTM D7414         >25         17.3             Base Number (BN)         mg KOH/g         ASTM D2896         13.6         8.7		Molybdenum	ppm	ASTM D5185m		196		
Calcium         ppm         ASTM D5185m         1188             Phosphorus         ppm         ASTM D5185m         808             Zinc         ppm         ASTM D5185m         977             Sulfur         ppm         ASTM D5185m         2522             Oxidation         Abs/.1mm         *ASTM D7414         >25         17.3             Base Number (BN)         mg KOH/g         ASTM D2896         13.6         8.7		Manganese	ppm	ASTM D5185m		6		
Phosphorus         ppm         ASTM D5185m         808             Zinc         ppm         ASTM D5185m         977             Sulfur         ppm         ASTM D5185m         2522             Oxidation         Abs/.1mm         *ASTM D7414         >25         17.3             Base Number (BN)         mg KOH/g         ASTM D2896         13.6         8.7		Magnesium	ppm	ASTM D5185m		801		
Zinc         ppm         ASTM D5185m         977             Sulfur         ppm         ASTM D5185m         2522             Oxidation         Abs/.1mm         *ASTM D7414         >25         17.3             Base Number (BN)         mg KOH/g         ASTM D2896         13.6         8.7		Calcium	ppm	ASTM D5185m		1188		
Sulfur         ppm         ASTM D5185m         2522             Oxidation         Abs/.1mm         *ASTM D7414         >25         17.3             Base Number (BN)         mg KOH/g         ASTM D2896         13.6         8.7		Phosphorus	ppm	ASTM D5185m		808		
Oxidation         Abs/.1mm         *ASTM D7414         >25         17.3             Base Number (BN)         mg KOH/g         ASTM D2896         13.6         8.7		Zinc	ppm	ASTM D5185m		977		
Base Number (BN)         mg KOH/g         ASTM D2896         13.6         8.7		Sulfur	ppm	ASTM D5185m		2522		
		Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3		
Visc @ 100°C cSt ASTM D445 15.4 ▲ 11.4		Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.7		
		Visc @ 100°C	cSt	ASTM D445	15.4	<b>11.4</b>		







Laboratory Sample No.

: LEC0048102 Lab Number : 06084661

Unique Number: 10872106

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 09 Feb 2024 : 13 Feb 2024

**Tested** Diagnosed

: 13 Feb 2024 - Jonathan Hester Test Package : CONST ( Additional Tests: FuelDilution, Glycol, PercentFuel, TBN )

LESLIE EQUIPMENT COMPANY 105 TENNIS CENTER DR. MARIETTA, OH

US 45750-9765 Contact: LEANNE KENDALL

KendalLeanne@lec1.com

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

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